# Childhood Sexual Abuse and Adult Work Outcomes

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The authors explored the relationship among childhood sexual abuse (CSA), physical and mental health work barriers, and employment outcomes using a large panel study of current and former welfare recipients. Controlling for human capital and demographic characteristics, they found CSA was associated with significantly fewer months worked over the 33-month period immediately following the 1996 welfare reform legislation. CSA was also strongly associated with presence of a mental or physical health work barrier during that same time period, and those variables mediated the relationship between CSA and employment. The data suggest that human capital variables alone do not account for women's work outcomes and that intervention is needed in the welfare system to address women's work barriers, including the long-term consequences of CSA.

KEY WORDS: child sexual abuse; employment; mental health; welfare; work barriers

Imployment is increasingly a reality of life for poor women as a result of the 1996 welfare reform law Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) (P.L. 104-193). PRWORA ended the long-standing federal welfare entitlement and requires that most welfare recipients work or engage in work-related activities to receive benefits. Welfare caseloads declined by more than half, from 4.55 million families in 1996 to 2.13 million families in 2001 (Brookings Institution, 2002). Although caseloads have increased since the economic downturn of 2001, they remain well below their prewelfare reform levels.

Research has shown that the transition to work may not be easy for many welfare recipients who face serious barriers to work, including physical and mental health problems (Danziger, Corcoran, et al., 2000; Danziger, Kalil, & Anderson, 2000; Jayakody, Danziger, & Pollack, 2000; Taylor & Barusch, 2004). A study of former and current welfare recipients found that one-third met the diagnostic criteria for major depression, posttraumatic stress disorder (PTSD), and generalized anxiety disorder (Danziger, Corcoran, et al., 2000). Similarly, the National Survey of American Families documented that about one-third of the welfare caseload reported very poor mental or physical

health, and four out of 10 recipients had two or more barriers to work (Zedlewski, 2003).

Although mental and physical health work barriers are known to reduce work levels among welfare recipients (Danziger, Corcoran, et al., 2000; Danziger & Seefeldt, 2002), not enough is known about the etiology of work barriers. Little attention has been given to how childhood trauma might reverberate throughout women's lives, potentially contributing to work barriers and limited work outcomes in adulthood. Few empirical studies have looked at employment outcomes among women sexually abused as children, although poor women's personal narratives point to childhood sexual abuse (CSA) as an important factor that hinders the ability to obtain and maintain work (Shipler, 2004).

To address this gap we examined the prevalence of CSA using data from the Women's Employment Study (WES), a nonclinical, representative sample of current and former welfare recipients. We tested the hypothesis that CSA is negatively related to women's employment outcomes, measured by the percentage of months worked over the 33-month period following enactment of PRWORA. We propose that the connection between CSA and employment is mediated by mental and physical health work barriers that may directly or indirectly result

from CSA. We discuss the implications of this study for welfare policy and intervention strategies.

### **CSA PREVALENCE**

According to the National Comorbidity Study (NCS), a nationally representative study of mental health disorders (Kessler et al., 1994), approximately 13.5% of female respondents retrospectively reported molestation, rape, or both before the age of 18 (Molnar, Berkman, & Buka, 2001). The NCS used only two questions to assess sexual abuse, which may lead to underreporting. A national telephone survey of sexual abuse using more comprehensive questions found that 27% of women reported CSA (Finkelhor, Hotaling, Lewis, & Smith, 1990). Unwanted sexual intercourse was reported by 14.6% of the women. In a meta-analysis that analyzed 45 samples involving 21,999 women, 27% reported some sexual experience that could be classified as CSA (Rind, Tromovitch, & Bauserman, 1998; see also Acierno, Resnick, & Kilpatrick, 1997).

# CSA LINKS TO EMPLOYMENT, MENTAL HEALTH, AND PHYSICAL HEALTH

# CSA and Employment

As noted, few researchers have explored the relationship between employment and CSA. Hyman (2000) reported a direct relationship between abuse and women's adulthood earnings and education attainment among lesbian women sexually abused as children. For the most part, however, research on CSA focuses on its mental and physical health consequences.

# **CSA and Mental Health**

An extensive body of research suggests that CSA is negatively related to psychological well-being. CSA victims have more difficulty coping with everyday stressors (Perrott, Morris, Martin, & Romans, 1998) and report more symptoms of distress (Coffey, Leitenberg, Henning, Turner, & Bennett, 1996) and lower levels of well-being (Brayden, Deitrich-MacLean, Dietrich, Sherrod, & Altemeier, 1995). Adult women with a history of CSA tended to report higher levels of substance abuse, anxiety, PTSD, depression, and depressive symptomatology (Beitchman et al., 1992; Gil-Rivas, Fiorentine, Anglin, & Taylor, 1997; McGrath, Keita, Strickland, & Russo, 1990; Messman-Moore & Long, 2002; Neumann, Houskamp, Pollock, & Briere, 1996). Patients with sexual abuse histories had higher rates of comorbidity with borderline personality disorder, PTSD, and other diagnoses (Zlotnick, Mattia, & Zimmerman, 2001). Sexual abuse is related to higher levels of suicidal ideation, more suicide attempts, and lower levels of attraction to life in a college sample (Molnar et al., 2001; Thakkar, Gutierrez, Kuczen, & McCanne, 2000). Although nearly all of this research is correlational and retrospective, two meta-analyses concluded that the balance of the evidence points to a positive relationship between CSA and adulthood psychological distress, depression, and lower self-esteem (Neumann et al., 1996; Jumper, 1995).

# **CSA and Physical Health**

There is also evidence connecting CSA to adulthood physical health problems. Women who reported CSA experiences had more health problems compared with women who did not report CSA (Hyman, 2000). A history of physical, sexual, or emotional abuse increased the risk of medical problems, self-injurious behavior, adulthood hospitalizations, poor perceptions of physical health, and lower self-ratings of health status (Moeller, Bachmann, & Moeller, 1993; Resnick, Acierno, & Kilpatrick, 1997; Weaver, Chard, Mechanic, & Etzel, 2004). Childhood abuse was related to higher incidence of cancer, heart disease, and skeletal fractures. Poor self-ratings of health also increased as exposure to abuse increased. Individuals exposed to more abuse had a higher risk of premature mortality and suicide attempts (Felitti et al., 1998). Finally, a study of CSA among college students indicated that those abused in childhood were more susceptible to daily stress related to a greater intensity of physical symptoms (Thakkar & McCanne, 2000).

# Summary

CSA has been linked to mental health problems (Neumann et al., 1996; Zlotnick et al., 2001), although some controversy exists about the extent and causal nature of this link (Rind et al., 1998), as well as to negative physical health outcomes (Resnick et al., 1997). Mental and physical health problems are known barriers to obtaining and sustaining employment among welfare recipients and low-income women (Corcoran, Danziger, & Tolman, 2004; Danziger, Corcoran, et al., 2000; Taylor & Barusch, 2004), suggesting the possibility that CSA may also relate to lowered employment outcomes, in part through its influence on physical

and mental health work barriers. Yet, no current research examines a potential link between CSA and adult employment among low-income women. We addressed this question in the present study using a nonclinical sample of current and former welfare recipients.

### **HYPOTHESES**

We tested a dual mediation model (see Baron & Kenny, 1986) in which mental and physical health work barriers mediate the relationship between CSA and employment. Our three hypotheses were (1) CSA is associated with lowered employment outcomes, measured by percentage of months worked over a 33-month period; (2) CSA is associated with mental health and physical health work barriers; and (3) mental health and physical health work barriers predict lower employment outcomes, with CSA included as a separate predictor variable in the final model. Full mediation is established if CSA is reduced to nonsignificance when the mental and physical health work barrier variables are included in the model.

#### **METHOD**

# **Participants**

Participants were part of the WES study, a longitudinal, community study of current and former welfare recipients in Michigan. The sample was systematically drawn with equal probability from an ordered list of single mothers in an urban Michigan county who received cash assistance from Temporary Assistance for Needy Families (TANF) in February 1997. The sample was limited to U.S. citizens who were either white or African American and between ages 18 and 54. All study participants were white (44.5%) or African American (55.5%). In 1997, at wave 1 of data collection, participants ranged in age from 18 to 54, with an average age of 29.78 years. Education levels were low; 30.7% reported less than a high school degree, 36.4% reported a high school diploma or general equivalency diploma (GED), and 32.2% had some form of post-high school education. At wave 3 of data collection, participants averaged 2.37 children, with total number of children ranging from 0 to 11.

At wave 1 of data collection, 753 women (86% response rate) were interviewed. In 1998, at wave 2, 693 of the 753 wave 1 respondents were re-interviewed (92%). In 1999, at wave 3 of data collection, 632 women of the 693 wave 2 respondents (91%)

were interviewed again (Danziger & Seefeldt, 2002). The high response rates obtained across several waves of data collection were good, given the transitory nature of the study participants. Women were interviewed in person by a trained study interviewer for approximately one hour and were paid for participating in the study. The study questionnaire evaluated mental health problems, physical health problems, work and human capital variables, educational background, and psychosocial or family disadvantage. The present study is based on 632 (351 African American and 281 white) respondents who answered the sexual abuse questions (Table 1).

#### Measures

Child Sexual Abuse. Research is not consistent on the age used to determine CSA (see meta-analysis by Bolen & Scannapieco, 1999). Because the WES CSA questions were nearly identical to those in the NCS (Kessler et al., 1994), we used the criteria of age 17 or younger to establish CSA (Molnar et al., 2001), thus allowing for comparison between a nationally representative sample (NCS) and a representative sample of current and former welfare recipients (WES). Respondents were given a list of

	% Reporting	N
Demographic variables		3.10
Married or lives with partner	24.5	632
Black/African American	55.5	632
White/Caucasian	44.5	632
Age 25-34 in 1997	46.8	632
Age 35 or over in 1997	26.4	632
Children ages 0-2	42.6	632
Children ages 3-5	41.6	632
Pregnant at wave 2 interview	18.7	632
Pregnant at wave 3 interview	4	631
Human capital variables		
Less than high school/no GED	30.7	632
Limited work experience	15	628
Few work skills	21.4	632
Knows few work norms	9.2	631
Low literacy	19	632
Childhood sexual abuse	36.1	632
Mental health barrier	55	615
Physical health barrier	21.5	628

Notes: WES = Women's Employment Study. GED = general equivalency diploma.

items about traumatic events and were asked, for example, "Did Event #5 ever happen to you?" The items read: "You were raped (someone has sexual intercourse with you when you did not want to by threatening you of using some degree of force)" and "You were sexually molested (someone touched or felt your genitals when you did not want them to)." Individuals age 17 or younger who reported rape or molestation in either wave 2 or wave 3 were included in the CSA group.

One concern with studies addressing childhood abuse is the retrospective nature of the questions. Asking individuals to remember events that happened many years in the past raises the possibility of incorrect recall. One advantage of the longitudinal nature of the data is that we have abuse reports at more than one interview. In all, 85% of the women in the study gave consistent reports of CSA at both waves, 404 (63.9%) consistently reported no CSA, and 133 (21%) reported CSA consistently at both interviews. There was some inconsistency of reporting. At wave 3, 64 women (10.1%) who had not reported CSA at wave 2 did report CSA. Likewise, 31 women (4.9%) who had reported CSA at wave 2 failed to report it at wave 3. As noted earlier, we considered any respondent who reported rape or molestation at age 17 or younger in either wave 2 or wave 3 as having experienced CSA. However, analyses using the wave 2 and wave 3 results separately produced nearly identical results to the combined CSA measure.

Mental Health and Substance Abuse. The World Health Organization Composite International Diagnostic Interview-Short Form (CIDI-SF) (Kessler, Andrews, Mroczek, Ustun, & Wittchen, 1998) was used to determine whether the respondent met criteria for major depression, social phobia, generalized anxiety disorder, drug dependence, and alcohol dependence. These diagnostic screening scales are based on the NCS structured psychiatric interview (Kessler et al., 1994). For the scales used in this study, overall classification accuracy ranged from 93% for depression to 99% for generalized anxiety disorder (Kessler et al., 1998). We created a dichotomous mental health work barrier variable that was coded "1" if a respondent met the CIDI-SF diagnostic screening criteria for at least one of the six mental health disorders over the first three waves of the WES study and coded "0" if none of the criteria for any of the six mental health disorders were met during the same time period.

Physical Health. Respondents were asked about physical limitations and rated their general health with questions from the SF-36 Health Survey (Ware, Snow, Kosinski, & Gandek, 1993). We created a dichotomous variable in which respondents who rated their general health as poor or fair and who also scored in the lowest age-specific quartile (based on national norms) of the multiple-item physical functioning scale were coded "1" to indicate a physical health work barrier. Those who did not meet these criteria were coded "0" and were not included in the group of individuals deemed to have a physical health work barrier.

Employment. Detailed month-by-month questioning was used to obtain information on respondents' work status in each month beginning in February 1997 until the wave 3 interview. Using this information we computed the percentage of months worked in calendar years 1997, 1998, and 1999. This provides an overall indication of employment as measured by percentage of months respondents worked a minimum of 20 hours a week or more over the 33-month period. The percentage-of-months-worked employment measure does not indicate variations in the level of employment (for example, hours per week) or the number of work transitions experienced by each respondent.

Control Variables. Because research has shown that absence of some human capital variables can act as work barriers among low-income individuals, we controlled for the following: education, work experience, work skills, work norms, and literacy. Control variables were defined in the following manner (see Danziger, Corcoran, et al., 2000, for more explanation of variable scoring): Those who did not graduate from high school or receive a GED were considered to have an education work barrier. Women who had worked less than 20% of the years since age 18 were considered to have a limited work experience barrier. Respondents who had performed fewer than four of nine common job tasks, such as working with a computer or talking to customers on the phone, were considered to have a low job skills work barrier. Limited knowledge of workplace norms was determined by asking women to rate the importance of nine behavioral workplace norms, such as missing work without calling in, leaving work early, or taking a longer-than-scheduled break. Finally, literacy work barrier was determined using scores from a standardized measure of reading skills. Women who read below the third-grade level were considered to have a literacy work barrier.

#### RESULTS

# **Prevalence and Correlation Results**

Childhood Sexual Abuse. More than one-third (36.1%) of the respondents reported CSA (Table 1)—25.9% at wave 2 only and 31.2% at wave 3 only. These estimates are much higher than the 13.5% CSA prevalence level reported in the NCS (Molnar et al., 2001).

Employment. Women worked 20 hours a week or more, for an average of 63.5% (M = .635, SD =.32) of the months during the time period from February 1997 to October 1999. Participants not reporting CSA worked 65.7% of the months during that time period (M = .657, SD = .32), whereas those reporting CSA worked 59.7% of that time period (M = .597; SD = .33). All WES participants worked a median of 72.7% of the months over the 33-month time period, suggesting that a majority of the respondents were working part- or full-time for most of the months during the time period we measured, with 5.7% of the sample reporting that they did not work at all during the 33-month time period and 17.6% of the sample reporting full work effort (20 hours a week or more) for the entire time period.

Mental Health Work Barrier. More than half (55%) of the respondents met the CIDI-SF diagnostic criteria for at least one of six mental health disorders—major depression, social phobia, generalized anxiety disorder, drug dependence, and alcohol dependence—sometime during the three waves of the study.

Physical Health Work Barrier. Among respondents, 21.5% rated their general health as poor or fair and scored in the lowest age-specific quartile (based on national norms) of the multiple-item physical functioning scale.

Correlation Results. Correlation analyses demonstrated a significant negative correlation between African American racial status and CSA (r = -.177, p < .01); knowing fewer than five work norms (r = -.078, p < .05); low literacy (r = -.106, p < .01); and percentage of months worked (r = -.088, p < .05) (Table 2). CSA was significantly, positively correlated with having a mental health work barrier (r = .262, p < .01) and a physical health work barrier (r = .095, p < .01).

# **Mediation Model**

For all analyses we controlled for demographic and human capital variables mentioned earlier (Table 1). Variables were entered in a hierarchical linear regression. In accordance with our hypothesis, CSA was related to a significant decrease in the percentage of months worked over the 33-month period from wave 1 to wave 3 of data collection (b = -.052; p < .05) (Table 3). In other words, respondents who reported CSA experienced a 5% decrease in the percentage of months worked over a 33-month period. One way to understand this is to consider it in reference to the average percentage of months that participants worked. On average, participants worked 63.5% of the months during the 33-month period, or approximately 20.95 months. If we extrapolate the effect of the 5% decrease in the dependent work variable that is attributed to CSA, this relates to a decline of 1.05 months worked over that same 33-month period (or approximately 19.90 months worked, again based on the average WES respondent). It is important to keep in mind that the percentage of months worked varied among study participants, and there is reason to think that women reporting CSA may not have been "average," yet this is an illustration of the effect of reporting CSA on work among study respondents.

Adding CSA to the demographic and human capital variables resulted in a small but significant increase in the multiple-correlation-squared coefficient ( $R^2 = .17$ ,  $\Delta R^2 = .006$ , p < .05; see last column of Table 3), confirming that CSA is related to lowered work outcomes beyond the much larger effect of human capital skills. Although the  $\Delta R^2$  for CSA is small, the overall effect size for this model was .21, accounting for a moderate amount of the variance in the work variable.

To test the second hypothesis, two separate logistic regressions were conducted between CSA and the mental health variable and CSA and the physical health variable (Table 3). CSA was a highly significant, positive predictor of adulthood mental health problems (odds ratio = 3.4, p < .001). The odds-ratio estimate indicates that respondents reporting CSA have a 240% increase in the probability that they would also report a mental health barrier to work, leaving all other predictors constant. CSA significantly predicted having a physical health barrier (odds ratio = 1.55, p < .05), and the odds-ratio estimate indicates that respondents reporting

			Table	2: Co	rrelation	on Mai	trix to	WES F	artici	pants (	N = 63	2)					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Child sexual abuse	_																
2. Married or lives with partner	.070	_															
3. Black/African American	177**	304**	_														
4. Age 25–34 in 1997	065	.069	.017														
5. Age 35 or older in 1997	002	025	049	562**	_												
6. Children ages 0-2	.066	.060	015	077	334**	_											
7. Children ages 3-5	.041	.004	.025	.076	266**	.026	-										
8. W2 pregnancy	.046	.086*	004	018	25**	.212**	.090*	-									
). W3 pregnancy	.050	003	.035	060	122**	.153**	.010	.215**	_								
10. Less than high school	.050	068	.016	088*	033	.017	.155**	.068	.058	_							
11. Limited work experience	.037	.010	030	038	.147**	064	011	088*	040	.224**	_						
12. Low work skills	006	.017	.070	048	.055	035	.053	-,032	.092*	.247**	.416**	_					
13. Knows few work norms	078*	029	.052	.043	.021	107**	023	.030	.049	033	026	.061	-				
14. Low literacy	106**	.003	.136**	.003	.000	028	.005	.097*	.046	.199**	.091*	.159**	.054	-			
5. Mental health barrier	.262**	044	078	.032	.028	025	020	.011	019	.028	030	091*	064	050	_		
16. Physical health barrier	.095*	.031	092*	089*	.200**	030	069	063	028	.119**	.105**	.087*	.022	010	.197**	-	
17. Percentage of months worked	088*	069	004	.032	040	060	.012	078	045	262**	279**	29**	022	123**	155**	284**	_

Note: WES = Women's Employment Study. W = wave.

<sup>\*</sup>p < .05. \*\*p < .01.

	OLS Regression Predicting Percent of Months Worked			Logistic Regression Predicting Mental Health Barrier		Pred	Regression dicting ealth Barrier	OL Percent			
	b	SE B	β	b	Exp(b)	b	Exp(b)	ь	SE B	β	$R^2$ ( $\Delta R^2$ )
Step 1											
Married	05	.02	06	42	.65*	.09	1.09	05	.02	07	
Race	01	.02	02	19	.82	35	.70	02	.02	04	
Age 25-34 in 1997	03	.03	00	.50	1.65*	.42	1.53	02	.03	03	
Age 35 or over in 1997	06	.04	08	.49	1.64	1.32	3.75***	02	.04	02	
Children ages 0 to 2	06	.02	09*	05	.95	.32	1.37	05	.02	08*	
Children ages 3 to 5	.02	.02	.04	07	.92	18	.83	.02	.02	.03	
W2 pregnancy	06	.03	07*	.18	1.19	14	.86	06	.03	07*	
W3 pregnancy	.00	.06	.00	11	.89	15	.85	00	.06	00	.02 (—)
Step 2											
Less than high school	12	.02	18***	.20	1.22	.71	2.03*	10	.02	15***	
Limited work experience	15	.03	16***	15	.86	.09	1.09	14	.03	16***	
Few work skills	13	.03	16***	41	.66	.31	1.37	12	.03	16***	
Know few work norms	03	.04	02	30	.73	.34	1.40	02	.04	02	
Low literacy	03	.03	04	08	.91	22	.80	04	.03	04	.16 (.143)**
Step 3											
CSA	05	.02	07*	1.22	3.40***	.43	1.5*	02	.02	03	.17 (.006)*
Step 4											
Mental health barrier		-						05	.02	08*	
Physical health barrier								17	.03	21***	.226(.057)**

Notes: WES = Women's Employment Study. OLS = ordinary least squares.  $R^2$  ( $\Delta R^2$ ) results are reported for the full model, by block. W = wave. CSA = child sexual abuse.  $^*p < .05$ .  $^**p < .01$ .  $^{***p} < .001$ .

CSA have a 55% increase in the probability that they would also report a physical health barrier, leaving all other predictors constant.

Finally, to establish that the combined effects of the physical and mental health variables fully mediated the relationship between CSA and work, all variables were entered in a stepwise fashion (Table 3). As predicted, CSA became nonsignificant when the physical and mental health work barrier variables were entered into the model. Indeed, the effect of CSA on the percentage of months worked was roughly halved (b = -.025). Having a mental health disorder had a negative effect on percentage of months worked over the 33-month period (b = -.056, p < .05), as did physical health barrier (b = -.17, p < .001).

The effect size for the full model (demographic, human capital, CSA, physical health, and mental health variables) was .30, indicating that the full model accounts for a moderate to large proportion of the variance attributed to the work variable. The addition of physical and mental health work barriers produced a relatively large increase in the  $R^2$  coefficient ( $\Delta R^2 = .057$ , p < .000), indicating that physical and mental health barriers explain a large portion of the variance in percentage of months worked over a 33-month period.

We also tested the individual effects of the mental health and physical health variables in two separate regressions. When entered alone each variable independently fully mediated the CSA to work relationship. For parsimony we reported the results for the full model with physical and mental health in the model together.

# DISCUSSION

CSA is a disturbingly common experience among a representative sample of current and former welfare recipients—36% reported CSA, a rate that is closer to those reported in studies based on clinical samples (Messman & Long, 1996) than to the 13.5% prevalence rate among women in a national, representative sample (Molnar et al., 2001).

Although the nature of the data limits causal conclusions, these findings point to the plausibility of a model in which CSA has a direct but weak effect on employment and has an indirect effect on work through its strong association with negative mental and physical health outcomes. Although human capital variables are clearly important predictors of work outcomes, CSA and mental and

physical health barriers also explain a large portion of the variance in work outcomes. The added effect of CSA on employment is small; however, that such an effect persists given the numerous control variables in the model is testament to the potential impact of CSA on women's lives. In reference to the average number of months worked for all WES respondents, CSA translated to approximately one month less of work over a 33-month period. To the extent that working fewer months may be attributed to job transitions, CSA may be one factor that makes it difficult for women to successfully transition from welfare to work by limiting job retention, job stability, and wage growth.

This study points to the importance of understanding the consequences of experiencing childhood trauma. It may be especially challenging for low-income women who have few resources to address the long-term consequences of CSA. Rather than wane over time, CSA may have negative longterm consequences for outcomes across several domains, including mental and physical health and employment.

#### POLICY IMPLICATIONS

Welfare reform made it mandatory for most welfare recipients to work. Women with serious mental or physical health problems may be at greater risk of losing benefits if their problems prevent them from meeting welfare requirements or cause them to expend their five-year TANF benefit limit. Highlighting the importance of this issue is evidence that the TANF caseloads increasingly consist of women who are more seriously disadvantaged than their counterparts who left welfare in the early years of welfare reform (Moffitt & Cherlin, 2002).

The present study suggests that women who have experienced childhood trauma may have ongoing problems that limit their ability to make a successful transition to the workforce. Strawn and Echols (1999) suggested that for welfare-to-work programs to be considered successful over the long term, they must meet the dual goals of addressing the needs of the most disadvantaged welfare recipients while also helping recipients find better paying and more stable jobs. Addressing childhood traumas may be one step toward meeting these dual goals.

Intensive case management and integrated service provision, including referral to outside resources, may be effective approaches to assist women in the welfare system who have barriers to work.

Services for women are likely to be more effective when they are flexible and can be directed to address individual, specific work barriers. For example, screening for mental health problems that are work barriers, such as depression and anxiety; referral to mental health professionals for assistance; and development of an employment plan that includes psychological treatment for the lingering effects of CSA are strategies that could address the long-term consequences of childhood trauma. Supported work environments may provide a foundation of work skills for women who face challenges in transitioning to the workforce. Furthermore, short-term welfare-to-work programs can be adapted to extend beyond traditional didactic approaches to job skills training. For example, in one urban, eastern county, welfare applicants were required to attend an innovative one-week workshop. Activities related to job skills such as how to interview with employers and resume writing, but with a focus on promoting women's sense of self-efficacy in their ability to find employment. Evaluation results indicate that program participants had decreased symptoms of depression up to four months following the intervention (Vinokur, 2003). Although the nonexperimental nature of the data precludes causal interpretation, this provides some evidence that short-term job training programs can be adapted to promote job skills and better mental health functioning.

On the policy front, TANF provides states with some flexibility in determining how and whom to serve in the TANF system (Pavetti, 2000). This means that TANF money can—and should—be used to provide a wider range of services to women that extends beyond traditional job training programs and case management. However, as many have noted, few states have attempted to develop innovative strategies to address mental health problems within the TANF population. Policy and program responses for this group need ongoing research, intervention development, and evaluation so that effective programs can be developed that concurrently move women to work and address work barriers, including CSA.

# CONCLUSION

The purpose of the present study was to explore the direct and indirect relationship among CSA, work barriers, and work outcomes among women on welfare. Women in this study reported strikingly high rates of CSA, mental health work barriers, and

physical health work barriers. Evidence supported the hypothesis that CSA is negatively linked to adult employment, and this relationship was mediated by the mental and physical health work barriers. We suggest that CSA might perpetuate the cycle of poverty by limiting women's employment. Future research should address nuanced outcomes relating to employment quality, work transitions, and wages earned. Finally, this research points to the tremendous, ongoing need for policies and programs that assist welfare recipients and low-income women with mental and physical health problems.

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