Longitudinal Relations Between Employment and Depressive Symptoms in Low-Income, Suicidal African American Women

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Unemployment and depression are problematic at both individual and societal levels, and research suggests that the two phenomena are related. More thorough and longitudinal analyses, particularly ones within low-income minority populations, are needed to guide the development of programs to increase employment in persons with mental health problems. The current study aimed to specify the relations over time between depressive symptoms and employment status within a sample of 46 low-income African American women participating in an intervention study for intimate partner violence and suicidal behavior. Hierarchical logistic regression analysis indicated that baseline levels of depressive symptoms predicted employment status at the end of a 10-week intervention period, controlling for baseline employment status. Chi-square analysis and qualitative analyses of trends in depression scores showed that changes in employment status during the 10-week intervention period predicted 6-month and one-year follow-up levels of depressive symptoms. Results imply that, for women in the currently sampled population, depressive symptoms create vulnerability for job loss, but the ability to gain employment despite high levels of depressive symptoms is linked to lowered depression levels over the long term. Community programs assisting such women could therefore not just lower the vulnerability to job loss by treating depressive symptoms, but they could potentially lower long-term depression levels through interventions that enhance employability and motivation to pursue work. J Clin Psychol 63: 541–553, 2007.

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Both epidemiological and phenomenological analyses of depression suggest that improved treatment of this condition could produce increased well-being at individual and group levels. Depression places people at risk for a host of psychosocial difficulties and can have a drastic impact on overall functioning. Importantly, up to 19% of individuals with severe depression commit suicide (Bostwick & Pankratz, 2000), and because of the increased prevalence of suicidal ideation (Kessler, Borges, & Walters, 1999) and unsuccessful attempts (Moscicki, 2001) relative to successful suicide attempts, it stands to reason that a multitude of depressed individuals experience distressing suicidal ideation and make unsuccessful suicide attempts. In addition to its individual impact, depression influences society as a whole (Greenberg et al., 2003). It is one of the leading healthcare burdens within the United States, costing an estimated $70.1 to $77.6 billion annually in terms of medical care and lost work productivity (Lerner et al., 2004). As of 2000, the economic burden for depression-related suicide mortality costs was $5.4 billion dollars (Greenberg et al., 2003). Longitudinal studies showing that level of depression predicts employment status over periods ranging from 6 months to 2 years (Lerner et al., 2004; Prause & Dooley, 2001) highlight the need for analyses of depression's influence on employment.

Not only does unemployment appear to be a consequence of increased depression levels, it could, in turn, lead to greater psychological dysfunction, thus playing a key role in a self-perpetuating cycle of poverty and psychopathology. Unemployment is a life stressor that impacts both acute and chronic aspects of physical health (Broman, Hamilton, Hoffman, & Mavaddat, 1995; Price, Choi, & Vinokur, 2002), and prolonged unemployment is widely known to be a chronically stressful state that can adversely affect mental health (Lazarus & Folkman, 1984). Specifically, an extensive literature indicates that unemployment is a risk factor for depression (Bromberger & Matthews, 1994; Catalano, Aldrete, Vega, Kolody, & Aguilar-Gaxiola, 2000; des Rivieres-Pigeon, Seguin, Goulet, & Descarries, 2001; Vinokur, Schul, Vuori, & Price, 2000; Vuori & Silvonen, 2005). Unemployed women have been found to have significantly higher levels of depressive symptoms than employed women (Bromberger & Matthews, 1994), and a high percentage of individuals develop depressive symptoms subsequent to becoming unemployed (Priceet al., 2002). Conversely, in one of few longitudinal studies in this area, data revealed that obtaining employment had beneficial effects on mood and depressive symptomatology (Bromberger & Matthews, 1994). Specifically, women in the investigation who were able to find employment experienced greater decreases in depressive symptoms than those who did not, regardless of the severity of their depression at baseline.

Given evidence identifying depressive symptoms and disorders as risk factors for unemployment, and unemployment as a risk factor for depression, more nuanced and longitudinal analyses of the relations among depressive symptoms and employment are warranted. It is also important for such longitudinal analyses to occur within populations for whom the relations among these variables are of primary concern. For instance, although potentially detrimental to all persons, it is known that the short-term effects of jobloss on mental health are even more deleterious for people living in impoverished environments, where the prospects of finding work are particularly low (Turner, 1995). Additionally, job search programs aimed at preventing major depression appear to be more useful for high-risk individuals, such as those persons living in poverty (Price, van Ryn, & Vinokur, 1992).

Another important consideration that should be factored into research on the relation between employment and depression is that less is known about the influence of depression on employment specifically for women. This is concerning not just because the lifetime prevalence rate of major depression is greater for women than men, varying from

10 to 25% in women within the general population (American Psychiatric Association, 2000), but also because depression's healthcare burden is proportionally greater for women than men (Birnbaum, Leong, & Greenberg, 2003). Similarly, there is a rising need to study the effects of depression on economic concerns in urban, African American populations. Although there is some evidence that the prevalence of major depression is lower in African American than European American populations, the prevalence of dysthymia is higher for African Americans than European Americans (Riolo, Nguyen, Greden, & King, 2005). Poverty seems to account for some of the increased risk of dysthymia within African American populations, and poverty is a powerful risk factor for major depression within European American populations.

For the aforementioned reasons, the present study investigated the relations between employment status and depressive symptoms in suicidal African American intimate partner violence (IPV) survivors residing in an impoverished, urban community. To facilitate better specification of the longitudinal relations among variables, study participants were assessed at the time of their entry into a treatment program for African American women experiencing IPV and suicidality after a 10-week-long intervention period, which included either a manualized empowerment group intervention or treatment as usual at 6-month follow-up and at one-year follow-up. Evidence suggests that the presence of depressive symptoms creates a vulnerability to job loss (Lerner et al., 2004; Prause & Dooley, 2001; Price et al., 1992); this vulnerability may result in increased levels of depression (Broman, Hamilton, Hoffman, & Mavaddat, 1995; Catalano et al., 2000; des Rivieres-Pigeon et al., 2001; Kraut & Walld, 2003; Price et al., 2002; Turner, 1995). Such a cycle would therefore doubly handicap individuals in impoverished communities where job opportunities are fewer, education levels are lower, and mental health treatment is less readily available.

Our basic theorizing was that due to the anhedonia and reduced-activity levels linked to depression, individuals entering the study with higher levels of depression would be less likely to obtain and more likely to lose employment during the first 10 weeks of the study. We hypothesized further that changes in employment status during the first 10 weeks of the study would predict long-term (i.e., 6-month and one-year follow-up) levels of depression. The ability to seek or sustain employment despite experiencing high levels of distress would be a personality characteristic that is particularly desirable in the type of high stress, chaotic environments in which our study participants exist. Conversely, the tendency to react to increased levels of distress by disengaging from adaptive behaviors such as employment (or employment seeking) reveals personality features that bode poorly for long-term functioning. Results in accord with such theorizing would highlight a cycle of psychopathology and poverty in which depressive symptoms create vulnerability to unemployment, which, in turn, solidifies the chronicity of depressive symptoms. The presence of such a cycle would indicate that treatment programs should deal in a straightforward way with overt symptoms of depression to promote the lowering unemployment vulnerability while also dealing with deeper personality features related to the ability to sustain effort and control impulses in the face of distressing internal experience.

Based on the considerations noted above, our specific predictions were as follows. First, depressive symptoms at baseline (Time 1) were hypothesized to predict employment status at 10-weeks (Time 2), controlling for baseline employment status, with women with higher levels of depression at baseline being less likely to gain and more likely to lose employment. Our second prediction was that changes in employment from Time 1 to Time 2 would predict depression status (i.e., depressed or not depressed) at 6-month follow-up (Time 3) and one-year follow-up (Time 4).

Method

Participants

Forty-six, low-income, African American women, aged 19–51 years (M = 35.11, SD = 8.77), seeking medical or psychiatric care, who reported being survivors of IPV and having attempted suicide within the past year, participated in this investigation. A large, public, urban, university-affiliated level-1 trauma hospital in the southeastern United States serving a predominantly indigent and minority population, served as the recruitment site. Approximately 3300 self-identified African American women (approximately 50 per month, for 66 months) consented to being screened for potential participation in the study. Of those, 208 (6%) met criteria for the study and were interviewed at the Time 1 assessment. Of those completing the Time 1 assessment, the current sample consisted of the 46 women who completed all or almost all of the measures in the current study at the Time 2, 3, and 4 assessments. Attrition was clearly high; however, such a dropout rate was not unexpected considering the chaotic nature of the lives of these women. At baseline, 21 (45.7%) of those who completed the study reported being homeless; hence, the disadvantages of a sample biased by high attrition should be weighed against the need to learn as much as possible about populations that have rarely been followed over extended periods of time. See Table 1 for other participant characteristics.

Procedure

Time 1 interview. The baseline interview (Time 1), which included a large battery of assessment measures in addition to those examined in the current study, lasted 2–2 1/2 hours and was conducted face-to-face in a private space. All questionnaires were verbally administered to prevent confounding by low levels of functional literacy in this population. After obtaining informed consent, participants were administered the Mini Mental State Exam (MMSE), a commonly used 30-item instrument measuring concepts such as orientation, recall, concentration, and comprehension (Folstein, Folstein, McHugh, & Fanjiang, 2001). If their MMSE score was less then 23 out of 30, they were also administered the Rapid Estimate of Adult Literacy in Medicine (REALM) (Williams et al., 1995). This widely used literacy instrument requires participants to verbally read 66 medically related words and has excellent test-retest and interrater reliability. It is believed

Table 1
Sample Characteristics (N = 46)

Relationship status		Education		Religion	
Single/never married	15 (32.6%)	$<12^{th}$ grade	18 (39.1%)	Baptist	26 (56.5%)
Partner, not living together	8 (17.4%)	12-grade (incl. high school) graduate	14 (30.4%)	Holiness	4 (8.7%)
Partner, living together	9 (19.6%)	GED	2 (4.3%)	Methodist	3 (6.5%)
Married	2 (4.3%)	Some college/ technical school	9 (19.6%)	Christian/Non-denominational	7 (15.2%)
Divorced	7 (15.2%)	College graduate	3 (6.5%)	Other	3 (6.5%)
Separated	3 (6.5%)			None	3 (6.5%)
Widowed	2 (4.3%)				

Note. GED = General equivalency diploma.

that low scores on the MMSE or REALM are indicative of acute cognitive dysfunction (Davis et al., 1993; Folstein et al., 2001); therefore, if a participant's REALM score was less than 18 out of 66, the participant was referred for psychiatric evaluation and rescheduled. Upon interview completion, all participants were debriefed, paid a $20 honorarium, were provided with two public transportation tokens and community referrals, and were referred to intervention or support groups associated with the research project. Regardless of whether in the intervention or control group, women were eligible for participation in support groups, each led only by women at least one of whom was African American. They were also offered individual psychotherapy, access to a variety of resources ranging from diapers and canned goods to a computer with Internet access, and public transportation tokens for coming to and from assessment and therapy appointments.

Time 2, 3, and 4 interviews. Study participants were interviewed at three time points after Time 1. At each of these time points, they were administered the same instruments as had been administered at Time 1, in the same manner, with the exception of the MMSE and REALM. The Time 2 interview was conducted at the end of a 10-week-long intervention period. Details of the intervention and control conditions employed in the larger study will be reported in a later article. The Time 3 and 4 interviews were conducted 6 months and one year after the Time 2 interview, respectively. To decrease attrition, women were paid $30, $40, and $50 at the end of the Time 2, 3, and 4 interviews, respectively.

Measures

Employment. In the process of obtaining other demographic information, such as age, relationship status, homelessness status, education, and religious affiliation, women were asked whether or not they were currently employed. This question was asked at each interview time point and yes responses were coded as 1, no responses were coded as 0.

Depressive symptoms. Depressive symptoms were measured with the Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996). The BDI-II is a 21-item self-report inventory measuring depressive symptomatology. For each item, the participant chooses one of four self-evaluative statements that might have characterized her over the past two weeks. The statements range in severity from 0 to 3. Total scores can range from 0 to 63, with scores in the 0–13 range indicating minimal depression, 14–19 indicating mild depression, 20–28 indicating moderate depression, and 29+ indicating severe depression. For purposes of the current study, women with BDI-II scores above 13 were labeled as depressed and coded as 1, whereas those with scores of 13 or less were labeled as not depressed and coded 0. There is strong support for the BDI-II's reliability and construct validity, and its incremental utility relative to the original BDI (Beck et al., 1996; Dozois, Dobson, & Ahnberg, 1998). In the present study, the BDI-II had coefficient alphas ranging from .87 to .93 over the four assessment points.

Results

Descriptive Statistics

Rather than deleting all cases with missing data from all analyses, cases were deleted from an analysis only if they were missing data required for that analysis. This had

minimal effect, as there were few missing data (i.e., one participant did not complete the BDI-II at Time 1, one did not complete it at Time 2, and one did not complete it at Time 4). Table 2 contains descriptive statistics for the BDI-II and employment at each time point, as well as mean BDI-II scores and frequency of BDI-II scores greater than 13 (i.e., in the depressive range) broken down by employment status. The data indicate that employed women were generally less depressed than unemployed women were, and they were less depressed to a statistically significant degree at Times 2 and 3. Though not shown in the table, 6 women gained employment from Time 1 to Time 2, whereas 5 lost employment, 34 stayed unemployed, and one woman maintained employment. Five of the 6 women who obtained employment during the first period of the study were still employed by the end of the study at one-year follow-up, while 4 of the 5 women who initially lost employment were still unemployed at the one-year follow-up, as were 30 of the 34 women who stayed unemployed from Time 1 to Time 2. Such numbers speak to the difficulty of obtaining and sustaining employment for this population. Additionally, the fact that the women who gained employment during the intervention phase of the study tended to remain employed, whereas those who lost it tended to remain unemployed, suggests that employment changes during this particular period were the most important to analyze in relation to depressive symptoms.

Table 3 contains supplementary descriptive statistics. It summarizes BDI-II scores and employment status broken down by intervention/control status, i.e., whether women were in the control/support group or the intervention group. Though there was a trend for the intervention group to experience greater decreases in depression scores and increases in employment than did the control group, neither mean depression scores nor employment status differed to a statistically significant degree at any time point as a function of group status.

Prospective Prediction of Employment Status by Depressive Symptoms

Hierarchical logistic regression analysis was used to determine whether depression at Time 1 predicted changes in employment status from Time 1 to Time 2. In the analysis,

Table 2
Descriptive Statistics

Time	Category	*N*	BDI-II *M* (*SD*)	BDI-II > 13
Baseline	Employed	6	32.5 (7.12)	6 (100%)
	Unemployed	40	36.6 (12.26)	35 (89.7%)
	Total	46	36.04 (11.73)	41 (91.1%)
10 Weeks	Employed	7	11.6 (10.57)**	3 (42.9%)
	Unemployed	39	26.6 (12.84)	31 (81.6%)
	Total	46	24.27 (13.57)	34 (75.6%)
6-Month follow-up	Employed	8	13.9 (9.09)*	3 (37.5%)
	Unemployed	38	25.5 (14.46)	28 (73.7%)
	Total	46	23.48 (14.30)	31 (67.4%)
1-Year follow-up	Employed	10	20.1 (16.84)	5 (50%)
	Unemployed	36	27.5 (14.04)	28 (80.0%)
	Total	46	25.89 (14.84)	33 (73.3%)

Note. BDI-II = Beck Depression Inventory-II.
*Variable differs for employed and unemployed at $p < .05$. ** Variable differs for employed and unemployed at $p < .01$.

Table 3
BDI-II Scores and Employment Status by Intervention Group Status

Time	Category	*N*	BDI-II *M* (*SD*)	# Employed
Baseline	Intervention	26	37.5 (10.8)	2 (7.7%)
	Control	20	34.1 (12.9)	4 (20.0%)
10 Weeks	Intervention	26	23.1 (13.3)	4 (15.4%)
	Control	20	25.7 (12.2)	3 (15.0%)
6-Month follow-up	Intervention	26	24.6 (14.6)	5 (19.2%)
	Control	20	22.1 (14.2)	3 (15.0%)
One-year follow-up	Intervention	26	23.5 (14.0)	7 (26.9%)
	Control	20	29.2 (15.6)	3 (15.0%)

Note. BDI-II = Beck Depression Inventory-II.

Time 2 employment status was the dependent variable, Time 1 employment status served as a control and was entered as a predictor in step 1, and Time 1 BDI-II scores were entered in step 2. Consistent with the first hypothesis, Time 1 BDI-II scores significantly predicted Time 2 employment status, controlling for baseline employment status, such that for every one-unit increase in baseline BDI-II scores, the odds ratio for being employed at Time 2 versus not being employed decreased by 7% ($b = -.074$, $SE = .035$, $p < .05$, OR = .929, 95% CI = .867–.995). In other words, consistent with the first prediction, women who were more depressed at Time 1 were more likely to lose employment and less likely to gain employment by Time 2.

Employment Status' Prediction of Depressive Symptoms Over Time

Chi-square analysis was used to assess the ability for changes in employment from Time 1 to Time 2 to predict depression status at Times 3 and 4. Two analyses were conducted: one predicting Time 3 depression status and the other predicting Time 4 status. For both of these, women were categorized as being depressed or not depressed (as determined by BDI-II scores above 13 or not, respectively), and their likelihood of being depressed was analyzed as a function of their having remained unemployed, lost employment, or gained employment from Time 1 to Time 2. (Only one woman stayed employed and thus was not included in the analyses.)

Both analyses yielded significant chi-square values, $\chi^2 = 10.835$ for Time 3 depression and $\chi^2 = 12.794$ Time 4 depression ($ps < .005$). For both analyses, the category of gaining employment was the sole significant contributor to the significant chi-square (standardized residuals = 2.1 and 2.7 for Times 3 and 4, respectively). Hence, women who gained employment during the first 10 weeks of the study had a greater likelihood of not being depressed at 6-month and one-year follow-up than would be expected based on rates for the overall sample. Contingency tables on which these results are based can be seen in Tables 4 and 5 for Times 3 and 4, respectively. Inspection of these tables reveals that some of the cells have frequencies less than 5, so results should be interpreted cautiously. However, the stark contrast in outcome for those who gained employment versus those who remained unemployed suggests that the findings are reliable. Five of the 6 women (83%) who gained employment in the initial portion of the study had BDI-II scores less than 14 at 6-month and one-year follow-up (with respective mean

Table 4
Frequency of Individuals Categorized as Depressed at Six-Month Follow-Up by Employment Status Change From Time 1 to Time 2

		Not depressed (BDI-II <14)	Depressed (BDI-II >13)
Gained employment	Count	5	1
	%	83.3%	16.7%
Stayed unemployed	Count	7	27
	%	20.6%	79.4%
Lost employment	Count	3	2
	%	60.0%	40.0%

Note. BDI-II = Beck Depression Inventory-II.

BDI-II scores of 9.50 and 8.67), whereas only 7 of 34 (21%) and 5 of 34 (15%) who stayed unemployed had scores less than 14 at the two respective follow-up periods (with respective mean BDI-II scores of 27.09 and 29.04).

Visual inspection of Figures 1 and 2, which summarize trends in BDI-II scores over time, supports the reliability of the aforementioned inferential findings and speaks to their clinical significance. For instance, Figure 1 depicts the percentage of BDI-II scores in the depressive range (i.e., above 13) at each time point in relation to change in employment from Time 1 to Time 2 (see Table 6 associated values), and Figure 2 depicts mean BDI-II scores in relation to employment change (see Table 7 for associated values). Analysis of the figures and their associated tables indicates that those who gained employment were significantly less depressed at Times 2, 3, and 4, but not Time 1, than those who remained unemployed. The fact that there were no significant differences at Time 1, but there were at the points concurrent with or subsequent to the measured change in employment status suggests that change in such status was indeed significantly predictive of meaningful changes in depressive symptoms. The two figures further highlight a trend for most women in each employment change category to be depressed at Time 1 and for the average woman to experience decreases in depression during the 10-week intervention period. However, most of those who obtained employment were not depressed by one-year follow-up, whereas most of those who remained unemployed remained depressed

Table 5
Frequency of Individuals Categorized as Depressed at One-Year Follow-Up by Employment Status Change from Time 1 to Time 2

		Not depressed (BDI-II <14)	Depressed (BDI-II >13)
Gained employment	Count	5	1
	%	83.3%	16.7%
Stayed unemployed	Count	5	29
	%	14.7%	85.3%
Lost employment	Count	2	3
	%	40.0%	60.0%

Note. BDI-II = Beck Depression Inventory-II.

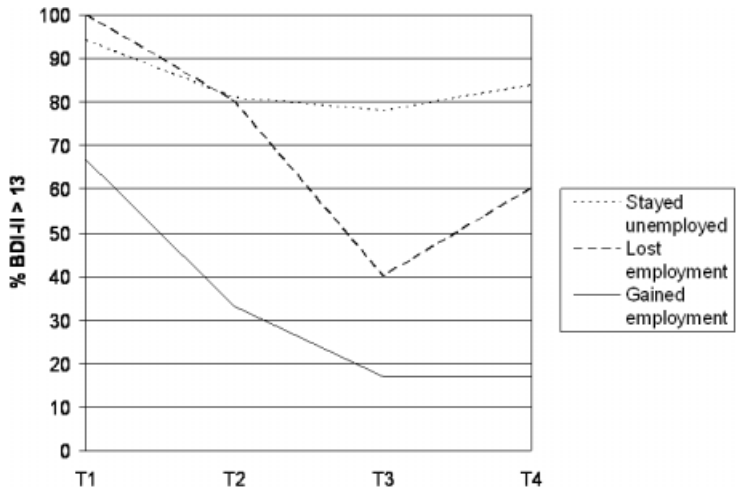

Figure 1. Percentage categorized as depressed by change in employment from Time 1 to Time 2.

throughout the study. The combination of these results with the chi-square analyses supports the second hypothesis that changes in employment are related to subsequent depression levels.

Discussion

The current findings describe a clinically significant relation between employment status and depressive symptoms within an impoverished, African American sample of women who have undergone major recent life stresses (i.e., IPV and a suicide attempt). First, women in the sample who entered the study with increased levels of depression were more vulnerable to job loss (and less likely to obtain employment) during the first 10

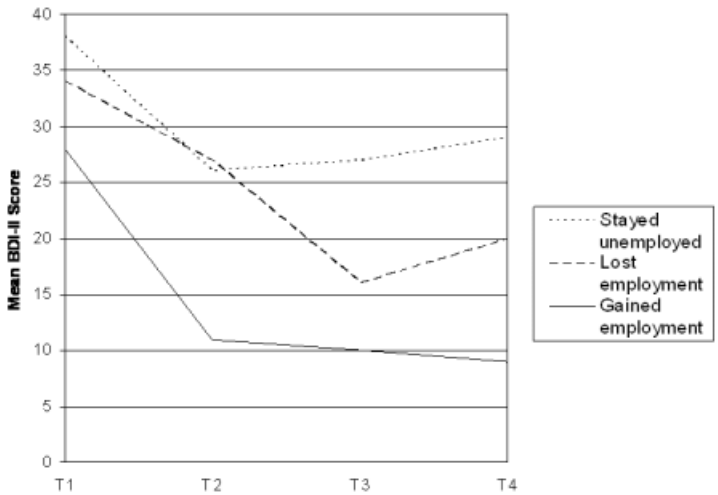

Figure 2. Mean Beck Depression Inventory-II score by change in employment from Time 1 to Time 2.

Table 6
Mean BDI-II Scores at Time 1, Time 2, Time 3, and Time 4 as a Function of Change in Employment from Time 1 to Time 2

	Remained unemployed ($N = 33$) M (SD)	Lost employment ($N = 5$)	Gained employment ($N = 6$)
BDI-II Time 1	38.24 (10.92)	34.40 (6.03)	27.50 (16.20)
BDI-II Time 2	26.55 (12.94)[a]	27.00 (13.66)	10.67 (11.27)[b]
BDI-II Time 3	27.09 (12.85)[a]	16.00 (15.38)	9.50 (13.52)[b]
BDI-II Time 4	29.74 (13.80)[a]	20.40 (10.74)	8.67 (10.05)[b]

Note. BDI-II = Beck Depression Inventory-II. Values with superscript "a" are significantly greater than those with superscript "b" beyond the .05 significance level, as determined by Tukey *t* tests.

weeks of the study. This is similar to findings from previous studies, in which depressive symptoms were found to create a vulnerability to job loss (Lerner et al., 2004; Prause & Dooley, 2001; Price et al., 1992). Further, changes in employment status during the initial 10 weeks of the study predicted depression levels 6 months and one year later. This is consistent with a previous longitudinal study that identified a similar association between obtaining employment and decreased level of depression (Bromberger & Matthews, 1994). These data, and the literature with which they converge, suggest that depressive symptoms create vulnerability to unemployment, which, in turn, predicts depression levels in the end. Translated into more concrete terms, women manifesting greater levels of depressive symptoms may be more likely to lose employment and less likely to gain it. However, some women are able to obtain or sustain employment despite having depression levels as high as many of those who lose employment, and these women end up with appropriately lower depression levels one year down the road.

Study results need to be considered in light of the limitations of the investigation. Some factors limit the reliability and generalizability of the present findings. First, the sample size was low, thus decreasing the statistical power of analyses. The small sample size precluded utilization of modeling procedures that have more reliability and more realistic assumptions than the analyses utilized in the present study. A second problem involves the demographics of the sample. The current sample of African American, impoverished women who have suffered through IPV and attempted suicide is very specific and

Table 7
Frequency of BDI-II Scores Greater Than 13 at Time 1, Time 2, Time 3, and Time 4 as a Function of Change in Employment from Time 1 to Time 2

	Remained unemployed	Lost employment	Gained employment
BDI-II Time 1	31/33 (93.9%)	5/5 (100%)	4/6 (66.7%)
BDI-II Time 2	27/33 (81.8%)[a]	4/5 (80.0%)	2/6 (33.3%)[b]
BDI-II Time 3	27/34 (79.4%)[a]	2/5 (40.0%)	1/6 (16.7%)[b]
BDI-II Time 4	29/34 (89.3%)[a]	3/5 (60.0%)	1/6 (16.7%)[b]

Note. BDI-II = Beck Depression Inventory-II. Values with superscript "a" are significantly greater than those with superscript "b" beyond the .05 significance level, as determined by Tukey *t* tests.

may exhibit psychological features that do not generalize to the general population. Keep in mind, however, that this sample represents an underresearched population for whom the dynamics between employment and mental health are of utmost significance. Specifically, employment-related stressors, such as lack of job security, are more likely to be encountered by disadvantaged workers, such as the women in this sample (Strazdins, D'Souza, & Lim, 2004). Further, among low-income, African American women, IPV is a more potent predictor of welfare status than is a prior history of receipt of welfare (Yoshihama, Hammock, & Horrocks, 2006). It is necessary to research such populations to gain increased understanding of how socioeconomic features and mental health outcomes explain one another.

Two final limitations are also related to characteristics of the sample, one involving the nature of the population sampled and the other being the context in which the specific sample was assessed. First, the chaotic nature of the women's lives make for a lack of stability that impedes reliable assessment and statistical analysis, as manifested in the high attrition rate. This increases the likelihood that other studies of individuals with similar demographics would yield results that are inconsistent with those found here. Such limitations necessitate that additional analyses of employment's relations with depression and suicidality within similar populations be conducted, particularly ones with increased sample size that employ more reliable statistical techniques. The second factor is that the current analyses were performed in the context of interventions for suicidality and IPV, and such intervention may moderate findings. Certainly, an intervention context is one that should have powerful and potentially confounding influence on mental health variables, but it is also the most appropriate context in which to assess such a sample, considering that most people who attempt suicide should be entered into some form of psychological treatment. A comparison of the data presented in Table 3, which summarizes mean depression symptom scores as a function of intervention/control status, to the data given in Table 6, which summarizes depression symptom scores as a function of employment change status, suggests that depression differed to a substantially greater degree because of employment change rather than intervention/control status. These findings demonstrate that the intervention context was, for better or for worse, only modestly to minimally confounding in the current study.

Despite the aforementioned limitations, the present study's findings imply that, for women living in impoverished and potentially violent communities who show signs of susceptibility to psychological distress, assistance with lowering their levels of depression could increase their probability of sustained employment. In addition, and perhaps more intriguing, some women do not react to high depression levels by giving up on employment, and even though these women may initially have high levels of depression, their ability to obtain a job despite such distress bodes well for the long-term alleviation of their depressive symptoms. Hence, identifying and enhancing the factors that allow for such resiliency in this subset of women could lead to interventions that induce an immunity against the depression-reactive employment loss that only increases the chronicity of depression, solidifying a vicious cycle of poverty and poor mental health. Research in this area would appear to be a particularly fruitful direction for future study, as developing resiliency and distress tolerance skills may be a more realistic approach to turning the cycle of poverty and psychopathology than attempting to eliminate the constant difficulties that appear to be an unavoidable norm for many low-income populations.

The current findings can inform the sort of community-based programs that address both mental health issues and problems with unemployment, many of which serve populations represented by the present study's sample. Administrators and staff at such programs should be aware that increased levels of depression create vulnerability for

unemployment, and it is not job loss but stable unemployment, which indicates poor prognosis for the long-term alleviation of depressive symptoms. However, even in the face of depressive symptoms, employment can be obtained to the end of lowering depressive symptoms over the long haul. Community mental health programs serving low-income, urban individuals experiencing high degrees of stress should therefore include not just the standard medication management and job search and training programs, but also some acceptance-based, psychotherapeutic strategies (see Hayes, Follette, & Linehan, 2005, for a compilation of such approaches). These appear to be useful in reducing the type of reactivity to psychological distress that interferes with the ability to engage in adaptive behaviors like seeking a job, even in the face of psychic distress.

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