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The relationship between selected housing and demographic characteristics and employment status among rural, low-income families

Ann Allgood Berry
Louisiana State University and Agricultural and Mechanical College

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THE RELATIONSHIP BETWEEN SELECTED HOUSING AND DEMOGRAPHIC CHARACTERISTICS AND EMPLOYMENT STATUS AMONG RURAL, LOW-INCOME FAMILIES

A Dissertation

Submitted to the Graduate Faculty of the Louisiana State University and Agricultural and Mechanical College in partial fulfillment of the requirements for the degree of Doctor of Philosophy

in

The School of Human Resource Education and Workforce Development

by

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TABLE OF CONTENTS

ACKNOWLEDGMENTS .............................................................................................................. ii

LIST OF TABLES ......................................................................................................................... vi

LIST OF FIGURES ...................................................................................................................... vii

ABSTRACT ................................................................................................................................. viii

CHAPTER

1. INTRODUCTION ................................................................................................................1
   Theoretical Perspectives .................................................................................................4
   Overview of Poverty .................................................................................................5
   Rural America .............................................................................................................6
   Housing Affordability ...............................................................................................8
   Income Adequacy ........................................................................................................12
   Housing Adequacy .......................................................................................................15
   Housing Tenure ...........................................................................................................16
   Housing Instability .......................................................................................................18
   Housing and Well-being ..............................................................................................20
   Research Objectives .....................................................................................................23
   Definitions of Terms .....................................................................................................27
   Methodology ................................................................................................................28
   References ...................................................................................................................32

2. HOUSING CIRCUMSTANCES AND HUMAN CAPITAL OF RURAL, LOW-INCOME FAMILIES IN THE CONTEXT OF WELFARE REFORM ........................................................................38
   Review of Literature ......................................................................................................43
   Method ............................................................................................................................54
   Results .............................................................................................................................56
   Conclusions and Implications .......................................................................................67
   References ...................................................................................................................71

3. HOUSING TENURE AND WELL-BEING OF RURAL, LOW-INCOME FAMILIES IN THE CONTEXT OF WELFARE REFORM ..............................................................................75
   Review of Literature ......................................................................................................76
   Method ............................................................................................................................83
   Results .............................................................................................................................85
   Conclusions and Implications .......................................................................................89
   References ...................................................................................................................90

4. SUMMARY AND CONCLUSIONS ...............................................................................95
APPENDIX A: PERMISSION LETTERS TO USE AND ADAPT HUMAN CAPITAL DEVELOPMENT MODEL..........................................................................................................................99

APPENDIX B: INSTRUMENT ...........................................................................................................102

VITA...............................................................................................................................................123
LIST OF TABLES

2.1 2003 Fair Market Rent and Housing Wages at 40 Hours per Week by State for Two and Three Bedroom Dwellings .................................................................52

2.2 Unemployment Rates by State in March 2003 .................................................................54

2.3 Description of Rural, Low-income Families on Human Capital Factors ............................56

2.4 Test for Independence of Housing Tenure and Income and Assistance ............................61

2.5 Cross Tabulation of Whether or Not Rural, Low-income Families Receive Housing Assistance and Housing Tenure Status .................................................................62

2.6 Cross Tabulation of Whether or Not Rural, Low-income Families Receive TANF Funding and Housing Tenure Status ........................................................................62

2.7 Cross Tabulation of Whether or Not Rural, Low-income Families Receive Food Stamps and Housing Tenure Status ........................................................................62

2.8 Cross Tabulation of Whether or Not Rural, Low-income Families Receive Cash Wages and Housing Tenure Status ........................................................................63

2.9 Classification of Cases by Employment Prediction Model N=387 .....................................67

3.1 Comparison of Selected Measures of Financial and Cognitive Well-being of Rural, Low-income Families by Housing Tenure ................................................................88
### LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Human Capital Development Model</td>
<td>5</td>
</tr>
<tr>
<td>1.2</td>
<td>Map Depicting States Participating in Wave 1 of NC-223 Study of Rural, Low-income Families</td>
<td>29</td>
</tr>
<tr>
<td>2.1</td>
<td>Human Capital Development Model</td>
<td>42</td>
</tr>
<tr>
<td>2.2</td>
<td>Monthly Human Capital Expenses Contributing to Difficulty Making Ends Meet</td>
<td>60</td>
</tr>
<tr>
<td>2.3</td>
<td>Sources of Assistance Reported by Rural, Low-income Families</td>
<td>65</td>
</tr>
<tr>
<td>2.4</td>
<td>Selected Measures for Housing Instability of Rural, Low-income Families (n=410)</td>
<td>68</td>
</tr>
<tr>
<td>2.5</td>
<td>Human Capital Development Model</td>
<td>69</td>
</tr>
<tr>
<td>4.1</td>
<td>Human Capital Development Model</td>
<td>96</td>
</tr>
</tbody>
</table>
This study was a secondary analysis of wave one data of the Rural Families Speak project, a multi-state longitudinal Agricultural Experiment Station project that focused on assessing changes in the well-being and functioning of rural low-income families in the context of welfare reform. Quantitative analysis was conducted to determine the housing situations of the families and the relationships of these factors with the family economic and cognitive well-being and employment circumstances of study participants. Discriminant analysis was used to develop a model to predict the employment circumstances (employed, not employed) of the participants.

Housing costs usually take the first and largest portion of a family’s budget, leaving the rest of the income to purchase food, clothing, health care needs, school fees, etc. Without supplemental assistance from family, friends, and government agencies, the housing costs for many of the families would be a burden to the family budget, limiting the funds available for human capital needs. Most participants in this wave of the study did not have housing costs greater than the government standard of 30% of monthly income. However, the majority of the families could not have afforded to pay fair market rents for housing in their geographic areas with their current monthly incomes.

Variables included in the final model to predict the participant’s employment status were the housing income adequacy of the family (fair market rent divided by monthly income), transportation assistance, child care assistance, Medicaid, TANF, and marital status. The model correctly classified over 70% of the cases.

Family economic and cognitive well-being for rural low-income families was studied with housing tenure as the independent variable. Homeownership was found to increase the
participant’s level of family economic well-being, as measured by the perception of income adequacy and the family’s total monthly income. Housing tenure was found to be independent of participant’s health, community awareness, and life satisfaction.

By tracking these families over time, the changes in their family economic well-being and their employment circumstances can be examined. Housing costs and circumstances can be monitored and analyzed for relationships to employment and family economic situations.
CHAPTER 1

INTRODUCTION

The economic development and well-being of a society are measured in the forms of its capital—financial capital, social capital, and human capital. All three forms of capital are influenced by the well-being of its citizens (Brooks-Gunn, Duncan, & Maritato, 1997).

Shelter, or housing, in addition to food and clothing, is one of the basic needs according to Maslow’s hierarchy of needs (DeSimone & Harris, 1998). The need for shelter from the elements is obvious. However, the psychological and sociological roles in human capital development that housing performs are often overlooked. When adequate, housing can provide a place for family functioning, nurturing, nourishing, and anchoring (Morris & Winter, 1978; Stone, 1993; Ziebarth, Prochaska-Cue, & Shrewsbury, 1997). The neighborhood and community where the family is housed determine access to jobs, services, stores, and the support system of family and friends. Housing plays a significant role in determining the physical and social environment in which the family lives, thereby affecting the ability for both social and human capital development of the family members and the community where they reside. Children and parents alike begin to develop their human and social capital in the home. Families provide financial capital, social capital and human capital to their children (Beaulieu & Mulkey, 1995). Community economic development depends upon the development of human and social capital (Becker, 1993).

Family financial capital and community development are not equitable across the United States. Families are living in poverty in both urban and rural areas of the country. In 2001, 32.9 million people (11.7 %) lived below poverty thresholds, up from 11.3% in 2000 (U.S. Census,
The 2001 poverty rate for people living in urban areas was 11.1%; for those living in rural areas, the rate was significantly higher at 14.2%.

Public assistance to low-income families underwent its most dramatic change in policy with the passage of the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996. The change was the requirement for most families to have a family member seek employment regardless of where they live. The goal of welfare reform is to increase human capital to the point that families are able to be self-sufficient. Economic self-sufficiency for families requires sustained, adequate employment for parents. Past studies have shown that instability in low-wage jobs can have adverse consequences for family earnings and for child and family well-being. Periods between jobs drain financial resources and take a toll on self-esteem and confidence (Edin & Lein, 1997). Barriers that have been significantly associated with employment include poor health, receipt of government assistance, area of residence, awareness of transportation service, and ownership of an available, reliable vehicle (Fletcher, Garasky, & Jensen, 2002).

Much of the poverty and welfare research has been conducted with urban residents, with limited investigation on the effects of welfare reform legislation on rural families (Zimmerman & Garkovich, 1998). It is important for policy makers to understand the unique conditions and needs of rural America in order to establish viable initiatives for the support of rural families in the context of welfare reform.

In order for rural communities to be strong and viable, they need strong and healthy families. Changes in the welfare system have created a dynamic, multifaceted environment that provides challenges and opportunities to families, communities, and public agencies. Critics of the changes in the welfare system argue that many families in rural areas will have a lower
standard of living after leaving welfare due to the barriers facing rural communities. Low-income rural families face self-sufficiency barriers such as fewer educational and employment opportunities, lower-wage jobs, little public transportation, limited childcare options and limited access to social supports (Braun, Lawrence, Dyk, & Vandergriff-Avery, 2002; Cook, Crull, Fletcher, Hinnant-Bernard, & Peterson, 2002; Lichter & McLaughlin, 1995). Overcoming these challenges and reducing barriers to self-sufficiency may require different policy decisions and human service outreach efforts than those needed for urban areas.

Researchers have suggested housing instability to be a barrier to employment and family economic stability. Johnson and Meckstroth (1998) proposed that it could also cause a continued reliance on or a return to public assistance. The conditions Johnson and Meckstroth theorized as contributing to housing instability include: (1) high housing costs, (2) poor housing quality, (3) unstable neighborhoods, (4) overcrowding, and (5) homelessness.

Limited empirical research has been conducted on the relationships among welfare reform, housing, and employment, particularly in rural areas. Some questions that arise are: Do rural low-income residents have affordable, adequate housing? What role does housing play in the economic well-being of rural families? Does housing instability serve as a barrier to employment and economic well-being? Cook et al. (2002) suggested further research is needed to learn about housing security and how families meet their basic needs for shelter in rural areas. Newman (1999) also questioned housing’s role in family self-sufficiency. This study takes the housing instability taxonomy of Johnson and Meckstroth (1998) and Cook et al.’s suggestion to explore a multi-state sample of rural low-income families to determine if housing instability exists as a barrier to employment and family economic stability in the context of welfare reform.
Housing instability factors are included in a model with other human, financial, and social capital factors to help predict the employment status of participants.

This research study used data from the first wave of a multi-state, longitudinal study of rural low-income families, NC-223, “Rural Low-income Families: Tracking Their Well-Being and Functioning in the Context of Welfare Reform.” Details of the national project can be found on the website, www.ruralfamiliesspeak.org. The data serve as a baseline to track the employment, assistance, and housing circumstances of the families. Results of the study can be used to help guide policy decisions for public assistance programs, direct educational outreach efforts for Cooperative Extension Services and other service agencies, and assist rural communities in identifying economic development needs as related to housing and human capital.

Theoretical Perspectives

The following model by Beaulieu and Mulkey (1995) illustrates the framework for this study. Factors that affect an individual’s human capital investment and future earnings begin in the home, with family attributes of financial, human, and social capital, influencing the individual’s investment ability and decisions, and subsequent employment and income outcomes. Simultaneously, the community where one resides provides the structural and social aspects which help shape the person’s human capital investment decisions that, in turn, affect economic well-being through employment and income.

The theoretical framework for this study comes from the family economics and human capital and economic development literature. This framework uses the various forms of capital (economic, human, social, and physical) to analyze the social and economic conditions of family
well-being and forms the basis for this study (Boisjoly, Duncan, & Hofferth, 1995; Putnam, 1995).

**Family Attributes**
- Financial capital
- Human capital
- Social capital

**Community Attributes**
- Structural factors
- Social capital

---

**Figure 1.1 Human Capital Development Model***


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**Overview of Poverty**

The prosperity of the world today is unprecedented; however, one quarter of the world’s population lives in absolute poverty, not even able to meet their basic needs. Efforts to eradicate world poverty have not succeeded. Watt (2000) suggested that absolute poverty is not inevitable, but can be eradicated with “equitable economic growth”. Watt’s theory of equitable economic growth would ensure opportunity for all people, not just those living in certain areas with jobs and industry (Watt, 2000).

Watt identified policy strategies that would help development for all of a country’s population. One of his core recommendations included investment in human capital through education and health care, which he believed to be basic rights for individuals. These social
provisions enhance individual well-being and strengthen the ability of people, and raise productivity, a necessary foundation for wealth creation for individuals and communities. Another of his core recommendations was for rural development to adopt “pro-poor” policies, i.e., land redistribution, investment in infrastructure, stable prices for necessi-ties, access to credit and savings facilities, and quality social provisions (Watt, 2000).

Watt’s (2000) recommendation of quality social provisions has been addressed in the United States through public education systems and health care programs such as Medicaid and Medicare. However, stable prices for necessities and land redistribution have not been components of public policy to eradicate poverty. Using the U.S. Census Bureau’s measure, a household is considered to be “living in poverty” if the household’s income is not sufficient to purchase basic needs and services. The official poverty definition uses income before taxes and does not include capital gains or non-cash benefits such as public housing, Medicaid, and food stamps. The 2003 poverty line for a family unit of four is $18,400 (2003 Federal Poverty Guidelines). The poverty line is determined by the size of family and the number of children; however, the poverty thresholds do not vary by geographic region. There were 32.9 million people and 6.8 million families in the United States living below poverty thresholds in 2001 (U.S. Census Bureau, 2002).

**Rural America**

Rural America comprises 2,305 counties, contains 80% of the land, and is home to 56 million people (Whitener & McGranahan, 2003). Employment opportunities in rural areas are limited with many people working in low-wage service industries, and where unemployment, underemployment, and poverty rates are high, and residents have less formal education (Whitener, 2003). According to the U.S. Census, the number of people living in poverty in rural
areas in 2001 was 7,460,000. Many of these individuals struggle daily to meet basic needs, depending upon various forms of assistance from government, family, and friends to stretch their monthly incomes.

In a study funded by the Kellogg Foundation, a survey of 1,030 of the nation’s 7,000 state legislators found that 86% of the respondents believed that people in rural areas have fewer opportunities than those in urban areas. The legislators agreed on the economic development needs of rural America. The lawmakers felt the most serious problems facing rural America were the lack of opportunity for young people, the decline of the family farm, limited access to health care, quality education and transportation, low-wage jobs, and the breakdown of the family (Philanthropy News Digest, 2002).

Welfare Reform and Rural Challenges

“Welfare” has historically been the term used when referring to governmental assistance programs for families. This program has technically been called Aid to Families with Dependent Children (AFDC) and is now Temporary Assistance for Needy Families (TANF). In 1996, the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) was passed which limited assistance to a maximum of 60 months. TANF recipients were required to work after receiving assistance for 24 months. On February 13, 2003, the House of Representatives passed legislation to reauthorize TANF through 2008. The bill increases work requirements from 30 to 40 hours per week and increases work participation rate requirements from 50 to 70% of state caseloads (Administration for Children & Families, 2003).

The overall focus of welfare reform is to replace family dependence upon ongoing cash assistance with family economic self-sufficiency. At the end of fiscal year 2002, there were 4,995,719 caseloads, which was a 59.2% decline in the number of families nationally receiving
cash assistance since PRWORA went into effect (Administration for Children & Families, 2003). However, between September and December 2002, TANF caseloads increased in 38 states, with 29 states reporting increases in caseloads since March 2001, the beginning of the nation’s recession (U.S. Census Bureau, 2002). Ideally, families which have left the welfare rolls have become self-sufficient through employment.

With employment being a key component of this government program, rural areas may be at a disadvantage in moving families from receiving public assistance to achieving economic self-sufficiency. Economic self-sufficiency challenges in rural areas are cited as limited job opportunities, low-wage jobs, transportation difficulties, limited childcare options, and increased distances to personal and social services (Braun, Lawrence, Dyk, & Vandergriff-Avery, 2002; Cook, Crull, Fletcher, Hinnant-Bernard, & Peterson, 2002; Lichter & McLaughlin, 1995). Katras (2003) found that rural low-income families relied on social support systems, both formal and informal, to access transportation and childcare resources in order to make ends meet. Additionally, Bokemeier and Garkovich’s research in 1991 indicated that rural households are more likely than urban households to live in inadequate housing, have lower incomes, and have housing unsuitable for their needs (Ziebarth, Prochaska-Cue, & Shrewsbury, 1997). Cook et al. (2002) cited that the availability, affordability, and quality of rural housing could also be barriers to self-sufficiency for low-income families, because housing cost and quality were found to be obstacles for rural, low-income families in Iowa.

**Housing Affordability**

Housing is both a necessity of life and a commodity that is market-driven. It also impacts all areas of an individual’s life. If a household’s housing is adequate, it will provide shelter for the physical and emotional needs of privacy and security for its members. The amount a
household can pay for housing plays a significant role in determining the social environment in which the family lives, thereby affecting the ability for both social and human capital development of the family members and the community where they reside (Clay & Schwarzweller, 1991; Edelman & Mihaly, 1989; Shlay, 1995; Stone, 1993).

“Affordability” is the measure of housing need and family well-being with the available resources of the household to provide for this need (Stone, 1993). Housing affordability reflects the relationship between the labor market and the housing market. If housing costs fluctuate, the labor market may or may not respond in the same direction. During the 1990s, rural housing prices increased rapidly. The fluctuating housing market can challenge low-income families (Willis, 2002).

Shelter Costs

The cost for shelter for a family usually takes the largest and first portion of the household income (Cook et al., 2002; Stone, 1993), unless the family receives some form of housing assistance, whether the assistance is in the form of government subsidies or family/friend/social support. Total shelter costs are those costs associated with the physical dwelling unit, including rent or mortgage payments, property insurance and taxes, and utilities (electricity, gas, and water/sewer) (Cook et al., 2002; Ziebarth et al., 1997). After shelter needs are met, the other household necessities can be purchased, such as food, clothing, medical care, transportation, etc. (Shlay, 1995). If there is any remaining household income for discretionary purposes, then household and individual wants can be purchased or investments made in the form of savings or human capital, i.e., education. In some cases, a family’s financial circumstances may require it to choose between paying for rent or utilities and food or medical needs (Cook et al., 2002). Savings and human capital investments required for family economic
stability (Cauthen, 2002) might be out of reach for rural, low-income families. High shelter costs may be a barrier to achieving self-sufficiency.

**Historical Guidelines for Household Housing Costs**

During the late 1880s, workers typically set aside between 20 and 25% of their total budget for shelter (rent, light and fuel). The saying, “a week’s wage for a month’s rent” originated during this time period (Feins & Lane, 1981). Ellen Richards referred to the thrifty French rule that “rent should account for one-fifth of a household’s total income” in her 1905 book, *The Cost of Shelter* (Ziebarth et al., 1997).

Review of the literature revealed inconsistent measures for housing costs and affordability determination. According to Ziebarth et al. (1997) families paying more than 30% of their adjusted gross income for housing and basic utility costs were considered cost burdened. Their study looked at differences in housing availability and affordability in rural areas of five Midwestern states from the standpoint of community type and housing tenure. Findings from the study revealed that in growing/isolated communities (communities experiencing growth yet not in close proximity to metro area), affordability was a concern; availability was a concern in growing/non-isolated communities (population expansion and close proximity to metro area).

Combs, Combs, and Ziebarth (1995) used three definitions of housing affordability in their study of data from the Panel Study of Income Dynamics, which did not isolate rural areas for study. The first definition they used was the housing expenditure/income norm, which identified households that spent 30% of their income on housing. Housing poverty was the second definition that identified households that had an income below 70% of the poverty level after removing housing costs. The third definition they used, housing burden, identified households that met criteria for both housing expenditure/income norm and housing poverty.
The housing burden definition was designed to identify households in poverty whose housing costs significantly contributed to monetary difficulties. No indication was given on what constituted housing costs; utilities were not mentioned in the study. Their findings indicated that large families, lower income households, households with higher educational levels, female headed households, and older households had a greater probability of experiencing a housing affordability problem. Households that received public assistance and younger households had a greater probability of an expenditure/income ratio of over 30% and of experiencing housing poverty, but not housing burden. The study also found that homeowners had a greater probability of experiencing housing poverty and housing burden, but not a housing expenditure/income ratio over 30%.

Cook et al. (2002), interviewed 17 rural Iowa residents and reported findings related to housing affordability, availability, and adequacy. They cited the standard used by HUD, 30% of gross family income that subsidized households must pay for housing. They reported rent and utilities separately in their tables but did not calculate the income/housing cost ratio for participants. Sixteen of the 17 were renters with rents ranging from $150 to $600 per month. Most of the families received some type of housing assistance from either the federal government or family or friends. Without assistance, the families would be living too close to the “financial-edge” for comfort (p. 301).

In summary, the literature revealed that housing costs, including rent or mortgage and utilities do take a substantial portion of the incomes of low-income families. Housing assistance, whether informal or formal, seems to play a role in providing shelter for the families.
Income Adequacy

Spending Patterns of Low-income Households

Research conducted by Passero (1996) of 6,307 households receiving public assistance found that expenditures of families varied widely, depending upon the employment status of adults in the household, marital status of the household head, and the presence of children. He found that dual-parent households spent 20% of total spending on food and 34% on housing. Single-parent families had lower total expenditures and reported a larger share of expenses on food and housing, 28% and 41%, respectively.

Pearce (2001) reported that costs for housing and child care for young children often total more than half of family expenses and food only 12-15%, depending upon where one lives. The Housing Assistance Council (1997) reported that more than 40% of rural poverty-level households spent over half of their incomes for housing.

Sources of Income and Assistance

Cash Wages

A multitude of income sources are mentioned in the literature for low-income families, with wages from employment being the one that welfare reform encourages. Sullivan (2001) found from a sample of 127 TANF recipients in Georgia barriers to employment included: employment support, human capital and health, and background. These barriers were significant predictors of earned income. Past income was shown to be a predictor of future income.

Cook et al. (2002) studied 17 rural female-headed families in Iowa receiving welfare benefits. Wages they reported ranged from $1.75 per hour to $12.50 per hour. The number of hours worked per week varied, depending upon the participant’s health or the health of her
children. The authors reported that, in order to afford Fair Market Rent for rural Iowa, the respondents would have had to earn $9.21 per hour.

Mikesell & Wallace (2000) compared low-income rural and urban homes and neighborhoods using data from the 1997 American Housing Survey. They found that wage-dependent rural households, where wage or salary earnings accounted for at least half of the annual household income, were more likely to have housing difficulties. Housing difficulties included excessive housing costs, crowding, physical inadequacies, and lower satisfaction with home or neighborhood. Nearly 4.3 million of the 22 million rural households received at least half of their income from wage and salary earnings, with most of them receiving little or no additional income. Wage-dependent households received government rental housing assistance much less often than other low-income households. Wage-dependent homeowners were most likely to have received government housing assistance. Fewer wage-dependent households owned their own homes.

Public assistance

TANF, unemployment and disability benefits, and Social Security are possible sources of monthly cash assistance. Intended benefits of TANF are to assist needy families so that children can be cared for in their own homes; reduce dependency of needy parents by promoting job preparation, work, and marriage; prevent out-of-wedlock pregnancies; and encourage the formation and maintenance of two-parent families (Administration for Children & Families, 2003).

Housing and utility assistance

Most welfare recipients do not receive government housing assistance (Cook et al., 2002). In a study of 17 families in Iowa, Cook et al. found that 16 of them rented their dwelling.
Eleven of the families had no housing assistance and paid rents between $150 and $600 per month. Those families receiving government assistance for reduced rent and utilities paid rents ranging from $0 to $155 per month.

Passero (1996) found that the most common combination of types of assistance for dual-parent households receiving public assistance was welfare, food stamps, and Medicaid. Support from public housing and government housing was rare.

A study of Indiana and Delaware families, both cohorts combining urban and rural areas, revealed that the additional time families lived in public housing or used vouchers was associated with increased employment and earnings and reduced welfare receipt. A possible positive interactive effect between welfare reform and housing vouchers was suggested, as housing assistance may provide an opportunity for welfare recipients to stabilize their lives, resulting in improved employment outcomes. Nationally, 30% of families on welfare received housing assistance (Lee, Beecroft, Khadduri, & Patterson, 2003).

**Fair Market Rent**

According to the National Low Income Housing Coalition (NLIHC) there exists a gap that widens each year for rental housing affordability. The Coalition computes the amount of money a household must earn per hour in order to afford a rental unit of a range of sizes at the area’s Fair Market Rent (FMR), based upon the generally accepted affordability standard of paying no more than 30% of income for housing costs. Data for the calculations are pulled from the U.S. Census Bureau and the U.S. Department of Housing and Urban Development and are categorized by state, delineating urban and rural areas. The national median two bedroom Housing Wage for 2002 was $14.66 (National Low Income Housing Coalition, 2003). In their study of rural Iowa low-income families, Cook et al. (2002) found that for their geographic area,
they would have to work 70 hours per week at a minimum wage job to afford the FMR for a two-bedroom unit at $409 per month. In 2003, the least affordable nonmetro states were Hawaii, Rhode Island, Alaska, Connecticut, Massachusetts, and New Hampshire, with housing wages ranging from $18.20 to $13.37 (National Low Income Housing Coalition, 2003).

**Housing Adequacy**

**Spatial Needs**

The norms for housing space were established by the American Public Health Association and the U.S. Department of Housing and Urban Development (as cited in Morris & Winter, 1978). The space recommendations were based upon activities normally conducted in a dwelling unit and the number of persons in a household. One of the standards currently used is based upon the persons-per-room ratio. This ratio is determined by dividing the number of persons in the household by the number of rooms (excluding bathrooms) in the dwelling space. Researchers consider a housing unit “overcrowded” with more than one person per room (Johnson & Meckstroth, 1998; Mikesell, 2000). The 1971 APHA model housing code recommends the maximum person-per-room ratio to be two (Morris & Winter, 1978).

Another measure of spatial need takes into account the number of adults in the household and the number and ages of children in the household to determine the number of sleeping rooms needed (Morris & Winter, 1978). The criteria used in this measure, developed by the APHA, include privacy during sleep, gender separation to maintain societal customs, and age separation to reduce conflict. This index, as interpreted by Morris and Gladhart and cited by Morris and Winter (1978, p.98) is the following:

“…no more than two people may share a bedroom and a bedroom is needed for the parental couple (or single parent); each child aged 18 or over; each pair of same sex children, at least between that ages of 9 and 17, whose ages differ by 4 years or less; each
pair of children of any sex, both under age 9, whose ages do not differ by more than 4 years; each additional adult or couple.”

Today, the housing quality standards set by HUD for its Section 8 housing program require that “the dwelling unit must have at least one bedroom or living/sleeping room for each two persons. Children of opposite sex, other than very young children, may not be required to occupy the same bedroom or living/sleeping room” (U.S. Department of Housing and Urban Development, 2003).

For most families, housing spatial needs will change throughout the life cycle as children develop and other family members age. A household’s housing need today could change substantially over time and the dwelling may or may not remain adequate to meet those changing spatial needs. Housing adequacy is also challenged by the presence of disabilities in any of the household members. Physical disabilities may require accommodations in the way of ramps, wider doorways, accessible bathrooms, absence of thresholds, lever door handles, lower electrical outlets, etc. Rural homes on average are smaller and more likely to have physical inadequacies compared to urban homes (Mikesell, 2000).

**Housing Tenure**

Housing tenure is one’s housing circumstance—whether one rents or owns one’s dwelling place. The American dream has long been homeownership, with government backing to help fulfill that dream through various low-interest loan programs (Retsinas & Belsky, 2002). In a study of renters conducted by Fannie Mae, 67% said they rented because they could not afford to purchase a home; 26% reported they rented due to choice (Fannie Mae, 1994).
Homeownership

In 2001, a record high of 68% of the nation’s households were homeowners. Interest rates in 2003 have been the lowest in 40 years, making the housing market attractive. Over three-fourths of rural U.S. households owned their homes in 2000 (Mikesell & Reeder, 2000). Mikesell & Wallace (2000) reported that rural low-income homeowners had better housing than did renters, whether or not they were wage-dependent.

Research on homeownership has yielded mixed results. Jang (1995) found homeownership to be a significant factor for expenditures on health care and reading and education, and concluded that homeownership was an important factor predicting the behavior of human capital investment for the female-headed household. In contrast, Smith and Crowder (1998) showed homeownership to be an impediment, along with age, to residents moving from poor neighborhoods (South & Crowder, 1998). Owning one’s home could be a barrier to employment in that it reduces mobility to take advantage of job opportunities.

Renting

In 2001, renter households made up one-third (nearly 36 million) of the households in the United States. Comparatively, only 24% of the households in rural areas were renters (National Low Income Housing Coalition, 2003). In rural and urban areas, low-income and minority households were the most dependent on rental housing (Mikesell & Reeder, 2000). The stock of rental housing declined significantly, especially for very low-income renters (U.S. Department of Housing and Urban Development, 1998).

Other Housing Circumstances

Homeownership and renting are not the only types of housing circumstances. Some families do not have either of these housing situations. A household’s personal and economic
situations may require other housing choices, such as living with family or friends, “doubling up”, or becoming homeless due to life events.

A house provides shelter as well as other benefits (Shlay, 1995). Homelessness, or lacking a permanent residence, takes a toll on adults and children, affecting health, education, and emotional development (Edelman & Mihaly, 1989). Three trends that have contributed to increasing homelessness include: decreasing household incomes among the poor and near poor, especially those headed by a man or woman under 25; decreasing supply of affordable housing; and cuts in federal low-income housing assistance (Edelman & Mihaly, 1989). Main (1998) cited the primary causes for homelessness as the housing market, unemployment and poverty, the economy in general, social policies, and disabilities among the homeless.

“Doubling up” has been found to be a strategy to make ends meet (Boushey & Gundersen, 2002; Cook, et al., 2002; Edin & Lein, 1997). Cook et al. (2002) found that respondents did not think of informal housing arrangements from family and friends as “housing assistance.” Assistance from family and friends did enhance housing affordability and brought at least temporary stability to the Iowa families in the study.

**Housing Instability**

Housing instability interferes with success in other basic tasks, especially employment, education and childrearing (National Low Income Housing Coalition, 2003). Housing instability, according to Johnson & Meckstroth (1998), is a housing circumstance having conditions of high housing costs, poor housing quality, unstable neighborhoods, overcrowding, or homelessness. The researchers used the rule of 30% of gross monthly income to determine high housing costs. Poor housing quality was determined by the physical condition of the dwelling. The condition “unstable neighborhoods” was determined using a variety of factors,
such as poverty, crime, or lack of job opportunities. Overcrowding was the condition of more than one person to a room. Homelessness was defined as the lack of a fixed, regular, and adequate nighttime residence (Johnson & Meckstroth, 1998). These researchers stated that little information was available on the nature of the relationship between housing instability and welfare receipt or employment status, but suggested possible impacts. These impacts included (1) high housing costs can pose serious budgeting problems and cause more frequent moves, which may disrupt transportation and child care circumstances; (2) high housing costs can affect employment status by limiting the amount of family income available to pay for employment-related expenses, i.e., clothing, child care, and transportation; (3) housing assistance levels rise and fall with family income, which creates a disincentive to earn higher wages; and (4) lack of permanent housing makes the job search difficult, since many jobs require an applicant to provide an address and telephone number for communication (Johnson & Meckstroth, 1998).

Poverty measures based solely on economic need have been criticized (Stone, 1993; Whitener, 2000). Although not using the exact conditions and criteria as Johnson & Meckstroth (1998), Whitener (2000) also used a multidimensional measure of housing disadvantage. Housing poverty was the term Whitener used to describe housing-poor households meeting one or more of the following criteria: economic need—housing costs (rent, mortgage, taxes, insurance, and repairs exceeding 50% of household income), housing quality (adequacy)—physical condition of structure severely inadequate based on HUD criteria, housing quality (crowding)—number of household members exceeds number of rooms in the unit, neighborhood quality—household bothered by crime, noise, litter, deteriorating housing, or inadequate public services. Whitener found that 21 million occupied housing units in 1995 qualified as housing poor; 89% of the units qualified based on only one criterion, economic need. In rural areas,
housing adequacy and economic need were the greatest indicators of housing poverty. Blacks and Hispanics had the largest percentages of housing poor households in rural areas.

Boushey and Gunderson (2001) categorized hardships for families moving from welfare to work into “critical” and “serious” hardships. Food, housing, childcare, and health care were the areas they examined in a sample of participants in the Survey of Income and Program Participation (SIPP) and the National Survey of American Families (NSAF). They examined families with positive income that were headed by an adult between the ages of 18 and 64. Critical housing hardships included not paying housing bills—eviction, utility disconnection, and moving in with others because they could not pay bills. Serious housing hardships measured a family’s ability to afford housing or utility bills, such as telephone service. They found that 45% of families receiving public assistance (nearly 1.9 million people) could not pay their rent, mortgage, or utilities. The study categorized the hardships by employment status—no work, some work, work full-time. The researchers found that non-working poor families were less likely to have difficulty making housing payments than working poor families. One-fifth of the non-working families had to double up with friends or family.

**Housing and Well-Being**

**Life Satisfaction**

Homeownership appears to promote life satisfaction through improvement of housing and neighborhood conditions. Research has shown that housing quality, housing type and neighborhood conditions have direct effects on residential satisfaction; housing tenure was not found to have a direct effect. Housing tenure was found to have an indirect effect on life satisfaction through housing quality, perceived crime, and residential performance (Scanlon, 1998). Rossi and Weber (1996) analyzed data from the National Survey of Families and
Households and found positive relationships between homeownership and both self-satisfaction and happiness.

Psychological Effects

In a longitudinal study of 31 impoverished Michigan families living in urban communities, Wells (2000) found a relationship between housing quality and psychological and cognitive well-being. Although the participants possessed a strong sense of self-confidence, optimism and determination, they also exhibited notable psychological distress, worried about their children, and experienced dissatisfaction with housing while living in inadequate housing. Relocation to new homes that they owned resulted in significant improvement in the participants’ psychological well-being (Wells, 2000).

White and Schollaert (1993) found that homeowners maintained higher levels of cognitive well-being than renters. They measured well-being with a Likert-type scale using the items: whole life, health, marriage, and the future, asking the respondents to indicate how they felt about each item, with seven response choices ranging from “delighted” to “terrible.” The researchers conducted a path analysis using a model including homeownership, stability, neighbors, neighborhood, and well-being. The study was conducted over a period of ten years.

Neighborhood and Community Involvement/Awareness

Homeownership usually promotes stability, with the family living in the residence for a longer period of time than someone renting the residence (Retsinas & Belsky, 2002). With a longer association in the neighborhood and community, homeowners tend to be more involved with the community (Retsinas & Belsky, 2002). White and Schollaert (1993) theorized that homeownership produced a sense of permanency and a psychological as well as an economic investment in the residential neighborhood. Homeowners had a greater concern for the welfare
of the residential environment. Research has shown that homeowners participate more in both voluntary organizations and political activity (Rossi & Weber, 1996). With a greater concern for the neighborhood, perhaps homeowners have a better awareness and knowledge of the community and its resources.

**Family Economic Stability**

Homeownership is strongly correlated with education, income, age, stage in the life cycle, marital status, race, the presence of children, and employment (Rohe, Van Zandt, & McCarthy, 2002). Boehm and Schlottmann (2002) found a correlation between homeownership and wealth accumulation. Family economic security, as defined by the National Center for Children in Poverty, is a family’s ability to meet its financial needs while promoting current and future health and well-being of all household members (Cauthen, 2002). Family economic security could also be termed economic self-sufficiency. Components necessary for economic security include income; savings, assets, and other wealth; and human and social capital. Cook et al. (2002) suggested that housing stability was a critical factor in self-sufficiency for rural low-income households. Haurin, Parcel, and Haurin (2002) included homeownership in their model analyzing child outcomes. Homeowners were more willing to invest in the home environment than renters, and stayed longer in the dwelling. These factors of greater stability increase the social capital of the household; higher levels of social capital positively influence child outcomes (Haurin et al., 2002).

**Physical Health**

There has been research on homeownership’s impact on health. Rohe, Van Zandt, and McCarthy (2002) suggested a positive association between homeownership and health, as long as the household was not in default on mortgage payments. Rossi and Weber (1996) found more
positive health self-assessments for homeowners. Page-Adams and Vosler (1997) found through their multivariate analysis of laid-off factory workers, that after controlling for income and education, homeowners reported significantly less economic strain, depression, and alcohol use than renters.

This review of literature indicated that housing circumstances—tenure, affordability, and adequacy—may not be independent of rural, low-income families’ human capital development, i.e. employment circumstances and ultimate family cognitive and economic well-being.

**Research Objectives**

Specific studies of housing, employment, and family well-being of rural, low-income families, particularly in the context of welfare reform, are limited. The specific objectives of this study concerning housing and employment circumstances were the following:

1. Describe rural low-income families on the following demographic characteristics:
   a. Age
   b. Marital status
   c. Partner status
   d. Ethnicity
   e. Number of children
   f. Total number of household members
   g. Sex of household members, as measured by the total number of male and female adults in the household; whether or not there are children of both sexes in the household; and if there are one or more children over the age of 12 in the household
h. Employment circumstances (defined as whether or not they are employed and the number of hours worked per week)

2. Determine monthly shelter costs as measured by the sum of rent/mortgage and total essential utilities.

3. Determine the housing affordability ratio and compare with the government standard.

4. Determine housing income adequacy (ability to afford area fair market rent) of rural low-income families as measured by the ratio of monthly household income (cash income plus public assistance income minus food stamps) to community fair market rent (as established by the National Low Income Housing Coalition).

5. Determine housing spatial needs, or housing adequacy, as measured by the total number of adults and children in the household, the ages and genders of both the adults and children in the household, and the presence of disabilities among adults and children in the household.

6. Determine if housing tenure (as measured by whether the study participants rent, own, or have other housing arrangements) is independent of the following income sources and types of assistance:
   a. Temporary Assistance for Needy Families (TANF)
   b. Food stamps
   c. Unemployment benefits
   d. Social Security Income (SSI)
   e. Disability benefits
   f. Cash wages
7. Determine housing instability (as measured by homelessness, housing spatial needs, housing affordability, and housing income adequacy) of rural low-income families.

8. Determine if a model exists which significantly increases the researcher’s ability to correctly classify rural low-income families on whether or not they are employed from the following personal, social, and housing circumstance measures:
   a. Housing instability (as measured by homelessness, housing spatial needs, and housing income adequacy)
   b. Age
   c. Marital status
   d. Number of children
   e. Educational level
   f. Types of assistance
   g. Sources of income
   h. Housing affordability
   i. Housing tenure
   j. Health status

Specific objectives to address housing tenure and family well-being were the following:

1. Describe rural, low-income families on the following demographic and psycho-social characteristics:
   a. Housing tenure (defined as whether they rent their home, own their home, or have another housing circumstance)
   b. Employment circumstances (defined as whether or not they are employed and the number of hours worked per week)
c. Outlook on life (as measured by the “Feelings about How Things Are Going” scale)

d. Awareness of and familiarity with community resources (as measured by the “Knowledge of Community Resources” scale)

e. Self-reported satisfaction with life

f. Economic situation (as measured by the respondents’ perception regarding the adequacy of their financial resources and total income)

g. Health status of household members (defined as whether or not selected health problems are reported to exist among one or more members of the household)

h. Shelter costs (defined as the total rent/mortgage plus essential utility costs)

i. Housing assistance (defined as whether or not the participant receives public housing assistance)

2. Determine if housing tenure (defined as whether they rent their home, own their home, or have another housing circumstance) is independent of the following economic and psychological and social characteristics:

   a. Employment circumstances (defined as whether or not they are employed and the number of hours worked per week)

   b. Outlook on life (as measured by the “Feelings about How Things Are Going” scale)

   c. Awareness of and familiarity with community resources (as measured by the “Knowledge of Community Resources” scale)

   d. Self-reported satisfaction with life
e. Economic situation (as measured by the respondents’ perception regarding the adequacy of their financial resources and total income)

f. Health status of household members (defined as whether or not selected health problems are reported to exist among one or more of the members of the household)

3. Determine if housing tenure (defined as rent, own, or other) and shelter costs (defined as high, medium or low) have significant main effects on employment circumstances (as measured by the total number of hours employed per week) and determine if a significant interaction effect exists between housing tenure and shelter costs.

4. Determine if a relationship exists between housing assistance (as measured by whether or not the participant receives public housing assistance) and family economic well-being (as measured by the respondent’s perception regarding the adequacy of their financial resources and total income).

5. Determine if a relationship exists between energy assistance (as measured by whether or not the participant receives public energy assistance) and family economic well-being (as measured by the respondent’s perception regarding the adequacy of their financial resources and total income).

**Definitions of Terms**

**Housing instability** – indicated by high housing costs (also referred to as affordability), unstable neighborhoods (employment circumstances is indicator), overcrowding (or adequacy), and homelessness.

**Affordability** - ratio of shelter cost to household income not more than 30%

**Housing wage** – the amount a full time worker (40 hours per week) must earn per
hour in order to afford a two-bedroom unit at the area’s Fair Market Rent.

Adequacy - the spatial needs are adequate for the number, age and gender of residents (dwelling size); accommodation for household members with disabilities.

Employment circumstances - the current employment status of respondent including the factors of working, not working, and number of hours worked per week.

Household income – total monthly income for household derived from the sum of wages and salaries (respondent); wages and salaries (partner); tips, commissions, overtime; Social Security Disability, Social Security Retirement/Pensions; SSI (Supplemental Security Income); TANF (Temporary Assistance for Needy Families); unemployment compensation; veterans’ benefits; child or spousal support; children’s wages; regular gifts from family/friends; and other.

Sources of assistance – assistance for the household from government/private programs including WIC, school lunch, EIC, childcare, housing, energy/fuel, transportation, diversionary, educational grants/loans, Medicaid, and other.

Housing tenure – rent, own or other living arrangement such as living with family.

Shelter costs – total monthly cost of rent/mortgage and utilities.

Family economic well-being – ability to “make ends meet” and to afford “about everything we want and still save money.”

Housing income adequacy – ratio of total household income to Fair Market Rent for nonmetro areas of participants’ states.

Methodology

The overall purpose of this study was to examine the housing circumstances of rural low-income families. This research project used Wave 1 data of the longitudinal multi-state project NC-223, “Rural Low-income Families: Tracking their Well-Being and Functioning in the
Context of Welfare Reform.” The United States Department of Agriculture granted permission to researchers from several universities with Agricultural Experiment Stations to establish this official research project that examines how recent changes in welfare policies affect rural, low-income families over time. Data for Wave 1 of the project were collected during 1999 and 2000.

Sample

The sample consisted of 410 rural low-income families from 24 counties in 14 states, with representation from all geographic regions. See Figure 1.2 for participating states. In each of the participating states, communities were selected based on the rural-urban continuum codes developed by Butler and Beale (1994) with the United States Department of Agriculture (USDA) Economic Research Service. This continuum is used to classify all counties in the United States by population size and location based upon the June 1993 definition of metropolitan and non-

Figure 1.2. Map Depicting States Participating in Wave 1 of NC-233 Study of Rural Low-income Families
metropolitan counties as determined by the Office of Management and Budget (OMB). Counties are classified on a continuum from zero to nine. Those with a zero rating are central counties metropolitan areas whose population is one million or more. Counties with a classification of nine are completely rural or had an urban population of less than 2,500 and were not adjacent to a metropolitan area. To be included in the national study, counties had to meet the standards of code six or higher on the Butler-Beale continuum.

In each of the participating states, 15-30 low-income rural families were recruited. Participants were recruited through the following programs and sources of referral: Food Stamps, WIC, Head Start, Work Centers, Social Service offices, Vocational Technical Schools, child care center for farm laborers, welfare to work classes, Cooperative Extension Service staff, 4-H parents, housing authority offices, food pantries, the Latino Migrant and Settled Workers Program, homeless shelters, and the Spanish Speaking Community Action program.

Mothers aged 18 or older with at least one child 12 years old or younger were interviewed. The family needed to be eligible for or receiving Food Stamps or Women Infants and Children (WIC) Program transfers. Preference was given to families with at least one preschool child so that childcare arrangements could be studied.

**Instrumentation**

The selected items from the instrument (see Appendix B) that were used for this study included: Feelings about How Things Are Going (Radloff, 1977), Knowledge of Community Resources (Richards, Pamulapati, Corson, & Merrill, 2000), Adult Health Survey, and Child Health Survey (Richards, Merrill, Corson, Sano, Graham, & Weber, 2000). The interview questions about life satisfaction, housing circumstances, education, employment, reported
household income and types of assistance, income adequacy, as well as demographic data, were also used in the analysis.

Data Collection

The data were collected by audiotaped personal interviews and written surveys during 1999 and 2000. The interviews were conducted in locations such as the participant’s home, agency offices, schools, etc. which were easily accessible to participants. The interviews lasted approximately two hours. Some states transcribed their interviews, while some had their interviews transcribed by another participating state. The transcribed interviews are housed in a protected site maintained by the College of Human Ecology at the University of Minnesota.

Data Coding

The centralized coding of the interview data was done by Oregon State University researchers using agreed upon themes, rules, principles, and factors for the decisions. Statistical Package for Social Sciences (SPSS Version 11.0) was used for the quantitative analysis of the data.

Limitations and Assumptions

The researcher acknowledges that this study did not use a random sample selection, and the study will be limited for generalizations. The study was also limited to households where the mother was at least 18 years of age.

The researcher assumes that the respondents gave accurate responses to the questions. It is also assumed that the interviewers recorded answers correctly and that transcription and coding were accurate.
References


CHAPTER 2

HOUSING CIRCUMSTANCES AND HUMAN CAPITAL OF RURAL, LOW-INCOME FAMILIES IN THE CONTEXT OF WELFARE REFORM

The economic development and well-being of a society are measured in the forms of its capital—financial capital, social capital, and human capital. Each form of capital influences the well-being of the society’s citizens (Brooks-Gunn, Duncan, & Maritato, 1997). Housing is a component of family financial capital, as it usually requires a large portion of family income, but it also is significant in social and human capital. The overall purpose of this study was to determine the influence of selected housing factors on the employment status of rural, low-income families.

The human need for shelter from the elements is basic. However, the psychological and sociological roles in human capital development that housing performs are often overlooked. Adequate and affordable housing can provide a place for family functioning, nurturing, nourishing, and anchoring (Morris & Winter, 1978; Stone, 1993; Ziebarth, Prochaska-Cue, & Shrewbury, 1997). The neighborhood and community where the family is housed determine access to jobs, services, stores, and the support system of family and friends. Housing plays a significant role in determining the physical and social environment in which the family lives, thereby affecting the ability for both social and human capital development of the family members and the community where they reside (Ziebarth, 2000; George, 2001).

Family financial capital is not equitable across the United States. In 2001, 32.9 million people (11.7 %) lived below poverty thresholds, up from 11.3% in 2000. The 2001 poverty rate for people living in urban areas was 11.1%, while for those living in rural areas, the rate was higher at 14.2% (U.S. Census Bureau, 2002).
Rural America comprises 2,305 counties, contains 80% of the land, and is home to 56 million people (Whitener & McGranahan, 2003). Employment opportunities in rural areas are limited, as many rural areas have low-wage service industries; high rates of unemployment, underemployment, and poverty rates; and residents have less formal education (Whitener, 2003). Many of these individuals struggle daily to meet the basic needs of food, clothing, and shelter, having to depend upon various forms of assistance from government, family, and friends to stretch their monthly incomes (Edin & Lein, 1997).

Public assistance to low-income families underwent its most dramatic change in policy with the passage of the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996. The most significant change was the requirement for a family member to seek employment, regardless of where they live. There are also time limits for families to receive assistance and a minimum number of hours a recipient must work per week. The overall goal of welfare reform is to increase human capital to the point that families are able to be self-sufficient. Economic self-sufficiency for families requires sustained, adequate employment for parents. Periods between jobs can drain family financial resources and affect one’s self-esteem and confidence (Edin & Lein, 1997).

Much of the housing and welfare reform research has been conducted with urban residents, with limited investigation on the effects of this legislation on rural families (Zimmerman & Garkovich, 1998). It is important for policymakers to understand the unique conditions and needs of rural America in order to establish viable initiatives for the support of rural families in the context of welfare reform.

In order for rural communities to be strong and viable, they need strong and healthy families. Changes in the welfare system have created a dynamic, multifaceted environment that
provides challenges and opportunities to families, communities, and public agencies. Critics of the changes in the welfare system argue that many families in rural areas will have a lower level of living after leaving welfare due to the barriers facing rural communities. Low-income rural families face self-sufficiency barriers such as fewer educational and employment opportunities, lower-wage jobs, little public transportation, limited childcare options and limited access to social support (Braun, Lawrence, Dyk, & Vandergriff-Avery, 2002; Cook, Crull, Fletcher, Hinnant-Bernard, & Peterson, 2002; Lichter & McLaughlin, 1995). Katras (2003) found that rural low-income families relied on social support systems for transportation and child care needs in order to make ends meet. Overcoming these challenges and reducing barriers to self-sufficiency may require different policy decisions and human service outreach efforts than those needed for urban areas.

Researchers have suggested “housing instability” to be a barrier to employment and family economic stability. Johnson and Meckstroth (1998) described housing instability to be the conditions of high housing costs, poor housing quality, unstable neighborhoods, overcrowding, and homelessness. The researchers suggest that one or a combination of these housing instability factors will require families to continue to rely on public assistance or even return to public assistance.

Limited research has been conducted on the relationship between housing and employment, particularly in rural areas. Hence, questions that could be addressed are: Do rural low-income residents have affordable, adequate housing? What role does housing play in the economic well-being of rural families and their ability to make ends meet? Is housing tenure independent of sources of income and assistance? Can certain housing circumstances help predict the employment situation? Knowing the factors that help predict employment,
policymakers can make better informed decisions in developing public assistance programs for citizens. Cook et al. (2002) suggested further research is needed to learn about housing security and how families meet their basic needs for shelter in rural areas. Using the housing instability taxonomy of Johnson and Meckstroth (1998) and Cook et al.’s suggestion of a targeted research agenda to aid housing policy, this research study examined selected measurements of housing instability and other financial capital, human capital, and social capital factors as possible predictors of employment circumstances. It used Wave 1 data of the longitudinal multi-state project NC-223, “Rural Low-income Families: Tracking their Well-Being and Functioning in the Context of Welfare Reform.” The national project funded by the United States Department of Agriculture has allowed researchers from several universities with Agricultural Experiment Stations to examine how the recent changes in welfare policies affect rural, low-income families over time. Data used for this analysis were collected in 1999 and 2000 from Oregon, New Hampshire, Kentucky, Louisiana, Michigan, California, Massachusetts, New York, Indiana, Ohio, Nebraska, Maryland, Wyoming, and Minnesota. For more information about this project, visit www.ruralfamiesspeak.org

The model by Beaulieu and Mulkey (1995) provides the framework for this study (see Figure 2.1). Factors that affect an individual’s human capital investment and future earnings begin in the home, with the family attributes of financial, human, and social capital, that influence the investment decisions and subsequent employment status and income level. Simultaneously, the community where one resides provides structural and social aspects that help shape the person’s human capital investment decisions that also affect the employment situation and income.
The theoretical framework comes from the family economics and human capital and economic development literature. The theoretical perspective based on capital in its various forms (economic, human, social, cultural, and physical) to analyze the social and economic aspects of everyday life forms the basis for this study (Boisjoly, Duncan, & Hofferth, 1995; Putnam, 1995). The literature review and analysis are framed by the model in Figure 2.1, and discriminant analysis used for statistical analysis.

**Family Attributes**

- Financial capital
  - *Income
  - *Expenses
  - *Housing instability
- Human capital
  - *Education
  - *Health
  - *Demographics
- Social capital

**Community Attributes**

- Structural factors
  - *Housing market
  - Job market
- Social capital
  - *Sources of assistance

**Human Capital Investments**

- Education
- Health care

*Employment

---

**Figure 2.1 Human Capital Development Model**

Review of Literature

Family Attributes

Financial Capital

Research conducted by Passero (1996) of 6,307 households receiving public assistance found that expenditures of families varied widely, depending upon the employment status of adults in the household, marital status of the household head, and the presence of children. He found that dual-parent households spent 20% of their total spending on food and 34% on housing. Single-parent families had lower total expenditures and reported a larger share of expenses on food and housing, 28% and 41%, respectively.

Pearce (2001) reported that costs for housing and child care for young children often total more than half of family monthly expenses, while food totaled only 12-15%, depending upon where one lives. The Housing Assistance Council (1997) reported that more than 40% of rural poverty-level households spent over half of their income for housing.

A multitude of income sources are mentioned in the literature for low-income families, with wages from employment being the source welfare reform is encouraging for as many families as possible. Temporary Assistance for Needy Families (TANF), unemployment and disability benefits, and Social Security are possible sources of monthly cash assistance. TANF benefits are used to assist needy families so that children can be cared for in their own homes; reduce dependency of needy parents by promoting job preparation, work, and marriage; prevent out-of-wedlock pregnancies; and encourage the formation and maintenance of two-parent families (Administration for Children & Families, 2003). Sullivan (2001) found from a sample of 127 recipients of Temporary Assistance for Needy Families (TANF) in Georgia that barriers they had to employment included: lack of employment support, insufficient human capital, poor
health, and employment background. These barriers were significant predictors of earned income. Past income was shown to be a predictor of future income. Barriers that have been significantly associated with employment include poor health, receipt of government assistance, area of residence, lack of awareness of transportation service, and lack of ownership of an available, reliable vehicle (Fletcher, Garasky, & Jensen, 2002).

Cook et al. (2002) studied 17 rural female-headed families in Iowa receiving welfare benefits. Wages reported ranged from $1.75 per hour to $12.50 per hour. The number of hours worked per week varied depending upon the participant’s health or the health of her children. They reported that, in order to afford Fair Market Rent for rural Iowa, the respondents would have had to earn $9.21 per hour (2002).

Mikesell and Wallace (2000) compared low-income rural and urban homes and neighborhoods using data from the 1997 American Housing Survey. They found that wage-dependent rural households, those families whose wages or salary earnings accounted for at least half of the annual household income, were more likely to have housing difficulties. Housing difficulties included excessive housing costs, crowding, physical inadequacies, and lower satisfaction with home or neighborhood. Nearly 4.3 million of the 22 million rural households received at least half of their income from wage and salary earnings, with most of these receiving little or no additional income. Wage-dependent households received government rental housing assistance much less often than other low-income households. Wage-dependent homeowners were most likely to have received government housing assistance. Fewer wage-dependent households owned their own homes.

Housing is both a necessity of life and a commodity that is market-driven. It also impacts all areas of an individual’s life. If a household’s housing is adequate, it will provide shelter for
the physical and emotional needs of privacy and security for its members. The neighborhood and community where one lives determine access to jobs, services, stores, and support system of family and friends. Thus, the amount a household can pay for housing plays a significant role in determining the social environment in which the family lives, thereby affecting the ability for both social and human capital development of the family members and the community where they reside (Clay & Schwarzweller, 1991; Edelman & Mihaly, 1989; Shlay, 1995; Stone, 1993; Ziebarth, 2000).

The cost for shelter for a family usually takes the largest and first portion of the household income (Cook et al., 2002; Stone, 1993), unless the family receives some form of housing assistance, whether the assistance is in the form of government subsidies or family/friend/social support. Total shelter costs are those costs associated with the physical dwelling unit, including rent or mortgage payments, property insurance and taxes, and utilities (electricity, gas, and water/sewer) (Cook et al., 2002; Ziebarth et al., 1997). After shelter needs are met, the other household necessities can be purchased, such as food, clothing, medical care, transportation, etc. (Shlay, 1995). If there is any remaining household income for discretionary purposes, then household and individual wants can be purchased or investments made in the forms of savings or human capital (i.e. education). In some cases, a family’s financial circumstances may require them to choose between paying for rent or utilities and food or medical needs (Cook et al., 2002). The factors of savings and human capital investments required for family economic stability (Cauthen, 2002) might be out of reach for rural, low-income families. High shelter costs may be a barrier to achieving self-sufficiency. According to Ziebarth et al. (1997) families paying more than 30% of their adjusted gross income for housing and basic utility costs were considered cost burdened. Combs, Combs, and Ziebarth (1995) used
the term “housing burdened” to identify households in poverty whose housing costs significantly contributed to the monetary difficulties.

In summary, housing costs for low-income families take a large portion of the family monthly budget, with many families having housing expenses greater than the recommended standard of 30% or less of income. From previous research findings, the conclusion could be drawn that housing costs pose a burden to families, limiting available money for other necessities and investments, both monetary as well as personal.

**Human and Social Capital**

Factors cited most often that affect human capital development are education and health (Schultz, 1981; Seiling, Bauer, Braun, Dolan, and Lawrence, 2001). One’s education includes formal and informal schooling and training and work experience. Factors that affect the ability for someone to increase their human capital through education, training, and work experience include the community where one lives and the opportunities available in the community. The economic and personal circumstances of households sometimes result in school being interrupted to meet family challenges, with the return to school being postponed because of financial issues or circumstances requiring the individual to care for children. An individual’s work history also affects the ability to be hired initially as well as to advance. Rural communities do not always have the available positions for this needed opportunity.

Human capital theory considers an individual’s state of health as a stock. This stock’s quality is influenced by genetics, lifestyle, and other acquired factors. Health stock depreciates over time and at an accelerated rate as the individual ages. Investments in the health of human capital include acquisition and maintenance costs, as with any asset. These costs include child care, nutrition, clothing, housing, medical services, and personal care (Schultz, 1981). Both
personal and company investments in health capital will contribute to a healthy, productive workforce. Access to and use of adequate medical care is necessary for many to stay healthy. Limited resource families in rural areas do not always have access to needed medical services nor do they have insurance or personal financial means to afford care (Philanthropy News Digest, 2002; Watt, 2000). An individual with poor health may have interruptions in schooling, which inhibits the education and training component. An individual who is employed and encounters health problems may have absences from work, which can reduce pay and on the job training. If work is missed often enough, the individual may be fired. Some health problems may lessen the individual’s ability to perform work tasks (Seiling, et. al, 2001).

Adequate housing is a form of investment in the health of human capital. The norms for housing space were established by the American Public Health Association and the U.S. Department of Housing and Urban Development (as cited in Morris & Winter, 1978). The space recommendations were based upon activities normally conducted in a dwelling unit and the number of persons in a household. One of the standards currently used is based upon the persons-per-room ratio. This ratio is determined by dividing the number of persons in the household by the number of rooms (excluding bathrooms) in the dwelling space. Researchers consider a housing unit “overcrowded” with more than one person per room (Johnson & Meckstroth, 1998; Mikesell, 2000). The 1971 APHA model housing code recommends the maximum person-per-room ratio to be two to one (Morris & Winter, 1978).

For most families, housing spatial needs will change throughout the life cycle as children develop and other family members grow older. A household’s housing need could change substantially over time and the dwelling may or may not remain adequate to meet those changing spatial needs. Housing adequacy is also challenged with the presence of disabilities by any of
the household members. Physical disabilities may require accommodations in the way of ramps, wider doorways, accessible bathrooms, absence of thresholds, lever door handles, lower electrical outlets, etc. Rural homes on average are smaller and more likely to have physical inadequacies compared to urban homes (Mikesell, 2000).

A house provides shelter as well as other benefits (Shlay, 1995). Homelessness, lacking a permanent residence, takes a toll on adults and children, affecting health, education, and emotional development. Edelman and Mihaly (1989) cited three trends that contributed to increasing homelessness: decreasing household incomes among the poor and near poor, especially those headed by a man or woman under 25; decreasing supply of affordable housing; and cuts in federal low-income housing assistance. Main (1998) cited the primary causes for homelessness as the housing market, unemployment and poverty, the economy in general, social policies, and disabilities among the homeless.

“Doubling up” has been found to be a strategy to make ends meet (Boushey & Gundersen, 2002; Cook et al., 2002; Edin & Lein, 1997). Cook et al. (2002) found that respondents did not think of informal housing arrangements from family and friends as “housing assistance.” Assistance from family and friends did enhance housing affordability and brought at least temporary stability to the Iowa families in the study.

Housing instability interferes with success in other basic tasks, especially employment, education and childrearing (National Low Income Housing Coalition, 2003). Housing instability, according to Johnson and Meckstroth (1998), is a housing circumstance having conditions of high housing costs, poor housing quality, unstable neighborhoods, overcrowding, or homelessness. The researchers used the rule of 30% of gross monthly income to determine high housing costs. Poor housing quality was determined by the physical condition of the
dwelling. The condition “unstable neighborhoods” was determined using a variety of factors, such as poverty, crime, or lack of job opportunities. Overcrowding was the condition of more than one person to a room. Homelessness was defined as the lack of a fixed, regular, and adequate nighttime residence (Johnson & Meckstroth, 1998). These researchers suggested, though admitting the lack of empirical evidence, there is a relationship between housing instability and both welfare receipt and employment status.

Poverty measures based solely on economic need have been criticized (Stone, 1993; Whitener, 2000). Although not using the exact conditions and criteria as Johnson and Meckstroth (1998), Whitener (2000) also used a multidimensional measure of housing disadvantage. Housing poverty was the term he used to describe housing-poor households meeting one or more of the following criteria: economic need—housing costs (rent, mortgage, taxes, insurance, repairs) exceeding 50% of household income, housing quality (adequacy)—physical condition of structure severely inadequate based on HUD criteria, housing quality (crowding)—number of household members exceeds number of rooms in the unit, neighborhood quality—household bothered by crime, noise, litter, or deteriorating housing, or inadequate public services. He also found that 21 million occupied housing units in 1995 qualified as housing poor; 89% of the units qualified based on only one criterion, economic need. In rural areas, housing adequacy and economic need were the greatest indicators of housing poverty. Blacks and Hispanics had the largest percentage of housing poor households in rural areas (Whitener, 2000).

Boushey and Gunderson (2001) categorized hardships for families moving from welfare to work into “critical” and “serious” hardships. Food, housing, childcare, and health care were the areas they examined in a sample of participants in the Survey of Income and Program
Participation (SIPP) and the National Survey of American Families (NSAF). They examined families with positive income that were headed by an adult between the ages of 18 and 64. Critical housing hardships included not paying housing bills— eviction, utility disconnection, and moving in with others because they could not pay bills. Serious housing hardships measured a family’s ability to afford housing or utility bills—still struggled to make ends meet (i.e. losing telephone service). They found that 45% of families receiving public assistance (nearly 1.9 million people) could not pay their rent, mortgage, or utilities. The study categorized the hardships by employment status—no work, some work, work full-time. The researchers found that poor families who do not work were less likely to have difficulty making housing payments than working poor families. One-fifth of the non-working families had to double up with friends or family.

The social capital provided by one’s family allows for the support system found among family, friends, and firms, or the “F-connection” as Ben-Porath (1980) refers to this economic functioning. The social capital provided by this network draws upon the relationships among persons as a resource for the development of human capital (Coleman, 1988).

**Community Attributes**

**Structural Factors**

Structural factors provided by a community also play a part in the human capital development and economic self-sufficiency of its residents. Available, adequate, and affordable housing; infrastructure; transportation; and a good educational system are some of the attributes a community can provide that may facilitate the development of its residents. According to the National Low Income Housing Coalition (2003), there exists a gap that widens each year for rental housing affordability. The Coalition computes the amount of money a household must
earn in order to afford a rental unit of a range of sizes at the area’s Fair Market Rent (FMR), 
based upon the generally accepted affordability standard of paying no more than 30% of income 
for housing costs. Data for the calculations are pulled from the U.S. Census Bureau and the U.S. 
Department of Housing and Urban Development and are categorized by state, delineating urban 
and rural areas. The national median Housing Wage for a two-bedroom unit in 2002 was $14.66 
(National Low Income Housing Coalition, 2003).

In their study of rural Iowa low-income families, Cook et al. (2002) found that for their 
geographic area, families would have to work 70 hours per week at a minimum wage job to 
afford the FMR for a two-bedroom unit at $409 per month. In 2003, the least affordable 
nonmetro areas were in the states of Hawaii, Rhode Island, Alaska, Connecticut, Massachusetts, 
and New Hampshire, with housing wages (those wages required for an individual to earn while 
working 40 hours per week to be able to afford market housing costs) ranging from $18.20 to 
$13.37 (National Low Income Housing Coalition, 2003).

Table 2.1 shows the Fair Market Rents (FMR) and housing wages for both two and three 
bedroom units for the nonmetro areas of the 14 states participating in the study, which represent 
each geographic region of the United States. Louisiana had the lowest FMR of $399 for a two 
bedroom and $525 for a three bedroom dwelling. Massachusetts had the highest, with $792 and 
$1,000, respectively (National Low Income Housing Coalition, 2003). Accordingly, Louisiana 
had the lowest housing wage and Massachusetts the highest (National Low Income Housing 
Coalition, 2003).

Social Capital

The community where one resides can also provide social capital in the form of 
relationships with friends, businesses, and community service and government support agencies.
Knowledge of and ability to access sources of assistance in one’s community can affect the circumstances of limited-resource families. If families receive multiple sources of assistance, this is an indicator of trustworthiness of people in the community to provide needed resources. Social capital is embodied in the relationships among persons (Coleman, 1988).

Table 2.1. 2003 Fair Market Rent and Housing Wages at 40 Hours per Week By State for Two and Three Bedroom Dwellings.

<table>
<thead>
<tr>
<th>State</th>
<th>Fair Market Rents Two/Three Bedroom</th>
<th>Housing Hourly Wages Two/Three Bedroom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Massachusetts</td>
<td>$792 1,000</td>
<td>$15.23 19.38</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>695 903</td>
<td>13.37 17.37</td>
</tr>
<tr>
<td>California</td>
<td>617 854</td>
<td>11.87 16.42</td>
</tr>
<tr>
<td>Maryland</td>
<td>617 817</td>
<td>11.86 15.70</td>
</tr>
<tr>
<td>New York</td>
<td>583 761</td>
<td>11.21 14.63</td>
</tr>
<tr>
<td>Oregon</td>
<td>548 754</td>
<td>10.54 14.49</td>
</tr>
<tr>
<td>Wyoming</td>
<td>500 671</td>
<td>9.62 12.99</td>
</tr>
<tr>
<td>Minnesota</td>
<td>482 608</td>
<td>9.26 11.70</td>
</tr>
<tr>
<td>Michigan</td>
<td>466 609</td>
<td>8.96 11.71</td>
</tr>
<tr>
<td>Ohio</td>
<td>464 596</td>
<td>8.93 11.47</td>
</tr>
<tr>
<td>Indiana</td>
<td>461 592</td>
<td>8.86 11.38</td>
</tr>
<tr>
<td>Nebraska</td>
<td>436 559</td>
<td>8.38 10.75</td>
</tr>
<tr>
<td>Kentucky</td>
<td>402 520</td>
<td>7.73 10.00</td>
</tr>
<tr>
<td>Louisiana</td>
<td>399 525</td>
<td>7.67 10.09</td>
</tr>
</tbody>
</table>

Whether or not they are aware of its availability, most welfare recipients do not receive government housing assistance (Cook et al., 2002). In a study of 17 families in Iowa, Cook et al. (2002) found that 16 of them rented their dwellings. Eleven of the families had no housing assistance and paid rents between $150 and $600 per month. Those families receiving government assistance for reduced rent and utilities paid rents ranging from $0 to $155 per month.
Passero (1996) found that the most common combination of types of assistance and income for dual-parent households receiving public assistance was welfare, food stamps, and Medicaid. Support from public housing and government housing was rare.

A study of Indiana and Delaware families, both cohorts combining urban and rural areas revealed that the additional time families lived in public housing or used vouchers was associated with increased employment and earnings and reduced welfare receipt. Nationally, 30% of families on welfare received housing assistance (Lee, Beecroft, Khadduri, & Patterson, 2003). Employment

According to the Bureau of Labor Statistics (BLS), the national unemployment rate was 6% in April 2003. Of the fifty United States, Oregon had the highest unemployment rate in March 2003, at 7.6%, which is one of the states included in the sample. Table 2.2 shows the unemployment rates for the 14 states examined in this study (Bureau of Labor Statistics, 2003). Sustained, adequate employment requires available job opportunities, and the necessary knowledge, skills, and abilities to perform the job (DeSimone & Harris, 1998). An individual also requires transportation to the job and care of children while working. Transportation and child care have been cited to be barriers to self-sufficiency, as well as the unavailability of well-paying jobs, health services, and support networks (Fletcher, Flora, Gaddis, Winter, & Litt, 2000).

With employment being the desired outcome of welfare reform, this study was framed by the human capital development model (see Figure 2.1) using the factors presented in the literature as possible barriers to and supports for employment for rural, low-income families in the context of welfare reform. Qualitative studies have suggested indicators, agency reports have
suggested predictors, and some studies have used large national databases, but no empirical study has been conducted to test the model. This study was designed to give credence to the theory underlying the model using a sample of rural families to provide a baseline for comparison and to track their situations and journeys toward economic self-sufficiency as measured by employment and earnings.

**Method**

**Sample**

The sample consisted of 410 rural low-income families from 24 counties in 14 states, with representation from all geographic regions of the United States. In each of the states, communities were selected based on the rural-urban continuum codes developed by Butler and Beale (1994) with the United States Department of Agriculture (USDA) Economic Research

<table>
<thead>
<tr>
<th>State</th>
<th>Unemployment Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oregon</td>
<td>7.6</td>
</tr>
<tr>
<td>Michigan</td>
<td>6.7</td>
</tr>
<tr>
<td>California</td>
<td>6.6</td>
</tr>
<tr>
<td>Louisiana</td>
<td>6.3</td>
</tr>
<tr>
<td>Ohio</td>
<td>6.1</td>
</tr>
<tr>
<td>New York</td>
<td>6.0</td>
</tr>
<tr>
<td>Kentucky</td>
<td>5.7</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>5.7</td>
</tr>
<tr>
<td>Indiana</td>
<td>4.7</td>
</tr>
<tr>
<td>Maryland</td>
<td>4.5</td>
</tr>
<tr>
<td>Minnesota</td>
<td>4.4</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>4.1</td>
</tr>
<tr>
<td>Wyoming</td>
<td>4.1</td>
</tr>
<tr>
<td>Nebraska</td>
<td>3.7</td>
</tr>
</tbody>
</table>
This continuum is used to classify all counties in the United States by population size
and location.

In each of the states, 15-30 low-income rural families were selected using a purposive
sampling procedure. Participants were recruited through the following programs and sources of
referral: Food Stamps, WIC, Head Start, Work Centers, Social Service offices, Vocational
Technical Schools, child care center for farm laborers, welfare to work classes, Cooperative
Extension Service staff, 4-H parents, housing authority offices, food pantries, the Latino Migrant
and Settled Workers Program, homeless shelters, and the Spanish Speaking Community Action
program. Responses of the mothers age 18 or older with at least one child 12 years old or
younger were included in this study. The mothers were eligible for or receiving Food Stamps or
Women Infants and Children (WIC) Program transfers. Preference was given to families with at
least one preschool child so that childcare arrangements could be studied. Data collection was
done through audiotaped personal interviews and written surveys. The interviews were
conducted in locations with consideration given to the accessibility for the participants, such as
the participant’s home, agency offices, schools, etc. The interviews lasted approximately two
hours.

Instrumentation

Selected questions and survey instruments from the national study instrument were used
for the analysis of housing, human capital, and employment status. The measures included the
following scales/groups of items: (1) Feelings about How Things Are Going (Radloff, 1977), (2)
Adult Health Survey (Richards, Merrill, Corson, Sano, Graham, & Weber, 2000), and (3)
Making Ends Meet Scale. Scores from these instruments were used to determine the
independent variables of mental and physical health well as household income adequacy. The
interview questions about housing and utility costs, housing tenure and homelessness; education level; age; employment circumstances of respondent; reported household income and its sources; types of assistance received; marital status; ethnicity; household size; and number of children were also used in the analysis as independent variables.

The dependent variable of participant’s employment status was coded as “0” for not employed and “1” for employed at the time of the interview. Although income was also given in the human capital development model of Beaulieu and Mulkey (1995), that variable was not examined as all the families in the sample were considered low-income, and the variable therefore was restricted in its range of measurement.

Results

Family Attributes

Human Capital

Selected demographic characteristics of the households are part of the “Human Capital” portion of the Family Attributes aspect of the model on which the study is based (See Figure 2.1). One of the variables on which participants were described was their age (as of 12/31/00). The age of respondents ranged from 18 to 58 years with a mean value of 29.2 (SD = 7.42) (see Table 2.3).

Table 2.3. Description of Rural, Low-income Families on Human Capital Factors

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>410</td>
<td>29.2</td>
<td>7.42</td>
<td>18.0</td>
<td>58</td>
</tr>
<tr>
<td>Number of children</td>
<td>410</td>
<td>2.3</td>
<td>1.31</td>
<td>1.0</td>
<td>10</td>
</tr>
<tr>
<td>Total family members</td>
<td>410</td>
<td>4.5</td>
<td>1.78</td>
<td>2.0</td>
<td>11</td>
</tr>
<tr>
<td>Mental health</td>
<td>410</td>
<td>17.4</td>
<td>11.36</td>
<td>0.0</td>
<td>53</td>
</tr>
<tr>
<td>Physical health</td>
<td>410</td>
<td>4.6</td>
<td>3.90</td>
<td>0.0</td>
<td>22</td>
</tr>
<tr>
<td>Employment (Number of hours worked per week)</td>
<td>209</td>
<td>32.3</td>
<td>11.60</td>
<td>1.5</td>
<td>55</td>
</tr>
</tbody>
</table>
The mean number of children reported was 2.3 (SD = 1.31), with values ranging from 1 to 10 children. Total number of family members ranged from 2 to 11, with a mean of 4.5 (SD = 1.78).

The mental and physical health scores of the respondents were also examined. Mental health was operationalized in this study as the composite scores of participants’ responses to the “Feelings about How Things Are Going” section of the questionnaire that included the Center for Epidemiologic Studies Depression Scale (Radloff, 1977). Using the four-point scale of “Rarely or none of the time” to “Most or all of the time” participants were asked to best describe how they felt during the week of the time of the interview on items such as, “I did not feel like eating,” “I had crying spells,” and “I thought my life had been a failure.” The measure was expressed as a continuous variable, derived by summing the scores from zero to three for the 20 items, yielding a possible range of scores from 0 to 60. Anyone with a score of 16 or higher is classified as at risk for clinical depression (Radloff, 1977). The mean mental health score of respondents was 17.4 (SD = 11.36) with a range of 0 to 53.

To measure physical health in this study, a list of 34 possible health problems, such as diabetes, physical disability, heart problems, and arthritis, was presented to the respondents and asked that they identify all that applied to them. These measures were then coded as “0” if not marked and “1” if marked. The overall physical health score was operationalized as the sum of the number of health problems reported. The mean was 4.6 (SD = 3.9) with a minimum of 0 and a maximum of 22.

Analysis of the employment circumstances of the respondents revealed 49% (n = 201) were not working at the time of the interviews, while 51% (n = 209) were working. The mothers who were working reported a range of 1.5 to 55 hours worked per week. The mean
number of hours worked per week by the mothers was 32.3 (SD = 11.6). The largest group of
the participants (n = 183, 44.6%) indicated that they were married while almost one-fourth (n =
102, 24.9%) reported that they were single. Other responses included: living with a partner (n =
61, 14.9%), divorced (n = 37, 9.0%), and separated (n = 27, 6.6%).

Respondents were asked to give the highest level of education they completed. The
largest group of participants indicated that they had completed high school or received a GED
but had completed less than a college degree (n = 269, 66.0%). In addition, 125 (30.6%) reported
that they had completed less than a high school diploma, and 14 (3.4%) reported
completion of a college degree or higher level of education.

Financial Capital Factors

Housing circumstances were considered to be a factor under the financial capital portion
of the model, as housing can be both an expense and an asset. The housing tenure of the
respondents was divided into three categories—rent, own or other circumstance. Renters made
up 60.9% of the sample; owners 19.8%. Over 19% (19.3%) had “other” housing arrangements.
Forty-nine respondents (14%) reported that they had been homeless within the last two years or
had to live with someone else.

“Housing cost” was determined by summing the rent/mortgage and essential utilities
(electricity, gas, water, and garbage/sewer) reported by respondents. The mean housing cost was
$321 per month (SD = 249.29), with a minimum of $0 and a maximum of $1,176.

The measure for housing affordability was determined by dividing the monthly housing
cost by total monthly household income, yielding a mean of .30 (SD = .328), or 30% spent on
housing and essential utilities per month. This measure ranged from 0 to 3.53, indicating that
some participants had no housing costs, while some had housing costs three and one-half times
the families’ monthly incomes. Nearly 65% of the respondents had a ratio of 0.30 or less, while 35% had ratios greater than 0.30. A ratio greater than 0.30 is considered to be housing cost burdened (Combs, et. al, 1995; Ziebarth et. al, 1997).

Participants were asked whether or not they had difficulty each month making ends meet to purchase items from a list of ten human capital necessities. Respondents could select as many of the items as applicable to their situation. Difficulty making ends meet to purchase clothing and food were the items most frequently cited (see Figure 2.2). In addition, an ability to make ends meet score was computed as the total number of items identified. When this score was determined, the range of measurements was from 0 to 10, with a mean score of 3.0 (SD = 2.5). To determine if the overall making ends meet score was related to Housing Costs, a Pearson-Product Moment correlation coefficient was calculated between the two measures. The relationship ($r = .12$) was statistically significant ($p<.020$), indicating that respondents with higher housing costs tended to report higher numbers of essential items for which they had trouble making ends meet each month.

Another housing variable on which respondents were described was their total spatial need. The measure was computed as the total number of family members with the following adjustments made to the score as appropriate: One point was added to the spatial needs scores if there was a child in the home over the age of 12 who was of a different gender than any other child in the home. One point was also added to the spatial needs score if any member of the household was reported as having a permanent disability. The mean spatial need of the study participants was 4.66 (SD = 1.92), indicating that the mean number of rooms needed in the housing of study participants was approximately five.
Study participants were also asked to indicate whether or not they received income from selected sources. The source reported most frequently was “Cash Wages” (n=296, 74%) while almost half (n=190, 49%) reported that they received income from “Food Stamps.” Other income sources reported included: TANF (n=82, 20%); Social Security Income (SSI) (n=36, 8.85); Social Security Disability Income (n=20, 4.9%); and Unemployment (n=9, 2.2%).

Figure 2.2 Monthly Human Capital Expenses Contributing to Difficulty Making Ends Meet.

To determine if housing tenure was independent of sources of income, chi-square values were determined for eight sources of income. Four of the sources of income were found to have significant values, indicating that they were not independent of the respondents’ housing tenure (see Table 2.5). The income source that was found to be most highly related to housing tenure was whether or not they received housing assistance ($X^2 = 52.31, p < .001$). Table 2.5 shows the
nature of the association between these variables, which was such that a higher percentage of
those who indicated that they did receive housing assistance reported their housing tenure as
“Rent” (94.3% vs. 51.4%). Additionally, a higher percentage of those who did not receive
housing assistance reported their housing tenure as “Own” (24.8% vs. 2.3%) and “Other” (23.8%
vs. 3.4%).

Whether or not the respondents received food stamps ($X^2 = 29.56, p < .001$) and TANF
($X^2 = 14.00, p < .001$) as sources of income were also found to have significant chi-square
values, indicating that they were also related to the housing tenure. The nature of the association

<table>
<thead>
<tr>
<th>Variable</th>
<th>$X^2$</th>
<th>df</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing Assistance</td>
<td>52.31</td>
<td>2</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Food Stamps</td>
<td>29.56</td>
<td>2</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>TANF</td>
<td>14.00</td>
<td>2</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Cash Income</td>
<td>13.17</td>
<td>2</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Unemployment</td>
<td>5.12</td>
<td>2</td>
<td>0.077</td>
</tr>
<tr>
<td>Energy Assistance</td>
<td>4.09</td>
<td>2</td>
<td>0.129</td>
</tr>
<tr>
<td>SSI</td>
<td>1.65</td>
<td>2</td>
<td>0.437</td>
</tr>
<tr>
<td>SSDI</td>
<td>1.20</td>
<td>2</td>
<td>0.548</td>
</tr>
</tbody>
</table>

with each of these variables was the same as for the variable, housing assistance. In each case,
those who reported that they did receive the selected source of income had a higher percentage of
respondents who were renters and those who did not report the source of income had higher
percentages of those who reported that they owned their homes and those that had “Other”
housing tenure (see Tables 2.7 and 2.8).
Table 2.5. Cross Tabulation of Whether or Not Rural, Low Income Families Receive Housing Assistance and Housing Tenure Status

<table>
<thead>
<tr>
<th>Housing Tenure Status</th>
<th>Receive Housing Assistance</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>%</td>
</tr>
<tr>
<td>Rent</td>
<td>160</td>
<td>51.4</td>
</tr>
<tr>
<td>Own</td>
<td>77</td>
<td>24.8</td>
</tr>
<tr>
<td>Other</td>
<td>74</td>
<td>23.8</td>
</tr>
<tr>
<td>Total</td>
<td>311</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: Chi-Square Value = 52.31  \( p < 0.001 \).

Table 2.6. Cross Tabulation of Whether or Not Rural Low Income Families Receive TANF Funding and Housing Tenure Status

<table>
<thead>
<tr>
<th>Housing Tenure Status</th>
<th>Receive TANF</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>%</td>
</tr>
<tr>
<td>Rent</td>
<td>179</td>
<td>56.8</td>
</tr>
<tr>
<td>Own</td>
<td>73</td>
<td>23.2</td>
</tr>
<tr>
<td>Other</td>
<td>63</td>
<td>20.0</td>
</tr>
<tr>
<td>Total</td>
<td>315</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: Chi-Square Value = 14.00  \( p < 0.001 \).

Table 2.7. Cross Tabulation of Whether or Not Rural Low Income Families Receive Food Stamps and Housing Tenure Status

<table>
<thead>
<tr>
<th>Housing Tenure Status</th>
<th>Receive Food Stamps</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>%</td>
</tr>
<tr>
<td>Rent</td>
<td>95</td>
<td>48.7</td>
</tr>
<tr>
<td>Own</td>
<td>58</td>
<td>29.7</td>
</tr>
<tr>
<td>Other</td>
<td>42</td>
<td>21.5</td>
</tr>
<tr>
<td>Total</td>
<td>195</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: Chi-Square Value = 29.56  \( p < 0.000 \).
Those respondents reporting cash as an income source had a higher percentage who indicated that their housing tenure was “Own.” Cash as an income source was also not independent of housing tenure ($\chi^2 = 13.17, p < .001$). Additionally, those who did not report cash as a source of income had higher percentages that indicated their housing tenure was “Rent” and “Other” (see Table 2.9).

Table 2.8. Cross Tabulation of Whether or Not Rural Low Income Families Receive Cash Wages and Housing Tenure Status

<table>
<thead>
<tr>
<th>Housing Tenure Status</th>
<th>Receive Cash Wages</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Yes</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Rent</td>
<td>77</td>
<td>75.5</td>
<td>160</td>
<td>55.4</td>
</tr>
<tr>
<td>Own</td>
<td>11</td>
<td>10.8</td>
<td>67</td>
<td>23.2</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
<td>13.7</td>
<td>62</td>
<td>21.5</td>
</tr>
<tr>
<td>Total</td>
<td>102</td>
<td>100</td>
<td>289</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: Chi-Square Value = 13.17 $p < .001$.

Community Attributes

Using the Fair Market Rents for nonmetro areas in each of the participating states and total monthly income, a Housing Income Adequacy ratio was determined for three-bedroom units. To determine this measure, the Fair Market Rents for the nonmetro areas for each participating state were corresponded to the cases for the appropriate states. This figure was then divided by the total monthly income of the families. This measure was derived rather than comparing the hourly housing wage with the hourly wages of the participants because many of the participants had more than one job with different hourly wage rates. For three-bedroom units, the mean housing income adequacy ratio was .85, with a minimum of .13 and a maximum of
7.33. With the reported incomes of the participating families, paying Fair Market Rent for housing would require an average of 85% of the monthly income.

Although some of the sources of income for the families were forms of government assistance (i.e. TANF and food stamps) those forms aided the financial capital of the families. Other sources of support and assistance, without cash values attached to them, were examined. Examples of these types of assistance included Medicaid; Women, Infant and Children (WIC); Earned Income Credit (EIC); and Housing Assistance and were considered under the “Community Attributes” section of the model as social capital support. The majority of the participating families received support from Medicaid, the School Lunch Program, and WIC. Housing assistance was reported by 22% of the families; while education grants or loans (for human capital investments) were reported by only 11% (see Figure 2.3).

**Employment**

Discriminant analysis was used to determine if a model existed that significantly increased the researcher’s ability to accurately explain the dependent variable, the employment status of the mothers. Employment is one of the outcome measures in the human capital development model. Initial analysis included financial capital variables (sources of income and housing factors); human capital variables (mental and physical health, education, age, number of children, and marital status); and community structural and social support factors (area housing FMR to income as measured by housing income adequacy and sources of assistance). In conducting the discriminant analysis, the researcher first compared the groups (employed and not employed) on each of the potential discriminating variables. Of the 32 variables on which comparisons were made, the two groups were found to be statistically different on six items--
housing income adequacy ($F_{(1,249)} = 23.147, p< .001$); TANF ($F_{(1,249)} = 22.743, p < .001$); transportation assistance ($F_{(1,249)} = 13.338, p < .001$); earned income credit ($F_{(1,249)} = 9.439, p = .002$); food stamps ($F_{(1,249)} = 9.036, p = .003$); and child care assistance ($F_{(1,249)} = 7.866, p = .005$).

The next step in conducting a discriminant analysis after comparing the discriminating variable means was to examine the independent variables to be included in the analysis for the presence of multicollinearity. Although several techniques exist for conducting a multicollinearity test, Lewis-Beck (1980) states that the most powerful method for assessing multicollinearity is to “Regress each independent variable on all the other independent variables” (p. 60). The strength of this method lies in the fact that it takes into account the relationship of each independent variable with all the other independent variables and a combination of other
independent variables. Whenever the cumulative $R^2$ values approach 1.0 (greater than .95), there is high collinearity. To ensure that there were no cases of collinearity between the independent variables, the cumulative $R^2$ was checked for all the independent variables. No values greater than .70 were found.

The third step in conducting a discriminant analysis is to examine the computed standardized canonical discriminant function coefficients. The centroids for the groups were determined to be .573 for the not employed group and -.559 for the employed group. A total of six factors entered the discriminant model and produced an overall canonical correlation of $R = .494$. This indicates that the combination of the factors in the model explained a total of 24.4% of the variability in whether or not the mothers were employed at the time of the interviews.

The standardized discriminant coefficients for the variables that entered the model included whether or not the participant was married (coefficient = .578); the participants who were not married were more likely to be employed. The housing income adequacy ratios (coefficient = .560) of those participants with more of their income necessary to pay FMR were more likely to be unemployed. Those participants who received child care assistance (coefficient = -.452) tended to be employed. The participants who received transportation assistance (coefficient = .416), TANF (coefficient = .385), and Medicaid (coefficient = .272) tended to be unemployed.

Finally, the percentage of correctly classified cases was examined. Data in Table 2.10 show that the model correctly classified 70.3% of the cases analyzed. The model is a meaningful one, with a 40.6% improvement over chance for correct classification for participants’ employment circumstance, employment being the outcome measure of the human capital development model examined for this study.
Table 2.9. Classification of Cases by Employment Prediction Model N=387

<table>
<thead>
<tr>
<th>Actual Group</th>
<th>No. of Cases</th>
<th>Not Employed</th>
<th>Predicted Group</th>
<th>Employed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Not Employed</td>
<td>183</td>
<td>115</td>
<td>62.8</td>
<td>68</td>
</tr>
<tr>
<td>Employed</td>
<td>204</td>
<td>47</td>
<td>23.0</td>
<td>157</td>
</tr>
</tbody>
</table>

Note: Percent correctly classified = 70.3%.

Conclusions and Implications

The results of this study show that the majority of the rural, low-income families in this sample did not have serious housing instability problems. Most of the families (65%) had affordability ratios of 30% or less. Thirteen percent had no cost for housing and utilities. However, one-third of the families had severe housing cost burdens, with some as high as 3.5 times the household income. Actual housing costs did not reflect FMR and subjects appeared to receive reduced rents or received government assistance that enhanced the affordability of housing, making it easier for the families to make ends meet to purchase other human capital necessities. The majority of the families could not afford the Fair Market Rents for their geographic region with their current household income, indicating that support from family, friends or community/government play a role in the housing affordability and economic status of the families. Only 22% of the families reported receiving housing assistance, a finding that supports previous studies citing that the number receiving housing assistance is low (Passero, 1996 and Lee et al. 2003). There was an indication that housing costs were positively correlated with the ability of the families to make ends meet each month for necessities such as clothing, food, and medicine. These items are factors that can affect the human capital development, and subsequently the employment and income, of the household members. Although the scores did
not factor into the employment prediction model, the mental and physical health problem scores for the respondents were notably high, with over half being at risk for clinical depression.

The four aspects of housing instability measured in this study were the variables of housing income adequacy, spatial needs, shelter costs, and homelessness. The data in Figure 2.4 show that 85% of the families do not have incomes adequate to afford Fair Market Rents. Housing costs are also a burden (>30% of monthly income) for 35% of the families in the study.

![Figure 2.4 Selected Measures for Housing Instability of Rural, Low-income Families (n = 410)](image)

Using the financial, human and social capital factors for family and community in the theoretical model of the study, the employment status prediction model included housing income adequacy, one of the housing instability factors, which was operationalized as a community structural factor. Those participants with higher housing income adequacy ratios tended to be unemployed. The only human capital factor entering the model was marital status; those participants who were not married tended to be employed. Other variables that entered the model were certain sources of income (financial capital) and types of assistance (social capital). Since
previous studies (Becker, 1993; Schultz, 1981) have indicated the importance of education and health in human capital theory, it was surprising to the researcher that neither educational level nor mental or physical health entered the model (see Figure 2.5).

**Family Attributes**
- Financial capital
  - *Income
  - Expenses
  - Housing instability
- Human capital
  - Education
  - Health
  - *Marital status
- Social capital

**Community Attributes**
- Structural factors
  - *Housing income adequacy
  - Job market
- Social capital
  - *Transportation assistance
  - *Child care assistance

**Figure 2.5 Human Capital Development Model**

*Factors entering the final model to predict employment status*

The researcher acknowledges that the study has limitations, as the sample was a purposeful one, rather than randomly selected, therefore limiting the results for generalization. The study was also limited to households where the mother was at least 18 years of age; data for younger mothers was not included in the analysis. The research was also limited to the extent that respondents gave accurate answers to the questions. Another limiting factor is the absence
of a dollar amount of the types of assistance received. Housing assistance was not broken down by type (i.e. Section 8) nor was the amount received recorded.

Employment of rural, low-income families who receive some type of public assistance will require that policymakers and employees of community development agencies and social support services realize that education and job skills are not the only factors to consider when developing programs for rural families. Future research of these families should involve investigation of whether or not the participants who are renting or living in other arrangements move on to homeownership or exit public housing. This move could drastically change the housing affordability of the families, perhaps negatively affecting their economic situation with higher housing and utility expenses. By tracking these families over time, through Wave 2 and Wave 3 of the national study, any changes in the families’ situations will be revealed. Will the findings show improvements in their financial well-being? Will they have different housing circumstances? Will their housing costs still be affordable? What will the situations be for those with “Other” housing circumstances? Future research is suggested to include the type of housing available in the communities and the employment opportunities available in the geographic areas.

Achieving self-sufficiency involves many factors, and policy and education will play vital roles in the sustained employment of rural, low-income residents. Managing budgets on limited resources as time limits expire for receipt of various forms of public assistance that impact the economic well-being of families will need to be a focused program for service agencies and educational outreach agencies, such as the Extension Service. As policymakers review welfare reform, all sources of assistance and income must be included in the mix, as the results of this study show the importance of transportation, child care, health care, and housing.
costs. Economic development of rural areas requires not only available jobs but a pool of
healthy human capital with the knowledge, skills, and abilities to perform the job and the tools
(health care, transportation, and child care) to work productively.

References


perspectives. In L. J. Beaulieu & D. Mulkey (Eds.), Investing in people: The human
capital needs of rural America (pp. 3-21). Boulder, CO: Westview Press.

Ben-Porath, Y. (1980). The F-connection: Families, friends, and firms and the organization of

issues, 16(5), 609-631.

by families after moving from welfare to work. Briefing Paper. Retrieved from Economic
Policy Institute: http://epinet.org

families' economic well-being in the context of public assistance. Southern Rural
Sociology, 18(1), 259-293.

Brooks-Gunn, J., Duncan, G. J., & Maritato, N. (1997). Poor families, poor outcomes: The well-
being of children and youth. In J. Brooks-Gunn & G. J. Duncan (Eds.), Consequences of


Counties, 1993 (Staff Report No. 9425). Washington, DC: USDA.

children's economic security: Research findings about increasing family income through

Rural Sociology and Development, 5, 1-10.


CHAPTER 3

HOUSING TENURE AND WELL-BEING OF RURAL, LOW-INCOME FAMILIES IN THE CONTEXT OF WELFARE REFORM

The American dream has long been homeownership, with the federal government helping to fulfill that dream through various low-interest loan programs (Retsinas & Belsky, 2002). Homeownership and its benefits has been the subject of research for many years. In this study the relationship between homeownership and well-being of rural, low-income families since welfare reform was examined.

Rural America comprises 2,305 counties, contains 80% of the land, and is home to 56 million people (Whitener & McGranahan, 2003). Employment opportunities in rural areas are limited with many being in low-wage service industries. Unemployment and underemployment are great, poverty rates are high, and residents have less formal education (Whitener, 2003). According to the U.S. Census, the number of people living in poverty in rural areas in 2001 was 7,460,000. Many of these individuals struggle daily to meet basic needs, depending upon various forms of assistance from government, family, and friends to stretch their monthly incomes (Edin & Lein, 1997).

“Welfare” has historically been the term used when referring to governmental assistance programs for families. This program has technically been called Aid to Families with Dependent Children (AFDC) and is now Temporary Assistance for Needy Families (TANF). The Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) was passed in 1996, which limited assistance to a maximum of 60 months. TANF recipients were required to work after receiving assistance for 24 months. On February 13, 2003, the House of Representatives passed legislation to reauthorize
TANF through 2008. The bill increased work requirements from 30 to 40 hours per week and increased work participation rate requirements from 50 to 70% of state caseloads (Administration for Children & Families, 2003). States were also given more flexibility to design programs to meet their population’s needs (Whitener, Weber, & Duncan, 2001).

The overall focus of welfare reform is to replace family dependence upon ongoing cash assistance with family economic self-sufficiency. At the end of fiscal year 2002, there were 4,995,719 caseloads, which is a 59.2% decline in the number of families nationally receiving cash assistance since PRWORA went into effect (Administration for Children & Families, 2003). Ideally, those families who have left the welfare rolls have become self-sufficient through employment. However, between September and December 2002, TANF caseloads increased in 38 states, with 29 states reporting increases in caseloads since March 2001, the beginning of the nation’s recession (U.S. Census Bureau, 2002).

**Review of Literature**

With employment being a key component of welfare reform, rural areas may be at a disadvantage in succeeding at moving families from receiving public assistance to achieving economic self-sufficiency. Economic self-sufficiency challenges in rural areas are cited as limited job opportunities, low-wage jobs, transportation difficulties, limited childcare options, and increased distances to personal and social services (Braun, Lawrence, Dyk, & Vandergriff-Avery, 2002; Cook, Crull, Fletcher, Hinnant-Bernard, & Peterson, 2002; Lichter & McLaughlin, 1995). Additionally, Bokemeier and Garkovich’s research in 1991 indicated that rural households are more likely than urban households to live in inadequate housing, have lower incomes, and have housing unsuitable for their
needs (Ziebarth, Prochaska-Cue, & Shrewsbury, 1997). Cook et al. (2002) cited that the availability, affordability and quality of rural housing could also be barriers to self-sufficiency for low-income families, suggesting that family well-being, both financial and cognitive, may not be independent of a family’s housing circumstances.

**Homeownership**

In 2001, a record high of 68% of the nation’s households were homeowners (U.S. Department of Housing and Urban Development, 2003). Interest rates in 2003 have been the lowest in 40 years, making the investment in homeownership attractive. Research has found homeownership to have positive benefits. Jang (1995) found homeownership to be a significant factor in expenditures by female-headed households for health care, reading, and education and concluded that homeownership was an important factor predicting investments in human capital. Over three-fourths of rural U.S. households owned their homes in 2000 (Mikesell & Reeder, 2000). Mikesell and Wallace (2000) reported that rural low-income homeowners had better housing than did renters, whether or not they were wage-dependent.

Other research showed homeownership to be an impediment, along with age, to residents moving away from poor neighborhoods (South & Crowder, 1998). Owning one’s home could be a barrier to employment in that it reduces mobility to job opportunities.

**Renting**

In 2001, renter households made up one-third of the households in the United States, nearly 36 million households. Comparatively, only 24% of the households in rural areas were renters (National Low Income Housing Coalition, 2003). In rural and
urban areas low-income and minority households were the most dependent on rental housing (Mikesell & Reeder, 2000). The available stock of rental housing has declined significantly, and the availability of rental housing affordable by very low-income families has declined even more (U.S. Department of Housing and Urban Development, 1998). In a study of renters conducted by Fannie Mae (1994), 67% said they rented because they could not afford to purchase a home; 26% reported they rented due to choice.

**Other Housing Circumstances**

Homeownership and renting are not the only types of housing circumstances. Some families do not have either of these housing situations. A household’s personal and economic situations may require other housing choices, such as living with family or friends, or “doubling up,” or becoming homeless due to life events.

A house provides shelter as well as other benefits (Shlay, 1995). Homelessness, or lacking a permanent residence, takes a toll on adults and children, affecting health, education, and emotional development (Edelman & Mihaly, 1989). Edelman & Mihaly (1989) cited three trends that contributed to increasing homelessness: decreasing household incomes among the poor and near poor, especially those headed by a man or woman under 25; decreasing supply of affordable housing; and cuts in federal low-income housing assistance. Main (1998) cited the primary causes for homelessness as the housing market, unemployment and poverty, the economy in general, social policies, and disabilities among the homeless.

“Doubling up” has been found by researchers to be a strategy to make ends meet (Boushey & Gundersen, 2002; Cook, et al., 2002; Edin & Lein, 1997). Cook et al. (2002)
found that respondents did not think of informal housing arrangements from family and friends as “housing assistance.” Assistance from family and friends did enhance housing affordability and brought at least temporary stability to the Iowa families in the study.

Most welfare recipients do not receive government housing assistance (Cook et al., 2002). In a study of 17 families in Iowa, Cook et al. found that 16 of them rented their dwellings. Eleven of the families had no housing assistance and paid rents between $150 and $600 per month. Those families receiving government assistance for reduced rent and utilities paid rents ranging from $0 to $155 per month.

Passero (1996) found that the most common combination of types of assistance for dual-parent households receiving public assistance were welfare, food stamps, and Medicaid. Support from public housing and government housing was rare.

A study of Indiana and Delaware families, both cohorts combining urban and rural areas, revealed that the additional time families lived in public housing or used vouchers was associated with increased employment and earnings and reduced welfare receipts, suggesting a positive interactive effect between welfare reform and housing vouchers. Nationally, 30% of families on welfare received housing assistance (Lee, Beecroft, Khadduri, & Patterson, 2003).

Zedlewski (2002) found that housing assistance made a positive difference in moving families from welfare to self-sufficiency, i.e. work. She compared welfare recipients with welfare leavers using data from the 1999 National Survey of America’s Families. Specific findings were that low-income families that had left welfare but received housing assistance had higher employment rates and incomes than those who did not receive housing assistance.
Homeownership and Family Well-Being

Life Satisfaction

Homeownership appears to promote life satisfaction through improvement of housing conditions (better quality) and neighborhood conditions (cleaner lawns) (Scanlon, 1998). Research has shown that housing quality, housing type and neighborhood conditions have direct effects on satisfaction; housing tenure was not found to have a direct effect (Scanlon, 1998). Housing tenure was found to have an indirect effect on life satisfaction through housing quality, perceived crime, and residential performance (Scanlon, 1998). Rossi and Weber (1996) analyzed data from the National Survey of Families and Households and found a positive relationship between homeownership and both self-satisfaction and happiness.

Psychological Effects

In a longitudinal study of 31 Michigan families living in urban communities, Wells (2000) found a relationship between housing quality and psychological and cognitive well-being. Although the participants possessed a strong sense of self-confidence, optimism and determination, they also exhibited notable psychological distress, worried about their children, and expressed significant dissatisfaction with housing while living in inadequate housing. Relocation to new homes that they owned resulted in significant improvement in the participants’ psychological well-being (Wells, 2000).

White and Schollaert (1993) found that homeowners maintained higher levels of cognitive well-being, or quality of life, than renters. They measured well-being with a Likert-type scale measuring the respondents’ feelings about selected personal items:
their life as a whole, health, marriage, and their future. They used a path analysis and looked at selected variables of neighborhood, community, and satisfaction. The study was conducted over a ten-year time frame. They found that homeowners maintained higher levels of well-being than did renters.

**Neighborhood and Community Involvement/Awareness**

Homeownership usually promotes stability, with the family living in the residence for a longer period of time than someone renting the residence (Retsinas & Belsky, 2002). With a longer association in the neighborhood and community, homeowners tend to be more involved with the community (Retsinas & Belsky, 2002). White and Schollaert (1993) theorized that homeownership produced a sense of permanency and a psychological as well as an economic investment in the residential neighborhood. Homeowners had a greater concern for the welfare of the residential environment.

Research has shown that homeowners participate more in both voluntary organizations and political activity (Rossi & Weber, 1996). With a greater concern for the neighborhood, perhaps homeowners have a better awareness and knowledge of the community and its resources.

**Family Economic Stability**

Homeownership has been strongly correlated with income, education, age, stage in the life cycle, marital status, race, the presence of children, and employment (Rohe, Van Zandt, & McCarthy, 2002). Boehm and Schlottmann (2002) found a correlation between homeownership and wealth accumulation. Family economic security, as defined by the National Center for Children in Poverty, is a family’s ability to meet its financial needs while promoting current and future health and well-being of all household
members (Cauthen, 2002). Family economic security could also be termed economic self-sufficiency. Components necessary for economic security include income; savings, assets, and other wealth; and human and social capital. Cook et al. (2002) suggested that housing stability was a critical factor in self-sufficiency for rural low-income households. Haurin, Parcel, and Haurin (2002) included homeownership in their model analyzing child outcomes. Homeowners were more willing to invest in the home environment than renters, and stayed longer in the dwelling. These factors of greater housing stability increased the social capital of the household; higher levels of social capital positively influenced the child outcomes of cognition and reduced behavior problems (Haurin et al., 2002). George (2001) suggested that there was a strong link between asset holding and economic well-being, with homeownership being the largest asset for many and the asset with the greatest potential for rural families.

**Physical Health**

There has also been research on homeownership’s impact on health. Rohe, Van Zandt, and McCarthy (2002) suggested a positive association between homeownership and health, as long as the household was not in default on mortgage payments. Rossi and Weber (1996) found more positive health self-assessments for homeowners. Page-Adams and Vosler (1997) found through their multivariate analysis of laid-off factory workers, that after controlling for income and education, homeowners reported significantly less economic strain, depression, and alcohol use than renters.

With previous research supporting the positive effects of homeownership, including better mental and physical health, greater life satisfaction, community
awareness and involvement, and better financial well-being, this study examines these variables with a rural, low-income population.

The research objectives of this study were:

1. To determine the housing tenure and affordability of rural, low-income families in the context of welfare reform.
2. To determine if housing tenure was independent of the financial and cognitive well-being of the families.
3. To examine the relationship of housing and energy assistance to the financial well-being of the families.

This study used data from the first wave of a multi-state, longitudinal study of rural low-income families, NC-223, “Rural Low-income Families: Tracking Their Well-Being and Functioning in the Context of Welfare Reform.” For more information about the national project, visit the website, www.ruralfamiliespeak.org.

**Method**

The sample used for this study consisted of 410 rural low-income families from 24 counties in 14 states, with representation from all geographic regions of the United States. In each of the states, communities were selected based on the rural-urban continuum codes developed by Butler and Beale (1994) with the United States Department of Agriculture (USDA) Economic Research Service. This continuum is used to classify all counties in the United States by population size and location.

In each of the states, 15-30 low-income rural families were selected using a purposive sampling procedure. Participants were recruited through the following programs and sources of referral: Food Stamps, WIC, Head Start, Work Centers, Social
Service offices, Vocational Technical Schools, child care center for farm laborers, welfare to work classes, Cooperative Extension Service staff, 4-H parents, housing authority offices, food pantries, Latino Migrant and Settled Workers Program, homeless shelters, and Spanish Speaking Community Action program. Responses of the mothers age 18 or older with at least one child 12 years old or younger were included in this study. The mothers were eligible for or receiving Food Stamps or Women Infants and Children (WIC) Program transfers. Data collection was done through audiotaped personal interviews and written surveys during 1999 and 2000. The interviews were conducted in locations with consideration given to the accessibility for the participants, such as the participant’s home, agency offices, schools, etc. The interviews lasted approximately two hours.

Instrumentation

Sections of the instrument used from the NC-223 study included the following: Feelings about How Things Are Going (Radloff, 1977) to determine participant’s mental health; Knowledge of Community Resources (Richards, Pamulapati, Corson, & Merrill, 2000) as a descriptor for community awareness and involvement; Adult Health Survey for participant and partner to determine adult physical health status and Child Health Surveys to assess health status of the children in the household (Richards, Merrill, Corson, Sano, Graham & Weber, 2000). Questions concerning housing circumstances and financial well-being were also used, including participants’ self-reported satisfaction with life, housing tenure and cost, participants’ perception of family economic situation and income adequacy, total monthly income, receipt of housing and energy assistance, and participants’ employment situation.
Results

Analysis of the demographic and psychological characteristics of the sample revealed that 201 (49%) of the participants were unemployed, while 209 (51%) were employed. Among the employed participants, the average number of hours worked per week was 32 (SD = 11.6) with a minimum of 1.5 hours and a maximum of 55 hours. Total monthly income reported for all participants ranged from a minimum of $0 to a maximum of $4,778 with a mean of $1,291 (SD = 898).

Housing tenure included 243 (61%) renters, 79 (20%) owners, and 77 (19%) with other housing arrangements. Receipt of housing assistance was reported by 88 (22%) of the families. When the data were analyzed to determine housing affordability, a housing affordability ratio was determined using housing costs (rent/mortgage plus essential utilities) divided by total monthly income. Sixty-five percent of the families had housing affordability ratios of 30% or less of monthly income, while 35% had ratios of greater than 30% indicating housing cost burdens (National Low Income Housing Coalition, 2003; Ziebarth, Prochaska-Cue, & Shrewsbury, 1997).

Respondents were asked to give the level of satisfaction with their life at the time of the interviews ranking their feelings on a scale ranging from “1” denoting “very dissatisfied” to “5” indicating “very satisfied.” The computed mean score for the participants’ life satisfaction was 3.7 (SD = .95), indicating that overall respondents were “satisfied” with their lives. This measure was based on a single item, therefore limiting the degree of accuracy of measurement of life satisfaction. Perceived income adequacy was also a scaled measurement. Respondents were asked to rank whether their income was enough to live on using a scale ranging from “1” denoting “not at all adequate” to
“5” indicating “can afford about everything we want and still save money.” The computed mean score was 2.5 (SD = .89), indicating that 44% of the families felt that they could afford some of the things they wanted but not all the things they wanted; only 2.7% could afford everything they wanted and still save money. Respondents were asked to rate their economic situation for the past year to determine if their economic situation “had improved a lot”, which received a rating of “5” to “gone down a lot” which received a rating of “1”. The computed mean for this measure of economic well-being was 3.4 (SD = 1.39), indicating that overall the participants’ economic situations had “remained the same” or “improved a little.”

Another variable on which study subjects were described was their knowledge of community resources. This variable was operationalized as the participants’ responses regarding whether or not they could find assistance in each of 26 specified areas if/when they needed to do so. The response to each item was coded such that a value of “1” was assigned if they indicated that they could find assistance in the area and “0” if they indicated that they could not find assistance in the area. Their knowledge of community resources was then defined as the sum of the responses to the 26 items. The mean score on this measure was 16.56 (SD = 4.9), with a minimum number of 0 items and a maximum of 22 items.

The mental and physical health scores of the respondents were also examined. Mental health was operationalized in this study as the composite score of participants’ responses to the “Feelings about How Things Are Going” section of the questionnaire that included the Center for Epidemiologic Studies Depression Scale (Radloff, 1977). This was expressed as a continuous variable derived by summing the scores from zero to
three for 20 items. Anyone with a score of 16 or higher is classified as at risk for clinical depression (Radloff, 1977). The mean score of respondents’ mental health was 17.4 (SD = 11.36) with a range of 0 to 53.

To measure physical health in this study the researcher presented a list of 34 possible health problems, including diabetes, arthritis, heart problems, and cancer, to the respondents and asked that they identify all that applied to them. These measures were then coded as “0” if not marked and “1” if marked. The overall physical health score was operationalized as the sum of the number of health problems reported. The mean was 4.6 (SD = 3.9) with a minimum of 0 and a maximum of 22. Health problems for partners had a mean of 2.9 (SD = 2.9) and for children 4.4 (SD = 3).

To accomplish the study objective regarding the relationship between housing tenure and financial and cognitive well-being of rural families, the researcher compared selected characteristics of rural families by categories of the variable “Housing tenure” (rent, own, or other). These characteristics included employment circumstances, mental health, physical health, awareness and familiarity with community resources, life satisfaction, perception of income adequacy, economic situation, and total monthly income. Chi-square analysis and analysis of variance procedures were used to accomplish this objective, and results of these comparisons are presented in Table 3.1.

Two of the variables examined were found to be significantly related to the participants’ housing tenure. Significant differences were found in the variables total monthly income ($F_{(2,396)} = 20.19, p = .001$) and income adequacy ($F_{(2,390)} = 3.47, p = .03$). Using the Tukey’s Post hoc multiple comparison procedure, respondents who were homeowners were found to have significantly higher incomes (mean = $1,819.38$) than
those who were either renters (mean = $1,136.07) or had some other housing tenure (mean = $1,269.56). Additionally, for the variable, “income adequacy,” participants who had “other” housing tenure had significantly higher perceptions regarding the adequacy of their income (mean = 2.63) than those who were renters (mean = 2.38).

Table 3.1 Comparison of Selected Measures of Financial and Cognitive Well-being of Rural, Low-income Families by Housing Tenure

<table>
<thead>
<tr>
<th>Variable</th>
<th>df</th>
<th>Test Value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>2</td>
<td>0.99&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.61</td>
</tr>
<tr>
<td>Total Monthly Income</td>
<td>2,396</td>
<td>20.19&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.001</td>
</tr>
<tr>
<td>Income Adequacy</td>
<td>2,390</td>
<td>3.47&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.03</td>
</tr>
<tr>
<td>Physical Health</td>
<td>2,386</td>
<td>2.72&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.07</td>
</tr>
<tr>
<td>Awareness of Community Resources</td>
<td>2,316</td>
<td>1.97&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.14</td>
</tr>
<tr>
<td>Mental Health</td>
<td>2,370</td>
<td>1.43&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.24</td>
</tr>
<tr>
<td>Satisfied with Life</td>
<td>2,391</td>
<td>0.75&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.48</td>
</tr>
<tr>
<td>Economic Situation</td>
<td>2,393</td>
<td>0.22&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.80</td>
</tr>
</tbody>
</table>

<sup>a</sup>Analysis of Variance  
<sup>b</sup>Chi-square Test

Analysis of the relationship existing between the receipt of housing assistance and family economic well-being (as measured by the respondents’ perception regarding the adequacy of their financial resources and total monthly income) showed that a significant negative relationship existed between housing assistance and total monthly income (r = - .31, p < .001). Those with higher income tended to be less likely to receive housing assistance.
There was also a significant negative relationship between receipt of energy assistance and the participants’ perception of income enough to live on ($r = -0.13, p < 0.008$) and total monthly income ($r = -0.11, p < 0.023$). Those who perceived their income to be enough to live on tended to be less likely to receive energy assistance, and those who reported higher monthly income tended to be less likely to receive energy assistance.

**Conclusions and Implications**

The homeowners in this sample of rural, low-income families reported higher monthly incomes than either renters or those with other housing tenure. This finding is consistent with the findings of previous research (Rohe, Van Zandt, & McCarthy, 2002; Boehm & Schlottman, 2002). However, this study did not find correlations of homeownership with other variables representing well-being, such as health, life satisfaction, or community awareness, as did White and Schollaert (1993).

The findings also support previous research concerning the importance of housing assistance (Lee, Beecroft, Khadduri, & Patterson, 2003), suggesting the need to continue this type of assistance for low-income families as they transition from welfare to work. Housing assistance can allow families with limited resources to get stabilized financially as they move from government assistance to wage-dependency. The families in this sample who received housing assistance perceived greater family financial well-being than those who did not.

The researcher acknowledges that the study has limitations, as the sample was a purposeful one, rather than randomly selected, therefore limiting the results for generalization. The study was also limited to households where the mother was at least 18 years of age; data for younger mothers was not included in the analysis. The research
was also limited to the extent that respondents gave accurate answers to the questions. Life satisfaction was a single-item question; respondents’ scores may not be an accurate depiction.

Homeownership provides an avenue for asset accumulation. However, owning a home in an area without job opportunities for the unemployed or underemployed may be a hindrance to family mobility. This study raises the following questions for future research: Do the families who were not homeowners desire to own their homes? Would owning their homes limit their job search or enhance their financial well-being? Should the government continue to encourage and support homeownership for low-income families? The families in this study sample will be tracked over time through Waves 2 and 3 of the national study. Their housing and family well-being, both financial and cognitive, will tell the story of how welfare reform and policy affect their daily lives and decisions.

Future research is recommended to include the housing adequacy of families. This study did not describe the physical conditions of the housing of the participants, such as inadequate plumbing, structural conditions of dwelling, heating/cooling provisions, indoor air quality, etc., which may affect the well-being of family members.

References


91


CHAPTER 4

SUMMARY AND CONCLUSIONS

The important goals of rural, low-income families achieving economic self-sufficiency and family well-being cannot be reached unless individuals, families, communities, and policymakers work together synergistically to accomplish these goals. This research study examined the housing and employment circumstances and economic and cognitive well-being of rural low-income families in 14 states.

The family attributes of human and financial capital and the community attributes of social support and structural aspects were examined for a national sample of 410 families. As a component of the financial capital and community aspects, the housing circumstances of the families were analyzed and indicators of the housing instability of the families based on homelessness, housing affordability, spatial need, and housing income adequacy. A significant relationship was found between housing costs and the ability for the families to make ends meet for human capital expenditures. Earlier research suggested that housing instability may contribute to the employment circumstances of low-income families. Findings from this study showed that most of the families in the sample could be considered to be living with housing instability measured by housing income adequacy, with 85% of the families unable to afford fair market rents for their geographic areas with the current level of income. Without reduced housing costs, whether through doubling up with family and friends, or reduced rents through public housing or understanding landlords, most of the families would have housing cost burdens. This factor entered the final model to predict whether or not the participant was employed. However, most of the factors entering the employment prediction model were community factors, both structural and social. Social support factors included in the model were
receipt of child care and transportation assistance. Whether or not the participant received
TANF and Medicaid were financial capital factors that entered the final model. The health of an
individual is considered a form of human capital that was included in the model for human
capital development theory. Medicaid, which is government-funded health benefits for certain
populations, was identified through this analysis as an employment prediction variable. Only
one human capital factor, marital status, entered the final model (see Figure 4.1).

**Family Attributes**
- Financial capital
  - Income
  - Expenses
  - Housing instability
- Human capital
  - Education
  - Health
  - Marital status
- Social capital

**Community Attributes**
- Structural factors
  - Housing income adequacy
  - Job market
- Social capital
  - Transportation assistance
  - Child care assistance

**Figure 4.1 Human Capital Development Model**
*Factors entering the final model to predict employment status
The importance of family, community, and government support for rural, low-income families is further shown through this investigation. In order for an individual to become and remain employed, the needs for transportation and child care, whether obtained through public assistance or private funds, are apparent. Recommendations from this study are for the deliberate coordination of support services for families in rural areas.

Findings concerning the housing tenure of the families and indicators of family economic and cognitive well-being revealed that homeownership is related to family economic well-being. Homeownership has also been linked with higher levels of cognitive, or psychological, well-being. The results of this study do not support all of the previous research findings concerning the positive benefits of homeownership. Those participants whose tenure was “other” perceived their incomes to be more adequate to live on than either homeowners or renters. Homeowners reported higher monthly incomes than the other two groups. Housing tenure was also found to be independent of employment.

Recommendations are for the results of this study be used to inform housing assistance agencies, community development and service agencies, and labor departments of the issues and circumstances of rural, low-income families as they attempt to move from government support to self-sufficiency. Coordination of public assistance and community efforts will be necessary for the families to graduate to self-sufficiency through employment with adequate income to make ends meet and to save and accumulate assets and wealth. Financial education programs for limited resource families will be critical to ensure sound money management practices as the families adjust to less government aid and greater dependence on cash wages to pay for housing, utilities, medical care, and other necessities. Many of the families in this study had difficulty making ends meet. Some of them had difficulty meeting credit payments. Banks, community
agencies, Cooperative Extension Services, and other organizations, i.e. churches, will need to reach out to this audience to teach sound money management and credit use practices. The economic development of the country and communities depends upon the financial stability of their families.

With the emphasis on employment under welfare reform, the coordination of family services will be important. The factors revealed through this study as being important for employment were mostly community aspects of social capital, not human capital. The factors in the human capital development model were not individual development (education or health status), but social capital. The community and government can play an active role in the support of the families in their move to self-sufficiency through transportation assistance, such as low interest loans for vehicles, down payment assistance, etc., similar to the low-income housing programs.

Suggestions for future research are to examine the specific types and monetary values of housing assistance received by rural, low-income families. As families become wage-dependent, manageable costs for adequate, affordable, and available housing and utilities will be critical to self-sufficiency. The benefits of a longitudinal, national study include the ability to track the participants over time and document challenges and successes in their situations. As the economy either grows or declines, and as policy changes, the well-being of the families should be tracked, in particular, their employment situations, housing circumstances, and cognitive well-being. Those families with “other” housing circumstances should be tracked and research emphasis placed on the kind of housing support they receive, the length of time they receive housing support, and if they become homeless.
APPENDIX A - PERMISSION LETTERS TO USE AND ADAPT HUMAN CAPITAL DEVELOPMENT MODEL
MEMORANDUM

TO: Ann Berry
FROM: Lionel J. Beaulieu, Author
RE: Investing in People Book Publication by Westview Press

This note is intended to serve as approval for your use of the figure found on page 9 of the edited volume, “Investing in People: Human Capital Needs in Rural America.” I wish you much success in the preparation of your research study.

Bo Beaulieu, Director
Southern Rural Development Center
Box 9656
Mississippi State, MS 39762-9656
662-325-3207 (voice)
662-325-8915 (fax)
ljb@srdc.msstate.edu
LETTER OF PERMISSION FROM
DAVID MULKEY

E-mail correspondence

From: Mulkey, David [WDMulkey@mail.ifas.ufl.edu]
Sent: Monday, June 16, 2003 10:07 AM
To: Berry, Ann A.
Subject: RE: Permission to use your model

I don’t have any problem with that assuming proper citation is included. You might check with
Dr. Beaulieu at the Southern Rural Development Center to make sure he feels the same way.
Which figure in particular are you using??

David Mulkey
Thank you for agreeing to participate in this important research on family life. As you probably know, we are part of a big study that is looking at how families living in rural parts of the country are managing on a limited income. We are talking to families living in small towns and rural areas all over the United States. Not all of the families we will talk to are currently receiving welfare. In fact, we will talk to some families who have never received cash assistance from the government, but nevertheless have trouble making ends meet each month. There are no “right” answers to any of our questions; we just want to hear what life is like for you and your family. Remember, this interview is voluntary. If you don’t want to answer a question, you don’t have to. All information you give us will be kept confidential. (Do not proceed unless you have a completed informed consent document.)

Let’s begin by talking about who lives in your household. Besides you, who lives in your house?

---

**CURRENT HOUSEHOLD COMPOSITION**

A. **Mother’s 1st Name** ________________  **DOB** ________________  **Marital Status** ________________  **Ethnicity** ________________

B. **Partner’s 1st Name** ________________  **DOB** ________________  **Ethnicity** ________________

<table>
<thead>
<tr>
<th>Child (First Name)</th>
<th>Sex</th>
<th>DOB</th>
<th>Relation to A***</th>
<th>Relation to B***</th>
<th>Contact w/ his parent (Y, N)</th>
<th>Received child support (Y/N)</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

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* Key to codes  **Key to Codes**  ***Key to codes***

- S = Single  - W = Non-Hispanic White  - A = Adopted
- M = Married  - H = Hispanic/Latino  - SC = Stepchild
- LW = Living with partner  - AA = African American  - B = Biological child
- D = Divorced  - N = Native American  - F = Foster child
- SEP = Separated  - A = Asian  - NR = Not related
- M = Multi-ethnic  - O = Other

Do you have any children not currently living with you? (If yes) Who are they, and where are they living?
LIVING IN THE COMMUNITY

1. Tell me about how this neighborhood/area is as a place to live. Does this neighborhood/area have everything that you and your family need? If not, what sorts of things are missing? (Probe if necessary: Do you have easy access to a grocery store; a mini-mart or convenience store; other household shopping; medical care; a gas station; church; school; child care; a library?)

2. Families may need to know how to find many different services available in the community. The services needed are different for each family. I have a list of resources that are often available in communities. I’d like to know about the kinds of community services you know about. Shall I read the list to you, or would you like to fill this out yourself? (Administer: Knowledge of Community Resources Measure)

NOTE: IF THE INTERVIEWEE ASKS YOU TO READ THE MEASURE, ASSUME THAT ALL FURTHER SURVEY MEASURES SHOULD BE READ ALOUD.

3. What’s the best thing about living where you do? The worst?

4. Is your housing adequate for you and your family’s needs? Why or why not? (Probe: size, quality, price, landlord.)

5. Have you moved in the past two years? If so, why? How does this place compare with where you lived before? (If not addressed) How has your family responded to these changes? How do you feel about this?

6. (Optional, ask if not addressed in #5) In the last two years was there ever a time when you and your family were homeless? For how long were you homeless? What did you do? How did you get housing again?
EMPLOYMENT/CURRENT WORK

1. Let’s talk about your employment situation. Are you currently working? (If not employed, skip to Question #2) What do you do? How much are you paid? When did you start working there? How many hours do you generally work each week? How many weeks do you work during the year? Have you ever had a raise? When? How much? (List only current employment; space provided for up to three jobs)

<table>
<thead>
<tr>
<th>Participant’s Current Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job 1</td>
</tr>
<tr>
<td>Wage/Salary</td>
</tr>
<tr>
<td>Date Started</td>
</tr>
<tr>
<td>Hours/week</td>
</tr>
<tr>
<td>Weeks/Year</td>
</tr>
<tr>
<td>Amount Raise</td>
</tr>
</tbody>
</table>

| Job 2                            |
|__________|__________|__________|__________|           |

| Job 3                            |
|__________|__________|__________|__________|           |

2. (Ask only if not currently employed) Are you looking for a job now? (If yes) How are you going about it? Have you ever worked for pay? (If answer is no, ask the appropriate questions in this section, but skip work history section)

3. What about your partner? What does your partner do? How much is your partner paid? When did your partner start working there? How many hours does your partner generally work each week? How many weeks does your partner work during the year? Has your partner ever had a raise? When? How much?

<table>
<thead>
<tr>
<th>Partner’s Current Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job 1</td>
</tr>
<tr>
<td>Wage/Salary</td>
</tr>
<tr>
<td>Date Started</td>
</tr>
<tr>
<td>Hours/week</td>
</tr>
<tr>
<td>Weeks/Year</td>
</tr>
<tr>
<td>Amount Raise</td>
</tr>
</tbody>
</table>

| Job 2                        |
|___________________________|

| Job 3                        |
|___________________________|

4. Is there anyone else in the household who has a job? (If yes) Tell me about that.

5. (Ask if currently employed) What problems, if any, do you currently face at work?
6. (Ask if currently employed) Do you get any benefits from your job(s)? How about your partner? What about health insurance...

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Provided by Mother's Job(s)</th>
<th>Provided by Partner's Job(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health insurance for self</td>
<td>□ Yes □ No</td>
<td>□ Yes □ No</td>
</tr>
<tr>
<td>Health insurance for children</td>
<td>□ Yes □ No</td>
<td>□ Yes □ No</td>
</tr>
<tr>
<td>Sick leave</td>
<td>□ Yes □ No</td>
<td>□ Yes □ No</td>
</tr>
<tr>
<td>Vacation pay</td>
<td>□ Yes □ No</td>
<td>□ Yes □ No</td>
</tr>
<tr>
<td>Overtime</td>
<td>□ Yes □ No</td>
<td>□ Yes □ No</td>
</tr>
<tr>
<td>Retirement plan</td>
<td>□ Yes □ No</td>
<td>□ Yes □ No</td>
</tr>
</tbody>
</table>

7. What would be your ideal job for supporting your family? What would help you to get that kind of job?

8. In the last several years welfare regulations have changed. There is now more of an emphasis on getting a job, and there are new time limits (talk about specific state programs, if appropriate). What do you think about these changes? Has your family been affected by them?

WORK HISTORY

1. We also want to know about the kinds of work that people have done in the past. Tell me about your work history. How old were you when you got your first job?

2. About how many jobs do you think you've had since then? Have you been more likely to work full-time or part-time? Why?

3. What kinds of jobs have you had? What were some of the reasons you left these jobs?

4. Tell me about the job that you held the longest, not counting your current job. When did you have this job? What did you do? What did you like about it? Why did you leave?

TRANSPORTATION AND CHILDCARE

1. What about transportation? How do you usually get around? (If not addressed: Do you own a car or have one you can borrow? How do you and your partner get to and from work?)

   a. (If the family has no car) How do you get your groceries, take your children to the doctors, run errands?
   b. (If the family has a car) How reliable is your car? When was the last time your car broke down? What happened?

2. What do you do when you really need transportation and it's not available to you?
3. When you are working (or participating in a job training program or the state’s welfare-to-work activities) who takes care of your children? Tell me how you get them there, and about how long they stay every day. Is it different if you have to work evenings or weekends?

4. (If appropriate) What about your older children? What do they do after school? What about school holidays and summers?

5. How many childcare arrangements do you have each week/month? Overall, how much do you pay for childcare each month?

6. How do you like your childcare provider? Why do you feel this way? Have you ever changed providers? Why?

7. Is there ever a time when you need someone to take care of your children outside your time at work? Who does that? How does it go?

8. Tell me about a situation when you needed emergency childcare. What did you do? Have you ever had to miss work or a training program because of a childcare problem? How did your supervisor react?

9. What do you do for childcare if your child gets sick? What happens if your provider is sick?

---

**FAMILY OF ORIGIN CHARACTERISTICS**

1. Tell me a little bit about your background. What was your family like when you were growing up? Who was in your family? Where did you live? What do you remember about your childhood?

2. Did your parents work? What kind of work did they do?

3. How much education did your mother have? ______ Your father? ______

   1 = 8th grade or less
   2 = some high school
   3 = high school or GED
   4 = specialized technical, business or vocational training after high school
   5 = some college, including Associate’s Degree
   6 = college or university graduate
   7 = one or more years beyond college
   8 = graduate degree
   9 = don’t know

4. Do you know if your family ever received welfare or other assistance? □ Yes □ No □ Don’t Know

5. How often did your family move when you were a child? Why did you move?

6. (Optional) How much contact do you have with your family now? Who are you in contact with? Where do they live? What is your relationship like now?
FAMILY WELL-BEING

1. Tell me about a typical day (a working day, if appropriate). What time do you get up? When do your children get up? Then, what happens next? And then...? (The goal here is to get through a typical weekday for the family.)

2. What sorts of things do you do for fun with your family? How often do you get to do them?

3. Overall, how would you say things are going for your family right now? (If not addressed) How are things going for you personally? (If appropriate) How are things going between you and your partner?

4. Here is a checklist that asks about how things have been in the last week. (Administer: Feelings About How Things Are Going)

5. Parents need lots of skills to help their families get by. Everyone has certain skills and abilities, but it's usually not possible for someone to have every single skill needed. We'd like to know what sorts of skills you have. (Administer: Life Skills Assessment)

6. Family members often have health problems. Sometimes these problems don't have much of an impact on day-to-day life, while at other times they can be a big problem. We'd like to know about any health problems the members of your family might have. (Administer: Adult Health Survey; Administer: Child Health Survey; use more than one if needed to get info about all children)

7. (If there are other people living in the household) Do any of the other people in your household have any health problems? (If yes) What kinds of health problems?

8. (If applicable) Do any of these health problems affect everyday life in your family? If so, how?

9. What things about your family make you proud and happy right now? What are the biggest challenges for your family as a whole?

EDUCATION AND INCOME

1. What is your current educational level? ____ (use scale below)

   1 = 8th grade or less
   2 = some high school
   3 = high school or GED
   4 = specialized technical, business or vocational training after high school
   5 = some college, including Associate's Degree
   6 = college or university graduate
   7 = one or more years beyond college
   8 = graduate degree
   9 = don't know

2. How much education did you have when you first became a parent? ____ (use scale)
3. (If no high school diploma) Why did you leave high school before finishing?

4. (If appropriate) What about your spouse/partner—how much education does he have? ___ (scale)

5. In the last few years have you had the opportunity to get further education or develop new job skills? What kind? How were you able to do this?

6. We’d like to know a bit about your family’s sources of income. Remember, all of this information is completely confidential. From which of the following sources do you receive income?

<table>
<thead>
<tr>
<th>Source of Income</th>
<th>Take Home Pay</th>
<th>Weekly</th>
<th>Bi-Weekly</th>
<th>Monthly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages and salaries (self)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wages and salaries (partner)</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Tips, commissions, overtime</td>
<td></td>
<td></td>
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<tr>
<td>Social Security Disability</td>
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<tr>
<td>Social Security Retirement/Pensions</td>
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<tr>
<td>SSI (Supplemental Security Income)</td>
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<tr>
<td>TANF</td>
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<tr>
<td>Unemployment Compensation</td>
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<tr>
<td>Worker’s Disability Compensation</td>
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<tr>
<td>Veterans’ Benefits</td>
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<tr>
<td>Child or spousal support</td>
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<tr>
<td>Children’s wages</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Food Stamps</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Regular gifts from family/friends</td>
<td></td>
<td></td>
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<tr>
<td>Other</td>
<td></td>
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</tbody>
</table>

7. Housing is usually the largest expense for families. Tell me about how much you pay per month and what utilities, if any, are included. Is this a rental or do you own? What utilities do you pay each month? How much? What happens if you can’t pay for utilities?

8. Families sometimes receive assistance from a variety of government or private programs. Do you receive assistance from any of the following? (Try and record cash value if possible)

- WIC
- School Lunch Program
- EITC (Earned Income Credit)
- Child Care Assistance
- Housing Assistance
- Energy/Fuel Assistance
- Transportation Assistance
- Diversionary Assistance (only some states)
- Educational Grants or Loans
- Medicaid
- Other
9. Is there any other assistance you’re getting, such as help with healthcare, food, meals, clothing, holiday gifts, furniture, baby goods, day care, or school supplies?

<table>
<thead>
<tr>
<th>Type of Help</th>
<th>Amount</th>
<th>Type of Help</th>
<th>Amount</th>
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</tbody>
</table>

10. Compared to two years ago, would you say your family’s economic situation has:

5 = Improved a lot
4 = Improved a little
3 = Remained the same
2 = Gone down a little
1 = Gone down a lot

11. (Optional) To what extent do you think your income is enough for you to live on?

1 = Not at all adequate
2 = Can meet necessities only
3 = Can afford some of the things we want but not all we want
4 = Can afford about everything we want
5 = Can afford about everything we want and still save money

12. In past year, has there been a time when you had a hard time making ends meet or paying for necessities? What did you have trouble paying for? Food? Clothing? Healthcare? Credit payments? Personal care or non-food items? (If appropriate) Diapers? What did you do?

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clothing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical Care</td>
<td></td>
<td></td>
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<tr>
<td>Dental Care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit Payments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Care Items</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diapers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School Fees or Expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. Have you or members of your household ever gone hungry or been close to going hungry? Please describe the situation as fully as you can. What led to it? How did you deal with it?

14. What do you need most to prevent this situation from happening? (Administer Food Security Module)

15. When you’ve gone for help from an agency, how were you treated? (Probe for specific agencies.)

16. In the past year, have you sold or pawned anything you owned?
PARENTING

1. Let's talk about being a parent. What do you enjoy most about being a parent? What are your strengths as a parent? What is the hardest part of being a parent?

2. (If appropriate) How does your partner help you with parenting?

(Optional) Here's another checklist that asks you to describe how you feel about yourself as a parent. (Administer: Parent Ladder) Why do you feel that way? Why do you feel that way?

SOCIAL SUPPORT

1. Who are the people who are most important to you and your family? By this, we mean friends or relatives who are important to you for one reason or another. For each person ask: Who is this person? Why are they important to you? (If appropriate) How did you meet them? How often are you in contact with them? Is there anyone else?

2. Is there anyone who makes things harder for your family? How so? Tell me about that.

3. Do you ever get to go out with your friends? Have you been able to find the time for any outside activities? What sorts of things do you do?

SUMMARY

1. When you look back over the past few years, what do you think are the most important things that have happened to you and your family?

2. Looking ahead into the future, what are you most looking forward to in the coming year? What do you most worry about? What do you think things will be like for your family in three years?

3. Overall, how satisfied are you with your life right now? (Use scale below) Why do you feel that way?

   1 = very dissatisfied
   2 = dissatisfied
   3 = mixed feelings
   4 = satisfied
   5 = very satisfied

4. Is there anything else that you think we should know about how your family is doing right now? Is there anything we've missed?
CONTACT INFORMATION: TO BE REMOVED AND KEPT IN STATE FILES

As you know, we would like to visit with you again in a few months to see how your family is doing. To make it easier to contact you in case you move and forget to tell us, will you share the name and phone numbers of three people who will always know where you are? Please be sure to tell them that we may contact them.

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone Number</th>
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<tbody>
<tr>
<td></td>
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</tbody>
</table>

Thank you so much for your time.

NOTES:
## Knowledge of Community Resources

There are many community services that families need to know how to access. The services needed are different for each family. If you needed it, would you know where to go to:

<table>
<thead>
<tr>
<th>Service</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Get help on heating bills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Apply for subsidized housing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Find temporary housing</td>
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<tr>
<td>4. Apply for Medicaid/MA</td>
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<tr>
<td>5. Find help for a drug or alcohol problem</td>
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<tr>
<td>6. Find help for a domestic violence problem</td>
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<tr>
<td>7. Get your child immunized</td>
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<tr>
<td>8. Find a family doctor</td>
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<tr>
<td>9. Find dental care</td>
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<tr>
<td>10. Find a mental health counselor</td>
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<tr>
<td>11. Find family planning services</td>
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<tr>
<td>12. Apply for welfare</td>
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<tr>
<td>13. Get legal assistance</td>
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<tr>
<td>14. Apply for food stamps</td>
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<tr>
<td>15. Apply for WIC</td>
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<tr>
<td>16. Locate job training</td>
<td></td>
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<tr>
<td>17. Find transportation choices</td>
<td></td>
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<tr>
<td>18. Find child care</td>
<td></td>
<td></td>
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<tr>
<td>19. Apply for a child care subsidy</td>
<td></td>
<td></td>
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<tr>
<td>20. Find help for a family member with disabilities</td>
<td></td>
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<tr>
<td>21. Find low-cost clothing for your family</td>
<td></td>
<td></td>
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<tr>
<td>22. University of Minnesota Extension Service Activities (EFNEP, 4H, etc.)</td>
<td></td>
<td></td>
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<tr>
<td>23. Find Loans to assist you</td>
<td></td>
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<tr>
<td>24. Find sources of financial assistance</td>
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<td></td>
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<tr>
<td>25. Obtain assistance in using the Internet</td>
<td></td>
<td></td>
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<tr>
<td>26. Use the internet</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
LIFE SKILLS ASSESSMENT

<table>
<thead>
<tr>
<th>Do you have:</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A driver's license</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Car insurance</td>
<td></td>
<td></td>
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<tr>
<td>3. Car registration</td>
<td></td>
<td></td>
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<tr>
<td>4. Health insurance</td>
<td></td>
<td></td>
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<tr>
<td>5. A checking account</td>
<td></td>
<td></td>
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<tr>
<td>6. A good credit record</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. A local library card</td>
<td></td>
<td></td>
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<tr>
<td>Do you know how to:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Manage your bills</td>
<td></td>
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<tr>
<td>9. Write a personal check</td>
<td></td>
<td></td>
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<tr>
<td>10. Make a family budget</td>
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<tr>
<td>11. Stretch your groceries to the end of the month</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Register to vote</td>
<td></td>
<td></td>
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<tr>
<td>13. Apply for a credit card</td>
<td></td>
<td></td>
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<tr>
<td>14. Prepare a well-balanced meal for your family</td>
<td></td>
<td></td>
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<tr>
<td>15. Get telephone service</td>
<td></td>
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<tr>
<td>16. Work with your landlord to improve housing</td>
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<tr>
<td>17. Register a consumer complaint</td>
<td></td>
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<tr>
<td>18. Talk to your child's teacher</td>
<td></td>
<td></td>
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<tr>
<td>19. Fill out forms to apply for services</td>
<td></td>
<td></td>
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<tr>
<td>20. Apply for a job</td>
<td></td>
<td></td>
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<tr>
<td>21. Write a resume</td>
<td></td>
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<tr>
<td>22. Dress for a job</td>
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<tr>
<td>23. Fill out your own income tax forms</td>
<td></td>
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<tr>
<td>24. Join a local club or organization</td>
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<tr>
<td>25. Create a personal support system</td>
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</tr>
</tbody>
</table>
FEELINGS ABOUT HOW THINGS ARE GOING
For each of the following statements, check the box that best describes HOW OFTEN YOU HAVE FELT THIS WAY DURING THE PAST WEEK.

<table>
<thead>
<tr>
<th></th>
<th>Rarely or none of the time</th>
<th>A little of the time</th>
<th>A moderate amount of time</th>
<th>Most or all of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I was bothered by things that don't usually bother me.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>I did not feel like eating; my appetite was poor.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3.</td>
<td>I felt that I could not shake the blues even with help from my family and friends.</td>
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<tr>
<td>4.</td>
<td>I felt that I was just as good as other people.</td>
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<tr>
<td>5.</td>
<td>I had trouble keeping my mind on what I was doing.</td>
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<tr>
<td>6.</td>
<td>I felt depressed.</td>
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<tr>
<td>7.</td>
<td>I felt that everything I did was an effort.</td>
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<td>8.</td>
<td>I felt hopeful about the future.</td>
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<tr>
<td>9.</td>
<td>I thought my life had been a failure.</td>
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<tr>
<td>10.</td>
<td>I felt fearful.</td>
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<tr>
<td>11.</td>
<td>My sleep was restless.</td>
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<tr>
<td>12.</td>
<td>I was happy.</td>
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<tr>
<td>13.</td>
<td>I talked less than usual.</td>
<td></td>
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<tr>
<td>15.</td>
<td>People were unfriendly.</td>
<td></td>
<td></td>
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<tr>
<td>16.</td>
<td>I enjoyed life.</td>
<td></td>
<td></td>
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<tr>
<td>17.</td>
<td>I had crying spells.</td>
<td></td>
<td></td>
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<tr>
<td>18.</td>
<td>I felt sad.</td>
<td></td>
<td></td>
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<tr>
<td>19.</td>
<td>I felt that people disapproved of me.</td>
<td></td>
<td></td>
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<tr>
<td>20.</td>
<td>I could not &quot;get going.&quot;</td>
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</tr>
</tbody>
</table>
ADULT HEALTH SURVEY

Do you and/or your partner have medical insurance?
You  Yes  No  Partner  Yes  No

If yes, what kind?
Private/EMO  Medicaid/MA  State Health Plan  Other (Explain)

Do you and/or your partner have any type of dental insurance?
You  Yes  No  Partner  Yes  No

If yes, what kind?
Private  Medicaid/MA  Other (Explain)

About how many times in the past year have you been to a doctor or other health care provider?
Your partner?

If none, when was the last time you visited a doctor or health care provider?
Your partner?

About how many times in the past year have you missed work due to an illness/injury?
Your partner?

Have you or your partner had any injuries or serious illnesses in the past year?
You  Yes  No  Partner  Yes  No

If yes, please explain

Have you been pregnant in the past three years?
Yes  No
If yes: How many times

Are you and your partner able to have more children?
Yes  No

If so, do you currently use birth control?
Yes  No

In the past three years, have you or your partner experienced any of the following health problems?

You  Partner
Heart Problems  Joint Problems
High Blood Pressure  Chronic Pain
Diabetes  Eating Disorder/Obesity
Cancer  Skin Problems
Digestive Problems  Permanent Disability
Liver Problems  Sexually Transmitted Disease
Seizure Disorder  Reproductive Problems
Depression/Anxiety  Bladder Infections
Anger Management  Drug Problems
Hepatitis  Alcohol Problem
Allergies  Tobacco Use
Asthma  Anemia
Frequent colds/sinus  Emotional, physical, or sexual abuse
Thyroid Problems  Migraines/Headaches
Kidney Problems  Learning Disabilities
Fatigue  Arthritis
Eye or vision problems
Back Problems
Other (Specify)

WAVE 1-2001
**First name of:** Child 1: ___________  Child 2: ___________  Child 3: ___________

### CHILD HEALTH SURVEY

Does C1 have medical insurance?  
Private/HMO  
Medicaid/MA  
State Plan  
Other (Explain): ___________

Does C1 have any type of dental insurance? Y Yes  Y No  
If yes, what kind?  
Private  
Medicaid/MA  
Other (Explain): ___________

Has your child had any injuries or serious illnesses in the past year?  
C1: Y Yes  Y No  
C2: Y Yes  Y No  
C3: Y Yes  Y No

If yes, please explain: ___________

C2: Y Yes  Y No  If yes, what kind?  
Private  
Medicaid/MA  
Other (Explain): ___________

C3: Y Yes  Y No  If yes, what kind?  
Private  
Medicaid/MA  
Other (Explain): ___________

About how many times in the past year has your child been to a doctor or other health care provider?  
C1: _______ C2: _______ C3: _______

About how many times in the past year has your child visited a dentist?  
C1: _______ C2: _______ C3: _______

If none, when was the last time your child visited a doctor or health care provider?  
C1: _______ C2: _______ C3: _______

In the past three years, has your child experienced any of the following health problems?  
C1: _______ C2: _______ C3: _______

- Head Lice
- Behavior Problems
- Conjunctivitis (pink eye)
- ADD/ADHD
- Fetal Alcohol Effects/Syndrome
- Fetal Drug Effects
- Broken Bones
- Sexually Transmitted Disease
- Skeletal Problems
- Tobacco Use
- Migraines/Headaches
- Permanent Disability
- Other (specify): ___________

---

**About how many times in the past year has your child missed school due to an illness/injury?**  
C1: _______ C2: _______ C3: _______

---

**WAVE 2-2001**
FOOD SECURITY MODULE

These next questions ask about the food eaten in your household in the last 12 months, since (current month) of last year, and whether you were able to afford the food you need.

1. Which of these statements best describes the food eaten in your household in the last 12 months?
[READ LIST, CIRCLE NUMBER OF RESPONSE]

   [1] Enough of the kinds of food we want to eat. [Go TO Q2]
   [2] Enough but not always the kinds of foods we want. [Go TO Q1b]
   [3] Sometimes not enough to eat [Go TO Q1a]
   [4] Often not enough to eat [Go TO Q1a]
   [5] DK or no answer [Go TO Q2]

1a. [IF ANSWERED 3 OR 4 ABOVE] Here are some of the reasons why people don’t always have enough to eat. For each one, please tell me if that is a reason why you don’t always have enough to eat. [READ LIST, CIRCLE RESPONSE]

   Not enough money for food.................................................. YES  NO  DK
   Not enough time for shopping or cooking............................ YES  NO  DK
   Too hard to get to the store.................................................. YES  NO  DK
   On a diet........................................................................... YES  NO  DK
   No working able to available................................................. YES  NO  DK
   Not able to cook because of health problems.......................... YES  NO  DK

1b. [IF ANSWERED 2 ABOVE] Here are some reasons why people don’t always have the quality or variety of food they want. For each one, please tell me if that is a reason why YOU don’t always have the kinds of food you want to eat. [READ LIST, CIRCLE RESPONSE]

   Not enough money for food.................................................. YES  NO  DK
   Kinds of food we want not available................................. YES  NO  DK
   Not enough time for shopping or cooking............................. YES  NO  DK
   Too hard to get to the store.................................................. YES  NO  DK
   On a special diet................................................................. YES  NO  DK

[IF ANSWERED 1 OR 5 ABOVE] Now I’m going to read you several statements that people have made about their food situation. For each of these statements, please tell me whether the statement is often true, sometimes true, or never true for your household in the last 12 months, that is, since last (name of current month).

2. The first statement is: “We worried whether our food would run out before we get money to buy more.” Was that often true, sometimes true, or never true for your household in the last 12 months?
[CHECK RESPONSE BOX]
   □ Often true
   □ Sometimes true
   □ Never true
   □ DK or no answer
3. "The food that we bought just didn't last, and we didn't have money to get more." Was that **often, sometimes, or never true** for your household in the last 12 months?
   - [ ] Often true
   - [ ] Sometimes true
   - [ ] Never true
   - [ ] DK or no answer

4. "We couldn't afford to eat balanced meals." Was that **often, sometimes, or never true** for your household in the last 12 months?
   - [ ] Often true
   - [ ] Sometimes true
   - [ ] Never true
   - [ ] DK or no answer

5. I (we) relied on only a few kinds of low-cost food to feed my (our) children because I was (we were) running out of money to buy food." Was that **often, sometimes, or never true** for your household in the last 12 months?
   - [ ] Often true
   - [ ] Sometimes true
   - [ ] Never true
   - [ ] DK or no answer

6. I (we) couldn't feed my (our) child (children) a balanced meal because I couldn't afford that." Was that **often, sometimes, or never true** for your household in the last 12 months?
   - [ ] Often true
   - [ ] Sometimes true
   - [ ] Never true
   - [ ] DK or no answer

   **[IF ANSWERED NEVER TRUE OR DK/NO ANSWER TO ALL 5 OF THE ABOVE QUESTIONS (Q2 THRU Q7), STOP HERE. OTHERWISE CONTINUE.]**

7. My (our) child (children) was (were) not eating enough because I (we) just couldn't afford enough food. Was that **often, sometimes, or never true** for your household in the last 12 months?
   - [ ] Often true
   - [ ] Sometimes true
   - [ ] Never true
   - [ ] DK or no answer

8. In the last 12 months, since last (name of current month), did you (or other adults in your household) ever cut the size of your meals or skip meals because there wasn't enough money for food?
   - [ ] Yes [GO TO Q8a]
   - [ ] No [GO TO Q9]
   - [ ] DK or no answer [GO TO Q9]
8a. [If YES] How often did this happen – almost every month, some months but not every month, or in only 1 or 2 months?
   □ Almost every month
   □ Some months but not every month
   □ Only 1 or 2 months
   □ DK or no answer

9. In the last 12 months, did you ever eat less than you felt you should because there wasn’t enough money to buy food?
   □ Yes
   □ No
   □ DK or no answer

10. In the last 12 months, were you ever hungry but didn’t eat because you couldn’t afford enough food?
    □ Yes
    □ No
    □ DK or no answer

11. In the last 12 months, did you lose weight because you didn’t have enough money for food?
    □ Yes
    □ No
    □ DK or no answer

[If answered no or DK/No answer to all of the 4 previous questions (Q8 thru Q11), Stop here. Otherwise continue.]

12. In the last 12 months, did you (or other adults in your household) ever not eat for a whole day because there wasn’t enough money for food?
    □ Yes [GO TO Q12a]
    □ No [GO TO Q13]
    □ DK or no answer [GO TO Q13]

12a. [If YES] How often did this happen – almost every month, some months but not every month, or in only 1 or 2 months?
    □ Almost every month
    □ Some months but not every month
    □ Only 1 or 2 months
    □ DK or no answer

13. The next questions are about children living in the household who are under 18 years old. In the last 12 months, since (current month) or last year, did you ever cut the size of your child’s (children’s) meals because there wasn’t enough money for food?
    □ Yes
    □ No
    □ DK or no answer
14. In the last 12 months, did any child ever skip meals because there wasn't enough money for food?
   - Yes [GO TO Q14a]
   - No [GO TO Q15]
   - DK or no answer [GO TO Q15]

14a. [If YES] How often did this happen – almost every month, some months but not every month, or in only 1 or 2 months?
  - Almost every month
  - Some months but not every month
  - Only 1 or 2 months
  - DK or no answer

15. In the last 12 months, was any child in the household ever hungry, but you just couldn't afford more food?
  - Yes
  - No
  - DK or no answer

16. In the last 12 months, did any child ever not eat for a whole day because there wasn't enough money for food?
  - Yes
  - No
  - DK or no answer
THE PARENTING LADDER

Where would you put yourself on the Parenting Ladder in terms of:

Your knowledge of how children grow and develop?

Your confidence that you know what is right for your child?

Your ability to create a safe home for your child?

Your success in teaching your child how to behave?

Your skill at finding fun activities that interest your child?

The amount of stress in your life right now?

Your ability to cope with the stress in your life?

Parenting is often smoother when others are there to help. Where would you put yourself on the Parenting Ladder in terms of:

Other parents for you to talk to?

Someone to help you in an emergency?

Someone to offer helpful advice or moral support?

Someone for you to relax with?

Professional people to talk to when you have a question about your child?

Your overall satisfaction with the amount of support in your life?
VITA

Ann Chalice Allgood Berry is the daughter of Sue Fullilove Allgood and William Sydney Allgood. She was born in Yazoo City, Mississippi, on January 6, 1958. She is married to Ross W. Berry and they have one son, Sean Ross.

In 1981, Ann graduated from Louisiana State University with a bachelor of science degree in home economics and received a master of science in home economics from LSU in 1983. She earned a master’s of business administration from Northeast Louisiana University in 1988. Areas of concentration in her doctoral studies in the School of Human Resource Education and Workforce Development have been Human Resource Development and Family Economics.

Ann is employed with the LSU Agricultural Center’s Cooperative Extension Service and has served this organization in a number of positions including: 4-H Agent, Area Energy Agent, and Agribility Program Coordinator. She is currently responsible for Family Economics program development and outreach efforts. She is also the Equal Employment Opportunity Coordinator for the organization, providing leadership for ensuring equal opportunity and accessibility in employment and programming for employees and clientele. In addition to working for the AgCenter, Ann was employed with the Louisiana Department of Economic Development as a small business counselor and financial incentives specialist.

Ann received the Denver T. Loupe Fellowship during her doctoral studies. She served as the Vice President, President, and now Past President of Epsilon Sigma Phi. She is a member of the Association for Financial Counseling, Planning Education and the Louisiana Extension Association for Family and Consumer Sciences, and Gamma Sigma Delta.