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## Longitudinal Effects of Domestic Violence on Employment and Welfare Outcomes

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### Abstract

This study uses longitudinal data spanning 13 years from a study of 234 adolescent mothers to evaluate the effects of cumulative domestic violence on employment and welfare use before and after welfare reform. Domestic violence increased the odds of unemployment after welfare reform, but not before; domestic violence had no effect on welfare use during any time period. Psychological distress after welfare reform was associated with unemployment, but not with welfare outcomes. Thus, the authors found that the direct effect of domestic violence on unemployment is not mediated by concurrent level of psychological distress. The relationship of psychological distress to unemployment exists only for those with a history of domestic violence. Cumulative domestic violence can have negative effects on economic capacity many years after the violence occurs, suggesting that policymakers recognize the long-term nature of the impact of domestic violence on women's capacity to be economically self-reliant.

### Keywords

domestic violence; employment; welfare reform; mental health; adolescent mothers

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After the passage of the Personal Responsibility and Work Opportunity Act of 1996 (PRWORA; U.S. Pub. L. 104-193), researchers began to document that domestic violence is a serious problem for many women interacting with the welfare system (Tolman & Raphael, 2000). Welfare reform shifted policy priorities from the provision of a basic income floor for poor children and their mothers to a primary focus on moving mothers into the workforce. Although research has indicated that economic hardship is one of the main motivations for remaining with a violent partner (see Anderson & Saunders, 2003, for a review), little is known about the long-term effects of intimate partner violence on women's economic resources, particularly under a new welfare policy regime. For economically stressed battered women, employment may be the road to self-sufficiency and freedom from abuse, or it may be an expectation that cannot be fulfilled because of the violence and its consequences (Brandwein, 1999). At this time, no studies are available that assess the long-term impact of domestic violence on economic outcomes such as employment and welfare use since the passage of PRWORA. Further research has been called for that addresses proximal and distal effects of violence, as well as whether these effects are mediated by the mental health sequelae of abuse (Riger & Staggs, 2004).

The present study uses prospective longitudinal data spanning 13 years to evaluate the short- and long-term effects of cumulative domestic violence experienced during the transition from

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adolescence to adulthood on subsequent employment and welfare use. The data derive from a study of adolescent mothers, a group at high risk for poverty because of their early parenting (Garfinkel & McLanahan, 1994) and at high risk for domestic violence because of their age (Straus, Gelles, & Steinmetz, 1980). We assess work and welfare outcomes before and after the implementation of welfare reform, testing first for the direct effects of domestic violence on these outcomes. Where appropriate, we examine whether psychological distress mediates this relationship and whether domestic violence moderates the effects of psychological distress on work and welfare outcomes.

## Domestic Violence and Economic Outcomes

Research on the relationship between domestic violence and economic outcomes has focused on understanding the prevalence of abuse among welfare-reliant women and examining whether domestic violence increases the risk for welfare use and unemployment. Among welfare recipients, between 12% and 23% report having experienced physical violence from an intimate partner in the previous 12 months, and more than two-thirds report serious physical abuse in their lifetime (see Tolman & Raphael, 2000, for a summary of available prevalence data). The lifetime prevalence of domestic violence among welfare recipients is almost triple the rate found among women in the U.S. population (Tjaden & Thoennes, 2000). Despite shortcomings in methods used to measure domestic violence among welfare populations, data from these studies consistently indicate that the prevalence of intimate partner violence is much higher among welfare recipients than what is seen in representative national surveys.

Some studies with low-income women have found that partner abuse is associated with a higher likelihood of receiving welfare (Danziger & Seefeldt, 2002; Lloyd, 1997; Nam & Tolman, 2002). This association differs depending on the victim's race and the type of abuse. For instance, Honeycutt, Marshall, and Weston (2001) found that physical abuse increased the odds of welfare receipt among African American and Latina women, but not among White women, and that psychological abuse increased odds of welfare receipt among White and Latina women. Researchers in Michigan have found that women who report both recent and past domestic violence are more likely to be welfare reliant; in contrast, those who report only abuse in the past have no change in their odds of receiving welfare (Tolman, Danziger, & Rosen, 2002). Although sequencing of welfare receipt and domestic violence remains unclear because of the cross-sectional nature of these studies, one longitudinal study found that having a history of domestic violence predicted long-term welfare use for homeless women and cycling on and off welfare for women who were not homeless (Salomon, Bassuk & Brooks, 1996).

The preponderance of recent research on domestic violence and economic hardship has focused on the effect of domestic violence on employment outcomes (see Riger & Staggs, 2004, for a review). Despite evidence that perpetrators directly interfere with women's employment (Moore & Selkove, 1999), available cross-sectional studies have not supported a relationship between battering and current employment (Danziger et al., 1999; Danziger & Seefeldt, 2002; Lloyd, 1997; Lloyd & Taluc, 1999; Tolman & Rosen, 2001). Battered women are as likely to be working as their nonabused, low-income counterparts. However, domestic violence may have more subtle effects, such as decreasing the number of hours or quarters worked (Hetling-Wernyj & Born, 2002; Meisel, Chandler, & Rienzi, 2003), affecting employment stability among those with recent abuse (Browne, Salomon, & Bassuk, 1999; Riger, Staggs, & Schewe, 2004), and increasing the likelihood that a woman will be fired, have to quit a job, or lose pay at work (Brush, 2002; Riger, Ahrens, & Blickenstaff, 2000). Race and ethnicity also affect employment among battered women; prior victimization is associated with unemployment for White women, and current partner abuse decreases employment for Latina women; for African American women, victimization is not associated with employment (Honeycutt et al., 2001). In a study of predominantly Latina women, those who experienced violence reported slightly

lower rates of current employment, but no significant differences in their employment patterns over the past 3 years (Romero, Chavkin, Wise, Smith, & Wood, 2002).

These findings present a complex picture. It may be that the experience of violence galvanizes women to seek more economic resources to ameliorate their situation, thereby providing a powerful incentive to overcome any potential barriers to work. However, the consequences of domestic violence for employment may emerge over time. As a result, women with histories of abuse may have difficulty in maintaining work even after leaving the abusive relationship. Women of differing racial and ethnic backgrounds appear to experience different effects of violence on their welfare use and work patterns, suggesting that issues related to racial inequality may also have a role in predicting economic outcomes for battered women.

## Effects of Psychological Distress on the Economic Outcomes of Battered Women

Some have argued that the effects of domestic violence on employment may be mediated by the effect abuse has in creating mental health problems for battered women (Julnes, Fan, & Hayashi, 2001; Riger & Staggs, 2004). A rich body of literature supports the significant and long-lasting effects of domestic violence for women's mental health. For instance, a meta-analysis of 18 studies of the effect of domestic violence on mental health found that battered women had higher rates of several mental disorders, including depression, anxiety, and posttraumatic stress disorder, than did nonvictims (Golding, 1999). In a recent analysis of the effects of intimate partner violence on mental health among a nationally representative group of women, abuse increased the odds of experiencing depressive symptoms and being diagnosed with a chronic mental illness that significantly interfered with a woman's normal activities (Coker et al., 2002).

Research with abuse survivors further suggests that psychological distress is associated with unemployment. Battered women who have clinical depression or anxiety are significantly more likely to be unemployed or report economic hardship than are battered women without these mental health problems (Carlson, McNutt, Choi, & Rose, 2002). Battered teenage mothers on welfare who reported higher levels of depression also reported greater levels of economic strain (Kalil & Danziger, 2000). These findings are consistent with other reports that women who are victims of violence are at risk of subsequent disruption in resources such as employment and reduced income following victimization, suggesting that psychological distress may be an underlying mechanism for resource loss in victims of violence (Byrne, Resnick, Kilpatrick, Best, & Saunders, 1999; Monnier, Resnick, Kilpatrick, & Seals, 2002). To date, no studies have investigated the potential mediating effect of psychological distress on economic outcomes among women experiencing intimate partner violence.

## Study Objectives

This review shows that significant gaps exist in our knowledge regarding the longitudinal effects of domestic violence on welfare use and employment and the role of psychological distress in mediating the impact of domestic violence on economic outcomes. Few studies have data available on each of these factors over time, and fewer still have been able to assess changes in risk patterns within differing policy contexts. In this case, we are particularly interested in the effects of domestic violence on welfare use and work outcomes both before and after the implementation of federal welfare reform initiatives.

In this study, we investigate three hypotheses. First, we test the hypothesis that previous domestic violence has a direct effect on later welfare use and unemployment, before and after welfare reform. In those situations in which domestic violence does have a direct effect on

economic outcomes, we next test a mediational model. We expect domestic violence to be positively related to future psychological distress and for this relationship to mediate the direct effect of abuse on economic outcomes. This hypothesis suggests that it is the mental health consequences of violence that impair later employment rather than the violence itself. Finally, we test a moderation hypothesis proposing that psychological distress will be a more important predictor of economic outcomes for women who have experienced abuse than for those who have not. In testing each hypothesis, we control for the effects of racial differences.

## Method

### Sample and Procedures

Data for this article came from an ongoing longitudinal study of pregnant and parenting adolescents, collected over 13 years beginning in 1988. All research procedures were reviewed and approved by the University of Washington Human Subjects Review Board. Unmarried pregnant adolescents age 17 and younger who planned to carry their pregnancies to term were recruited from public and private hospital prenatal clinics, public school alternative programs, and social services. Because recruitment procedures included advertising, we could not calculate a conventional overall response rate. However, approach and consent data were obtained at one of the participating agencies, a large county hospital prenatal clinic where 76% of those eligible agreed to participate.

A total of 240 pregnant young women were enrolled in the study and completed the initial interview. Sample attrition has been minimal. Temporary sample attrition resulting from the inability to locate a respondent for a particular interview has ranged from 0% to 10%. Interview completion rates were greater than 95% in 9 of the 14 waves. The sample for the present analyses consisted of 98% of the original sample. Omitted from these analyses were 4 respondents who dropped out of the study and 2 who died. Compared with 1988 national data of births to adolescents at age 17 and younger, the sample had slightly fewer Whites (51% vs. 59%), somewhat fewer African Americans (28% vs. 37%), and more in the Other categories (including biracial, Native American, and Asian/Pacific Islander) of race and ethnicity (21% vs. 3%; Charles Stewart Mott Foundation, 1991). These percentages reflect the demographic profile of the region (Seattle-King County Department of Public Health, 1996). The age at the first period of data collection ranged from 12 to 17 years ( $M = 16.6$  years).

### Measures

Because the intent of this study was to investigate the consequences of domestic violence within the context of the federal change in national welfare policy, we assessed our outcome variables both before and after implementation of welfare reform. Economic outcomes were measured pre-welfare reform (1994) and post-welfare reform (in 1998, 1999, and 2000). Because of the vagaries of data collection, no data are available for 1995 through 1997. Cumulative domestic violence, the independent variable, was measured from 1992 to 1994; the last time point was 6 months before the first outcome measured in 1994.

**Dependent variables**—To capture later economic outcomes, we assessed whether a woman used welfare as her primary means of financial support and whether she was currently employed at the times noted above. *Welfare use* was assessed as yes/no as to whether public assistance was the primary means of financial support in the past 6 months. *Employment* was assessed as yes/no; “yes” included working full time, part time, or at a temporary job, as the original variable was categorical and could not be ranked.

**Independent variables**—Domestic violence was measured with the following items from the Conflict Tactics Scale (Straus, 1990): whether the father of the respondent’s child, her

husband, or any boyfriend or sexual partner in the preceding 6 months threatened to hit or throw something at her; threw something at her; pushed, grabbed, shoved, or slapped her; hit her with a fist or object, kicked, or bit her; beat her up; choked or burned her; threatened her with a knife or gun; or used a knife or fired a gun at her. Once respondents turned 18 years old, they provided a retrospective assessment of their experiences with domestic violence since pregnancy and then described any current experiences with abuse at each subsequent follow-up interview. Five waves of data (from 1990 to 1993) were collected before 1994 and were used to construct an indicator of cumulative domestic violence. For reasons of power related to the analysis and for ease of interpretability, respondents were at each wave categorized into two groups representing no exposure and exposure to at least one act of domestic violence. These five dichotomous indicators of exposure to domestic violence were then summed to form a continuous measure of cumulative domestic violence ranging from 0, representing *no history of domestic violence*, to 5, representing *exposure to domestic violence at all five waves of data collection before welfare reform*. To examine the potential of exposure to domestic violence to moderate the relationship between psychological distress and economic outcomes, we dichotomized the cumulative index of domestic violence to represent yes/no history of domestic violence, which enabled a within-group analysis. In preliminary analyses, we further restricted domestic violence to represent only those people with severe physical abuse (hit with an object, beaten up, choked, threatened with or use of a weapon), but as the results were not meaningfully different, we choose to present the findings for the total domestic violence variable here.

**Psychological distress**—We used a measure of psychological distress that was taken at the same time as the report of employment or welfare use. Psychological distress was measured in each of the outcome periods using the Global Severity Index of the Brief Symptom Inventory (BSI; Derogatis, 1993). The BSI is the brief form of the Symptom Checklist-90-R (Derogatis, 1977) and measures nine areas of psychopathology, including depression, anxiety, hostility, interpersonal sensitivity, phobias, psychosis, paranoid ideation, obsessions and compulsive behaviors, and somatization. Each item of the BSI is scored on a 5-point scale of distress ranging from 0 (*not at all*) at one pole to 4 (*extremely*) at the other. The Global Severity Index provides a summary index, with higher scores denoting increasing rates of psychological distress. In 1994, only items included in the Depression subscale were asked in the survey, so this reduced variable is used in the preliminary bivariate analyses for 1994 only.

**Race**—Race was measured by the respondent's self-report of her racial or ethnic identity. A three-category variable was constructed to identify White, African American, and Other race or ethnicity. The Other group included women who identified as Native American, Asian American, Pacific Islander, or biracial (most often having both African American and White parents).

### Analytic Strategy

To assess the impact of domestic violence on economic outcomes, we used a logistic regression model, given that our outcomes are dichotomously scored. First, bivariate associations were examined, followed by a series of logistic regression models. We present the odds ratios for domestic violence and psychological distress. The odds ratio can be interpreted as the change in odds (greater than 1 = increased odds; less than 1 = decreased odds) of being either unemployed or using welfare with a unit change in the independent variable. In the first series of models, following the procedures for testing a mediation model set forth by Baron and Kenny (1986), we established the relationship between cumulative domestic violence before welfare reform on psychological distress and economic outcomes, followed by the relationship of psychological distress to economic outcomes. Next, we examined the effect of cumulative domestic violence given concurrent psychological distress. We followed this analysis by

looking at the relationship between psychological distress and economic outcomes separately for those who had a history of domestic violence and those who did not have a history of domestic violence. In each of these analyses, we controlled for race of respondent.

Missing data were managed using the SPSS 11.01 Missing Value Analysis module, which is based on Little and Rubin's (1987) work with expectation-maximization algorithms. Overall, there was little missing data, within and across time. The average amount of missing data for all of the study variables was 3.8%.

## Results

Descriptive results showed initially high levels of domestic violence and welfare use during adolescence that declined sharply in adulthood. From pregnancy until age 18, 68.8% of the respondents reported that they had experienced at least one episode of abuse. In 1992, 38.0% of the women reported an episode of abuse in the past 6 months. This figure dropped to 15.0% of women reporting current abuse in 2000. In 1989, just after giving birth, 47.0% of the women reported that welfare was their primary means of financial support. This percentage was highest in 1992 at 62.4%, then dropped to 10.3% by 2000. Before welfare reform, 40.1% of the sample were working; in the 3 outcome years following welfare reform, on average 63.0% of women were working at a full-time, part-time, or temporary job.

To establish the conditions required for a mediation analysis (per Baron & Kenny, 1986), we next examined the bivariate correlations (tables are available from first author) between our predictor (cumulative domestic violence) and the two economic outcomes at four time points (welfare use and unemployment in 1994, 1998, 1999, and 2000). This initial analysis showed that domestic violence was not related to unemployment or welfare use in 1994 ( $r = .02$  and  $.06$ , respectively) and was not related to welfare use post-welfare reform ( $r = -.11$ ,  $.02$ , and  $.03$  for 1998, 1999, and 2000, respectively). Domestic violence was related to unemployment in 1998 ( $r = .17$ ,  $p < .01$ ) and in 1999 ( $r = .13$ ,  $p < .05$ ), but not in 2000 ( $r = .06$ ). The next step in our analysis was to establish that a relationship existed between cumulative domestic violence and our mediator variable, psychological distress, in 1998 and 1999 ( $r = .31$  and  $.25$ ,  $p < .001$ , respectively). Our final step in determining whether a mediational analysis should be conducted was to establish that psychological distress was related to unemployment in 1998 ( $r = .17$ ,  $p < .01$ ) and in 1999 ( $r = .19$ ,  $p < .01$ ).

### Mediational Model

To test the model of mediation in the full sample, we first examined the influence of cumulative violence on unemployment post-welfare reform after controlling for respondents' race as seen in the Direct Effect columns of Table 1. Cumulative exposure to domestic violence had a significant direct effect on being unemployed in 1998 (OR = 1.27,  $p < .01$ ). The mediation model in 1998 was not upheld, as the path from cumulative domestic violence to employment remained significant when psychological distress was included in the model (OR = 1.21,  $p < .05$ ). For outcomes in 1999, after controlling for race, cumulative domestic violence was not associated with unemployment; however, concurrent psychological distress (1999) continued to be significantly associated with unemployment during the same time frame (OR = 1.85,  $p = .015$ ).

### Moderation Model

Given that the direct effect of cumulative domestic violence was not mediated by psychological distress, we next evaluated whether cumulative domestic violence moderated the effect of psychological distress on unemployment in 1998 and 1999. We entered the main effects of domestic violence and concurrent psychological distress, followed by an interaction term

created as the product of the two main effects. This interaction term was not significant regardless of whether race was controlled. However, we wanted to look more specifically at those who had a history of domestic violence compared with those who did not. We examined the effect of psychological distress on unemployment for those with and without a history of domestic violence. The results demonstrated that the relationship between psychological distress and unemployment was only significant for those with a history of domestic violence (Table 2). Specifically, for those with a history of domestic violence, psychological distress was positively associated with unemployment post-welfare reform in 1998 and 1999, with increased odds ratios of unemployment of 1.85 and 1.98, respectively. Race did not have an effect on unemployment for either group.

To further explore the combined effects of cumulative exposure to domestic violence and psychological distress, we created four distinct groups: those with a history of neither violence nor psychological distress; those with both risk factors; those with only psychological distress; and those with only a history of domestic violence. To do this, psychological distress was recoded into a dichotomous variable with those cases that were 1 standard deviation above the mean representing a group with psychological distress. Owing to small cell size for those who only had mental health distress ( $n_s = 5$  and 5 in 1998 and 1999, respectively) and the inappropriateness of a traditional chisquare analysis, we used Exacon, a statistical module in SLEIPNER, a software package developed by Bergman and El-Kouri (1998). This procedure uses a Fisher's exact test for calculating the probability of an observed cell frequency, conditional on the marginal totals, occurring beyond that which is expected by chance. Table 3 presents the observed and expected cell frequencies. The significant  $p$  value for each cell indicates whether an observed cell frequency occurred more or less than would be expected by chance. Results indicate that in 1998 and 1999 the combined effect of cumulative domestic violence and psychological distress was associated with being unemployed post-welfare reform; similarly, those with both risk factors were less likely to be employed than would be expected by chance. The other cells representing different combinations of risk were not significant.

## Discussion

These results demonstrate that having a history of domestic violence during the transition to adulthood decreased the likelihood of working post-welfare reform, but these effects faded by the final wave of data collection (2000). Our pre-welfare reform findings that domestic violence was not related to employment are consistent with previous cross-sectional studies that have shown no association between domestic violence and concurrent employment (Danziger et al., 1999; Danziger & Seefeldt, 2002; Lloyd, 1997; Lloyd & Taluc, 1999; Tolman & Rosen, 2001). However, when evaluated 4 and 5 years later, domestic violence had a significant (although small) effect on unemployment. Women who experienced abuse during their transition into adulthood were at increased risk for unemployment, an effect that diminished over time. Although we could not directly test for the effects of welfare reform policy changes on women's employment, these results suggest that changes in the policy may have contributed to changing employment patterns. It may be the case that the emphasis in the federal policy on moving women from welfare use into the labor force created increased hazards for battered women. Women with a history of domestic violence were no more likely to be on welfare, but after welfare reform they were more likely to be unemployed. Potentially, pushed off of welfare, these women, as a subgroup, may have been unable to overcome barriers such as diminishment of their social networks as a result of the domestic violence to find and maintain work. An alternative explanation is that domestic violence may have had a particularly detrimental effect on employment during the transition to adulthood because of unanticipated developmental issues for adolescent mothers at this point in the life span. It may be that domestic violence during the transition from adolescence to adulthood negatively affected

other developmental milestones such that these developmental effects became more relevant later in young adulthood. Further research is warranted to test these alternative hypotheses, as well as to explore more contextual factors related to employment, such as any differences in the types of jobs battered and nonbattered women held before and after welfare reform.

Contrary to our hypothesis, concurrent psychological distress does not mediate the effect of cumulative domestic violence on unemployment. It appears that cumulative domestic violence has a long-term erosive impact on mental health, but this effect on mental health did not account for the relationship between domestic violence and unemployment as expected, thus other mechanisms must be relevant to explaining this effect. Two possibilities warrant further attention. First, domestic violence may cause long-term problems with employment because of the ways in which abuse prevents women from developing their social networks (Dutton, 1992), given that poor women rely heavily on these networks to find and maintain employment (Edin & Lein, 1997). This suggests the hypothesis that domestic violence decreases social networks, which negatively influences employability, and that for poor women the negative impact of reduced social networks is more pronounced in predicting employment. Alternatively, given the evidence that battered women report being fired and quitting jobs more frequently than do nonabused women (Brush, 2002), domestic violence during the transition to adulthood may prevent the establishment of foundational work histories necessary to later success in acquiring and maintaining employment. This leads to the hypothesis that problematic work history during the transition to adulthood interacts with exposure to domestic violence to predict unemployment and employability in the future, accounting for the long-term impact of domestic violence on employment.

Finally, although psychological distress does not mediate the pathway between domestic violence and work, we found that psychological distress was significantly associated with unemployment for women with a history of domestic violence. A potential model for explaining the reason why those exposed to domestic violence are less likely to be employed post-welfare reform is that as a group, they have a greater incidence of mental health problems (Golding, 1999; Tolman & Rosen, 2001). Although the results in the full sample indicated that psychological distress was associated with concurrent unemployment, when assessed within groups of women based on their exposure to domestic violence, the effect of psychological distress was only significant for those with a history of domestic violence. We further extend these findings by showing that in the context of risk groupings, only those women who report both historical exposure to domestic violence and high psychological distress were less likely to be employed.

Interestingly, cumulative domestic violence was not related to welfare use either before or after the implementation of welfare reform. Contrary to previous cross-sectional findings among samples of welfare recipients (Danziger & Seefeldt, 2002; Lloyd, 1997; Nam & Tolman, 2002), this longitudinal evaluation showed no evidence of a relationship between early domestic violence and later welfare use. An issue in the previous work is that the impact of domestic violence on welfare use has usually been evaluated using samples drawn from low-income (primarily welfare) populations. In this study of a community-based sample, we speculate that the women may have had greater diversity in economic choices than samples drawn from welfare populations.

As with all studies, this study had some limitations that bear mentioning. The sample was drawn from a single geographic area of the United States. Although the sample appears representative of those teenagers who gave birth in this area, we do not know to what extent the findings generalize to other regions of the United States. The data are based on self-report and may be subject to some error; for example, domestic violence may be underreported. On the other hand, these limitations are common in studies of domestic violence, and the present



study has a number of strengths compared with prior studies, such as the number of years spanned by the longitudinal data and the fact that the sample was not drawn from a domestic violence or welfare agency.

## Conclusion

This study indicates that domestic violence can have negative effects on economic capacity and mental health outcomes many years after the violence occurred. These results highlight the importance of targeting those battered women with more symptoms of psychological distress for mental health intervention as a pathway toward improved economic outcomes. The combined effects of domestic violence and psychological distress on these women's capacity to be economically self-sufficient were significant.

Policymakers could make a significant contribution to the well-being of battered women by recognizing the long-term nature of the impact of domestic violence on women's mental health and capacity to be economically self-reliant. Current welfare policy provides minimal protection and services for battered women. Further evaluation is needed of the kinds of assistance within welfare and employment programs that would be most beneficial to domestic violence survivors.

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## Biographies

**Taryn Lindhorst**, PhD, LCSW, is an assistant professor of social work at the University of Washington. Her work is informed by 16 years of social work practice experience. Her research focuses on the intersections between individuals and social institutions, particularly as these relate to issues of violence and poverty for women. Her work on the effects of welfare reform for battered women has won two national awards, and her research has been funded by the National Institute of Mental Health and the National Institute of Justice. Her current projects include a longitudinal analysis of the long-term impact of domestic violence on economic and mental health outcomes among adolescent mothers and a qualitative study with battered women who have been prosecuted for child abduction under the international Hague Convention treaty.

**Monica Oxford**, MSW, PhD, is a research assistant professor of social work at the University of Washington. Her area of research examines the life-course patterns of adolescent mothers and their children. In addition, Her coprincipal is interested in how context and parenting practices combine to inform particular patterns of child outcomes and how intervention practice operates in varying environmental contexts. She is a coprincipal investigator on the Young Women's Health Study.

**Mary Rogers Gillmore**, formerly professor of social work at the University of Washington, is currently director and professor at the School of Social Work at Arizona State University. Her research interests are pregnant and parenting teenagers and adolescent substance use and sexual behaviors. She is a coprincipal investigator on the Young Women's Health Study that provided the data for this article.

Table 1  
 Mediation Model: Cumulative Domestic Violence, Psychological Distress, and Work

Variable	Unemployment 1998			Unemployment 1999		
	Direct Effect		Mediation Model	Direct Effect		Mediation Model
	Odds Ratio	95% CI	Odds Ratio	95% CI	Odds Ratio	95% CI
Cumulative domestic violence	1.27**	1.06, 1.52	1.21*	1.0, 1.46	1.12	0.93, 1.35
Psychological distress			1.60†	0.97, 2.63	1.85*	1.12, 3.05

Note: Cumulative domestic violence, psychological distress, and work are tested controlling for respondents' race. Empty cells correspond to the mediation test in which direct effects are not tested. CI = confidence interval.

†  $p \leq .10$ .

\*  $p \leq .05$ .

\*\*  $p < .01$ .

**Table 2**  
Test of Moderation Effects on Unemployment Post–Welfare Reform

Variable	No Exposure to Domestic Violence		History of Exposure to Domestic Violence	
	Odds Ratio	95% CI	Odds Ratio	95% CI
1998				
Respondent race				
Caucasian	—	—	—	—
African American	1.03	0.25, 4.29	0.96	0.47, 1.97
Other	0.95	0.20, 4.57	0.99	0.44, 2.22
Mental health distress	1.52	0.46, 5.01	1.87*	1.10, 3.17
1999				
Respondent race				
Caucasian	—	—	—	—
African American	0.46	0.10, 2.08	1.58	0.77, 3.22
Other	0.64	0.14, 3.04	1.50	0.68, 3.34
Mental health distress	1.85	0.44, 7.85	1.98*	1.17, 3.35

Note: Dashes indicate that Caucasian was the reference group. CI = confidence interval.

\*  $p \leq .05$ .

**Table 3**  
Association Between Risk Group and Unemployment in 1998 and 1999 ( $N = 234$ )

Variable	Both Psych. Distress and DV	Neither Psych. Distress nor DV	Psych. Distress Only	DV Only
1998				
Employed ( $n = 149$ )	13 (20.38)*	33 (29.93)	3 (3.18)	100 (95.51)
Unemployed ( $n = 85$ )	19 (11.62)*	14 (17.07)	2 (1.81)	50 (54.49)
$n$	32	48	4	150
1999				
Employed ( $n = 144$ )	14 (19.7)*	33 (29.5)	1 (2.5)	96 (92)
Unemployed ( $n = 90$ )	18 (12.3)*	15 (18.5)	3 (1.5)	54 (57.7)
$n$	32	48	5	150

Note: Expected count in parentheses. Psych. = psychological; DV = domestic violence.

\*  $p < .05$ .