Patterns of Work-Related Intimate Partner Violence and Job Performance Among Abusive Men

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Abstract

This study assesses different types of work-related intimate partner violence (IPV) perpetration and their relationship to perpetrators' work performance and employment. We determine if groups of abusive men with similar patterns of work-related IPV exist and then examine whether the patterns are related to their characteristics, job performance, and employment outcomes. Participants were 198 adult men (60% Latino, 40% non-Latino) from batterer intervention programs (BIPs) who self-reported their lifetime work-related IPV and job outcomes. Five distinct clusters were identified and named based on the pattern (predominance or absence) of different work-related abusive behaviors reported: (a) low-level tactics, (b) job interference, (c) job interference with threatened or actual violence, (d) extreme abuse without jealousy and (e) extreme abuse. Analyses revealed significant differences between the clusters on ethnicity, parental status, partner's employment status, income, education, and (among Latinos only) acculturation. The probability of men's work-related IPV substantially

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impacting their own job performance was nearly 4 times greater among those in the *extreme abuse* cluster than those in the *low-level tactics* cluster. These data inform the development of employee training programs and workplace policies for reducing IPV that affects the workplace.

Keywords

domestic violence, batterers, workplace violence, cluster analysis, job performance

While intimate partner violence (IPV) mostly occurs in the private confines of the home, analysis is needed of significant and distinct types and impacts of IPV occurring in more public systems or contexts such as in workplaces and schools. Across studies, approximately 36% to 75% of employed women who experience IPV report being harassed by an abusive partner while at work (Shepard & Pence, 1988; Swanberg, Logan, & Macke, 2005; Taylor & Barusch, 2004). A variety of abusive behaviors are used against victims to interfere with their ability to get to their job, do their job, and keep their job (Brush, 2002; Riger, Ahrens, & Blickenstaff, 2000). Swanberg et al. (2005) identified two main categories: work-related stalking (e.g., surveillance, harassment at work) and work disruption (e.g., prevent the victim from reaching the workplace). Such work-related IPV may be perpetrated from an abuser's workplace, or at a victim's workplace, or IPV occurring in the home may have spillover effects on victims' and perpetrators' employment and workplaces, including effects on victims, coworkers, perpetrators, and others at the job site (Swanberg & Logan, 2005; Tolman & Wang, 2005).

A broader picture is emerging from reports of abusive men about the variety of forms of work-related IPV perpetration and its impact on the employment and work performance of perpetrators as well as victims. Abusive men disclose a wide range of partner-controlling behaviors at home and from their job using workplace resources, including monitoring, stalking, harassment, lying to manipulate and control victims' access to work and employment, and physical violence (Galvez, Mankowski, McGlade, Ruiz, & Glass, 2011; Rothman & Perry, 2004). State employees' self-reported propensity for abusive behavior is related to missing work more often and making more mistakes on the job (Rothman & Corso, 2008). Additional reports also have found that abusive men attribute their own poor work performance, work absences, and unemployment to their IPV (Cranwell Schmidt & Barnett, 2011; Lim, Rioux, & Ridley, 2004).

Patterns of Abusive Behaviors and Work-Related IPV

In attempting to understand the different forms and contexts (e.g., location) of IPV, several typologies of IPV perpetrators (what we refer to as patterns of abusive behavior) have been proposed. Holtzworth-Munroe and Meehan (2004) describe three patterns: family only, dysphoric/borderline, and generally violent/antisocial. These patterns have been validated in subsequent research (Holtzworth-Munroe, Meehan, Herron, Rehman, & Stuart, 2000). Johnson (2008) also proposed that three distinct patterns of IPV exist—intimate terrorism, situational couple violence, and violent resistance. Johnson's definitions have been partially supported (e.g., Frye, Manganello, Campbell, Walton-Moss, &Wilt, 2006). Other descriptive accounts of different forms of IPV emphasize more clearly the distinction between physical violence and coercive and controlling behaviors that profoundly affect many dimensions of a woman's experience and life, including work (Stark, 2007).

Meaningful differences in patterns of work-related IPV perpetration may also exist and have different correlates and impacts on job performance, employment, and work safety. For example, different patterns of work-related IPV could occur as a function of differences among diverse abusive men (e.g., ethnicity, income, education) and their family contexts. For example, work-related IPV might stem in part from historical changes in the workfamily roles of women, which may affect particularly immigrant households as families acculturate to U.S. cultural norms and beliefs about women and work (Grzywacz, Rao, Gentry, Marín, & Acury, 2009; Klevens, 2007). Consider how, as a result of their increasing employment, Latinas' traditional roles in their family are changing. Women's increasing level of employment may lead to feelings of disappointment and frustration and to role strain in male partners who expect to fulfill the traditional role of financially supporting the family (Morash, Bui, & Santiago, 2000; Perilla, Bakerman, & Norris, 1994). Similarly, abusive men whose partners are not employed outside the home may report less or different forms of work-related IPV because of reduced opportunity to use abuse and control tactics; only abusive behaviors performed while a man is at his job or that use his workplace resources (e.g., having a coworker check up on the partner while she is at home) would be possible.

Different forms and patterns of work-related IPV could have different impacts on perpetrators' own work performance and employment. For example, behaviors in the home that interfere with a victim's ability to get to her job likely affect the perpetrators' own work performance less than frequent calls from home from his workplace to monitor her whereabouts. Perpetrators,

whose work-related IPV involves jealousy, might be a particular threat to victims' and coworkers safety, as jealousy has been linked to IPV femicide in the workplace.

Purpose of the Current Study

The purpose of this study is to identify different patterns of work-related IPV among known abusive men and to determine whether these patterns are associated with demographic and other individual characteristics such as race/ethnicity, income, and acculturation as well as men's job performance and employment. These data will inform the development of work-related IPV screening, training, and prevention programs in the workplace that are based in culturally and linguistically competent strategies.

Method

Sample and Setting

The current study is part of a larger funded project aimed at developing and evaluating a community-partnered intervention for employed immigrant and U.S.-born survivors of IPV. Because the larger project stems from a focus on eliminating health disparities, Latino/as were purposefully oversampled. Study participants (n = 198) were adult men (18 years and older) primarily court-mandated to participate in a community-based, English or Spanish language batterer intervention program (BIP; n = 9) in rural and urban communities in Oregon. All men attending the BIP on the day of the survey (n = 199) were invited to participate in the study; only one man declined to participate, resulting in a 99% participation rate.

Procedure

The first and second author attended weekly group meetings to inform men about the study and invite their participation in an anonymous self-administered survey to be completed on-site during their regularly scheduled meeting. BIP group facilitators were not present during any of these interactions. The men were informed that refusal to participate would have no effect on their relationship with the BIP. Men who verbally expressed interest in participating in the survey were given a paper copy of the survey in English or Spanish. Because not all men had the literacy level needed to read and self-administer the survey, an iPod® MP3 player was made available to participants who wished to listen to the survey questions (Galvez, Mankowski, Braun, & Glass,

2009). Six participants elected to complete the survey using this method of administration. Both the paper and iPod formats of the survey took approximately 45 min to complete. Men were paid US\$15 for their participation.

Survey Instrument

Men's work-related IPV was assessed using the work-related domestic violence perpetration scale (Mankowski et al., 2012). The survey measure consists of 40 items that assess lifetime occurrence of work-related IPV behaviors used against current partner and any former partner. The items were developed in part based on abusive behaviors identified in focus groups conducted with men in BIPs about work-related IPV (Galvez et al., 2011) and through consultation with victim advocates and BIP group facilitators. The 40 items comprise five subscales, each of which assesses a different form of workrelated intimate partner violence including coworker jealousy, threatened or actual abuse, work control, work monitoring, and work interference. The coworker jealousy subscale contains three items asking about thoughts, feelings, and behaviors occurring when the respondent believes his intimate relationship was threatened by his current and/or former partners' coworker(s) or boss (e.g., "I have accused my partner (ex-partner) of having sex with her coworkers or boss"). The threatened or actual abuse subscale includes 11 items asking about the respondent's use of threatened or actual physical or emotional abuse or violence at home or in the workplace that impacted his current and/or former partners' job or employment (e.g., "I have threatened to hurt my partner (ex-partner) physically at her job"). The work control subscale includes four items assessing the respondent's use of power to direct or determine his current and/or former partners' employment or work hours (e.g., "I have made my partner [ex-partner] quit her job"). The work-monitoring subscale includes 10 items measuring work-related behaviors used by the respondent to keep tabs on, keep an eye on, or keep his current and/or former partners under surveillance (e.g., "I have driven my partner [ex-partner] to and from work so I can keep an eye on her"). The work interference subscale includes 12 items measuring respondent's use of behaviors that directly or indirectly hindered, obstructed or impeded the current and/or former partners' employment or job performance (e.g., "My partner [ex-partner] has gotten in trouble at her job because I frequently called her"). The subscales measure whether a man has ever used any of these forms of work-related intimate partner violence in his lifetime. Subscales were scored 0 if all items in a subscale were "no" and scored 1 if one or more of the items was marked "yes" due to the postively skewed frequency distributions, which are common in behavioral measures of IPV.

Men's work performance was assessed using the four items, "I have missed time at work because of my abusive behavior," "I have not been able to concentrate at work because of my feelings/thoughts about my partner (expartner)," "I have not been able to perform my work duties because of my feelings/thoughts about my partner (ex-partner)," and, "I have made mistakes at work due to my abusive behavior." Responses were scaled such that 0 = yes to fewer than two questions and 1 = yes to two or more questions.

Men's employment was assessed using the three items, "my employer (or boss) has asked me to quit or fired me because I was arrested for abusive behavior," "my employer (or boss) has fired me because I missed work due to abusive behavior," and, "I have been denied a job because I had domestic violence on my record." Responses were scaled such that 0 = no to all questions and 1 = yes to 1 or more question(s).

For items in the measures of work-related IPV, men's work performance, and men's employment, a 2-point response scale (i.e., whether the behavior had ever occurred or not) was used for two reasons. First, we wanted the response scale to be as simple as possible for respondents with any level of literacy to understand and use (see Galvez et al., 2009). Second, we did not have any information about the prevalence or frequency of most of the behaviors and therefore we determined that it was appropriate in this initial assessment, as well as consistent with the recommended scoring of a widely used measure of IPV (i.e., Conflict Tactics Scale) when prevalence is not known, to assess whether the behavior has ever occurred.

Acculturation was measured using the Language Use subscale of the acculturation scale developed by Marín, Sabogal, Marín, Otero-Sabogal, and Perez-Stable (1987). The subscale contains five items rated on a 1- to 5-point Likert-type scale: 1 (*only Spanish*), 2 (*Spanish better than English*), 3 (*both equally*), 4 (*English better than Spanish*), or 5 (*only English*). A sample item is, "In general, what language(s) do you read and speak?" The scale was reliable ($\alpha = .87$).

The survey was originally designed in the English language, then translated into Spanish, and back translated into English by a team of bilingual/bicultural (e.g., Mexican American, Latino) researchers. An initial pilot test with a sample of men enrolled in a Spanish language BIP provided us with feedback about the accuracy of the language of several measures. Revisions were made to address the participants' comments prior to further use of the survey.

Analysis

Cluster analysis was used to determine if there are distinct groups of men with similar patterns of abusive behaviors. Cluster analysis was selected over

factor analysis because it does not make the assumption that the variables (i.e., coworker jealously, threatened or actual abuse, work control, work monitoring, and work interference) combine in the same way for all men. Cluster analysis has been used to identify patterns of support from supervisors desired by women who are victims of domestic violence (Perrin, Yragui, Hanson, & Glass, 2010) and patterns of abuser's behaviors as reported by the victims (Glass et al., 2009; Panchanadeswaran et al., 2010). Hierarchical cluster analysis was conducted using Ward's Method and squared Euclidean distance measure on the binary responses. The agglomeration schedule, dendrogram, and interpretability of solutions were used to determine the number of clusters. Next, we used K-means cluster analysis to finalize the classification of individuals into clusters, and discriminant analysis to further validate the classification of individuals into clusters.

Results

Participant Characteristics

Participants were men attending batterers' intervention groups (N = 198). Almost all of the men attended because they were mandated by a criminal court or the Oregon Department of Human Service (91.4%); 9.6% reported attending voluntarily. The average length of participation in a BIP was 9.6 months (SD = 10.7). More than half of the participants were married or living with a partner (50.5%), 28.2% were separated or divorced, 21.3% were single or single living with children. The average age of participants was 34.2 years (SD = 10.5). Participants had 10.1 years of formal education (SD = 3.3) on average. The majority of participants were employed (89.3%). Of those who were employed only 9.3% were union members. The mean monthly individual earned income was 5.3 (SD = 2.2), corresponding to the category US\$1,501 to US\$2,000 monthly; mean household income was 5.51 (SD =2.44), corresponding to the category US\$2,000 to US\$2,500 monthly. The survey instructed participants to mark multiple racial categories, if applicable; 38.9% marked White, 5.1% Black, 2.0% Asian, 3.5% Native American, 2.5% Hawaiian or Pacific Islander, and 43.9% Other. A large share of the sample was Latino (60.6%). Over half (53.9%) of the participants were born outside of the United States. The largest share of those born outside the United States was born in Mexico (84.5%). Participants born outside the United States had lived in the United States an average of 11.5 years (SD =6.0). The largest share of participants' current partners/spouses was born in the United States (60.3%). Of those born outside the United States, 86.7% were born in Mexico. On average, partners/spouses born outside the United

	Cluster						
Form of Work-related IPV	Extreme Abuse (n = 55)	Low-Level Tactics (n = 64)					
Threatened or actual abuse	.80	1.00	1.00	.00	.41		
Interference	.98	.83	1.00	1.00	.00		
Monitoring	1.00	1.00	.00	.36	.05		
Jealousy	1.00	.00	.30	.09	.17		
Control	.56	.46	.24	.23	.06		

Table 1. Proportion of Men Reporting Each Form of Work-Related IPV by Cluster.

Note. The five work-related IPV subscales were scored 0 (no behaviors of this type) or 1 (1 or more behaviors of this type).

States had lived in the United States for 10.1 years (SD = 7.4). Among Latinos, the average acculturation score was 9.4 (SD = 4.2), which represents a typical level of acculturation for first generation Hispanics and a relatively low level of acculturation for second generation Hispanics.

Patterns of Work-Related IPV

Next, we performed cluster analysis to identify whether there are separate groups of men with distinct patterns of work-related abusive behaviors. Using multiple criteria (agglomeration schedule, dendrogram, and interpretability of cluster solutions) a five-cluster solution was selected based on the Ward's method of cluster analysis. Using the cluster centers from the Ward's cluster analysis, we obtained the final cluster classifications using a K-means cluster analysis. A discriminant analysis using the five subscales to predict cluster membership correctly classified 96.0% of participants into their original clusters. We then named the clusters based on the pattern (predominance and absence) of abusive behaviors reported by the men (see Table 1). Extreme abuse was characterized by a relatively high proportion of men reporting all of the abusive behaviors. Extreme abuse without jealousy was characterized by a high proportion of men reporting threatened or actual abuse, monitoring, interference, and control, and a low proportion of men reporting jealousy. Interference with threatened or actual violence was characterized by a high proportion of men reporting threatened or actual abuse and interference, and a low proportion of men reporting monitoring. *Interference* was

characterized by a high proportion of men reporting interference and a low proportion of men reporting threatened or actual abuse, or jealousy. *Low-level tactics* was characterized by a low proportion of men reporting controlling, monitoring, or interference. These patterns varied in prevalence across the sample; some were relatively common, describing 27% to 32% of the sample (i.e., extreme abuse; low-level tactics) while others were fairly rare, describing only 12% to 13% of the sample (i.e., interference; extreme abuse without jealousy).

Validity of the Work-Related IPV Patterns

To further validate the interpretation of the clusters, a series of chi-square tests and ANOVAs were conducted to examine differences between clusters on demographic variables. Chi-square tests revealed significant differences between clusters on ethnicity $\chi^2(4) = 20.61$, p < .001, parental status $\chi^2(4) =$ 10.20, p = .037, and partner's current employment status $\chi^2(4) = 9.54$, p =.049. A larger proportion of men grouped in the low-level tactics and interference clusters were Latino, had children, and had partners who were not currently employed (see Table 2). The larger proportion of men in the low-level tactics and interference clusters with currently unemployed partners could mean that they had less opportunity to perpetrate some of the measured workrelated IPV behaviors. However, because there was no difference between clusters in the percent whose partners had ever been employed and since the survey asks whether men had "ever" used the work-related IPV behaviors, the differences between clusters in work-related IPV behaviors cannot be adequately explained in terms of difference in opportunity. No statistically significant differences were found on household structure; however, these results should be interpreted cautiously as some cells had very small sample sizes (e.g., there were few men who lived with their partner's family).

ANOVAs revealed significant differences between the clusters on income F(4, 191) = 5.47, p < .001, education F(4, 187) = 3.77, p = .006, and acculturation (among Latinos only) F(4, 109) = 4.57, p = .002. Bonferroni post hoc tests, with a corrected p value, were used to determine which differences between clusters were statistically significant at a .05 α level. Low-level tactics (M = 4.6, SD = 1.9) and interference (M = 4.3, SD = 1.9) clusters had significantly lower income than interference with threatened or actual violence (M = 6.1, SD = 2.4) and extreme abuse without jealousy (M = 6.2, SD = 2.3) clusters. Low-level tactics (M = 9.2, SD = 3.4) also reported significantly fewer years of education than interference with threatened or actual violence (M = 11.4, SD = 2.9) clusters. Among Latinos only, men grouped in the low-level tactics (M = 7.8, SD = 2.8) cluster reported lower acculturation than

	Extreme Abuse (n = 55)	Extreme Abuse Without Jealousy (n = 24)	Interference with Threatened or Actual Violence (n = 33)	Interference (n = 22)	Low-Level Tactics (n = 64)	
	%	%	%	%	%	
Latino*	50.9%	41.7%	45.5%	86.4%	75.0%	
Children (I or more)*	49.1%	45.8%	46.7%	73.7%	70.0%	
Partner currently employed*	74.5%	68.2%	77.8%	50.0%	52.0%	
Household structure ξ						
Own home	36.4%	54.2%	42.4%	40.9%	29.7%	
With partner's	3.6%	4.2%	9.1%	9.1%	3.1%	
Family						
With own family	29.1%	25.0%	18.2%	22.7%	25.0%	
Other	30.9%	16.7%	30.3%	27.3%	42.2%	
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	
Age	31.3 (8.4)	37.9 (13.6)	36.7 (10.2)	33.2 (9.4)	34.3 (11.0)	
Income*	5.5 (2.0)	6.2 (2.3)a,b	6.1 (2.4)c,d	4.3 (1.9)a,c	4.6 (1.9)b,d	
Years education*	10.5 (2.7)	11.0 (4.3)	11.4 (2.9)e	9.0 (3.0)	9.2 (3.4)e	
Acculturation (Latino only)*	11.6 (5.8) ^f	10.8 (4.9)	10.4 (2.8)	8.9 (3.2)	7.7 (2.8) ^f	

Table 2. Differences Between Clusters on Demographic Variables.

Note. *p < .05, ⁵cell sizes of less than 5; means with the same superscript are statistically different from one another using Bonferroni post hoc tests.

those in the *extreme abuse* cluster (M = 11.6, SD = 5.8). No statistical difference between the clusters was found on age.

Patterns of IPV Associated With Work Performance and Employment

We conducted logistic regressions to examine the relationship between cluster membership and work performance and employment, controlling for age, ethnicity, and income. Cluster membership was dummy coded so that *low-level tactics* would be compared to each of the other clusters. The logistic regression model predicting batterers' job performance fit significantly better than a constant only model, $\chi^2(7) = 67.59$, p < .001. Controlling for the demographic predictors, the probability of batterers' job performance being substantially impacted is nearly 4 times (RR = 3.98, 95% CI = [3.21, 4.34]) higher for men grouped in the *extreme abuse* cluster than for those in the *low-level tactics* cluster (OR = 24.29, 95% CI = [8.46, 69.77]), 3.5 times

renormance.			
		Job Performance	
Variable	Odds Ratio	95% CI	p value
Age	.98	[.94, 1.02]	.30
Latino	1.47	[.63, 3.40]	.37
Income	1.04	[.87, 1.23]	.70
Cluster membership			

[8.46, 69.77]

[2.10, 19.30]

[4.17, 36.06]

[.43, 4.08]

.00

.00

.00

.63

Table 3. Odds Ratios and 95% CI from Logistic Regressions Predicting Men's Job Performance.

Note. $\chi^2(7) = 67.59$, p < .001; LL = Low-Level Tactics; I = Interference; ITA = Interference with Threatened or Actual Violence; E-J = Extreme Abuse without Jealousy; E = Extreme Abuse.

24.29

6.37

12.26

1.32

(RR = 3.54, 95% CI = [1.69, 3.85]) higher for *interference with threatened or actual violence* than *low-level tactics* (OR = 12.26, 95% CI = [4.17, 36.06]), and nearly 3 times (RR = 2.93, 95% CI= [2.46, 4.16]) higher for *extreme abuse without jealousy* than *low-level tactics* (OR = 6.37, 95% CI = [2.10, 19.30]; see Table 3). Cluster membership was not a significant predictor of batterers' employment. For descriptive purposes, percentages of men in each cluster that reported an impact of work-related IPV on their job performance or employment are presented in Table 4.

Discussion

LL vs. E

LL vs. I

LL vs. E-I

LL vs. ITA

This study replicates and extends research demonstrating a link between work-related IPV and perpetrators' job performance (Cranwell Schmidt & Barnett, 2011; Lim et al., 2004; Rothman & Perry, 2004). We found that not all abusive men perpetrate work-related IPV at the same level or in the same way. Five distinct patterns of work-related IPV perpetration were identified—low-level tactics, interference, interference with threatened or actual violence, extreme abuse without jealousy, and extreme abuse. The groups were named based on the pattern of work-related abusive behaviors reported by men who abused their partners. For example, the extreme abuse group was so named because the men characterized their abuse using all of the work-related abusive behaviors examined (i.e., threatened/actual abuse, jealousy, monitor, interference, and control) and because of the severity of impact of

	Cluster										
	Extreme Abuse (n = 55)		Extreme Abuse Without Jealousy (n = 24)		Interference With Threatened Or Actual Violence (n = 33)			Interference (n = 22)		Low-Level Tactics (n = 64)	
	n	%	n	%	n	%	n	%	n	%	
Performance	48	87.3%	15	62.5%	24	75.0%	7	31.8%	14	21.9%	
Employment	19	35.2%	7	30.4%	9	30.0%	4	19.1%	9	14.5%	

Table 4. Percentage of Men Reporting an Impact on Job Performance and Employment by Cluster.

Note. Performance is defined as responding "yes" to two or more of the four performance items; employment is defined as responding "yes" to one or more of the three employment items.

the behaviors. The patterns of work-related IPV resemble different types of IPV perpetration identified in prior studies (Brush, 2002; Holtzworth-Munroe & Meehan, 2004; Johnson, 2008).

These patterns of work-related IPV are associated with individual differences among the abusive men, particularly differences in characteristics most directly affected by or affecting work such as income, education, partners' employment status, and acculturation. This finding suggests the clusters have some external validity. Specifically, men in the low-level tactics cluster tended to have lower income, education, and acculturation than men in some of the other clusters. In addition, a larger proportion of men in the low-level tactics and interference clusters were Latino, had children, and had partners who were not currently employed although they did not differ in whether their partners had ever been employed. These findings raise questions about whether and how cluster differences result from differences in opportunity to perpetrate work-related IPV (e.g., partner or abuser is, or is not, currently employed), differences in resources to perpetrate workrelated IPV (e.g., lower income jobs may provide less autonomy and access to technology that is used to monitor victims), or other causes. In addition to their different causes, various forms of work-related IPV could have different impacts on partners' employment. For example, men who do not want their partners to work outside the home may be especially successful at using work interference tactics to prevent partners from finding or keeping a job.

Further validating the patterns of work-related IPV, we found that the patterns predict abusive men's job performance, though not employment. Most

men in our study report that their IPV affects their job performance, and this is especially likely among men who perpetrated more forms or more severe work-related IPV. For example, men in the extreme work-related IPV cluster were nearly four times as likely as men in the lower level cluster to experience substantial negative impacts of IPV on their own job performance. Given the cross-sectional design of the study, however, it is important to note that one of the measured indicators of job performance (i.e., absenteeism) could also affect the prevalence of work-related IPV by reducing men's opportunity to use certain work-related IPV tactics. Longitudinal research designs are needed to distinguish various possible causal pathways and outcomes of work-related IPV.

Limitations and Implications

The particular sample and analysis method limit the generalizability of the study findings. We partnered with community agencies and with a skilled bilingual and bicultural research team member who led recruitment and survey administration to reach a sample of ethnically and geographically diverse rural and urban Latino men and BIPs. This outreach was successful, as the majority (60%) of the sample defined themselves as Latino, primarily Mexican immigrants. This sample represents a population that may be particularly impacted by work-related IPV due to acculturation processes and stresses (Grzywacz et al., 2009). However, work-related IPV perpetration and its impacts could differ in more general samples of employees who do not attend BIPs.

While cluster analysis is an exploratory, data-driven technique, the significant differences between clusters on men's job performance and employment-related demographic variables are evidence of their predictive and discriminant validity, respectively. Nonetheless, future research should attempt to cross-validate the five clusters found in this study with a sample that is more representative of the wider population of abusive men who are not enrolled in batterer intervention programs. More significantly, because of the cross-sectional study design, we cannot rule out the possibility that negative job performance subsequently increases work-related IPV. Indeed, a feedback loop may exist in which work-related IPV negatively affects both the perpetrator's and the victim's job performance, which in turn produces further stress and motivation to engage in work-related IPV to control the partner. Or, a third variable could be associated with both work-related IPV and job performance (e.g., substance abuse, impulse control). Longitudinal data are needed to establish a causal relationship between patterns of workrelated IPV and work performance.

Our findings should deepen employer's concerns regarding work-related IPV and its impact on employees' safety and productivity. Beyond its known impact on victims' job productivity and employers' costs (Reeves & O'Leary-Kelly, 2007), this study finds that work-related IPV also predicts perpetrators' own work performance, attendance, concentration, and on-the-job mistakes (see also Cranwell Schmidt & Barnett, 2011; Lim et al., 2004; Rothman & Perry, 2004). Monitoring and intervening in employees' perpetration of varied forms of work-related IPV could increase workplace safety and productivity for victims, coworkers, and perpetrators. In this study, negative job impacts were substantially more likely to occur among men whose work-related IPV perpetration is characterized by threatened or actual violence, and either monitoring or jealousy, or both. Men whose work-related IPV consisted of only job interference or relatively low levels of abuse were much less likely to experience negative impacts on their own job performance. Consequently, our findings suggest that specific patterns of workrelated IPV perpetration are especially important to assess and target in employee training and intervention programs (i.e., patterns characterized by threatened or actual violence with monitoring and/or jealousy). Knowledge of the work-related IPV patterns identified and validated in this study might help employers and employee assistance programs develop effective workrelated IPV perpetration screening and program referral protocols (Hardison Walters et al., 2012). Furthermore, employers should consider implementing work-related IPV perpetration education programs and policies (e.g., training on recognizing various forms of work-related IPV; flexible work schedules that facilitate attendance and completion of BIPs; Hardison Walters et al., 2012; Swanberg, Ojha, & Macke, 2012).

In addition, our finding that different patterns of work-related IPV are predicted by men's individual characteristics (e.g., income, education, ethnicity) further informs the development of employee trainings and interventions. For example, contrary to the cultural deprivation hypothesis common in ethnocultural research (see Mechanic & Pole, 2012), men in the extreme abuse compared to the low-level tactics cluster were less likely to have children, to be Latino, and if Latino, were less acculturated. These findings suggest that intervention programs could increase their relevance and effectiveness by adapting to the larger family and acculturative context of an individual perpetrator's pattern of work-related IPV (Grzywacz et al., 2009).

Finally, employers and employee assistance programs should consider referring employees who perpetrate work-related IPV to BIPs that specifically address work-related IPV perpetration (Rothman & Corso, 2008; Rothman & Perry, 2004). Workplace safety and productivity may be increased

for all employees if abusive partners complete a BIP, particularly one that addresses work-related IPV. However, an initial study found that BIPs commonly do not address work-related IPV in their curricula (Galvez et al., 2011). Consequently, BIP group facilitators need training about forms and patterns of work-related IPV and their impacts. Such training would enable programs to develop intake screening assessments and curricula to address work-related IPV and its substantial relationship to the work productivity of perpetrators and the workplace safety of victims and their coworkers.

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References

- Brush, L. D. (2002). Work-related abuse: A replication, new items, and persistent questions. *Violence and Victims*, 17, 743-757.
- Cranwell Schmidt, M., & Barnett, A. (2011, November). *How does domestic violence affect the Vermont workplace?* Center of Rural Studies, University of Vermont.
- Frye, V., Manganello, J., Campbell, J. C., Walton-Moss, B., & Wilt, S. (2006). The distribution of and factors associated with intimate terrorism and situational couple violence among a population-based sample of urban women in the United States. *Journal of Interpersonal Violence*, 21, 1286-1313.
- Galvez, G., Mankowski, E. S., Braun, M. F., & Glass, N. (2009). Development of an iPod audio computer-assisted self-interview to increase the representation of low literacy populations in survey research. *Field Methods*, 21, 407-415.
- Galvez, G., Mankowski, E. S., McGlade, M., Ruiz, M. E., & Glass, N. (2011). Work-related intimate partner violence among employed immigrants from Mexico. *Psychology of Men & Masculinity*, *12*, 230-246.

- Glass, N., Perrin, N. A., Hanson, G. C., Mankowski, E., Bloom, T., & Campbell, J. C. (2009). Patterns of abusive behaviors as reported by Latina and non-Latina survivors. *Journal of Community Psychology*, 37, 156-170.
- Grzywacz, J. G., Rao, P., Gentry, A., Marín, A., & Acury, T. A. (2009). Acculturation and conflict in Mexican immigrants' intimate partnerships: The role of women's labor force participation. *Violence Against Women*, 15, 1194-1212.
- Hardison Walters, J. L., Pollack, K. M., Clinton-Sherrod, M., Lindquist, C. H., McKay, T., & Lasater, B. M. (2012). Approaches used by employee assistance programs to address perpetration of intimate partner violence. *Violence and Victims*, 27, 135-147.
- Holtzworth-Munroe, A., & Meehan, J. C. (2004). Typologies of men who are typically violent: Scientific and clinical implications. *Journal of Interpersonal Violence*, 19, 1369-1389.
- Holtzworth-Munroe, A., Meehan, J. C., Herron, K., Rehman, U., & Stuart, G. L. (2000). Testing the Holtzworth-Munroe and Stuart (1994) batterer typology. *Journal of Consulting and Clinical Psychology*, 68, 1000-1019.
- Johnson, M. P. (2008). A typology of domestic violence: Intimate terrorism, violent resistance, and situational couple violence. Lebanon, NH: University Press of New England.
- Klevens, J. (2007). An overview of intimate partner violence among Latinos. *Violence Against Women*, 13, 111-22.
- Lim, K. C., Rioux, J., & Ridley, E. (2004). Impact of domestic violence offenders on occupational safety & health: A pilot study. Maine Department of Labor, Family Crisis Services. Augusta, ME.
- Mankowski, E. S., Galvez, G., Perrin, N., Hanson, G., Rollins, C., & Glass, N. (2012). *Measuring workplace intimate partner violence among abusive men*. Manuscript submitted for publication.
- Marín, G., Sabogal, F., Marín, B., Otero-Sabogal, R., & Perez-Stable, E. J. (1987).
 Development of a short acculturation scale for Hispanics. *Hispanic Journal of Behavior Sciences*, 9, 183-205.
- Mechanic, M., & Pole, N. (2012). Methodological considerations in conducting ethnoculturally sensitive research on intimate partner abuse and its multidimensional consequences. Sex Roles. doi: 10.1007/s11199-012-0246-z
- Morash, M., Bui, H. N., & Santiago, A. M. (2000). Cultural-specific gender ideology and wife abuse in Mexican-descent families. *International Journal of Victimology*, 7, 67-91.
- Panchanadeswaran, S., Ting, L., Burke, J. G., O'Campo, P., McDonnell, K. A., & Gielen, A. C. (2010). Profiling abusive men based on women's self-report: Findings from a sample of urban low-income minority women. *Violence Against Women*, 16, 313-27.
- Perilla, J. L., Bakeman, R., & Norris, F. H. (1994). Culture and domestic violence: The ecology of abused Latinas. *Violence and Victims*, *9*, 325-339.
- Perrin, N., Yragui, N., Hanson, G., & Glass, N. (2010). Patterns of workplace supervisor support desired by abused women. *Journal Interpersonal Violence*, 26, 2264-2284.

Reeves, C., & O'Leary-Kelly, A. M. (2007). The effects and costs of intimate partner violence for work organizations. *Journal of Interpersonal Violence*, 22, 327-344.

- Riger, S., Ahrens, C., & Blickenstaff, A. (2000). Measuring interference with employment and education reported by women with abusive partners: Preliminary data. Violence and Victims, 15, 161-172.
- Rothman, E. F., & Corso, P. (2008). Propensity for intimate partner abuse and work-place productivity: Why employers should care. Violence Against Women, 14, 1054-1064.
- Rothman, E. F., & Perry, M. J. (2004). Intimate partner abuse perpetrated by employees. *Journal of Occupational Health Psychology*, *9*, 238-246.
- Shepard, M., & Pence, E. (1988). The effects of battering on employment status of women. *Affilia*, 3, 55-61.
- Stark, E. (2007). Coercive control: How men entrap women in personal life. New York, NY: Oxford University Press.
- Swanberg, J. E., & Logan, T. K. (2005). Domestic violence and employment: A qualitative study. *Journal of Occupational Health Psychology*, 10, 3-17.
- Swanberg, J. E., Logan, T. K., & Macke, C. (2005). Intimate partner violence, employment, and the workplace: Consequences and future directions. *Trauma Violence Abuse*, 6, 286-312.
- Swanberg, J. E., Ojha, M. U., & Macke, C. (2012). State employment protection statutes for victims of domestic violence: Public policy's response to domestic violence as an employment matter. *Journal of Interpersonal Violence*, 27, 587-619.
- Taylor, M. J., & Barusch, A. S. (2004). Personal, family, and multiple barriers of long term welfare recipients. *Social Work*, 49, 175-183.
- Tolman, R. M., & Wang, H. (2005). Domestic violence and women's employment: Fixed effects models of three waves of women's employment study data. *American Journal of Community Psychology*, *36*, 147-158.

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