

SEOHEE SON *Sookmyung Women's University*

PATRICIA HYJER DYK* *University of Kentucky*

JEAN W. BAUER** *University of Minnesota*

MARY JO KATRAS*** *University of Minnesota*

Barriers to Employment Among Low-Income Mothers in Rural United States Communities

This article addresses potential barriers to sustained employment for rural low-income mothers. Drawing from a two panel longitudinal sample of 240 families from the Rural Families Speak project, it examines the extent to which human capital and family factors were related to these mothers' ability to be employed. Comparisons are made between mothers, who over a three-year period, were

continuously unemployed, intermittently employed, or stably employed. Many of these rural low-income mothers faced multiple individual and family barriers that impacted their labor force participation. Notably food insecurity, mental health, caring for a young child, housing, and a family history of welfare were associated with less stable employment. The implications for public policy and service delivery are discussed.

This research was supported in part by USDA/CSREES/NRICGP Grants - 2001-35401-10215, 2002-35401-11591, 2004-35401-14938. Data were collected in conjunction with the cooperative multi state research project NC-223/NC-1011 Rural Low-Income Families: Tracking their well being and functioning in the context of welfare reform. Cooperating states are California, Indiana, Kentucky, Louisiana, Massachusetts, Maryland, Michigan, Minnesota, Nebraska, New Hampshire, New York, Ohio, and Oregon. Research was also supported by MIN-52-055, Minnesota Agricultural Experiment Station Project and Special Hatch Competitive Funding for Minnesota Rural Families Speak project. We thank Sarah Frank for her assistance in the early stages of the paper.

Lecturer, Department of Family Resource Management, Sookmyung Women's University, Seoul, Korea (seoheeson1@gmail.com)

*Associate Professor, Community and Leadership Development and Sociology, University of Kentucky, USA

**Professor, Family Social Science, University of Minnesota, USA

***Lecturer, Family Social Science, University of Minnesota, USA

Key Words: employment, employment barrier, low-income, rural

Balancing work and family roles is a challenge for any family raising young children in 21st century America. Low-income mothers in rural areas, in particular, face multiple barriers to sustained employment due to lower levels of human capital (e.g. less than a high school education), time and emotional demands from family members, as well as lack of quality work opportunities and resources (e.g., affordable child care and transportation) (Katras, Zuiker, & Bauer, 2004; Pruitt, 2008). Nevertheless, the current U.S. welfare policy has taken a work-first approach that emphasizes moving families from welfare to work without consideration of individual, family, and community barriers to employment. Rural low-income mothers are more vulnerable compared to their urban counterparts under the current welfare policy. Thus, it is important to understand the individual and family

barriers to employment for rural low-income mothers and examine how to improve their employment and to deliver appropriate services for these mothers.

A line of research has emerged that examines the employment barriers faced by low-income women, predominantly mothers who are exiting the welfare rolls (Danziger & Seefeldt, 2002). These studies have primarily focused on urban populations (Dworsky & Courtney, 2007; Smith, Romero, Wood, Wampler, & Wise, 2002; Zedlewski, 1999). However, there is a paucity of research on their rural counterparts. This is an egregious omission since rural families in particular face limited economic diversity (Dyk & Zimmerman, 2000; Zimmerman & Hirschl, 2003) and access to education, quality childcare, transportation infrastructure, and medical specialists (Pruitt, 2008).

The purpose of this research is to examine the relationships between potential barriers faced by rural low-income mothers and three employment trajectories: continuous unemployment, intermittent employment, and stable employment over a three-year period. Research questions of the present study are: (1) How prevalent are barriers to rural low income mothers across employment categories? (2) What is the relationship between potential barriers and subsequent employment? and (3) What is the relationship between types of barriers and subsequent employment? Findings expand our understanding of the employment barriers for low-income populations by focusing on rural mothers and the influence of their individual and family circumstances.

BACKGROUNDS

United States Welfare Policy

The Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996 dramatically altered welfare policy and assistance to low-income families. It eliminated the federal entitlement system of cash assistance under Aid to Families with Dependent Children (AFDC), terminated the Job Opportunities and Basic Skills (JOBS) training programs, created the Temporary Assistance to Needy Families (TANF) Block Grant, and allowed states to

design their own welfare programs within guidelines. Significantly, this legislation altered the cash assistance program from being an entitlement to one limited by time and contingent on the unemployed participating in work or work related activities. Notably, the current welfare legislation does not contain specific rural provisions even though rural communities have different contexts compared to urban communities including fewer job options, lack of child care, and scarce transportation resources (U.S. Department of Health and Human Services, 2002). Regrettably, many former TANF recipients have not been able to obtain and sustain employment. A number of studies have interviewed TANF leavers to gain insight into the challenges these mothers face as they seek sustainable work. The major studies have examined urban populations (the bulk of states' caseloads) to determine how barriers might be addressed at state and federal levels. Notable studies of former TANF recipients include the Urban Institute's National Survey of America's Families (NASF) (Loprest & Zedlewski, 1999; Zedlewski, 1999, 2003), Milwaukee County Wisconsin (Dworsky & Courtney, 2007), Women's Employment Study (WES) in an urban Michigan county (Danziger & Seefeldt, 2002), and health barriers among poor women working in San Antonio, TX (Romero, Chavkin, Wise, Smith, & Wood, 2002). The present study examines a smaller, yet equally important population of low-income rural mothers.

Rurality

While the designation "rural" has many connotations, it generally refers to less populated areas distant from urban or metropolitan areas (USDA Economic Research Service 2007). However, "rural areas and communities are not just smaller, poor substitutes for urban areas. Rather, they are qualitatively different, and those differences are consequential" (Rural Policy Research Institute, 2001, p. 3). For instance, elected leaders may only be part-time, there are fewer non-profit organizations to provide a safety net of social services, and minimal transportation infrastructure placing greater importance on car ownership to access work are issues faced by all community members, not just low-income

residents (Zimmerman & Hirschl, 2003).

The lower incomes and disproportionately higher poverty rates in many rural counties (USDA Economic Research Service, 2004a), has sparked research that has examined the importance of considering place with regard to work opportunities (Falk, Schulman, & Tickamyer, 2003), local opportunity structures (Cotter, 2002), livelihood “adaptive” strategies (Brown & Lichter, 2004), and place-based low-income family supports (Tickamyer, White, Tadlock, & Henderson, 2007). Low wages, minimal benefits, and limited advancement opportunities characterize rural employment (McLaughlin & Coleman-Jensen, 2008; Slack & Jensen, 2002; Ziebarth & Tigges, 2003). For example, although rural mothers with children under age six have had higher employment rates compared to urban mothers with young children (i.e., 69% of rural mothers vs. 63% of urban mothers in 2004), poverty rates are still higher among rural mothers than urban mothers (Smith, 2007). The service and manufacturing sectors together employ more than two out of three rural workers (USDA Economic Research Service, 1997). Rural workers often hold more than one job and are more likely to be seeking full time employment compared to their urban counterparts (Kusmin, 2007).

Hence, rural workers including lesser skilled former TANF recipients are finding it difficult to gain stable employment. And even many who do are underemployed and still rely on public assistance to make ends meet (Dyk & Zimmerman, 2000). Other low-income rural workers secure jobs, only to lose them due to unreliable transportation, personal or family health issues, or plant closures (Glasmeyer & Salant, 2006). Rural-urban inequities persist particularly for the lives of single mothers and their children as they face the challenge of finding a good job paying a living wage (Lichter & Jensen, 2001; Weber & Jensen, 2004). Thus, it is important to further understand other factors that impact rural family members’ employment (Snyder & McLaughlin, 2004; Taylor, 2001), particularly those low-income families transitioning off welfare assistance into paid work and those whose work patterns vary.

Barriers to Employment

Barriers to employment have been studied for single and welfare reliant urban mothers (Danziger, Corcoran, Danziger, Heflin, Kalil, Levine, Rosen, Seedfelt, Siefert, & Tolman, 2000). A clear pattern arises that many of these low-income urban welfare leavers faced one or more significant barriers to employment (Danziger *et al.*, 2000; Polit, Widom, Edin, Bowie, London, Scott, & Valenzuela, 2001; Zedlewski, 1999, 2003). One barrier may not preclude working, but multiple barriers impede employment (Olson & Pavetti, 1996). Prominent barriers included having less than high school education, poor mental health (depression), physical health conditions, having an infant, or children with health problems (Corcoran, Danziger, Khalil, & Seefeldt, 2000; Smith *et al.*, 2002; Zedlewski, 1999, 2003). Huan and Douglas (2004) conducted a meta-analysis of employment barriers faced by current and former TANF recipients also reported similar findings and two additional items of caring for a child with special needs and unstable housing situation. Although not examined in urban studies, food insecurity has emerged as an additional employment barrier in rural studies (Sano, Dolan, Richards, Bauer, & Braun, 2008).

It is important to examine the relationships between types of barriers and employment patterns given rural low-income mothers may have different employment barriers depending upon their employment patterns. Previous research has emphasized that investment in human capital would help increase stable employment of low-income mothers (Brodsky & Ovwigho, 2002; Simmons, Braun, Wright, & Miller, 2007). However, human capital alone, as measured by education, may not explain rural low-income mothers’ employment. Smith (2007) reported that rural mothers were more likely to live in poverty compared to their urban counterparts at every education level despite higher employment rates for rural mothers. Porterfield (2001) also reported that higher education, particularly college education, did not help rural mothers’ employment or income. We have viewed human capital as those characteristics that are held by an

individual or has the ability to influence work. In addition to human capital, different types of barriers such as family circumstances should be considered in relation to rural low-income mothers' employment patterns in rural contexts. Therefore, in the present study, employment barriers were separated into two types of barriers, human capital barriers and family barriers, to identify the relationships between types of barriers and employment patterns as well as the prevalence of employment barriers for rural low-income mothers.

METHOD

Data Source

The current study is a secondary analysis using a data subset from a multi-state, mixed methods, longitudinal research project commonly known as Rural Families Speak (RFS) (Bauer, 2004). The overall goal of this study was to examine family well-being and functioning of rural low-income families in the context of welfare reform. Researchers from 14 states representing all regions of the United States collaborated using a common protocol to gain insights into the individual choices and contextual constraints that impact the ability of low-income rural families to engage in employment and make ends meet.

Twenty-five rural counties across the fourteen states were selected based on Beale code designations. Published by the U.S. Department of Agriculture Economic Research Service (2004b), Beale codes distinguish metropolitan counties by size and nonmetropolitan counties by degree of urbanization and proximity to metro areas. Counties in this study were primarily identified as 6 through 8. Codes 6 and 7 indicate counties that are nonmetropolitan with an urban population of 2,500 to 19,999. Code 8 counties are completely rural with no population center of more than 2,500 people.

Mothers were recruited in these rural counties based on three inclusion criteria at the time of the initial interview: (a) at least one child was under 13 years old, (b) their household income was no more than 200% of the poverty guidelines, but not limited to those who had been on welfare, and (c) preference

was given to families with at least one preschool child. Participants were identified through programs serving low-income families given the mobility and the low reliability of the phone lists for this low-income rural population. A total of 471 families were studied across three waves of data collection conducted from 1999-2003 in two panels (<http://www.ruralfamilies.umn.edu>). This is the largest and most recent data set available for rural low-income family studies. It is also the only longitudinal data set and has potential for mixed methods research studies.

Variables

The dependent variable in the present study was the rural low-income mothers' employment patterns across three waves categorized as continuous unemployment, intermittent employment, and stable employment (Berry, Katras, Sano, Lee, & Bauer, 2008). The *continuous unemployed* group included mothers who were never employed during the course of the study. The *intermittent* group was classified as experiencing a change of employment status during the time period varying from either employed or unemployed or from employer to employer. The *stable* group included those who remained employed at the same workplace over the course of study.

Independent variables included two types of employment barriers: individual human capital and family barrier variables. To answer our first and third research questions, the number of barriers to employment was counted. To identify the number of employment barriers, each variable was transformed into a dichotomous variable to indicate whether or not the mothers experienced any barriers (1=had barrier, 0=did not have barrier). These barriers were selected on our human capital theory and previous research of urban low-income mothers. For another set of analysis (research question 2), we included both dichotomous variables and continuous variables to predict the employment patterns of the mothers. Continuous variables were the mother's education, number of health problems, and age of the youngest child. These measures were obtained during RFS baseline data collection (wave 1).

Table 1. Demographic Characteristics of Mothers by Employment Status

(N = 240)

Variable	Continuous Unemployment (n = 57)	Intermittent Employment (n = 142)	Stable Employment (n = 41)	Total (n = 240)	F
	M (SD)	M (SD)	M (SD)	M (SD)	
Mothers' Age	31.42 (6.59)	29.35 (7.19)	34.07 (6.95)	30.66 (7.20)	7.64**
Number of Children	2.28 (1.19)	2.11 (1.17)	2.54 (1.16)	2.23 (1.18)	2.15
Age of Youngest Child in a Household	3.52 (2.80)	3.39 (2.96)	4.89 (2.99)	3.68 (2.97)	4.29*
Total Number of Family Members	4.28 (1.73)	4.15 (1.70)	4.34 (1.54)	4.21 (1.67)	.27
Monthly Income	\$1103.37 (731.41)	\$1291.38 (839.43)	\$1424.76 (752.81)	\$1269.52 (804.30)	2.05
	N (%)	N (%)	N (%)	N (%)	Chi-square
Marital Status					
Single	9 (3.8)	34 (14.2)	8 (3.3)	51 (21.3)	6.87
Married	30 (12.5)	50 (20.8)	14 (5.8)	94 (39.2)	
Living with Partner	8 (3.3)	25 (10.4)	10 (4.2)	43 (17.9)	
Divorced/ Separated	10 (4.2)	33 (13.8)	9 (3.8)	52 (21.7)	
Mothers' Ethnicity					
Non-hispanic White	40 (16.8)	101 (42.4)	32 (13.4)	173 (72.7)	7.82
Hispanic/Latino	9 (3.8)	23 (9.7)	8 (3.4)	40 (16.8)	
African American	2 (.8)	10 (4.2)	0 (0.0)	12 (5.0)	
Native American	1 (.4)	1 (.4)	0 (0.0)	2 (.8)	
Multi-racial/ Other	5 (2.1)	5 (2.1)	1 (.4)	11 (4.6)	
Mothers' Education					
8th Grade or Less	5 (2.1)	7 (2.9)	3 (1.3)	15 (6.3)	14.82
Some High School	10 (4.2)	25 (10.4)	2 (.8)	37 (15.4)	
High School or Ged	18 (7.5)	45 (18.8)	11 (4.6)	74 (30.8)	
Specialized Training After High School	7 (2.9)	24 (10.0)	10 (4.2)	41 (17.1)	
Some College	15 (6.3)	39 (16.3)	12 (5.0)	66 (27.5)	
College or University Graduate	1 (.4)	2 (.8)	3 (1.3)	6 (2.5)	
Graduate Degree	1 (.4)	0 (0)	0 (0)	1 (.4)	

* $p < .05$, ** $p < .01$.

Note. Data are based on baseline information. The total number of responses for each it differs because of missing data.

Human capital barriers

Mother's education As a measure of education barrier, we created two variables: a dichotomous and a continuous for different analyses. The dichotomous variable (1=less than high school education, 0 =more than high school education) was used for Table 2. To predict the relationships between potential barriers and the employment patterns of the mothers, we treated each mother's education as a continuous variable ranging from 1 (8th grade or less) to 8 (Graduate degree) (see Table 1). Note that value 7 (one or more years beyond college) is not shown in Table 1 since no mother in this subsample was in this category.

Number of health problems Regarding physical health problems, mothers were asked to identify whether they had any of the following 14 commonly assessed (Sturm & Wells, 2001; Bird, 2006) health problems: heart problems, high blood pressure, diabetes, cancer, liver problems, seizure disorder, hepatitis, asthma, back problems, chronic pain, permanent disability, reproductive problems, bladder infections, and migraines/headaches. The score for each mother was calculated by summing the number of physical health problems with a range of 0 to 14. As a barrier to work, mother's physical health problems was a dichotomous variable (1=more than 3 physical health problems, 0=less than 3 physical health

problems). Consistent with previous studies (Dworsky & Courtney, 2007) three or more of these problems was identified as a discriminating number. The total number of physical health problems was used to predict potential barriers to the mothers' employment.

Mental health The measure of the mothers' mental health was a self-reported item on the health inventory completed by each mother. They indicated *yes* or *no* to the question of whether or not they had experienced depression or anxiety (1=*had depression or anxiety*; 0=*no depression or anxiety*).

Food insecurity Food security is a measure of the availability and access to food for the mother. Berry and her colleagues (2008) reported that food security increased the potential for stable employment. Thus, food security was considered to be a part of individuals' human capital since food security can contribute to people's personal health and their earning and productivity ability. In the present research, food insecurity, as a barrier, was a dichotomous variable (1=*food insecure*; 0=*food secure*) measured by the 18-item U.S. Household Food Security Module with a 12-month time reference (Bickel, Nord, Price, Hamilton, & Cook, 2000).

Human capital barriers A variable was created by summing across the above four variables to indicate the number (ranging from 0 to 4) of barriers each mother faced.

Family barriers

Age of youngest child As an employment barrier, having young children and the need for child care were measured by the presence of a child under age four (1=*had child under age 4*; 0=*had no child under age 4*). However, the variable of age of youngest child was treated as a continuous variable to predict the relationships between potential barriers and mother's employment patterns.

Child health Child health was measured based on the mothers' report regarding whether any of her children had had injuries or illnesses that kept her from being able to work (1=*child had injuries or*

illness; 0=*child had no injuries or illness*).

Marital status Whether or not the mother had a spouse/partner present was measured by the mothers' marital status (1=*no spouse/partner present*; 0=*spouse/partner present*). The mothers who did not have spouse/partner present were considered as having a barrier since having a second person available in a household was desirable for mothers' employment.

Housing stability The housing stability variable was measured by a question about whether the mother owned a home or not (1=*does not own a home*; 0=*own a home*). Renting increases the mother's risk of having less stable housing.

Family of origin on welfare To capture the family context of previous welfare dependency, we measured the *yes/no* response to whether the mother's parents received welfare when she was at home and growing up (1=*parents received welfare*; 0=*parents did not receive welfare*).

Family barriers A variable was created by summing across the above five variables to indicate the number (ranging from 0 to 5) of barriers each mother faced.

Total number of work barriers This variable is the sum of the *Human capital barriers* and the *Family barriers* variables to reflect the cumulative effect of both individual and family challenges to employment.

Analysis

To identify the prevalence of employment barriers across employment patterns, chi-square analyses were used. In addition, multinomial logistic regression analyses were conducted to predict employment patterns of rural low-income mothers with potential employment barriers and the types of employment barriers as predictor variables. The presence of multicollinearity was tested by examining a correlation matrix among all independent variables. The coefficients of the correlation were lower than .3 indicating little association among employment barriers.

Table 2. Number of Barriers to Work

(N = 240)

	Number (%) of Respondents			Chi-square
	Continuous Unemployment (n = 57)	Intermittent Employment (n = 142)	Stable Employment (n = 41)	
Total Number of Work Barriers				
0	1 (2.0%)	0 (0%)	3 (7.3%)	25.26***
1	2 (4.0%)	5 (3.5%)	5 (12.2%)	
2	3 (5.0%)	14 (9.9%)	9 (22.0%)	
3+	51 (89.0%)	123 (86.6%)	24 (58.5%)	
Human Capital Barriers				
0	14 (24.6%)	29 (20.4%)	18 (43.9%)	19.88**
1	11 (19.4%)	52 (36.6%)	12 (29.3%)	
2	16 (28.0%)	42 (29.6%)	8 (19.5%)	
3+	16 (28.0%)	19 (13.4%)	3 (7.3%)	
Family Barriers				
0	1 (1.8%)	1 (.7%)	3 (7.3%)	21.17**
1	6 (10.5%)	14 (9.9%)	12 (29.3%)	
2	17 (29.8%)	41 (28.8%)	13 (31.7%)	
3+	33 (57.9%)	86 (60.6%)	13 (31.7%)	

** $p < .01$, *** $p < .001$.

Participants

Since this study was designed to examine employment barriers, a subsample of the RFS project was selected to include all families with mother's employment data over the three waves of data collection in two panels. A sample of 240 cases had sufficient data to meet this criterion.

Employment trajectories were categorized into one of three employment patterns: continuous unemployment, intermittent employment, and stable employment. Fifty-seven mothers were included in the *unemployed* group. Another 41 mothers comprised the *stable* group. The majority of the mothers (59.2%, $n=142$) were classified as *intermittent*. The data did not allow for determining the reason for the unemployment, just that there was a change in the situation, thus intermittent.

Table 1 reports the demographic characteristics of the mothers categorized by their employment trajectory. On average, mothers interviewed were 31 years old, and just over half had a partner (57.1%) and an average of four people living in the household. The mothers were predominantly non-Hispanic White (72.7%), with other ethnicities represented: Hispanic/Latina (16.8%), African American (5.0%), Native American (.8%), and multi-racial (4.6%). The

education level obtained was: finished less than high school (21.7%), high school degree or General Educational Development (GED) (30.8%), and more than high school (47.5%).

The mothers in the stable employment group were the oldest, and the youngest child in the family was the oldest across all three employment groups. There was not a significant difference in number of children, family size, monthly income, marital status, ethnicity, and education across the three groups.

FINDINGS

Prevalence of Employment Barriers Across Employment Patterns

The prevalence of employment barriers for each of the three employment patterns is reported in Table 2. While one obstacle may not keep mothers out of the labor force, the accumulation of barriers creates a greater challenge. To gain insight into how the accumulation of barriers might contribute to the ability to sustain employment, the barriers were counted. Additionally, barriers were separated to indicate which circumstance, human capital or family may be presenting a greater prevalence of

Table 3. Estimates of Multinomial Logistic Model to Predict Employment Patterns

(N = 240)

Variable	Potential Barriers			Types of Barriers		
	B	SE B	OR	B	SE B	OR
Intermittent Employment (n = 142)						
Intercept	.10	.87		-.82 [†]	.47	
Human Capital Barriers				.36 [†]	.19	1.44
Mother's Education	.02	.17	1.02			
Number of Health Problems	-.12	.15	.89			
Mental Health	.56	.46	1.75			
Food Insecurity	1.01*	.44	2.74			
Family Barriers				.69***	.19	2.00
Age of Youngest Child	-.16*	.07	.85			
Child Health	.09	.43	1.09			
Marital Status	-.05	.45	.95			
Housing Stability	1.40**	.47	4.06			
Family of Origin on Welfare	.76 [†]	.41	2.13			
Continuous Unemployment (n = 57)						
Intercept	-1.31	1.01		-1.78**	.57	
Human Capital Barriers				.65**	.21	1.92
Mother's Education	.03	.19	1.03			
Number of Health Problems	.22	.16	1.25			
Mental Health	.89 [†]	.52	2.44			
Food Insecurity	.65	.50	1.92			
Family Barriers				.55**	.21	1.73
Age of Youngest Child	-.16*	.08	.85			
Child Health	.00	.50	1.00			
Marital Status	-.86 [†]	.52	.43			
Housing Stability	1.94**	.59	6.94			
Family of Origin on Welfare	.33	.47	1.39			

[†] $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.

Note. Reference group is mothers with stable employment

barriers. Table 2 reports the number of barriers 0 to 3+ by employment category and gives insight into the cumulative effect of human capital and family barriers for these rural women.

A clear pattern emerges. Mothers in the stable employment group reported significantly less human capital and family barriers. They were twice as likely to report no human capital barriers (43.9%) compared to their counterparts in the unemployed (24.6%) and intermittent (20.4%) groups. The stable employed mothers were three times as likely to only have one or less family barrier (36.6%) than the unemployed (12.3%) and intermittent (10.6%) mothers. From this table we see nearly nine out of ten mothers in the unemployed and intermittent

groups experienced three or more work barriers and that family barriers were more likely to contribute to this total. Further analyses below provide additional insights into the impact of these factors.

Potential Barriers to Employment

Table 3 shows the results of the multinomial logistic regression predicting the employment patterns of rural low-income mothers. The predictors were a) human capital barriers including mother's education, number of health problems, mental health, and food insecurity; and b) family barriers including age of the youngest child, child health, marital status, housing stability, and family of origin on welfare. The mothers with stable employment were used as a

reference to compare with the mothers with intermittent employment and the mothers with continuous unemployment in the analysis.

Compared to the mothers with stable employment, food insecurity, age of the youngest child, and housing stability, and family of origin on welfare were related to the mothers with intermittent employment. Of the human capital barriers, food insecurity was associated with higher odds of intermittent employment over the three-year period by 174% ($e^{1.01}=2.74$, $p<.05$). In terms of family barriers, the predictor of having an older child in the household decreased the odds of the mothers with intermittent employment by 15% compared to the mothers with stable employment ($e^{-.16}=.85$, $p<.05$). That is, if a mother had a younger child, she was more likely to have changed her employment over the three-year period than a mother having an older child. Not owning a home also increased the odds of the mothers with intermittent employment by a factor of 4.06 ($e^{1.40}=4.06$, $p<.01$). The predictor of having parents who received welfare was marginally significant ($e^{.76}=2.13$, $p<.10$). Having parents who received welfare contributed to the higher likelihood of intermittent employment compared to the mothers with stable employment.

The predictors of mental health, age of the youngest child, marital status, and housing stability contributed to the likelihood of continuous unemployment compared to stable employment. Like the predictors of the mothers with intermittent employment, having a younger child ($e^{-.16}=.85$, $p<.05$) and not own a home ($e^{1.94}=6.94$, $p<.01$) increased the odds of the mothers having continuous unemployment over the three-year period compared to the mothers with stable employment. In addition, the mothers' self-reported depression was associated with 144% higher odds ($e^{.89}=2.44$, $p<.10$) of the mothers with continuous unemployment compared to the mothers with stable employment. The predictor of not having a spouse or partner decreased the odds of the mothers having continuous employment by 57% ($e^{-.86}=.43$, $p<.10$) compared to the mothers with stable employment. That means, having a spouse or partner present who may contribute to the household's income could contribute

to the higher likelihood of continuously unemployment compared to the mothers with stable employment.

Types of Barriers to Employment

To further understand the association between the mothers' employment patterns and the types of barriers, the total number of human capital barriers and family barriers were used to predict the rural, low-income mothers' employment patterns (See Table 3). Compared to stable employment, the total number of family barriers ($e^{.69}=2.00$, $p<.001$) was the more influential factor than the total number of human capital barriers ($e^{.36}=1.44$, $p<.10$) to predict intermittent employment. However, both the total number of human capital barriers ($e^{.65}=1.92$, $p<.01$) and family barriers ($e^{.55}=1.73$, $p<.01$) contributed to the higher likelihood of continuous unemployment compared to stable employment.

DISCUSSION

The objectives of this research were to identify the prevalence of key barriers to sustained employment for a sample of low-income rural mothers and to examine the relationships between potential barriers and the mothers' employment patterns. We particularly focused on a set of human capital barriers and family barriers that predicted an employment trajectory of continuous unemployment, intermittent employment or stable employment of rural low-income mothers.

One of the key finding is that employment barriers for rural low-income mothers were very prevalent regardless of the rural low-income mothers' employment patterns. Most mothers with unstable employment had more than 3 employment barriers, and more than half of the mothers with stable employment also faced more than 3 employment barriers. Although all mothers faced barriers, rural low-income mothers with multiple employment barriers were more likely to have unstable employment, as Olson and Pavetti (1996) reported. Regarding potential employment barriers, our findings were consistent with prior research,

reporting that low-income mothers' mental health problems, having young children, and unstable housing were associated with unstable employment (Corcoran *et al.*, 2000; Hauan & Douglas, 2004; Smith *et al.*, 2002).

This study found that the identified potential barriers for employment were different depending upon low-income, rural mothers' employment patterns over the three year period. Both family barriers including the presence of younger children in the home and housing instability were associated with unstable employment. While the human capital barrier of food insecurity and the family barrier of family of origin on welfare were associated with intermittent employment, the human capital barrier of mental health and family barrier of marital status were associated with continuous unemployment. In terms of food insecurity, this finding is consistent with previous research which found that food insecurity was associated with unstable employment (Berry *et al.*, 2008). Interestingly, a mother's education was not associated with her stable employment, unlike results of previous research (Hauan & Douglas, 2004).

Family barriers were found to be more influential than human capital barriers in predicting the employment trajectory. This finding is important to note when developing policies for rural low-income mothers' employment since it reveals that the mothers were more likely to be employed if they had fewer family barriers. To date, however, a number of studies have focused on the importance of human capital in increasing employment and improving the economic well-being of low-income families (Berry *et al.*, 2008; Brodsky & Ovwigho, 2002; Mammen, Bauer, & Lass, 2009; Mammen, Lass, & Seiling, 2009). As the results of this research show, in addition to the lack of human capital, family barriers such as child care, housing stability, and family of origin on welfare should be considered in the policy discussion of rural low-income mothers' employment and economic well-being.

Our results shed light on why is it difficult for rural mothers to remain employed. These mothers are embedded in families and communities that not only provide great personal satisfaction and support

but provide daily challenges to their ability to negotiate the demands placed upon them by the systems within which they are embedded. Welfare reform policies place time limits and work requirements that constrain mothers' choices in how to balance time between family caregiving and income generation. We see from this study that even for those with stable employment, many mothers have several barriers to employment. The challenges are even greater for mothers in the intermittent and unemployed groups.

Yet, as these findings indicate the economic success of many rural families will be impacted by the availability of child care services and subsidies, adequate information and programming to meet physical and mental health challenges, and stable housing. Since food insecurity remains a reality in many of these low-income families, increased efforts to provide families with information for Supplemental Nutrition Assistance Program (SNAP) benefits and eligibility for public assistance could provide a safety net. Job training programs may also be a vital resource in these rural communities and they should be encouraged to incorporate assessments to identify potential barriers to sustained employment as well as link mothers to networks that can provide support. We would also encourage rural communities to identify the "bright spots" (Heath & Heath, 2010), the strategies that are working for low-income rural families that are successfully able to balance their family and work challenges. Non-profit organizations and the Cooperative Extension Service are particularly positioned to take a community-based approach to assess what is working and how supportive networks can be developed to ameliorate the impact of human capital and family barriers that exist for low-income rural mothers.

One limitation of the present study is the classification of employment patterns. It is difficult to distinguish within the data between unemployment and choosing to be out of the labor force. It could be possible to combine mothers who may have chosen to not be employed for pay outside the home with those who were involuntarily unemployed. Researchers should be careful to distinguish employment status by asking whether they are either

voluntarily or involuntarily unemployed for future employment research.

Another limitation of this study is that the barriers we examined in this study were by no means exhaustive of variables that could be included in such an analysis. However, barriers were selected that were comparable to previous studies and could be measured using data from the RFS study to extend our understanding of employment barriers to a low-income rural mother sample. For future research, rural community-level barriers should be considered in the analysis since rural communities have very different characteristics that could contribute to low-income mothers' employment (Bauer, Dyk, Son, & Dolan, in press). Addressing issues such as place-based low-income and welfare policies that target sustained employment should be discussed for future research. Rural realities are not often considered in policies and regulations that typically reflect urban concerns and infrastructure. Funding formulas, qualification requirements, and eligibility constraints that work well in urban communities may be impracticable for rural contexts (Pruitt, 2008). Certainly economies of scale for service delivery in urban areas cannot be realized in more remote rural counties where service availability is limited and more costly to deliver.

REFERENCES

- Bauer, J. W. (2004). *Low income rural families: Tracking their well-being and functioning in the context of welfare reform: North central region, multi state project NC 223*. Retrieved April 18, 2004 from <http://www.ruralfamilies.umn.edu/publications>
- Bauer, J. W., Dyk, P. H., Son, S., & Dolan, E. M. (in press). Rural does matter: Understanding the rural context. In J. W. Bauer & E. M. Dolan (Eds). *Rural families and work*. New York: Springer.
- Berry, A. A., Katras, M. J., Sano, Y., Lee, J., & Bauer, J. W. (2008). Job volatility of rural low-income mothers: A mixed methods approach." *Journal of Family and Economic Issues*, 29, 5-22.
- Bickel, G., Nord, G. M., Price, C., Hamilton, W., & Cook, J. (2000). *Guide to measuring household food security*. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service.
- Brodsky, A. E., & Ovwigho, P. C. (2002). Swimming against the tide: Connecting low-income women to living wage jobs. *Journal of Poverty*, 6, 63-87.
- Bird, C. L. (2006). Life quality: Assessing the influence of economic strain and parenting. Unpublished dissertation. University of Minnesota, Saint Paul.
- Brown, J. B., & Lichter, D. T. (2004). Poverty, welfare, and the livelihood strategies of nonmetropolitan single mothers. *Rural Sociology*, 69, 282-301.
- Corcoran, M., Danziger, S. K., Khalil, A., & Seefeldt, K. S. (2000). How welfare reform is affecting women's work. *Annual Review of Sociology*, 26, 241-269.
- Cotter, D. A. (2002). Poor people in poor places: Local opportunity structures and household poverty. *Rural Sociology*, 67, 534-555.
- Danziger, S. K., Corcoran, M., Danziger, S., Heflin, C., Kalil, A., Levine, J., Rosen, D., Seedfelt, K., Siefert, K., & Tolman, R. (2000). Barriers to the employment of welfare recipients. In R. Cherry & W. M. Rodgers III (Eds). *Prosperity for all? The economic boom and African Americans* (pp. 239-272). New York: Russell Sage Foundation.
- Danziger, S. K., & Seefeldt, K. S. (2002). Barriers to employment and the "hard to serve": Implications for services, sanctions, and time limits." *Focus*, 22, 76-81.
- Dworsky, A., & Courtney, M. E. (2007). Barriers to employment among TANF applicants and their consequences for self-sufficiency. *Families in Society*, 88, 379-389.
- Dyk, P. H., & Zimmerman, J. N. (2000). The impacts and outcomes of welfare reform across rural and urban places in Kentucky" (Final Report, Policy Outcome Grant, Administration for Families and Children, U.S. Department of Health and Human Services). Lexington, KY: University of Kentucky College of Agriculture. Retrieved March 10, 2010 from <http://www.ca.uky.edu/SNARI/Reportfiles/ReportFrontPage.htm>

- Falk, W. W., Schulman, M. D., & Tickamyer, A. R. (2003). *Communities of work: Rural restructuring in local and global contexts*. Athens, OH: Ohio University Press.
- Glasmeier, A. K., & Salant, P. (2006). Low-skill workers in rural America face permanent job loss. Durham, NH: Carsey Institute. Retrieved March 5, 2010 from http://www.carseyinstitute.unh.edu/publications/PB_displacedworkers_06.pdf
- Hauan, S., & Douglas, S. (2004). *Potential employment liabilities among TANF recipients: A synthesis of data from six state TANF caseload studies*. Washington, DC: U.S. Department of Health and Human Services. Retrieved March 5, 2010 from <http://aspe.hhs.gov/hsp/leavers99/emp-liab04/index.htm>
- Heath, C., & Heath, D. (2010). *Switch: How to change things when change is hard*. New York: Broadway Books.
- Katras, M. J., Zuiker, V. S., & Bauer, J. W. (2004). Private safety net: Childcare resources from the perspective of rural low-income families. *Family Relations*, 53, 201-209.
- Kusmin, L. D. (2007). Rural employment at a glance" (Economic Information Bulletin No. 31). Washington, DC: U.S. Department of Agriculture, Economic Research Service. Retrieved March 5, 2010 from <http://www.ers.usda.gov/publications/eib31/eib31.htm>
- Lichter, D. T., & Jensen, L. (2001). Poverty and welfare among rural female-headed families before and after PRWORA. *Rural America*, 16, 28-35.
- Loprest, P., & Zedlewski, S. (1999). Current and former welfare recipients: How do they differ?"(Assessing the New Federalism Discussion Paper No. 99-17). Washington, DC: The Urban Institute. Retrieved March 5, 2010 from <http://www.urban.org/publications/310312.html>
- Mammen, S., Bauer, J. W., & Lass, D. (2009). Life satisfaction among rural low-income mothers: The influence of health, human, personal, and social capital. *Applied Research Quality of Life*, 4, 365-386.
- Mammen, S., Lass, D., & Seiling, S. B. (2009). Labor force supply decisions of rural low-income mothers. *Journal of Family and Economic Issues*, 30, 67-79.
- McLaughlin, D. K., & Coleman-Jensen, A. J. (2008). Nonstandard employment in the nonmetropolitan United States. *Rural Sociology*, 73, 631-659.
- Olson, K. K., & Pavetti, L. (1996). Personal and family challenges to the successful transition from welfare to work" (Research Report). Washington, DC: Urban Institute. Retrieved March 5, 2010 from <http://www.urban.org/publications/406850.html>
- Polit, D. F., Widom, R., Edin, K., Bowie, S., London, A. S., Scott, E. K., & Valenzuela, A. (2001). Is work enough? The experiences of current and former welfare mothers who work" (The Project on Devolution and Urban Change). New York: Manpower Demonstration Research Corporation. Retrieved on March 5, 2010 from <http://www.mdrc.org/publications/74/full.pdf>
- Porterfield, S. L. (2001). Economic vulnerability among rural single-mother families. *American Journal of Agricultural Economics*, 83, 1302-1311.
- Pruitt, L. R. (2008). Rural families and work-family issues. In S. Sweet & J. Casey (Eds.). *Sloan Work and Family Encyclopedia*. Chestnut Hill, MA: Sloan Work and Family Research Network. Retrieved March 5, 2010 from http://works.bepress.com/lisa_pruitt/9
- Romero, D., Chavkin, W., Wise, P. H., Smith, L. A., & Wood, P. R. (2002). Welfare to work? Impact of maternal health on employment. *American Journal of Public Health*, 92, 1461-1468.
- Rural Policy Research Institute (2001). Welfare reform in rural America: A review of current research(Policy Paper P2001-5, February 2). Rural Welfare Reform Initiative, Rural Policy Research Institute, University of Missouri. Retrieved on March 5, 2010 from <http://www.rupri.org/Forms/p2001-5.pdf>
- Sano, Y., Dolan, E. M., Richards, L., Bauer, J. W., & Braun, B. (2008). Employment patterns, family resources, and perception: Examining depressive symptoms among rural low-income mothers. *Journal of Rural Community Psychology*. E11(1).
- Simmons, L. A., Braun, B., Wright, D. W., & Miller, S. R. (2007). Human capital, social support, and economic well-being among rural, low-income moth-

- ers: A latent growth curve analysis. *Journal of Family and Economic Issues*, 28, 635-652.
- Slack, T., & Jensen, L. (2002). Race, ethnicity, and underemployment in non-metropolitan America: A 30-year profile. *Rural Sociology*, 67, 208-233.
- Smith, K. (2007). Employment rates higher among rural mothers than urban mothers. Durham, NH: Carsey Institute. Retrieved Jun 6, 2011 from www.carseyinstitute.unh.edu/publications/FS_ruralmothers_07.pdf
- Smith, L. A., Romero, D., Wood, P. R., Wampler, N. S., Chavkin, W., & Wise, P. H. (2002). Employment barriers among welfare recipients and applicants with chronically ill children. *American Journal of Public Health*, 92, 1453-1457.
- Snyder, A. R., & McLaughlin, D. K. (2004). Female-headed families and poverty in rural America. *Rural Sociology*, 69, 127-149.
- Sturm, R., & Wells, K. B. (2001). Does obesity contribute as much to morbidity as poverty or smoking?" *Public Health*, 115, 229-235.
- Taylor, L. C. (2001). Work attitudes, employment barriers, and mental health symptoms in a sample of rural welfare recipients. *American Journal of Community Psychology*, 29, 443-463.
- Tickamyer, A. R., White, J. A., Tadlock, B. L., & Henderson, D. A. (2007). Spatial politics of public policy: Devolution, development and welfare reform. In L. Loba, G. Hooks & A. Tickamyer (Eds.). *The Sociology of Spatial Inequality* (pp. 113-139). NY: SUNY Press.
- USDA Economic Research Service (1997). Rural employment. Washington DC: Economic Research Service. Retrieved March 15, 2010 from <http://www.ers.usda.gov/publications/aib710/aib710c.htm>
- USDA Economic Research Service (2004a). Rural income, poverty, and welfare: Rural poverty. Washington DC: Economic Research Service. Retrieved March 15, 2010 from <http://www.ers.usda.gov/Briefing/incomepovertywelfare/RuralPoverty>
- USDA Economic Research Service (2004b). Rural-urban continuum codes. Washington DC: Economic Research Service. Retrieved March 15, 2010 from <http://www.ers.usda.gov/Data/RuralUrbanContinuumCodes>
- USDA Economic Research Service (2007). Measuring rurality: What is rural? Washington DC: Economic Research Service. Retrieved March 15, 2010 from <http://www.ers.usda.gov/Briefing/Rurality/WhatIsRural>
- U.S. Department of Health and Human Services. (2002). *One department serving rural America: Rural task force report to the secretary*. Washington, D.C.: Health and Human Services Rural Task Force. Retrieved March 5, 2010 from http://ask.hrsa.gov/detail_materials.cfm?ProdID=760
- Weber, B., & Jensen, L. (2004). *Poverty and place: A critical review of rural poverty literature*. (RPRC Working Paper No. 04-03). Retrieved from the RUPRI Website: <http://www.rupri.org/Forms/WP0403.pdf>
- Zedlewski, S. R. (1999). Work activity and obstacles to work among TANF recipients (*Assessing the New Federalism*. Series B, No. B-2). Washington, DC: Urban Institute. Retrieved March 5, 2010 from http://www.urban.org/UploadedPDF/anf_b2.pdf
- Zedlewski, S. R. (2003). Work and barriers to work among welfare recipients in 2002 (Snapshots3 of America's Families No. 3). Washington, DC: Urban Institute. Retrieved March 5, 2010 from http://www.urban.org/UploadedPDF/310836_snapshots3_no3.pdf
- Ziebarth, A., & Tigges, L. (2003). Earning a living and building a life: Income-generating and income-saving strategies of rural Wisconsin families. In W. W. Falk, M. D. Schulman, & A. R. Tickamyer (Eds.). *Communities of Work: Rural Restructuring in Local and Global Contexts* (pp 316-338). Athens, OH: Ohio University Press.
- Zimmerman, J. N., & Hirschl, T. A. (2003). Welfare reform in rural areas. In D. L. Brown & L. E. Swanson (Eds.). *Challenges for Rural America in the Twenty-first Century* (pp. 361-374). University Park, PA: The Pennsylvania State University Press.

Received March 23, 2011

Revised June 11, 2011

Accepted June 15, 2011