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The Literacy Proficiencies of Oregon Tanf Recipients : A Human Capital Approach

Amy Katherine Arnett
Portland State University

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THESIS APPROVAL

The abstract and thesis of Amy Katherine Arnett for the Master of Science in Sociology were presented June 9, 2000, and accepted by the thesis committee and the department.

COMMITTEE APPROVAL:

[REDACTED]
Karen Seccombe, Chair

[REDACTED]
Lee J. Haggerty

[REDACTED]
Grant Farr

[REDACTED]
Kathryn Harris
Representative of the Office of Graduate Studies

DEPARTMENT APPROVAL:

[REDACTED]
Grant Farr, Chair
Department of Sociology

ABSTRACT

An abstract of the thesis of Amy Katherine Arnett for the Master of Science in Sociology presented June 9, 2000.

Title: The Literacy Proficiencies of Oregon TANF Recipients: A Human Capital Approach

On August 22, 1996, President Clinton signed new legislation that dismantled the United State's welfare system. Consequently, thousands of welfare recipients had to move into the work-force. It is essential to discover if former welfare recipients are prepared to obtain employment and achieve self-sufficiency. Previous research suggests that human capital assets, such as level of literacy proficiency and grade completed in school are important factors in predicting welfare receipt. The purpose of this study is to investigate how literacy skills are associated with having received TANF for people without a high school degree or GED. The 941 subjects were located in the Portland, metropolitan area and were between the ages of 18-44.

Using data from Wave 1 of the Longitudinal Study of Adult Literacy, a quantitative analysis was conducted in order to investigate the following two hypotheses: For people with low-levels of education, there will be a strong, inverse relationship between literacy proficiency and having received TANF; In a

multivariate context, after controlling for other relevant variables, a statistically significant relationship between literacy proficiency and TANF receipt will exist.

The Pearson's correlation for literacy proficiency and TANF receipt is -.026, but statistical significance was not achieved. Consequently, support cannot be concluded for the first hypothesis. When all pertinent variables are properly controlled for in a multivariate logistic regression model, statistical significance was achieved for the association between literacy proficiency and having received TANF, but the effect was not in the expected direction. Therefore, the second hypothesis also was not supported.

This study yielded mixed results and no definitive statement can be made about how human capital assets affect the likelihood of having received TANF. However, literacy proficiency, when other important factors are controlled for, do appear to be important. Future research is needed in order to better understand the relationship between human capital assets and having received TANF. It is essential that social science researchers continue to uncover the complex forces at work in the lives of welfare recipients so that we can better aid them in their journey to self-sufficiency.

THE LITERACY PROFICIENCIES OF OREGON TANF RECIPIENTS:
A HUMAN CAPITAL APPROACH

by

AMY KATHERINE ARNETT

A thesis in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE
in
SOCIOLOGY

Portland State University
2000

DEDICATION

I wish to dedicate this thesis to my very loving husband, Michael Len Arnett, to whom I owe my master's degree. I could not have gotten through this process without his loving support, gentle encouragement, and constant belief in me.

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Table of Contents

Dedication.....	i
Acknowledgments.....	ii
List of Tables.....	iv
List of Figures.....	v
Chapter One: Introduction.....	1
Why Study Welfare Recipients.....	1
Hypotheses.....	3
Chapter Two: Conceptual Development.....	5
Characteristics of TANF Recipients.....	5
Barriers to Self-sufficiency.....	7
Education and Welfare.....	8
Literacy, Basic Skills and Welfare.....	9
Other Barriers to Self-sufficiency.....	16
Theoretical Framework.....	22
Human Capital Model.....	24
Limitations to the Human Capital Perspective.....	26
Chapter Three: Methodology.....	29
Sample.....	30
Sample Characteristics.....	30
Variables.....	32
Data Analysis.....	36
Chapter Four: Findings.....	38
Bivariate Analyses.....	38
Multivariate Analyses.....	41
Chapter Five: Implications and Conclusions.....	47
Implications.....	47
Limitations to the Study.....	53
Suggestions for Future Research.....	54
Conclusions.....	55
References.....	57

List of Tables

Table 1: Characteristics of TANF Recipients for the Fiscal Year 1998.....	6
Table 2: Sample Characteristics.....	31
Table 3: Pearson's Correlation Coefficients for the Independents by TANF.....	39
Table 4: Results of the Logistic Regression Analysis.....	42

List of Figures

Figure 1: Comparing the total percentages of people who fall into the lowest two proficiency levels.....	13
Figure 2: The Average Literacy Proficiencies by Race.....	14
Figure 3: Literacy Proficiencies of Welfare Recipients.....	38

Chapter One

Introduction

As we prepare to enter the 21st century, there are many complex and powerful reasons why adults in the United States need to learn new skills and obtain higher levels of education. With the changes that globalization brings in the structure of the economy and the types of jobs that are available, it is now more difficult than ever before for some individuals to achieve and maintain self-sufficiency. People with low-levels of education, literacy, and basic skills lack adequate human capital to be able to compete for good jobs in the labor market. Consequently, they are less likely to fare well in today's economy. Human capital assets are skills that individuals obtain, such as education, and training, that increases a person's earning potential. Not only are people more ill prepared for today's work force, but the structure of public assistance is also changing in an attempt to reduce dependency on social welfare programs. These facts add up to a troubling social problem that confronts our nation and the thousands of impoverished people who live within it as we move into the new millennium.

Why Study Welfare Recipients?

In January of 1997, a piece of legislation took effect that resulted in a revamping of the welfare system. The new welfare system has required many recipients to move off of public assistance and into the work force (Seccombe, 1999; Wijnberg & Weinger, 1998; Salomon, 1996; Greenberg, 1996). According to the United States Department of Health and Human Services, there were 2.6 million

families receiving assistance from Temporary Aid to Needy Families (TANF) in March of 1999 compared to almost 4.96 million families receiving aid in 1993, which is a 46% decrease in caseloads. With this decrease in caseloads and the resulting large numbers of recipients moving into the work force, it is very important to question how they may fare and how well prepared they are for making the transition from welfare to work.

Another fact to consider is that a significant number of the people on TANF are single mothers and their children. Low-income single mothers have recently captured the attention of numerous social science researchers, journalists, and politicians. There are several reasons for this interest, but perhaps, most importantly this is because the number of impoverished women and children has grown at an alarming rate over the past few decades (Sansone, 1998; Harris, 1996; Devine and Wright, 1993). According to recent U. S. Census Bureau statistics (1999), related children living in families headed by a female with no husband present had a poverty rate of 54.8%. Furthermore, women and children continue to make up the largest percentage of individuals living below the poverty threshold. Welfare recipients are an economically vulnerable population of people and it is essential for researchers and policy makers to examine why this is true and what we can do to aid them in their journey to self-sufficiency.

This study seeks to address some of these issues by conducting a secondary analysis of data generated from wave 1 of the 1999 Longitudinal Study of Adult Learning (LSAL). Numerous researchers in the past have connected levels of

education with the likelihood of needing welfare. However, it has only been recently that researchers have begun to examine the connection between literacy proficiency with needing help from public assistance programs.

One aspect that makes the LSAL data set interesting and unique is that the population selected for study does not have a high school degree or GED. Because everyone sampled will have low-levels of education, this factor will be controlled for effectively. Therefore, we can investigate how literacy and basic skills affects the likelihood of receiving TANF as well as what other factors may lead some people to need public assistance while the effect of education is basically removed.

The majority of the research that has been done on welfare recipients and literacy proficiency has been bivariate in nature. This study seeks to expand the work of others by conducting a multivariate analysis in order to determine how important literacy proficiency is in predicting the likelihood of needing TANF. The purpose of this study is to investigate the following two hypotheses:

- H1:** For a population of people with low-levels of education, there will be a significant, inverse relationship between literacy proficiency and having received TANF some time in the past year.
- H2:** In a multivariate context, the relationship between literacy proficiency and TANF receipt will persist after controlling for other relevant variables which may covary and it will be an inverse association.

I will use bivariate analyses to explore the first hypothesis, and a logistic regression analytical technique will be used in order to test the second hypothesis. A theoretically driven model based on what others have found to be significant in predicting welfare status will be developed for the multivariate analysis. If literacy

skills are a significant predictor of welfare receipt, policy recommendations could be made based on these findings. It is my hope that this study, will add to the growing body of literature on why some people need welfare as well as illuminate what can be done in the future to aid the thousands of individuals who are moving off of welfare and into the workforce.

Chapter Two

Conceptual Development

In order to conceptually frame the argument that low levels of literacy will be associated with an individual's welfare status, several different topics will be discussed. First, the economic and sociodemographic characteristics of both the national and local Oregon welfare populations should be examined in order to determine who is currently on welfare. Also, investigating these characteristics is essential because we need to know if there is anything different about the Oregon welfare population that may interfere with the results of this study. Third, how other researchers have connected literacy rates with the use of Temporary Aid to Needy Families (TANF) will be discussed. Next, other types of barriers to self-sufficiency that welfare recipients face will be examined in order to give a complete picture of the complexity of the problem. Last, a discussion of the theoretical approach, the human capital model, will be needed to complete the conceptual development for this study.

Characteristics of the TANF population

The economic and sociodemographic factors of individuals on welfare should be considered when attempting to uncover why people are on welfare. Furthermore, it is important to illuminate any possible oddities about the Oregon TANF population that may interfere with the results of this study. Table 1 presents characteristics of the national and local, Oregon, welfare populations.

Table 1: Characteristics of TANF Recipients for the Fiscal Year 1998

Characteristics	National Average ¹	Oregon Average ²
Total Number of TANF Families	3,175,646	18,898
Family Composition		
Average family size	2.8	3.7
Single-parent families	70.5%	70.3%
Two-parent families	5.4%	8.5%
No-parent families	23.4%	21.2%
Total Number of TANF Adult Recipients	2,631,142	16,514
Race		
White	35.6%	81.3%
Black	37.1%	7.4%
Hispanic	20.0%	5.5%
Other ³	7.3%	5.9%
Level of Education		
1 to 11 years of education	42.6%	37.2%
12 or more years of education	46.0%	51.4%
Unknown amount of education	11.4%	11.3%
Employment Status		
Employed	22.8%	6.3%
Unemployed ⁴	45.0%	93.7%
Not in Labor Force ⁵	28.3%	0.0%
Total Number of TANF Children	6,329,970	34,385

Source: United States Department of Health and Human Services (1999).

As Table 1 indicates, there were 3.2 million families receiving TANF nationally in 1998 compared to 18.9 thousand families in Oregon who received aid. The majority of the families on TANF, 70.5% nationally and 70.3% locally, are headed by single parents. Eighty one percent of the individuals on TANF in Oregon are white, while 7.4% are Black, and 5.5% are Hispanic. However, there is a roughly equal number of white and Black recipients nationwide (54.6% and 37.1%, respectively). Oregon TANF recipients are slightly more educated than are recipients nationwide. Fifty one percent of the Oregon recipients have completed 12 or more years of education

¹ National monthly average for the fiscal year 1998.

² Oregon monthly average for the fiscal year 1998.

³ Other includes, Native American, Asian, and other races.

⁴ Unemployed, looking for work.

⁵ Unemployed, not looking for work (includes discouraged workers).

compared to only 46% of the recipients across the nation. Six percent of Oregon welfare recipients were employed in 1998 versus 22.8% of welfare recipients across the nation. However, 93.7% of the Oregon welfare population is unemployed and are currently looking for work, compared to 45% of recipients nationwide. There are no welfare recipients in Oregon who are unemployed and not looking for work, but 28.3% of recipients across the U.S. are not currently participating in the labor force.

Barriers to Self-sufficiency

Few would argue with the idea that welfare recipients have many barriers to self-sufficiency and there are many themes in the current body of literature on why these barriers exist. Before discussing some of these themes, it is appropriate to define self-sufficiency. The Economic Policy Institute in Washington D. C. defines self-sufficiency as an income that allows one to live without government assistance, and this is the definition that will be most appropriate for the purposes of this paper (Ruggeri, 1999).

The majority of the explanations in the literature concerning barriers to self-sufficiency center around an impoverished individual's lack of personal and/or environmental resources. People may lack these resources because of the structural constraints that exist in our society and/or because of individual constraints (Macenko and Fagen, 1996). The most adequate explanation of the poverty rates and welfare usage would need to include both types of constraints, as it is more often a combination of factors that lands people in poverty and on welfare. The first barrier to

self-sufficiency, inadequate literacy and basic skills, is the main focus of this thesis, and therefore, will be discussed first.

Education and Welfare

Education has long been honored in our society as a route to social mobility and material security. Few would argue with the fact that an individual's level of education affects their likelihood of living in impoverished conditions and being on welfare (Smith, 1999; Zedlewski, 1999; Levitan, Mangum, & Mangum, 1998; Marcenko and Fagan, 1996; Devine and Wright, 1994). For instance, in 1995, people with less than a high school degree had a 23% rate of poverty in contrast to a 6.4% rate of poverty for those with some college. In other words, those without a high school degree were four times more likely than those with some college to be living below the poverty threshold (Levitan, Mangum, and Mangum, 1998). The National Institute for Literacy (1996) gives us the following statistics about how the level of education affects the likelihood of welfare usage:

- Almost 50% of the adults on welfare in 1996 did not have a high school degree or GED.
- Over 60% of those who spend more than five years on welfare enter the system with less than a high school degree.
- Over 65% of people on welfare who have a high school diploma or GED leave welfare to become self-sufficient within two years.
- Workers who do not have a high school degree earn a mean monthly income of \$452, compared to \$1,829 for those with a bachelor's degree.

These statistics inevitably and unfortunately tie level of education to welfare usage and self-sufficiency. The picture is even bleaker for women who have low-levels of

education. For example, Blau (1998/99) reports that in 1995 only 47% of women with less than a high school degree were in the labor force compared to 83% of college graduates. Plainly, a person's level of education is one of the key factors in determining labor market entry and attachment, as well as, the ability to make a wage that will approach self-sufficiency (Zedlewski, 1999; Ruggeri, 1999; Brooks and Buckner, 1996). Inadequate education and training consigns some women to a revolving door of welfare, while higher education is a promising pathway to job opportunities and economic success (Kates, 1996).

Another fact to consider is that women with similar levels of education make considerably less money than their male counterparts. Full-time, year round, women workers on average make 73% of men's earnings (U. S. Census Bureau, 1999). According to the U. S. Census Bureau (1999), the female-to-male ratio varies by education but the lowest ratio can be found among people with professional degrees, with women earning only 61% of men's earnings. Furthermore, women who attended high school but who did not receive a degree or GED make only 70% of men's earnings. In no case did women earn more than their male counterparts. A woman who is a head of a household needs at least a college degree to be able to earn a family wage that approximates that of a man with a high school diploma (Blank, 1995).

Literacy, Basic Skills and Welfare

A great deal has been written on how level of education predicts welfare usage for some people. However, there is a dearth in the literature on how low-levels of literacy predict the likelihood of an individual needing help from public assistance

programs (Barton and Jenkins, 1995). It is my belief, that inadequate literacy and basic skills will be one of the most important predictors of labor force detachment and hence, welfare reliance. Moreover, literacy and basic skills are significant components of acquiring an education, which has already been shown to be vitally important for reducing the risk of unemployment and welfare dependency. Recently, researchers have begun to uncover a connection between literacy, employability, and welfare dependency. As a framework for this study, it is important to illuminate what other researchers have found regarding the literacy skills of welfare recipients.

From the recent studies on literacy and welfare recipients, several general conclusions can be made. The first, and perhaps, most important, conclusion is that the literacy proficiencies and basic skills of welfare recipients in the United States are generally much lower than the proficiencies of individuals in the general population (Levenson et. al, 1999; D' Amico, 1997; Olson and Pavetti, 1996; Barton and Jenkins, 1995). For Instance, D' Amico (1997) discovered that the likelihood of being on welfare or public assistance programs increases as skill levels decrease. Furthermore, Pavetti (1993) shows that low basic skills is one of the strongest predictors of long-term welfare receipt (as cited in Pavetti, 1997).

Research has shown that an increase in an individual's literacy and basic skills results in an increase in employment and thus, in self-sufficiency (Levenson et. al, 1999, Smith, 1999; Pavetti et al, 1997; Pavetti, 1997; Olson and Pavetti, 1996; D'Amico, 1997; Barton and Jenkins, 1995). For example, people with low levels of literacy proficiency on average tend to work less weeks per year, are less likely to be

employed, and make lower average wages than those with higher skill levels (Statistics Canada, 1996; D' Amico, 1997; Barton and Jenkins, 1995). The literature supports the position that low levels of literacy and basic skills can be a significant, if not the most significant, barrier to labor force attachment and self-sufficiency, as well as a predictor of long-term welfare reliance for recipients (Pavetti, 1997). Now that the general conclusions are known, one literacy and basic skills study that is relevant for this study will be described in some detail.

One of the most important studies that examines the literacy skills of adults in the United States is the 1992 National Adult Literacy Survey (NALS), conducted by the Educational Testing Service for the U. S. Department of Education. Before moving on to some of the important findings of this study, it is important to know that the researchers adopted the following definition of literacy for their study: “*Using printed and written information to function in society, to achieve one’s goals, and to develop one’s knowledge and potential*” (National Adult Literacy Survey, National Center for Education Statistics, 1992). This definition goes beyond the simple meaning of literacy as being able to read and write. Rather, it seeks to explain the numerous and diverse skills that are necessary for accomplishing different types of tasks in different contexts (Barton and Jenkins, 1995). The NALS further defines literacy along three specific dimensions: prose literacy, document literacy, and quantitative literacy. These different dimensions of literacy are “designed to capture an ordered set of information-processing skills and strategies that adults use to accomplish a diverse range of literacy tasks” (National Adult Literacy Survey,

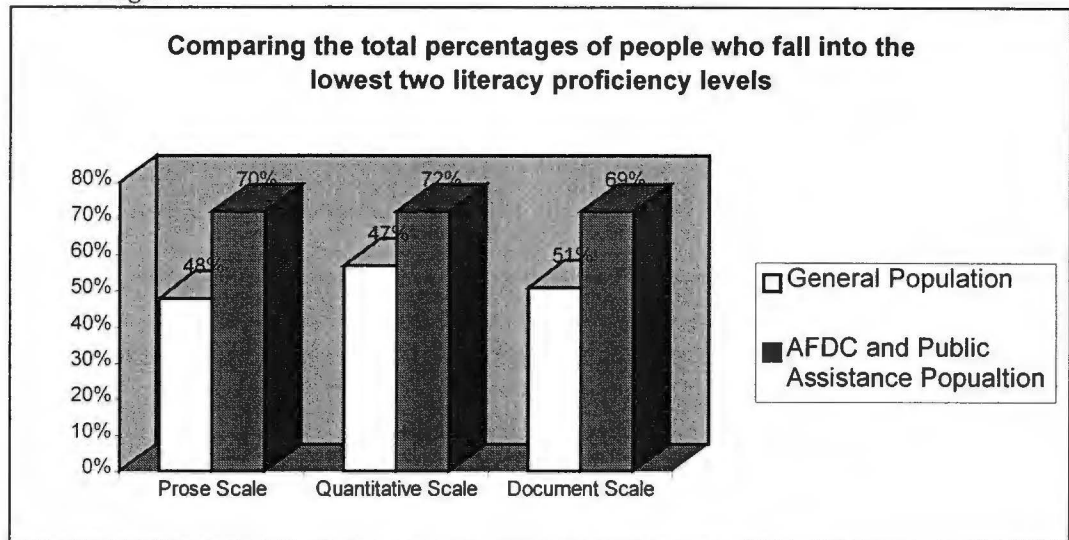
National Center for Education Statistics, 1992). In order to assess the subjects' literacy skills, the researchers asked respondents to perform a variety of literacy tasks using print material that is similar to what people encounter in their places of work, community and daily lives. Based on their performance, the subjects were assigned a score that ranged from 0 to 500. Finally, the scores on each type of literacy proficiency were grouped into levels that represented a range of scores. Individuals whose score fell in the level one range would represent the lowest level of literacy proficiency and level five would represent the highest proficiency level.

The NALS study was groundbreaking research since it created a way to distinguish how proficient adults in the U. S. are in certain tasks rather than simply labeling people as literate or illiterate. Most importantly for this study, the NALS study allowed researchers, Paul Barton and Lynn Jenkins (1995), to examine the literacy skills of people ages 16 and over who received Aid to Families with Dependent Children (AFDC) and public assistance twelve months prior to the study. They compared the literacy skills of those on welfare with the skills of the adult population as a whole and from these comparisons, they were able to draw some startling conclusions.

Barton and Jenkins (1995) first examined the distribution of literacy skills for welfare recipients versus adults nationwide. The reason Barton and Jenkins claims to be comparing the literacy skills of recipients with adults nationwide is because they used a randomly generated sample that is representative of the national population. In each type of literacy proficiency, prose, document, and quantitative, welfare recipients

were far more likely than were those in the total population to perform in the lowest levels on each scale. Furthermore, welfare recipients were far less likely than the people in the general population were (5% compared to 23% respectively) to achieve the highest levels. Figure one is a graphic representation of the percentages of the general adult population and the AFDC and public assistance population who scored in the lowest two proficiency levels.

Figure 1



Source: Literacy and Dependency (Barton and Jenkins, 1995)

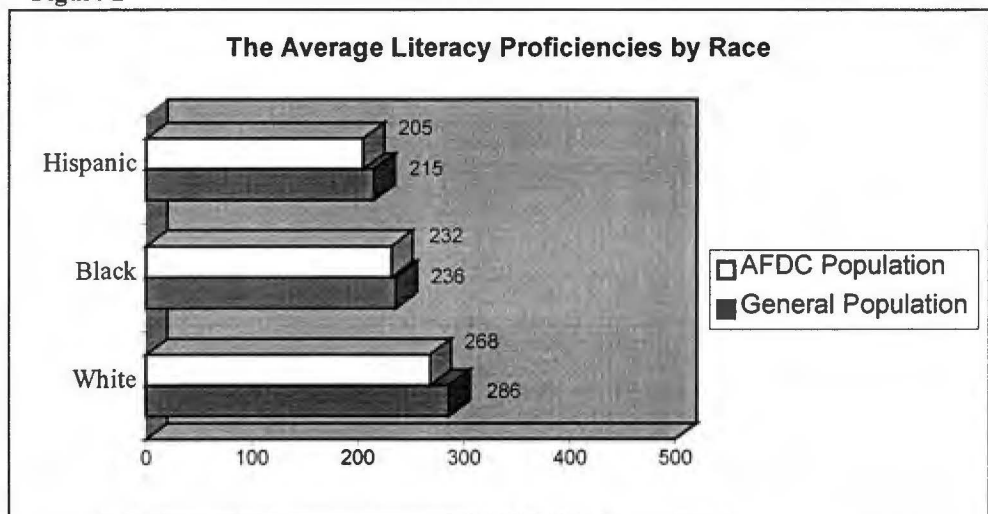
As figure one indicates, between two-thirds and three-quarters of those who used AFDC or public assistance programs in the previous twelve months scored in the lowest two levels of proficiency on all three scales compared to about half of those in the general population (Barton and Jenkins, 1995).

Second, Barton and Jenkins (1995) examined the skills of several different groups, but the only ones that are important to mention here are sex and race. It is important to note that 71% of the people in the welfare population were female and only 29% were male. The only real striking difference in literacy proficiencies

between males and females is that females on welfare had a slightly higher average score than their male counterparts. It appears that men who receive public assistance have slightly more limited literacy skills than the females.

There are a disproportionate number of African Americans and Hispanic people represented in the welfare population. For example, African Americans represent 30% of the welfare population, but only 11% of the general population, and Hispanics comprised 19% of the welfare population compared to 10% in the general population. Barton and Jenkins found that race had a large impact on the subjects' literacy proficiencies. Figure 2 is a graphic representation of the average proficiency scores for each different racial group.

Figure 2



Source: Literacy and Dependency (Barton and Jenkins, 1995)

As Figure two indicates, whites, in both populations, demonstrated much stronger literacy skills than Blacks and Hispanics. Blacks, likewise, had higher average scores than Hispanics. Furthermore, whites on welfare scored much higher than African Americans and Hispanics in the general population. There was very little difference

between the skills of those African Americans in the welfare population and the general population.

Barton and Jenkins also examined health status and literacy proficiencies for each group. Fourteen percent of the welfare recipients reported having a health condition that kept them from participating fully in work or school. Welfare recipients with a limiting health condition had an average score of 219 (level one), while those welfare recipients without such a condition had an average score of 247 (level two).

The last aspect that is important to discuss is what Barton and Jenkins (1995) discovered about labor force participation, literacy, and welfare recipients. According to the researchers, welfare recipients worked an average of 16 weeks per year compared to an average of 30 weeks per year for those in the total population. Similar to previous research, they discovered that welfare recipients were less likely than the general population to hold jobs that were professional or managerial in nature and were more likely to have a job in the service industry. The median weekly wage of those AFDC recipients that were employed was \$184 compared to \$333 a week for workers nationwide. In the welfare population, as well as in the general population, those with higher levels of literacy proficiency tended to work more weeks in the previous year and earn a higher weekly wage than those with lower levels of proficiency. Moreover, welfare recipients who were full-time workers scored higher on the assessment than those who were not working.

To conclude this section, Barton and Jenkins (1995), consistent with other studies, found that welfare recipients on average performed at lower levels of literacy

proficiency than those in the general population. Literacy proficiencies do vary by race in both populations. However, among the welfare recipients, race seems to have a much smaller impact. Those welfare recipients with a limiting health condition scored in the lowest proficiency level. Recipients on public assistance were less likely to be employed and made considerably less money than their counterparts in the national population. Finally, the welfare recipients who were full-time workers performed at higher levels than did those who were not working. It is clear that a low level of literacy and basic skills is a significant predictor of welfare reliance for many individuals. However, it is important to note that while literacy and basic skills are an absolute must for social mobility, it is not a cure-all. There are many complex aspects to one's ability to find and keep employment that can make the road to self-sufficiency long and laborious. Therefore, a brief discussion about the other significant barriers that welfare recipients face on their journey to economic stability is necessary.

Other Barriers to Self-sufficiency

Changes in the Economy: The recent deindustrialization and economic restructuring of the U. S. society has made achieving economic success difficult for low-income families. Moreover, the changing economic structure has made life the most difficult for low-income single mothers and minorities (Leviatan, Mangum, & Mangum, 1998; Brooks and Buckner, 1996; Salomon, Bassuk, & Brooks, 1996).

In the past, it was possible for people with low levels of education and skill to obtain a manufacturing job, which typically paid well, offered benefits, and allowed an individual to support their family (Edin and Lein, 1997; Devine and Wright, 1993).

During the 1970s and 80s, however, many of these jobs were lost due to the closing of large factories all across the nation. Most of the job growth that has occurred over the past two decades has been primarily in the service industry and by the year 2000, the US Department of Labor, estimates that more than 50% of the jobs available will require an education and/or some kind of technical training and that 80% of those entering the labor force will be women and/or minorities (Sansone, 1998; Rocha, 1997; Lazere, 1996; Devine and Wright, 1993). Service sector occupations are the jobs that are most readily available for those with low-levels of skill. Because of their low wages and lack of benefits, service sector jobs do not offer a realistic means to become and remain self-sufficient. Therefore, the most disadvantaged groups continue to fall below the poverty threshold (Brooks & Buckner, 1996; Danzinger & Gottschalk, 1995).

Income: Further compounding welfare recipients' ability to achieve self-sufficiency is the low minimum wage, the erosion of the family wage, and the earnings gap between men and women (Seccombe, Battle Waters, & James, 1999; Levitan, Mangum, & Mangum, 1998; Rocha, 1997; Brooks and Buckner, 1996; Salomon, Bassuk, & Brooks, 1996; Devine and Wright, 1993). Throughout the 1980s, the economic position of those working at minimum wage steadily worsened (Devine and Wright, 1993). Employment at minimum wage, now at \$5.15 an hour, would leave a family well below the poverty threshold.

Families have had to struggle with lower real earnings since the 1970s, which means they have had to put more than one wage earner in the work force in order to

subsist in today's economy (Rocha, 1997; Salomon, Bassuk, & Brooks, 1996; Devine and Wright, 1993). This is obviously not possible for single mothers and one reason why they are overrepresented in the poverty and welfare population.

Workplace Benefits: Workplace benefits have been shown to be vitally important in helping a mother-only family achieve and maintain self-sufficiency. However, a lack of workplace benefits is important for any welfare recipient attempting to gain economic success. Workplace benefits include paid sick leave, health insurance, wage-replacement during family leave, assistance in finding child-care, and flexible work hours (Piotrkowski and Kessler-Sklar, 1996). Most of the research on welfare recipients, indicates that poor low-income people have very limited access to such important workplace benefits (Seccombe, 1999; Oliner, 1995a/1995b; Hagen and Davis, 1994; Rank, 1994). Consequently, welfare recipients are likely to cycle in and out of the work force (or on and off of welfare) (Edin and Lein, 1997; Harris, 1996; Splater-Roth, et al. 1995). Inadequate workplace benefits present a major barrier for individuals attempting to achieve economic stability. Most low-income mothers would rather stay on welfare in order to receive medical benefits and ensure the well being of their children (Seccombe, 1999; Edin and Lein, 1997).

Similarly, a lack of affordable child-care is a reason many single mothers will give for not being employed or for returning to welfare after exiting (Seccombe, 1999; Edin and Lein, 1997; Brooks and Buckner, 1996; Harris 1996; Seavey, 1996; Kimmel, 1995; Rank, 1994, Popkin, 1990). The added expense of child-care can make working

an expensive enterprise, one that is not necessarily worth it (Brooks and Buckner, 1996; Harris, 1996; Kimmel, 1995). For example, in 1991, working families with earnings below the poverty threshold spent 27% of their monthly income on child-care (Seavey, 1996). The problem is not only affordability, but also safe child-care (Seccombe, 1999; Edin and Lein, 1997). Many single mothers simply do not trust strangers to properly care for their children. Therefore, child-care responsibilities are a top priority, and if low-income families do not have access to affordable and safe child-care, it can be a significant barrier to economic success.

To briefly conclude this section, low-income people have many structural barriers to self-sufficiency. Deindustrialization has resulted in a loss of manufacturing jobs and a shift to a service sector economy. The jobs that are currently most available for individuals with low-levels of education and/or skill are ones that pay minimum wage and offer very little benefits. It is very difficult for anyone working at minimum wage to make ends meet but it is especially difficult for single mothers who have precious few resources that they can depend upon. Structural barriers make it difficult for low-income families and individuals to ‘pull themselves up by their bootstraps’.

There are many themes in the literature that discusses individual level barriers that could impede welfare recipients’ ability to achieve economic success. The ones that will be examined here include health problems, and inadequate work experience and social support. Human capital assets, literacy and basic skills, and education fall under individual level constraints, but these have been discussed in a previous section.

Health: Poor physical or mental health in the family has been frequently cited

by welfare recipients as an impediment to looking for and keeping a job, and this forces many low-income people to turn to welfare programs for help (Seccombe, 1999; Zedlewski, 1999; Ehrle, Moore & Brown, 1999; Pavetti et al, 1997, Salomon, Bassuk, & Brooks, 1996). For example, Zedlewski (1999) reports that 48% of the adults receiving TANF benefits indicated having either poor physical or mental health and 18% of the sample indicated that health limits their ability to work. Furthermore, women who have children with mental or physical health problems are less likely to be employed and are more likely to need help from public assistance programs (Seccombe, 1999). Health problems for welfare recipients have been shown to be a significant barrier to employment and hence, to economic self-sufficiency.

Transportation: Not owning or having access to a working motor vehicle severely limits one's ability to maintain a job. Recently, researchers have discovered that if people do not own or have access to a means of transportation they are more likely to need help from public assistance programs in order to make ends meet (Seccombe, 1999; Edin and Lein, 1997; Rocha, 1997). Rocha (1997) discovered that while level of education, age, and being single all impacted the poverty status of women, she also discovered not owning a car proved to be a significant barrier for many women in her study. If welfare recipients do not own a car, it will be very difficult for them to achieve and maintain self-sufficiency.

Social Support: Numerous researchers have documented the importance of social support networks in providing critically needed resources for low-income single mothers (Seccombe, 1999; Jackson, 1998; Sansone, 1998; Wijnber and Weinger,

1998; Edin and Lein, 1997; Macenko and Fagen, 1996; Harris, 1996; Salomon, Bassuk, & Brooks, 1996; Oliner, 1995a/1995b; Stack, 1974). Social support can come in the form of giving emotional support, giving time—as in providing help with child-care, and/or giving cash assistance. Support can be sought through both formal networks, such as charities, churches, and social services, and informal networks, such as receiving help from family members, neighbors, friends, and the children's father. Both types of support are important, but in the studies conducted by Edin and Lein (1997) and Seccombe (1999) mothers preferred to turn to their informal social support networks because there was less stigma attached to receiving help of this kind. The social support networks that a woman creates not only helps her survive welfare, but they are also vitally important in helping her make a successful transition from welfare into the work force (Seccombe, 1999). Welfare recipients without social networks have a much more difficult time exiting the system and becoming self-sufficient.

There are other individual level issues that could prevent welfare recipients from obtaining employment and becoming self-sufficient such as, changes in family structure by separation, divorce, or death, violent and abusive relationships, substance abuse problems, a lack of transportation, and simply just having bad luck. Statistics show that women are far more likely than men are to be plunged into poverty because of a divorce. Moreover, with the termination of a relationship many women are forced to turn to welfare simply because they cannot solely support their family (Seccombe, 1999; Caputo, 1997; Brooks and Buckner, 1996; Wiklund, 1993). In conclusion, if welfare recipients have little social support, inadequate work experience, health

problems, experience marriage dissolution, have substance abuse problems and/or are experiencing a violent relationship, they are vulnerable to unemployment and are more likely to need public assistance programs to help make ends meet.

Theoretical Framework

Several theoretical arguments have been proposed in the past, which attempt to explain poverty, inequality, and welfare use. These theories range on a continuum, with individual explanations on one-end and structural explanations on the other. Both structural and individual level theories are important in explaining poverty and welfare use. However, the one that is most appropriate for framing this project is the human capital explanation, which stems from an individualist argument. A brief overview of the leading theories will be offered. Second, a complete explanation of the human capital model and how it applies to my work will be offered. Finally, a short discussion about the limitations to the human capital approach and why other theories would need to be used in conjunction with this approach in order to adequately explain poverty and welfare receipt will be needed.

Many researchers have offered theoretical perspectives on why people end up in poverty and on welfare. From the literature and previous research, these theories have often been grouped into different types of explanations: individualism, culture of poverty, and social structuralism (Seccombe, 1999; Seccombe, James, & Battle Waters, 1998; Hunt, 1996; Rank, 1994). The individualist perspective places the responsibility solely on the shoulders' of the impoverished by claiming that individuals who are on welfare and in poverty are there primarily because of a lack of

thrift, motivation, ability, and talent (Seccombe, 1999; Seccombe, James, & Battle Waters, 1998, Rank, 1994; Kluegal and Smith, 1986; Murray, 1984; Gilder, 1981). This is a popularly held view, which has often been a driving force in the current welfare reform debate (Seccombe, 1999; Hunt, 1996; Kluegel and Smith, 1986; Feagin, 1975).

The culture of poverty thesis was first introduced by Oscar Lewis in the early 1960s and since it's introduction has been at the center of much controversy. According to the culture of poverty perspective, the behaviors, values, beliefs, and attitudes that lead to welfare dependency are a part of a cultural process, and this process is learned from parents and from the surrounding environment in which an individual lives (Wilson, 1996, George and Howards, 1994; Rank, 1993; Wilson, 1987; Lewis, 1966; Monynihan, 1965).

The structuralism perspective stems from the writings of Marx and Engels, Weber, and C. W. Mills. There are different aspects to the structural approach, but the premise behind all of them is roughly the same: Structural limitations, either as a function of capitalism, labor market stratification, or the welfare system, exist that serve to restrict job, career, and mobility opportunities for some individuals. Things like the exploitation of workers by a wealthy capitalist class, occupational segregation and discrimination, housing discrimination, and social isolation, which are all structural barriers, serve to restrict people's access to resources (Wilson, 1996; Rank, 1994; George and Howards, 1991; Wilson, 1987; Hodson and Kaufman, 1982; Marx and Engles, 1968).

These are just three of the many competing explanations of poverty, inequality, and welfare reliance. Because of the complex and intricate nature of poverty and welfare dependency, it would be wise for social scientists to utilize an integrated approach to explaining these social issues.

Human Capital Model

The human capital perspective, which applies an economic modeling approach to human behavior, is most commonly attributed to Gary S. Becker (1964), an economist and sociologist at the University of Chicago. However, there are several other important pioneers of the human capital model, such as Jacob Mincer, Milton Friedman, and Sherwin Rosen, all of who are also associated with the University of Chicago. In his classical study of the consequences of investing in an individual's knowledge, skills, and education, Becker takes us on a journey that defines human capital, as well as, explains how it is related to economic growth, inequality in earnings, and the family among other things. Since Becker's groundbreaking work in this area, many other researchers have added validity to this argument by showing that welfare recipients who possess greater human capital increase their chances of exiting welfare and getting out of poverty (Seavey, 1996; Rank, 1994; Harris, 1993). Furthermore, the human capital explanation focuses on a person's lack of human capital rather than on an individual's motivations or attitudes and therefore, is more likely to place the responsibility of the poverty problem more squarely on the shoulder's of the social structure in which we live.

Becker (1964) rightfully hesitated before naming his new concept "human capital".

In the early 1960s, the word *capital* sounded too much like Marx's version of the class system, in which if people were capital, then they were being treated like machines and being exploited by a wealthy capitalist class (Becker, 1964). However, Becker had a different idea in mind. The word *capital* as defined by the Webster dictionary is an individual's net worth or a stock of accumulated goods at a specified time and is in direct contrast to income that is received at specified time. Therefore, when most people talk about capital they are talking about a bank account, shares of stock they own, or housing equity they may have built up over the years. Becker, on the other hand, came up with a different kind of capital. As he so eloquently states in his book entitled *Human Capital* (Becker, 1964),

“Consequently, it is fully in keeping with the capital concept as traditionally defined to say that expenditures on education, training, medical care, etc., are investments in capital. However, these produce human, not physical or financial capital because you cannot separate a person from his or her knowledge, skills, health, or values the way it is possible to move financial and physical assets while the owner stays put” (p. 16).

Becker saw human capital as any investment an individual makes in him or herself, such as education, training, paying health insurance, or attending a lecture on punctuality, that will increase their earnings potential as well as better themselves in any number of other ways. He did recognize the potential ideological problems with the term and the fact that it still remains relatively suspect in some academic circles. However, he still maintains that the human capital model does help us to understand a certain class of behavior in societies all around the globe.

Becker argues that increasing an individual's education and training are by far the most important investments in human capital that people can make. As an

individual's education and training increase so do their levels of income, and they are hence, less likely to be found in the poverty and welfare population. This fact has been well documented by numerous researchers (Smith, 1999; Zedlewski, 1999; Levitan, Mangum, & Mangum, 1998; Marcenko and Fagan, 1996; Kates, 1996; Rank, 1994; Devine and Wright, 1994).

The human capital perspective sees the labor market as a unified entity that is a competitive system. It is the level of human capital that an individual possesses, as well as, the supply and demand for jobs that determine the amount of wages that people receive (Rank, 1994). Moreover, it suggests that people with inadequate human capital are not able to compete effectively and are thus, more likely to be living in poverty and on welfare. This perspective argues that "the way to reduce poverty and welfare dependency is to concentrate on upgrading an individual's skills. This might include ensuring graduation from high school, teaching people marketable trades, enabling them to acquire job experience and so on" (Rank, 1994, p. 27).

Limitations to the Human Capital perspective

Some researchers have shown that human capital investments, such as increasing levels of education, training to obtain more marketable skills, and/or increasing work experience, have been positively associated with exiting welfare. However, other researchers argue that increasing human capital is not the only answer to helping individuals move from welfare to self-sufficiency (Seccombe, 1999; Rocha, 1997; Rank, 1994; Sherraden, 1991). For example, in Rocha's (1997) study of low-income female householders, consistent with previous research, she found that

education was an important predictor of poverty status for women. However, she also found that there were other factors that significantly impacted whether or not a mother was poor. She discovered that poor mothers were more likely to be single, younger, and live in a county with high rates of poverty, and they were less likely to own a car. A lack of transportation was a significant barrier for many of the women in her study, for without transportation, choices become severely restricted. Rocha argues that other types of assets are equally as important for predicting welfare reliance. Even though investments in human capital are vitally important for welfare recipients, these assets are only a small piece of the puzzle.

Another aspect that should be made clear is that there are structural (and not individual) reasons why people lack adequate human capital that would allow them to be competitive in the labor market. These structural barriers may include things such as a lack of access to a good education, occupational segregation and discrimination based on race and gender, a lack of good jobs that pay well and offer key workplace benefits, and a lack of family resources and assets (Seccombe, 1999; Rank, 1994). Therefore, a complete explanation of poverty and welfare use would need to include both structural and individual arguments in order to be adequate. However, since my project focuses on just one small element in the complex web of interrelated constraints facing low-income families, literacy and basic skills, the human capital approach is the most appropriate explanation for this study.

I will attempt to show that in a population of people with low-levels of education, welfare recipients who have higher levels of literacy skill are less likely to

need TANF in order to make ends meet. In other words, in this vulnerable population of people, individuals who have more human capital (have higher levels of literacy skills) will be less likely to need welfare.

Conclusion

From the literature that has been presented, TANF recipients have a multiplicity of personal and structural challenges to overcome in their journey to self-sufficiency. The majority of the previous studies have focused on the complex nature of welfare recipients' lives and the factors that lead them to living in impoverished conditions and being reliant on welfare. Furthermore, many researchers have focused on how one's level of education affects the likelihood of them being able to obtain employment and self-sufficiency. However, it has only been recently that researchers have begun to examine how literacy and basic skills predict the chances of welfare usage for low-income people. Moreover, most of the analyses that have been conducted are bivariate in nature. I would like to extend the work in this area by doing a multivariate analysis that would illuminate predictors of welfare reliance. I am hypothesizing that low levels of literacy proficiency will be significantly associated with welfare receipt after controlling for health, sex, level of education, access to a motor vehicle, income and social support networks. Essentially, I argue that the more welfare recipients invest in their own human capital (developing literacy and basic skills) assets the easier their transition from welfare-to-work will be.

Chapter 3

Methodology

This study was designed to conduct quantitative analyses of secondary data from Wave 1 of the 1999 Longitudinal Study of Adult Literacy (LSAL) (Steve Reder, Principle Investigator). The LSAL project was funded by a grant from the U. S. Department of Education for the National Center for the Study of Adult Learning and Literacy (NCALL), which is based at the Harvard Graduate School of Education. The LSAL study is a longitudinal research project that is designed to collect data in a series of five waves over a period of 10 years. One of the main purposes of the LSAL study is to create a publicly accessible database that addresses key issues concerning the process and consequences of adult literacy development and learning over time. It seeks to uncover the life contexts in which literacy development takes place, such as participating in formal instructional programs and non-formal learning activities in home, work, and school. Furthermore, it attempts to discover the impact of literacy development on various social and economic outcomes.

Participants in the study were interviewed in their homes. The in-home sessions, which averaged about two hours, consisted of approximately 60-minute interviews followed by a standardized paper-and-pencil assessment of functional document literacy proficiency (Tests of Adult Literacy Skills) and other cognitive assessments. The interview explored individuals' education and employment activities and histories, their use of written material in home, work, community, and

school contexts (as applicable), as well as their goals, social networks, and learning opportunities and strategies in those contexts. A question on TANF receipt was also included in the interview.

Sample

The data was collected from a sample of 941 people who participated in Wave 1 of the Longitudinal Study of Adult Literacy. The target population for the project was residents of the Portland, Oregon metropolitan area, age 18-44, who are proficient (not necessarily native) in speaking English, who did not have a high school degree or the equivalent, and who are not currently in high school.

A sample of approximately 1,000 was drawn for the study through two frames of approximately 500 individuals each. The first frame consisted of the general target population; individuals were randomly selected, screened for eligibility, and recruited for the study through random-digit dialing (RDD) and computer-assisted telephone interviewing (CATI) methods. The second frame, used to oversample participants in adult education programs, consisted of members of the target population who recently enrolled in adult basic or adult secondary education courses at one of three community colleges offering such classes in the metropolitan area. Both the student and the general subsamples were contacted, screened and recruited for participation through the same CATI methods and are in all respects being treated identically throughout the longitudinal study.

Sample Characteristics

Table 2 reports some demographic and general characteristics of the sample.

Table 2: Sample Characteristics

Variables	N	Percent of Total Sample (%)
Sex	937	
Female	450	48
Male	487	52
Marital Status	940	
Married	378	40.2
Not Married	562	59.8
Race	937	
White	566	60.4
Black	120	12.8
Latino	113	12.1
Other ⁶	138	14.7
Age	937	
18-29	561	65.8
30-44	376	34.2
TANF⁷	941	
Received	110	11.7
Did Not Receive	831	88.3
TALS Scores	929	
Level One	116	12.5
Level Two	334	36
Level Three	345	37.1
Levels Four and Five	134	14.4
Completed Level of Education	936	
Less than 10 th grade	275	29.4
10 th to 12 th grade	661	70.6
Employment Status	908	
Employed	547	58.1
Not Employed	361	38.4
Household Income	812	
Less than \$30,000	472	58.1
More than \$30,00	340	41.9

There is a roughly equal number of males (N = 487) and females (N = 450) in the sample (52 and 48 percent, respectively). The majority of the participants, 59.8% (N = 378), are not married. Sixty percent of the sample are white (N = 566), while 12.8% (N = 120) of the sample are Black, 12.1% (N = 113) are Hispanic, and 14.7% are

⁶ Other includes Native American, Pacific Islander, Asian, and other racial groups.

⁷ Did you or anyone in your household receive Temporary Aid to Needy Families sometime in the past 12 months.

categorized as other races (N=138). The respondents' ages range from 18 to 44, with the average age for the sample being 26. Fifty-eight percent (N=547) of the sample were employed, and most of the respondents, 58.1% (N=472), had household incomes that were less than \$30,000, while 41.9% (N=340) had household incomes greater than \$30,000 at the time of the survey. One hundred and ten people out of the original 941 respondents, or 11.7% of the sample, received TANF sometime in the past twelve months. The average TALS score for the participants was 277 points out of 500. Most people's score fell in either level two (36%, N = 334), or level three (37.1%, N = 345). The mean years of education completed by the subjects is 10, with 29.4% completing less than 10th grade and 70.6% completing 10th through 12th grade.

Variables

The following variables are used in the logistic regression analysis.

Dependent Variable

TANF. In the logistic regression analysis, the dependent variable is receipt of TANF sometime during the past year. TANF is a dichotomous variable coded as 1=yes, they have received TANF sometime within the past 12 months and 0=no, they have not received TANF sometime within the last 12 months. One hundred and ten (11.7%) respondents had received TANF, while 831 (88.3%) had not received TANF.

Independent Variables

TALS Scores. Because the main hypothesis of this thesis is that welfare recipients' literacy scores will significantly impact their TANF status (have or not received) and

that this relationship will be significant in a multivariate context, the scores for the standardized document literacy assessment test or Tests of Adult Literacy will be included in the analyses. The respondents' scores range from 133 to 381, with a mean score of 279. Raw literacy scores, have been recoded into variables that represent literacy proficiency levels identical to those used by the Department of Education in the National Adult Literacy Survey. The TALS scores in five levels groups the scores in the following manner: (1) Level One = 0 to 225 (2) Level Two = 226 to 275 (3) Level Three = 276 to 325 (4) Level Four = 326 to 375 (5) Level Five = 376 to 500. A new variable was created from the TALS level variable by collapsing levels four and five into one category because so few people fell into these levels. Both variables, the raw literacy scores and the TALS scores in four levels, are used in the bivariate analyses. However, for the multivariate analysis only the raw score variable is utilized. The majority of the respondents scored in the second and third level of literacy proficiency (36 and 37 percent, respectively).

Health. Because an individual's health is likely to be related to labor force attachment and hence, welfare receipt, a composite variable of health status was created to include in the analyses. The Wave 1 survey instrument includes the following three health related questions: *Overall, how would you rate your health?* 1) Poor 2) Fair 3) Good 4) Very Good 5) Excellent; *Sometimes people have something they want to do, but they just don't feel well enough to do it. How often does this happen to you?* 0) Some of the time 1) A lot of the time 2) Once in a while 3) Never; *Many people have a problem or disability that gets in the way of work or education.*

Do you now have any of the following problems? (Mark all that apply)

1) Health problems or disability 2) Physical handicap or disability 3) Emotional problems or disability 4) An illness that has lasted a long time 5) None of the above.

First, the number of health problems variable had to be combined into one variable because the respondent was allowed to choose multiple responses. This was done using a count statement. The three health variables were then standardized by converting them into z-scores. This was done because the variables had different units of measurements. Last, the three z-score variables were summed in order to create the composite measure of health status. A person with a low score on the health scale would have poor health and a person with a high score would have excellent health.

Informal Social Support. The possible mediating effect of informal social support will need to be controlled for because individuals with large informal social support networks are less likely to need TANF to help make ends meet than those who do not have this support available to them. Informal social support can be conceptualized in different ways. However, it most commonly refers to support individuals' receive from their friends, family, and their children's father (Seccombe, 1999; Edin and Lein, 1997). This support can come in the form of financial help, time, and emotional support. The questionnaire for this study has one question, which measures respondents' amount of informal social support. The question states as follows: *If you need child-care do you usually:* 1) get help from friends or relatives 2) pay for in-home child-care 3) use daycare services 0) none of the above.

This question was a 'mark all that apply' variable and therefore, an aggregated informal social support variable had to be created by computing the original three variables. The new aggregated variable was then recoded into a dichotomous (yes/no) variable that reflected the presence or absence of informal social support. Two hundred and two or 21.5% of the entire sample responded that they use friends or relatives for child-care. The informal social support variable will be used to properly control for the potentially spurious effect that informal social support may have on the relationship of interest.

Transportation. Numerous researchers have shown that not owning a means of transportation can be a significant barrier to economic success for welfare recipients (Seccombe, 1999; Edin and Lein, 1997; Rocha, 1997). It is difficult for people to hold a job if they have no way to get to work everyday. It is suspected that if people do not own or have access to a car, they will be more likely to be on welfare. Because this could potentially interfere with the relationship of interest, not owning a car will need to be controlled for in the multivariate analysis. The survey asks respondents if they currently own or have use of a working motor vehicle and is coded using 0 (no) and 1 (yes). Sixty-six percent (N=618) of the sample responded that they do have access to a motor vehicle.

Years of Education Completed. It has been well documented that a person's level of education has a big impact on self-sufficiency, labor force attachment, and welfare receipt. Therefore, the respondents' years of education will also need to be controlled for properly. The variable highest grade or year of school completed will be utilized for this purpose.

The variable was collapsed into two categories: 1) less than grade 8 and 2) grades 9 through 12. The mean number of years of education for the sample is 10. Seventy percent of the sample completed 10th through 12th grade, while 30 percent of the sample completed less than 10th grade.

Income. Yearly income clearly impacts welfare status. The more money you and your family make the less likely you are to be on TANF. Because of the new legislation that requires people to be involved in work-related activities, many welfare recipients are now also making an income. For these reasons, yearly income will need to be controlled for in order to eliminate any possible mediating effects it could have on the TANF-Literacy skill relationship. The family income question asks the respondent to estimate their yearly household income. The income variable was recoded as 0 = household income is less than \$30,000 a year and 1 = household income is more than \$30,000 a year. The majority of the subjects (58.1%, N=472) answered that their family income is less than \$30,000 a year.

Sex. Seventy percent (N=77) of those who have received TANF in the past 12 months are female. Therefore, sex will also have to be controlled for in the analyses. The sex variable has been recoded into a dichotomous variable reflecting either being female (1) or not being female (0).

Data Analysis

Univariate, bivariate, and multivariate analyses were conducted with the LSAL data set using various statistical procedures. For the univariate analyses, measures of dispersion and measures of central tendency were examined in order to determine the

spread of the data as well as how it is grouped around the mean. These procedures aided with the recoding and operationalization of the concepts for this study.

Pearson's correlation, a measure of association, was conducted for the bivariate analysis. Crosstabulations and a comparison of means were also used to compare variables. These statistical procedures aided in the investigation of the first hypothesis that there would be a strong, inverse relationship between literacy proficiencies and welfare receipt.

A logistic regression technique was used for the multivariate analysis of the study. Logistic regression is a form of regression analysis and is useful when a researcher has a dependent variable that is a dichotomy (yes/no variable) and when the independent variables are continuous, categorical or both. This type of analysis allowed the odds of someone having received welfare in the past 12 months to be tested, while controlling for pertinent variables, such as sex, grade completed in school, health status, the amount of informal social support, level of income, and owning or having access to a working motor vehicle. Logistic regression analysis, was used to test the second hypothesis that literacy proficiency will be significantly, inversely associated with having received TANF sometime in the previous 12 months, not the effects of other background variables.

Chapter 4

Findings

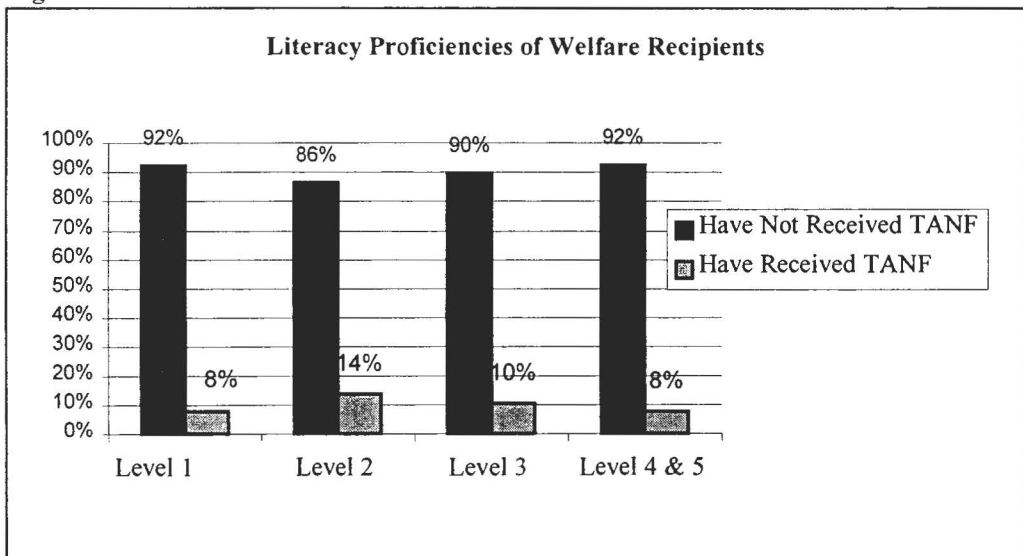
In this chapter, the following two hypotheses, which are the focus of this study, will be investigated:

- H1:** For a population of people with low-levels of education, there will be a statistically significant, inverse relationship between literacy proficiency and having received TANF some time in the past year.
- H2:** In a multivariate context, a significant, inverse association between literacy proficiency and TANF receipt will exist after controlling for other relevant variables.

Bivariate Analyses

Crosstabulations were conducted as a first step to exploring the bivariate relationships among the important independent and dependent variables. Figure 3 presents a graphic representation of the results of the crosstabulation between the respondents' literacy proficiencies (in levels) and having received TANF.

Figure 3



As Figure 3 indicates, 8% of the people who scored in the level 1 (0-225) range received TANF sometime in the previous 12 months, while 92% had not received TANF. For those who scores fell in level 2 (226-275), 14% had received TANF and 86% had not received TANF. Ten percent of the people in level 3 (276-325) had received TANF, while 90% had not received TANF. For the individuals who scored in levels 4 and 5 (327-500), only 8% had received TANF, while 92% had not received TANF.

For the next step in examining the bivariate associations, Pearson's correlation coefficients were calculated between each independent and dependent variable. The results of these analyses are presented in table 3.

Table 3: Pearson's Correlation Coefficients for the Independents by TANF⁸

	TANF	Sex	Health Scale	Literacy Scores	Informal Social Support	Grade	Car	Family Income
TANF	1.00							
Sex	.126**	1.00						
Health Scale	-.206**	.224**	1.00					
Literacy Scores	-.026	-.109**	.146**	1.00				
Informal Social Support	.038	-.024	.037	-.072*	1.00			
Grade	-.078**	-.084**	.046	.093**	-.055**	1.00		
Car	-.266**	-.032	.146**	.090**	-.042	-.014	1.00	
Family Income	-.155**	-.045	.027	.093**	-.039	.034	.103**	1.00

* P < .05, ** P < .01 (1-tailed significance test)

The Pearson's r correlation statistical test between TANF and the respondent's literacy proficiency scores, $r = -.026$, did not yield statistically significant results.

⁸ Dependent variable coded: 1= has received Temporary Aid to Needy Families sometime in the past 12 months; 0= has not received Temporary Aid to Needy Families sometime in the past 12 months.

Consequently, the first hypothesis, that an inverse relationship between literacy proficiency and welfare receipt exists, was not supported by these results.

For highest grade completed, the correlation coefficient is $r = -.078$, which indicates a significant, inverse association with TANF receipt. This finding is in the expected direction. The lower the grade in school completed the more likely they are to have received TANF, which is consistent with previous research. For the sex variable, $r = .126$, which indicates a positive relationship that is statistically significant. This relationship is in the expected direction. The correlation coefficient for the standardized health scale is $r = -.206$ and the association is statistically significant. This coefficient indicates a negative relationship, which is in the direction expected. The poorer someone's health is (the lower the number on the health scale), the more likely they are to be on TANF. The correlation coefficients for the family income and owning or having access to a working motor vehicle variables are also statistically significant ($r = -.155$ and $r = -.226$ respectively). Pearson's r for the family income variable reveals an inverse relationship, which means the less money a person makes, the more likely they are to have received TANF. The relationship between having a car and TANF receipt is also inverse, which means that if someone does not own or have access to a working motor vehicle, they are more likely to have received TANF. The findings for both of these variables are in the direction expected and are consistent with previous research.

The correlation coefficient for the informal social support variable, $r = .038$, and is not statistically significant. Therefore, there is not an association between

getting help with child-care from friends or family and TANF receipt. This finding is inconsistent with previous research.

As Table 3 further indicates, the independent variables most highly associated with having received TANF sometime in the previous year in a bivariate context are (a) owning or having access to a working motor vehicle; (b) an individual's health status; (c) an individual's family income; and (d) being female. In a bivariate context, an individual's literacy proficiency is not associated with having received TANF.

Multivariate Analysis: Logistic Regression Model

Logistic regression analysis was used to investigate the second hypothesis in this study. The model that was developed for this study was theoretically derived and driven. Previous research has found that informal social support, level of education, being female, level of income, owning or having access to a car, and health are strong predictors of individuals' welfare status. I hypothesized that after other pertinent variables are controlled for, literacy skills would be significantly and inversely associated with having received TANF. The results of the logistic regression analysis are presented in Table 4. Logistic regression analysis excludes all cases that contain missing data (essentially, pairwise selection is used). The total number of cases included in the analysis is 829, which means that the total number of excluded cases is 111. Table Four presents the logit coefficients (B), partial correlations (R), the odds ratios (Exp B), and the statistical significance of the model. The estimated logit coefficients are used to estimate or predict the odds of the dependent variable equaling 1.

Table 4: Results of the Logistic Regression Analysis

Variables (N=829)	B	R	Exp (B) Odds Ratio	
Sex	.674***	.088***	1.96	
Health Scale ⁹	.235***	.160***	1.26	
TALS Scores ¹⁰	.005**	.065**	1.00	
Informal	.455	.030	1.57	
Grade Completed	-.230***	-.088***	0.79	
Income	-1.01***	-.137***	0.36	
Car	-1.28***	-.211***	0.27	
Nagerlkerke R ²	Model Chi-square	Goodness-of-Fit (Chi-square)	Percent predicted: Overall	Percent predicted correctly: TANF Population
.235	104.530***	40.973***	90.99%	24.38%

*p< .05, ** p<.01, *** p<.001(2-tailed significance test)

The partial correlations, which is an alternative way to assessing the relative importance of each variable in the model, indicate the association between the independent and the dependent variables while controlling for all other variables.

As indicated by Table 4, statistical significance (at least p<.05) was achieved for all variables except for the informal social support variable. All of the variables have associations in the direction expected except for the literacy scores variable. Both the odds ratio and the partial correlation for the literacy proficiency-TANF association indicate a positive relationship between having received TANF and an individual's literacy proficiency. In other words, as an individual's literacy score increases, their chances of having received TANF sometime in the previous 12 months also increases. This finding is not in the direction expected and is the most interesting finding in this study.

⁹ Continuous variable

¹⁰ Continuous variable

The odds ratio for literacy proficiency is 1.0056. Therefore, when there is a unit increase in literacy scores (as an individual's literacy score increases), the odds of having received TANF also increases by a factor of .0056. In other words, as an individual's literacy score increases by one unit, an individual is .0056 times more likely to have received TANF sometime in the past year. This odds ratio indicates that when other variables are being controlled for, there is a significant, positive association between literacy proficiency and having received TANF. Even though statistical significance was achieved for this relationship, the finding was in an unexpected direction. Consequently, according to the findings of this study, support cannot be concluded for the second hypothesis.

The partial correlation for the literacy skills variable is .065 ($p < .05$). This indicates that an individual's literacy proficiency has a small, but positive independent effect on having received TANF while all other independent variables in the model are being held constant. In fact, when reviewing all of the partial correlations in Table 4, literacy proficiency has the smallest impact of all the independent variables on having received TANF. Even though the overall relative impact of literacy proficiency on having received TANF is small, it is important that a statistically significant positive association emerged when controlling for other variables. This means that when the effects of other variables are removed, higher literacy increases the likelihood of having received TANF during the past year.

According to the odds ratio for the grade completed variable, for every grade in school a person completes, their odds of having received TANF decrease by a factor of .794.

Similarly, the partial correlation indicates that grade completed in school is inversely associated with having received TANF ($R = -.088$), which is the expected direction. The higher the grade in school someone completes, the less likely they are to have received TANF. The two human capital variables, literacy proficiency and grade completed in school, have the smallest impact of the statistically significant variables in the model on having received TANF in the previous 12 months.

When car changes from 0 (not having a car) to 1 (having a car), the odds of someone having received welfare decreases by a factor of .276. The odds ratio for this variable indicates that when other important factors are controlled for owning or having access to a car has a large independent effect on having received TANF. The partial correlation between owning or having access to a working motor vehicle and having received TANF is $-.211$, which indicates a significant, inverse association. Both, the odds ratio and the partial correlation suggest that when other variables are held constant, not owning or having access to a working motor vehicle is one of the most important predictors of having received TANF. These findings are in the direction expected and consistent with previous research.

The odds ratio for the health variable suggests that as an individual with poor health is .276 times more likely to have received TANF. Similarly, the partial correlation for the health variable, $-.160$, indicates a significant, inverse association, which is in the expected direction. The poorer an individual's health is the more likely they are to have received TANF in the previous year. Both the odds ratio and the partial correlation indicate that an individual's health status has a relatively large

independent effect on having received TANF. These results are consistent with previous research.

The results of the odds ratio for income reveal that as income changes from 0 (less than \$30,000) to 1 (more than \$30,000), the odds of having received TANF decrease by a factor of .362. The partial correlation for the household income variable is $R = -.137$, which indicates that family income is inversely associated with having received TANF. As people make more money, they are less likely to need TANF. Consequently, these results are also as expected.

When female increases from 0 (not female) to 1 (being female), the odds of someone having received TANF increases by a factor of .963. In other words, if a person is female, they are .963 times more likely to have received TANF than someone who is not female. The partial correlation for the female variable is .088. Even though this effect is very small, it is statistically significant and in the expected direction. According to these results, which are consistent with the findings of other researchers, if you are female, you are slightly more likely to have received TANF sometime in the previous year.

The only variable that did not achieve statistical significance in the model was the informal social support variable. It is likely that a better measure of informal social support is needed in order to truly measure its effect on having received TANF.

As indicated by Table 4, the Nagelkerke R^2 , which is an attempt to approximate the R^2 in multiple regression analysis, is .235. The R^2 for this model

indicates that the independent variables in the model explain a small to moderate amount of why some people have received TANF in the past 12 months.

Both Chi-squares, the model and goodness-of-fit test, are statistically significant at the .001 level. This means that I can be 99% confident that these results did not occur simply by chance. The variables selected for the model, because statistical significance was achieved, are a good fit for predicting those who have received TANF.

The overall percent of correctly predicted cases by the model is 90.99%. The model predicted close to 100% of those who have not received welfare, with one case being predicted incorrectly. The model correctly predicted Twenty four percent of those who have received TANF. Three quarters of the TANF population were incorrectly predicted, which indicates that there are other variables that explain individuals' welfare status that were not included in the model.

Chapter 5

Implications and Conclusions

In this chapter, implications of the findings will be discussed and inferences will be made about what the results of the analyses may mean. A section about the limitations of this study will also be included in this chapter. Suggestions for future research and a brief conclusion will complete this discourse.

Implications

Based on secondary analyses of wave 1 of the 1999 Longitudinal Study of Adult Learning, this research investigated two hypotheses. The first hypothesis, that there would be a statistically significant, inverse association between an individual's literacy proficiency and having received Temporary Aid to Needy Families sometime in the past 12 months, was not supported by the findings of this study. According to the Pearson's correlation coefficient, a significant association was not found between literacy proficiency and having received TANF.

The second hypothesis, that a statistically significant relationship between an individual's literacy proficiency and having received TANF would be present after controlling for all other pertinent variables was not supported by the results of this study. Even though statistical significance was achieved, the effect was in an unexpected direction. Both the partial correlation and the odds ratio indicated a positive association between literacy proficiency and welfare receipt. This would mean that as an individual's literacy score increases, the likelihood of having received

TANF also increases. The results that emerged were exactly opposite from what was expected and hypothesized.

Previous researchers such as, Levenson et. al, (1999), D' Amico (1997), Olson and Pavetti (1996), and Barton and Jenkins (1995), found that welfare recipients generally have lower levels of literacy and basic skills than people in the general population, and also as skill levels decrease, the likelihood of being on welfare increase. However, because a positive association was found between literacy proficiency and TANF receipt, the results of this study are inconsistent with the findings of previous research. It is important to consider reasons why the results may have come out this way. The next section discusses some ideas about why a positive association was discovered between literacy proficiency and having received TANF.

Are TANF recipients in Oregon an unusual population?

Perhaps the most important characteristic about the people in Oregon that needs to be mentioned is that the population in this study has higher levels of literacy proficiency than people do in the national population. For example, according to the 1992 Study of Adult Literacy in the United States, the mean literacy proficiency of adults nationwide is approximately the same as the mean literacy proficiency for those in this study ($M = 279$). However, the key for this study is that the population sampled had less than a high school degree or GED, and yet, the mean literacy score was the same as that of the national population without the restriction on education. In other words, Oregonians with low levels of education have the same mean literacy score as those of all levels of education in the national population.

If people who have low-levels of education in Oregon have higher than average literacy proficiencies, it stands to reason that they would also be more successful and be less likely to have received TANF. Furthermore, the mean literacy score of those who have received TANF ($M = 275.69$) is not significantly lower than the mean literacy score of those have not received TANF ($M = 279.76$). Perhaps, the higher than average literacy rates for this population, is a partial reason why the results of this study revealed that a positive association between literacy proficiency and having received TANF exists for Oregonians.

The next possibility to consider is that the individuals in Oregon who have received TANF are different from the welfare recipients in the national population. For example, people in Oregon who have received TANF are more highly educated than those in the national population. These results indicate that the higher the grade in school one completes, the less likely they are to have received TANF. Therefore, if the Oregon TANF recipients are more highly educated to begin with, then the grade they completed in school would play even less of a role in predicting Oregonian's TANF receipt.

Another possibility is that perhaps in order to obtain TANF, individuals may need to have a certain amount of literacy proficiency to even go through the process of applying for aid. It is possible that a person with a level one literacy proficiency would not be able to fill out the proper paperwork, meet with caseworkers, keep track of expenditures, and complete all the necessary tasks that a person has to complete in order to receive aid.

My understanding is that the process of applying for and keeping aid from public assistance programs is long and arduous.

One in which not everyone would be able to participate in fully for numerous different reasons. Consequently, it is very likely that a person would need to have a certain amount of literacy skill to even apply and receive TANF in the first place. This may be why more individual's who have received TANF were found in the higher levels of literacy proficiency (levels 2 and 3), as well as why a positive association was emerged from the findings of this study.

Similarly, the results of the bivariate analysis as well as the multivariate analysis indicate that a linear relationship does not exist between literacy proficiency and having received TANF. It is more likely the case that the association between a person's literacy skill and having received TANF is curvilinear. A person needs a certain amount of skill to obtain welfare and when they obtain the higher literacy levels they are able to acquire a job that allows them to make enough money so that the need for welfare no longer exists. It is not the case, according to these results, that the lower the skill the higher the likelihood of having received TANF, which would indicate a linear relationship. Consequently, the results reveal that a curvilinear relationship exists between literacy proficiency and having received TANF in the previous 12 months, which means that a positive association makes sense and is a significant finding.

Human Capital?

For this study, an attempt was made to provide support for the argument that

people who have more human capital assets would be less likely to have received TANF. The findings for the literacy skills variable in the bivariate analysis suggest that one's literacy proficiency is a human capital asset that does not predict TANF receipt. Moreover, in a multivariate context when controlling for other variables, the impact of the human capital asset of literacy proficiency on having received TANF is minimal. Therefore, the results of this study refute the idea that high levels of at least one human capital asset, literacy proficiency, does not have a large impact on the likelihood of having received TANF.

The grade completed variable on the one hand supports the human capital theory, but if you take the larger picture into account, it refutes the theory. For example, the human capital theory would be supported if you examine the results of both the bivariate and multivariate analyses. The higher the grade in school an individual completes, or the higher the investment in human capital a person makes, the less likely they are to have received TANF. However, when taking into account all of the other predictors of TANF receipt, the grade completed in school has a relatively small impact. The argument can be made that this population of people who have not completed high school and/or do not have a GED is relatively successful regardless of the small investment they have made in their level of human capital (education). Success in this case is defined as being self-sufficient and not needing the help of public assistance programs. Most of this population has not received TANF (89%) and seems to be able to make ends meet without the help of government assistance even though they do not have high investments in human capital.

This fact seems to contradict the human capital theory.

The results indicate that for a population of people with low-levels of education, the two factors that have the largest independent effect on having received TANF are having poor health and not owning or having access to a working motor vehicle. Family income, being female, and grade completed in school also significantly impact having received TANF. These results are consistent with previous research.

The Strength of the Economy

Another important fact to consider is the strength of the current United States economy. The U. S. economy is extremely strong right now in the year 2,000. The following characteristics make the economy strong: Unemployment is low; interest rates are low; jobs are plentiful; and the stock market has reached historic highs this past year. In fact, the economy is so strong right now that Alan Greenspan has attempted lately to slow down the booming economy by raising interest rates in an attempt to keep inflation under control. All of these facts mean that people are being able to obtain a job relatively easily right now. Consequently, more people today are able to make ends meet without the help of government assistance. The currently strong economy is probably a reason why a large the number of people in the sample had not received TANF is even though they only had low-levels of education. The state of the economy should always be kept in mind when doing a study of this nature for it has important consequences in determining how many people are able at any given time to obtain a job that would allow them to achieve self-sufficiency.

Limitations of the Study

Secondary data, although extremely useful because of its convenience and availability, has disadvantages: if you did not design the data collection instrument, it is unlikely that all of the variables that should be included actually were. It is unlikely that the variables will be measured in an appropriate way that allows you to answer the exact research questions in which you are interested. Both of these disadvantages were a problem for this study. There were many aspects to a welfare recipient's life that would have been appropriate to control for in this study, but because they were not included in the original survey there was no way they could have been included in this study. Consequently, the multivariate model created was limited to the measures that were included in the original survey.

Another limitation to this study is the small number of people sampled who had actually received TANF in the past 12 months. Because the TANF population was small, caution had to be used in the type of analyses conducted with the data, the number of variables included in the model as well as in drawing conclusions from the results. For example, the rule of thumb for logistic regression analysis is that you can use 1 variable per 10 cases for the condition you are attempting to predict. There were 110 individuals who had received TANF; therefore, I could include no more than 11 variables in the model.

One last consideration about this study that should be examined is the generalizability of the results. This study attempted to identify factors that impact the odds of an individual receiving TANF.

Therefore, the population that was the main focus of this study was individuals who had received TANF sometime in the previous 12 months. The question to ask is whether or not the results of this study would hold true for a different group of people who had received TANF.

In other words, if I were to conduct a study with welfare recipients in New York or Florida, would I get the same or similar results? It is almost impossible to know the answer to this question, but I would guess the answer would be no. TANF recipients in Oregon seem to be somewhat unique. The literacy rates of Oregonians alone imply that people in Oregon are different from the National population. Consequently, the results of this study cannot be generalized to another population of people who had received TANF. Any conclusions made from this research are limited to individuals, between the ages of 18 and 44, who were living in the Portland metropolitan area at the time of the survey.

Suggestions for Future Research

It would be useful to know how the results of this study would compare to a similar study of adults nationwide. Perhaps, Oregonians are better educated, more literate, and are better able to obtain a job, which would set them apart from TANF recipients in the national population. In order to better test how human capital assets, such as literacy proficiency and level of education, predict TANF receipt, a good future research project would be to replicate this study with a randomly drawn sample of individuals with low-levels of education from the national population. It would also be better to design a survey instrument that would include more measures that

may predict TANF receipt as well as variables that would more accurately measure some of the pertinent concepts. By conducting such a study, the results of this research could either be supported or refuted.

Conclusion

In conclusion, the first hypothesis originally put forth as the purpose of this study was not supported by the findings. Support was also not found for the second hypothesis. Even though support was not found for the second hypothesis, a significant, but positive association between literacy proficiency and having received TANF was found. This result was unexpected. Perhaps, people need to have a certain amount of literacy skill to be able to receive help from public assistance programs.

In examination of the data in a bivariate context, it was discovered that literacy proficiency for this population of people is not significantly associated with having received TANF. This finding is not consistent with previous research. For example, Levenson et. Al (1999), D' Amico (1997), Olson and Pavetti (1996), Barton and Jenkins (1995) all found that the literacy and basic skills of welfare recipients tend to be much lower than the literacy skills of the national population. However, for this study, people who scored in the lowest level of literacy proficiency were less likely to have received TANF sometime in the previous 12 months than those individuals who scored in the higher proficiency levels.

In a multivariate context, even though the relative independent effect of an individual's literacy proficiency was small, a statistically significant relationship was found when all of the other variables in the model were held constant.

Individual level factors, such as having poor health, being female, and not owning or having access to a working motor vehicle, were stronger predictors of receiving TANF than were the human capital variables of literacy proficiency and grade completed in school. The individual level factors have been shown by other researchers in the past to be significant barriers to self-sufficiency and hence, to receiving welfare (Seccombe, 1999; Zedlewski, 1999; Ehrle, Moore & Brown, 1999; Rocha, 1997; Rank, 1994). Several researchers in the past have found that low-income people who have large informal social support networks are more likely to successfully move from welfare-to-work and are better able to make ends meet without the help of public assistance programs than those who do not have such social support networks (Seccombe, 1999; Edin and Lein, 1997). However, in this study, a significant relationship was not found to exist between informal social support and having received TANF.

The literature and results that have been presented in this study reaffirm the idea that welfare recipients have a multiplicity of personal and structural challenges to overcome in their journey to self-sufficiency. Furthermore, with the eroding safety net that has occurred with the dismantling of the social welfare system in the US, it is extremely important to continue to illuminate the complex and interwoven factors that land people in poverty and on welfare so that we may better aid them in their transition from welfare to work.

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