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# The Effects and Costs of Intimate Partner Violence for Work Organizations

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This study examines the productivity-related effects and costs of intimate partner violence (IPV) on the workplace. Specifically, it explores whether IPV victims and nonvictims differ in the number of work hours missed due to absenteeism, tardiness, and work distraction and the costs for employers from these missed work hours. The research involved a Web-based survey of 823 male and 1,550 female employees in three midsized organizations. Employees who reported lifetime IPV victimization, but not current victimization, missed more hours of work because of absenteeism than did nonvictims. Current victims, but not lifetime victims, were more likely to be distracted at work than nonvictims. Organization costs due to absenteeism and tardiness were greater for lifetime victims than nonvictims; however, no difference in costs was found for current victims. Overall, we found that IPV has negative effects on organizations, but that the nature and cost of these effects vary by type of victimization.

**Keywords:** *work productivity; work distraction; absenteeism; tardiness; cost; intimate partner violence*

Although family violence prevention advocates argue that employers should play a critical role in a coordinated community response to the prevention of intimate partner violence (IPV; Jackson & Garvin, 2003), this seems likely to occur in for-profit businesses only if there is evidence that IPV affects the workplace and has costs for the employer. A number of previous studies suggest that women who experience IPV carry the effects

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with them to work. Victimized women have reported that the abuse caused them to be absent and tardy, to be less productive while at work, to lose advancement opportunities, to lose their jobs, and to earn lower wages (e.g., Lloyd & Taluc, 1999; Swanberg & Logan, 2005). Although these and similar studies are among the first to make the connection between IPV and the workplace, they suffer from several methodological limitations, including small numbers of respondents (e.g., Brandwein & Filiano, 2000; Friedman & Couper, 1987) and nonrepresentative samples (e.g., women in shelters or on welfare; Shepard & Pence, 1988; Stanley, 1992; see National Center for Injury Prevention and Control [NCIPC], 2003, for a full discussion of this issue). In this article, we report on a large-scale study that used alternative methods to estimate the organizational effects and costs from IPV.

During the past 15 years, most articles that address the business cost of IPV cite a common statistic—that IPV costs U.S. corporations \$3 to \$5 billion dollars annually in productivity losses. This often-repeated cost estimate was first presented in a report titled *Violence and Stress: The Work/Family Connection*, developed by the Bureau of National Affairs (BNA; 1990). A full examination of the report, however, indicates that cost was not actually a focus of the report, that no research was presented to support the estimate, and that the estimate was derived from expert opinions, making this cost figure problematic.

Recently, more rigorous studies have better quantified the costs of IPV. Two studies (Arias & Corso, 2005; Max, Rice, Finkelstein, Bardwell, & Leadbetter, 2004; NCIPC, 2003) were based on the National Violence Against Women Survey (NVAWS; Tjaden & Thoennes, 2000) and used salary and medical care averages to calculate medical and mental health costs, productivity losses from home and work, and costs due to premature mortality. The NCIPC (2003) estimated that abused women lose a total of nearly 8 million days of paid work annually, costing almost \$728 million.<sup>1</sup> They estimated additional losses of \$893 million in lifetime earnings due to premature mortality by female victims in the United States. Total costs were estimated to be \$5.8 billion, or \$8.3 billion in 2003 dollars (Max, Rice, Finkelstein, Bardwell, and Leadbetter, 2004).

Although the NVAWS was the first study to use a nationally representative probability sample, it is important to note limitations in this study that accrue to subsequent studies that use these data when trying to estimate organization costs from IPV. The NVAWS respondents were asked to report on the effects of their most recent experience with IPV, and more than one half reported on violent incidents that occurred more than 5 years ago (Tjaden & Thoennes, 2000). Research suggests that the ability to recall absenteeism

from work drops dramatically when the time period being considered goes from 1 month to 1 year, with only one half of respondents able to accurately recall days of absenteeism for the past 12 months (Severens, Mulder, Laheij, & Verbeek, 2000). Thus, the NVAWS numbers on absenteeism due to an IPV incident must be regarded with caution.

The NCIPC (2003) and Max et al. (2004) estimated productivity losses only by missed days of work; other "missed work" variables such as tardiness and work distraction were not included in the calculations. And productivity costs were estimated not by using actual respondent wages but by using an estimate of women's average daily wages based on age at the time of the abuse. Although the productivity loss figures reported in the NCIPC study were per incident of victimization, many studies have found that the effects of IPV are long term rather than incident based, with victims experiencing more chronic pain and gastrointestinal disorders, posttraumatic stress, substance abuse, depression, and poor general health than nonvictims (Coker, Smith, Bethea, King, & McKeown, 2000; Golding, 1999; Plichta, 2004; Wisner, Gilmer, Saltzman, & Zink, 1999). Thus, as noted by the researchers, incident-based reports of productivity losses are likely to underestimate long-term productivity losses attributable to IPV.

Also using data from the NVAWS, Arias and Corso (2005) examined work-related costs of IPV, making it subject to similar limitations as those just described. However, their study (unlike the NCIPC study) did examine costs related to male and female victims. Using injury rates, percentage of injured victims missing work, and mean days of work missed, these authors found no significant differences in mean days of productivity loss for men and women. Overall, the authors estimated that the average annual paid work productivity cost due to absenteeism was \$98.08 for female victims and \$92.52 for male victims.

Although all research studies have deficiencies, and ours is no exception, we set out to avoid several problems that plagued previous research. First, we used a Web-based survey to collect data from individuals at work versus at home, as has been done in most previous studies (e.g., NVAWS, National Crime Victimization Survey [NCVS]). We expected that respondents may be more forthcoming about IPV experiences in the workplace, rather than at home, where the abuser might be present. Second, we focused on respondents' recent experiences with absence, tardiness, and work distraction, allowing us to avoid the potential recall problems just described. Third, we collected data from IPV victims and nonvictims. Because all employees, not just IPV victims, cost their employers in terms of absence, tardiness, and work distraction, the most accurate test of IPV-related costs

will come from a comparison between victims and nonvictims on these variables. Fourth, we examined a broad range of “missed work” variables including absence, tardiness, and several forms of work distraction.

Finally, we collected information on respondents’ actual salaries, rather than simply using salary estimates. The use of actual salary is important not only because it provides a more accurate measure of salary but also because it allows us to provide insight on an important research question in the IPV literature; that is, many scholars have indicated that women with fewer economic resources are more likely to experience IPV because they have diminished alternatives to leave the relationship (Berkowitz, 1993; Straus & Gelles, 1988). However, few of these studies have examined victim salaries directly. For example, using data from the NCVS, the Bureau of Justice Statistics (BJS) found that women in the lowest income households had 7 times the rates of abuse as those in the highest income households (Rennison & Welchans, 2000); however, this research examined household income and not the income of the IPV victim. Similarly, Farmer and Tiefenthaler (1997, 2003) used data from the NCVS to examine the effects of women’s individual income on abuse, finding a negative relationship; however, because the NCVS gathers only household-level income data they had to create estimates of individual income. Because the current study asked respondents to report on their current salary levels, we are able to provide some insight into the question of how IPV victimization and economic power (i.e., salary) are related.

Thus, the primary purpose of the current study is to examine the work-related effects and costs that organizations bear from IPV. Although it is important to recognize that IPV victims bear the highest costs from abuse, the focus of the current study is on the cost of IPV for organizations. Specifically, we examine differences in hours of work missed from absenteeism, tardiness, and work distraction for male and female IPV victims and nonvictims, and the costs that accrue to organizations from these. Given that our data provide information on employee salary, a secondary purpose of the current study is to examine the relationship between salary and IPV victimization. Although there is speculation regarding the relationship between victimization and salary, there is little empirical evidence on this issue to date.

## Method

### Participants

The sample for the current study was composed of 1,550 women and 823 men who worked in three midsized business organizations headquartered in

a southern state. Most respondents (63% of women and 73% of men) were married, and their average age was 40 years. Whites were the dominant racial group, representing 85% of respondents, whereas African Americans accounted for almost 10%, and other racial groups accounted for the remaining 5%. Most respondents had some college or education beyond that level. The average annual income of respondents was \$47,712. Additional descriptive information on this sample is provided in Table 1. (Note: Table 1 categorizes respondents by victimization group. Information on how victimization groups were determined is provided in the Measures section.)

The three organizations differed in the gender composition of their workforces. The first organization, an insurance provider, employed a primarily female workforce. The second organization, a transportation company, employed a primarily male workforce. The final organization, which had a gender-balanced workforce, was a university in which staff members were surveyed. Response rates in these organizations ranged from 36% to 29%. Although all three organizations were headquartered in one state, they also had operations in 38 other states. Overall, 26% of the respondents in the current sample were from states other than the headquarter state.

## Measures

*Current victimization.* Current victimization was measured with items similar to those used in the NVAWS and was consistent with recommendations made by the Centers for Disease Control and Prevention (Saltzman, Fanslow, McMahon, & Shelley, 2002). Respondents were asked to consider the past 12 months and the frequency with which they had experienced five behaviorally specific actions at the hands of an intimate partner: (a) threats of harm, (b) stalking (defined as a pattern of unwelcome and harassing contact, such as unwanted phone calls or e-mails or following, that leave one afraid), (c) physical aggression (e.g., hitting, slapping, kicking, punching, scratching, pushing, biting, or other use of physical force), (d) being physically hurt, and (e) being forced into unwanted sexual acts. Respondents answered on a 5-point scale that included never = 1, rarely = 2, sometimes = 3, fairly often = 4, and frequently = 5. Consistent with the NVAWS, individuals who scored 2 or higher on any of the five items were categorized as "current IPV victims."

*Lifetime victimization.* Those respondents who were not classified as current victims were asked about lifetime victimization experiences using the same five items described above. For these questions, respondents were asked to reflect on their experiences during their lifetime rather than during the past

**Table 1**  
**Descriptive Statistics (in percentages)**

Variables	Current Victim				Lifetime Victim				Nonvictim				Overall	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
	(n)	(n)	(n)	(n)	(n)	(n)	(n)	(n)	(n)	(n)	(n)	(n)	(n)	(n)
Marital status														
Married	45.0 (72)	61.2 (52)	56.0 (261)	61.6 (98)	69.5 (451)	78.0 (451)	62.9 (90)	73.1 (601)	62.9 (90)	73.1 (601)				
Not married, living in committed relationship	6.3 (10)	5.9 (5)	9.0 (42)	6.9 (11)	4.1 (27)	4.7 (27)	5.8 (27)	5.2 (43)	5.8 (27)	5.2 (43)				
Never married	12.5 (20)	14.1 (12)	7.5 (35)	12.6 (20)	13.3 (72)	12.5 (72)	11.5 (178)	12.7 (104)	11.5 (178)	12.7 (104)				
Separated	8.1 (13)	3.5 (3)	1.7 (8)	0.6 (1)	1.1 (2)	0.4 (2)	2.0 (31)	0.7 (6)	2.0 (31)	0.7 (6)				
Divorced	26.9 (42)	15.3 (13)	24.0 (112)	18.2 (29)	10.6 (79)	4.3 (25)	16.3 (253)	8.2 (67)	16.3 (253)	8.2 (67)				
Widowed	1.3 (2)	0.0 (0)	1.7 (8)	0.0 (0)	1.4 (4)	0.2 (1)	1.5 (23)	0.1 (1)	1.5 (23)	0.1 (1)				
Race														
White	77.5 (124)	83.5 (71)	85.7 (400)	94.3 (150)	81.1 (506)	88.3 (506)	82.3 (1271)	89.0 (727)	82.3 (1271)	89.0 (727)				
Hispanic and/or Latino	0.6 (1)	3.5 (3)	1.5 (7)	0.0 (0)	1.5 (5)	1.8 (10)	1.4 (22)	1.6 (13)	1.4 (22)	1.6 (13)				
Black and/or African American	16.9 (27)	9.4 (8)	10.9 (51)	3.1 (5)	12.9 (20)	3.5 (20)	12.7 (196)	4.0 (33)	12.7 (196)	4.0 (33)				
Other	5.0 (8)	3.6 (3)	1.9 (9)	2.5 (4)	4.4 (37)	6.5 (37)	3.6 (56)	5.4 (44)	3.6 (56)	5.4 (44)				
Age														
18-29 years	30.3 (46)	36.6 (30)	15.0 (65)	24.1 (35)	21.1 (132)	24.3 (132)	20.2 (292)	25.6 (197)	20.2 (292)	25.6 (197)				
30-39 years	30.3 (46)	31.7 (26)	30.7 (133)	30.4 (44)	24.1 (164)	30.2 (164)	26.7 (386)	30.4 (234)	26.7 (386)	30.4 (234)				
40-49 years	28.9 (44)	15.9 (13)	31.6 (137)	26.9 (39)	29.3 (252)	26.0 (141)	30.0 (433)	25.1 (193)	30.0 (433)	25.1 (193)				
50-59 years	7.9 (12)	15.9 (13)	20.1 (87)	15.9 (23)	20.4 (79)	14.6 (79)	19.0 (274)	14.9 (115)	19.0 (274)	14.9 (115)				
60-69 years	2.6 (4)	0.0 (0)	2.5 (11)	2.8 (4)	5.1 (34)	5.0 (27)	4.1 (59)	4.0 (31)	4.1 (59)	4.0 (31)				
Education														
Some high school	0.6 (1)	0.0 (0)	0.7 (3)	1.3 (2)	1.0 (7)	0.4 (2)	0.4 (6)	0.5 (4)	1.0 (7)	0.4 (6)				
High school graduate	54.4 (39)	12.9 (11)	19.0 (88)	8.8 (14)	20.3 (132)	9.2 (53)	20.4 (314)	9.5 (78)	20.4 (314)	9.5 (78)				
Some college	51.3 (82)	32.9 (28)	45.8 (212)	40.9 (65)	43.8 (285)	28.5 (164)	45.2 (697)	31.3 (257)	45.2 (697)	31.3 (257)				
4-year college graduate	13.8 (22)	37.6 (32)	16.4 (76)	27.7 (44)	21.4 (142)	34.0 (196)	19.1 (295)	33.2 (272)	21.4 (142)	33.2 (272)				
> 4-year college	9.4 (15)	16.5 (14)	18.1 (84)	21.4 (34)	14.2 (96)	28.0 (161)	14.9 (230)	25.5 (209)	14.2 (96)	25.5 (209)				

12 months. As with current victimization, individuals who scored 2 or higher on any of the five items were categorized as "lifetime IPV victims."

Those respondents who were neither current victims nor lifetime victims were categorized as "nonvictims." Thus, respondents were classified into one of three mutually exclusive groups.

*Work hours.* Respondents classified themselves as working full-time or part-time; only those who indicated that they worked full-time were included in the current study. Respondents also reported on the number of hours worked per week. All full-time respondents worked at least 32 hrs per week. The mean number of hours worked per week was 43.

*Salary.* Salary was measured by asking respondents to report their current annual salary. Hourly salary was derived by dividing annual salary by 50 (weeks) and then dividing that figure by the number of hours worked per week.

*Absenteeism costs.* We integrated information on the amount of work missed with information on the respondent's salary to determine absenteeism costs.<sup>2</sup> To determine hours missed due to absenteeism, we asked respondents to report on the number of hours they missed work during the past 4 weeks across four items: the number of part and whole workdays missed to attend to their own physical or mental health, and the number of part and whole days missed to attend to matters other than their own health or vacation (e.g., family member's health, child care, to attend to legal or financial matters, or other personal reasons). If respondents indicated that they missed parts of days, they were asked how many total hours across these part days they had missed. Total absence-related missed work hours for the 4-week period were then cumulated across these four items, and this value was multiplied by the respondent's hourly salary. This value, which represented absenteeism costs per month, was multiplied by 12 to determine annual absenteeism costs.

*Tardiness costs.* Tardiness costs were assessed with one question that asked about the number of days respondents had been tardy (less than a half-hour late to work) in the past 4 weeks. Each incident of tardiness was counted as one quarter of an hour of missed work. The tardiness hours for the 4-week period were multiplied by salary per hour and then by 12 to arrive at the annual tardiness cost for each respondent.

*Work distraction costs.* We integrated information on the amount of time that respondents were at work but were not productive with salary information

to assess work distraction costs. Work distraction was measured with a five-item scale adapted from Stewart, Ricci, Chee, Hahn, & Morganstein (2003;  $\alpha = .78$ ).<sup>3</sup> The questions were framed by the following statements: "All of us have time periods when we are very productive and time periods when our productivity is lower than usual. The next questions ask about your job performance over the past 4 weeks." Respondents were asked to report the percentage of time that they (a) found it difficult to concentrate, (b) worked more slowly than usual, (c) were tired and/or exhausted at work, (d) did no work, and (e) had to do work over. Because the last two items imply a zero-productivity state, they were averaged and counted as work hours fully missed. For example, if a respondent worked 40 hrs per week, did no work 10% of the time and did work over 10% of the time, this was counted as 4 hrs ( $40 \times [(0.1 + 0.1)/2]$ ) of missed work.

The first three items in this scale were treated somewhat differently. Because these items (concentration problems, working slowly, being exhausted at work) indicate diminished productivity (but not zero productivity), we averaged across the three items and assumed that hours spent in these states involved a 25% loss in productivity (the 25% figure was chosen because it reflects a conservative estimate of diminished productivity). For example, if a respondent who works 40 hrs per week indicated concentration problems 50% of the time, working slowly 40% of the time, and being exhausted 60% of the time, this would be scored as 5 lost work hours for the week ( $40 \text{ hrs} \times [(.5 + .4 + .6)/3] \times .25$ ).

Total work distraction hours was calculated by adding the average of the zero productivity items to the average of the diminished productivity items. These hours were multiplied by the respondents' salary per hour to arrive at a monthly cost for work distraction and then multiplied by 12 to arrive at an annual cost.

## Procedure

The current study was part of a larger study exploring work-family issues. A company executive e-mailed all employees to solicit their participation in a Web-based survey. A link to the Web site was embedded in the e-mail. Respondents could request a paper survey if desired. Participation was voluntary, no compensation was given, and respondents did not identify themselves. The current study was approved by the university institutional review board prior to survey administration. Because of the sensitive nature of IPV questions, respondents who reported IPV were queried at several points in the survey about their comfort level. If respondents indicated discomfort, they

were given the option of ending their participation and were directed to IPV counseling services. Respondents were instructed to complete the survey at work, on company time. Most respondents completed the survey in less than 20 mins.

## Results

### Analytic Plan

Two types of statistical analyses were used in the current study. To assess differences in the percentages of men and women reporting different types of IPV victimization, chi-square difference tests were used. For the remaining research questions, a 3 (victimization category)  $\times$  2 (gender) between-groups factorial ANOVA was used. If significant differences were found among groups, post hoc Tukey's HSD analyses were used to determine which groups differed.

### IPV Victimization

IPV victimization in the current sample, overall and by type of abuse, is shown in Table 2. Current female victims were more likely than male victims to experience every type of abuse except for physical aggression. Because of the high rate of physical aggression reported by men, there was no difference in the overall rate of current male and female victimization, with 10.3% of each reporting abuse. Female lifetime victims were more likely to report every type of abuse, including physical aggression, than were male lifetime victims. Overall, a larger percentage of female employees (30.1%) reported experiencing IPV sometime in their lifetimes than did male employees (19.3%),  $\chi^2(1, N = 2373) = 32.24, p < .01$ . (For a full discussion of prevalence issues, see Reeves, Bates, & O'Leary-Kelly, 2006.)

The means and standard deviations of the dependent variables by gender and victimization category can be found in Table 3. The results of the 3  $\times$  2 between-subjects ANOVAs and post hoc Tukey comparisons for each of the dependent variables are described below.

### Missed Work Hours

A 3  $\times$  2 ANOVA found a main effect of victimization on annual missed work hours due to absenteeism,  $F(2, 2374) = 5.72, p < .01$ , a main effect of

**Table 2**  
**Current and Lifetime Victimization by Gender (in percentages)**

Type of Abuse	Current Victimization <sup>a</sup>			Lifetime Victimization		
	Female ( <i>n</i> = 160) <sup>a</sup>	Male ( <i>n</i> = 85) <sup>a</sup>	$\chi^2$	Female ( <i>n</i> = 467) <sup>a</sup>	Male ( <i>n</i> = 159) <sup>a</sup>	$\chi^2$
Threats	7.0	4.8	4.26*	29.1	13.9	59.22**
Stalking	3.9	2.1	5.34*	23.7	11.9	41.21**
Physical aggression	6.0	7.7	2.61	28.0	21.2	11.35**
Being hurt	4.7	2.6	5.91*	25.1	8.8	79.25**
Sexual abuse	2.4	1.1	4.62*	17.7	.9	110.12**
Total victimized	10.3	10.3	0.00	30.1	19.3	32.24**

a. *n* for each variable may differ slightly due to missing values.

\* $p < .05$ . \*\* $p < .01$ .

gender,  $F(1, 2374) = 20.26$ ,  $p < .01$ , and no interaction between gender and victimization. Post hoc Tukey HSD comparisons indicated that the annual hours of missed work due to absenteeism were greater for lifetime victims ( $M = 129.73$ ,  $SD = 196.28$ ) than for nonvictims ( $M = 94.67$ ,  $SD = 166.61$ ,  $p < .01$ ). Females ( $M = 121.30$ ,  $SD = 188.95$ ) missed more hours of work due to absenteeism than did males ( $M = 77.71$ ,  $SD = 154.20$ ).

There was also a main effect of victimization on annual work hours missed due to tardiness,  $F(2, 2374) = 3.88$ ,  $p < .05$ ; however, there was no difference between men and women, and no interaction. The Tukey analysis revealed no significant differences at the .05 level; however, the difference between nonvictims ( $M = 3.10$ ,  $SD = 9.21$ ) and current victims ( $M = 4.51$ ,  $SD = 10.56$ ) approached significance ( $p < .10$ ).

There was a main effect of victimization on annual missed work hours due to distraction while at work,  $F(2, 2173) = 5.78$ ,  $p < .01$ , no difference between men and women, and no interaction. Tukey HSD comparisons indicated that the annual hours of missed work due to distraction were greater for current victims ( $M = 246.86$ ,  $SD = 300.63$ ) than for lifetime victims ( $M = 198.43$ ,  $SD = 206.10$ ,  $p < .05$ ), and were also greater for current victims than for nonvictims ( $M = 185.84$ ,  $SD = 205.03$ ,  $p < .01$ ).

## Organization Costs

We also estimated the cost to organizations that resulted from the absence, tardiness, and work distraction of victims and nonvictims in the

**Table 3**  
**Means and Standard Deviations of Dependent Variables by Gender and Victimization Category**

Dependent Variable	Nonvictims			Current Victims			Lifetime Victims		
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>
<b>Males</b>									
Hours missed due to absenteeism	70.80	150.94	579	75.33	126.90	85	104.11	175.82	159
Hours missed due to tardiness	2.95	9.50	579	5.08	12.37	85	4.21	10.75	159
Hours missed due to distraction	202.00	197.50	534	243.72	243.20	69	212.18	211.88	155
Cost due to absenteeism	1,758	4,352	552	1,819	3,668	84	2,583	4,978	153
Cost due to tardiness	62	202	570	120	329	83	104	317	155
Cost due to distraction	5,238	6,255	487	4,869	5,310	60	4,653	4494	138
Salary	66,277	60,545	509	48,749	28,836	74	57,563	\$38,323	141
<b>Females</b>									
Hours missed due to absenteeism	109.62	174.14	924	138.68	224.04	160	138.46	202.21	467
Hours missed due to tardiness	3.19	9.03	924	4.20	9.49	160	3.96	9.79	467
Hours missed due to distraction	175.58	209.13	841	248.55	328.34	128	193.65	204.08	446
Cost due to absenteeism (\$)	1,953	3,663	876	2,032	3,240	154	2,331	3,675	454
Cost due to tardiness (\$)	55.34	189	906	71	212	158	76	208	463
Cost due to distraction (\$)	3,357	6,949	772	4,041	5,814	118	3,718	5,389	425
Salary (\$)	40,481	32,329	823	33,426	15,328	147	41,233	59,900	442

current sample. As shown in Table 3, there are absence, tardiness, and work distraction costs associated with the employment of victims and nonvictims. A 3 x 2 between-subjects ANOVA found a main effect of victimization on the annual cost from absenteeism,  $F(2, 2273) = 4.08, p < .05$ , no difference between men and women, and no interaction. Tukey HSD comparisons indicated that the mean annual cost due to absenteeism was greater for lifetime victims ( $M = \$2,394, SD = \$4,040$ ) than for nonvictims ( $M = \$1,878, SD = \$3,943, p < .05$ ).

There was also a main effect of victimization on the annual cost of tardiness,  $F(2, 2335) = 5.11, p < .01$ , a main effect of gender,  $F(1, 2335) = 5.41, p < .05$ , and no interaction. Tukey HSD comparisons indicated that the annual cost due to tardiness was greater for lifetime victims ( $M = \$82.84, SD = \$240.43$ ) than for nonvictims ( $M = \$58.78, SD = \$193.91, p < .05$ ). The mean annual tardiness cost was greater for males ( $M = \$78, SD = \$244$ ) than for females ( $M = \$63, SD = \$179$ ).

For all employee groups, regardless of victimization status or gender, the highest organizational costs resulted from work distraction. A 3 x 2 between-subjects ANOVA found no effect of victimization on the annual cost of work distraction but did find a main effect of gender,  $F(1, 2000) = 9.04, p < .01$ , and no interaction. The mean annual work distraction cost for males ( $M = \$5,088, SD = \$5,860$ ) was greater than the cost for females ( $M = \$3,535, SD = \$6,385$ ).

## Salary Differences

A 3 x 2 between-subjects ANOVA found a main effect of victimization on annual salary,  $F(2, 2136) = 6.36, p < .01$ , a main effect of gender,  $F(1, 2136) = 46.48, p < .01$ , and no interaction between gender and victimization. Post hoc Tukey HSD comparisons indicated that the annual salary of nonvictims ( $M = \$50,338, SD = \$46,923$ ) was greater than the salary of current victims ( $M = \$38,557, SD = \$22,008, p < .01$ ). The annual salary of males ( $M = \$62,788, SD = \$54,569$ ) was higher than the annual salary of females ( $M = \$39,982, SD = \$41,949$ ).

## Discussion

Our research suggests that IPV victimization has negative effects on employee work outcomes and that these effects have costs for employers. The results of the current study add to a growing body of evidence suggesting that the effects of family violence are pervasive, with negative

effects extending beyond the victims and their families. In this section, we discuss the types of negative work-related effects that result from victimization and discuss their resulting organizational costs.

First, our findings indicate that victimization affects work absence. Specifically, we found that employees who had experienced IPV in the past (i.e., lifetime victims) were more likely to be absent than were nonvictims. This provides support for the conclusions drawn by previous researchers (Coker et al., 2000; Golding, 1999; Plichta, 2004; Wisner et al., 1999) that there are negative long-term health effects from IPV. It was interesting, however, that employees who currently were experiencing IPV were no more likely to be absent than were nonvictims. Given that research has established the highly negative effects of IPV on victims' mental health (Golding, 1999), it seems remarkable that such employees do not display higher absence levels. There are multiple possible explanations for this finding. Attendance at work may be a coping mechanism that helps victims deal with the abuse, or perhaps attendance reflects the strong need of victims to keep their jobs and maintain their economic power as a way out of the abusive situation.

We also found that victimization affects tardiness, although the nature of this effect, in terms of which types of victims were most likely to be tardy, was less evident. Most of the effect of victimization on tardiness resulted from current victims, although the post hoc comparisons between current victims and nonvictims revealed that this effect only approached significance.

The current study also revealed an effect of victimization on work distraction, with current victims reporting significantly higher levels of distraction compared to nonvictims. This effect indicates that employees who currently are experiencing IPV have more difficulty staying engaged in their work than do nonvictims, a finding that is not surprising given the trauma of IPV. However, it is noteworthy that we found no differences in the levels of work distraction for lifetime victims versus nonvictimized employees.

Taken together, the findings reported to this point suggest an interesting pattern of effects depending on the recency of victimization. Simply put, it appears that current victims get to work but have difficulty working. On the other hand, lifetime victims appear to have challenges around work attendance, but once at work they are as fully engaged as other employees.

The extent to which these productivity-related behaviors affect organizational costs is a related issue that involves combining missed work hours with salary information to determine organizational losses. Before interpreting our findings regarding organizational costs, it is critical to note that these costs are unique to the specific organization(s) being studied. Because organizational costs are influenced not only by the work behaviors (i.e., the

number of missed work hours) of victims and nonvictims but also by the salary levels and distributions that exist in the organization and in these groups, the costs related to IPV will be unique to each employer.

It is not surprising to note that given the effects just described, we found that victimization had negative effects on organizational costs. First, victimization was related to absence and tardiness costs, with lifetime victims associated with significantly higher costs than nonvictims. It is interesting to note that we did not find that victimization was predictive of work distraction costs. Although this might be considered surprising given the main effect of victimization on missed work hours due to work distraction, this result is likely explained by the low salary levels among current victims (an issue that will be discussed next), which deflates organization costs.

Our findings related to the relationship between victimization and salary were interesting. Researchers (e.g., Farmer & Tiefenthaler, 1997, 2003) suggested a negative relationship, and there is some evidence for this in the current results. We found a significant effect of victimization on salary, with current victims reporting lower salaries than nonvictims. These results should be interpreted with caution because a definitive study of this issue would involve assessment and control of numerous potential confounding variables, such as job responsibility and category, organizational tenure, professional tenure, and educational background, among others.

However, given that caution, we comment briefly on the implications of the current results for an as-yet-unanswered issue in the IPV literature. Currently, the causality inherent to the IPV victimization–salary relationship is not clear. It could be that salary drives victimization, such that individuals with lower salaries are victimized to a greater extent because of their economic vulnerability. If so, it seems likely that current victims would have lower salaries than nonvictims. On the other hand, it could be that victimization drives salary, such that victims have less earning power because of the career-related interruptions inherent to victimization. If so, it seems likely that lifetime victims would have lower salaries than nonvictims. It is interesting to note that our data suggested differences only for current victims. Of course, longitudinal research will be needed to directly test this interesting causality question.

Finally, the current study involved male and female employees, allowing for assessment of the degree to which male and female victims differ on the criterion variables studied here. It is interesting to note that there were no significant interaction effects between gender and victimization in their effects on work-related variables. It appears that IPV negatively affects the productivity of female and male employees who are victimized and increases costs for their employers.

Although the current study addressed limitations inherent to previous research, it has limitations of its own. Perhaps the most evident limitation is that we did not examine health care costs, which are likely to be the largest cost organizations bear from IPV victimization. For example, Max et al. (2004) estimated health care costs from IPV to be almost 6 times greater than absenteeism costs—\$4.1 billion vs. \$728 million. In addition, we did not examine turnover costs that result when victims leave the workplace, although these can represent a significant cost for organizations (Shaw, Duffy, Johnson, & Lockhart, 2005). Therefore, we strongly encourage future research that assesses these important costs.

Another limitation relates to our response rates. In an effort to avoid the potential confounds associated with previous studies, we conducted the current study in the work setting, recognizing that this choice presents a new set of challenges. In organizational research, response rates often are less than 50% (Roth & BeVier, 1998), and with high-level managers, these average response rates are even lower, with a mean of 32% (Cycyota & Harrison, 2006). The primary concern with low response rates is that employees who responded to the survey are different from those who did not in some way that confounds the results obtained. In the current study, the most problematic response bias would be related to victimization—for example, if victimized employees were less likely to respond than nonvictimized employees. Although we certainly cannot rule out this possibility, there is some evidence to suggest this was not a significant problem in the current sample. First, this research involved a study of general work-family issues and was not presented as an IPV study. Therefore, it would not be evident to respondents that IPV was included in the survey until they already had started the survey. Second, given the electronic nature of the survey, we were able to assess whether respondents who started the survey opted to end their participation when they reached the IPV questions. We did not find this to be the case. Finally, the current results indicate high prevalence rates compared to other IPV-related studies (e.g., NVAWS), which suggests that victims were not reluctant to complete the survey. However, we reiterate that the potential for a response bias exists.

Another limitation of the current study is that we do not have a nationally representative sample. The issue of representativeness should be considered at the organizational and individual levels. In regard to the former, the current study involved only three work organizations and therefore caution should be taken in generalizing the results to other organizations. As mentioned above, we especially caution the reader on this point in regard to estimates of organizational costs. The costs reported here depend on the unique

salary structures and distributions within the organizations that were studied, and it is highly likely that cost figures in other organizations (which have different salary structures and distributions) would differ. At the individual level, the representativeness issue should also be acknowledged; however, it may be less problematic. The number of individuals studied here is much larger than that found in many other studies of work-related IPV costs. In fact, there were almost as many current male victims (85) in the current sample of 823 respondents as there were in the NVAWS sample of 8,000 male respondents (88). In addition, the current study included individuals from 39 states, suggesting some level of national representation

Before concluding, we comment on one unique aspect of our research—that we collected IPV data in the workplace. In the two national studies referred to earlier (NCVS and NVAWS), respondents were interviewed either by phone or in person in the home, making it likely that at least some respondents were being asked about IPV in the presence of their intimate partners, creating the potential for underreporting. We expect that, under the right conditions such as assurances of anonymity and/or confidentiality, respondents may be more forthcoming about IPV experiences when queried in a more neutral setting such as the workplace. This supposition is supported in that the rates of self-reported violence in the current study were notably higher than those found in other previous studies of IPV prevalence.

In conclusion, we return to the question of why it is important to quantify the business-related costs of IPV. Some employers may take an interest in IPV prevention because they recognize the importance of supporting their employees or because they are good community citizens. However in many cases, getting the attention and involvement of for-profit business organizations will require a demonstration of the bottom-line costs they incur in relation to IPV. The current study provides that type of evidence. Employers do not have to choose between minimizing their operating costs and “doing the right thing” around IPV. Smart employers can do both.

## Notes

1. Although these studies did not directly address this issue, it should be noted that some costs examined in the studies (e.g., missed work hours) could accrue to victims (through lost wages), and/or employers (through lost productivity). In the current study, we adopt an organization cost perspective (explained below); however, this does not preclude a recognition that victims also bear costs.

2. This method of measuring costs assumes that when employees miss work, the costs that accrue to the organization are equivalent to the cost of paying the individual for the missed work time. Although this is a reasonable approximation of costs, it should be noted that determination of costs may involve more complex considerations that were beyond the scope of the current

study. For example, some employers may not pay employees when work is missed, thereby enhancing the cost to the victim and minimizing the cost to the organization. On the other hand, organizations may at times accrue costs greater than the salary costs of the absent employee (e.g., if an absent employee negatively influences the productivity of another employee, if an important project deadline is missed).

3. Stewart, Ricci, Chee, Hahn, & Morganstein (2003) asked respondents to choose among "all of the time" (100%), "most of the time" (75%), "half of the time" (50%), "some of the time" (25%), or "none of the time" (0%) for the five distraction questions and allocated the percentages in parentheses to time missed. We had respondents mark a point on a line divided into 10% increments, with 0% labeled "never," 50% labeled "half the time," and 100% labeled "all the time," and used the indicated percentages in our calculations.

## References

- Arias, I., & Corso, P. (2005). Average cost per person victimized by an intimate partner of the opposite gender: A comparison of men and women. *Violence and Victims, 20*, 379-391.
- Berkowitz, L. (1993). *Aggression: Its causes, consequences, and control*. Philadelphia: Temple University Press.
- Brandwein, R. A., & Filiano, D. M. (2000). Toward real welfare reform: The voices of battered women. *Affilia, 15*, 224-243.
- Bureau of National Affairs. (1990). *Violence and stress: The work/family connection*. Washington, DC: Bureau of National Affairs PLUS Research and Special Projects Unit.
- Coker, A. L., Smith, P. H., Bethea, L., King, M. R., & McKeown, R. E. (2000). Physical health consequences of physical and psychological intimate partner violence. *Archives of Family Medicine, 9*, 451-457.
- Cycyota, C. S., & Harrison, D. A. (2006). What (not) to expect when surveying executives: A meta-analysis of top manager response rates and techniques over time. *Organizational Research Methods, 9*, 133-160.
- Farmer, A., & Tiefenthaler, J. (1997). An economic analysis of domestic violence. *Review of Social Economy, 55*, 337-358.
- Farmer, A., & Tiefenthaler, J. (2003). Explaining the recent decline in domestic violence. *Contemporary Economic Policy, 21*, 158-172.
- Friedman, L., & Couper, S. (1987). *The cost of domestic violence: A preliminary investigation of the financial costs of domestic violence*. New York: Victim Services.
- Golding, J. (1999). Intimate partner violence as a risk factor for mental disorders: A meta-analysis. *Journal of Family Violence, 14*(2), 99-132.
- Jackson, M., & Garvin, D. (2003). *Coordinated community action model*. Retrieved May 15, 2006, from [www.mincava.umn.edu/documents/ccam/ccam.pdf](http://www.mincava.umn.edu/documents/ccam/ccam.pdf)
- Lloyd, S., & Taluc, N. (1999). The effects of male violence on female employment. *Violence Against Women, 5*, 370-392.
- Max, W., Rice, D. P., Finkelstein, E., Bardwell, R. A., & Leadbetter, S. (2004). The economic toll of intimate partner violence against women in the United States. *Violence and Victims, 19*, 259-272.
- National Center for Injury Prevention and Control. (2003). *Costs of intimate partner violence against women in the United States*. Atlanta, GA: Centers for Disease Control and Prevention.
- Plichta, S. B. (2004). Intimate partner violence and physical health consequences. *Journal of Interpersonal Violence, 19*, 1296-1323.

- Reeves, C. A., Bates, C. A., & O'Leary-Kelly, A. M. (2006, August). *The prevalence of intimate partner violence among employees and its impact on the workplace*. Paper presented at the meeting of the Academy of Management, Atlanta, GA.
- Rennison, C. M., & Welchans, S. (2000). *Intimate partner violence* (NCJ 178247). Washington, DC: Bureau of Justice Statistics.
- Roth, P. L., & BeVier, C. A. (1998). Response rates in HRM/OB survey research: Norms and correlates, 1990-1994. *Journal of Management*, *24*, 97-117.
- Saltzman, L. E., Fanslow, J. L., McMahon, P. M., & Shelley, G. A. (2002). *Intimate partner violence surveillance uniform definitions and recommended data elements* (rev. ed.). Atlanta, GA: Centers for Disease Control and Prevention and National Center for Injury Prevention and Control.
- Severens, J. L., Mulder, J., Laheij, R. J. F., & Verbeek, A. L. M. (2000). Precision and accuracy in measuring absence from work as a basis for calculating productivity costs in The Netherlands. *Social Science and Medicine*, *51*, 243-249.
- Shaw, J., Duffy, M., Johnson, J., & Lockhart, D. (2005) Turnover, social capital losses, and performance. *Academy of Management Journal*, *48*, 594-606.
- Shepard, M., & Pence, E. (1988). The effect of battering on the employment status of women. *Affilia*, *3*(2), 55-61.
- Stewart, W. F., Ricci, J. A., Chee, E., Hahn, S. R., & Morganstein, D. (2003). Cost of lost productive work time among US workers with depression. *Journal of the American Medical Association*, *289*(23), 3135-3144.
- Stanley, C. (1992). *Domestic violence: An occupational impact study*. Tulsa, OK: Domestic Violence Intervention Services.
- Straus, M. A., & Gelles, R. J. (1988). Violence in American families: How much is there and why does it occur? In E. W. Nunnally, C. S. Chilman, & F. M. Fox (Eds.), *Troubled relationships* (pp. 141-162). Newbury Park, CA: Sage.
- Swanberg, J., & Logan, T. (2005). Domestic violence and employment: A qualitative study. *Journal of Occupational Health Psychology*, *10*, 3-17.
- Tjaden, P., & Thoennes, N. (2000). *Full report of the prevalence, incidence, and consequences of violence against women: Findings from the National Violence Against Women Survey*. Washington, DC: National Institute of Justice and Centers for Disease Control and Prevention.
- Wisner, C. L., Gilmer, T. P., Saltzman, L. E., & Zink, T. M. (1999). Intimate partner violence against women: Do victims cost health plans more? *Journal of Family Practice*, *48*, 439-443.

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