Factors Influencing Low-income Mothers' Employment:

The Role of Behavioral Health and Government Support

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Using the National Survey on Drug Use and Health (NSDUH) from the 2004 to 2013 waves, this study aims to analyze predictors of employment status among low-income single mothers in the United States. This study used a hierarchical logistic regression analysis to analyze the relationships between mothers' employment status and predictors, including demographic characteristics, depression and substance use disorder (behavioral health problems), and government supports (cash and in-kind). The sample consists of a total 14,722 single mothers. This study found that the presence of any substance abuse and dependence showed statistical significance with lower odds of employment, after controlling for covariates. Government supports, including Temporary Assistance for Needy Families (TANF) and the Supplemental Nutrition Assistance Program (SNAP) were significantly associated with lower odds of being employed, whereas receiving job training and child care support were significantly associated with higher odds of being employed. The findings reveal associated relationships between behavioral health, government supports (welfare benefits), and employment.

Keywords: Employment Status, Single Mother, Welfare Benefits, Behavioral Health

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I. Introduction

The purpose of this study is to examine the predictors of single mothers' employment status. Specifically, this study is to assess multiple aspects of low-income women's labor market experiences, including human-capital, depression, substance use problems, and government supports (welfare benefits). In 2013, more than 10 million low-income working families with children were living in the United States (Gabe, 2014). In general, single-parent families experience lower economic well-being than families with married parents. The median income for single-mother families was only 31% of the median income for two-parent families, and the poverty rate for children in single-parent families was triple the rate for children in two-parent families (DeNavas-Walt & Proctor, 2014). Also, single mothers were more likely to be unemployed compared with other parents (U.S. Bureau of Labor Statistics, 2007, 2011). With limited sources of help compared to that for two-parent families, single mothers also struggle to balance work and parental responsibilities.

Low-income single mothers tend to have multiple problems that can have debilitating effects on self-sufficiency. Individual factors that hinder progress in gaining and sustaining employment include limited human capital and physical and mental disabilities. It is evident that single mothers with limited economic resources face employment barriers such as low educational level or lack of job skills (Dworsky & Courtney, 2007; Taylor & Barusch, 2004), impaired physical and mental health (Danziger, Kalil & Anderson, 2000), dependence on drug or alcohol (Meara, 2006), welfare receipt (Hoynes & Schanzenbach, 2012), and having children (Son et al., 2011). A combination of these factors is assumed to have kept many women from having steady, living-wage-paying jobs.

Paid employment for low-income single mothers is critical, because paid jobs provide economic resources for people to sustain themselves. In addition to living expenses, paid jobs also fulfill the work requirement for those who are receiving public assistant benefits, TANF. Despite the importance of this topic, little research has provided a multifaceted understanding of economically disadvantaged mothers' labor market experiences. Policymakers have argued that increased labor force participation among low-income women lead to economic stability. Regarding the importance of employment status in a single mother with low income, prior studies investigated predictors of their employment status. However, those studies also have several limitations as follows. First of all, the previous studies only took into account the welfare population (Metsch & Pollack, 2005; Murry et al., 2002). However, including only welfare recipients does not facilitate the examination of the effects of participation in each public assistance program on employment outcomes. This research includes the general low-income population with children and examines mental health problems and welfare benefits as related to the factor of employment status. Also, in the early 2000s, numerous studies examined the effectiveness of welfare reform and its impact on employment status. Recently, however, little research attempt has been made to investigate employment outcome, behavioral health, and welfare receipt among low-income single mothers after 2006. During the past years, the United States experienced economic recession (The National Bureau of Economic Research, 2010), and this has had an impact on employment status, welfare receipt, and behavioral health among low-income women. In the shadows of the Great Recession, many Americans may experience daily hardship due to shrinking job opportunities. It seems that obtaining a secure job with adequate wages is difficult for low-income women even when the economy is booming. The economic catastrophe disproportionately affects low-income single mothers in terms of unemployment and welfare receipt. This recent crisis provided an opportunity to study the impact of macroeconomic changes on employment status among economically disadvantaged women with behavioral health problems.

The paper estimates the effects of behavioral health and welfare receipts on employment outcome among low-income single mothers, in addition to demographic covariates. In interpreting the associations between depression, substance use problems, welfare benefits, and employment outcome, it is important to note that 보건사회연구 35(4), 2015, 407-431 Health and Social Welfare Review

correlations do not establish causal direction. In this study, the term low-income is tied to the measure of poverty in the United States. Poverty thresholds are issued annually by the U.S. Census Bureau, and the designation of low-income single women with children refers to those whose income level is less than twice the federal poverty threshold each year. This is because the low-income population living just above the official poverty thresholds is also vulnerable to the economic instability caused by job loss, ill health, and fluctuations in housing and food prices, similar to individuals at the official poverty line. Also, since federal and state assistance programs are targeted to the low-income population, including those near poverty, the sample of this research includes those not only at or below the poverty line, but also those just above the poverty line.

II. Literature review

1. Meaning of Employment

Having a paid job means that low-income single mothers achieve economic independency, so that they can support their family through paid employment. Low-income single mothers were primary targets of welfare reform in 1996, based on the argument that welfare recipients should be expected to work. From a policy perspective, welfare reform would have succeeded if the welfare programs were efficient in moving recipients from welfare to work, since one of the four federal goals for welfare reform (TANF) is to "end the dependence of needy parents on government benefits..." (Schott, 2015). The United States places high value on work, thus the participating labor force represents both a right and a responsibility. From an individual perspective, work provides income, a status of belonging, and social interaction in society; thus it is an important determinant of social inclusion (Evans

& Repper, 2000). Also, paid employment might be beneficial to low-income women with mental health problems simply because work is valued even if it does not significantly improve one's economic well-being, because many low-income individuals share the national value attached to work. For example, after examining the mental health consequences of employment among a representative sample of poor single mothers, studies found that current employment improves the mental health (measured as symptom of depression) of poor single mothers (Zabkiewicz, 2010). Anderson, Halter, and Gryzlak (2004) found that women who left the TANF in Chicago reported psychological benefits from work, improved economic circumstances, work as a source of pride in accomplishment, and the workplace as a medium through which to form new friendships (Anderson, Halter, & Gryzlak, 2004).

2. Factors related to employment

The primary predictor discussed in prior research to employment among low-income single mothers is the lack of human capital. Human capital is a set of knowledge and skills that an individual accumulates and employs to increase his or her chances to be employed as well as make earnings (Gao, Gill, Schmidt, & Pratt, 2010); prior research measured this in terms of education, job skill (job training), and work experience (Danziger, Kalil, et al., 2000; Simmons, Braun, Wright, & Miller, 2007). Empirical studies indicate that educational attainment, especially post-secondary education, positively affects the economic standing and employment status of single mothers (Sandoval, Cervero, & Landis, 2011; Zhan & Pandey, 2004). Zhan and Pandey (2004) revealed that a 4-year college degree improves labor income among single parents according to the national data, the Panel Study of Income Dynamics. Also, using a panel of data about welfare recipients in Alameda, Los Angeles, and San Joaquin Counties in California, Sandoval and colleagues (2011) found that human capital (measured by educational level and receipt of job training) played an important role in the lives of low-income mothers who obtained a job.

Another major correlation with employment is behavioral health problems. The term behavioral health refers to a state of mental or emotional being and the choices and actions that affect wellness. It encompasses both mental health and substance use, including depression, substance abuse or misuse, serious psychological distress, and suicide (Substance Abuse and Mental Health Services Administration, 2011). People with mental and substance abuse disorders may encounter difficulty with maintaining interpersonal relations, finding and sustaining employment, and caring for themselves and family members, because behavioral health problem may affect individuals' ability to function in daily life. Although behavioral health problems are both common and important in the general population, they are especially more common among women than men (Substance Abuse and Mental Health Services Administration, 2011), particularly among individuals who are socially disadvantaged (Heflin & Iceland, 2009). Low-income single mothers may experience higher levels of psychiatric distress than individuals in the general population, and these problems may affect their economic self-sufficiency. Because psychological factors play a potentially critical role in the success of economic independence, this research focuses on the behavioral health of women and its impacts on employment status. Serious inability to function will bring about inadequate job performance, and can consequently lead to the loss of a job. Previous research suggests that behavioral health problems result in lower rates of labor force participation, reduced earnings, and unstable employment. For example, a study compared the employment transitions among persons with serious mental illness (SMI) or substance use disorders (SUD) to those of a no-disordered control group. The results show that persons with SUD were more likely to transition out of employment than the controls (Baldwin & Marcus, 2014). Another study, based on NSDUH, verifies that the rates of employment were significantly low for parents with serious mental illness compared with parents without mental illness (38% vs. 50%) (Luciano, Nicholson, & Meara, 2014). Although depressive symptoms and substance use problem are prevalent among vulnerable individuals like the unemployed poor females, (Cook, Mock, Jonikas, & et al., 2009; Gupta & Huston, 2009; Pollack, Danziger, Seefeldt, & Jayakody, 2002), caution must be exercised in discussing relationships between behavioral health problems and their impact on employment status among low-income single mothers. That is, pointing out the behavioral health problems of low-income mothers does not negate that societal factors, such as the lack of opportunities and structural barriers, may present an additional cause of unemployment.

In addition to human capital and behavioral health problems, receiving welfare benefits are also an important factor related to employment among low-income single mothers. The primary welfare benefits, the TANF program, provide assistance to needy families and seek to reduce the dependency of needy parents by promoting job preparation. The TANF provides cash benefits to very poor families with children through a variety of services and supports including income assistance, childcare, education and job training, transportation, and other services to help low-income families. Families receiving TANF cash assistance are automatically financially eligible for food benefits from SNAP, the program formerly known as food stamps. There is a concern that certain disadvantaged single mothers were relying on welfare benefits and not working for living expenses, although TANF, with cash benefits and all other in-kind benefits, requires most recipients to work within two years of receiving public aid, with the exception of work-exempt participants. However, the problem is that most welfare recipients have weak labor force attachment and low earnings in general. Literatures on work incentives of social welfare programs found mixed results. For example, Moffitt (2002) summarized the research on work and labor supply issues related to welfare and concluded that the estimates of the effects of TANF are generally positive on employment and earnings. Using the PSID, Hoynes and Schanzenbach (2012) found modest reductions overall in employment rates and hours worked, and larger reductions among female headed households. The results suggested a larger work disincentive effect of SNAP for female heads

than had previously been concluded in the literature (Hoynes & Schanzenbach, 2012). Considering employment barriers, in order for welfare recipients to find and sustain a job, in recent decades, states have combined many services as a strategy to move hard-to-employ individuals toward self-sufficiency. Some TANF offices provide education, job training, and work experience as a means to improve and develop human capital and resolve issues that prevent participants from getting stable and living wage-paying jobs. The others focus on assessing and treating participants' barriers so that recipients will obtain treatment for health conditions such as mental health or substance abuse problems before they go to work (Bloom, Loprest, & Zedlewski, 2011). Despite the mixed results, some states' pilot studies found positive employment outcomes among single-mother welfare recipients with mental health and substance use problems after implementing education, job training programs, and support services (Bloom et al., 2011).

Besides the factors discussed in previous research, covariates that have been related to employment of single mothers include age, number of children, and race. For example, unmarried women with children under 3 years and Black and Hispanic women are the least likely to be employed (53% and 55%, respectively), whereas 62% of unmarried White women are employed. The effects of marital status on employment vary for women in different racial and ethnic groups, thus emphasizing how race and income structures affect women's employment experiences and outcomes (Marks & Leslie, 2000). The impact of children on the employment of single mothers was also revealed. Son, Dyk, Bauer, and Katra (2011) studied the key barriers to sustained employment for a sample of low-income rural mothers and found that the presence of younger children in the home was associated with unstable employment.

III. Methods

1. Data and sample

This research used a nationally representative data set (NSDUH) from the 2004 to 2013 waves. The data was collected by the U.S. Department of Health and Human Services (DHHS), SAMHSA, Office of Applied Studies. This is an annual cross-sectional survey that provides population estimates of substance use and the health statuses of the civilian, non-institutionalized population aged 12 years or older in the United States. Target participants were selected for participation utilizing multistage area probability sampling methods for each of the 50 states and the District of Columbia. The survey included household residents; residents of shelters, rooming houses, college dormitories, migratory workers' camps, and halfway houses; and civilians residing on military bases. Approximately 2% of the U.S. population, including active military personnel, residents of institutional group quarters (e.g., prisons, nursing homes, mental institutions, and long-term hospitals), and homeless persons not living in a shelter on the date of the survey were excluded. To compare the prevalence of employment status among low-income single mothers across time, the study pulled a total 10 years of cross-sectional data. The methods for survey sampling and data collection are the same for each year of the survey. Among the general population, the number of individuals who have behavioral health problems such as depression or substance use disorders is rather low, so combining multiple years of data increases finding power. The nationally representative samples across 10 years enable the authors to examine behavioral health problems along with other socio-demographic factors. The advantage is that the NSDUH is one of the only available national datasets that includes measures of employment status, behavioral health problems such as alcohol dependence, depressive symptoms, welfare-recipient status, and other socio-demographic information for nearly 20 years. The sample included single women aged 18-64 with children whose income level is less than

200% of the poverty threshold. In this study, disabled and retired mothers and full-time students were excluded so that our sample could approximate the women who are able to work. Cases with missing data on any of the study measures were excluded using the listwise deletion method. The final sample size was 14,722 for the research.

2. Measurement

Employment was measured by asking mothers the question if they had done any regular work for pay in the past week. If the women had worked at a full-time or part-time job in the past week, they were coded as working status (yes=1), whereas if respondents were unemployed and had been looking for a job in the past week, they were coded as unemployed status (no=0). MDE was measured as a dichotomous variable, which was defined using the diagnostic criteria from DSM-IV. Respondents were defined as having MDE if they had faced a period of 2 weeks or longer in the past 12 months during which they experienced a depressed mood or loss of interest or pleasure in daily activities, and they had at least four of seven additional symptoms, such as problems with sleep, eating, energy, concentration, and self-worth. Illicit drug or alcohol abuse or dependence variables were also defined based on the abuse criteria listed in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV). A respondent was defined as engaging in alcohol, marijuana, cocaine, heroin, hallucinogen, inhalant, pain reliever, tranquilizer, stimulant, or sedative abuse if they reported a positive response to one or more of the following four abuse criteria: (1) respondent reported having serious problems due to substance use at home, work, or school; (2) respondent reported using substance regularly and then did something during which substance use might have put them in physical danger; (3) respondent reporting substance use causing actions that repeatedly got them in trouble with the law; (4) respondent reported having problems caused by substance use with family or friends and

continued to use substance even though it was thought to be causing problems with family and friends. For government welfare benefits, respondents were asked if they received cash assistance (TANF), SNAP, and other in-kind benefits (job training and child care support) during the last year. These questions were all coded as yes/no responses. As covariates, this study included age (18-25, 25-49, and 50-64), education level (less than high school, high school, and any college), race/ethnicity (non-Hispanic white, non-Hispanic black, Hispanic, other), number of children, and poverty level (less than 100% and 100-199% of federal poverty threshold).

3. Analytic Plans

First, sample characteristics included demographic characteristics, behavioral health problems (i.e., MDE and illicit drug or alcohol abuse or dependence), and receipt of welfare benefits (see Table 1) with design-adjusted Wald X2 two-tailed statistical tests. Next, hierarchical multiple logistic regressions were run in three steps. In the first step, demographic characteristics and socioeconomic factors were added. In the second step, behavioral health problems were added in addition to socio-demographic factors. In the last step, three welfare benefits were entered along with socio-demographic and behavioral health problem factors. Between the steps, F statistics generated by the Wald test were calculated to compare with and without behavioral health problem and welfare benefit variables. In the regression analysis, the survey data was unable to produce a chi-squared value, thus instead of Log Likelihood (LR) Chi2 model contrasts, the Wald test was used to test the significance of blocks of predictors, building the regression model one block at a time. All analyses were performed using STATA 13.0, and an alpha level of < .05 was established for significance. This study used STATA 'svy' and 'nestreg' commands to account for the complex sampling design used in NSDUH and to incorporate the jackknife replicate weights needed to compute accurate standard errors. All analyses were weighted to provide nationally representative estimates. The final person-level weight variable, ANALWT_C, was divided by ten to create an adjusted weight variable. Since it aggregates 10 years of data, the multivariate analysis included year dummies to control for the effects of time (not tabled). Given the nature of the available data, the study results should be interpreted cautiously, noting that simultaneity and omitted variables may influence the estimated coefficients.

IV. Results

Table 1 displays characteristics of the study sample by employment status. Among the total respondents, more than 80% were either full-time or part-time employed. The majority of both employed and unemployed single mothers were aged between 26 and 49, yet compared to employed single mothers, the distribution of the younger age group was higher for unemployed single mothers (31.2% VS. 20.9%).

					(N=14,72
	Unem (N=2	ployed 2,631)		loyed 2,091)	Statistics
	N	%	N	%	Wald test
Age					
18-25	1684	31.2%	6267	20.9%	31.01***
26-49	928	65.6%	5681	74.9%	
50-64	19	3.2%	143	4.1%	
Race					
Non-Hispanic White	880	34.2%	5148	40.9%	9.71***
Non-Hispanic Black	1063	40.1%	3287	29.8%	
Hispanic	507	22.1%	2763	24.6%	
Other	181	3.6%	893	4.7%	
Education					45.93***
Less than high school	1016	34.4%	2764	21.3%	
High school graduate	1092	40.5%	5004	39.2%	
College	523	25.1%	4323	39.5%	
Number of children					0.23
1	1445	47.7%	6164	46.6%	
2	758	31.3%	3765	31.8%	
3+	428	21.0%	2162	21.6%	
Poverty level					
Less than 100% of poverty threshold	1950	73.8%	5887	43.6%	215.06***
101-199% of poverty threshold	681	26.2%	6204	56.4%	
MDE	314	13.4%	1355	10.7%	3.21
Any illicit drug / alcohol abuse or dependence	332	11.4%	1260	8.1%	9.16**
TANF	843	29.4%	1784	11.6%	123.24***
SNAP (Food stamp)	2086	76.6%	6745	49.7%	262.03***
Job training or child care support	776	25.6%	2933	18.9%	18.67***

Table 1. Descriptive statistics for employment status

Note: *p<.05; **p<.01; ***p<.001

The distribution of the number of children among the two groups is similar. In terms of race and ethnicity, more than 40% of unemployed single mothers are non-Hispanic Black, whereas the majority of employed single mothers are non-Hispanic White (40.9%). As expected, education level, poverty level, MDE, substance use disorder, and receipt of welfare benefits also differ by employment status. Most single mothers have graduated high school, but the percentage of those who have less than a high school education is significantly greater for unemployed respondents than their counterparts. The poverty rate of less than 100% of the threshold for unemployed single mothers are significantly more likely than employed ones to have MDE and substance use disorders. In a similar note, welfare benefits including TANF, SNAP, and job training or childcare support is higher among unemployed single mothers than the employed.

Table 2 shows the results of the multivariate analysis. The first step includes demographic characteristics. Compared to the youngest age group, those aged between 26 and 49 face significantly associated higher odds of being employed (odds ratio (OR) 1.37) than do those with higher education relative to those with less than high school education (OR 1.5, 2.16), and single mothers with more children (OR 1.13), and those in the poverty threshold between 101 and 199% than less than 100% (OR 3.21). Odds of employment are significantly lower for non-Hispanic Blacks (OR 0.67) and higher for Hispanics (OR 1.27) compared to non-Hispanic Whites. In the second step, any illicit drug or alcohol abuse or dependence is statistically significant with lower odds of employment, after controlling for covariates. Consistent with the findings of the bivariate analysis in Table 1, MDE is not a significant predictor of employment status. The odds of other demographic factors are not changed from step 1, except the race factor.

		יכאו באי		מורנווות בוו	InducyIII		- 14, 122)			
			Step 1			Step 2			Step 3	
		В	95% CI	OR	В	95% CI	OR	В	95% CI	OR
Age										
26-49		.32	[1.183 - 1.592]	1.37^{**}	.31	[1.174 - 1.584]	1.36^{***}	.21	[1.058 - 1.448]	1.23^{**}
50-64		.46	[.829 - 3.051]	1.59	.43	[.817 - 2.925]	1.54	.15	[.606 - 2.234]	1.16
Race										
Non-Hispanic Black		39	[.564816]	.67***	42	[.543788]	.65***	33	[.593876]	.72**
Hispanic		.24	[1.019 - 1.600]	1.27*	.20	[.975 - 1.542]	1.22	.19	[.961 - 1.516]	1.20
Other		.17	[.850 - 1.664]	1.19	.15	[.823 - 1.631]	1.15	.26	[.887 - 1.878]	1.29
Education										
High school		.4	[1.245 - 1.813]	1.50^{***}	<u>.</u>	[1.240 - 1.802]	1.49^{***}	.35	[1.189 - 1.707]	1.42***
College		77.	[1.772 - 2.638]	2.16^{***}	.78	[1.783 - 2.646]	2.17***	.71	[1.680 - 2.479]	2.04***
Number of children		.13	[1.038 - 1.248]	1.13^{**}	.12	[1.038 - 1.247]	1.13^{**}	.17	[1.074 - 1.303]	1.18^{**}
Poverty level		1.17	[2.653 - 3.887]	3.21***	1.16	[2.640 - 3.857]	3.19***	.92	[2.0487 - 3.062]	2.51**
Any illicit drug or alcohol abuse or	ol abuse or				30	[.578946]	.73*	22	[.629 - 1.024]	.80
dependence										
MDE					27	[.563 - 1.035]	.76	23	[.576 - 1.084]	.79
TANF								75	[.378586]	.47***
SNAP (Food stamp)								63	[.442636]	.53***
Job training or child ca	care support							.22	[1.013 - 1.538]	1.24^{*}
Constant		.46	.46 [1.022 - 2.433] 1.57*	1.57*	.55	.55 [1.113 - 2.712]	1.74^{*}	1.08	[1.818 - 4.798]	2.95***
Note: $*p < .05$; $**p$.01; $***p$.001 Reference: age 18-25, Non-Hispanic White, less than 100% of poverty threshold, less than high school graduate	1; *** $p \sim 00$ on-Hispanic	l White,	less than 100%	of poverty	threshold	l, less than high	school grad	uate		

Table 2. Hierarchical Logistic Regression Model Predicting employment status (N=14, 722)

Year dummy was included at each step, but is not displayed in the table.

F test: Model 1 F (18, 103) = 19.69, p×. 000; Model 2 F (20,101) = 19.10, p×. 000; Model 3 F (23,98) = 24.63, p×. 000 B coefficient, OR odds ratio, CI confidence interval

In step 1, Hispanics compared to non-Hispanic Whites have higher odds of being employed, but in step 2, the odds ratio of Hispanics to those of the reference group is not statistically significant. Compared to the first step, in the second step, the model adding both MDE and illicit drug or alcohol abuse or dependence resulted in a statistically significant improvement in model fit. In the third step, the addition of government welfare benefits, cash assistance (TANF), and SNAP is associated with lower odds of being employed (OR 0.47, 0.53). Unlike other welfare benefits, receiving job training or childcare support increases the odds of being employed (OR 1.24). Also, in step 3, illicit drug or alcohol abuse or dependence is no longer statistically significant. Based on the post estimation, compared to the second step, in the third step, the model's addition of three welfare benefits resulted in a statistically significant improvement in the model fit.

V. Conclusion & Discussion

This study examined the predictors of employment status among low-income women with children. First, having illicit drug or alcohol abuse and dependence significantly predicted lower odds of being employed. This result supports the argument that substance use is consistently associated with chronic unemployment. In prior research (Bray, Zarkin, Dennis, & French, 2000; Schmidt, Dohan, Wiley, & Zabkiewicz, 2002; Schmidt, Zabkiewicz, Jacobs, & Wiley, 2007), substance abuse is related to less-stable patterns of employment over time among welfare recipients. Even among the general population, substance abuse has a negative influence on both employment and wages (MacDonald & Shields, 2004).

Second, MDE was not associated with employment status in both binary and multivariate analysis. This result contradicted the findings in previous research (Lennon, Blome, & English, 2001; Whooley et al., 2002) that people who had higher

levels of depressive symptoms were less likely to be employed than those who had lower levels of depressive symptoms. Two plausible explanations can be offered for this result. In the analytic sample, nearly one-third of low-income single mothers reported co-occurrence of substance use disorder and MDE. In spite of the relatively low correlation between substance abuse disorder and MDE, only substance abuse disorder was significant, possibly because of the co-existence with behavioral health problems. Another possible explanation is that substance abuse screening is relatively common before and after the job offer, whereas pre-screening for MDE is not.

Third, while TANF and SNAP were negatively associated with employment, job training and childcare supports were positively associated with employment. Mixed associations between government supports and employment were also found in prior research (Livermore & Powers, 2006). Livermore and Powers (2006) used the data of Fragile Family and Child Well-being (FFCW) and found that the use of an employment agency (welfare Job placement) enhanced the likelihood of employment. However, low-income single mothers who received other government supports such as TANF, SNAP, or a housing subsidy were less likely to be employed. In fact, TANF and SNAP showed a consistent negative relationship with employment among low-income single mothers. For example, Wood, Moore, and Rangarajan (2008) also concluded that TANF recipients were particularly unlikely to achieve steady employment during the years after TANF entry. Although receiving TANF and SNAP is associated with a lower odds ratio of being employed, it does not necessarily claim that welfare benefits prohibit single mothers from participating in the labor force. Rather, it should be understood that, compared to low-income single mothers who do not receive TANF, TANF recipients face various work barriers, and thus they need case management and support services to succeed at work (Bloom et al., 2011).

Findings from this research support the claim that more than one employment difficulty exists among low-income women with children. However, addressing an individual's problems is not sufficient to encourage low-income single mothers to enter the workforce. For those who have substance abuse disorders, timely access to treatment is vital to improve the employment outcomes. Concerted efforts must also be made to address other significant barriers. While substance abuse treatment is an important component of an overall strategy to reduce or eliminate barriers to self-sufficiency, it is not the complete solution. Limited human capitals like education and job skills can be improved through government benefits. Although the actual effectiveness of job training or job placement is a topic for future research, making in-kind employment resources available to low-income single mothers may be a successful way of facilitating their connection to the labor force.

Despite the fact that the current study examined employment outcomes and their predictors in the U.S., it also has policy implications in South Korea. The number of single mothers living with children is increasing in South Korea, and 15% of them were in poverty in 2012, based on their cash-disposable income (Lim & No, 2013). South Korea enacted the National Basic Livelihood Protection Act in 1999. The recipients are entitled to minimum cost of living, and able-bodied recipients are required to seek work to avoid welfare dependency, similar to TANF. Allowances are provided on the condition that the recipients participate in workfare programs, such as job placement, job training, and public work. However, researchers and policy makers express the concern that only half of them are participating in programs that link work and welfare, and the effects of such programs are still questionable. Also, there is limited availability of therapeutic services and social work services that can contribute to the mental health of women in poverty. According to the current study, low-income single mothers with behavioral health issues struggle to obtain paid work, but welfare services preparing labor force participation are positively related to employment outcomes. Thus, welfare programs including financial support, vocational training and guidance, training, and counseling services may help low-income women with behavioral health problems to become self-sufficient.

Several limitations of this study should be noted. First, the cross-sectional nature of the NSDUH makes it difficult to untangle the simultaneous causal pathways by

which mental health problems and welfare benefits influence and reflect employment outcomes. Mental health problems may trigger prolonged unemployment, for example. Also poverty and unstable employment status may stimulate depressive symptoms and other mental health problems as well as the receipt of welfare benefits. Second, the data relied on the participants' self-reporting of substance use and mental health symptoms, which may be inaccurate because of memory errors or social desirability, thus leading to underreporting of use. Third, in terms of measurement, existing studies tend to present only one measure of employment outcomes, with no other options provided. Similarly, the survey data does not provide further information on job training, job placement, and childcare supports. Employment outcome can vary by the quality and quantity of the welfare benefits, yet it is difficult to identify these aspects in the data sets. Despite this limitation, the NSDUH's rich data provide valuable information about mental health problems and economic conditions (welfare receipt and employment status). Although this study cannot untangle issues of simultaneous causation, the associations that the current study document are important for public policy, because these factors could interact.

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References

- Anderson, S. G., Halter, A. P., & Gryzlak, B. M. (2004). Difficulties after leaving TANF: Inner-city women talk about reasons for returning to welfare. Social Work, 49(2), pp.185-194. doi: 10.1093/sw/49.2.185.
- Baldwin, M. L., & Marcus, S. C. (2014). The impact of mental and substance-use disorders on employment transitions. *Health Economics*, 23(3), pp.332-344. doi: 10.1002/hec.2936.
- Bloom, D., Loprest, P. J., & Zedlewski, S. R. (2011). TANF recipients with barriers to employment. *Temporary Assistance for Needy Families Program—Research Synthesis Brief* 1. Washington, DC: The Urban Institute.
- Bray, J. W., Zarkin, G. A., Dennis, M. L., & French, M. T. (2000). Symptoms of dependence, multiple substance use, and labor market outcomes. *The American Journal of Drug and Alcohol Abuse*, 26(1), pp.77-95. doi:10.1081/ADA-100100592.
- Cook, J. A., Mock, L. O., Jonikas, J. A., et al. (2009). Prevalence of psychiatric and substance use disorders among single mothers nearing lifetime welfare eligibility limits. *Archives of General Psychiatry*, 66(3), pp.249-258. doi: 10.1001/archgenpsychiatry.2008.539.
- Danziger, S. K., Kalil, A., & Anderson, N. J. (2000). Human capital, physical health, and mental health of welfare recipients: Co-occurrence and correlates. *Journal* of Social Issues, 56(4), pp.635-654. doi: 10.1111/0022-4537.00189.
- DeNavas-Walt, C., & Proctor, B. D. (2014). Income and poverty in the United States: 2013. Washington, DC: U.S. Census Bureau.
- Dworsky, A., & Courtney, M. E. (2007). Barriers to employment among TANF applicants and their consequences for self-sufficiency. *Families in Society: The Journal of Contemporary Social Services*, 88(3), pp.379-389. doi: http://dx.doi.org/10.1606/1044-3894.3647.

- Evans, J. & Repper, J. (2000). Employment, social inclusion and mental health. Journal of Psychiatric & Mental Health Nursing, 7(1), p.15. doi: 10.1046/j.1365-2850.2000.00260.x.
- Gabe, T. (2014). Welfare, work, and poverty status of female-headed families with children: 1987-2013: Congressional Research Service.
- Gao, N., Gill, K. J., Schmidt, L. T., & Pratt, C. W. (2010). The application of human capital theory in vocational rehabilitation for individuals with mental illness. *Journal of Vocational Rehabilitation*, 32(1), pp.25-33. doi: 10.3233/JVR-2010 -0492.
- Gupta, A. E., & Huston, A. C. (2009). Depressive symptoms and economic outcomes of low income women: A review of the social causation, social selection, and interactionist hypotheses. *Social Issues and Policy Review*, 3(1), pp.103-140. doi: 10.1111/j.1751-2409.2009.01012.x.
- Heflin, C. M., & Iceland, J. (2009). Poverty, material hardship, and depression. Social Science Quarterly, 90(5), pp.1051-1071. doi: 10.1111/j.1540-6237.2009.00 645.x.
- Hoynes, H. W., & Schanzenbach, D. W. (2012). Work incentives and the food stamp program. *Journal of Public Economics*, 96(1), pp.151-162.
- Lennon, M. C., Blome, J., & English, K. (2001). Depression and low-income women: Challenges for TANF and welfare-to-work policies and programs. Columbia University Academic Commons.
- Lim, W. -S., & No, D.-M. (2013). Statistical annual report on poverty in 2013: Korea Institute for Health and Social Affairs.
- Livermore, M. M., & Powers, R. S. (2006). Employment of unwed mothers: The role of government and social support. *Journal of Family and Economic Issues*, 27(3), pp.479-494. doi: 10.1007/s10834-006-9027-6.
- Luciano, A., Nicholson, J., & Meara, E. (2014). The economic status of parents with serious mental illness in the united states. *Psychiatric Rehabilitation Journal*, 37(3), pp.242-250. doi: 10.1037/prj0000087.

- MacDonald, Z., & Shields, M. A. (2004). Does problem drinking affect employment? Evidence from England. *Health Economics*, 13(2), pp.139-155. doi: 10.1002/hec.816.
- Marks, R. S., & Leslie, A. L. (2000). Family diversity and intersecting categories: Toward a richer approach to multiple roles. In D. H. Demo, K. R. Allen & M. A. Fine (Eds.), *Handbook of family diversity*(pp.402-423). New York: Oxford University Press.
- Meara, E. (2006). Welfare reform, employment, and drug and alcohol use among low-income women. Harvard Review of Psychiatry (Taylor & Francis Ltd), 14(4), pp.223-232. doi: 10.1080/10673220600883150.
- Metsch, L. R., & Pollack, H. A. (2005). Welfare reform and substance abuse. *The Milbank Quarterly*, 83(1), pp.65-99. doi: 10.1111/j.0887-378X.2005.00336.x.
- Moffitt, R. A. (2002). Welfare programs and labor supply. *Handbook of public economics*, 4, pp.2393-2430.
- Murry, V. M., Brody, G. H., Brown, A., Wisenbaker, J., Cutrona, C. E., & Simons, R. L. (2002). Linking employment status, maternal psychological well-being, parenting, and children's attributions about poverty in families receiving government assistance. *Family Relations*, 51(2), pp.112-120. doi: 10.1111/j.1741-3729.2002.00112.x.
- Pollack, H. A., Danziger, S., Seefeldt, K. S., & Jayakody, R. (2002). Substance use among welfare recipients: Trends and policy responses. *Social Service Review*, 76(2), pp.256-274. doi: 10.1086/339669.
- Sandoval, J. S. O., Cervero, R., & Landis, J. (2011). The transition from welfare-to-work: How cars and human capital facilitate employment for welfare recipients. *Applied Geography*, 31(1), pp.352-362.

doi: http://dx.doi.org/10.1016/j.apgeog.2010.07.008.

Schmidt, L., Dohan, D., Wiley, J., & Zabkiewicz, D. (2002). Addiction and welfare dependency: Interpreting the connection. *Social Problems*, 49(2), pp.221-241. doi: 10.1525/sp.2002.49.2.221.

- Schmidt, L., Zabkiewicz, D., Jacobs, L., & Wiley, J. (2007). Substance abuse and employment among welfare mothers: From welfare to work and back again? *Substance Use & Misuse*, 42(7), pp.1069-1087. doi: 10.1080/1082608070 1409644.
- Schoeni, R. F., & Blank, R. M. (2000). What has welfare reform accomplished? Impacts on welfare participation, employment, income, poverty, and family structure. National Bureau of Economic Research Working Paper Series, No. 7627. doi: 10.3386/w7627.
- Schott, L. (2015). Policy basics: An introduction to tanf. Center on Budget and Policy Priorities.
- Simmons, L. A., Braun, B., Wright, D. W., & Miller, S. R. (2007). Human capital, social support, and economic well-being among rural, low-income mothers: A latent growth curve analysis. *Journal of Family and Economic Issues*, 28(4), pp.635-652. doi: 10.1007/s10834-007-9079-2.
- Son, S. -H., Dyk, P. H., Bauer, J. W., & Katras, M. J. (2011). Barriers to employment among low-income mothers in rural united states communities. *International Journal of Human Ecology*, 12(1), pp.37-49. doi: 10.6115/ljhe.2011.12.1.37
- Substance Abuse and Mental Health Services Administration. (2011). A plan for samhsa's roles and actions 2011-2014. *HHS Publication*. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Taylor, M. J., & Barusch, A. S. (2004). Personal, family, and multiple barriers of long-term welfare recipients. *Social Work*, 49(2), pp.175-183. doi: 10.1093/ sw/49.2.175.
- The National Bureau of Economic Research. (2010). U.S. Business cycle expansions and contractions. Retrieved Oct 30, 2014, from http://www.nber.org/cycles.html.
- The U.S. Bureau of labor Statistics. (2014). Labor force statistics from the current population survey. Retrieved July 30, 2014, from http://data.bls.gov/timeseries/LNS14000000.
- Whooley, M. A., Kiefe, C. I., Chesney, M. A., Markovitz, J. H., Matthews, K., & Hulley, S. B. (2002). Depressive symptoms, unemployment, and loss of income:

The cardia study. Archives of Internal Medicine, 162(22), pp.2614-2620. doi:10.1001/archinte.162.22.2614.

- Wood, R. G., Moore, Q., & Rangarajan, A. (2008). Two steps forward, one step back: The uneven economic progress of tanf recipients. *Social Service Review*, 82(1), pp.3-28. doi: 10.1086/525035.
- Zabkiewicz, D. (2010). The mental health benefits of work: Do they apply to poor single mothers? *Social Psychiatry and Psychiatric Epidemiology*, 45(1), pp.77-87. doi: 10.1007/s00127-009-0044-2.
- Zabkiewicz, D., & Schmidt, L. (2007). Behavioral health problems as barriers to work: Results from a 6-year panel study of welfare recipients. *Journal of Behavioral Health Services & Research*, 34(2), pp.168-185. doi: 10.1007/s11414-007-9060-8.
- Zhan, M., & Pandey, S. (2004). Economic well-being of single mothers: Work first or postsecondary education? *Journal of Sociology & Social Welfare*, 31(3), pp.87-112. doi: 10.1111/j.0022-2445.2004.00045.x.

Factors Influencing Low-income Mothers' Employment: The Role of Behavioral Health and Government Support

저소득 모자가정 여성 가구주의 취업 영향요인 연구: 정신건강과 소득이전 프로그램의 효과를 중심으로

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본 연구논문의 목적은 개인의 우울증과 음주 및 약물 오, 남용, 그리고 소득이전 프로그램이 저소득 모자가정 여성 가구주의 취업에 어떠한 영향을 미치는지 분석하는 것이다. 연구 분석을 위해 2004년부터 2013년까지 실시된 미국 약물남용 및 정신 건강 서비스 관리(SAMHSA)의 국립 약물남용 보건조사(NSDUH)를 사용하였으며, 여구 목적에 따라 위계적 로지스틱 회귀분석을 실시하였다. 여구결과에 따르면 정신 건강 변수 중 약물 오, 남용이 취업 여부에 유의미한 영향을 미치는 것으로 나타났 으며, 소득이전 프로그램 가운데서는 TANF와 SNAP, 그리고 사회복지 서비스가 모두 취업 여부에 유의미한 영향이 있는 것으로 파악되었다. 다만, 소득이전 프로그램 중 TANF와 SNAP은 취업과 부정적 영향 관계를, 직업훈련과 아동복지 서비스를 포함한 사회복지 현물급여는 취업과 긍정적 영향 관계를 가진 것으로 나타났다. 저소득 모자 가정 여성 가구주의 근로활동을 위해서는 인적 자본 요인의 강화뿐 아니라 개별적 취업 장애요인을 파악한 다양한 정책적 대안이 필요한데, 특히 음주 및 약물 오, 남용의 문제를 가진 저소득 여성의 경우에는 노동시장 참여를 위해 치료 후 사회적 지원이 이루어져야 할 것이며, 그렇지 않은 저소득 여성 가구주의 경우 소득지원 이외의 취업과 밀접한 관계가 있는 취업훈련이나 아동복지 서비스가 제공되어야 할 것으로 파다되다.

주요용어: 저소득 모자가정, 여성 가구주, 여성 취업, 취업 장애요인, 소득이전 프로그램