TANF ENTRY AND EXIT IN THE POST WELFARE REFORM ERA: THE CONTRIBUTIONS OF HUMAN CAPITAL AND SOCIAL CAPITAL

by

Monique A. Constance-Huggins

BA, Royal Roads University, 1998

MPIA, University of Pittsburgh, 2000

MSW, University of Pittsburgh, 2010

Submitted to the Graduate Faculty of

School of Social Work in partial fulfillment

of the requirements for the degree of

Doctor of Philosophy

University of Pittsburgh

2013

UNIVERSITY OF PITTSBURGH

SCHOOL OF SOCIAL WORK

This dissertation was presented

by

Monique A. Constance-Huggins

It was defended on

April 2, 2013

and approved by

Dr. Catherine G. Greeno, Associate Dean for Research, School of Social Work

Dr. John M. Wallace, Jr., Associate Professor, School of Social Work

Dr. William Elliott, III, Assistant Professor, School of Social Welfare, Kansas University

Dissertation Director: Dr. Rafael Engel, Associate Professor, School of Social Work

mac160@pitt.edu

Dedicated to my husband, Leonard Huggins; my two daughters, Lenique and Anya; and my parents, Conrod and Magdelene Constance

TANF ENTRY AND EXIT IN THE POST WELFARE REFORM ERA: THE CONTRIBUTIONS OF HUMAN CAPITAL AND SOCIAL CAPITAL

Monique A. Constance-Huggins, PhD

University of Pittsburgh, 2013

ABSTRACT

The 1996 Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) dramatically transformed the United States' welfare system. It did so by replacing the old cash system, Aid to Families with Dependent Children (AFDC), with Temporary Assistance for Needy Families (TANF). This new system is predicated on several mandates which include mandatory work in exchange for cash assistance, and a five-year lifetime limit on the receipt of cash assistance. This major restructuring resulted in greater emphasis on welfare recipients' ability to succeed in this market economy. Specifically, it evokes greater attention to the factors that can potentially hinder or promote welfare exit.

Research has primarily emphasized human capital theory in welfare receipt and exit. Human capital pertains to an individual's educational attainment or technical expertise that can translate into productivity within the labor market. Less research has been devoted to social capital, a concept that sheds light on the social reality in which people live. Social capital deals specifically with the advantages that are embedded in social relations than can provide economic benefits. In accordance with this definition, studies have shown that the accumulation of social capital has led to better employment outcomes. Given its importance, a view of the social capital of welfare recipients along with their human capital accumulation will help to illuminate the complexities inherent in entering and exiting welfare.

Among low income individuals, educational level does not necessarily reflect welfare status or a change in status. An important contributor to economic well-being, such as promoting TANF exit or hindering TANF entry, is social capital. However, little is known about its role in conjunction with human capital, among welfare recipients. In response to this gap, this dissertation seeks to examine the relative effects of human capital and social capital on TANF exit and entry.

This research is based on the Making Connections dataset which is part of a larger initiative by the Annie Casey Foundation to improve neighborhood social and economic opportunities. The results of this study show that social capital is an important predictor of exiting TANF, however it does not affect TANF entry. It also suggests that human capital is important for exiting TANF but does not act as a buffer against entering TANF. The implications of these findings are that welfare policy and programs should promote social capital and human capital efforts for welfare recipients.

TABLE OF CONTENTS

PREFACE. xiv

CHAPTER 1. BACKGROUND 1

Statement of the Problem and Significance 1

Study Overview 6

Problem Justification 6

CHAPTER 2. LITERATURE REVIEW 11

Single Mothers and Poverty 11

Historical Background to Welfare Reform 13

Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) 17

Current Knowledge on Welfare Use and Exit 21

Patterns of Welfare Use 23

Factors Affecting Welfare Receipt and Exit. 25

Exit Routes 30

Understanding Welfare Receipt: Conceptual Framework 33

Human Capital 33

Theoretical Development of Human Capital 34

The Operationalization of Human Capital. 35

Application of Human Capital to Welfare Receipt and Exit. 37

Empirical Findings on Human Capital and Welfare Use. 42
Critical Analysis 44
Social Capital and Welfare Use 47
Theoretical Development of Social Capital 47
Operationalization of Social Capital. 50
Application of Social Capital to Welfare Use. 52
Empirical Findings on Social Capital and Welfare Use. 57
Critique of Social Capital Theory. 58
Integration of Human Capital and Social Capital 59
Conceptual Framework and Hypothesis 62
CHAPTER 3. RESEARCH METHODS 65
Research Questions 65
Background to the Making Connections Survey 66
Suitability of MC Dataset to this Study 68
Research Design 69
Sample Selection 70
Operationalizing the Conceptual Model 70
Dependent Variable 70
Independent Variables 71
Human Capital 71

Social Capital 71

Control Variables 74

Data Analysis 76

Attrition and Missing Values 78

CHAPTER 4. DESCRIPTIVE RESULTS: FACTORS ASSOCIATED WITH TANF RECIPIENCY 79

Sample Characteristics 79

Differences and Similarities Between TANF Recipients and Non-Recipients at Wave 1 82

Human Capital Characteristics of TANF Recipients and Non-Recipients 83

Social Capital Characteristics of TANF Recipients and Non-recipients 83

Changing Status: Moving on to TANF 84

Human Capital Characteristics of Individuals who Moved-on TANF 85

Social Capital Characteristics of Moved-on Individuals 86

Changing Status: Moving off TANF 87

Human Capital Characteristics of Individuals who Moved-off TANF 88

Social Capital Characteristics of Move-off Recipients 89

Effect of Attrition 89

Summary of Descriptive Analysis 91

CHAPTER 5. THE EFFECTS OF HUMAN CAPITAL AND SOCIAL CAPITAL ON WELFARE RECEIPT AND EXIT 93

Factors Associated with TANF Receipt 93

Factors Associated with Moving on TANF 97

Factors Associated with Moving off TANF 101

Summary 104

CHAPTER 6. IMPLICATIONS FOR RESEARCH, POLICY, AND PRACTICE 105

Summary of Research Findings 105

Magnitude of TANF Entry and Exit. 105

Cross Sectional Analysis. 106

Human Capital 106

Social Capital 107

Exit Model. 107

Entry Model 109

Other Factors in Entry and Exit Models 112

Welfare Policy 114

Education and Welfare Policy. 115

Job Training and Welfare Policy 116

Social Capital and Welfare Policy. 117

Vehicle Ownership and Welfare Policy 117

Programs 118

Social Work Practice 122

Limitations of the Study 124

Future Research 126

Conclusion 128

REFERENCES 131

APPENDIX 145

LIST OF FIGURES

Figure 2.1. A conceptual framework for investigating the role of human capital and social capital on welfare receipt and exit 64

Figure 3.1. *Making Connections* targeted sites 66

Figure 3.2 Longitudinal design 69

LIST OF TABLES

Table 3.1. Operationalization of Study Variables.. 73

Table 3.2. Unemployment Rate for 2005.. 75

Table 3.3. State Rankings for Components of the TANF Program, by Overall Work Incentives 76

Table 4.1. Demograpic Breakdown for Full Sample at Wave 1 81

Table 4.2. Descriptive Statistics of Socio-Demographic and Community Context Characteristics for TANF Recipients and Non-Recipients at Wave 1 82

Table 4.3. Wave 1 Human Capital for TANF and Non-TANF Recipients 83

Table 4.4. Descriptive Statistics for Social Capital Characteristics for TANF Recipients and Non-Recipients at Wave 1 84

Table 4.5. Descriptive Statistics for Individuals who Moved to TANF 86

Table 4.6. Social Capital Characteristics of Move-on and Never-used Individuals..................... 87

Table 4.7. Descriptive Statistics for Move-off Compared to Always On Recipients.................. 88

Table 4.8. Social Capital Characteristcs of Move-off and Always Used Individuals 89

Table 4.9. Demographics for Wave 1 only and Waves 1 and 2 Respondents 91

Table 5.1. Logistic Regression Estimates Predicting the Odds of TANF Receipt 96

Table 5.2. Logistic Regression Estimates Predicting the Odds of Moving to TANF................. 100

Table 5.3. Logistic Regression Estimates Predicting the Odds of Moving off TANF 103

Appendix 1. Breakdown of Study Sample by Community... 145

Appendix 2. TANF vs. Non-TANF recipients on full sample at wave 1 146

PREFACE

ACKNOWLEDGMENTS

This dissertation could not have been completed without the love and support of many individuals. First, I will like to thank Dr. Ray Engel, my chair, for his support throughout this process. His patience with me, and encouragement to keep pushing on cannot be overstated. The constant edits, direction, and critical review of my work has contributed to me developing into a competent researcher. Additionally, I would like to express my gratitude to Dr. Greeno for providing immense feedback on my dissertation. Her intriguing questions have pushed me to think more critically about welfare policy and the relevance of my work. I would also like to acknowledge Dr. Wallace for his feedback on my dissertation. Through his frank and pointed critique I was able to reshape my work into a more refine product. The contributions of Dr. Elliott to this dissertation process cannot be overstated. His thorough edits and thought-provoking questions have helped me to become a better scholar. His constant push, yet gentle encouragement have helped me to stay focus during this difficult dissertation process. I am also grateful to the Annie E. Casey Foundation and the National Opinion Research Center (NORC) for granting me access to the *Making Connections* dataset. The staff members at these organizations have also provided me with invaluable assistance.

The love, support, and encouragement of my caring family also deserve special thanks. My dear husband, Leonard, has been a rock for me throughout this process. He always found the time to read my work and to provide advice, and a shoulder to lean on when I felt overwhelmed. I am grateful for the times when he will double up on household duties so that I can spend more time finishing my work. I am eternally grateful to him. I am also thankful and proud of my two princesses, Lenique and Anya. They have been patient with me as I took precious time away from them to work on my dissertation. Their hugs and sweet comments such as “mom I can’t wait for you to be done for us to play” provided a powerful motivation for me to complete this journey. Last but not least, I would like to thank my parents. The prayers and the encouragement of my mom have truly helped me along the journey. In fact, she instilled in me a deep sense of caring for individuals that influenced my decision to enter into the field of social work. My dad was also an inspiration to me embarking on this journey. His hard work and commitment to his family provided a model for all my endeavors, including working on my dissertation. He left this earth before I completed my dissertation but his spirit reminds me each day that I needed to keep persevering. I am eternally grateful.

CHAPTER 1

BACKGROUND

Statement of the Problem and Significance

The 1996 Personal Responsibility and Work Opportunity Act (PRWORA) dramatically transformed the United States' welfare system. It did so by replacing the old cash system, Aid to Families with Dependent Children (AFDC), with Temporary Assistance for Needy Families (TANF). TANF imposes a five-year lifetime limit on the receipt of cash assistance. However, states are permitted to use their own funds to shorten or extend the federal limit on cash receipt and benefit eligibility. The PRWORA also requires individuals to work or participate in work-related activities in exchange for cash assistance (Blank, 2002). Since this paradigm shift, TANF caseload has plunged by more than 50% as the new restrictive policy, coupled with the robust economy of the 1990s, hastened exit from, and slowed entry into TANF.

However, these movements did not occur evenly across the population, as individuals with fewer barriers to employment were more likely to exit TANF and less likely to enter TANF. Put differently, those individuals with more barriers will be less likely to exit, and therefore, are at greater risk for long-term dependence (Seefeldt & Orzol, 2005). This highlights the need to examine the factors that underlie the process by which individuals rely on or exit from welfare.

More than fifteen years after the passage of welfare reform, and in the midst of the 21st century Great Recession, there is refocused attention on welfare entry and exit and the factors that predict changes in status. In response to this refocused attention, this dissertation examines the role of human capital and social capital as predictive factors against the need for TANF and factors that facilitate exit from TANF.

TANF is a key welfare program in the United States. Although it is not the largest federal program to address the needs of poor families, it is the largest direct cash assistance program serving the non-elderly and able-bodied (Martin & Caminada, 2011). TANF is the only mechanism through which families receive cash directly to supplement their income on a monthly basis (Martin & Caminada, 2011). Accordingly, there are several factors (such as education, work experience, transportation, and social connections) that affect welfare use associated with TANF which this dissertation further examines.

It is important to examine factors that affect welfare receipt and exit is an important endeavor for several reasons. First, entering and exiting welfare are related to the debate around the functions of welfare. Second, the extent of welfare use can exacerbate the hardship faced by single mothers. Third, entering and exiting welfare can perpetuate the disparities that already exist in welfare use.

Entering and exiting welfare are intricately related to the debate around the functions of welfare. For several decades, a major controversy has been that cash assistance increases long-term dependence among recipients. Many critics argued that welfare is more of a problem than a solution to poverty (Mead, 1986; Murray, 1984) and served as a major justification to eliminating AFDC and replacing it with TANF. Other scholars have asserted that welfare is an important cash-based option among poor families, which helps to improve their well-being (Grice, 2005). Regardless of the position taken, it can be argued that entering and exiting welfare is an important gauge of a family’s economic well-being. The findings from this study will help to shed light on this issue by highlighting the extent of welfare use in this sample and the factors that shape an individual’s capabilities to make the transition from welfare.

In this era of time-limited welfare, the extent to which single mothers use and exit welfare can exacerbate the economic hardship they face. For example, individuals who are unable to find work (because of barriers to employment) and thus may not leave welfare are at greater risk of exhausting their time limit. Therefore, they will be forced to leave even in the face of poverty and economic hardship. Alternatively, many individuals may be denied cash assistance because they are unable to comply with the requirements of TANF. In either case, this suggests that some poor families will ultimately have to pay the cost of their own disadvantage (Grice, 2005). Accordingly, understanding the factors that affect welfare receipt and exit is critical for evaluating the overall impact of welfare reform.

Compounding the ramifications of the time limit on welfare receipt is the impact of the 2008 (21st century) Great Recession. Sum and Ishwar (2010) suggest that the 2008 recession has been the worst economic downturn in the last 75 years. The recession has affected low-income mothers in two ways. One consequence of the recession has been drastically reduced state revenues leading to cuts in human services. Second, it has fueled a spike in unemployment rates (Sum & Ishwar, 2010). While individuals in the top 20% income bracket enjoyed close to full employment, the bottom 20% faced an unemployment rate of 30%, surpassing the overall unemployment rate of the1930 Great Depression (25%) (Sum & Ishwar, 2010). It is those individuals in the lowest quintile of the income bracket that are most likely to be served by the welfare system. Therefore, the impact of the recession on them cannot be ignored.

The issues of welfare receipt and exit are also critical because of their potential contribution to perpetuating the economic disparities already prevalent in the United States. For example, African Americans make up a disproportionate share of individuals in poverty. Concomitantly, they are more likely than Whites to receive welfare and are less likely to leave welfare through work. Additional research is needed to determine what contributes to welfare use and the exit routes from welfare and hence poverty for all individuals, especially racial minorities.

Research has primarily emphasized human capital theory in welfare receipt and exit (Bane & Ellwood, 1994; Hamil-Luker, 2005; Harris, 1993; Heflin, 2003). Human capital refers to the educational level, skills, and work experience that an individual possesses that translate into productivity in the labor market (Sunstein, 1997). This theory suggests that individuals with greater levels of human capital will be more successful in the labor market and will be less reliant on welfare (Hamil-Luker, 2005). Although human capital theory is useful in explaining economic outcomes, it is missing a critical component that could also affect outcome –social capital (Gezinski, 2011). For example, human capital theory highlights individual efforts to gain more education and skill, while ignoring the role of social capital in the form of family/friend support as well as community participation. Coleman (1988) describes social capital as the advantages that are embedded in social relationships. He regards it as actual or potential resources that are linked to relationships and therefore, it is a means by which people can gain access to economic and cultural resources. Portes (1998) also captures it as “the ability of actors to secure benefits by virtue of membership in social networks or other social structures” (p. 6). Despite the current welfare policy that stresses individual responsibility, the social reality is that all individuals, including those on welfare, are embedded in the larger society and are reliant on it (Ward & Turner, 2007). This phenomenon is an important predictor of individual differences in people’s economic experiences (Granovetter, 1973). As an asset, social capital, like human capital has the potential to translate into productivity in the labor market (Weaver & Habibov, 2012).

Among low-income individuals, human capital factors such as educational level do not necessarily reflect welfare status (Pandey & Gua, 2007), although in the population as a whole, human capital is positively associated with economic success. An important contributor to economic well-being, including exiting or avoiding welfare, is social capital. Coleman (1988) in his seminal essay *Social Capital in the Creation of Human Capital* surmised that social capital, like human capital, “is productive, making possible the achievement of certain ends that in its absence would not be possible” (p. S98). Given its importance, a view of the social capital of welfare recipients along with their human capital accumulation will help to illuminate the complexities inherent in entering and exiting welfare.

This dissertation seeks to expand current knowledge on welfare receipt and exit in several ways. First, it seeks to provide greater insights into the resource profile of welfare users by examining the separate contributions of social capital and human capital to welfare entry and exit. The effects of social capital on welfare exit have been explored by few researchers (Hawkins, 2002; Ward & Turner, 2007). However, these researchers have not explored welfare entry through the lens of social capital theory. This study is the first to examine the effects of social capital on both TANF entry and exit in the same study. The integration of human capital and social capital is necessary to provide a fuller and more nuanced view of the experiences of welfare recipients. Second, in contrast to most previous work, it focuses on welfare use in the years after welfare reform. Third, unlike most of the post-welfare studies which use data from a single state, this study is based on information drawn from several U.S. states across varying regions. It therefore provides a broader understanding of welfare use in the U.S.

Study Overview

This dissertation builds on the current literature by examining whether human capital and social capital separately contribute to welfare entry and exit among single mothers. Human capital and social capital are captured using a more inclusive set of variables than most previous studies.

The dissertation is based on panel data (N=1,067) from *Making Connections,* which is a survey of families residing in 10 low-income neighborhoods across the U.S. Studies have shown that social capital is an increasingly important path to economic mobility (Gezinski, 2011; Hawkins, 2002; Simmons et al., 2007). However, it is well established that social capital varies by socio-economic status (Wilson, 1987). Given that the *Making Connections* sites are in low-income neighborhoods, theoretically we might expect them to have low levels of social capital (Massey & Denton, 1993; Wilson, 1987). However, it is still important to examine the effects of social capital on welfare outcomes within this rather limited range.

The specific questions addressed are:

1. Are human capital and social capital variables associated with TANF receipt?
2. To what extent, if any, do human capital and social capital predict TANF entry?
3. To what extent, if any, do human capital and social capital predict TANF exit?

Findings from the analyses as well as their implications for social work practice and future research are presented in chapters 4, 5, and 6.

Problem Justification

Although the issues of welfare receipt and exit are critical for all populations, it may be greater for oppressed populations, who are already disadvantaged by exogenous economic and structural forces. Their daunting social and economic conditions relative to those of the dominant groups in society, render them at greater risk to rely on welfare. They are beset with more barriers, such as low education, single parenting, and a lack of social connections, which ultimately impede exit from welfare (Boisjoly, Harris & Duncan, 1998). At the center of these groups are women, who account for about 90% of the welfare roll (Duncan, Harris & Boisjoly, 2000). Women with children are particularly dependent on welfare given their economic vulnerability.

Single women with children are at an increased risk of being poor and having to depend on welfare for a number for reasons. First, they lack the second income that is necessary to 'weather economic storms'. Second, single women are often forced to take part-time jobs that do not pay a living wage or that offer little or no benefits. Further, higher wage, full-time jobs can exert demands on single women that they might not be able to meet. Lastly, single women may have difficulty finding safe and affordable childcare so they can seek and maintain a job (LegalMoment, 2011).

Welfare receipt and exit are critical when gender and race intersect. Women of color, in general and African Americans in particular, lag behind their White counterparts at every juncture of welfare – they have higher rates of welfare use, lower rates of exit, longer stays, and are 50% more likely to return to welfare after leaving (Bane & Ellwood,1994; Edin & Harris, 1999; Harknett, 2001). For example, in 2006 African Americans made up 12.8% of the general population but accounted for 36% of TANF recipients. Non-Hispanic Whites were 65.6% of the population, but accounted for only 37.5% of TANF recipients (U.S. House of Representatives, 2008).

Other racial minority groups do not fare much better than African Americans. Although data on Hispanics are less copious, existing reports show that they are also over-represented on TANF. They make up 21% of the TANF population, but only 15.4% of the general population

(U.S. House of Representatives, 2008). Research also suggests that many of them have low levels of education, large families, and a language barrier (Stier & Tienda, 2000), which exacerbate their risk of using TANF and reduces the likelihood of TANF exit. Although data on other minority racial groups, particularly Native Americans remain scant, they may have similar welfare experience to African Americans and Hispanics since they are demographically similar and may face similar forms of economic, social, and political oppression (Pandey & Gua, 2007).

Relevance to social work. Entering and exiting welfare are important issue areas of inquiry for social work. From its inception, the social work profession has had a noteworthy relationship with programs to assist the needy (Rank & Hirschl, 2002). For example, the profession's early and seminal association with settlement houses centered around recognizing and addressing unmet needs created by economic, demographic, and policy changes (Koerin, 2003). Further, the American history of welfare programs, through the New Deal, was developed and implemented by two social workers –Frances Perkins and Harry Hopkins (NASW, 2009). This work epitomizes the profession's concern for, and commitment to enhance the well-being of individuals affected by poverty. In keeping with this tradition of helping people in need, social workers have to be keenly concerned about the extent to which those in poverty use and exit TANF. In fact, this focus on poverty is reflected in the National Association of Social Work's (NASW, 2008) code of ethics:

> Social workers pursue social change, particularly with and on behalf of vulnerable and oppressed individuals and groups of people. Social workers' social change efforts are focused primarily on issues of poverty, unemployment, discrimination, and other forms of social injustice (p.3).

There are several reasons why an understanding of the complexity of welfare entry and exit is essential for social work practice. First, social workers often work within settings where they have to implement public assistance programs and policies (Rank & Hirschl, 2002) Knowledge of welfare entry and exit, as well as their predictors, will therefore enable social workers to implement these policies in more sensitive ways. For example, knowing that certain characteristics may constrain welfare exit, will help social workers to design programs that address specific subgroups. Second, social service agencies in which social workers are employed are likely to experience an influx of welfare recipients whose financial needs may not be adequately met by welfare or the labor market (Taylor & Barusch, 2004). Understanding the system of factors that influence welfare receipt and exit can therefore help social workers to better contextualize their clients' problems. This is consistent with the "person-in-the-environment" perspective often used by social workers (Germain & Gitterman, 1995).

Third, social workers also advocate for expanding the social safety net for the poor. From the onset, social workers have been concerned about the impact of reform on the ability of poor individuals to take care of their families (Long, 2000). The imposition of time limits for cash assistance, mandatory work, and sanctions for non-compliance was seen as threatening the safety-net of individuals. In fact, social workers have always been skeptical about how such welfare reform would protect individuals from a low-wage labor market as well as enhance access to jobs, insurance, child care, and paid family leave. Accordingly, the NASW calls for a campaign to return to the social safety net for poor families (NASW Speaks, 2012). Having an understanding of the factors that influence welfare use and exit could help to boost this campaign.

Further, knowing the effects of human capital and social capital on TANF use and exit would be useful to social workers. The hallmark of the social work profession is to improve the well-being of individuals' lives. Social workers can help their clients improve their well-being by building or modifying their social capital (Pinto, 2006). In fact, social workers should become critically aware of their position in the social network of their clients. These social networks, which include social workers, can help mobilize resources, provide information, and connect TANF recipients to potential employers. Therefore, in order to help their clients, social workers need to better understand the connection between social capital and their use of social services, and obtaining employment.

The same is true for human capital. Social workers who understand the connection between human capital and welfare status can help to improve their clients' well-being by encouraging them to go back to school as well as referring them to training and extra educational services. Gooden (2006) however, cautioned that such encouragement and referrals be done in an equitable way where racial minorities are given the same opportunities as Whites by social workers to build their human capital.

CHAPTER 2

LITERATURE REVIEW

This chapter highlights several topics that are critical to our understanding of welfare receipt and exit among single mothers in the United States. It begins with a discussion of single mothers and poverty. Next, it provides a historical overview of welfare reform, and a description of current welfare policy. The chapter then focuses on what is currently known about transitions in and out of welfare. Finally, it ends with the theoretical framework providing the basis for this dissertation.

Single Mothers and Poverty

Female-headed households are among the fastest growing households in the U.S. From 1950 to 2007, the share of family households with children under 18 that were maintained by a single mother grew from 6% to 23%. At the same time, the percentage maintained by married couples dropped from 93% to 71%. Meanwhile households maintained by a single father increased from 1% to 5% (Kreider & Elliott, 2009).

The prevalence of female-headed households varies across sub-groups. For example, in 2007, 30% and 18% of Black and Hispanic families, respectively, were maintained by single women. Among White family groups, 8% were headed by single women.

Female-headed households are more likely than other households to live in poverty. In 2009, the poverty rate among families with female householder was 29.9% compared to 16.9% for families with a male householder and 5.8% for married couples (DeNavas, Proctor, & Smith, 2010). Further, individuals in female-headed households had a higher rate (51.8%) of episodic poverty (in poverty for two or more months), and higher rate (9.7%) of chronic poverty (in poverty for more than 36 months) than people in married-couple families. In addition, female-headed households had a lower poverty exit rate (33%) than married-couple families (50.3%) (DeNavas, Proctor, & Smith, 2010). These figures reflect the economic hardships that families headed by single mothers face.

Consistent with such high poverty rates, single mothers experience significant material hardship. For example, in 2009, 37% of single mothers were considered by the United States Department of Agriculture (USDA) to be “food insecure.” Single mothers comprise the majority of homeless families and about one-fifth live in a household of another person (LegalMomentum, 2011).

Given the higher poverty rates and heightened economic hardship, single mothers are at an increased risk of using welfare. The increase in welfare caseload since the 1970s was due largely to the growth in female-headed families (O’Neill & O’Neill, 1997). Forty percent of single mothers used cash welfare (Lower-Basch & Greenberg, 2009). Further, single mothers, especially those with younger children, make up the greater proportion of welfare recipients. For example, over half of TANF recipients are single mothers with a child below age six and over a quarter are single mothers with a child two years of age or younger (LegalMomentum, 2011).

The intersection of poverty and race highlights another dimension of TANF use. Women of color are over-represented on TANF participation. While African American females account for 12.5% of the U.S. female population they make up 36% of the welfare rolls. This share is similar to that of Whites (38%) but is significantly higher than that of other racial minority groups. For example, Hispanics (also over-represented on the TANF rolls) account for 21%, while multiracial families accounted for 5.4% of welfare rolls (U.S. Committee on Ways and Means, 2008). This high share of African Americans on welfare relative to their share of the population has remained relatively unchanged over the years. In fact, while Whites experienced a noticeable and steady decline in their welfare rolls after welfare reform, the share of African Americans was only slightly lower than its pre-welfare reform level. For example, the share of African American welfare recipients was only 1.4% lower in 2006 than it was in 1994 (U.S. Committee on Ways and Means, 2008), while, the share of White welfare recipients in 2006 was 4.2% lower than that in 1994.

Historical Background to Welfare Reform

Over the years, social welfare programs to help low-income mothers in the United States have undergone significant changes. Programs have shifted from state and local Mothers' Pension Plans in 1911, to Aid for Dependent Children (ADC) in 1935, to Aid to Families with Dependent Children (AFDC) in 1962 and to Temporary Assistance for Needy Families (TANF) in 1996. This section presents a brief review of these changes with particular emphasis on the underlying influences that fueled them. Also, the section provides an overview of TANF.

The Mothers' Pension program was established in 1911. It was designed to help the "deserving poor" (mostly White widows) (Abramovitz, 1996). The pension plan was based on the assumption that keeping children in the home with their mothers was more cost effective than institutional care or orphanage. Furthermore, the architects of the plan believed that Mothers' Pension would reduce the need for struggling mothers in the labor force to work for meager wages in low paying agricultural, domestic or factory jobs (DiNitto & Cummins, 2006).

The Social Security Act of 1935, replaced Mothers' Pension with a federal entitlement cash program – Aid to Dependent Children (ADC). The ADC program was designed to help mothers who had lost the income of their spouse. At this time, single mothers were seen as "deserving" poor since most were widowed. Consistent with the Mothers' Pension, it was the belief that it was the responsibility of these mothers to stay at home to care for their children

(Grice, 2005). Further, the 1939 passage of the Survivors Insurance covered many of these widows. The initial focus of the ADC on widows was reflected in the composition of the welfare rolls. In 1939, for example, widows accounted for the majority of the welfare roll (61%); individuals who were deserted, divorced or separated made up 37%; while never-married mothers were 2% of the welfare roll (Abramovitz, 1996).

However, social changes over the decades created a paradigm shift in the public's view of mothers. One of the most notable changes was the increase in out-of-wedlock births. For example, between 1940 and 1958, out-of-wedlock births tripled (Trattner, 1999). In addition, there was a surge in divorce rates. These changes in family structure were reflected in significant compositional changes in the welfare rolls. For example, never-married women made up one-third of the population on welfare in 1975, but this share soared to three-fifths in 1988 (58%) (O'Neill & O'Neill, 1997). In essence, while the total number of families on welfare increased slightly between 1975 and 1988, the number of single-headed families on welfare doubled. Accordingly, individuals on welfare were seen as less deserving of public aid.

Other changes also shaped the way mothers on welfare were perceived. Notably, the proportion of single mothers among the poor population increased. Consistent with this, the welfare caseload burgeoned. For example, the number of welfare recipients grew from 1.2 million individuals in 1940 to 8.5 million individuals in 1970, and 11.5 million individuals in 1990 (DiNitto, 2006). Further to this, the share of minorities on welfare grew. The increasing presence of minority women compounded the negative perceptions of welfare recipients (Neubeck & Cazanave, 2001). Another significant change was that the number of women with children entering the workforce soared. For example, between 1950 and 1995, labor force participation among women with children under age 18 increased from 22% to 70% (Committee on Ways and Means, 2008). Many argued that if these women were able to work and still care for their children, then the same should be expected of mothers receiving welfare. In light of these dynamics, women on welfare were increasingly viewed as undeserving; and ever since, cash assistance was deemed the problem and not the solution (Trattner, 1999).

In the decades before the 1996 welfare law, several steps were taken to encourage marriage and work among welfare recipients. For example, based on the belief that ADC encouraged single parenthood, the Kennedy Administration in 1961 granted states the option to extend ADC benefits to children of two parent families who were unemployed (Trattner, 1999). This led to the program being renamed Aid to Families with Dependent Children (AFDC) in 1962. By 1967, Congress had become concerned about the need to make public assistance services work-related (Caputo, 2011). Accordingly, the Work Incentive Program (WIN) was created as the major vehicle for implementing AFDC related work and training. The program mandated that fathers receiving AFDC register for the program in exchange for cash assistance. Although registration was voluntary for mothers, they were encouraged to join by the incentives the program provided. For example, work incentives included promises of employment services, training, and increased funding for daycare. The program also mandated a reduction of the 100% tax on earnings. This meant that AFDC recipients who were working were allowed to retain the first $30 and subsequent one-third of earnings before a reduction in their grants (Caputo, 2011). WIN, however had a spotty existence; It found jobs only for 2-3% of the 2.5 million eligible AFDC families while the budget was $150 million. As a result there were calls for the program to end at the end of the 1960s (Caputo, 2011).

Legislative actions were also taken to severely restrict the receipt of cash assistance. These efforts date back to at least the Omnibus Budget Reconciliation Act (OBRA) of 1981.

The Act represented the first major shift in welfare policy to cut cost and to only provide for the "truly" needy. It did so by limiting the eligibility of welfare receipts; and reducing benefits. The OBRA essentially started the trend of moving AFDC from an income maintenance program to an employment program (Epstein, 1997). The Act establised federal mechanisms that allowed states to experiment with initiatives that would boost employment of welfare recipients. Among these mechanisms were community work programs, and a work supplementation program that allowed for the use of welfare funds to subsidize client employment in public, private, and non-profit organizations. Further, it expanded states' authority for requiring both AFDC applicants and recipients to participate in job search programs (Epstein, 1997).

The next major attempt at reforming welfare was the Family Support Act (FSA) of 1988. The purpose of the Act was to revise the AFDC program to emphasize work, child support, and family benefits; and to amend title IV of the Social Security Act to encourage and help needy children and their parents to obtain the education, training, and employment needed to avoid long-term welfare dependence (Public law 100-485 October 13 1988). In this vein, the Act created the Job Opportunity and Basic Skills Training Program (JOBS) within AFDC. The program provided AFDC recipients with jobs, training, remedial and basic education, supportive services, extended health benefits and childcare (Besharov, Germanis & Rossi, 1997). Further, it encouraged individuals to attend college while receiving cash assistance. JOBS was largely guided by a human capital development approach to employment. This approach emphasized the importance of up-front investment in basic education, training, and skill development, as a means to self-sufficiency (Schneider, 2005). The JOBS program according to a General Accounting report "embodies a new consensus that the well-being of children depends not only on meeting their material needs but also the parents' ability to become economically self-sufficient" (O'Neil & O'Neil, 1997, p. 56).

The FSA also required states to impose work or participation mandates on welfare recipients. States were expected to enroll a large portion of their welfare roll in JOBS related activities. Further, they were required to target more of their expenditure on individuals who were more at risk of becoming welfare dependent. For the first time, parents with children under the age of six were expected to participate in a work activity.

Despite these changes, AFDC became increasingly controversial and the political support for the program weakened. However, it functioned as a temporary aid for many families, only about 10% of these families including unwed mothers had remained on the system for many years (O'Neil & O'Neil, 1997). Further, the caseload between 1988 and 1995 burgeoned from 3.8 million to 5 million. Concern about reducing the dependency of these individuals prompted a national call for welfare reform. In 1992, then Democrat Presidential candidate Bill Clinton made welfare reform a key campaign focus with a proposal "to end welfare as we know it." On August 22, 1996, the President enacted the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA).

Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA)

The Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996 replaced AFDC with Temporary Assistance for Needy Family (TANF). Clothed in a spirit of self-sufficiency, the Act represents the watershed legislative intervention that fights welfare use. The new system changed the purpose of welfare from merely providing cash support to needy individuals to one of promoting work and marriage, as well as reducing nonmarital births and ultimately welfare rolls (Hamil-Luker, 2005).

TANF took a stark departure from the nature of the old cash system. First, the new legislation imposed a five year lifetime limit on the receipt of support funded through the federal government. However, states have the option to use their own funds to shorten or extend the federal limit. Second, recipients are required to work or participate in a work activity in order to receive cash payments. In fact, states were expected to have placed 50% of their welfare recipients in work programs for at least 30 hours per week (or 20 hours for women with children younger than age six) by 2002. The new law sharply curtailed which educational and training activity would fulfill this requirement. Another feature of the policy is that individuals are sanctioned for non-compliance. Sanction could take the form of reduction in benefits or complete removal from the welfare rolls. TANF also disqualifies a wide range of individuals as ineligible to receive benefits. Among these groups are teen mothers, people who refuse to work, convicted drug felons, and immigrants. Another key component of TANF is the 'family cap.' This gives states the option to deny mothers an increase in cash assistance if they have additional children while on welfare (Blank, 2002).

Another component of the policy is the devolution of greater program responsibility to the states through the provision of block grants for TANF (Blank, 2002). This decision essentially eliminated all federal eligibility and payment rules, while granting states more flexibility with their own cash assistance. Further, it removed the federal entitlement to receiving cash as states now have the power to choose which families they want to support.

These key features of welfare reform were not random. They were fueled by a number of forces. First, they were largely shaped by a belief in the individual explanation of poverty and long-term welfare use (Handler, 1995). There was an increasing right-wing ideology of welfare recipients being lazy, sexually irresponsible, and welfare cheats, and therefore undeserving of aid

(Gooden, 2006). In particular, concerns were raised over the increasing number of out-of-wedlock births and labor force detachment. The belief was that AFDC provided incentives for women to refrain from working and to have children out of marriage. This was consistent with the views of Mead (1986) on the function of welfare. Mead suggested that “federal politicians tend to use social programs simply to give deserving people good things, seldom to set standards for how they ought to behave. Thus, dependent groups are shielded from the pressures to function well, which in turn impinge on other Americans” (p. 2). He further surmised that welfare policy had largely ignored the behavioral problem among the poor, and therefore had failed to overcome poverty. In this vein, TANF sought to heal what was seen as the ill-behavior of welfare recipients through program features such as the five-year limit on cash receipt, mandatory work requirement in exchange for receiving welfare benefits, and sanction for non-compliance.

The moral attack was particularly harsh on racial minorities. According to Handler (1995), race and ethnicity reinforced the moral condemnation of welfare. He asserted that “the stereotypical welfare recipient is a young, inner-city Black mother who has several children in order to get more welfare, thus breeding another generation of future welfare mothers, unemployed males, and criminals”(p.4.). As a result, labels such as “mammies”, “jezebels”, and “hoochie-mamas” were attached to Black women during the welfare reform debate (Handler, 1995). These labels have stigmatized Blacks in ways that women of no other race have been stigmatized. Feagin (2000) suggests that these negative terms for Black women have their roots in slavery and “Jim Crow” racism when they were used to justify the raping of Black women. Other terms such as ‘welfare queen’ and ‘welfare mother’ used during the welfare debate, disproportionately affected Black women because of their over-representation on welfare.

Neubeck and Cazanave (2001) surmised that, “the term welfare mother suggests a master status that carries many stereotypes and which overrides all other human features of mothers receiving public assistance” (p. 243).

This pervading socio-cultural view of welfare recipients being undeserving provided the basis for the heavy emphasis on mandatory work, the use of sanctions, and the imposition of time limits. These features disadvantage many individuals, particularly racial minorities. For example, the heavy use of sanctions overlooks the many structural barriers in the labor market encountered by single mothers of color. In essence minorities are punished for historical legacies, and current reality of discrimination (Gooden, 2006).

These moral attacks against the welfare system coincided with the increasing darkening of the welfare rolls. Starting from the 1960s, welfare had come to be viewed as a “black program” with the increasing number of Blacks (Schram, 2005). The increased number of Black recipients made welfare politically vulnerable (Williams, 1987). Williams (1987) suggested that welfare was “being used as a political cudgel by anti-tax, anti-big government conservatives; and being wielded on behalf of white “backlash” and racial polarization” (p.10). The calls for the “black system” to be contracted eventually came in the 1990s. Schram (2005) purports that if welfare had been seen as a white, middle class program it would not have received the political and public backlash that it did. The negative social construction has served to subjugate Black women on welfare both in the design of the policies and in their implementation. The policy makers attacked the alleged moral deficiencies of the poor and disguised their racial sentiments, thus being able to present the goals of PRWORA in race-neutral terms (Neubeck & Cazenave, 2001).

The moral attack on welfare recipients was accompanied by fervent complaints about the increasing cost of maintaining welfare rolls. Welfare benefits were $134 million in 1940 and had reached $4.9 billion in 1970. In 1990, welfare benefits had totaled $18.5 billion. Despite these increases, the welfare program was only a very small part of governments' budget. In 1994, when welfare enrollment was at its peak, federal, state, and local governments spent less than 1 (.9) percent of their budget on the program. Yet, governments continued to complain about a financial squeeze (DiNitto & Cummins, 2006) All these forces combined to play a pivotal role in shaping the features of the current welfare policy.

Current Knowledge on Welfare Use and Exit

Welfare is the language used here to refer to TANF. It plays a significant role in the lives of single mothers as it is the only program that directly provides cash to poor families allowing them to supplement their income on a monthly basis. However, since the 1996 welfare reform, enrollment in this important program has plummeted. For example, the enrollment of eligible families declined from 84% under AFDC in 1995 to about 40% under TANF in 2009 (Pavetti & Scott, 2011). In comparison, the Food Stamp program enrolls over 85% of eligible children. During the recent 21st century "Great Recession," TANF enrollment increased by 110,000 from 1.73 million families in 2007 to 1.84 million families in 2009. However, this increase has not reached pre-welfare reform numbers. Further, the increase in TANF enrollment during the 21st century recession greatly lagged behind the increase in the number of poor families during that same time period. The number of families in poverty increased 800,000 from 5.8 million in 2007 to 6.6 million poor families in 2009 (U.S. Census Bureau, 2010).

Beneath these numbers is a more complex picture of what triggers an individual to use welfare. Studies done both before and after welfare reform have identified birth of a child, loss of a job and separation from a spouse as key events to trigger welfare use. For example, Bane and Ellwood (1994) using Panel Study for Income Dynamics (PSID) data to explore welfare entry and exit among female heads of households found that changes in family structure were the most common event associated with welfare entry. They found that 42% of entries to welfare took place when a wife became the head of a household, while 39% of entries were attributed to when an unmarried woman without a child became head of the family with a child. A drop in earnings is also associated with entry to welfare. According to Bane and Ellwood (1994), such events accounted for 7% of all entries. Although it was significant, it was strikingly lower than entries triggered by changes in family structure.

However, these findings were contradicted by Boisjoly and his colleagues (1998), who used 28 years of data from the PSID. Unlike Bane and Ellwood (1994), they found that no one event accounted for more than one-third of welfare entry. Of particular interest, first birth to an unmarried woman occurred in only one-fifth to one-quarter of the cases. This muddle of results could perhaps be explained by the different sample of women used in both studies. The sample used by Boisjoly and his colleagues (1998) included non-heads of households, who are possibly younger and less likely to be married, relative to female heads of households.

In linking these triggers of welfare entry to length of welfare use, both studies were less contradictory. The studies showed that entries that start with births to unmarried women are associated with longer stays on welfare. For example, Boisjoly et al. (1998) found that only 30% of welfare spells associated with birth of a child ended within two years; roughly half remained on welfare after five years; while one-quarter were still in progress after 14 years. These patterns of welfare use are further discussed below.

Patterns of Welfare Use. Welfare use over time is an important consideration in this discourse on welfare receipt and exit. Several studies have followed welfare recipients over time and have shown that welfare use is diverse. Research conducted on pre-PRWORA samples of recipients has shown that there are short term users, long term users, and cyclers (Bane & Ellwood, 1994; Blank, 1989; Harris, 1996; Rank, 1985; Rank & Hirschl, 2002). In fact, contrary to the public's perception of persistent welfare use among the poor, welfare stays were brief (Bane & Ellwood, 1994). About 50% of all spells (a period of welfare receipt) end within two years, while 14% lasted 10 or more years. However, the study also found that at any point in time 48% of recipients were in spells expected to last ten or more years. This is because individuals with long spells piled up on the caseload. Bane and Ellwood further noted that while holding other factors (such as education level and family size) constant, African American women had a first welfare spell that was more than a year longer than that of White women. Additionally, Bane and Ellwood (1994) found that 33% of African Americans compared to 15% of Whites had spells lasting more than ten years.

Bane and Ellwood (1994) also found that many women who left welfare did not do so permanently. In fact, 17% of the women who left welfare cycled back within the following year. They also noted that cycling was more common for those recipients in the first couple of years after exiting welfare than for those who remained off the system for at least three years. They further found that African Americans (48%) were more likely than Whites (32%) to return to welfare. Edin and Harris (1999) similarly found that although African American women were more likely than their White counterparts to work continuously after leaving welfare, they were nearly 50% more likely to return to welfare.

Rank and Hirschl (2002) who approached the patterns of welfare use inquiry from a life course perspective also echoed the findings of previous studies. Relying on PSID data from 1967 to 1996, they found that most Americans who use welfare do so for a short time; however, once Americans use welfare, they are likely to do so again at some point in their life. Specifically, of those individuals using welfare between ages 20 and 65, 90% will do so more than once. The extent of repeated use suggested in this study is higher than that found in earlier studies. This is because Rank and Hirschl used a much wider definition of welfare than most studies. They included users of AFDC, food stamps, Medicaid and Supplemental Security Insurance. Further, while previously cited studies explicitly focused on female heads of household, Rank and his colleague did not have that limitation in their sample.

Studies examining TANF recipients since the 1996 enactment of the PRWORA have also found that welfare use over time is dynamic (Burley et al., 2001; Rangarajan & Johnson, 2002). However, there is evidence that the pattern of use may differ slightly from that of pre-welfare reform. Notably, welfare recipients under TANF are more likely to move on and off quickly and spend a shorter period on welfare than recipients on AFDC. For example, Rangarajan and Johnson (2002) in their study of patterns of receipt in New Jersey over a three-year period (using state data), found that fewer than 30% of recipients remained on welfare beyond two years. Further, roughly half of the individuals received cash assistance for twelve months or less. Burley and colleagues (2001) echoed similar results; in examining patterns of welfare use in Washington State, they found that since 1997 fewer individuals were staying on welfare continuously. They found that since welfare reform, the average stay on welfare declined from 28 months to 18 months.

Other post welfare reform studies show substantial welfare cycling (Acs & Loprest, 2004; Born, Ovwigho & Cordero, 2002; Cancian, Meyer & Wu, 2005; Cheng, 2002; Loprest, 2002). For example, data from the Urban Institutes' National Survey of America's Families (NSAF) - collected since 1997- found that one-fifth of welfare leavers returned within one year (Loprest, 2002). However, Born, Ovwigho & Cordero (2002) examining welfare use in Maryland, found somewhat higher rates of return to welfare than Loprest (2002). They found that 31% of recipients cycled back onto welfare within a year and that the majority did so within the first three months. The inconsistency in these findings could be explained by the fact that Born and his colleagues (2002) utilized administrative data. This data source includes gaps in welfare receipt of less than 30 or 60 days. Pavetti (1993) suggests that gaps of this size might reflect administrative exits (due to error, or non-compliance with paperwork submission deadlines) and not true exits from welfare. Also, the inconsistency might represent differences in state policies.

Although it is presumed that changes in the welfare policy have impacted patterns of welfare use, some of the differences between pre- and post-PRWORA findings could perhaps be explained by methodological differences. For example, Rangarajan and Johnson (2002) drew their conclusion from only three years of observation compared to earlier scholars (such as Boisjoly, Harris & Duncan., 1998) who relied on many more years of data. As Nam (2005) suggests, estimates can be influenced by length or frequency of observation. Further, sample sizes drawn from national datasets (utilized in many pre-PRWORA studies) are often larger than those drawn from state datasets.

Factors Affecting Welfare Receipt and Exit. There is a large body of literature documenting the factors that affect welfare receipt and exit. Researchers have largely used barriers to employment as a framework for examining these factors. In sum, studies conducted before welfare reform found that single women who rely on welfare have more employment barriers than non-welfare users (Bane & Ellwood, 1994; Boisjoly, Harris & Duncan, 1998; Edin, Harris, & Sandefur, 1998; Harris, 1993; O'Neil & O'Neil, 1983; Spalter-Roth, Burr, Hartmann & Shaw, 1995). For example, Harris (1993) found that having large families increased reliance on welfare, hindered exit through work, and limited welfare recipients from obtaining self-sustaining jobs. Similarly, Stellmack and Wanberg (2000) found that women with fewer children stayed off of welfare longer. Meanwhile, Edin, Harris and Sandefur (1998) reported that women with two or more children were far less likely to find a job and leave welfare. Not only is the number of children important in examining welfare use, but the age of the children is also critical. Having younger children in the household will increase the likelihood of a mother using welfare and will constrain her ability to leave welfare through work or marriage (Edin & Lein, 1997).

Age is another notable background characteristic. For example, Boisjoly, Harris & Duncan, (1998) found that individuals who were older (at least age 22), relied less on welfare. This could be that older women are more likely than younger women to exit welfare because they can better adapt to their situation, have greater networks, as well as have more life skills that might facilitate employment experience (Harris, 1993).

In addition to these background characteristics, pre-welfare reform studies report that human capital variables influence welfare receipt and exit (Bane & Ellwood, 1994; Boisjoly, Harris & Duncan, 1998; Edin, Harris, & Sandefur, 1998; Harris, 1993; O'Neil & O'Neil, 1983; Spalter-Roth, Burr, Hartmann & Shaw, 1995). These studies have shown that individuals with lower levels of education, skills, and training are more likely to use welfare, less likely to leave, and less likely to leave permanently. For example, Bane and Ellwood (1994) found that individuals with a high school diploma or higher were more likely to have shorter stays on welfare and to exit through work.

These older welfare studies have also highlighted the significance of race in welfare use. Bane and Ellwood (1994) found that African Americans and Hispanics were more likely than Whites to be recipients and to stay on welfare for a longer time. Boisjoly, Harris & Duncan, (1998) echoed similar findings. In particular, they found that single mothers, who were Black, were more likely to rely on welfare and least likely to leave, even when controlling for education. These racial differences could partly be explained by Blacks' lower marriage rate and their lower expected market incomes (Bane & Ellwood, 1994; Pavetti, 1993).

Since the passage of PRWORA a number of studies have been done on welfare exit. These studies have also confirmed that individuals with multiple barriers to employment are more likely to use welfare, and less likely to exit. A study in Utah found that over 90% of long-term users of welfare have one or more major barriers and that more than a third have four barriers (Vu, Anthony, & Austin, 2009). These barriers identified by post-welfare reform studies are quite varied and include: poor physical health (Brandon & Hogan, 2002), transportation problems (Heflin, 2003), mental health issues (Seefeldt & Orzol, 2005), and child's health or behavioral problems (Olson & Pavetti, 1996). In addition, welfare users were found to have lower levels of human capital, in the form of education (Acs & Loprest, 2004) and to experience domestic violence (Moffitt & Cherlin, 2002). Further, they were found to have less access to resource rich networks or social capital (Ward & Turner, 2007). Psychological factors have also been shown to have some influence on welfare receipt and exit. For example, using data from the National Longitudinal Survey of Youth (NLSY), Kozimor-King (2008) found that locus of control and self-efficacy are related to welfare use.

Substance abuse also plays a role in welfare exit. Schmidt, Dohan, Wiley and Zabkiewicz (2002) found that substance abuse functions differently from other barriers. They found that instead of hindering welfare exit, substance abuse actually increases the rate of leaving welfare but for negative reasons, including sanction, imprisonment, or loss of child custody.

Transportation as a type of asset, has also been linked to welfare receipt and exit in post-PRWORA studies. Huang, Nam and Wikoff (2010) surmised that assets such as automobiles could expand employment opportunities for low-income families. This is consistent with the literature on the spatial mismatch hypothesis (SMH) which suggests that the separation of low-skilled minorities in U.S. inner cities from suburban job opportunities is problematized by the lack of transportation (Kain, 1968). For example, the cost of commuting to find and keep a job may be substantial due to poor public transportation service to the suburbs. As Bania, Leete and Coulton (2008) suggested, the low density of service; infrequent and unreliable service and the need for transfers increase both the average commuting time and the variability of commuting time. Therefore, not owning an automobile can limit job search activities among welfare recipients, thereby impeding welfare exit.

There are important reasons for focusing on this form of asset in welfare study. First, there has been significant vehicle exemption (exceeding that of other forms of assets) under TANF. Second, vehicles are the largest sources of wealth for low-income single women. Sullivan (2006) postuated that durable goods like vehicles are important mechanisms for individuals who have limited exposure to financial institutions. Women who have access to transportation are able to engage in activities such as job seeking and school attendance, that will promote their overall well-being.

The continued significance of race in determining welfare receipt and exit has been validated in a number of post-welfare reform studies (Hamil-Luker, 2005; Loprest, 2002; Seefeldt & Orzol, 2005). Results from these studies have shown that racial minorities, especially African Americans, are more likely to use TANF and stay longer. Further, they are less likely to exit. For example, Seefeldt and Orzol (2005) examining a sample of 549 women from the Women Employment Study (WES), found that African Americans constituted the largest share (65%) of persistent welfare users (those with more than 5 years on welfare). Cancian, Meyer and Wu (2005) looking at three years (from 1997 to 2001) of Wisconsin administrative data also found that African Americans stayed on welfare longer than their White counterparts. Further, Hamil-Luker (2005) who distinguished four patterns of welfare use (chronic, young adults, mid-adult, and non-receipt) with the use of latent class analysis, found that the majority of chronic recipients were African Americans. In fact, they were twice as likely as Whites to be classified as chronic users. African Americans on average have longer dependence on welfare, partly because they are more likely than Whites to possess characteristics that hinder self-sufficiency.

In addition to the above mentioned barriers to employment, the role of TANF state policies on welfare exit and entry has been noted. Immediately following the passage of PRWORA, there was a rapid decline in the number of people on welfare. Although this was aided by the robust economy of the early 1990s, many feared that during an economic downturn, there will be a drastic increase in the rolls (Currie, 2007). However, the recent recession did not trigger a significant return to TANF. Currie (2007) suggests that this signals the continuing importance of TANF policies in helping to keep eligible mothers off of welfare.

Some studies have examined the role of TANF state policies on welfare exit and entry (Hetling, 2011; Irving, 2008; Moffit, 2003). Overall, these studies suggest that the new TANF policies have discouraged entry to and hastened exit from welfare. For example, Hetling (2011) used data from the Survey of Income and Program Participation (SIPP) and the Urban Institute's Welfare Rules Database and found that women living in states with less flexible welfare rules were more likely to be disconnected from either work or welfare. However, the study found that these welfare rules only accounted for a quarter of the observed variation among states. Moffit (2003) using 1999 to 2001 data on welfare and non-welfare families in Boston, Chicago, and San Antonio, found that non-financial factors (that is, work requirements, sanctions, and diversion) played a large role in exit and entry over that period. Irving (2008) also noted the differential effects of welfare rules across place of residence. Specifically, Irving (2008) found that stringent time limit policies promoted non-work exits in poor southern non-metro areas, while it encouraged work exits in large rustbelt cities.

Although the above mentioned studies address a more complex array of characteristics than pre-PRWORA studies, the field is still narrow in its examination of factors that impact welfare use among single mothers. Most of the studies still tend to lean on a human capital model (Kozimor-King, 2008). Despite the influence of social capital in employment outcomes for the general public (Kaye & Nightingale, 2000), this variable is often ignored in welfare studies that rely on post-welfare-reform data. Researchers who have explored this important variable have found a link between social capital and welfare use (Schneider, 2005; Ward & Turner, 2007).

Exit Routes. A rich body of research exists which addresses the avenues of welfare exit (Bane & Ellwood, 1994; Hamil-Luker, 2005; Harris, 1993; Nam, 2005; Rangarajan & Johnson, 2002). Early research by Bane and Ellwood (1994) found that most exits occurred through marriage (29%) while increased earnings accounted for only 25%. Other routes included, no longer had an eligible child, earning of others increased, transfer income increased, family size decreased, and family moved. However, the prospects of leaving welfare through marriage have declined over the years (Strother, 2004). Employment now plays a more important role in TANF exit.

The important role of work in welfare exit is well documented. Harris (1993), using monthly data from the PSID for 1984-1986, found that two-thirds of observed exits from welfare were work related. The other one-third ended when a woman married or started a cohabitating relationship or when the child reached school age. Harris' (1993) methodological approach was, in fact, unique as she distinguished between the types of work exits – getting a new job or working-off welfare. The former refered to when an individual, who had not been working while on welfare, finds a job and then leaves welfare. Working-off welfare occurs when an individual was working while receiving welfare benefits and continues to work and exits welfare (with no other significant event occuring). Her findings showed that having a new job was a more common way to exit than through cumulative work experience. Further, work-offs are associated with longer spells and duration on welfare. The average completed spell length was 10.4 months for job exits compared to 12.7 months for work-off exits. A later study by Acs and Loprest (2001) reported similar findings on the significance of work in exiting welfare; they found that approximately 60% of welfare exits occurred through employment. However, unlike Harris (1993), Acs and his Loprest (2001) did not separate out the effects of new jobs versus cumulative work experience.

In examining the impact of race on the type of exit route, the evidence suggests that racial minorities are faced with blocked opportunities. On one hand, they are less likely than Whites to exit through marriage, and on the other hand they are faced with labor market barriers which make it difficult for them to obtain jobs (Danziger et al., 2000). A paradoxical relationship between work and welfare exit for African Americans was, however, noted by Harknett (2001). Analyzing data on a welfare program in Riverside, California, Harknett found that although African Americans and Hispanics worked more than Whites, they were less likely than Whites to leave welfare. For example, at the end of the second observation year, 60% of Hispanic and African American women were still receiving cash assistance compared to 53% of Whites. Harknett suggested that this might be related to the fact that when Whites worked they made more money than their African American counterparts, thereby having to rely less on welfare.

This literature sheds light on the complexities of experiences faced by single mothers on welfare or those at risk of using welfare. The ultimate question of how best to help single mothers escape poverty and gain self-sufficiency cannot be addressed without considering the events around welfare entry as well as the modes of exit. The web of interconnectedness has implications particularly for racial minorities who are disadvantaged at every juncture – they are more likely to initiate welfare; are more likely to be long-term users of welfare; and have less success exiting through marriage and employment.

The complexity in unraveling welfare entry and exit also has implications for policy and program intervention. Policies to help individuals avoid welfare dependency will be inadequate if they take a myopic view. If work is the main exit route, it is therefore critical for policies and programs to reflect a wide range of factors, including one's social capital, that can affect work opportunities. The literature review suggests there is urgency in addressing these welfare issues from a viewpoint of lack of available resources for low-income families. In the following section, I address the theoretical framework used to guide this dissertation.

Understanding Welfare Receipt: Conceptual Framework

Welfare receipt and exit among single mothers are affected by a complex set of variables. No one factor can explain how and why some single mothers exit welfare while others do not. Given that individuals who do not exit welfare quickly are at risk of exhausting their cash limit, it is critical to know the various factors that affect welfare entry as well as exit.

Several theories and concepts have suggested that welfare entry and exit are affected by various components of a mother's life. Among these is the educational background of the individual. Economists have conceptualized this component as human capital. Human capital falls under an individual explanation for labor market outcomes as it focuses on the abilities and opportunities of the individual. However, it is suggested that labor market outcomes can not only be explained by individual behavior, but by forces beyond the individual. Among these are one's neighborhood and social connections (Coleman, 1988; Putnam, 1993). Sociologists have conceptualized this component of an individual's life as social capital. Accordingly, both aspects of an individual's life must be examined to get a richer understanding of welfare receipt and exit among poor single mothers. An exploration of human capital and social capital is provided below.

Human Capital

Human capital theory has long been presented as an individual level explanation for economic outcomes such as welfare receipt and exit. In fact, human capital is regarded as an attribute of individuals and a factor of production. Sunstein (1997) defines it as the basket of skills, qualifications, and knowledge that individuals possess which gives them the ability to perform labor so as to produce economic value. Accordingly, the concept, which is usually found in economics, posits that one's level of education and skills are tied to his or her economic status (Schultz, 1961).

Theoretical Development of Human Capital. Human capital as a theoretical discourse started with the work of Adam Smith in 1776 (cited in Becker, 1964). Smith contended that a nation's capital stock included the acquired and useful knowledge and skills of its people. Smith viewed human capital as one of four types of fixed capital, the other three being machines, buildings, and lands. Human capital encompasses skills, dexterity (physical, intellectual, psychological, etc) as well as judgment. It increases both an individual's and a nation's wealth (Becker, 1964).

The work of Becker (1962, 1964), Mincer (1958), and Schultz (1961) advanced the modern-day conceptualization of human capital. Mincer (1958) developed a model showing that people invest in education up to a point where the investment cost is equal to the present day value of the return on schooling. He contended that this model also applies to on-the-job (after school) training, which at the time had accounted for a substantial amount of total compensation. Becker (1962) built on Smith's work by categorizing education as an investment good (a physical asset) instead of a consumption or status good. This categorization laid the ground work for modern-day human capital theory. According to Becker (1964), investment could be made in education with the expectation that it would yield a rate of return. He postulated that greater investment in post-secondary education will make an individual more productive, resulting in a higher yield of return. This increased focus on the importance of human capital further spurred the development of human capital management.

Schultz (1961) further contributed to the modern development of human capital theory by examining its impact on earnings. His analysis of longitudinal data from 1929 to 1956 revealed that 36% to 70% of the increase in income from labor could be attributed to an increase in education in the labor force. He hypothesized that increased investment in human capital would result in an impressive increase in real earnings per worker.

There are three key underlying assumptions that bounded the work of the human capital theorists. First, there is the assumption that individuals make their choices to invest in education based on rational economic factors (Johnson, 2000). Specifically, human capital theorists believe that individuals weigh the cost of post-secondary education, including tuition, fees, books, room and board, lost wages, and psychological cost, against the economic and psychological benefits they perceive would come with a higher level of education (Sunstein, 1997). Second, the theory assumes a consistent relationship between market incomes and the amount of human capital a person owns (Johnson, 2000). For example, if people with higher levels of human capital do not earn more than those with lower levels, then investment in education is deemed futile. A third assumption of the theory is that there are equal and adequate environmental opportunities available that would allow individuals with higher investment in education to earn more income (Johnson, 2000).

The Operationalization of Human Capital. There is no single human capital index that is used in the welfare literature. However, in view of Becker and Tomes' (1993) claim that education and training are the most important investment in human capital, most researchers on welfare use and other fields operationalize human capital as the education level, job training, work experience and the skills of an individual (Gezinski, 2011; Hawkins, 2005; Heflin, 2005; London, 2006; Nam, 2005; Simmons et al., 2007). For example, Gezinski using data from the

Making Connections dataset captured human capital as including: 1) the respondent's highest level of education (ranging from 8th grade or less to graduate degree), 2) whether or not the individual completed job training in the last three years, and 3) whether the respondent attended community college. Similarly, Nam (2005) operationalized human capital as the lack of high school degree, low wage experience, lack of work skills as well as insufficient knowledge about workplace norms.

Although most researchers capture human capital by measuring the respondents' own level of education and skills, some researchers focus on the respondents' parents. The rationale here is that individuals who have parents with high levels of human capital would be encouraged to invest in more education and job training. Further, since human capital development starts at birth (Becker & Tomes, 1993) children who grow up in educated housholds are more likely than those who grow up in less educated households to have higher levels of education. Simmons and his colleagues (2007), for example, measured human capital by using mother's educational level, mother's knowledge of community resources, and mother's life skills.

A few researchers have also operationalized human capital as the health of the individual (Bleakey, 2010; Weaver & Habibov, 2012). For example, Weaver and Habibov (2012) used health status along with education status as human capital variables when examining the effects of human capital and social capital on economic well-being. To assess health status they created a dummy variable which indicated if the respondents reported they were or were not in good health. The rationale behind the use of health in measuring human capital is that being unhealthy suppresses the ability to work productively and/or the incentives to invest in more human capital. In that sense, it is seen as a kind of human capital as well as an input to producing other forms of capital (Bleakey, 2010).

Application of Human Capital to Welfare Receipt and Exit. Human capital theory provides robust explanations for welfare use. In essence, people with greater investment in human capital should be more productive and find more stable jobs with higher wages, therefore they should be less likely to receive welfare, or if on welfare, more likely to exit the program. Indeed, empirical data show that welfare recipients have low educational attainment. In 2008, nearly half of the TANF population had less than a high school diploma (U.S. Department of Health and Human Services, 2008). Further, Danziger et al. (2002) reported that the educational level of welfare recipients lags behind that of the general population; 31% of their observed sample had less than a high school diploma compared to 13% in the general population.

Accordingly, individuals who cannot obtain stable jobs and therefore are more reliant on welfare lack the necessary self investments to enhance their human capital. These individuals often secure part-time rather than full-time jobs, which typically have higher turn-over rates and pay less than welfare cash benefits (Harris, 1996). This is particularly relevant for African Americans who generally have lower levels of education, skills, and training compared to Whites (Bane & Ellwood, 1994). Thus according to the human capital theory, the fact that African Americans tend to remain on welfare longer than Whites may be partially attributed to lower levels of human capital.

The human capital perspective also suggests that the socioeconomic conditions of an individual’s family affect welfare receipt and exit. Recipients with greater family financial resources are more likely to invest in human capital and consequently be successful in finding jobs (Korzimor-King, 2008). Conversely, individuals with disadvantaged family resources are more likely to remain dependent on welfare or hold jobs that do not lift them out of poverty. For example, welfare recipients whose parents have at least a high school education are more likely to exit welfare because of the increased likelihood of securing better quality jobs than individuals from disadvantaged homes (Korimor-King, 2008). If this human capital explanation holds true, we would also expect racial minorities such as African Americans to be more reliant on welfare given they generally possess fewer family resources than Whites.

In a broader sense, the human capital model also includes factors that reflect barriers to employment. Danziger et al. (2002) surmised that although traditional factors such as education, skills, training, and work experience are important in determining productivity and hence employability, other factors also play an important role. Accordingly, there should be an expanded model that incorporates barriers to employment such as mental and physical health as well as other psychosocial and family disadvantages. It is not surprising that most welfare recipients have multiple barriers to employment that go beyond low levels of education and job training (Danziger et al., 2002). Olson and Pavetti (1996) using data from the 1991 National Longitudinal Study of Youth (NLSY) found that about 30% of welfare recipients not only had low skills level, but also problems of alcohol and drug abuse, and mother's or child's illness. The implication of this is that employment may not necessarily be impeded by a single problem but by the co-occurrence of several barriers.

However, human capital varies by race and ethnicity, family composition, marital status, age, transportation, as well as the economic and policy environment. First, the impact of race on human capital attainment could be seen through the racial differences in the return on education investment as racial minorities receive a lower return on their educational investment in education than do Whites. Goldenburg (2001) found that on average, the return on a college education for a Black man is 6.6% to 10% in the North and 10.6% to 14% in the South. White men on the other hand, enjoy a return on educational investment of 14.5% regardless of region.

Race can also affect human capital through school quality. African Americans are more likely than Whites to live in poorer areas, where school quality is lower (Card & Kreuger, 1992). The quality of schools indicated by such measures as pupil-teacher ratio, annual teacher pay, and school term length, has direct impact on the quality of education that an individual receives. Accordingly, African Americans will be expected to have poorer post-secondary education than Whites because of the lower quality of education they receive.

Second, family characteristics can affect human capital acquisition. As noted earlier, parents contribute to their children's human capital acquisition through expenditure on health and education (Becker & Tomes, 1993). Children from wealthier families should have higher levels of human capital than children from poorer families because their parents invest more in their education. The education level of the parents also impacts the human capital accumulation of a child as it helps to shape the home learning environment (Bourdieu, 1986). Gaughan (2002) also found that the higher the skill level of the parent, the more likely the values of education, such as staying in school longer, will be passed on to the children. These individuals are therefore more likely to be successful in the job market.

Third, certain life course events such as marriage and child bearing may also affect the extent of human capital investment. For example, early childbearing may jeopardize a mother's education, and having subsequent children may restrict her ability to work (Harris, 1993). Further, single mothers who are never married have fewer resources on which they can draw to support their children and finance their own education. Harris also postulated that teen-aged mothers and those who have never been married may have lost the opportunities to invest in their own education or job training afforded by marriage and delaying the birth of the first child. Such deficits make it difficult for them to leave welfare.

Age may affect the extent of human capital acquisition. Younger adults are more likely than their older counterparts to invest in human capital (Bryant, 1990). Studies have shown that investment made later in life yield lower returns (Becker, 1993). Accordingly, older individuals will be less inclined to invest in education as they would have fewer years in the job market to collect returns on their investment (Becker, 1993). Alternatively, age can also signal work experience. Relative to younger people, older workers have more years in the job market, and hence more work experience.

Transportation can also affect the acquisition of human capital. There is a positive relationship between vehicle ownership and job training attainment (Zhan, 2007). Specifically, Zhan found that for an individual who owns a vehicle, the odds of receiving training was 1.5 times the odds for those who did not have a vehicle. This could mean that individuals who own vehicles can better access job training and skills development programs than their counterparts who do not have vehicles.

The strength of human capital investments in affecting welfare entry and exit varies by location. Labor market conditions affect the human capital acquisition and vary by state of residency as well as the rurality of residence (Harris, 1993). For example, areas with few job opportunities, offer little opportunities for individuals to build human capital through work experience and skill development. Also, areas with only low-paying, service-sector jobs may create a disincentive for individuals to make costly investments in higher levels of education. These low paying jobs provide only meager returns on educational investments.

The policy environment may also shape human capital acquisition among single mothers. Prior to PRWORA welfare recipients were allowed to participate in extended training and post-secondary education while receiving cash assistance. However, the 1996 legislation imposed restrictions on education and training pursuit among single mothers (London, 2006). Specifically, basic skills classes and postsecondary education can no longer be counted as 'work activities' that TANF recipients are required to do in exchange for cash receipt (Hamil-Liker, 2005). Up to one year of vocational training is allowed, and states can only allow 30% of their welfare recipients to engage in such activities. Accordingly, students on welfare are required to work 20 or 30 hours while attending school and handling family responsibilities. Failure to meet their required hours could result in severe sanction (such as being removed from TANF). These changes have resulted in a decrease in the number of welfare recipients pursuing postsecondary education and training (Kahn & Polakow, 2000). By limiting postsecondary educational options for welfare recipients, TANF adds another layer of handicap in human capital investment among welfare recipients.

States differ in how they implement TANF policies. For example, in the area of sanctions for non-compliance regarding work requirement, states can choose to either reduce the cash benefit to the adult, reduce the cash benefit to the entire family, or close the case (Kassabian, Vericker, Searle, & Murphy, 2010). Accordingly, individuals from states with more stringent sanction rules would be discouraged from pursuing additional education for fear of being fully sanctioned if school interferes with their required hours of work.

While the restriction on education hinders human capital investment, the work-first focus of TANF does little to build it. The work-first focus under TANF emphasizes immediate job search, vocational training that lasts less than a year, and unsubsidized or subsidized employment as routes out of poverty (London, 2006). The approach assumes that TANF recipients will increase their skills, work experience, and education by merely being attached to the labor market. However, Lewis and Widerquist (2001) contend that the types of job opportunities that are available to low-skilled workers are not the types that provide opportunities to build human capital.

In sum, a reflection of the prior work on human capital suggests that White single mothers are less likely to enter welfare and more likely to leave through work because of their advantage in education and training over most minority groups, especially African Americans. Further, the approach suggests that single mothers with favorable family resources, who have relatively small families, whose early life-course paths have not delayed investment in human capital, are less likely to rely on welfare than those with disadvantaged family background, larger families and have had children later in life. In addition, individuals who live in areas with favorable economic and policy conditions are more likely to have opportunities that enhance their human capital acquisition than those from disadvantaged areas.

Empirical Findings on Human Capital and Welfare Use. The relationship between human capital factors and welfare use among low-income mothers is well documented (Bane & Ellwood, 1994; Blank, 2002; Boisjoly et al., 1998; Danziger et al., 2000; Harris, 1993; Kozimor-King, 2008; Nam, 2005). For example, Harris (1993) relying on a sample of 340 women from the PSID, found that women with lower levels of education and poor work experience stayed longer on welfare than those with more enhanced human capital. This occurred because individuals with more education were able to find stable jobs that facilitated their quick exit from welfare while those with less education had to combine work with welfare thereby extending their welfare dependency. Using 28 years of data from the PSID, Boisjoly et al. (1998) also found that high school dropouts were nearly three times more likely to receive and remain on welfare longer than those who complete high school.

Studies conducted since the passage of PRWORA have confirmed that human capital is still a relevant framework for addressing welfare receipt and exit (Acs & Loprest, 2001; Cancian et al., 2005; Nam, 2005). Using event history analyses, Nam (2005) found that human capital was a significant predictor in how quickly individuals exited welfare and their likelihood of cycling back. Nam improved upon earlier studies by capturing a more refined measurement of human capital, which included insufficient knowledge about workplace norms, and experiences of work-related discrimination.

Some scholars have applied the human capital framework in explaining economic well-being to specific populations such as rural low-income families. For example, using three waves of data from a multi-state longitudinal database, *Rural Families Speak*, Simmons et al. (2007) found that human capital helped to predict economic well-being of rural low-income families.

Although, much of the research assessing human capital variables has focused on the individual level, empirical studies have shown that the family economic environment also impacts welfare use. Based on a sample of 2,153 young women from the NLSY, Edwards, Plotnick, and Klawitter (2001) found that family poverty and mother's education had a significant effect on the probability that a young woman would use welfare and stay for a longer time. This finding was consistent with earlier findings by Harris (1993) that welfare recipients, whose parents had high educational achievement, spent less time on welfare.

Recent studies have shown that a human capital model including a wider set of labor market barriers has an impact on labor market outcomes (Danziger et al., 2002). For example, Danziger et al. (2002) using data from the Women Employment Study (WES) found that the model which included traditional human capital variables along with twelve additional measures of employment barriers, compared to one with only the traditional human capital variables, was a better predictor of employment for welfare recipients. Among the measures that remain significant in the model were low education, lack of work experience, poor access to transportation, poor health, drug dependence, experiences of perceived discrimination, and major depression.

Critical Analysis. The human capital perspective provides a sound explanation for the patterns of welfare use. Yet at times this explanation proves to be inadequate. One of the first issues with the theory pertains to its underlying assumption that there are equal and adequate job opportunities for everyone with a certain level of education. Researchers have shown that economic conditions are the main factors that explain waxing and waning of caseloads. Specifically, the welfare caseload increases during recession (when the unemployment rate is high) and decreases when the economy expands. Accordingly, individuals, even with adequate education and skills, will not find jobs if there are limited opportunities.

Second, factors such as discrimination and race can reduce the direct correlation between education and labor market outcomes, particularly for African Americans and other oppressed groups. For example, Parisi et al. (2006) refuted previous studies on the differential educational levels between Whites and African American welfare recipients. They found that African Americans and Whites on welfare have similar educational levels. Despite this similarity, they revealed that there is differential influence of education on welfare exit between Whites and African Americans. This, according to Parisi et al. (2006) indicates that labor market queuing (that is, ranking of individuals from perceived best to worst) may be happening. However, another explanation could be that the quality of the education may be different for African Americans than it is for Whites. This idea of explaining economic outcomes by individual characteristics ignores the critical role of socioeconomic conditions and institutions in breeding discrimination and generating limited opportunities in the market. Indeed, institutional barriers and cultural stereotypes limit the level of an individual's autonomy (Johnson, 2000). The assumption that the market, because of competition, fairly compensates the individual solely for his or her characteristics or contributions to production is therefore shortsighted.

Another critique is that the human capital theory does not explain how having higher levels in some dimensions of human capital do not result in better economic outcomes. For example, African American welfare recipients are found to have more labor market activity than Whites (Harris, 1993). This arguably could provide them with more work experience and skills (a key dimension of human capital). Yet, African Americans are less likely to obtain higher-paying jobs that enable them to exit welfare. This is critical given that researchers such as Hamil-Luker (2005) found work experience to be the strongest predictor of avoiding welfare. It could be that other dimensions of the human capital theory –lower education level and family resources- confounded the effects of higher work activity. The theory does not explain the interactions of these dimensions on oppressed populations.

Another critique is that the majority of the research on human capital and welfare receipt and exit has taken a snapshot view of educational attainment at one point in time rather than a longitudinal view. While this approach is valuable, it overlooks those welfare recipients who return to school in later years and who invest in occupational training throughout a life course. Such an oversight represents a critical deficit as research suggests that more and more adults are participating in life-long learning activities (Hamil-Luker, 2005). Accordingly, taking an event history approach might be more relevant for capturing changes in educational status for welfare recipients.

In addition to the above critiques, it is also evident that the research on human capital attainment and welfare receipt and exit has largely concentrated on secondary education or less, while ignoring the role of post-secondary education. Although current TANF policy has limited postsecondary options for welfare recipients, there are still many individuals who pursue college degrees. Using data from the NLSY, London (2006) found that 17.0% of welfare spells are associated with college enrollment (whether prior or during enrollment). However, the study found that women who enroll in college before they start receiving welfare have a higher probability of graduation than those who start college after beginning a welfare spell and they spend less time on aid. The study further show that 36.2% of welfare recipients who attend college graduate at some point during the 20 year period of the study. Although this graduation rate is substantially lower than that of the general population (48%) London found that those who attended college were more likely to find jobs and escape poverty. London asserts that there is great need for more scholarship in this area.

As previously discussed, a broader view of the human capital model that includes barriers to employment is needed. Consistent with this, Zedlewski and Loprest (2001), in a Michigan study, identified 19 barriers to employment for welfare recipients. Danziger (2001) contended that failure to consider this wider spectrum of barriers facing employment for welfare recipients severely understates the obstacles they face. Despite the importance of this broader view of human capital in welfare employment, it has been largely ignored in past studies of welfare use. Given that studies have validated the role of traditional human capital variables in patterns of use, I speculate that similar findings will emerge when a more extended model of employment barriers is used.

In summary, the human capital perspective highlights the role of individual efforts in determining labor market success, while ignoring forces beyond the individual. One of these forces is the social networks in which people are imbedded. The next section addresses this issue.

Social Capital and Welfare Use

Social capital provides another perspective on what helps to keep individuals off of welfare. Social capital is broadly defined as the advantages that are embedded not in the individual, but in social relationships and networks. Its value lies in its potential to facilitate individual and community action. Like other types of capital such as physical and human capital, it is assumed that having more social capital is better than having less. However, unlike these forms of capital it cannot be traded on the open market, instead it changes over time as relationships change (Leana & Van Buren, 1999). Social capital theory has been presented by some scholars to explain welfare use particularly among African Americans.

***Theoretical Development of Social Capital*.** The concept of social capital has grown increasingly popular across disciplines, but has been addressed in the literature for close to a century. The origins of social capital can be traced back to a speech made in 1916 by L. J. Hanifan, State Supervisor of Rural Schools in West Virginia. Hanifan promoted the notion of social capital to support the role of communities in building strong schools (Hanifan, 1916 cited in Bebbington et al., 2006). He postulated that, "social capital was those tangible substances [that] count for most in the daily lives of people: namely, good will, fellowship, sympathy, and social intercourse among the individuals and families who make up a social unit" (Hanifan, 1916, cited in Bebbington et al., 2006, p: 35).

Social capital as a concept continued to evolve throughout the 20th century through the works of theorists such as Bourdieu (1986), Coleman (1988), and Putnam (1995), and became popular across multiple disciplines. Yet there is no consensus on how to conceptualize social capital. Pierre Bourdieu (1986) analyzed the instrumental value of social capital for deriving social and economic benefits from group membership. He also contrasted the concept of social capital with cultural capital (capital that is embedded in a person, objectified and institutionalized), and symbolic capital (manifestation of each of the forms of capital when they are naturalized on their own).

Coleman (1988) redefined the concept of social capital in terms of its function. He argued that social capital is not a single entity, but a range of different entities having characteristics in common; their entities comprise some aspect of a social structure, and facilitate certain actions of individuals who are within the structure (Coleman, 1988). Coleman suggested that social capital can take three forms; (1) obligations and expectations which depend on trust; (2) capacity of information to flow through the social structure; and (3) the presence of norms. The first form pertains to a situation when an individual does a deed for someone with the hope that that person would reciprocate in the future. The second form of social capital refers to the notion that an individual can rely on and trust someone to provide accurate information that could facilitate action. The last form pertains to norms and sanctions which help to create a trusting environment.

Putnam (1995) has been credited for popularizing the concept of social capital through his work on civic participation and the controversial article, the "*Decline of America's Civic Society*" (1993). He suggested that the democratic disarray in the United States could be linked to a broad and continuing erosion of civic engagement. Therefore, according to Putnam, the question of how to reverse these adverse trends in social connectedness, thus restoring civic engagement and civic trust should be high on America's agenda.

The contributions made by the key architects of social capital reflect different and distinct strains of the concept. First, social capital as defined by Putnam (1993;1995) is viewed as an attribute of communities. He defines the concept as features of social organization or community such as networks, norms, and trust that facilitate coordination and cooperation for mutual benefit. This view suggests that there is a structural component (describing the form of social networks) as well as a cognitive component (which describes the quality of social interaction inside the network) (Tsai & Ghoshal, 1998). The forms of networks that one is embedded in, could be further broken into bonding social capital (networks with people similar to ones self) and bridging (which comprises of people across social groups) (Putnam, 1995).

. Contrary to Putnam, Coleman (1988) presents it as an individual attribute. Coleman assumes that individuals are embedded in a system of normative obligation and that this system is drawn upon by family and friends to benefit the members. His focus is on the linkages among individuals. Accordingly, Coleman defines the concept of social capital as a neutral resource that facilitates any manner of action, but whether society is better off as a result depends entirely on the individual uses to which it is put (Coleman, 1988). This view highlights the importance of social capital in the flow of goods, services and information to individuals or groups within a network. As Coleman suggests it is an important resource that makes otherwise impossible goals possible.

Coleman's (1988) focus on the individual is supported by other scholars including Bourdieu (1986). He regards social capital as a resource that is embedded in interpersonal relationships. Specifically, he defines it as "actual or potential resources [that] are linked [to] . . .

institutionalized relationships of mutual acquaintance or recognition" (p. 248). Accordingly, it is a means by which individuals gain access to economic and cultural resources. Bourdieu (1986) further suggests that we develop social capital by having affiliations with others, cultivating contacts, and engaging in services that give access to information, and knowledge.

Despite the differences in the definition of social capital, a constant thread throughout all the approaches is the centrality of networks. The nature of one's network helps determine access and level of social capital (Boisjoly et al., 1998). This network view of social capital highlights the relationships or ties between individuals (Granovetter, 1995). These relationships often vary according to their type or formality. The two types of relationship is whether it is bridging or bonding. Bonding is about the relations amongst relatively homogenous groups, such as members of a community, while bridging relates to relations with distant friends and colleagues, and members of different communities (Woolcock, 2001). Networks could also be formal or informal. Informal ties refer to relationships with family and friends, while formal ties relate to relationships with organizations.

Operationalization of Social Capital. There is no standard accepted measure of social capital in social science research, and specifically in welfare research. However, throughout the social capital literature there is a trend in the way it has been measured. The operationalization of social capital in the literature has embraced both the views of Coleman (1988) (emphasizing the embeddedness of individuals within systems of family and friends) and Putnam's (1993) (features of social organizations, such as networks, norms, and trust, that facilitate action and co-operation for mutual benefit). Some studies have used one or the other, while other studies incorporated both perspectives in their operationalization.

Following Coleman's perspective, social capital has mostly been captured by variables that describe the connectedness of individuals to their family and friends and the kinds of help or support that could be garnered from them. For example, extent of the embeddedness is captured by asking respondents about the number of family and friends who live close by and the frequency with which they see or talk to their family members and friends (Ward & Turner, 2007).

Realizing that contacts may or may not be supportive to individuals, studies also capture the ability of one's personal network to supply various resources such as information, advice, practical services, and material resources. For example, Hawkins (2002) captured social capital by the items; "about how often can you…ask friend or family member for help; can borrow money from friend or family member; can call someone in an emergency."

Consistent with Putnam, memberships in networks and trust have been the most commonly used measures of social capital. This is not surprising given that in most countries and cultures, enjoying social and economic success rests on having the right contacts in the right places (Vella & Narajan, 2006). These social structures allow for individual interactions which creates access to information, and job opportunities and other positive effects, and in turn sparks trust (Vella & Narajan, 2006).

Social participation has been captured by survey questions that ask respondents about their participation in formal and informal activities in society or membership in organizations (Gezinski, 2011; Hawkins, 2002; Rupasingha & Goetz, 2007). For example, Hawkins (2002) used the questions "about how often do you…attend social events at church/synagogue; participate in religious-affliated groups; participate in service or political groups."

Trust as a feature of social capital refers to the expectation that individuals or institutions will act with concern and in a competent, fair, and open manner. It is commonly operationalized by survey questions that get to an individual's perception of trust in other people or institution (Brisson et al., 2009; Gezinski, 2011; Sampson et al., 1997; Tsai & Ghoshal, 1998). For example, Gezinski (2011) captured trust by the degree of agreement to the question "People in my neighborhood can be trusted."

Application of Social Capital to Welfare Use. The concept of social capital has been linked theoretically to a variety of economic outcomes, including welfare use. The social capital explanation for the receipt and exit of welfare focuses on the networks in which individuals are embedded. Since social capital includes trust-based networks that individuals use to access resources (Bourdieu, 1986) then it must be critical to help welfare recipients find jobs and reduce their dependence on welfare. This is consistent with Schneider's (2000) proposition that individuals who get and keep jobs have resource-rich networks that allow them to achieve their goals. In fact, data show that 25 to 50% of workers acquire their jobs through personal networks (Granovetter, 1995). Schneider (2000) adds that this is particularly true of low-wage jobs, which are more likely to be filled by informal personal contacts. This makes social capital particularly relevant for welfare recipients, given they are largely in the low-wage market.

The seminal work of Granovetter (1973) sheds more light on how the theory is applicable to the welfare population. Granovetter postulates that there are strengths in 'weak ties' – connections that fall outside the realm of close friends and relatives. These ties provide individuals and groups with access to information by acting as bridges between different social hierarchies. Such ties enable individuals to obtain jobs, which provides further ties for them to access information in new social groupings. This is consistent with the adage that "it is not what you know, but who you know" that enables you to find a job and get ahead. Rankin (2003) endorsed Granovetter's view by asserting that employment outcomes of disadvantaged workers, including those on welfare, may be impacted by the type and effectiveness of the job search market that are available to them. He further surmised that "...the labor market experience of the poor is not only a matter of limited human capital, but also limited social capital. The social organization of poor neighborhoods also limits access to networks containing forms of social capital that can promote mobility" (p. 285).

Like human capital, social capital might vary by race, socioeconomic status, gender, age, and policy environment. Many studies have shown that there are racial differences in the composition of job networks, which impact economic outcomes (Martineau, 1977; Boisjoly, Duncan, and Hofferth, 1995). Martineau (1977) found that in urban areas African Americans have more informal ties to relatives and friends compared to Whites. This was also supported by Boisjoly et al. (1995) who surmised that African Americans are more likely than their White counterparts to have kinship ties. Marsden (1987) further found that African Americans had smaller and less diverse networks than Whites. Given the difference in the nature of the network between African Americans and Whites, it could be argued that African Americans have more access to latent supportive resources and less access to instrumental resources than Whites (Marsden, 1987). This consequently impacts their economic outcomes (Granovetter, 1973).

Race impacts social capital through clustering; individuals tend to cluster by race and ethnicity within neighborhoods. Jargowsky (1997) found that the majority of Whites, African Americans and Hispanics reside where their group is dominant. To compound this, racial minorities are over-represented in low-income neighborhoods (Massey & Denton, 1993). Wilson (1987) asserts that such clustering in low-income areas limits the access that poor

African Americans have to networks that are necessary for reducing poverty and welfare dependency. He further postulated that members of the underclass suffer from a “lack of contact or sustained interaction with the individuals and institutions that represent mainstream society” (p. 60). Such contacts do not only provide important job information and other resources, but also cultural learning that facilitates economic and social mobility.

One explanation for the racial and ethnic clustering is housing and economic changes in the economy. Wilson (1987) asserts that the emergence of the service sector, decline in manufacturing jobs, and the relocation of better-paying jobs to the suburbs fueled the burgeoning poverty rates and the isolation of African Americans in the inner-city from middle class individuals and jobs. Furthermore, the Civil Rights Movement of the 1960s and the removal of restrictive housing covenants that confined African Americans to the ghetto resulted in the creation of a black middle-class. As the middle-class escaped the ghetto, they left behind a concentration of poor and “truly disadvantaged” individuals isolated from mainstream America.

Another explanation offered for the racial clustering is segregation and institutional racism (Quillian & Redd, 2006). Racial segregation refers to the isolation of groups based on race, and implies that persons with similar social characteristics associate with each other. According to Massey and Denton (1993), “no group in the history of the United States has ever experienced the sustained high level of residential segregation that has been imposed on blacks in large American cities for the past fifty years”(p.153). They further suggest that this came about through self-conscious actions and purposefully designed institutional arrangements. Such racial segregation decreases the average contact that disadvantaged (African Americans) have with advantaged (Whites), while increasing the opportunities for advantaged individuals to have contact with advantaged associates.

Clustering among racial groups may also be the result of homophily, that is the voluntary choice of individuals from similar race and ethnicity to cluster in specific neighborhoods. Regardless of the vehicle, segregation or homophily, racial clustering serves to benefit Whites by affording them more advantaged connections while disadvantaging African Americans by limiting their contacts with advantaged networks.

Socioeconomic status also impacts social capital accumulation. Individuals from wealthy families have more access to resource-rich (money and knowledge) contacts than those from poorer families (Massey & Denton, 1993). This could be a result of economic clustering where individuals with similar levels of income or wealth tend to cluster together. For example, economic clustering in low-income neighborhoods has been well established (Coulton & Pandey, 1992; Massey & Denton, 1993). This reduces the average contact that individuals in poor neighborhoods have with those in wealthier neighborhoods. Accordingly, any economic benefits that could be enjoyed from having such connections are limited.

Other background characteristics such as age and gender have been found to impact both the extent and type of social capital accumulation. For example, Lowndes (2006) found that younger people and women prefer informal, local, egalitarian networks to other types of networks. Further, because of their age and years of experience, older individuals would have more contacts than younger individuals. Gezinski (2011) found that older women had more bonding and bridging social capital, as well as shared values, than their younger counterparts. In this vein, older welfare recipients might be more likely than their younger counterparts to use their contacts to facilitate welfare exit.

Rural residence also plays an important role in understanding social capital among low-income mothers. For example, in comparing social capital in rural and urban communities

Hofferth and Iceland (1998) found that families in rural areas were more likely than families in urban areas to receive financial help from family. Further, they found that young, rural people demonstrated the strongest patterns of giving to friends and family, although they had the least financial means to give. The relative absence of services and institutional support in rural areas (Colker & Dewees, 2000; Friedman, 2003) may suggest that individuals have to rely more on family and friends for support.

The current welfare policy also has the potential to make or break social capital among welfare recipients. TANF heightens the role of faith- based organizations in the community through the Charitable Choice provision. The provision reduces the barriers that religious organizations face when competing for federal and state funds to provide services (Cnaan, & Bodie, 2002). This is particularly important for African Americans as faith-based organizations have been found to be central to social capital building in their communities (Putnam, 2000). Interaction and participation with these organizations give individuals on welfare an opportunity to build trusting networks with formal organizations. However, these organizations can just as easily create mistrust among welfare recipients if they feel they are treated unfairly. Furthermore, Kumlin and Rothstein (2005) suggest that means-tested welfare institutions can affect interpersonal trust of welfare recipients if services are deemed to be delivered poorly and unfairly because of an individual's welfare status or race.

In sum, the social capital approach suggests that White single mothers are less likely to rely on welfare because of their advantage in social capital, particularly bridging social capital, over African Americans. Also, the approach suggests that single mothers from higher socio-economic status, who do not live in poor neighborhoods, would have higher social capital and rely less on welfare. The type of experiences that individuals have with the welfare state could also affect the extent to which they are able to build relationships with actors within the welfare state.

Empirical Findings on Social Capital and Welfare Use. Empirical studies have validated the usefulness of social capital theory to understanding welfare (Gezinski, 2011; Harknett, 2001; Hawkins, 2002; Henderson & Tickamyer, 2008; Juon et al., 2009; Schneider, 2005; Ward & Turner, 2007) and economic well-being (Weaver & Habibov, 2012). For example, Hawkins (2002) using data on 529 single mothers from the National Survey of Families and Households (NSFH) found social capital (measured as help from friends and families, and organizational membership) were associated with decreased reliance on welfare.

A study by Ward and Turner (2007), however, contradicted Hawkins' findings. After controlling for human capital the study found that organizational membership was not important for reducing welfare dependence or promoting work. This inconsistency could perhaps be explained by the fact that Ward and Turner conducted their study on a rural population. Their findings appear consistent with literature that cites the relative paucity of services and organizations in rural areas (Colker & Dewees, 2000; Friedman, 2003). However, Ward and Turner (2007) found that greater involvement and strong attachment to community were associated with reduced welfare dependence.

Gezinski (2011) using data from the *Making Connections* study also examined the impact of social capital on employment outcomes among a sample of women who indicated they had used a welfare office. The study found a positive relationship between higher levels of giving support to family and friends and better employment outcomes.

Studies have also noted the disparate impact of social capital on welfare use (Harknett, 2001; Hawkins, 2002). Harknett (2001) using data from a large-scale experimental evaluation of the Labor Force Attachment (LFA) program in Riverside County, California found that Whites had more social capital (measured as marriage and co-habitation, money from family or friends, and child support) than African Americans and Hispanics. Further, they found that having more social capital was associated with quicker exits from welfare.

Although African Americans are at risk for long-term welfare use, there are within group variations in patterns of welfare use that are associated with social capital variables (Juon et al., 2009). Juon and his colleagues (2009) measuring social capital as residential mobility and organizational membership found that both measures were important. For example, African American welfare recipients who moved often were more likely to be late welfare leavers or persistent users of welfare. Further, the study revealed that late welfare leavers were almost five times more likely to move often than those who were poor but received no welfare. One interpretation of this finding is that the frequent movements may impair the cultivation of social ties which are particularly important for job-seekers with scarce resources (Schneider, 2000). The assumption of this measurement is that networks are disrupted when individuals move.

Critique of Social Capital Theory. One of the main criticisms of the social capital approach is that it ignores the negative aspects and only promotes the benefits of social capital (Halpern, 2005). Being part of a network is not always beneficial to an individual or society. For example, Halpern (2005) suggests that organized crime or gangs involve a social network which includes shared norms but they do not constitute a societal good. Portes (1998) also opined that networks can restrict individual freedom, exclude outsiders, and lead to downward leveling of norms. The latter refers to situations in which group solidarity is cemented by a common experience of adversity and opposition to mainstream society. The resulting downward leveling of norms can therefore work to keep members of a marginalized group (such as welfare recipients) in place, and force the more ambitious to escape from it (Portes, 1998).

Another limitation of social capital theory is the difficulty in measuring its concepts. This is partly due to the range of definitions attached to the theory. Once there is relevant survey data, it is fairly straightforward to measure the differences in network characteristics and other concepts of social capital between groups. However, what is more difficult to capture is how strong a role an advantaged social context plays on one's economic outcomes or even capture the true boundaries of a social network. For example, it is difficult to say confidently that better economic outcomes for Whites with more advantaged associates really result from the causal influence of associates on outcomes. One may also conclude that such outcomes may result because associates who are likely (for other reasons) to be advantaged tend to associate with each other.

Further, studies use different definitions of social capital, which might account for some of the mixed findings. Some studies such as Ward and Turner's (2007) try to improve on the robustness of their study by having more than one measurement of the concept. Such efforts, however, may not always be possible when using secondary datasets, which may contain limited social capital variables. Although well-accepted measures of all types of social capital have not been identified, there is a general acceptance of measures that capture an individual's perceptions of trust, cohesion, and value sharing with individuals as well as the support they receive. Studies reflecting a range of these may produce a more nuanced picture of the influence of social capital.

Integration of Human Capital and Social Capital

The relationship between social capital and human capital has been established in several studies (Lin, 2001; Halpern, 2005; Mozumber & Halim, 2006; Teachman, Paasch, & Carver, 1997). These studies have generally highlighted the interdependence of both theories, showing that human capital helps to build social capital, while social capital leads to greater educational attainment. For example, Lin (2001) examining social capital among men and women in China found that social capital and human capital were positively related as higher levels of human capital led to greater social capital. Teachman et al. (1997) using data from the National Educational Longitudinal examined the impact of social capital on human capital among 8th graders and found that students with higher levels of social capital had better educational outcomes (less likely to drop out of school).

Despite the relationship between social capital and human capital relatively few studies have examined the two as they relate to low-income mothers more generally (Simmons et al., 2007; Weaver & Habibov, 2012) or to welfare receipt and exit specifically (for exceptions Edin & Lein, 1997; Gezinski, 2011; Hawkins, 2005; Parker, 1994; Schein, 1995).

Simmons and his colleagues (2007) used three waves (1999 to 2002) of data from the Rural Families Speak (RFS) study to examine the role of social capital and human capital in the long-term economic well-being of rural, low-income mothers. They were particularly interested in tracking the well-being of these women in the era of welfare reform. The results show that social capital independent of the impact of human capital has a positive impact on economic well-being. Accordingly, the importance of integrating both factors when examining the well-being of low-income women in rural and other communities cannot be overstated.

Weaver and Habibov (2012) used data from Canada's General Social Survey (CGS) to assess the relative effects of human capital and social capital on economic well-being. They found that while social capital and human capital both influenced income, human capital had a larger effect on economic mobility than did social capital. Their findings, however, were contradictory to previous studies (Abdul-Hakim, Abdul-Razak, & Ismail, 2010; Fafchamps & Minten, 2002; Narayan & Pritchett, 1999) that found social capital to have a larger effect than human capital on economic well-being. These mixed results regarding the relative effect of social capital and human capital only prompt the need for more more investigation.

Hawkins (2002) examined both the role of human capital and social capital in addition to psychological factors in helping low-income single mothers exit welfare for self-sufficiency. Hawkins based his study on a sample of 529 single mothers drawn from the National Survey of Families and Households (NSFH). Human capital and social capital –the two factors of relevance to this current study- played a role in low-income mothers reaching economic self-sufficiency. Human capital variables that were found to be strongly linked to economic self-efficiency included education, and training. Concomitantly, social capital, measured as religious and social activities and association, had a strong effect on the outcome.

Although past research on the simultaneous impact of social and human capital variables on women's welfare receipt and exit have added to our knowledge, important gaps and limitations remain. The present study seeks to address these limitations and to fill these gaps. For example, Hawkins' (2002) relied on pre-welfare reform data for his study. In this work-based, time-limited welfare era, it is more critical to examine the factors that can affect welfare receipt and exit. Research is therefore needed to see if factors that affect welfare use prior to welfare reform are still relevant in this era.

Hawkins (2002) also used a limited definition of human capital; specifically, the education of the respondent as well as her parent. Although education is important, scholars (such as Danziger et al., 2000) suggest that an expanded human capital model that includes variables such as transportation and health has a greater impact on welfare exit.

Gezinski (2011) using a sample of 1,428 single mothers from the *Making Connection* dataset found a range of human capital and social capital factors influenced employment outcomes. Although Gezinski's (2011) study provides useful model to study welfare, her research is different from this current inquiry in several ways. For example, Gezinski looked at a sample of women who reported that they used a welfare office, this study is based on individuals who reported they received an income from welfare. Also, Gezinski's focus was on the employment outcomes of these women who had used a welfare office. This present inquiry examines what impacts both welfare receipt and exit among single mothers. Further, her study used cross-sectional data, while the data used for the present study is longitudinal, and thus provides a methodologically more rigorous attempt to establish causality.

In sum, building upon the findings of previous studies, the present study seeks to examine the effects of human capital and social capital on TANF entry and exit. The conceptual framework, the specific research questions and the hypotheses that guide the study are described below.

Conceptual Framework and Hypothesis

In this time-limited welfare era, understanding the factors that cause individuals to receive and exit welfare is crucial. Accordingly, it is important to examine the factors that predict these movements. Human capital and social capital theories offer different perspectives on the questions of what determines welfare receipt and exit among single mothers. Human capital theory postulates that education, skills, and work experiences help individuals to be more productive in the labor market and therefore avoid welfare. Social capital theory (a type of external force) posits that individuals can gain access to economic and cultural resources because of their connections thereby enabling them to exit welfare. Given the importance of human capital and social capital they should be integrated to produce a theoretical framework that is reflective of both the actions of individuals as well as the external forces that affect welfare receipt and exit.

The model posits (see figure 2.1) that human capital and social capital have a direct influence on welfare use and exit. Individuals with higher levels of education, more job training, and more work experience would be less likely to enter and more likely to leave welfare. Further, those with higher levels of social capital, such as living in a close knit neighborhood, and having the ability to borrow from friends and family are less likely to rely on welfare and more likely to leave. It is expected that regardless of race, single mothers with little human capital and limited social capital will be more likely to enter, and less likely to exit welfare.

Past research suggests that variables beyond human capital and social capital impact welfare receipt and exit (Danziger et al., 2000; Hetling, 2011; Huang et al., 2010; Loprest, 2002). Accordingly, they are examined as controls. These variables include race, age, presence of children under age six, state TANF policy and economic conditions. For example, Hispanics and African Americans are more likely than Whites to enter welfare and less likely to exit welfare (Cancian, Meyer & Wu (2005).

Also, single mothers that are younger, and have children under age 6, are more likely to enter and less likely to leave welfare, than those that are older, and have older children. Further, it is expected that single mothers that are from states with stringent TANF policies and poor economic conditions would be less likely to exit welfare than their counterparts in states with more favorable conditions. Poor economic conditions influence welfare use by affecting the economic resources and opportunities available to a single mother (Ward & Turner, 2007). These economic conditions vary across geographic areas.

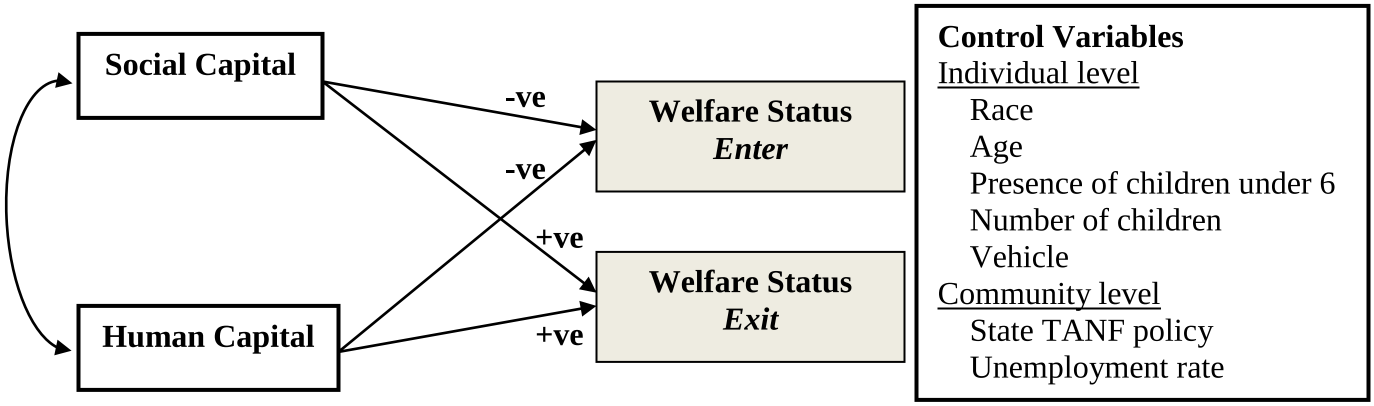

Figure 2.1. A conceptual framework for investigating the role of human capital and social capital on welfare receipt and exit

Based on the conceptual framework presented above and existing studies in this area of inquiry, several hypotheses will be tested in this dissertation:

Research Question 1: Are human capital and social capital variables associated with TANF receipt?

Hypothesis 1.1: Human capital is negatively related to TANF receipt.

Hypothesis 1.2: Social capital is negatively related to TANF receipt.

Research Question 2: To what extent, if any, do human capital and social capital predict TANF entry?

Hypothesis 2.1: Human capital is negatively related to entering TANF.

Hypothesis 2.2: Social capital is negatively related to entering TANF.

Research Question 3: To what extent, if any, do human capital and social capital predict TANF exit?

Hypothesis 3.1: Human capital is positively related to exiting TANF.

Hypothesis 3.2: Social capital is positively related to exiting TANF.

The next chapter outlines the methodological designs to address these research questions and hypotheses.

CHAPTER 3

RESEARCH METHODS

This dissertation analyzes panel data from the *Making Connections* (MC) survey[1] to determine the relative impact of social capital and human capital on welfare receipt, welfare entrance and welfare exit among a sample of single mothers. This chapter begins with a general overview of the analytic strategy. The rest of this chapter provides description of the data, the sample, the research design, as well as the operationalization of the conceptual model and the analytic procedure that will be used to address the research questions.

Research Questions

In contrast to most previous work around welfare recipiency, this dissertation focuses on multi-region data to explore welfare receipt and exit in the post-welfare reform era. It seeks to provide greater insights into the experiences of the welfare recipients by exploring a range of human capital and social capital variables. The study addresses the following research questions:

1: Are human capital and social capital variables associated with TANF receipt?

2: To what extent, if any, do human capital and social capital predict TANF entry?

3: To what extent, if any, do human capital and social capital predict TANF exit?

These questions are reflective of the theoretical framework of this dissertation which postulates that social capital and human capital variables are central in mitigating welfare receipt as well as promoting exit.

[1] Approval was sought from the University of Pittsburgh's Review Board (IRB) to access this dataset because of the presence of some sensitive information. On April 19, 2011 the IRB determined that this inquiry presented no risk to the study participants and granted expedited approval.

Background to the Making Connections Survey

The *Making Connections* (MC) survey is part of a larger, comprehensive effort by the Annie E. Casey Foundation (AECF) to bring about community change in low-income neighborhoods in 10 metropolitan regions across the U.S. AECF targets neighborhoods that have a large portion of people facing barriers to connecting with social and economic opportunities. Accordingly, AECF seeks to improve outcomes for disadvantaged children by bolstering their families, and improving the quality of their neighborhoods and local services. The cities include Des Moines, IA; Denver, CO; San Antonio, TX; Seattle, WA; Oakland, CA; Milwaukee, WI; Hartford, CT; Indianapolis, IN; Providence, RI and Louisville, KY (see figure 3.1). The sites were selected in a partnership including the AECF, local policy makers, and practitioners. The data were collected jointly by the National Opinion Research Corporation (NORC) at the University of Chicago and the Urban Institute.

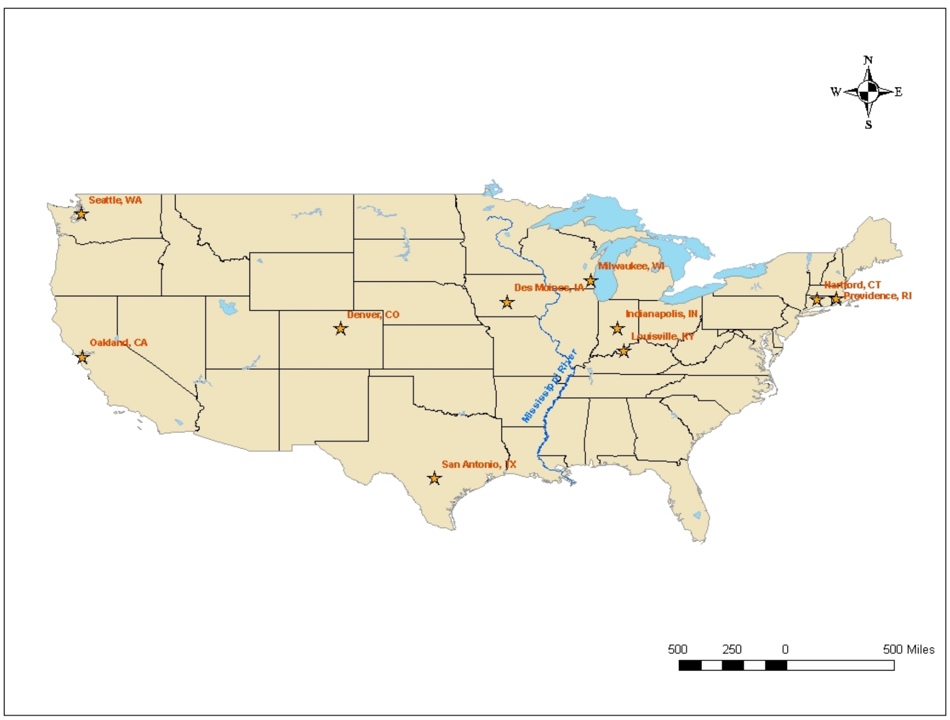

Figure 3.1. *Making Connections* targeted sites

The survey samples were designed to ensure that each household in the selected area had an equal probability of being selected. To accomplish this, NORC utilized a list-assisted probability sampling of households. NORC developed the sampling frame using the United States Postal Service (UPS) master list of delivery addresses (Coulton, Chan, & Mikelbank, 2011). The addresses were mapped using geocoding software, and field checks were done to confirm the accuracy of the list. Households were selected using probability sampling. Once a household was selected for the survey, a household roster was generated. In households with children, a focus child was selected at random, and the parent/guardian with the most knowledge about the child became the survey respondent. If there were no children in the household, one adult was randomly selected to respond for the household. This sample design generated a representative sample of households in the area.

In-person interviews were conducted with respondents in their homes. The questions covered a range of topics including economic hardship, employment, income and assets, neighborhood connections, neighborhood actions, services and amenities, organizations and volunteerism, the focus child, and demographics. The interviews were conducted in English, Spanish or another language to facilitate ease of communication with respondents.

The MC survey can be used as either a cross-sectional or panel survey. This means that while families are followed and interviewed over time, a representative sample of new families are taken and included in each wave. This yields a cross-sectional snapshot of neighborhood residents at different time points. This dissertation, however, focuses on the longitudinal (panel) survey of the MC dataset.

The dissertation focuses on waves 1 and 2 of the MC survey as wave 3 has not been completed. Wave 1 data were collected from 2002 to 2004. In this wave, interviews were conducted on a random sample of residential addresses in each neighborhood. A total of 7,497 individuals participated in wave one, reflecting a response rate of 68%. This wave serves as the baseline. Wave 2 data were collected between 2005 and 2007 in each site. In this wave, 3,716 of the wave 1 participants (49.6%) were re-interviewed. Researchers returned to the same addresses and interviewed the current occupants, whether or not they were the same residents from the previous waves. If the families living at a sampled address had moved by the time of the follow-up surveys, and the original family had children, they were contacted and interviewed. This approach allows the survey to capture both changes in the composition and well-being of the neighborhood as well as changes in the well-being of families with children.

Suitability of MC Dataset to this Study. The MC dataset is well suited for this current inquiry as it captures welfare use among participants in several cities across the U.S. These cities offer good insight into the challenges of welfare recipients across the country as they represent different regions and are among the 50 largest U.S. metropolitan areas. Further, it offers a unique and valuable glimpse into the dynamics of low-income, and in particular, minority neighborhoods, nationwide. The dataset also enables analysis of welfare receipt and exit in the post-welfare era that go beyond a focus on a single state; and has been used in previous studies on welfare use (Gezinski, 2011). The MC survey has provided information for studies that use concepts that are similar to this current study. For example, scholars have examined access to social capital (Brisson et al., 2009; Brisson & Usher, 2005; Gezinski, 2011) and the influence of human capital (Gezinski, 2011).

Despite the benefits of using the MC survey, there are limitations. First, the MC dataset is not a representative sample of adults as adults within households with children were not randomly selected. The AECF's objective was to obtain information about the focus children from the most knowledgeable adult in the household. Second, the MC data are not representative of individual respondents, neighborhoods, or cities as these were not randomly chosen. Although results from the 10 cities involved in the study are suggestive of the processes in other urban areas, making inferences at the national level cannot be made. Third, the MC data provide only annual or biennial data on welfare use, when, in fact, monthly data may be preferred (Gottschalk, McLanahan, & Sandefur, 1994).

Research Design

This dissertation uses a longitudinal- research design based on the MC panel survey. It examines the impact of social capital and human capital on the welfare outcomes of single mothers over two waves (see figure 3.2). This design allows the researchers to collect data that can be ordered in time. Engel and Schutt (2005) suggest that 'by measuring the value of cases on an independent variable and a dependent variable at each of these times, the researcher can determine whether variation in the independent variable precedes variation in the dependent variable" (p. 141). This design circumvents a key limitation of cross-sectional studies, that is, the inability to draw conclusions about the order of events.

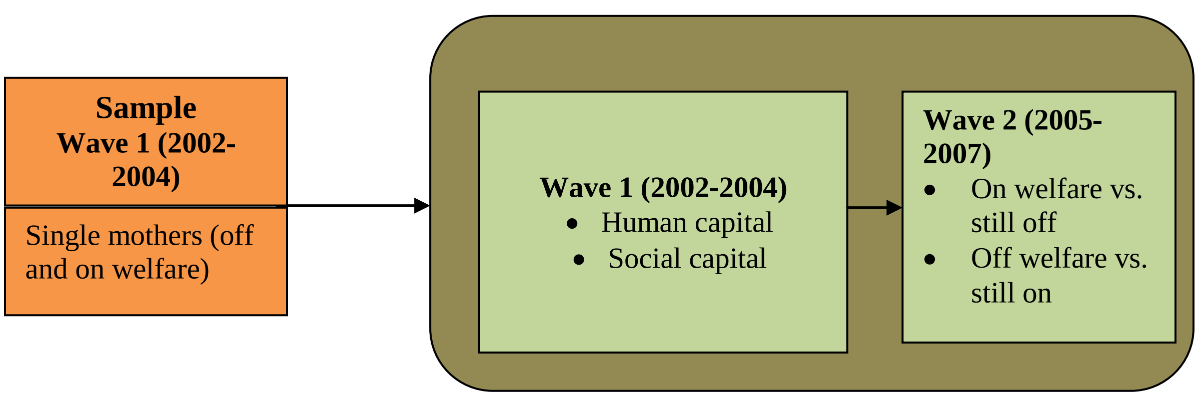

Figure 3.2 Longitudinal design

Sample Selection

Survey respondents who were first interviewed in wave 1 and again in wave two and who met three criteria were used in the analysis. First, the respondent must be a female since the vast majority of TANF recipients are women. Second, she must be single; single mothers were identified as women with no spouse/partner present in the household. Third, the single woman must be between age18 and 64, which is the working age population. Excluded from the sample were individuals receiving Supplemental Security Insurance (SSI) since SSI has different eligibility criteria from TANF.

After accounting for these restrictions, the size of the study sample was 1,067 women, ages 18 to 64. To answer research question 2 (about TANF entry), this study focused on a sub-sample of 709 women who did not receive TANF at wave 1. To answer research question 3 (about TANF exit), the study used the sub-sample of 308 TANF recipients at wave 1.

Operationalizing the Conceptual Model

Dependent Variable

Three related dependent variables are used in this study: welfare receipt, welfare entry and welfare exit. Welfare receipt was measured at wave 1, while welfare entry and exit were captured by a change in welfare status from wave 1 to wave 2. Wefare status was measured by the question *"Did you (or anyone in your household) receive any income in the last 12 months from public assistance or welfare payments from the state or local welfare office?"* Responses were 'yes' or 'no'. Accordingly, for single mothers who were not on welfare in wave 1, they could either be receiving welfare or still be off welfare in wave 2. Single mothers who were on welfare at wave 1 may either still be on welfare or have exited welfare at wave 2.

Independent Variables

Human Capital. Education and job training are the most common measures of an individual's human capital investment in welfare studies. These two indicators were measured at wave 1.

- Educational level. Respondents chose from 9 educational categories: 8^{th} grade or less, beyond 8^{th} grade, but not high school graduation, GED, high school graduation, trade or vocational school, 1 to 3 years of college, graduate 4 year college, some graduate education, or graduate degree. These categories were grouped into three smaller categories: less than high school; high school graduate/GED; and beyond high school (see table 3.1). For the logistic regression analysis, dummy variables were created for each category, with the less than high school category, serving as the reference.
- Employment/job training. This was captured by answers to the question "in the last 12 months have you completed any job training classes or education programs?"

Social Capital. Social capital was measured at time 1 to predict outcomes at time 2. This study embraced Putnam's operationalization (1995) of social capital which focused on networks and associated norms and values. It also embraced Coleman's idea (1988) of benefits from friends and family. These two approaches form the basis upon which the bulk of empirical work on social capital is done. The MC survey does not have a constructed scale to measure social capital, but captures several variables that are consistent with the social capital literature, and can serve as proxies to measure the concept.

This study used seven social capital measures that were employed in previous studies (Brisson et al., 2009; Gezinski, 2011) based on the MC dataset (see table 3.1). In fact, Gezinski's (2011) study utilized a similar sample of women in the MC dataset as this inquiry. The first 3 questions address the quality of the neighborhood network: (1) "I live in a close-knit neighborhood;" (2) "People in my neighborhood are willing to help their neighbors;" (3) "People in my neighborhood can be trusted." Responses are based on a five-point Likert scale, ranging from strongly disagree to strongly agree. The remaining questions addressing social support networks -or social relationships- are indictors of the stock of community social capital among single women. The four questions are: (4) "Sometimes families **give** financial help, either to other people they live with or to friends and family outside. Did you give any financial help like this in the last 12 months?" (5) "Sometimes families **get** financial help, either from other people they live with or from friends and family outside. Did you get any help like this in the last 12 months?" (6) "In an emergency do you borrow money from a family member?" and (7) In an emergency do you borrow money from a friend?" Respondents answered "yes' or "no" to these questions.

For the purpose of analysis, this dissertation relied on Putnam's (2000) method in creating a single social capital index. Specifically, standardized scores or z-scores were computed for each of the variables. The index was then computed by taking the average of the standard scores for all seven variables. The alpha score for this variable is .5. According to Bowling (2002) an alpha of .5 or higher is considered as a sign of acceptable internal consistency. Further, according to Putnam (2000) a summative index produced this way is identical to a factor score from a principal components analysis of the seven variables.

Table 3.1. Operationalization of Study Variables

Indicators	Code
TANF receipt	0= No 1= Yes
TANF entry	0=No 1=Yes
TANF exit	0=No 1=Yes
Control variables	
Age	18-64
Race	0=White 1=Minority
Number of children	Continuous
Presence of children under age 6	0 = No 1 = Yes
Vehicle ownership	0= No 1= Yes
State unemployment rate	Annual percentage unemployed
State TANF policy	0=Weak 1=Mixed 2=Strong
Human Capital	
What is the highest level of education do you have?	1 = Less than High School 2 = High School graduate /GED 3 = Beyond High School
In the last 12 months have you completed any job training classes or education programs?	0 = No 1 = Yes
Social Capital	
Live in close knit neighborhood People in neighborhood help People in neighborhood can be trusted	1 = Strongly disagree 2 = Disagree 3 = Neither disagree nor agree 4 = Agree 5 = Strongly agree
Borrow from family in emergency	0 = No 1 = Yes
Borrow from friend in emergency	0 = No 1 = Yes
Give help	0 = No 1 = Yes
Get help	0 = No 1 = Yes

Control Variables

The empirical models used in this dissertation control for demographic factors (race, age, number of children in household, presence of children under age 6), vehicle ownership, city unemployment rate (community economic context), and TANF policy. Each of the control variables have been shown by previous researchers to influence the risk of receiving welfare and the likelihood of exiting welfare. These variables were measured at time 1 to predict outcomes at time 2.

The background factors included age, race, and family composition (see table 3.1). Age, which was measured continuously, ranged from 18 to 64 years. The racial categories were Non-Hispanic Whites, Non-Hispanic Blacks, Hispanics, and Non-Hispanic mixed race. However, for the purpose of the regression analysis, race was categoried as White and minority with the minority group being comprised of Non-Hispanic Blacks, Non-Hispanics, and Non-Hispanic mixed race. The number of children in the household was measured as a continuous variable. The study measured whether there were any children less than six years of age present in the household. Vehicle ownership was captured by the question “does anyone in your household own a car?”

Community economic context was measured by the 2005 annual unemployment rates in each of the MC sites. These data came from the United States Bureau of Labor Statistics (BLS) (see table 3.2). 2005 was used since it was the year in which the outcome variable was measured.

Table 3.2. Unemployment Rate for 2005

City	2005
Denver	4.7
Des Moines	4.8
Hartford	3.1
Indianapolis	4.8
Louisville	6.0
Milwaukee	4.5
Oakland	4.0
Providence	5.1
San Antonio	4.3
Seattle	4.7

Source: Bureau of Labor Statistics

State TANF policy is another important control variable. TANF policies vary across states in light of the increased responsibility given to them through the TANF block grants. This study used Blank's and Schmidt's (2001) categorization of state TANF policies. States are characterized as having a strong, weak, or mixed work incentive strategy based on their benefit levels, earnings disregards, time limits and sanctions (Blank & Schmidt, 2001; Gais, et al., 2001). The combined effects of these characteristics reduce the availability of welfare and increase the incentive to work. A strong TANF strategy is one with unambiguous, work-driven incentives, which is characterized by low benefits, high earnings disregards, strict sanctions and short-time limits. On the other hand, a weak strategy is characterized by high benefit generosity, low earnings disregards, lenient sanctions, and lenient time limits. A mixed strategy is one that combines features of strong and weak strategy.

According to the categorization by Blank and Schmidt (2001), one of the 10 states in this study was characterized as having strong strategy, two as having weak, and seven as having mixed strategy (see table 3.3). Data on the state TANF policy were merged into to the dataset.

For the purpose of the regression analysis, dummy variables were created for each category with the strong group serving as the reference group.

Table 3.3. State Rankings for Components of the TANF Program, by Overall Work Incentives

State	Benefit Generosity	Earnings Disregards	Sanctions	Time Limits	Overall Work Incentives
California	High	High	Lenient	Lenient	Mixed
Colorado	Medium	Low	Moderate	Moderate	Weak
Connecticut	High	High	Moderate	Strict	Mixed
Indiana	Medium	Low	Lenient	Lenient	Weak
Iowa	Medium	High	Strict	Moderate	Strong
Kentucky	Low	Low	Moderate	Moderate	Mixed
Rhode Island	High	High	Lenient	Lenient	Mixed
Texas	Low	Low	Moderate	Moderate	Mixed
Washington	High	High	Lenient	Moderate	Mixed
Wisconsin	High	Low	Strict	Moderate	Mixed

Source: Adopted from Blank and Schmidt (2001)

Data Analysis

The overall analytical strategy examined the effects of human capital and social capital on welfare receipt and exit for a sample of single mothers, while controlling for background factors, city unemployment rate, and TANF policy. Bivariate analysis and logistic regressions were used in the analysis. First, bivariate statistics were used to answer research question 1: "*Are human capital and social capital associated with TANF receipt?* This inquiry was made at time one.

Second, logistic regression was used to estimate welfare entrance and exit using human capital and social capital, and control variables at time t, where the dependent variable is the welfare status of the sample respondents at time t+1. Logistic regression is appropriate for this inquiry as the outcome variable - received welfare or did not receive welfare - is dichotomous.

Further, regression is appropriate as it allows for the separate and collective effects of two or more independent variable on a dependent variable. All data were analyzed using SPSS statistical software. The regression models (detailed below) were based on the following framework; Welfare outcome (W) = $\beta_0 + \beta_1 H + \beta_2 S + \beta_3 C + \mu$, where H is human capital, S is social capital, C is the various control variables, used in the study and μ represents any unobserved factors. For example, if any of the independent variables has a negative coefficient, it decreases the probability that a single mother would remain on welfare. In other words, it increases the likelihood for exit from welfare. Similarly, a positive coefficient increases the likelihood of remaining on welfare.

The approach for questions 2 and 3 was as follows: *Question 2. To what extent, if any, do human capital and social capital predict TANF entry?* Logistic regression was used to examine the effects of human capital and social capital factors from wave 1 on respondents' welfare status (still off welfare or on welfare) at wave 2. In the first model, individual control variables (race, age, number of children, presence of child under age 6, and vehicle ownership) were entered. The second model contained contextual variables (unemployment rate, and TANF policy). Human capital variables (educational level and job training) were added in the third model, while the social capital index was added in model 4.

Question 3. To what extent, if any, do human capital and social capital predict TANF exit? Logistic regression was used to determine if human capital and social capital in wave 1 predicted welfare status (exit or still on) in wave 2. The individual control variables were entered in Model 1. In model 2, the contextual varaiables of unemployment rate and state TANF were added. Model 3 contained the human capital variables that are known to affect welfare exit. In model 4 the social capital index was added. Measures of predictive accuracy of these models are provided through the Nagelkerke's R^2 (which is not equivalent to the variance explained in a multiple regression model, however closer to one is also positive).

Attrition and Missing Values

As with many studies, there were missing data and cases of attrition in this study. For individuals with missing data, SPSS used listwise deletion by default and does not permit pairwise deletion. Listwise deletion removes entire cases for variables that have missing values. To address the issue of attrition, I compared non-respondents (individuals who met the inclusion criteria at wave 1 but attrited by wave 2) with the respondents who were interviewed in both waves 1 and 2, along key independent variables (from wave 1).

CHAPTER 4

DESCRIPTIVE RESULTS: FACTORS ASSOCIATED WITH TANF RECIPIENCY

This chapter presents the major descriptive findings of the study, and evaluates the association of demographics, human capital, social capital and barriers to TANF status. The section begins with detailed description of the demographic, community context, human capital, and social capital characteristics of the overall sample, followed by baseline differences in the TANF and non-TANF sample. This is followed by a comparison between individuals who are on TANF at both waves and exit TANF at wave 2 and a comparison of people never on TANF and those who began to receive TANF at wave 2.

Sample Characteristics

The overall sample contained 1,067 single women. The women ranged in age from 18 to 64 and had an average age of 35.6 years (Table 4.1). The average number of children per household was 2.2. Thirty six percent of the sample reported having a child under the age of 6 living in the home. About two-thirds (66%) of the women owned a vehicle. The majority self-identified as racial minorities (85%) while 15% were Whites; nearly half (48%) of the sample self-identified as Black/African American, 8% as Hispanics, and 29% as mixed race. There was a much higher proportion of racial minorities than Whites in the sample because the MC neighborhoods were either in, or near urban cores and are all low-income places that tend to have high concentrations of racial and ethnic minorities. The majority (80%) of the women lived in states that had mixed TANF policies. The average unemployment rate in the cities where the women lived was 4.6%. A slight majority (36%) of the single women had a high school diploma or GED, while 33% had less than a high school diploma and 31% were educated beyond a high school diploma. Less than a third of the sample received job training.

In terms of social capital characteristics, the mean score for single women who lived in a close knit neighborhood was 3.28, while the mean score for women who felt that people in their neighborhood help each other was 3.34 (Table 4.1). The women generally did not feel they could trust people in their neighborhood ($\bar{x}$=2.28). Over 50% of all single women borrowed money from family in an emergency, while fewer (28%) reported borrowing from a friend in an emergency. More women gave help (40%) than received help (33%).

By wave two, several of the women in the two samples had experienced changes in their TANF status. Specifically, of the 308 individuals on TANF in wave 1, 54% (166) were off by wave two. Among the 759 mothers not on welfare in wave 1, 15% (114) were receiving TANF by wave 2.

Table 4.1. Demograpic Breakdown for Full Sample at Wave 1

Variables	Frequencies
Mean age	35.6 (11.5)
Average number of children in household	2.27 (1.26)
Percent with children under age 6	388 (36.4%)
Own a vehicle	707 (66.3%)
Racial Breakdown	
NH White	160 (15.0%)
Minorities	907 (85.0%)
NH Black/African American	515 (48.3%)
Hispanic	81 (7.6%)
NH Mixed Race	311 (29.1%)
State TANF policy	
Weak	146 (13.7%)
Mixed	854 (80.0%)
Strong	67 (6.3%)
Unemployment Rate	4.60 (.86)
Education	
Less than High School	342 (32.6%)
High School graduate /GED	378 (36.1%)
Beyond High School	328 (31.3%)
Job Training	303 (29.1%)
Social Capital	
Live in close knit neighborhood	3.28 (1.15)
People in neighborhood help	3.34 (1.09)
People in neighborhood can be trusted	2.82 (1.10)
Borrow from family in emergency	599 (58.2%)
Borrow from friend in emergency	283 (27.5%)
Give help	420 (39.5%)
Get help	349 (32.9%)

Differences and Similarities Between TANF Recipients and Non-Recipients at Wave 1

Table 4.2 shows the relationship of various demographic variables to TANF recipiency at wave 1. There were statistically significant differences on several demographic variables. TANF recipients were younger than non-TANF recipients ($\bar{x}$=31 versus $\bar{x}$=37). Thirty eight percent of women who had children under the age of 6 were TANF recipients. Twenty-two percent of individuals who owned a vehicle were also TANF recipients.

Table 4.2. Descriptive Statistics of Socio-Demographic and Community Context Characteristics for TANF Recipients and Non-Recipients at Wave 1

Variable	TANF Recipients N = 308	Non-TANF Recipients N = 759	Statistics
Average age	31.4 (s.d.=9.9)	37.36 (s.d.=11.7)	t=7.93***
Number of children in household	2.4 (s.d.=1.3)	2.2 (s.d.=1.2)	ns
Children under age 6	149 (38.4%)	239 (61.6%)	χ^2= 27.00***
Vehicle ownership	157 (22.2%)	550 (77.8%)	χ^2=45.68***
Racial Breakdown			ns
NH White	48 (30.0%)	112 (70.0%)	
Minorities	260 (28.7%)	647 (71.3%)	
NH Black/African American	144 (28.0%)	371 (72.0%)	
Hispanic	20 (24.7%)	61 (75.3%)	
NH mixed race	96 (30.9%)	215 (69.1%)	
TANF policy			ns
Weak	51 (34.9%)	95 (65.1%)	
Mixed	240 (28.1%)	614 (71.9%)	
Strong	17 (25.4%)	50 (74.6%)	
Unemployment rate	4.59 (s.d.=.89)	4.60 (s.d=.84)	ns

Note. ***p<.001

The racial composition of both groups mirrowed each other (table 4.2). Thirty percent of Whites and 28.7% of minorities were on TANF. A closer look at some of the minority groups shows that 28% of Non-Hispanic Blacks/African Americans, 24.7% of Hispanics, and 30.9% of Hispanic mixed races were TANF recipients.

The community context evaluated by State TANF policy and metropolitan unemployment rates, did not differ across the two groups. Thirty-four percent of the states with weak policy, 28.1% with mixed policy, and 25.4% with strong policy have TANF recipients. These differences, however, were not significant. The unemployment rate was also similar in areas where TANF (4.59) and non-TANF recipients (4.6) lived.

Human Capital Characteristics of TANF Recipients and Non-Recipients

There were statistically significant differences in education between TANF and non-TANF recipients. Individuals with lower levels of education were more likely to be receiving TANF benefits (Table 4.3). Specifically, 38.9% of individuals with less than a high school diploma, compared to 27% with a high school diploma and 21% with beyond a high school level education were on TANF. Job training was also significantly associated with TANF recipiency. Thirty-six percent of individuals who completed job training were TANF recipients.

Table 4.3. Wave 1 Human Capital for TANF and Non-TANF Recipients

	TANF Recipients	Non-Recipients	Statistics
Education			χ^2=27.08***
Less than High School	133 (38.9%)	209 (61.1%)	
High School Graduate/GED	102 (27.0%)	276 (73.0%)	
Beyond High School	69 (21.0%)	259 (79.0%)	
Job Training	110 (36.3%)	193 (63.7%)	χ^2=10.34***

Note. ***p<.001

Social Capital Characteristics of TANF Recipients and Non-recipients

There were several differences between TANF and non-TANF recipients for the social capital variables (see table 4.4). TANF recipients were statistically significantly less likely to agree that people are willing to help each other ($\bar{x}$=3.24 versus $\bar{x}$=3.38). Borrowing from family and friends in an emergency were statisitically significant. Nearly thirty-four percent (33.5%) of individuals who borrowed from family, and 36.1% who borrowed from friend were on TANF.

Differences in giving and getting help were also significant. Twenty-four percent of people who reported they gave help and 39% who reported they received help are on TANF. Respondents' endorsement of living in close knit neighborhoods, or that people in the neighborhood could be trusted yielded no statistical differences. The overall social capital score was significantly different between TANF ($\bar{x}$=.05) and non-TANF recipients ($\bar{x}$=.02).

Table 4.4. Descriptive Statistics for Social Capital Characteristics for TANF Recipients and Non- Recipients at Wave 1

	TANF Recipients	Non-Recipients	Statistics
Social Capital Variables			
Live in close knit neighborhood [1]	3.31 (s.d.=1.10)	3.27 (s.d.=1.17)	ns
People in neighborhood help[1]	3.24 (s.d.=1.05)	3.38 (s.d.=1.10)	t=1.83*
People in neighborhood can be trusted[1]	2.85 (s.d.=1.08)	2.81 (s.d.=1.11)	ns
Borrow from family in emergency[2]	201 (33.5%)	398 (66.5%)	χ^2=16.92***
Borrow from friend in emergency[2]	102 (36.1%)	181 (63.9%)	χ^2= 10.46***
Give help[2]	102 (24.3%)	318 (75.7%)	χ^2=7.13**
Get help[2]	136 (39.0%)	213 (61.0%)	χ^2=25.99***
Social capital index	0.05 (0.44)	0.02 (0.47)	t=-2.65**

Note. [1] These variables were calculated on a scale from 1-5 where 1is strongly disagree and 5 is strongly agree. The value represents the mean score among responding participants.
[2]These variables are yes, no responses
*p<.05, p**<.01, ***p<.001

Changing Status: Moving on to TANF

These results are limited to the 759 women not on TANF at time 1 and compare the 114 on TANF at time 2 to the 645 not on TANF at time 2. There were several demographic characteristics associated with the transition to TANF receipt that were statistically significant (see table 4.5). Women who moved to TANF receipt were younger ($\bar{x}$=34) than those who never used TANF ($\bar{x}$=38). About 20% who had children under the age of 6 living in the home moved on to TANF, and 12.4% of the women who did not own a vehicle moved on to TANF by wave 2.

Whites (10.7%) were less likely to move to TANF in comparison to most other women of color, except for Hispanics (8.2%). Among African Americans 15.4% moved to TANF receipt. Close to 20% of women of mixed races moved to TANF receipt. Comparison of state unemployment rate for those who moved on TANF ($\bar{x}$= 4.5) and those who never used TANF ($\bar{x}$=4.6) revealed statistically significant differences between the groups. State TANF policy was not associated with moving to TANF.

Human Capital Characteristics of Individuals who Moved-on TANF

Education was associated with the transition to TANF receipt (see table 4.5). Single women with less than a high school level education (21.5%) were more likely than those with a high school diploma (14.9%) and who had beyond a high school level education (10.0%) to move to TANF receipt. There was no association between job training and moving on to TANF.

Table 4.5. Descriptive Statistics for Individuals who Moved to TANF (N=759)

Variables	Moved On	Never TANF	Statistics
Mean age	34 (10.4)	38 (11.8)	t=3.39***
Number of children in household	2.4	2.1	ns
Children under age 6	51 (21.3%)	187 (78.7%)	χ^2=10.91***
Vehicle ownership	68 (12.4%)	482 (87.6%)	χ^2=11.2***
White/Minority			ns
NH White	12 (10.7%)	100 (89.3%)	
Minority	102 (15.8%)	545 (84.2%)	
White/All races			χ^2=6.05*
NH White	12 (10.7%)	100(89.3%)	
NH Black/African American	57 (15.4%)	314 (84.6%)	
Hispanic	5 (8.2%)	56 (91.8%)	
NH Mixed race	40 (18.6%)	175 (81.4%)	
Human Capital Variables			
Education			χ^2=11.96***
Less than High School	45 (21.5%)	164 (78.5%)	
High School Graduate/GED	41 (14.9%)	235 (85.1%)	
Beyond High School	26 (10.0%)	233 (90.0%)	
Completed job training	25 (13.0%)	168 (87.0%)	ns
Community Context			
TANF Policy			ns
Weak	20 (21.1%)	75 (78.9%)	
Mixed	85 (13.8%)	529 (86.2%)	
Strong	9 (18.0%)	41 (82.0%)	
Unemployment rate (mean)	4.46 (s.d=.73)	4.62 (s.d=.86)	t=2.12**

Note. *p<.05, **p<.01, ***P<.001

Social Capital Characteristics of Moved-on Individuals

Social capital differences existed between the single women who moved on to TANF receipt and those who never received TANF during the study period (see table 4.9). However, no clear patterns were evident – some measures were higher for those who moved on and some measures were higher for those who never used TANF. Single women who moved on TANF compared to those who never received TANF were statistically significantly less likely to agree that people in their neighborhoods can be trusted ($\bar{x}$=3.17 versus $\bar{x}$=3.41). Giving help to family members and borrowing from family members were also statistically significant. Twelve percent of single women who report that they gave help to family members move on to TANF, and nearly 20% of those who reported borrowing from family members also made the transition to TANF receipt. There were no statistically significant differences in the extent to which people agreed that they live in close knit neighborhood, and that their neighborhood can be trusted. Also, getting help from a family member and borrowing from a friend in an emergency were not statistically significant.

Table 4.6. Social Capital Characteristics of Move-on and Never-used Individuals

Social Capital Variables	Move On	Never TANF	Statistics
Live in a close-knit neighborhood	3.20 (1.17)	3.28 (1.17)	ns
People in my neighborhood are willing to help their neighbors	3.17 (1.12)	3.41 (1.09)	t=2.15**
People in neighborhood can be trusted	2.71 (1.11)	2.83 (1.11)	ns
Give help to family members	39 (12.3%)	279 (87.7%)	χ^2 =3.18*
Get help from family members	39 (18.3%)	174 (81.7%)	ns
Borrow from family in emergency	74 (18.6%)	324 (81.4%)	χ^2 =6.91**
Borrow from friend in emergency	28 (15.5%)	153 (84.5%)	ns

Note. *p<.05, **p<.01

Changing Status: Moving off TANF

These results are limited to the 308 women on TANF at time 1 and compare the 142 on TANF at time 2 to the 166 off TANF at time 2. There were no significant associations between moving off of TANF and age, number of children, presence of children under age 6, vehicle ownership, race, and community context (see table 4.7).

Table 4.7. Descriptive Statistics for Move-off Compared to Always On Recipients

Variables	Moved Off	Always TANF	Statistics
Mean age	31.4 (s.d=10.7)	31.3 (s.d=9.3)	ns
Number of children in household	2.2 (s.d=1.7)	2.5 (s.d=1.3)	ns
Children under age 6	79 (53.0%)	70(47%)	ns
Vehicle ownership	87 (55.4%)	70 (44.6%)	ns
White/Minority			ns
NH White	27 (56.3%)	21 (43.8%)	
NH minority	138 (53.1%)	122 (46.9%)	
White/All races			ns
NH White	27 (56.3%)	21 (43.8%)	
NH Black/African American	83 (57.6%)	61 (42.4%)	
Hispanic	11 (55%)	9 (45%)	
NH Mixed race	44 (45.8%)	52 (54.2%)	
Human Capital Variables			
Education			χ^2=5.36*
Less than High School	64 (48.1%)	69 (51.9%)	
High School Graduate/GED	54 (52.9%)	48(47.1%)	
Beyond High School	45(65.2%)	24 (34.8%)	
Completed job training	73 (66.4%)	37 (33.6%)	χ^2=11.83***
Community Context			
TANF Policy			ns
Weak	24 (47.1%)	27 (52.9%)	
Mixed	130 (54.2%)	110 (45.8%)	
Strong	11 (64.7%)	6 (35.3%)	
Unemployment rate (mean)	4.65 (s.d=.89)	4.53 (s.d=.89)	ns

Note. **P<.01, ***p<.001

Human Capital Characteristics of Individuals who Moved-off TANF

Human capital factors were associated with moving off of TANF (see table 4.7). Single women who had less than a high school diploma (48.1%) were less likely than those with a high school diploma or GED (52.9%) and women with beyond a high school level education (65.2%) to move off TANF. Job training was also significantly associated with women who moved off. Two-thirds of the single women who completed job training moved off of TANF.

Social Capital Characteristics of Move-off Recipients

A number of social capital variables were associated with moving off TANF (see table 4.8) . Nearly two-thirds of the single women who reported giving help to family members moved off TANF. Meanwhile, little more than half (59.2%) of women who claimed they borrow money from family in an emergency transitioned off of TANF. A smaller percentage of women (39.5%) who borrow money from friends also moved off TANF. There were no statistical differences on the extent to which individuals agreed that: they live in close-knit neighborhood; people in their neighborhood are willing to help; and that people can be trusted. There was also no difference among the women in getting help from family members.

Table 4.8. Social Capital Characteristcs of Move-off and Always Used Individuals

Social Capital Variables	Move Off	Always TANF	Statistics
Live in a close-knit neighborhood	3.22	3.41	ns
People in my neighborhood are willing to help their neighbors	3.32	3.15	ns
People in neighborhood are willing to be trusted	2.92	2.78	ns
Give help to family members	63 (61.8%)	39 (38.2%)	$\chi^2 = 3.95$*
Get help from family members	75 (55.1%)	61 (44.9%)	ns
Borrow from family in emergency	119 (59.2%)	82 (40.8%)	$\chi^2 = 4.68$*
Borrow from friend in emergency	64 (62.7%)	38 (37.3%)	$\chi^2 = 3.86$*

Note. *p<.05

Effect of Attrition

I compared the 646 individuals who were not re-interviewed in wave 2 with the 1,067 individuals who were reinterviewed (see table 4.9). Comparison of these two groups along key variables showed that both groups were similar in terms of the number of children they had and job training. Also, they were similar in several social capital variables (whether or not respondents borrowed from family; whether or not respondents borrowed from friends; and the extent to which they agree people live in close knit neighborhood, people are willing to help or people can be trusted). They were also similar on their overall social capital index.

However, there were statistically significant differences between both groups along several variables. In terms of TANF recipiency, 31.3% were wave 1 only respondents (χ^2 =10.78, p=.001). Wave 1 only respondents were older than those who responded in both waves ($\bar{x}$=39 versus $\bar{x}$=36), and they lived in states with lower employment rates (4.5% versus 4.6%). Among individuals who owned vehicles, 35.1% were from wave 1 only. Individuals with less than a high school diploma (40.5%) were more likely than those with a high school diploma (33.0%) and those who had beyond a high school level education (39.6%) to be wave 1 only respondents. Attrition was higher among Whites (51.1%) than among Blacks (32.7%), Hispanics (27.7%), and individuals of mixed races (38.2%). Among single women with children under the age of 6 in the house, 21% were wave 1 only respondents. Other significant differences were observed along the lines of vehicle ownership and some social capital variables (giving help and receiving help).

In comparing TANF and non-TANF recipients at baseline using the combined sample of wave 1 only and waves 1 and 2 respondents (analysis not included here, see appendix 2), significant difference was revealed in attrition rate. Among the wave 1 only respondents, 21.7% were TANF recipients.

Table 4.9. Demographics for Wave 1 only and Waves 1 and 2 Respondents

Variables	Wave 1 only (646)	Waves 1 and 2 (1,067)	Statistics
Public assistance	140 (31.3%)	308 (68.7%)	χ^2 =10.78 **
Race			χ^2=37.986***
NH White	167 (51.1%)	160 (48.9%)	
NH Black	250 (32.7%)	515 (67.3%)	
Hispanic	31 (27.7%)	81 (72.3%)	
NH mixed race	192 (38.2%)	311 (61.8%)	
Mean age	39.43 (12.79)	35.52 (11.55)	t=6.35***
Number of children in household	2.34 (1.19)	2.27 (1.26)	ns
Children under age 6	103 (21.0%)	388 (79.0%)	χ^2=82.5***
Vehicle ownership	381 (35.1%)	707 (64.9%)	χ^2=9.13**
Unemployment rate	4.46 (.880)	4.60 (.862)	t= -3.10**
TANF policy			
Weak	123 (45.7%)	146 (54.3%)	χ^2=15.335***
Mixed	464 (35.2%)	854 (64.8%)	
Strong	59 (46.8%)	67 (53.2%)	
Human Capital			
Education			χ^2= 8.133**
Less than HS	233 (40.5%)	342 (59.5%)	
HS/GED	186 (33.0%)	378 (67.0%)	
Beyond HS	215 (39.6%)	328 (60.4%)	
Job training	165 (35.3%)	303 (64.7%)	ns
Social capital			
Give help	209 (33.2%)	420 (66.8%)	χ^2 = 8.584**
Get help	186 (34.8%)	349 (65.2%)	χ^2 = 2.650*
Borrow from family	342 (36.3%)	599 (63.7%)	ns
Borrow from friend	163 (36.6%)	283 (63.4%)	ns
Live in close knit	3.27 (1.11)	3.28 (1.13)	ns
People in neighborhood help	3.41 (1.066)	3.34 (1.09)	ns
People can be trusted	2.84 (1.068)	2.82 (1.10)	ns
Social capital index	.023 (.471)	.012 (.464)	ns

Note. *p=.05, **p=.01, ***p=<.001

Summary of Descriptive Analysis

The chapter first presented descriptive statistics for the TANF and non-TANF recipients at wave 1. Comparision of the descriptive characterisics for these women showed a general pattern in the relationship between the key variables - human capital and social capital- and welfare status. Single women receiving TANF had lower levels of education than women who were not on TANF. However, this was not the case for job training. The results showed that TANF recipients were more likely than their non-TANF counterparts to complete job training. The social capital factors were mixed. TANF recipients compared to non-TANF recipients had lower scores on most social capital variables. The exception was that they were more likely than those not on TANF to borrow from family and friends.

Following the descriptives for TANF recipiency at wave 1, the chapter then presented descriptives for single women who moved on and those who moved off TANF by wave 2. Among the significant findings, lower levels of education were associated with moving on to TANF. Several social capital variables were also significantly associated with moving on to TANF.

Several variables are also associated with moving off TANF. The results showed that higher levels of education and more job training were associated with moving off TANF. Several social capital variables, such as borrowing from family and friends, and giving help to family members were also found to be associated with moving off TANF.

These descriptive findings provide the background to examine the role of human capital and social capital in predicting welfare receipt and exit. Logistic regression was used to determine the role of social capital and human capital in predicting these outcomes. The results are presented in chapter 5.

CHAPTER 5

THE EFFECTS OF HUMAN CAPITAL AND SOCIAL CAPITAL ON WELFARE RECEIPT AND EXIT

This chapter explores the effects of human capital and social capital on welfare receipt and exit, controlling for background characteristics, vehicle ownership, unemployment rate and state TANF policy. I expect that single women who have higher levels of human capital (measured as education and job training) and who have access to more social capital will be less likely to be on TANF, or to move on TANF. Further, they will be more likely to move off. Binary logistic regression models were used to estimate the effects of these factors from wave 1 on individuals' welfare status at wave 1 (for the cross-sectional relationship) and on wave 2 (for the longitudinal relationship). This method used maximum-likekihood estimation to predict the likelihood of an individual entering or exiting welfare at wave 2. Covariates for (1) background demographics, (2) contextual factors, (3) human capital factors, and (4) social capital were entered into the regression models to test the null hypothesis that these covariates did not significantly increase the ability to predict single women entering and exiting welfare.

Factors Associated with TANF Receipt

To estimate the probability of TANF receipt, wave 1 (baseline) data were used. Table 5.1 shows the estimates from the four logistic models. In model 1, individual background factors of race, age, number of children in household, the presence of children under age 6, and vehicle ownership were entered. A test of this model against a constant only model was statistically significant which indicated that together the background variables reliably distinguished between TANF and non-TANF recipients ($\chi^2 = 59.03$, $p < .001$, with df = 5). Nagelkerke's R^2 (not equivalent to the variance explained in multiple regression model) of .10 indicated a weak relationship between prediction and grouping. With a cutoff of .5 the classification table indicated that the model correctly predicted 71.7% of the overall cases.

The Wald criterion demonstrated that age (p =.000) and vehicle ownership (p = .000) made a significant contribution to prediction in this model. EXP (B) value indicates that for every one year increase in age above 18 years, the odds of being on TANF decreased by about 4% (odds ratio =.962). Having a vehicle decreased the odds of TANF recipiency. This means that single women with vehicles were 56.7% less likely to be on welfare than their counterparts who did not own a vehicle (odds ratio = 0.433, p =.000). Race, number of children in the household, and having children under the age of 6 in the household did not predict TANF receipt in this model as well as in any of the other three models.

The second model was expanded by the inclusion of contextual factors (city unemployment rate and state TANF policy). However, it failed to improve the predictive value of the previous model. Education level and job training were added as human capital variables in model 3. The predictors as a set reliably distinguished between TANF and non-TANF recipients (χ^2 = 70.61, p = .000, df = 8). The classification table indicated that the model correctly predicted 71% of the cases. A closer look revealed that having a high school /GED education was not a significant predictor of TANF receipt compared to single mothers who had less than a high school diploma. However, having education beyond the high school level significantly decreased the odds of being on welfare. This indicated that single women who have education beyond a high school level were about 39% less likely to be on welfare than those with less than a high school diploma (odds ratio = 0.61, p =.05). Job training had a different and greater effect on TANF receipt than did education. The results showed that individuals who received job training were about 55% more likely to receive TANF than those who did not complete job training (odds ratio = 1.55, *p*=.01).

Social capital was added in the final model, it was significant in distinguishing between TANF and non-TANF recipients (χ^2 = 76.02, *p* < .001, df = 12). The Nagelkerke R^2 was .09, and the overall prediction success of the model was 70.7%. I expected that social capital would decrease the odds of being a TANF recipient. However, the results revealed that social capital significantly increased the odds of TANF receipt. Specifically, for each one-point increase in social capital, the odds of being on welfare increased by about 50% (odds ratio = 1.50, *p*=.02). In this final model with all the variables added, age and vehicle ownership remained the most significant variables in predicting TANF status (Table 5.1).

Table 5.1. Logistic Regression Estimates Predicting the Odds of TANF Receipt

	Model 1			Model 2			Model 3			Model 4		
Variables	B	S.E	O.R	B	S.E	O.R	B	S.E	O.R	B	S.E	O.R
Intercept	1.231**	.434	3.425	1.317*	.688	3.731	1.327	.713	3.772	1.365*	.719	3.916
Minority (vs. White)	-.453	.267	.636	-.458	.291	.632	-.469	.295	.625	-.465	.296	.628
Age	-.039***	.009	.962	-.039***	.009	.962	-.035***	.009	.965	-.035***	.009	.966
Number of children	.066	.064	1.068	.065	.064	1.067	.042	.066	1.043	.049	.066	1.050
Children<6	.224	.169	1.251	.223	.169	1.250	.225	.171	1.252	.222	.172	1.249
Vehicle ownership	-.837***	.165	.433	-.840***	.166	.432	-.776***	.171	.460	-.778***	.172	.459
Unemployment rate				-.011	.089	.989	-.017	.090	.983	-.038	.091	.963
TANF policy (strong is reference)												
Weak TANF				-.079	.429	.924	-.035	.435	.966	-.026	.437	.974
Mixed TANF				-.014	.342	.986	.000	.346	1.000	.015	.349	1.015
Education (< HS reference group)												
HS/GED							-.285	.193	.752	-.278	.194	.757
Beyond HS							-.524	.215	.592*	-.494	.216	.610*
Job training							.457	.176	1.579**	.438	.177	1.550**
Social Capital										.411	.177	1.508*
Sample size	761			761			761			761		
Model chi-square (likelihood ratio)	59.03***			59.10			70.61***			76.02***		
Degrees of freedom	5			8			11			12		
Pseudo R^2	.10			.10			.12			.13		

Notes. Data from Making Connections survey
O.R=Odds ratio, S.E=standard error; *p<.05, **p<.01, ***p<.001

Factors Associated with Moving on TANF

The analysis for moving on to TANF was conducted on those who reported they were not on TANF at wave 1. Moving on TANF was therefore defined as not having been on TANF at the first time point and on TANF on the second time point. Table 5.2 reports the estimates from the four logistic regression models. The analyses presented here identify the characteristics that distinguish single women who moved on to TANF, compared to those who have never used TANF. Model 1 included the individual background factors (race, age, number of children in household, the presence of children under age 6, and vehicle ownership). A test of this model against a constant only model was statistically significant indicating that the background variables reliably distinguished between individuals who moved on TANF and those who did not (χ^2=15.43, *p*=.009, df =5). The Nagelkerke R^2 was .05 with the overall prediction success of the model being 82.6%.

A closer look revealed which factors contributed to the significance of this model. Vehicle ownership, a form of asset, was the only significant predictor of moving on to TANF. Owning a vehicle significantly decreased the odds of transitioning to TANF. That is, single women who owned a vehicle were 51% less likely to move on to TANF than single women who did not own a vehicle (odds ratio=.49, *p*=.004). These odds were consistent across all four models (Table 5.2). In fact, vehicle ownership was the single most important variable in predicting a change in status in this model (1) as well as in the final model (4) when all variables are added.

Non-significant results were found for the other variables in this model. Race, age, and the presence of children under age 6 in the household are significantly associated with TANF status in the cross-sectional bivariate level (see table 4.5 in chapter 4). However, in the longitudinal regression analysis, their effects were erased. The results also showed that similar to its non-significance in the bivariate analysis, the number of children in the household was not significant in predicting single women moving to TANF in wave 2.

City unemployment rate and state TANF policy were added in model 2. This model did a better job than the previous model with just the demographic variables at predicting TANF entry (χ^2=20.77, *p*=.008, df=8). The Nagelkerke R^2 is .07 and the overall prediction success was 82.6%. More specifically, although the city unemployment rate did not have a significant effect on moving to TANF receipt, living in a state with mixed TANF policy compared to one with strong TANF policy decreased the odds of moving on to TANF (odds ratio= .397, *p*=.05).

In model 3, human capital variables were included. The data in table in 5.2, revealed that, although the coefficients were in the expected direction (i.e., they were inversely related to moving on to TANF) the human capital variables (education and job training) did not significantly relate to moving on to welfare. That said, however, both vehicle ownership and living in a state with a mixed TANF policy remained significant predictors (*p*=.005) of moving to welfare. Overall, as a set of variables, the model was significant in distinguishing between moving on TANF and never using TANF (χ^2 = 26.21, *p*=.006, df=11). The Nagelkerke R^2 was .08 with an overall prediction success of 82.6%.

The social capital index was added in model 4. It improved the predictive capacity of the previous model (χ^2=26.88, *p*=.008, df=12). The R^2 of .09 indicated a weak relationship between the predictors and the outcome variable. The classification table indicated that the model correctly predicted 82% of the cases.

I hypothesized that social capital would have an inverse relationship with welfare entry. However, examination of the coefficients revealed that despite a negative relationship (B= -.215) between social capital and moving to TANF, social capital did not statistically predict moving on to TANF at wave 2. In this final model where all variables were added, vehicle ownership and mixed TANF policy remained the only significant predictors of moving to TANF receipt in wave 2.

Table 5.2. Logistic Regression Estimates Predicting the Odds of Moving to TANF

	Model 1			**Model 2**			**Model 3**			**Model 4**		
Variables	B	S.E	O.R	B	S.E	O.R	B	S.E	O.R	B	S.E	O.R
Intercept	-1.339	0.718	0.262	0.179	1.066	1.196	0.763	1.102	2.144	0.717	1.101	2.048
Minority (vs. White)	0.464	0.497	1.59	0.650	0.528	1.916	0.663	0.536	1.94	0.654	0.536	1.923
Age	-0.016	0.013	0.985	-0.015	0.013	0.985	-0.018	0.014	0.982	-0.482	0.302	0.618
Number of children	0.09	0.094	1.09	0.093	0.095	1.095	0.075	0.096	1.077	0.057	0.098	1.059
Children< age 6	0.349	0.250	1.41	.395	0.255	1.484	0.373	0.256	1.45	0.399	0.249	1.491
Vehicle ownership	-0.705**	0.245	0.494	-0.762**	0.248	0.467	-0.705**	0.253	0.494	-0.707**	0.253	0.493
Unemployment rate				-0.207	0.146	0.813	-0.212	0.141	0.809	-0.204	0.142	0.816
TANF policy (strong is reference)												
Weak TANF				-0.506	0.592	0.606	-0.645	0.602	0.525	-0.616	0.602	0.540
Mixed TANF				-0.859	0.460	0.423	-0.924*	0.466	0.397	-0.916*	0.465	0.400
Education (< HS reference group)												
HS/GED							-0.524	0.290	0.592	-0.538	0.291	0.584
Beyond HS							-0.332	0.304	0.717	-0.349	0.305	0.705
Job training							-0.404	0.292	0.667	-0.396	0.293	0.673
Social Capital										-0.215	0.260	0.807
Sample size	511			511			511			511		
Model chi-square (likelihood ratio)	15.43**			20.77**			26.21**			26.88**		
Degrees of freedom	5			8			11			12		
Pseudo R^2	.05			.07			.08			.09		

Note. Data from Making Connections survey
O.R=Odds ratio, S.E=standard error; *p<.05, **p<.01, ***p<.001

Factors Associated with Moving off TANF

The analysis for moving off TANF was conducted on single women who reported they received TANF in wave 1. Moving off TANF was therefore defined as having been on TANF at the first time point and off TANF on the second time point. The models estimated here are the same in structure as those estimated for TANF status and moving to TANF. Table 5.3 shows four models depicting the odds of moving off TANF. A test of model 1, which included the background factors, against a constant only model was not statistically significant indicating that the predictors did not distinguish between moving off TANF and always using TANF. Further, the Wald criterion demonstrated that none of the individual variables (race, age, number of children, presence of children and vehicle ownership) were significant in predicting welfare exit. Notably, vehicle ownership, which was statistically significant in the entry analyses failed to predict welfare exit in all of the exit models.

In model 2, contextual factors - city unemployment rate and state TANF policies were added. This expanded model was not significant in predicting movements off TANF. Further, none of the individual variables were significant in predicting welfare exit.

Human capital variables were added in model 3. I expected that higher levels of education and more job training would significantly predict moving off TANF. As shown in model 3 of table 5.3, the addition of human capital variables together did not yield a significant model. However, closer examination of the individual coefficients showed that education was important in predicting welfare exit. Individuals who had education beyond a high school level were two times more likely than those with less than a high school diploma to move off welfare (odds ratio=2.177, p=.02). However, the study did not find that single mothers with a high school diploma or GED statistically were any more likely to move off of welfare than those who had less than a high school diploma.

Job training had a significant positive relationship with welfare exit. Single women who completed job training were also two times more likely (odds ratio=2.05, *p*=.013) than those who did not complete job training, to move off TANF.

Social capital was added in the final model. The results revealed that social capital significantly predicted moving off welfare (odds ratio=2.28, *p*=.008). The predictors in this model as a set reliably distinguished between moving off TANF and always on TANF (χ^2= 24.1, *p=.019*, df=12). The Nagelkerke R^2 was .12 with the overall predictive success of the model being 54.4%.

Table 5.3. Logistic Regression Estimates Predicting the Odds of Moving off TANF

	Model 1			Model 2			Model 3			Model 4		
Variables	B	S.E	O.R	B	S.E	O.R	B	S.E	O.R	B	S.E	O.R
Intercept	0.476	0.666	1.609	-0.417	1.078	0.659	-0.751	1.156	0.472	-0.619	1.177	0.539
Minority(vs. White)	-0.205	0.426	0.815	0.037	0.487	1.038	-0.044	0.498	0.957	-0.165	0.510	0.848
Age	-0.001	0.014	0.999	-0.002	0.015	1.002	0.008	0.015	1.008	0.012	0.016	1.012
Number of children	-0.080	0.100	0.923	-0.078	0.101	0.925	-0.040	0.104	0.961	-0.037	0.105	0.965
Children<6	0.110	0.268	1.116	0.115	0.270	1.122	0.181	0.277	1.198	0.201	0.281	1.222
Vehicle ownership	0.108	0.263	1.114	0.070	0.267	1.073	-0.140	0.290	0.869	-0.169	0.296	0.845
Unemployment rate				0.204	0.138	1.226	0.137	0.144	1.147	0.066	0.148	1.068
TANF policy (strong is reference)												
Weak TANF				-0.628	0.720	0.533	-0.628	0.741	0.534	-0.416	0.762	0.660
Mixed TANF				-0.331	0.599	0.718	-0.272	0.613	0.762	-0.125	0.628	0.883
Education (< HS reference group)												
HS/GED							0.067	0.309	1.069	-0.014	0.316	0.987
Beyond HS							0.778*	0.380	2.177	0.883*	0.3874	2.418
Job training							0.715**	0.286	2.045	0.720**	0.290	2.054
Social Capital										0.828**	0.312	2.288
Sample size		250			250			250			250	
Model chi-square (likelihood ratio)		1.43			4.30			16.87			24.10**	
Degrees of freedom		5			8			11			12	

Note. Data from Making Connections survey
O.R=Odds ratio, S.E=Standard error; *P=<.05; **p=<.01; ***p=<.001

Summary

In terms of the key variables of interest, the results from the logistic models highlight the importance of human capital and social capital in TANF status as well as changing TANF status. Specifically, I found that social capital was a significant predictor of TANF status (at baseline) as well as moving off welfare. However, it was not significant in moving on TANF.

The results also confirmed the role that education and job training play in helping single women exit welfare. Those with higher levels of education (particularly beyond a high school level) and/or who had more job training were more likely to move off welfare than single women who had lower levels of human capital.

Although the main focus of this dissertation was to examine the importance of human capital and social capital on welfare entry and exit, the rather robust contributions of vehicle ownership must be noted. Owning a vehicle significantly increased the odds of not moving on to TANF.

A look at both the entry and exit models showed that variables that were significant in the entry models failed to have any effects on moving off and vice versa. For example, not owning a vehicle related significantly to moving to TANF receipt but it was not a significant predictor of moving off TANF. Also, human capital and social capital variables which were significant in the exit model yielded no significance in moving on TANF. It was also noteworthy that several variables were not significant in either the entry or exit analyses. The next chapter discusses the implications of the findings of this chapter.

CHAPTER 6

IMPLICATIONS FOR RESEARCH, POLICY, AND PRACTICE

This chapter provides a discussion of the research findings. It begins with an indepth discussion of the results of the key predictor variables - human capital and social capital – and the control variables. Next, it explores the implications of the findings for welfare policy and social work practice. The chapter then highlights some of the limitations of the study and concludes with recommendations for future research.

Summary of Research Findings

In this dissertation, I assessed the issue of welfare recipiency by examing cross-sectional differences between TANF and non-TANF recipients in terms of their human capital and social capital at baseline. I also examined the role of human capital and social capital in predicting change in TANF status including TANF entry and TANF exit (at wave 2). In the cross-sectional analysis, I expected human capital and social capital to be negatively associated with TANF receipt. In the longitudinal analyses, I expected that single women with higher levels of human capital and social capital would be less likely to move on TANF and more likely to move off TANF after controlling for a number of other variables. Overall, the results support and in some cases contradict the results of other studies on the role of human capital and social capital in welfare use. Before discussing these results, the magnitude of the movements on and off TANF must be noted.

Magnitude of TANF Entry and Exit. The extent of the movements on and off TANF in this study was surprising. I anticipated that given the nature of the neighborhoods in the MC survey that there would be a greater flow of individuals on to TANF and fewer movements off TANF. However, the results showed that the movements were consistent with previous studies on welfare transitions since the onset of TANF. For example, Moffit (2003) found in his study that 55% of his wave 1 TANF recipients had exited by wave 2, and that 90% of his wave 1 non-TANF recipients were still not receiving TANF by wave 2. This dissertation found that of those on TANF in wave 1, 54% were off by wave 2 and of those off TANF at wave 1, 85% were still off the rolls at wave 2. The high percentage of individuals who remained non-TANF recipients perhaps reflects the composition of the sample, for there were no income limit included in the sample selection criteria. As a result, although the MC survey was based on low-income neighborhoods, the sample might include a number of non-TANF recipients who have a low probability of moving on to TANF. In addition, the drop in the percent of the overall sample that was on TANF (over the two waves) was consistent with national trends.

Cross Sectional Analysis. In the cross-sectional analysis, human capital, social capital, and transportation were associated with TANF receipt.

Human Capital. Consistent with previous findings (Hawkins, 2002), this study found that having higher levels of education decreased the odds that an individual received welfare. It could be that individuals with low levels of education have fewer job options and as a result may find it more difficult to obtain family supporting jobs with benefits. Therefore, these individuals have to rely on TANF to support their families.

The study also found that having more job training was associated with receiving TANF. This could, in part, be explained by the job training classes that some welfare-to-work agencies provide to their TANF recipients. Alternatively, it could be that because TANF recipients have fewer years of formal education than non-TANF recipients they would need to address this gap by enrolling in job training programs.

Social Capital. Social capital is an important aspect of the lives of all individuals, expecially those who have limited financial resources. In this cross-sectional analysis, while I expected that social capital would be negatively associated with TANF receipt, the results showed that social capital was positively related to TANF receipt. This could be a reflection of the way social capital was measured. The social capital index largely captured an individual's relationship with family and friends. Such connections may not necessarily lead one to success, instead, it could be a sign that TANF recipients were still struggling and therefore needed higher stocks of social capital, such as financial support from family and friends to help them 'get by'.

Exit Model. Human capital and social capital were the only variables that were found to be significant predictors of exiting TANF.

Human Capital in Exit Model. Findings from the study emphasize the importance of human capital in facilitating TANF exit. Starting with education, women who had higher levels of education (specifically, beyond high school level) were more likely to exit welfare than those with less than a high school education. This finding is consistent with previous studies both before and after welfare reform (Hawkins, 2002; Pavetti, 1993). These studies found that higher levels of education are linked to better paying jobs which in turn allow individuals to exit welfare and support themselves. The significant findings on the effects of education on welfare exit underscore the importance of human capital in the lives of women and the need for policy makers and program developers to focus on efforts to develop human capital among this population.

Job training was also a significant predictor of welfare exit. This finding supports previous findings on the role of job training in helping low-income individuals at risk for welfare use to improve their economic outcomes and boost human capital (Caputo, 2011). The results showed that individuals who had completed more years of job training were less likely to remain on welfare than those who had completed fewer years of training. This suggests that many women may not be equipped to leave welfare because of a lack of job training.

Social Capital in Exit Model. I expected that social capital would facilitate TANF exit. Consistent with previous work on the effects of social capital on economic outcomes (Gezinski, 2011; Hawkins, 2002), this study found social capital to be a significant predictor of welfare exit. Despite, the fact that the *Making Connections* sites are in poor neighborhoods and might have a narrow range of social capital (Wilson, 1987), this finding still supports the notion that social capital is an important asset to individuals who are faced with an adverse situation and need to improve their social and economic conditions. The results imply that women may not be able to take the steps necessary to leave welfare (such as finding and keeping a job) without the support of family and friends to help them meet the demands of the jobs, caring for the children or connecting them to the right resources. Accordingly, the stock of social capital among women can either be used to leverage the meager welfare benefits, open new opportunities for employment, enable recipients to capitalize on opportunities, and build more social capital by facilitating inclusion and participation in welfare-to-work activities and programs. When low-income single women have access to social capital, they are more equipped to manage life's transitions (such as moving off TANF) and to move towards self-sufficiency. It could be that in this time-limited, sanction-intensive welfare era that single women must be more aggressive at relying on all the resources (especially, social capital) at their disposal in an effort to transition off of welfare.

Entry Model. The main variables of interest, human capital and social capital, were not statistically significant predictors in the entry model. The study, however, found that vehicle ownership and mixed TANF policies were significant predictors of TANF entry.

Human Capital in Entry Model. Although education was significant in the exit model, it was not found to be a significant predictor of moving to TANF receipt. Previous findings (Harris, 1996; Pavetti, 1993; Schmidt et al., 2002) found that a human capital model significantly explained the likelihood of moving on to welfare. The results here did not confirm the results of these previous work. It could be that these single women with children who are not in welfare at time 1 are already somewhat unlikely to receive welfare. It could also be that the models used in other studies included human capital variables that were different from the model in this inquiry. For example, in addition to educational level and training (used in this study), Pavetti (1993) included Armed Forces Qualifications Test (AFQT) as a measure of basic skills, and participation in public and private training before and after welfare use.

The non-significant findings on education suggest that despite the established importance of education for labor market success, it may be insufficient in keeping individuals from moving to TANF receipt when a triggering event (such as loss of a job, or birth of a child) occurs. This does not negate the importance of upgrading the skills of individuals to make them more marketable, rather it suggests that higher education is not always a guarantee against experiencing tough economic times. Single women may face uncontrollable events such as illness, job loss, or change in family structure which can cripple their material well-being (Acs, Loprest, & Nichols, 2009). This may result in them having to rely on welfare even if they possess a high level of education.

The results showed that although job training was significant in the exit model, it was not a significant predictor of moving on to TANF. This finding was unexpected as I anticipated that individuals with more job training would be significantly less likely to move on to TANF. Perhaps this points to the limits of job training. Lafer (1994) surmised that although job training has gained considerable traction as an anti-poverty strategy since the 1982 passage of the Job Training Partnership Act (JTPA), it is limited in its economic usefulness for a number of reasons. First, he suggests that there are not enough jobs that pay decent wages for the number of people who need them. Second, in cases where there are adequate jobs, training is not as important as institutional determinants of wages. Third, racial segmentation in the market must be addressed before job training can prove relevant for minorities (Lafer, 1994), who made up a disproportional share of this current study sample. To the extent that Lafer's thesis is correct, it could have implications for job training serving as a protective factor against triggers of welfare entrance (particularly job loss).

In sum, despite the non-significance of human capital variables -education and job training- on welfare entry, their contribution to helping single women exit welfare cannot be overstated. Previous studies have found that women with higher levels of education, and job skills are in a better position to secure and maintain employment and therefore leave welfare (Heflin, 2003). Further, the mere process of attending school promotes skills in self-management and interpersonal relationships (Gaughan, 2002) that could promote marriage – an important exit route from welfare. More discusssion on the implications of these findings on policy, program and practice will be presented later in the section on welfare policy.

Social Capital in Entry Model. As hypothesized, I expected that individuals with higher levels of social capital would be significantly less likely to move on to TANF. In this light, I anticipated that social capital would function as a protective factor on which families rely and thereby avoid welfare in the face of economic hardship. The non-significance of social capital in this entry model does not negate the influence of social capital as a buffer against adverse situation. This finding suggests that while social capital is instrumental in helping people transition from an adverse situation (as indicated by it significance in the exit model), it may be less functional as a protective factor against adverse situations.

Further, the findings could also signal the limits of social capital. In fact, Cocoran and Adams (1997) have suggested that some forms of social capital may have limited usefulness, particularly if most or all the members of the same group have similar socio-economic status. It could be that while their connections provided some advantages, these advantages were not enough to provide adequate financial resources, or links to jobs that make a difference. This explanation seems plausible given the nature of the MC dataset. The MC survey focused on low- income neighborhoods which suggests that survey participants were on the low end of the socio-economic scale.

The non-significance of social capital in TANF entry could also be explained by the limited range of social capital among the population studied. Both non-TANF and TANF recipients closely mirror each other in terms of their social capital characteristics. This suggests that individuals living in low-income neighborhoods do not easily cross social strata to be connected to ample resource-rich individuals who serve as a protective factor against difficult times. Granovetter (1983) sees this social strarta crossing as bridging social capital, which allows individuals to ‘get ahead’ instead of just ‘getting by’. The social capital variables used in the study appear to capture more bonding social capital (relationships among friends and family) than bridging capital (relationships with organizations and individuals who are outside one’s social strata). Therefore these bonding social capital variables may not help the single mothers to 'get ahead'.

Other Factors in Entry and Exit Models. Among the control variables, vehicle ownership was a significant predictor of welfare use among single women. Women who had vehicles were less likely to move on to welfare. Owning a vehicle was significant in the bivariate and multivariate analyses. These findings support the literature on assets that transportation is a facilitating factor. It could also be that car ownership is itself a measure of wealth and thus people with wealth are less likely to move on to welfare.

The significant result for vehicle ownership underscores the underlying structural issues of scarcity of local employment opportunities. Many low-income individuals live in areas where there are limited job opportunities. This is in part fueled by the increasing migration of low-wage, entry- level jobs from central city areas to the suburbs that are not often accessible by public transportation (Blumenberg & Manville, 2004). The results could indicate the difficulty that low-income women have in moving between their place of residence and job opportunities. This makes finding and keeping a job elusive.

It must be noted, that although vehicle ownership was significant in this entry model, it was not statistically significant in exiting TANF. The lack of statistical significance in the exit model is unlike previous studies (e.g. Nam, 2005) which found that a lack of transportation significantly restricted transitions off of welfare. It could be that although the single women in this dataset did not own a vehicle, they lived in areas that were well served by public transportation and therefore had ready access to jobs, chidcare and other social services. Further, cars can be a significant financial drain for the poor, particularly if the vehicle requires significant maintenance or has high payments. Therefore, this can further limit the ability of a poor single women to make economic progress.

The study also found that living in a state with mixed TANF policies compared to strong TANF policies predicted welfare entry. The significance of TANF policy was not surprising given the increasing role of state TANF policy in shaping welfare outcomes among single women since welfare reform. For example, Hetling (2011) found that individuals living in states with stricter policies around mandatory work activities tend to exit welfare sooner than their counterparts living in areas with more lenient policies.

The current study found no statistically significant relationships between welfare status and race, age, number of children in the household and presence of children under age 6 in the households. The finding that race was unrelated was unexpected given that previous work (e.g. Boisjoly et al., 1998) found that being a minority significantly increased the odds of moving on welfare, while decreasing the odds of moving off welfare. This non-significance could be driven by the fact that the racial minority groups were combined into one group –minorities- and compared against Whites. However, the analyses were re-run with Blacks serving as the reference group and this did not have any effect on the findings on race. Other studies (e.g. Ward & Turner, 2005) have shown that age is a significant predictor of welfare exit, specifically, younger women are less likely to move off TANF. However, this current study did not confirm this finding. The non-significance of family structure (number of children in household and the presence of children age 6) was also surprising given that previous studies found these factors to be important predictors of welfare outcomes (Bane & Ellwood, 1994; Boisjoly et al.,1998; Danziger et al, 2000; Stellmack & Wanberg, 2000).

Further, city unemployment rate was not associated with moving to or off TANF. Previous studies (e.g. Ward & Turner, 2007) had similar non-significant findings. However, the findings in this study were still unexpected given that the paucity of job opportunities may lead to more reliance on public assistance so individuals can make ends meet.

The non-significance of unemployment could perhaps be attributed to the bias in the site selection, as the survey was based in low-income areas. Accordingly, their economic context did not vary widely enough to have differential effects on the population studied. Furthermore, it may be that community context may have a greater impact on other TANF outcomes such as the the length of time off of TANF, the types of jobs individuals obtain, and the number of hours they work, rather than simply their TANF status. Ward and Turner (2007) suggest that because of the TANF policy requirements that women must work in order to keep their benefits, the effects of economic contextual factors may be greatest on the *quality* of employment for single mothers.

Welfare Policy

The findings from this dissertation have implications for welfare policy. They offer some responses to the on-going question of how might we refine welfare policies so that the nation's vulnerable populations are given more opportunities to succeed. An important contribution of this dissertation is the findings that welfare exit among single women is affected by not only their human capital but their social capital as well. This has implications for the current pervasive 'work-first' approach of TANF. This approach emphasizes job search and quick entry into the labor market as a way of increasing recipients' income and reducing their time on welfare (Jagannathan & Camasso, 2005). The 'work-first' approach is based on the premise that welfare recipients can best enhance their work habits and skills, and advance to better positions in the workplace, even if the jobs are low-paying, temporary or undesirable (Jagannathan & Camasso, 2005). The findings imply that the work-first approach would be most viable for individuals that have none or few barriers to self-sufficiency and who live in neighborhoods where community support is widespread. As a result, the study suggests important policy recommendations related to human capital and social capital that should be considered in upcoming PRWORA reauthorization if transitioning from welfare to work is the main goal.

Education and Welfare Policy. This study supports the findings of previous studies that education plays a significant role in explaining welfare exit (Bane & Ellwood, 1994; Findeis et al., 2001; Holzer, 2000). Yet, current TANF policy has de-emphasized the role of education in helping welfare recipients gain self-sufficiency. Under the current policy, only one year of schooling for adult recipients can be counted as an allowable work activity, thereby restricting the extent to which welfare recipients may pursue post-secondary education. This study found that women with more education than a high school diploma have a greater chance to exit welfare than those with less than a high school diploma to exist welfare. However, it did not find any significant difference between women with a high school diploma or GED and those with less than a high school education. These results suggest that a welfare policy that encourages post-secondary education for welfare recipients can improve the chances of welfare recipients to exit welfare and consequently improve their family income. Many studies have confirmed that welfare participants who capitalize on post-secondary education have seen improvements in their wages and job stability (Deprez & Butler 2001; Mathur et al. 2004; Smith, Deprez, & Butler, 2002). Further, better educated individuals (especially those who have beyond a high school level education) are better suited to take care of themselves when the economy is turbulent and to rely less on government assistance (Easterbrooke, 2009).

Job Training and Welfare Policy. Job training for welfare recipients suffers the same fate as education under welfare reform. Welfare reform has de-emphasized job training, despite that it is one of the most common ways that low-income individuals who are older than traditional school age, can improve their human capital (Dave et al., 2011). Dave and his colleagues found that welfare reform has significantly reduced the probability of vocational training among people at risk of depending on welfare and particular, those with less than a high school diploma. They found heterogeneity across the states, which indicate that states with stricter policies experienced larger decreases in vocational job training. In sum, current welfare policy can be seen as a hindrance to vocational education and training. Any policy that fails to emphasize job training serves therefore as a deterrent to the acquisition of human capital.

Promoting job training has been used in previous efforts. Prior to TANF, programs have supported a human capital developmental approach by promoting job training, as a means to self-sufficiency. For example, the Jobs Opportunities and Basic Skills Training Programs (JOBS) – initiated as part of the Family Support Act 1988- encouraged welfare recipients to attend college. All but three U.S. states had provisions in place under the JOBS program to encourage welfare recipients to attend college (Caputo, 2011). The program, however, declined with the advent of the ‘work-first’ approach adopted by many states. Although the “work-first” approach led to increased employment, there is evidence that the positive impact from it declined in the long-term, while the impacts associated with the human capital approach improved, that is, individuals remained employed for longer (Riccio, Friedlander, & Freedman, 1994). This suggests that emphasizing job training in the current welfare policy would not only boost welfare exit but have long-terms benefits such as reducing welfare recidivism. Therefore, the recommendation is that current welfare policy should make provisions for job training programs for welfare recipients and have them count as an allowable work activity.

Social Capital and Welfare Policy. For individuals living on the economic margins, the extent to which they use welfare is affected by their social context, and specifically their social capital. Individuals with higher levels of social capital are more likely to exit welfare. This finding provides an opportunity for welfare programs to open more pathways to sustainable welfare exit for low-income women rather than restricting them. The web of social services (such as child care and job training) available to assist welfare recipients are largely shaped by public policy as they can allow or restrict the funding of these programs. For example, the previously mentioned, Job Training Partnership Act (JTPA) and JOBS provided funding for most of the job-specific training and basic remedial education prior to welfare reform. In the absence of funds like these and the current retrenchment of child care and other support, welfare recipients have fewer chances of being connected to institutions and resources that matter. As Kumlin and Rothstein (2005) suggest, experience with government institutions can help to build trust – a critical aspect of social capital.

Overall, the implications of the findings from this dissertation for welfare policy makers are clear. The findings provide compelling evidence that programs designed to help prevent welfare dependence among single women, should reflect a balanced approach that addresses not only employment, but human and social capital development.

Vehicle Ownership and Welfare Policy. The findings that vehicle ownership decreased the odds of moving on to welfare highlights the role of transportation in the continued economic mobility of low-income women. Owning a vehicle helps single women to maintain access to their jobs, childcare, and other services or social programs that are important in their lives.

Owning a vehicle also allows women to travel safely to and from work after dark (Blumenberg & Manvalle, 2004). In fact, it is suggested that car ownership may be more important to low-income individuals than it is to higher income workers (Blumenberg & Manvalle, 2004). This is because low-income individuals are more likely to have inconsistent work schedules which may require them to travel off-peak hours to and from their communities that may not be safe.

Therefore the importance of vehicle ownership suggests that promoting car ownership through policies could be an important strategy in helping single women improve their economic status. One example of a policy that needs revision is related to the vehicle eligibility rules for receiving TANF. Although some states provide exemption for the full value of a car, several states still exempt new TANF entrants from having a car worth more than $1,500 (Sullivan, 2006). For these states, extending the vehicle asset limit for welfare participants will allow individuals to have reliable vehicles that could help them secure and maintain employment in jobs that are far from their place of residence. Policy makers should also consider promoting programs that increase access to car ownership. Some of these programs will be addressed next.

Programs

Based on the results that education is an important factor in welfare exit, welfare-to-work programs should encourage post-secondary education among welfare recipients. The current efforts of some programs to promote post-secondary education may provide specific ideas for TANF program administrators. For example, using TANF resources, the Kentucky Ready to Work program promotes access to higher education by funding counselors at community colleges for helping TANF recipients navigate between school, family, and TANF work requirements. In addition, portions of their TANF resources are used in engaging clients in paid work study while they pursue their education. The Arkansas Career Pathways is another example of a welfare-to-program that uses TANF resources to fund counselors at community colleges who work with TANF recipients. This program also uses TANF resources to provide tuition assistance and to fund work-study internships for welfare recipients (Hamilton & Scrivener, 2012).

The findings that job training is significant in predicting TANF exit supports the need to strengthen existing job-training efforts by welfare-to-work and other programs. For example, Caputo (2011) examining the effectiveness of job training programs for low-income individuals has found that government training programs especially when integrated with formal academic coursework do have a modest impact on economic well-being and human capital. For example, job-related earnings of the participants are higher for those who undergo job training.

Providing skill development by strengthening and expanding existing welfare-to-work job training program is crucial given that the majority of individuals on TANF lack education beyond the high school level. Job training may be the most common or perhaps the only option for poor single women to improve their human capital, after they have passed the traditional years of schooling. Although most employers require a high school diploma for hiring, job training still provides a good entry into a carreer path for low-income women (Schneider, 2000), thereby enabling individuals to transition off of welfare.

The implications of the narrow range of social capital among the women in this study is that programs should use networking strategies to connect low-income women to social services, organizations, and jobs. In other words, services geared towards welfare-recipients should embrace ways of building social capital by connecting welfare recipients to people and organizations that are beyond their current social strata. One example of a repository of social capital, especially among minority groups, is faith-based organizations. Therefore, investing in support for such organizations provides the opportunities for low income individuals to build their social capital (Kumlin & Rothstein, 2005). Embracing the belief of Schneider (2000), the most effective strategies for building social capital is to rely on what already works for neighborhood residents. As the decriptive results in chapter 4 highlight, both TANF and non-TANF individuals already rely substantially on family and friends for help. Given this, programs can identify other networks within the community and establish connections with such networks to provide services to residents.

Also, the significant result of social capital in the exit model has implications for the job-seeking strategies for welfare recipients. Given that many of the businesses that hire welfare recipients are small businesses, traditional employer-targeted solutions may be less effective in this new economy (Schneider, 2000). As a result, there is an increasing need for supplements from government and non-profit sector to help low-income workers make that transition to self-sufficiency. This includes establishing a web of social support programs (such as child care, elder care, after school care, job training classes) for free or reduced cost in local communities which could position low-income women to take advantage of job opportunities. At the same time, efforts should be made to strengthen the links between welfare recipients and employers in the various neighborhoods to further build their social capital.

One way of building effective networks and connections between welfare recipients and employers is through training programs with specific ties to employers. Additionally, welfare programs can partner with employers to provide on-the-job training for the recipients. Tax credits could be provided to employers as incentives to participate in such initiatives. For many low-income women, training is an important gateway into a stable career path. However, the training may not always lead to the same successful outcomes for all individuals. For example, studies (Schneider 2000) have shown that Blacks/African Americans take multiple training programs that often lead to low-wage jobs that quickly end because of their part-time or temporary nature. This could in part be explained by findings (Schneider, 2000) that Blacks rely heavily on their friends and family (in similar socio-economic status) for information about job training and therefore may not be referred to the most appropriate job training that could meet their needs.

Formal social service agencies play an important role in making the connections between welfare recipients and training programs. Schneider (2000) revealed that 47% of her sample found their way into government-funded job-specific programs through social service agencies. Some of these connections were made possible because of the partnerships that exist betwee social service agents and various community groups. This underscores the importance of formal networks in making the connections between low-income women, especially for Blacks/African Americans, and human capital building opportunities.

The creation of mentorship programs instead of having job clubs for welfare recipients (meetings or classes with welfare recipients only to talk about job seeking techniques) is another way of building connections. Through mentorship programs recipients could be linked to individuals who already hold jobs in their field of interest. Mentors could be drawn from faith-based, civic, or community organizations.

As an overall strategy, linkages among appropriate organizations in the community, such as schools, employment offices, welfare offices, providers of adult education, as well as day care providers, can potentially offer a public saftey network in the absence of personal networks and inadequate resources.

The findings that car ownership decreases the odds of transitioning on to TANF signals the need for programs to promote transportation resources and overcome the spatial mismatch between people and jobs. One of the largest reasons for not owning a vehicle is that vehicles are expensive and low-income individuals who are either on welfare or at risk of using welfare often do not have the necessary financial resources to purchase and maintain them (Blumenberg & Manville, 2004). Therefore, there is support for programs to facilitate car purchase among low-income individuals. Transportation programs could include those that promote access to low-cost, reliable vehicles, fuel subsidies, and low- or no-interest loans for vehicle purchase and maintenance.

One example of a program that promotes vehicle ownership that could be emulated across the country is the *Ways to Work Loan Transportation Loan Program* of Western Pennslyvania. The program provides loan at an affordable interest rate to low-income individuals who need a vehicle to get to work, and cannot get a loan from a traditional source because of poor credit. All participants of the program must pass a financial literarcy class offered by the program. The loans that the individuals receive could be used to purchase a used car or to repair a car.

Social Work Practice

The significance of human capital variables in predicting welfare exit has implications for social workers practicing in welfare agencies. These workers are directly responsible for the implementation of TANF programs. As a result, social workers can help to make or break the human capital developmental experiences of their clients. For example, although welfare-to-work programs may provide training to their clients, not all training is equal. Individuals receiving training in “soft skills” such as interviewing skills and appropriate work attire may be less prepared for the job market than those who receive training in Microsoft Word and Excel. Despite the utility of both types of training, those equipped with “hard skills” are in a better position to capitalize on more job opportunities as well as exit welfare (Gooden, 2007). Given that the demand for such training might exceed the capacity of the agency, workers may have to determine which clients receive what training. Biases, such as racial biases (Gooden, 2007) held by the workers can determine who receives what types of training, and the quality of these training. Recognition of the importance of human capital to welfare could help workers to apply any human capital development opportunities in an equitable way. As Beverly and Sherraden (1997) suggest, social work in most of its applications, should not be viewed merely as a problem solving endeavor but as an opportunity to build human capital that can contribute to overall well-being.

The importance of social capital to welfare exit emphasizes the role of social workers in supporting social capital as it pertains to supporting individual and family relationships. Building relationships is central to social capital and is an explicit social work principle. Specifically the NASW (2008) states that “social workers understand that relationships between and among people are an important vehicle for change. Social workers engage people as partners in the helping process. Social workers seek to strengthen relationships among people in a purposeful effort to promote, restore, maintain, and enhance the wellbeing of individuals, families, social groups, organizations, and communities”(p. 5).

One way that social workers can help to build social capital among welfare recipients is to use their own social capital when welfare clients are searching for jobs or trying to gain access to services. Given the low social status of welfare recipients and the closed social systems they operate in, they are often isolated from the socio-economic mainstream. In light of this, social workers can provide potential links between welfare recipients and the socio-economic mainstream thereby increasing their access to opportunities and resources. Further, the use of worker's social capital can help to mitigate any potential negative impact of social capital such as fellow welfare recipients encouraging each other to restrict their efforts to transition off welfare. Results from a qualitative study on the discretionary use of worker social capital revealed that although not officially required, welfare workers often used their own social capital to get information about available jobs as well as to exert their influence in the hiring process (Livermore & Neustrom, 2003). However, it must be noted that despite the potential benefits, the use of workers' personal social capital can potentially initiate the development of dual relationships between social workers and their clients (Livermore & Neustrom, 2003), therefore workers must be cautious.

Lastly, social workers should advocate for, and/or with people, the formulation and implementation of policies and programs that can help to build social capital among low-income individuals. Further, social workers should also advocate for changes in structural conditions that may keep low-income individuals socially isolated.

Limitations of the Study

Although this dissertation makes an important contribution to welfare research by examining an often neglected aspect of the lives of welfare recipients- social capital-it does have several limitations. The first limitation relates to the measurement of social capital. The measurements used in this study may not fully capture social capital among welfare recipients. This is not unique to this study, however, as there is still no standardized measurement of the concept. The proxies here, however, reflect the two most common definitional approaches - Putnam's (1995) and Coleman's (1988) - in the social capital literature. Further, the study captures a wider array of social capital proxies than most other studies that examine social capital and welfare use.

A second limitation pertains to the nature of the dataset. The MC sample was drawn from families who live in low-income neighborhoods, most of which were in, or close to, the urban core. William Julius Wilson (1987) suggests that these areas are not only characterized by large proportions of poor minorities but have become increasingly socially isolated. Given this, the MC dataset might not have reflected much diversity in social capital among the survey participants. That the variables used to measure social capital might not have been able to capture resource-rich individuals who can connect others to opportunities, could be a function of the neighborhoods from which the MC samples were drawn. For example, the variables used to measure social capital in this study focused mainly on the connections with family and friends (bonding social capital) and not on bridging capital (connections with individuals outside of one's social strata and low income neighborhoods). According to Granovetter (1995), these connections (bridging capital), which he termed weak ties, are most critical in helping individuals improve their economic outcomes. As a result, the relative absence of bridging capital variables could have affected the findings of the study. Further to this, the internal consistency (as captured by the cronbach's alpha) of the seven variables comprising the social capital index was only .5 indicating that social capital as a concept, might not have been well captured.

Another limitation of the dissertation is that the dataset does not capture welfare receipt on a monthly basis. Welfare is given monthly, which means that individuals could be on welfare one month and off the next. However, other dataset such as the PSID and the NLSY, commonly used in welfare research also suffer from such criticism. One of the advantages that the MC dataset holds over these datasets is that it has richer social capital proxies. Another limitation worth mentioning is that this study did not make a distinction between employment and non-employment exits. As a result, some factors may have differential effect on the type of exit. Never-the-less, previous studies (e.g. Nam, 2005) that have done this type of analysis have found that labor market barriers (similar factors to those included in this dissertation) also affect exit through non-work exit routes. Further, despite increased focus on sanctions in this welfare era most of the exits still occur through work.

In addition, this study did not capture a longitudinal view of the key predictive variables. These variables were measured at one point (at the start of the welfare use). As such, in this study it cannot be stated how changes in social capital and human capital affect welfare outcomes.

Last, it is possible that sample attrition could have influenced some of the findings of the study. For example, it is possible that since individuals with higher education were more likely to be re-interviewed in wave 2, that the findings that higher educated individuals were more likely to exit TANF, was a reflection of survival bias. Nonetheless, the findings are consistent with previous studies on the association between education and TANF exit.

Future Research

Although the dissertation adds to our knowledge of welfare it leaves open several questions that need to be addressed. First, although descriptive statistics in this study showed demographic and other differences between TANF and non-TANF as well as between outcome groups, qualitative study is needed to better understand the circumstances of women in these groups. Second, knowledge is still sparse on specifically how social capital helps low-income mothers to exit welfare. Qualitative studies of social capital are needed to help us better understand the experiences of these mothers as they rely on their social networks to find jobs and exit welfare. Third, more research is needed on the relationship between social capital and welfare entry and exit in different populations. For example, this dissertation focused on social capital and welfare use in cities, but there is reason to believe that the social structure and economies of rural communities can impact the levels of social capital. Accordingly, individuals in rural communities may be affected differently by their social capital than individuals in urban communities.

Further work is also needed to improve the measurement of social capital. Although significant progress has been made, there is still some discord around the components that should be included in the measurement of social capital and how these components should be operationalized. Improved measures of social capital can help to advance the current state of knowledge on social capital, and yield more accurate findings. These in turn, can better inform program and policy intervention. The fact that social capital is a significant predictor of welfare exit, but does not influence entrance, calls for further empirical scrutiny on how social capital can serve as a protective factor, and how such resources can be mobilized in female-headed single families and low-income communities. Further research with better measurements of social capital can help us to better sort out these relationships.

The dissertation also leaves open the question on the differential racial effects of social capital and human capital on welfare entrance and exit. There are at least two reasons for looking at different races, especially Blacks and Whites. The first is that Blacks and Whites enter and exit welfare at different rates. The second reason is that social capital and human capital accumulation differ across Blacks and Whites.

Further, questions need to be answered on the role of social capital and human capital on not just welfare exit but on longer term issues such as employment retention, and advancement for welfare leavers. In addition, we need to also examine the impact of welfare receipt and exit on the well-being of children.

Given the importance of education in helping women leave welfare, future research can focus on whether allowing more years of post-secondary education to be counted as allowable welfare activity, makes a difference in a women exiting welfare.

The question of the factors that impact welfare receipt can also be better addressed by having more intervention research. Also, although this study adds to our knowledge of welfare use in the post –welfare era, randomized controlled studies could provide us with more information on the causal links between human capital and social capital variables and welfare outcomes.

Lastly, it stands to reason that given the significance of social capital in predicting welfare exit, that future studies should focus on identifying predictors of social capital among welfare recipients. Such an endeavor could augment the efforts of policy makers and program developers aiming to improve welfare reform outcomes.

Conclusion

The belief that low-income single women who rely on welfare generally have poor work ethic and are driven by a desire to remain dependent on welfare has pervaded much of the debate around welfare reform (Hawkins, 2002). Largely lacking from the debate is attention to the multiplicity of barriers that single women face that may cripple their ability to move off welfare and to remain off welfare. Low-income single women, relative to their married and wealthier counterparts face many difficulties in life that hinder their ability to gain and maintain self-sufficiency. The welfare literature has overwhelmingly highlighted the important role of human capital such as education and job training, in affecting the welfare outcomes of single women. Consistent with findings from this dissertation, previous studies have shown that those with less human capital investment are less likely to move off welfare.

The experiences that single women face go beyond their human capital accumulation to include their social capital. It is about being embedded in a network that gives people, even with much human capital, the access to opportunities. In this vein, the everyday connections with family, friends, and resource-rich individuals and organizations are crucial in determining whether single women simply ‘get by’ or ‘get ahead.’ Contemporary research endeavors have drawn our attention to the fact that individuals rely on their networks to help make ends meet, for support, and to get information on jobs, and services. Further, such reliance can influence economic outcomes. Therefore, the fundamental question that this dissertation raised is how does the social capital and not just human capital affect the welfare outcomes of single women. While much is known about human capital and welfare use, very little is known about social capital’s role in predicting welfare outcomes.

With this interest in uncovering the role of social capital, I postulated that social capital would increase the odds of exiting welfare and reduce the likelihood of entering welfare. Results from this dissertation give us an intriguing picture of the state of social capital among single women on welfare or at risk of using welfare. More importantly, the results provide compelling evidence of the importance of social capital in the lives of single women as they try to move off welfare. Helping single women reach a level of self-sufficiency, such as being off of welfare, is important to these women, their families and the society as a whole. Therefore, policies and programs that help single women build social capital, could be an effective way in helping women on their journey to improving their economic conditions.

Unquestionably, education is important in the advancement of low-income women. For example, those with a college diploma are able to seize more lucrative jobs and move off of welfare (Schneider, 2005). However, as this study shows, human capital alone does not lead to TANF exit. Instead, it is the combination of education, training, and appropriate social capital that is most effective in helping single mothers make that successful transition. This combination therefore supports the potential of programs such as Project Match (Olson, Berg & Conrad, 1990) as well as the AWEP, which have combined education and job training model with social capital building strategies such as mentorship in helping low-skilled individuals.

REFERENCES

Abdul-Hakim, R., Abdul-Razak, N. A., & Ismail, R. (2010). Does social capital reduce poverty? A case study of rural households in Terengganu, Malaysia. *European Journal of Social Sciences*, *14*(4), 556-566.

Abramovitz, M. (1996). Regulating the lives of women: Social welfare policy from colonial times to the present. Cambridge, MA: South End Press.

Acs, G., & Loprest, P. (2004). Leaving Welfare: Employment and Well-Being of Families that Left Welfare in the Post-Entitlement Era. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

Acs, G., Loprest, P., & Nichols, A. (2009). Risk and recovery: Documenting the changing risks to family incomes. The Urban Institute, brief 8. Retrieved from URL: http://www.urban.org/UploadedPDF/411890_risk_and_recovery.pdf

Bane, M.J., & Ellwood, D.T. (1994). *Welfare Realties: From rhetoric to reform*. Harvard University Press: Cambridge, Massachusetts.

Bania, N., Leete, L., & Coulton, C. (2008). Job access, employment and earnings: Outcomes for welfare leavers in a U.S. urban labor market. *Urban Studies*, 45, 2179-2202. Doi: 10.1177/0042098008095864

Bebbington, A., Woolcock, M., Guggenheim, S., & Olson, E. (2006). *The search for empowerment: Social capital as idea and practice at the World Bank*. Bloomfield, CT: Kumarian Press, Inc.

Becker,G.S. (1962). Investment in human capital: A theoretical analysis. *Journal of Political Economy,* 70, 9-49

Becker, G.S. (1964). *Human capital* (Rev. Ed.) Chicago, Il: Chicago University Press

Becker, G. S., & Tomes, N. (1993). Human capital and the rise and fall of families. In G. S. Becker (Ed.), Human capital: A theoretical and empirical analysis, with *special reference to education* (3rd ed.). Chicago: The University of Chicago Press.

Besharov, D.J.,Germanis,P.,& Rossi, P.H. (1997). *Evaluating Welfare Reform: A guide for scholars and practitioners*. The University of Maryland.

Beverly, S. & Sherraden, M. (1997). Human capital and social work. Center for Social Development Working Paper No. 97-2. Retrieved from URL: http://csd.wustl.edu/Publications/Documents/11.HumanCapitalAndSocialWork.pdf

Blank, R.M. (1989). Analyzing the Length of Welfare Spells. *Journal of Public Economics*, 39(3), 245-73.

Blank, R.M. (2002). Evaluating Welfare Reform in the United States. *Journal of Economic Literature*, 40(4), 1105-1166.

Blank, R. & Schmidt, L. (2001). Work and wages and welfare. In R. Blank and R. Haskins (Eds.). *The New World of Welfare* (pp. 70-96). Washington, DC: Brookings Institute.

Bleakley, H. (2010). Health, human capital, and development. Unpublished manuscript.

Blumenberg, E., & Manville, M. (2004). Beyond the spatial mismatch: Welfare recipients and transportation policy. *Journal of Planning Literature, 19 (2):182-205* DOI: 10.1177/0885412204269103

Boisjoly, J., Duncan, G., Hofferth, S. L. (1995). Access to Social capital. *Journal of Family Issues*. 16, (5), 609-631.

Boisjoly, J., Harris, K.M., & Duncan, G.J. (1998). Trends, events, and duration of initial welfare spells. *Social Service Review*, 72(4), 466-492.

Born, C. E., Ovwigho, P., & Cordero, M. L. (2002). Returns to welfare under welfare reform: Early patterns and their implications. *Administration in Social Work*, 26(3), 53-69.

Bourdieu, P. (1986). *The forms of capital*. In J. Richardson (Ed.), Handbook of theory and research for the sociology of education (pp. 241-258). New York: Greenwood Press.

Bowling, A. (2002). *Research methods in health*. In investigating health and health services. 2nd edition. Buckingham: Open University Press.

Brandon, P. & Hogan, D. (2002). *The effects of children with disabilities on mothers' exits from welfare.* (Working Paper no. 300). Retrieved from Northwestern University and University of Chicago, Joint Center for Poverty Research, Chicago website: URL: http://www.jcpr.org/wp/Wpprofile.cfm?IDp357.

Brisson, D. & Usher, C. (2005). Bonding social capital in low-income neighborhoods. *Family Relations*, 54 (5), 644–653.

Brisson, D., Roll, S., East, J. (2009). Race and ethnicity as moderators of neighborhood bonding social capital: effects on employment outcomes for families living in low-income neighborhoods. *Families in Society: The Journal of Contemporary Social Services*,90(4) 368-374. Doi: 10.1606/1044-3894.3919.

Bryant, W. K. (1990). The economic organization of the household. Cambridge: Cambridge University Press.

Burley, M., Lerch, S., & Mayfield, J. (2001). *Welfare caseload trends in Washington State, 1997-2000: Analysis of long-term welfare use and the approaching time limits.* Retrieved from Washington State Institute for Public Policy website: URL: http://www.wsipp.wa.gov/rptfiles/TimeLimits.pdf

Cancian, M., Meyer D., & Wu, C. (2005). After the revolution: welfare patterns since TANF implementation. *Social Work Review*, 29(4), 199-214

Caputo, R. K. (2011). U.S. social welfare reform: policy transitions from 1981 to present. New York, NY: Springer.

Card, D. & Krueger, A.(1992). School quality and Black-White relative earning: A direct assessment. *Quarterly Journal of Economics*, 10 (1), 151-200

Cheng, T. (2002). Welfare recipients: How do they become independent? *Social Work Research*, 26(3), 159.

Cnaan, R. A.,& Bodie, S. C. (2002). Charitable choice and faith-based welfare: A call for social work. *Social Work*, *47*(3), 224-235.

Coleman, J.S. (1988). Social capital in the creation of human capital. *The American Journal of Sociology*, 94, S95-S120.

Colker, L. & Dewees, S. (2000). Child care for welfare participants in Rural Areas." *Rural Welfare Issues Brief* (November 2000). Retrieved from Macro International URL: http://www.acf.dhhs.gov/programs/opre/childc~1.doc.

Corcoran, M. & Adams, T. (1997). Race, sex, and the intergenerational transmission of poverty. In G. J. Brooks-Gunn (Eds.), *Consequences of growing up poor* (pp. 461-571). New York: Russell Sage Foundation.

Committee on Ways and Means. (2004). 2004 Green Book: Background Material and Data on the Programs within the Jurisdiction of the Committee on Ways and Means. WMCP 108-6. Washington, DC: House of Representatives.

Coulton, C., Chan, T., & Mikelbank, K. (2011). Finding place in community change initiatives: Using GIS to uncover resident perceptions of their neighborhoods. *Journal of Community Practice*, 19(1), 10-28. DOI: 10.1080/10705422.2011.550258

Coulton, C. J. & Pandey, S.(1992). Geographic concentration of poverty and risk to children in urban neighborhoods. *American Behavioral Scientist*, 35(3), 238-257.

Currie, J. (2007). *The invisible safety net: Protecting the nation's poor children and families*. New Jersey: Princeton University Press

Danziger, S, Corcoran, M., Danziger, S., Heflin, C., Kalil, A., Levine, J., Rosen, D., Seefeldt, K., Siefert, K., & Tolman, R. (2000). Barriers to the employment of welfare recipients. In R. Cherry & W. Rodgers III (Eds.), *Prosperity for All? The economic boom and African Americans* (pp. 245–278). New York: Russell Sage.

Danziger, S. K. & Seefeldt, K. (2000). Ending welfare through work first: Manager and client views. *Families in Society: The Journal of Contemporary Human Services*. 81(6), 593-604.

Dave, D., Reichman, N., Corman, H., & Das, D. (2011). Effects of welfare reform on vocational education and training. Working Paper 1669. Retrieved from URL: http://www.nber.org/papers/w16659

DeNavas, W., Proctor, B., & Smith, J. (2010). Income, poverty, and health insurance coverage in the United States: 2009. *Current Population Report*. Publication 60-238. Washington, DC. U.S. Census Bureau. URL: http://www.census.gov/prod/2010pubs/p60-238.pdf

Deprez, L., & Butler, S. (2001). Higher education: A route out of poverty for women. In *On Campus with Women*. Washington, DC: Association of American Colleges and Universities.

DiNitto, D.M. & Cummins, L.K. (2006). Social welfare: politics and public policy (6th edition). Boston, MA: Allyn & Bacon, Inc.

Duncan, G.J., Harris, K.M., & Boisjoly, J. (2000). Time limits and welfare reform: New estimates of the number and characteristics of affected families. *Social Service Review*, 74(1), 55-75.

Easterbrooke, G. (2009). Sonic boom: Globalization at much speed. New York: Random House.

Edin, K. & Lein, L. (1997). Making ends meet: How single mothers survive welfare and low wage work. New York, NY: Russell Sage Foundation.

Edin, K., & Harris, K. M. (1999). Getting off and staying off: Racial differences in the work route off welfare. In I. Browne (Ed.), *Latinas and African American Women at Work* (pp. 270–301). New York, NY: Russell Sage.

Edin, K., Harris, K. M. & Sandefur, G. D. (1998). *Welfare to work:Opportunities and pitfalls.* Washington, DC: American Sociological Association.

Edwards, M. E., Plotnick, R., & Klawitter, M. (2001). Do attitudes and personality characteristics affect socioeconomic outcomes? The case of welfare use by young women. *Social Science Quarterly*, 82(4), 827-843.

Engel, R., & Schutt, R. (2005). *The practice of research in social work*. Sage Publication, Inc.

Epstein, W.M. (1997). *Welfare in America: How social science fails the poor*. The University of Wisconsin Press.

Fafchamps, M., & Minten, B. (2002). Returns to social network capital among traders. *Oxford Economic Papers, 54*, 173-206.

Feagin, J. (2000). Racist America: Roots, current realities, and future reparations. New York, NY: Routledge.

Findeis, J., Henry, M., Hirschl, T., Lewis, W., Ortega-Sanchez, I., Peine, E., & Zimmerman, J. (2001). Welfare reform in rural America: A review of current research. Retreived from Rural Policy Research Institute P2001-5, URL: www.rupri.org/pubs/archive/reports/P2001-5/index.html.

Friedman, P. (2003). Meeting the challenge of social service delivery in rural areas. Retrieved from Welfare Information Network URL: http://www.financeproject.org/Publications/meetingthechallengein.htm

Gais, T., Nathan, R., Lurie, I., & Kaplan, T. (2001). Implementation of the Personal Responsibility Act of 1996. In R. Blank and R. Haskins (Eds.), *The New World of Welfare* (pp.35-69). Washington, DC: Brookings.

Gaughan, M. (2002). The substitute hypothesis: The impact of premarital liaisons and human capital on marital timing. *Journal of Marriage and the Family*, 64, 407–419.

Germain, C., & Gitterman, A. (1995). Ecological perspective. In R. L. Edwards (Ed.), *Encyclopedia of social work* (816-824), Washington, DC: NASW Press.

Gezinski, L.B. (2011). Mediating Impact of Social Capital and Human Capital on Employment Outcome among Single Women Who Use Welfare: A Structural Equation Model. (Doctoral Dissertation). Retrieved from ProQuest Dissertation and Thesis. Permalink URL: http://rave.ohiolink.edu/etdc/view?acc_num=osu1306905684

Goldenburg, J. (2001). Determinants of the earnings gap between Blacks and Whites: A human capital approach. (Doctoral Dissertation). University of Nevada, Las Vegas.

Gooden, S.T. (2006). Addressing racial disparities in social welfare programs: Using social equity analysis to examine the problem. *Journal of Health and Social Policy,* 22(2), 1-12.

Gottschalk, P., McLanahan, S., & Sandefur, G.D. (1994). The dynamics of intergenerational transmission of poverty and welfare participation. In S. Danziger, G. Sandefur, & D. Weinberg (Eds.), *Confronting poverty: Prescriptions for change* (pp. 85-108). Cambridge, MA: Harvard University Press.

Granovetter, M. (1973). The strength of weak ties. *American Journal of Sociology* 78, 1360-1380.

Granovetter, M. (1983). The strength of weak ties revisited. *Sociological Theory 1*, 201-233.

Granovetter, M. (1995). *Getting a job: A study of contacts and careers*, second edition. Chicago, Il: University of Chicago Press.

Grice, S. (2005). Influence of individual and local conditions on patterns of TANF use (Doctoral Dissertation). Retrieved from Proquest dissertation and thesis. (UMI Number: 3201847)

Halpern, D. (2005). *Social capital*. Cambridge, U.K: Polity Press.

Hamil-Luker, J. (2005). Trajectories of public assistance receipt among female high school dropouts. *Population Research and Policy Review*, 24 (6), 673–694. Doi: 10.1007/s11113-005-5751-0

Hamilton, G. & Scrivener, S. (2012). Facilitating Postsecondary education and Training for TANf recipients. Brief # 12 Urban Institute. Retrived from the Urban Institute website: URL: http://www.mdrc.org/sites/default/files/Facilitating%20Postsecondary%20Education.pdf

Handler, J.F. (1995). *The poverty of welfare reform*. Yale University.

Harknett, K. (2001). Working and leaving welfare: Does race or ethnicity matter? *Social Service Review*, 75(3), 359-385.

Harris, K. (1993). Work and welfare among single mothers in poverty. *American Journal of Sociology*, 99(2), 317–352.

Harris, K. (1996). Life after welfare: Women, work and repeated dependence. *American Sociological Review*, 61(3), 407-426.

Hawkins, R.L. (2002). How low income single mothers leave welfare for economic self-sufficiency: The role of psychosocial characteristics, human capital and social capital. (Doctoral Dissertation). Retrieved from ProQuest Dissertation and Thesis.(UMI Number: 3052315).

Henderson, D. A. & Tickamyer, A. R. (2008). Lost in Appalachia: The unexpected impact of welfare reform on older women in rural communities. *Journal of Sociology & Social Welfare* 35 (3): 153–171.

Heflin, C. (2003). Exit routes from welfare: Examining psycho-social, demographic, *and human capital factors* (Working Paper). Retrieved from University of Michigan, Gerald R. Ford School of Public Policy, Ann Arbor website: URL: http://www.fordschool.umich.edu/poverty/pdf/ch2v2.pdf

Henderson, D. A., & Tickamyer, A. R. (2008). Lost in Appalachia: The unexpected impact of welfare reform on older women in rural communities. *Journal of Sociology and Social Welfare, 35*(3), 153-171.

Hetling, A. (2011). The Importance of Region and State Welfare Rules for Disconnected Single Mothers. University of Kentucky Center for Poverty Research, Discussion Paper Series DP 2011-04

Hofferth, S. L. & Iceland, J. (1998). Social capital in rural and urban communities. *Rural Sociology*, 63(4), 574-598.

Holzer, H. J. (2000). The labor market for young African-American men: Recent trends, causes, and implications. In S.H. Danziger (Ed.), *Back to shared prosperity: The growing inequality of wealth and income in America*. Kalamazoo, MI: W.E. Upjohn Institue for Employment Research.

Huang, J., Nam, Y., & Wikoff, N. (2010). Household assets and food stamp program participation among eligible low-income households (CSD Working Paper 10-28). St. Loius, MO: Washington University, Center for Social Development.

Irving, S. (2008). State welfare rules, TANF exits, and geographical context: Does place matter? *Rural Sociology* 73(4): 605-630.

Jagannathan, R., & Camasso, M. (2005). Beyond intention to treat analysis in welfare-to-work studies: The efficacy of labor force attachment, human capital investment and combined strategies for self-sufficiency. *Journal of social service research*, 31(4), 43-60.

Jargowsky, P. A. (1997). *Poverty and place: Ghettos, barrios, and the American city*. New York: Russell Sage Foundation.

Johnson, C. (2000). Racial disparities and neoclassical economics: The poverty of human capital explanations. *The Social Science Journal*, 37(3), 459-462.

Juon, H., Green, K., Kasper, D. Thore, R., Ensminger, M. (2009). Welfare receipt trajectories of African-American women followed for 30 years. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, 87 (1), 76-94.

Kain, J.F. (1968). Housing segregation, negro employment, and metropolitan decentralization. *The Quarterly Journal of Economics*, 82(2), 175-197

Kahn, P. & Polakow, V. (2000). Struggling to stay in school: Obstacles to post-secondary education under the welfare-to-work regime, Flint MI: University of Michigan.

Kassabian, D., Vericker, T., Searle, D., & Murphy, M. (2010). Welfare rules databook. Washington, D.C.: The Urban Institute.

Kaye, K. & Nightingale, D. (2000). *The low wage labor market: Challenges and opportunities for economic self-sufficiency*. U.S. Department of Health and Human Services: Washington, D.C. 2000.

Kelly, J. (2009). Leaders and lessons to guide us. *NASWNEWS,* 54(6).

Koerin, B. (2003). The settlement house tradition: Current trends and future concerns. *Journal of Sociology and Social Welfare*, 30(2), 53-68.

Kozimor-King, M. (2008). Does belief matter? Social psychological characteristics and the likelihood of welfare use and exit. *Journal of Sociology and Social Welfare*, 35(1), 197-219.

Kreider, R.M. & Elliott, D. B. (2009). America's families and living arrangements: 2007. *Current Population Reports.* Publication20-561. Washington, DC: U.S. Census Bureau. URL: http://www.census.gov/prod/2009pubs/p20-561.pdf

Kumlin, S., & Rothstein, B. (2005). Making and breaking social capital The impact of welfare-state institutions. *Comparative Political Studies*, 38(4), 339-365

Lafer, G. (1994). The politics of job training: Urban poverty and the false promise JTPA. *Politics and Society*, 22(3), 349-388.

Leana, C & Van Buren, H. (1999). Organizational social capital and employment practices. The *Academy of Management Review*, 24(3), 535-555.

Legal Momentum (2011). Meager and diminishing welfare benefits perpetuate widespread material hardship for poor women and children. Available at URL: http://www.legalmomentum.org/help-center/meager-and-diminishing.html

Lewis, M. & Widerquist, K. (2001). *Economics for social workers: The application of economic theory to social policy and the human services*. New York: Columbia University Press

Lin, N. (2001). *Social capital: A theory of social structure and action*. Cambridge: Cambridge University Press.

Livermore, M. & Neustrom, A. (2003). Linking welfare clients to jobs: Discretionary use of worker social capital. *Journal of Sociology and Social Welfare*, 30(2), 87-103.

London, R. (2006). The role of postsecondary education in welfare recipients' paths to self-sufficiency. *Journal of Higher Education*, 77(3), 472-496.

Long, D. (2000). Welfare reform: A social work perspective for assessing success. *Journal of Sociology & Social Welfare,* 27(4), 61-78.

Loprest, P. (2002). *Who returns to welfare?: Assessing the new federalism,* (Report No. B-49). Retrieved from Urban Institute website: URL: http://www.legis.state.wi.us/lc/committees/study/2006/SFAM/files/310548_B49.pdf

Lower-Basch, E., & Greenberg, M.H. (2009). Single mothers in the era of welfare reform. In A. Bernhardt, H. Boushey, L. Dresser, and C. Tilly, eds. *The Gloves-off Economy: Workplace Standards at the Bottom of America's Labor Market,* Champaign, IL: Labor and Employment Relations Association, pp. 163–190.

Lowndes, V.(2006). It's not what you've got but what you do with it: Women, social capital and political participation. Ch9. In B. O'Neill & E. Gidengil (Eds.), *Gender and social capital*(pp. 213-241), New York: Routledge.

Marsden, P. (1987). Core discussion networks of Americans. *American Sociological Review*, 52(1), 122-131

Martin, M. C. & Caminada, K. (2011). Welfare reform in the U.S.: A policy overview analysis. *Poverty and Public Policy*, 3(1), 1-40.

Martineau, W. (1977). Informal social ties among urban black Americans: Some new data and a review of the problem. *Journal of Black Studies*, 8(1), 83-104.

Massey, D.S., & Denton, N.A. (1993). American apartheid: Segregation and the making of the underclass. Cambridge: Harvard University Press.

Mathur, A., Reichle, J., Strawn, J., & Wiseley, C. (2004). From jobs to careers: How California community college credentials pay off for welfare participants. Washington, DC: Center for Law and Social Policy

Mead, L. (1986). Beyond entitlement: The social obligations of citizenship. New York: The Free Press.

Mincer, J.(1958). Investment in human capital and personal income distribution. *Journal of Political Economy*, 66(4), 281-302.

Moffit. R. A.(2003). The role of non-financial factors in exit and entry in the TANF program. Working paper.

Moffitt, R, A., & Cherlin, A. (2002). Disadvantage among families remaining on welfare.(Working Paper no. 301). Retrieved from Northwestern University and the University Chicago, Joint Center for Poverty Research, Chicago website. URL: http://www.jcpr.org/wpfiles/moffitt_cherlin_revSRI01.pdf.

Moynihan, D. P. (1965). *The Negro family: The case for national action*. Washington, D.C.: Office of Policy Planning and Research, U.S. Department of Labor.

Mozumber, P. & Halim, N. (2006). Social capital fostering human capital: The role of community participation in primary school management in Bangladesh. *Journal of International Development*, 18(2), 151-162.

Murray, C. (1984). Losing grounds: American social policy, 1950 - 1980. NewYork, NY: Basic Books.

Nam, Y. (2005). The roles of employment barriers in welfare exits and reentries after welfare reform: Event history analyses. *Social Service Review, 79, 268-293.*

Narayan, D., & Pritchett, L. (1999). Cents and sociability: Household income and social capital in rural Tanzania. *Economic Development and Cultural Change*, *47*, 871-897.

National Association of Social Workers(NASW) (approved 1996, revised 2008). Code of ethics of the National Association of Social Workers. Washington, DC.

National Association of Social Worker (2012). Social Work Speaks: 2012-2014 (9th Ed.) NASW Press, Washington D.C.

National Poverty Center. (2010). *Poverty facts*. Retrieved from URL: http://npc.umich.edu/poverty/

Neubeck, K.J. & Cazanave, N.A. (2001). Welfare racism: Playing the race card against America's poor. New York, NY: Routledge Press.

Olson, L., Berg, L., & Conrad, A. (1990). High turn-over among the urban poor: The Project match experience. Evanston: Center for Urban Affairs and Policy Research, North Western University.

Olson, K., & Pavetti, L. (1996). Personal and family challenges to successful transition from welfare to work, Washington, DC: Urban Institute.

O'Neill, D.M., & O'Neill, J.E. (1997). *Lessons for welfare reform: An analysis of the AFDC caseload and past welfare-to-work programs.* Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

Pandey, S., & Gua, B. (2007). A longitudinal study of welfare exit among American Indian families. *National Association of Social Workers*, 31(2), 95-107.

Parker, L.A. (1994). The role of workplace support in facilitating self-sufficiency among single mothers on welfare. *Family Relations*, 43(2), 163-173

Parisi, D., McLaughlin, D.K., Grice, S.M., &Taquino, M. (2006). Exiting TANF: Individual and local factors and their differential influence across racial groups. *Social Science Quarterly*, 87 (1), 76-90

Pavetti, L. (1993). The dynamics of welfare and work: Exploring the process by which women work their way off welfare. Unpublished doctoral dissertation. Harvard University, Washington, DC.

Pavetti, L. & Schott, L. (2011). TANF's inadequate response to recession highlights weakness of Block-Grant structure proponents wrong to see it as model for medicaid, SNAP, or other low-income programs. Retreived from the Center on Budget and Policy Priorities. URL: http://www.cbpp.org/cms/?fa=view&id=3534

Pinto, R. M. (2006). Using social network interventions to improve mentally ill clients' well-being. *Clinical Social Work Journal, 34*(1), 83-100.

Portes, A. (1998). Social capital: Its origins and applications in modern sociology. *Annual Review of Sociology* 24 (2)1-24.

Putnam, R.D. (1993). The prosperous community. Social capital and public life. *The American Prospect*, 4 (13)35–42.

Putnam, R. D. (1995). Bowling alone: America's declining social capital. *Journal of Democracy*, 6(1) 65-78.

Putnam, R. D. (2000). *Bowling alone: The collapse and revival of community*. New York: Simon & Schuster.

Quillian, L., & Redd, R. (2006). *Can social capital explain persistent poverty gaps?* (National Poverty Center Working Papers Series, No. 06-12). Ann Arbor, MI: National Poverty Center.

Rangarajan, A., & Johnson, A. (2002). Current and formerWFNJ clients: How are they and their children faring 40 months later? Washington, D.C.: Mathematica Policy Research, Inc.

Rank, M.R. (1985). Exiting from welfare: A life-table analysis. *The Social Service Review*, 59(3), 358-376

Rank, M.R., & Hirschl, T.A. (2002). Welfare use as a life course event: Towards a new understanding of America's safety net**.** *Social Work*, 47(3), 237-248.

Rankin, B. (2003). How low income women find jobs and its effects one earnings. *Work and Occupations*, 30(3), 281-301.

Riccio, J., Friedlander, D., & Freedman, S. (1994). *GAIN: Benefits, Costs, and Three-Year Impacts of a Welfare-to-Work Program*. New York: Manpower Development Research Corporation.

Rupasingha, A. & Goetz, S. J. (2007). Social and political forces as determinants of poverty: A spatial analysis. *Journal of Socio-Economics* 36(4): 650-671.

Sampson, R. J., Raudenbush, S. W., & Earls, F. (1997). Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science, 227*(5328), 918–924.

Schein, V. E. (1995). *Working from the margins: Voices of mothers in poverty*. Ithaca, NY: Cornell University Press.

Schmidt, L., Dohan, D.,Wiley, J., & Zabkiewicz, D. (2002). Addiction and welfare dependency: Interpreting the connection. *Social Problems* 49 (2): 221–41.

Schneider , J. (2000). Pathways to opportunity: The role of race, social networks, institutions, and neighborhood in career and educational paths for people on welfare. *Human Organization*, 59(1), 72-85.

Schneider, J.A. (2005). Getting beyond the training vs. work experience debate: The role of labor markets, social capital, cultural capital, and community resources in long-term poverty. *Journal of Women, Politics & Policy*, 27(3), 41-53.

Schram, S.F. (2005). Contextualizing racial disparities in American welfare reform: Toward a new Poverty Research. *Perspectives on Politics 3 (2) 253-268*

Schultz, T. (1961). Investment in human capital. *The American Economic Review*. 51 (1), 1-17

Seefeldt, K.S. & Orzol, S.M.. (2005). Watching the clock tick: Factors associated with TANF accumulation. *Social Work Research*, 29(4), 215-229.

Sherraden, M. (1991). *Assets and the poor: A new American welfare policy*. Armonk, Ny: Sharpe.

Simmons, L., Braun, B., Wright, D., & Miller, S. (2007). Human capital, social support, and economic wellbeing among rural, low-income mothers: A latent growth curve analysis. *Journal of Family Economic Issue*, 28, 636-652, DOI 10.1007/s10834-007-9079-2

Smith, R., Deprez, L., & Butler, S. (2002). *Parents as scholars: Education works, outcomes for Maine families and implications for TANF reauthorization*. Augusta, ME: Maine Equal Justice Partners.

Spalter-Roth, R., Burr, B., Hartmann, H. & Shaw, L. (1995). *Welfare that works: The working lives of AFDC recipients.* Washington, DC: Institute for Women's Policy Research.

Stellmack, A. L. & Wanberg, C. R. (2000). Predictors of success at leaving the Minnesota Family Investment Program. *CURAReporter*, December, 8-14.

Stier, H., & Tienda, M. (2000). *The color of opportunity: pathways to family, welfare, and work.*. Chicago, Il: University of Chicago Press.

Strother, P. (2004). Exit from poverty. *Journal of Human Behavior in the Social Environment*,7(3), 97-119.

Sullivan, J. (2006). Source welfare reform, saving, and vehicle ownership: Do asset limits and vehicle exemptions matter? *The Journal of Human Resources*, 41 (1) 72-105

Sum, A., & Ishwar K. (2010). Labor underutilization problems of U.S. Workers across household income groups at the end of the great recession: A truly great depression among the nation's low income workers amidst full employment among the most affluent. Paper prepared for the C.S. Mott Foundation, Flint Michigan. Boston, MA: Center for Labor Market Studies, Northeastern University, URL: http:// www.massworkforce.com/documents/LaborUnderutilizationProblemsofU_000.pdf.

Sunstein, C.R. (1997). *Free markets and social justice*. New York, NY: Oxford University Press

Taylor, M.J. & Barush, A.S. (2004). Personal, family, and multiple barriers of long-term welfare recipients. *Social Work*, 49(2), 175-183.

Teachman, J. D. Paasch, K., & Carver, K. (1997). Social capital and the generation of human capital. *Social Forces*, 75(4), 1343-1359.

Trattner, W.I. (1999). *From poor law to welfare state: A history of social welfare in America*. New York, NY: The Free Press.

Tsai, W. P., & Ghoshal, S. (1998). Social capital and value creation: The role of intrafirm networks. *Academy of Management Journal* 41(4): 464-476.

U.S. Census Bureau (2010). Poverty status of families, by type of family, presence of related children, race, and Hispanic origin: 1959 to 2009, available at URL: http://www.census.gov/hhes/www/poverty/data/historical/families.html.

U.S. Department of Health and Human Services. (2008). *Characteristics and financial circumstances of TANF recipients.* Retrieved from URL: http://www.acf.hhs.gov/programs/ofa/character/FY2008/indexfy08.htm.

U.S. House of Representatives, Committee on Ways and Means.(1996). *1996 Green Book: Background materials and data on programs within the jurisdiction of the committee on ways and means*. Retrieved from Washington, DC: U.S. Gov. Printing Office website URL: http://waysandmeans.house.gov/media/pdf/110/tanf.pdf

U.S. House of Representatives, Committee on Ways and Means. (2008). 2008 Green Book. Retrieved from URL: http://democrats.waysandmeans.house.gov/files/document/tanf.pdf

Vella, V., & Narajan, D. (2006). Building indices of social capital and its outcomes. *Electronic Journal of Sociology*. Retreived from URL: http://www.sociology.org/content/2006/tier/venanzio.

Vu, C., Anthony, E., & Austin, M. (2009). Strategies for engaging adults in welfare-to-work activities. Families in Society: *The Journal of Contemporary Social Services*, 90(4), 359-366.

Ward, S., & Turner, H. (2007). Work and welfare strategies among single mothers in New England: The role of social networks and social support. *Journal of the Community Development Society*, 38(1), 44-58

Weaver, R.D. (2011). Predictors of social capital among persons in receipt of TANF: Results from the Georgia welfare reform research project. *Journal of the North American Association of Christians in Social Work*, 38 (4), 417–439.

Weaver, R.D., & Habibov, N. (2012). Social capital, human capital, and economic well-being in the knowledge economy: Results from Canada's General Social Survey. *Journal of Sociology & Social Welfare, 39*(2), 31-53.

Williams, F. (1987). Racism and the discipline of social policy: A critique of welfare theory. *Critical Social Policy*, 7(20), 4-29.

Wilson, W, J. (1987). *The truly disadvantaged*. Chicago: University of Chicago Press.

Woolcock, M. (2001). The place of social capital in understanding social and economic outcomes. *ISUMA Canadian Journal of Policy Research*, 2(1), 11-17.

Zedlewski, S.R., & Loprest, P. (2001). Will TANF work for the most disadvantaged families? In R.M. Blank & R. Haskins (Eds.), *The New World of Welfare* (pp. 311-334). Washington, DC: Brookings Institution Press.

Zhan, M. (2007). Assets, human capital development, and economic mobility of single mothers. *Families in Society: The Journal of Contemporary Social Services*, 88(4), 605-615.

APPENDIX

Appendix 1. Breakdown of Study Sample by Community

Community	Study Sample (Wave 1)		
	Sample 1 On welfare	**Sample 2** Not on welfare	**Sample Total**
Denver	23	47	70
Des Moines	17	50	67
Indianapolis	28	48	76
San Antonio	30	55	85
Seattle	18	43	61
Milwaukee	36	127	163
Hartford	53	94	147
Providence	27	38	65
Oakland	21	118	139
Louisville	55	139	194
Total	**308**	**759**	**1,067**

Appendix 2. TANF vs. Non-TANF recipients on full sample at wave 1

Variables	TANF	Non-TANF	Statistics
Average age	32.97 (10.79)	38.50 (12.31)	t= 8.42***
Number of children in household	2.37 (1.281)	2.24 (1.235)	ns
Children under age 6	188 (38.3%)	303 (61.7%)	χ^2 =52.49***
Vehicle ownership	213 (19.6%)	875 (80.4%)	χ^2 = 67.47***
Racial Breakdown			ns
NH White	77 (23.6%)	250 (76.4%)	
NH Black/African American	201 (26.3%)	564 (73.7%)	
Hispanic	24 (21.4%)	88 (78.6%)	
NH mixed race	145 (28.8%)	358 (71.2%)	
TANF policy			ns
Weak	78 (29.0%)	191 (71.0%)	
Mixed	338 (25.6%)	980 (74.6%)	
Strong	32 (25.4%)	94 (74.6%)	
Unemployment rate	4.50 (.874)	4.56 (.87)	ns
Human capital			
Education			χ^2 = 47.28***
Less than HS	205 (35.7%)	370 (64.3%)	
High School/GED	141 (25.0%)	423 (75.0%)	
Beyond HS	96 (17.7%)	447 (82.3%)	
Job training	152 (32.5%)	316 (67.5%)	$\chi^{2=}$12.591***
Social capital			
Live in close knit neighborhood [1]	3.31 (1.118)	3.26 (1.147)	ns
People in neighborhood help[1]	3.27 (1.05)	3.40(1.091)	t=2.109*
People in neighborhood can be trusted[1]	2.80 (1.075)	2.84 (1.097)	ns
Borrow from family in emergency[2]	289 (30.7%)	652 (69.3%)	$\chi^{2=}$26.507***
Borrow from friend in emergency[2]	144 (32.3%)	302 (67.7%)	χ^2 =13.01***
Give help[2]	136 (21.6%)	493 (78.4%)	χ^2 =10.478**
Get help[2]	201 (37.6%)	334 (62.4%)	χ^2 =53.064***
Attrition	140 (21.7%)	506 (78.3%)	χ^2 =10.780**

Note. *p=.05, **p=.01, ***p=<.001