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Intimate Partner Violence Among Low-Income Fathers: Testing a Stress-Coping Model

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Abstract

This research used a stress-coping conceptual framework to examine intimate partner violence (IPV) among men who are fathers. The current study examined how perceived stress explained associations between stressors (e.g., employment status, psychological and physical female-to-

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male partner violence [FMPV], substance use, criminal justice system involvement) and male-perpetrated physical and psychological IPV. Participants were 1,971 low-income, ethnically diverse fathers involved in a statewide fatherhood program. Findings indicated that, across African American, White, and Hispanic/Latino men, male-reported FMPV and criminal justice involvement were associated with psychological and/or physical IPV via perceived stress. Employment status and alcohol use were associated with psychological IPV via perceived stress among African American men only. Implications for community-based fatherhood programs are discussed.

Keywords

intimate partner violence; stress; fatherhood; race; ethnicity

Intimate partner violence (IPV) is a significant public health concern (Tjaden & Thoennes, 2000; Teitelman, Ratcliffe, Morales-Aleman, & Sullivan, 2008). Twenty-five percent of women report being physically assaulted or raped by a current or former partner in their lifetime (Tjaden & Thoennes, 2000). Women are more likely than men to sustain serious and life-threatening injuries because of physical IPV (Felson & Cares, 2005; Kimmel, 2002; Warner, 2010) and report higher psychological IPV (i.e., insults, swears, threats), both of which are associated with elevated mental and physical health problems (Coker et al., 2002; Lacey, McPherson, Samuel, Sears, & Head, 2013). Both physical and psychological IPV contribute to increased health care utilization and costs among female victims (Bonomi, Anderson, Rivara, & Thompson, 2009) and the adverse effects may be long-lasting (Jones et al., 2006). There is a need for research that continues to refine the factors associated with male perpetration of IPV (Thompson, Saltzman, & Johnson, 2003). Inquiry into the male perpetrator's perspective may aid with understanding the minimal effects detected across treatment programs designed to reduce IPV among male batterers (Eckhardt, Murphy, Black, & Suhr, 2006; Eckhardt et al., 2013).

When examining factors that influence male perpetration of IPV, there is a need for research focused on fathers in particular. Fathers are unique from nonparent populations in that they have responsibilities, and potentially added stressors, associated with parenting and modeling appropriate behaviors for their children (Stover, 2013). Furthermore, there is evidence that fatherhood status may be associated with increased effectiveness of IPV intervention programs, possibly due to increased motivation to protect their children from their own anger and lack of behavioral control (Stover, 2013). Certain life stressors may undermine this effect, as research shows that fathers with substance use problems do not improve in IPV interventions compared with nonfathers (Stover, McMahon, & Easton, 2011). Therefore, there is a need for research on the stress-related risk factors and mechanisms through which fathers perpetrate IPV, especially racial/ethnic minority fathers who may have greater exposure to stressors such as low socioeconomic status, racism, and negative life events (Bamishigbin et al., 2017).

Stress, Coping, and IPV

The stress-coping model (Lazarus & Folkman, 1984) is one theoretical framework that is useful for conceptualizing stress-related risk factors and mechanisms of IPV perpetration among fathers. The stress-coping model (Lazarus & Folkman, 1984) suggests that the consequence of stressors is contingent upon how an individual appraises stressors (e.g., demands at work or relationship conflicts), the stressor's potential harm, as well as one's capacity to manage that stressor using available resources and abilities. When individuals believe stressors are unmanageable, they experience stress and cope by either asking for help or engaging in maladaptive behaviors. A maladaptive response is more likely when there is a greater inability to manage the stressor. Based on this model, individuals who experience significant stressors are at greater risk for engaging in IPV (Caetano, Ramisetty-Mikler, & Harris, 2007), such that increases in stress result in a decreased ability to adaptively cope with interpersonal conflict. That is, when individuals experience stressors, such as unemployment, relationship conflict, and involvement in the criminal justice system, these experiences may eventually overburden their coping resources, which can increase the likelihood of maladaptive social functioning, such as IPV.

Under the stress-coping model, perceived stress (i.e., perception of inability to cope with stressors) may explain the relation between stressors and IPV perpetration. No studies have examined how perceived stress explains the collective impact of stressors (e.g., relationship conflict, criminal justice system involvement) on IPV among fathers from low-income and ethnically diverse backgrounds. These stressors may be modifiable and, thus, amenable to better coping responses if targeted or prevented through community-based interventions (e.g., workshops on active coping and stress reduction strategies) that are specifically focused on IPV.

There are several stress-related factors associated with IPV perpetration among men that are important to examine in a stress-coping framework. The present study focuses on select stress factors related to IPV, including age, social circumstances, relationship-based stressors, and substance use. Some studies have observed a negative relationship between age and IPV perpetration, as skills for managing stress are thought to improve across the life span (Caetano, Ramisetty-Mikler, & Field, 2005; Caetano, Vaeth, & Ramisetty-Mikler, 2008; Cunradi, Caetano, Clark, & Schafer, 2000; Sarantakos, 2004; Tilley & Brackley, 2005). In addition, stressful social circumstances such as unemployment status, and involvement in the criminal justice system are associated with greater IPV perpetration (Gordon et al., 2011; Logan, Walker, Staton, & Leukefeld, 2001; Snow, Sullivan, Swan, Tate, & Klein, 2006) and may be explained by perceived stress. The presence of relationship stressors, especially high psychological and physical female-to-male partner violence (FMPV), may represent an important stressor influencing male-perpetrated IPV (Caetano et al., 2008). Research suggests bidirectional IPV (i.e., that which occurs male to female as well as female to male) is more severe and indicative of relationship dysfunction than unidirectional IPV (Whitaker, Haileyesus, Swahn, & Saltzman, 2007). Finally, certain behaviors, such as alcohol and marijuana use, that are associated with IPV perpetration (Stuart et al., 2008), may also be explained by perceived stress. Alcohol and illicit drug use patterns within a relationship have been conceptualized as distal risk factors that interact

with acute factors to cause IPV (Stuart et al., 2008). Because of the psychological, physiological, and legal consequences associated with alcohol and marijuana use as well as the research suggesting that stress initiates and maintains use of these substances (Corbin, Farmer, Nolen-Hoeksema, 2013; Hyman & Sinha, 2009), they are viewed here as stressors that may lead to IPV via perceived stress.

Race/Ethnicity as a Potential Moderator of the Role of Stress

Research suggests that there may be racial/ethnic differences in IPV perpetration. Specifically, higher rates of IPV have been found among African American and Hispanic couples compared with White couples (Caetano, Field, Ramisetty-Mikler, & McGratch, 2005; Caetano et al., 2008), and among African American compared with Hispanic and White men and women (Spencer, Renner, & Clark, 2016). However, race may act as proxy for social and structural factors associated with IPV (Hampton, Oliver, & Magarian, 2003), as racial minorities may experience added stressors compared with Whites. Therefore, the role of race/ethnicity in IPV may be best understood by testing models that include differences between racial and ethnic groups while accounting for other stress-related factors (e.g., age, employment status, substance use, criminal justice involvement) that influence IPV perpetration. It may be that minority men, in general, experience more perceived stress due to exposure to racial and other stressors, and thus, the proposed relationships among stressors, perceived stress, and IPV may be stronger among ethnic minority men.

The Present Study

The current study applied a stress-coping framework (Lazarus & Folkman, 1984) to examine the degree to which perceived stress may explain how several stress-related factors (e.g., age, unemployment, relationship conflict as indicated by FMPV, alcohol and marijuana use, criminal justice involvement) are associated with physical and psychological IPV among low-income ethnically diverse fathers. We hypothesized that predictors of stress would be indirectly associated with IPV via perceived stress. In addition, due to research indicating that men are more likely to report IPV perpetrated by a female partner than their own use of IPV (Wenger, 2015), we conducted supplementary analyses on the relationship between FMPV and IPV in the present study.

Method

Participants

The present study included a sample of 1,971 men (drawn from an overall sample of 3,082 men) who participated in a statewide community-based fatherhood initiative program. All 3,082 men approached for inclusion in the fatherhood evaluation study consented for their standard intake data to be used for research purposes. The current sample excludes people who reported having been convicted of spousal abuse ($n = 184$), thus increasing confidence that these effects do not merely capture past IPV-related justice system involvement predicting future instances of IPV. We focused on two racial groups and one ethnic group for this article. We excluded people not representing African American race (non-Hispanic), Caucasian race (non-Hispanic), or Hispanic/Latino ethnicity ($n = 410$) to exclusively focus

on particular racial/ethnic groups, resulting in a reduced sample of 2,488. There were too few people of other races to analyze separately. Furthermore, only data available for all participants (i.e., listwise deletion sample) were analyzed to avoid estimating missing data based solely on demographic variables (i.e., race, age), further reducing the sample to 1,971. Demographic characteristics by racial group are displayed in Table 1. The sample consisted of African American (47%), White (40%), and Hispanic/Latino (12%) fathers with ages ranging from 16 to 59 years ($M = 33.76$, $SD = 8.89$). There were too few participants from other racial/ethnic groups for sufficient statistical power. Most respondents were employed (71%). The majority of the sample had been involved in the criminal justice system (i.e., 70% had been convicted of a misdemeanor and/or a felony).

Procedure

The principal investigator (PI) served as the evaluator of the fatherhood initiative administered by nonprofit organizations in communities across the state and in collaboration with the State social service administrator, who administers the fatherhood initiative where the evaluation research was completed. This initiative's goals were to promote responsible parenting, healthy relationship skills, and economic stability among low-income and noncustodial fathers. Study procedures were developed using a participatory action research approach in which the local community members consulted and collaborated on aspects of the research process (Cornwall & Jewkes, 1995). Researchers, community members, nonprofit organizations and State agencies involved in this project collectively agreed upon study aims and methods, and collaborated throughout the evaluation. The final protocol developed was the result of this research strategy and resulted in some modifications to the standardized instruments used. The study was approved by the University Institutional Review Board (IRB).

Participants were referred to fatherhood programs via self-referral, Department of Social Services area offices, community programs, support groups, and Department of Children and Families area offices. Upon presentation to the fatherhood program, participants were informed about the voluntary nature of participation and provided informed consent. Participants completed a 1.5-hr assessment with their case manager as part of their intake into the fatherhood program; no compensation was provided. Participants could withdraw from the study at any time; responses were confidential and did not negatively affect participation in the program.

Measures

The following measures were administered as part of the 1.5 hr assessment completed by participants in the fatherhood program. All data were self-reported.

Demographics.

Age was analyzed as a continuous variable. Participants self-reported their age, race/ethnicity, and employment. Employment status was assessed by asking participants whether or not they were employed at the time of the assessment.

Substance use.

Substance use was assessed using two dichotomous (0 = no, 1 = yes) items asking whether participants used (1) alcohol or (2) marijuana in the past 30 days. These substances were thought to be most commonly used among this population; questions about use of other illegal drugs were not included in the assessment packet.

Criminal justice involvement.

Criminal justice involvement was measured by asking participants whether they were ever convicted of a misdemeanor, felony, or both. Participants who indicated they had never been convicted of a crime were given a "0," respondents who reported being convicted of at least one misdemeanor but not a felony were given a "1," participants who reported being convicted of at least one felony but no misdemeanor were given a "2," and participants who endorsed both misdemeanor and felony convictions were given a "3." This method for quantifying criminal justice involvement has been used in other studies (see Gordon et al., 2011).

Perceived stress.

Perceived stress was assessed using the four-item version of the Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983; Wartig, Forshaw, South & White, 2013), which measures levels of stress experienced in the past month. Items include, "In the past month, how often have you felt that you were unable to control the important things in your life?" and "In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?" Each item is rated on a 5-point Likert-type scale (0 = *never*, 1 = *almost never*, 2 = *sometimes*, 3 = *fairly often*, 4 = *very often*) and higher scores indicate higher levels of stress. The internal consistency score of the scale in the present study was slightly below the generally accepted cutoff of .70 ($\alpha = .64$); however, the small number of items contributed to this alpha and this reliability is consistent with that found using the four-item scale in other studies (Cohen et al., 1983; Gordon et al., 2011). We decided to proceed with the analyses given the novelty of the study.

Physical and psychological FMPV.

FMPV was initially measured with the Revised Conflict Tactics Scale (CTS-2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996); however, after a month of piloting the assessment protocol with 50 participants, participants noted that some of the items were redundant, confusing, and unnecessarily added to the length of the assessment. Participants and case managers requested that the items in the CTS-2 be combined to shorten the assessment. Though shortening the measure altered its psychometric properties, given the strong feedback and valued opinions of community collaborators, the PI agreed to combine the items to create an overall composite of IPV. FMPV was assessed with two items that captured psychological and physical violence reportedly inflicted by the male participants' current female intimate partner in the past 12 months. The adapted measure asked the following: (a) "Has your partner engaged in any of the following behaviors: insult you or put you down, swear at you or threaten you (psychological)?" and (b) "Has your partner engaged in any of the following behaviors: push you, slap you, grab you, punch you, beat

you up, burned you or choked you (physical)?” Items were rated consistent with the CTS-2 (0 = *never*, 1 = *once*, 2 = *twice*, 3 = *3–5 times*, 4 = *6–10 times*, 5 = *11–20 times*, 6 = *more than 20 times*), and this shortened assessment measure has been used in other studies (Gordon et al., 2011).

Physical and psychological IPV.

Similar to the FMPV indicators described above, male-perpetrated physical and psychological IPV was assessed using two items based on the CTS-2 (Straus et al., 1996). The item assessing physical IPV perpetration asked, “Have you pushed, slapped, grabbed, punched, kicked, beat up, burned or choked your partner?” The psychological IPV item asked, “Have you engaged in any of the following behaviors: insult your partner or put them down, swear at them or threaten them?” Questions referred to the participants’ current intimate partner relationship and captured IPV incidences in the past 12 months. Responses were recorded on a 7-point scale (0 = *never*, 1 = *once*, 2 = *twice*, 3 = *3–5 times*, 4 = *6–10 times*, 5 = *11–20 times*, 6 = *more than 20 times*).

Analysis Plan

An ANOVA was conducted to determine racial/ethnic differences among study variables (see Table 1). Bivariate correlations show the direction and strength of associations between variables (see Table 2). Finally, we tested a stress-coping model of IPV using structural equation modeling (SEM) and multiple-group path analysis (Kline, 2005; Tabachnick & Fidell, 2007), which allowed us to examine racial differences in the indirect effect of perceived stress in the relation between stressors (i.e., employment status, substance use, FMPV, degree of prior criminal justice involvement) and IPV. In addition, to compare male-reported FMPV with men’s own IPV, we conducted within-group, paired-variables *t* tests. Per J. Cohen’s (1988) recommendations, path estimates of .1, .3, and .5 correspond to small, moderate, and large effect sizes for direct associations and values of .01, .09, and .25 correspond to small, moderate, and large indirect effect sizes. Global fit indices were used to determine whether the hypothesized model fit the data well. All analyses were conducted in SPSS and Mplus, Version 6 (Muthén & Muthén, 2010).

Results

Bivariate Relationships

Sample characteristics.—As shown in Table 1, African American and White men differed on all the variables. White men were more likely to report being employed, experiencing psychological and physical FMPV, perpetrating psychological and physical IPV, and having no criminal justice history or a history of misdemeanors. African American men were more likely to report using marijuana in the past 30 days compared with White men, but these groups did not differ in alcohol use. Hispanic/Latino men showed more mixed results, but there were fewer Hispanic/Latino men ($n = 243$) than African American ($n = 933$) and White men ($n = 795$), which may not represent State demographics where the evaluation research was conducted.

Correlations.—Correlations, means, and standard deviations for continuous variables; thresholds and standard deviations derived from the standard errors for categorical variables; and ranges for study variables are presented in Table 2.

SEM and Multiple Group Analyses

Goodness-of-fit and model respecification.—The original, multiple-group model comparing African American, White, and Hispanic/Latino men had a poor fit to the data: $\chi^2(42, N = 1971) = 1,533.38, p < .000$, root mean square error of approximation (RMSEA) = 0.232 (90% confidence interval [CI] = [0.223, 0.243]), Tucker–Lewis index (TLI) = $-.06$, and comparative fit index (CFI) = 0.38. An examination of the correlation matrix revealed that there were strong direct associations between psychological and physical FMPV and male-perpetrated psychological and physical IPV, with correlations ranging from .348 to .562. We also reviewed the modification indices (Kline, 2005; Muthén & Muthén, 2010), which suggested that adding direct paths from psychological and physical FMPV to male-perpetrated psychological and physical IPV would significantly improve the model fit. The respecified model (Figure 1) adequately fit the data: $\chi^2(30, N = 1971) = 55.35, p < .01$, RMSEA = 0.036 (90% CI = [0.020, 0.050]), TLI = .98; CFI = .99. Furthermore, a chi-square difference test of model fit confirmed that adding the direct paths from the exogenous FMPV variables to the endogenous male-perpetrated IPV variables in the respecified model significantly improved model fit, $\chi^2(12) = 1,478.03 > 12.03$.

Final model.—Significant indirect effects in the respecified model are displayed in Table 3. The indirect effects differed between the respecified model and the original model in that indirect effects via perceived stress on male-perpetrated physical IPV were no longer significant among African American and Hispanic/Latino men. This may have been due, in part, to a lack of statistical power for testing indirect effects with fewer free parameters in the model (i.e., greater model complexity). However, adding direct effects for both psychological and physical FMPV on both male-perpetrated psychological and physical IPV may have accounted for much of the variance that appeared to be explained by these indirect effects. Given possible power concerns, indirect effects that approached significance in the respecified model are included in the table with the indirect effects that reached statistical significance.

Perceived stress had a consistent influence for African American fathers, as there was a significant indirect effect from employment, psychological and physical FMPV, alcohol use, and criminal justice involvement on male-perpetrated psychological IPV via perceived stress. The indirect associations of predictors with male-perpetrated psychological and physical IPV were generally small, but mostly significant. Path estimates ranged from $\beta = .009 (p < .05)$ to $\beta = .028 (p < .001)$ among African American men. Among White men, there was an indirect effect of psychological FMPV and criminal justice involvement on male-perpetrated psychological and physical IPV via perceived stress. The only significant indirect associations for Hispanic/Latino men were from psychological FMPV and criminal justice involvement on male-perpetrated psychological IPV. The magnitude of significant, indirect associations among White men ($\beta = .010, p < .05$ to $\beta = .027, p < .01$) and Hispanic/Latino men ($\beta = .033, p < .05$ and $\beta = .035, p < .05$) were small and similar to those for

African American men. There were fewer significant indirect associations among Hispanic/Latino men. Table 4 shows nonsignificant path estimates ranging from $\beta = .008$ to $\beta = .017$. As shown in Tables 3 and 4, the indirect association of alcohol use with psychological IPV via perceived stress was positive among African American men, but negative among Hispanic/Latino men. In comparison, the indirect association of marijuana use with psychological IPV via perceived stress was negative among African American men, but the indirect association of marijuana with psychological and physical IPV via perceived stress was positive among Hispanic/Latino men. Alcohol use was associated with higher levels of IPV among African American and lower levels of IPV among Hispanic men.

To test whether there were significant differences in path estimates between racial/ethnic groups, a chi-square difference test (Kline, 2005) was conducted to determine whether the model was significantly worsened by constraining each direct and indirect path across African American, White, and Hispanic/Latino men. The constrained model adequately fit the data based on many of the fit indices: $\chi^2(56, N = 1971) = 173.12, p < .001$, RMSEA = 0.056 (90% CI = [0.047, 0.066]), TLI = .94; CFI = .95. However, the chi-square difference test indicated that the constrained model fit the data significantly worse than the unconstrained model: $\chi^2(26) = 117.77, p < .001$. As such, pairwise comparisons across racial and ethnic groups were warranted.

There were several statistically significant differences between groups in the indirect effects of predictors on male-perpetrated psychological and physical IPV via perceived stress. There was a significant difference between African American and White men for the indirect effect of psychological FMPV on male-perpetrated physical IPV via perceived stress ($b = -.011, SE = .005, p < .05$), such that the positive, indirect association was stronger among African American men. There was a significant difference between African American and Hispanic/Latino men for the indirect association of alcohol use on psychological IPV via perceived stress ($b = .055, SE = .026, p < .05$). The indirect association was positive among African American men, but negative among Hispanic/Latino men. There was also a difference that approached significance between African American and Hispanic/Latino men for the indirect effect of marijuana use on psychological IPV via perceived stress ($b = -.076, SE = .040, p = .054$). The indirect association was negative among African American men, but positive among Hispanic/Latino men. Finally, there was a significant difference between African American and White men for the indirect effect of criminal justice involvement on psychological IPV via perceived stress ($b = .012, SE = .001, p < .05$) such that the positive, indirect association was greater among White men.

Additional analyses were conducted using within-group, paired-variables t tests to determine the extent to which men in the sample reported more FMPV than male-perpetrated IPV. In general, the results showed that men reported 14 *Journal of Interpersonal Violence* 00(0) more psychological FMPV than physical IPV (M difference = .070, $SE = .790, p < .001$). Participants endorsed greater levels of physical FMPV than male-perpetrated physical IPV (M difference = .199, $SE = .668, p < .000$). The direct associations between psychological FMPV and male-perpetrated IPV and between physical FMPV and male-perpetrated IPV were significant across all three groups ($\beta = .40-.69, p < .001$; see Figure 1). Psychological FMPV was associated with physical IPV among African American men ($\beta = .17, p < .001$),

but the effect size was between small and moderate and there was no association among White and Hispanic/Latino men. Physical FMPV was associated with male-perpetrated psychological IPV among Hispanic/Latino men ($\beta = .19, p < .01$), African Men ($\beta = .08, p < .01$) and White men ($\beta = -.07, p < .05$). The association appeared to be negative among White men, but, again, this association was small. Direct associations were greater than moderate in magnitude when the type of FMPV matched type of male-perpetrated IPV (e.g., psychological FMPV with male-perpetrated psychological IPV).

There were several racial differences in the associations between FMPV and IPV. The direct association between psychological FMPV and male-perpetrated psychological IPV was stronger among Hispanic/Latino men compared with African American ($b = .213, SE = .072, p < .001$) and White ($b = .149, SE = .072, p < .05$) men. For the direct association between physical FMPV and male-perpetrated physical IPV, the magnitude was greater among White compared with African American men ($b = .060, SE = .029, p < .05$); Hispanic/Latino men did not differ from African American or White men. The direct association between psychological FMPV and male-perpetrated physical IPV was stronger for White men compared with African American ($b = .180, SE = .048, p < .001$) and Hispanic/Latino ($b = -.308, SE = .090, p < .01$) men. Finally, for the association between physical and psychological FMPV, the magnitude was greater among White compared with African American men ($b = .060, SE = .029, p < .042$).

Discussion

IPV has significant public health consequences, including adverse effects on mental and physical health and increased health care costs. This is particularly the case for fathers, for whom health consequences of IPV often extend to their children. Specifically, children have an increased risk of negative outcomes when there is a history of IPV or heightened relationship conflict between parents (Arias & Ikeda, 2006). However, men's roles as fathers can be leveraged to reduce perpetration of IPV (Gordon et al., 2011; Stover et al., 2011). To develop effective interventions within existing fatherhood programs to reduce violence against women by their male partners, it is essential to understand the mechanisms and risk factors for IPV perpetration among fathers (Tilley & Brackley, 2005). In addition, given the observed differences in rates of IPV perpetration across racial/ethnic groups, it is important to examine what factors uniquely contribute to these differences and their meaning for targeted interventions. The current study examined how stress factors may confer risk of perpetrating IPV by fathers of different racial/ethnic backgrounds.

Perceived Stress and Male-Perpetrated IPV

These findings lend partial support to the stress-coping framework applied to IPV in the current study. Perceived stress was consistently associated with psychological IPV across African American, White, and Hispanic/Latino fathers. However, perceived stress had a small association with physical IPV among White men and the association was not significant among African American and Hispanic/Latino men. It may be that there are other pertinent psychological mechanisms involved in the relationship between perceived stress and physical IPV in particular, such as emotion dysregulation, aggression, or racism/

microaggression. The relation between perceived stress and psychological IPV is consistent with research suggesting that stress might take a psychological toll by impairing judgment and heightening irritability (Brunswick, Lewis, & Messeri, 1992). Heightened stress may tax coping resources, such that when faced with relationship conflict, men are less tolerant or open to prosocial conflict solutions. Under these conditions, men may be more likely to engage in psychological IPV. Men may perceive their use of psychological IPV as “normal” or less harmful than physical IPV, making them more likely to engage in this type of behavior as opposed to physical IPV.

There is also research that suggests the cycle of violence is marked by increased incidents of psychological IPV over shorter time periods, ultimately resulting in physical IPV. Tracking this trajectory and understanding how different groups progress to physical violence in their intimate relationships would be important to understand from an indicated prevention perspective. Time to first physical incident would be another important phenomenon to understand as we tailor interventions for fathers. It is also possible that the men in the present study underreported their use of physical IPV, influencing results; this has been found in other studies (Armstrong et al., 2001). Indeed, rates of IPV were low in this community-based sample of men participating in a fatherhood program, which may have affected our ability to detect meaningful effects in the path model. However, results suggest several important associations between stress-related factors and IPV.

Indirect Associations Between Stressors, Perceived Stress, and IPV

The results suggested perceived stress helps explain associations between stress-related risk factors for IPV (i.e., employment status, FMPV, substance use, criminal justice involvement) and perpetration of IPV among fathers. Across racial and ethnic groups, psychological or physical FMPV was associated with male-perpetrated IPV indirectly via perceived stress. This finding supports our hypothesis that markers of relationship discord, such as FMPV, can lead to IPV via perceived stress. Notably, FMPV was also uniquely associated with male-perpetrated IPV irrespective of perceived stress, as indicated by the direct associations between FMPV and male-perpetrated IPV. These direct associations between FMPV and male-perpetrated IPV are consistent with research suggesting that men who engage in IPV are involved in relationships wherein mutual violence occurs (Stuart et al., 2006; Tilley & Brackley, 2005). Direct associations between FMPV and male-perpetrated IPV may be explained, in part, by qualitative evidence that men’s perceptions of FMPV are part of their narratives regarding the reasons for their own perpetration of IPV (Tilley & Brackley, 2005). For example, a sentiment often expressed by men who engage in IPV is the following: *I am a victim, too; therefore, I am justified in my use of violence* (Henning & Holdford, 2006; Tilley & Brackley, 2005).

An interesting observation from the present study was that respondents reported higher levels of FMPV than male-perpetrated IPV. One explanation could be selective recall of FMPV (i.e., overreporting) and IPV (i.e., underreporting). Armstrong et al.’s (2001) qualitative analysis uncovered that men and women have different levels of IPV recall, and that men had less recollection of their own use of IPV. As such, it is possible that men in the present study might have underreported their own IPV. Other research supports the idea that

people use strategies such as minimization, blaming, and denial when recalling their own use of physical IPV (Henning, Jones, & Holdford, 2005). Fatherhood programs that address male-perpetrated IPV must consider the apparent challenges men face in recalling their use of IPV. In considering male-perpetrated IPV, fatherhood programs should consider fathers' report of FMPV as a potential stressor that at minimum may signal psychological if not physical violence in their current intimate relationship. It may also suggest that these fathers may have poor conflict-management skills and ongoing issues with power and control in their relationships. Programs must also consider how male-reported FMPV is used by male perpetrators to justify their use of IPV. In addition, male-reported FMPV may indicate general relationship challenges that could lead to IPV.

In addition to associations between reported FMPV and IPV, the present study observed that a history of criminal justice involvement was indirectly associated with IPV perpetration via perceived stress across racial and ethnic groups. Of note, we excluded people who reported prior spousal abuse convictions, thus increasing confidence that these effects do not merely capture past IPV-related justice system involvement predicting future instances of IPV. Because our data are cross-sectional, we cannot infer any sort of causal relationship between criminal justice involvement and IPV. However, using a stress-coping framework, there are several possible explanations for these findings. Prolonged adverse events, such as incarceration, can create lasting and chronic stress for men (Lazarus & Folkman, 1984). The chronic stress associated with incarceration, which includes subsequent barriers and difficulties with appropriate job placement, perceived and anticipated stigma, and balancing other demands (e.g., family responsibilities/obligations), may overburden the coping resources of men. This perceived burden might increase the likelihood of IPV perpetration (Gordon et al., 2011). An alternative explanation could be that men involved in the criminal justice system may have developed more maladaptive patterns of coping with stress, because of the structure and purpose of the correctional facility. Their incarceration experience may contribute to them resorting to violence when conflicts arise in their intimate relationships. Examining maladaptive coping strategies, in particular those used to manage interpersonal conflict, is an important direction for future research. In any case, men with prior criminal justice involvement appear to be at increased risk for engaging in IPV. This suggests that more resources and greater attention is warranted to help counteract incarceration risks for families.

Across groups, age was not associated with perceived stress or IPV outcomes via perceived stress, which is inconsistent with the conclusions of Folkman, Lazarus, Pimley, and Novacek (1987), which indicate that the ability to cope with stress improves with age. Among low-income fathers in the present study, perceived stress does not explain the association between age and IPV. In this ethnically diverse, low-income sample of fathers who likely experience high levels of stress, the ability to cope with stress may not improve with age as found in other studies. This is an important variable to incorporate in future research.

Racial and Ethnic Differences

The present study was particularly interested in differences across racial and ethnic groups. Racial and ethnic differences among low-income fathers in the present study suggest

differences in the stress-coping model of IPV among African American, White, and Hispanic/Latino men. There were significant differences based on race and ethnicity in the magnitude of direct and indirect associations of FMPV on male-perpetrated IPV via perceived stress. However, the pattern of differences across groups was not clear. For example, although the indirect association between psychological FMPV with physical IPV was greater among African American men than White men, there were no significant differences based on other associations between types of FMPV and IPV. In addition, there was no clear pattern of differences between groups in the direct associations of FMPV with male-perpetrated IPV. Nonetheless, it is apparent that further research is needed to identify possible patterns that might emerge across racial and ethnic groups. Further studies may be needed to elucidate the racial/ethnic differences that Caetano and associates (2008) found, in which African American men are more likely to be in mutually violent relationships. A stress-coping model could be further developed to explain why men of different races or ethnicities differ in the associations between FMPV and male-perpetrated IPV. A more definitive picture of these differences would better inform culturally tailored approaches to addressing the role of FMPV in male-perpetrated IPV.

There was an indirect association between employment status and psychological IPV via perceived stress among African American men such that the indirect association was greater among African American men who were employed than those who were unemployed. Although there was an indirect association between employment status and psychological IPV among African American men, the association was not significant among White and Hispanic/Latino men. Extant studies provide possible explanations for these findings. African American men earn substantially less than White men (62% of their White counterparts' earnings) and are more likely to live in poverty (Heflin & Pattillo, 2006). Furthermore, African American men report greater racial discrimination in the workplace and more stress related to racial discrimination than White men (Krieger et al., 2006; Williams, Yu, Jackson, & Anderson, 1997). Employed African American men may contend with the stressors associated with employment-related disparities, which may in turn lead to poor coping in the form of IPV.

Building on previous research showing a link between alcohol consumption and IPV perpetration (Stuart, 2005; Thompson et al., 2003), alcohol consumption had an indirect, albeit small, association with psychological IPV via perceived stress among African American but not White and Hispanic/Latino men. There are several explanations for the relationship between alcohol use and IPV among African American men. For example, alcohol consumption could be a way to cope with stress and provide an escape (Cooper, Frone, Russell, & Mudar, 1995). African American men may contend with a greater degree of social and structural stresses compared with other races (e.g., social and economic marginalization associated with racism), and be more likely to use alcohol to cope with this stress, which may impair their judgment and undermine their ability to engage in positive conflict-management behaviors, prompting IPV. Indeed, there is evidence to suggest a heightened relationship between stressors and problematic alcohol use among African Americans compared with Caucasians and Hispanics (Jones-Webb, Karriker-Jaffe, Zemore, & Mulia, 2016). These results must be interpreted with caution due to the use of a dichotomous alcohol measure.

Contrary to our hypotheses, an inverse relationship between marijuana use and male-perpetrated psychological IPV approached significance among African American men. This is in contrast to previous investigations showing a strong positive association between marijuana use and IPV (Feingold, Kerr, & Capaldi, 2008), but consistent with mixed findings in the literature (Moore & Stuart, 2005). This inverse observation may be the function of our dichotomous measurement of marijuana use, whereas continuous measurement that not only examines use but also the frequency and quantity of use might have resulted in the hypothesized positive relationship of higher use and male-perpetrated IPV. This postulation is buttressed by Feingold, Kerr, and Capaldi's (2008) study in which marijuana and alcohol dependence were both associated with increased male-perpetrated IPV. In this context, it may be that the risk of male-perpetrated IPV is not increased by marijuana use, but by problematic marijuana use. Alternatively, it may be that the pharmacological effects of marijuana are associated with less perceived stress, and hence lower rates of IPV among certain individuals, as marijuana is often used to manage difficult emotions (Semcho, Bilsky, Lewis, & Leen-Felder, 2016). In addition, there may be cultural differences in expectancies associated with marijuana use that might explain a significant indirect effect with IPV among African American men. Such speculation requires empirical testing.

An important consideration in the present study is that there were over 4 times more African American men and 3 times more White men than Hispanic/Latino men in the sample. As a result, there were several indirect effects that might have been significant if there were more Hispanic/Latino men in the sample, including indirect effects of employment, psychological FMPV, alcohol use, and marijuana use on psychological and/or physical IPV via perceived stress.

Limitations

Despite the strengths of the study, such as identifying factors that increase risk of IPV among and ethnically and racially diverse fathers, several limitations should be noted. Many of the effects observed in the present study were small, and some expected effects (e.g., correlation between age and IPV) were not obtained. Results should be interpreted in light of effect size. In addition, we retained effects that approached statistical significance in our final model due to the exploratory nature of examining racial differences; however, research should replicate these effects in additional samples to determine generalizability. Due to the cross-sectional nature of the study, causality and temporal relations among variables cannot be inferred from the results. All of the respondents completed the measures with their case managers, which may have increased their need to be seen in a socially favorable manner, and hence affected self-report of substance use and IPV for instance. Of note, we did not have any collateral report of respondent FMPV or IPV, and thus had to rely on self-report as the sole source of data. In addition, the CTS-2 (Straus et al., 1996) caused confusion and was reported as being repetitive by participants. As such, investigators were responsive to participants' feedback and combined the items measuring psychological and physical IPV and FMPV. Moreover, alcohol and marijuana use in the past 30 days were assessed using dichotomous items; future research should use nuanced measures that assess frequency and severity of use, which have important implications for IPV. Our shortened measure of

perceived stress had low internal consistency, which may have biased our results. In addition, the present study conceptualizes IPV through a stress-coping framework, and the results may not generalize to individuals whose IPV is instrumentally motivated (e.g., as in individuals high on antisocial features). Because many men who engage in IPV feel that they need to have control and power over women, future studies would be strengthened by including a masculinity measure (e.g., Conformity to Masculine Norms; Mahalik et al., 2003) or an assessment of antisocial features to examine how these variables affect IPV in the context of a stress-coping framework. Finally, we were unable to account for all potentially relevant stressors that may influence IPV (e.g., racism and microaggressions), and future research should incorporate other key stressors to best understand these relationships.

Implications

Despite the limitations, the present study has several strengths. The present study examined IPV perpetration among a large community-based sample of ethnically diverse, low-income fathers. The results raise interesting questions about modifiable risk factors for IPV that can be investigated through additional research or addressed through fatherhood programming. Specifically, fatherhood programs may benefit from incorporating techniques that are proven to reduce stress and address substance use/other maladaptive coping strategies associated with stress. In addition, inasmuch as FMPV is indicative of relationship discord, these findings suggest the importance of fostering healthy intimate relationship skills in men and reducing relationship conflict between fathers and their female partners. Several key components to cultivating healthy romantic relationships are accountability for one's actions, awareness of one's role in interactions, and understanding of how one's actions might undermine or support the building of a healthy bond with partners (Gordon et al., 2012). Importantly, the present study suggests that it is important to consider the unique stressors of specific racial/ethnic groups when addressing IPV. For instance, there may be differences in expression of conflict among African Americans that affect the way IPV interventions should be delivered.

Given that fatherhood may play an important protective role in the success of interventions that are designed to reduce male-perpetrated IPV (Stover et al., 2011), fatherhood programs may be in a unique position to reduce the public health consequences of male-perpetrated IPV. Overall, the present study raises questions about the proactive role that fatherhood programs can play in reducing IPV risk and promoting the physical and mental health of families.

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References

- Arias I, & Ikeda R (2006). Etiology and surveillance of intimate partner violence In Lutzker JR (Ed.), *Preventing violence: Research and evidence-based intervention strategies* (pp. 173–194). Washington, DC: American Psychological Association.
- Armstrong T, Heideman G, Corcoran K, Fisher B, Medina K, & Schafer J (2001). Disagreement about the occurrence of male to female intimate female violence: A qualitative study. *Family & Community Health*, 24, 55–75. [PubMed: 11275571]
- Bamishigbin ON, Schetter CD, Guardino CM, Stanton AL, Schafer P, Shalowitz M, Lanzi RG, Thorp J, & Raju T (2017). Risk, resilience, and depressive symptoms in low income African American fathers. *Cultural Diversity and Ethnic Minority Psychology*, 23, 70–80. [PubMed: 27244219]
- Bonomi AE, Anderson ML, Rivara FP, & Thompson RS (2009). Health care utilization and costs associated with physical and nonphysical-only intimate partner violence. *Health Services Research*, 44, 1052–1067. [PubMed: 19674432]
- Brunswick A, Lewis C, & Messeri P (1992). Drug use and stress: Testing a coping model in an urban African-American sample. *Journal of Community Psychology*, 20, 148–162.
- Caetano R, Field CA, Ramisetty-Mikler S, & McGratch C (2005). The 5-year course of intimate partner violence among White, Black, and Hispanic couples in the United States. *Journal of Interpersonal Violence*, 20, 1039–1057. [PubMed: 16051726]
- Caetano R, Ramisetty-Mikler S, & Field CA (2005). Unidirectional and bidirectional intimate partner violence among White, Black, and Hispanic couples in the United States. *Violence and Victims*, 20, 393–406. [PubMed: 16250407]
- Caetano R, Ramisetty-Mikler S, & Harris TR (2007). Acculturation stress, drinking, and intimate partner among Hispanic couples in the U.S. *Journal of Intimate Partner Violence*, 22, 1431–1447.
- Caetano R, Vaeth PAC, & Ramisetty-Mikler S (2008). Intimate partner violence victim and perpetrator characteristic among couples in the United States. *Journal of Family Violence*, 23, 507–518.

- Cohen J (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). New York, NY: Academic Press.
- Cohen S, Kamarck T, & Mermelstein R (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24, 386–396.
- Coker AL, Davis KE, Arias I, Desai S, Sanderson M, Brandt H, & Smith P (2002). Physical and mental health effects of intimate partner violence for men and women. *American Journal of Preventive Medicine*, 23, 260–268. [PubMed: 12406480]
- Cooper ML, Frone MR, Russell M, & Mudar P (1995). Drinking to regulate positive and negative emotions: A motivational model of alcohol use. *Journal of Personality and Social Psychology*, 69, 990–1005. [PubMed: 7473043]
- Corbin WR, Farmer NM, & Nolen-Hoekesma S (2013). Relations among stress, coping strategies, coping motives, alcohol consumption, and related problems: A mediated moderation model. *Addictive Behaviors*, 38, 1912–1919. [PubMed: 23380486]
- Cornwall A, & Jewkes R (1995). What is participatory research? *Social Science & Medicine*, 41, 1667–1676. [PubMed: 8746866]
- Cunradi CB, Caetano R, Clark C, & Schafer J (2000). Neighborhood poverty as a predictor of intimate partner violence among White, Black, and Hispanic couples in the United States: A multilevel analysis. *Annals of Epidemiology*, 10, 297–308. [PubMed: 10942878]
- Eckhardt CI, Murphy C, Black D, & Suhr L (2006). Intervention programs for perpetrators of intimate partner violence: Conclusions from a clinical research perspective. *Public Health Reports*, 121, 369–381. [PubMed: 16827438]
- Eckhardt CI, Murphy CM, Whitaker DJ, Sprunger J, Dykstra R, & Woodard K (2013). The effectiveness of intervention programs for perpetrators and victims of intimate partner violence. *Partner Abuse*, 4, 196–231.
- Feingold A, Kerr DCR, & Capaldi DM (2008). Associations of substance use problems with intimate partner violence for at-risk men in long-term relationships. *Journal of Family Psychology*, 22, 429–438. [PubMed: 18540771]
- Felson RB, & Cares AC (2005). Gender and the seriousness of assaults on intimate partners: Intimate partners and other victims. *Journal of Marriage and Family*, 67, 1182–1195.
- Folkman S, Lazarus RS, Pimley S, & Novacek J (1987). Age differences in stress and coping processes. *Psychology and Aging*, 2, 171–184. [PubMed: 3268206]
- Gordon DM, Hunter B, Woods LN, Tinney B, Bostic B, Malone S, . . . Smith A (2012). Increasing outreach, connection, and services to low-income, non-custodial fathers: How did we get here and what do we know. *Fathering*, 10, 101–111. [PubMed: 24817832]
- Gordon DM, Iwamoto D, Watkins ND, Kershaw T, Mason D, & Judkins A (2011). Promoting responsible fatherhood programming: Factors affecting low-income fathers' involvement in child protection services and court-restricted access to their children. *Journal of Poverty*, 15, 184–205.
- Hampton R, Oliver W, & Magarian L (2003). Domestic violence in the African American community: An analysis of social and structural factors. *Violence Against Women*, 9, 533–557.
- Heflin CM, & Pattillo M (2006). Poverty in the family: Race, siblings, and socioeconomic heterogeneity. *Social Science Research*, 35, 804–822.
- Henning K, & Holdford R (2006). Minimization, denial, and victim blaming by batterers: How much does the truth matter? *Criminal Justice and Behavior*, 33, 110–130.
- Henning K, Jones AR, & Holdford R (2005). "I didn't do it, but if I did I had a good reason": Minimization, denial, and attributions of blame among male and female domestic violence offenders. *Journal of Family Violence*, 20, 131–139.
- Hyman SM, & Sinha R (2009). Stress-related factors in cannabis use and misuse: Implications for prevention and treatment. *Journal of Substance Abuse Treatment*, 36, 400–413. [PubMed: 19004601]
- Jones AS, Dienemann J, Schollenberger Kub J, O'Campo P, Gielsen AC, & Campbell JC (2006). Long-term costs of intimate partner violence in a sample of female HMO enrollees. *Women's Health Issues*, 16, 252–261. [PubMed: 17055378]

- Jones-Webb R, Karriker-Jaffe KJ, Zeng SE, & Mulia N (2016). Effects of economic disruptions on alcohol use and problems: Why do African Americans fare worse? *Journal of Studies on Alcohol and Drugs*, 77, 261–271. [PubMed: 26997184]
- Kimmel MS (2002). “Gender symmetry” in domestic violence: A substantive and methodological research review. *Violence Against Women*, 8, 1332–1363.
- Kline RB (2005). *Principles and practice of structural equation modeling* (2nd ed.). New York, NY: Guilford Press.
- Krieger N, Waterman PD, Harman C, Bates LM, Stoddard AM, Quinn MM, . . . Barbeau EM (2006). Social hazards on the job: Workplace abuse, sexual harassment, and racial discrimination: A study of black Latino, and white low-income women and men workers in the United States. *International Journal of Health Services*, 36, 51–85. [PubMed: 16524165]
- Lacey KK, McPherson MD, Samuel PS, Sears KP, & Head D (2013). The impact of different types of intimate partner violence on the mental and physical health of women in different ethnic groups. *Journal of Interpersonal Violence*, 28, 359–385. [PubMed: 22929348]
- Lazarus RS, & Folkman S (1984). *Stress, appraisal, and coping*. New York, NY: Springer.
- Logan TK, Walker R, Staton M, & Leukefeld C (2001). Substance use and intimate violence among incarcerated males. *Journal of Family Violence*, 16, 93–114.
- Mahalik JR, Locke BD, Ludlow LH, Demer MA, Scott RP, Gottfried M, & Freitas G (2003). Development of the Conformity to Masculine Norms Inventory. *Psychology of Men and Masculinity*, 4, 3–25.
- Moore TM, & Stuart GL (2005). A review of the literature on marijuana and interpersonal violence. *Aggression and Violent Behavior*, 10, 171–192.
- Muthén LK, & Muthén BO (2010). *Mplus user’s guide* (6th ed.). Los Angeles, CA: Muthén & Muthén.
- Sarantakos S (2004). Deconstructing self-defense in wife-to-husband violence. *The Journal of Men’s Studies*, 12, 277–296.
- Semcho S, Bilsky SA, Lewis SF, & Leen-Feldner EW (2016). Distress tolerance predicts coping motives for marijuana use among treatment seeking young adults. *Addictive Behaviors*, 58, 85–89. [PubMed: 26921722]
- Snow DL, Sullivan TP, Swan SC, Tate DC, & Klein E (2006). The role of coping and problem drinking in men’s abuse of female partners: Test of a path model. *Violence and Victims*, 21, 267–285. [PubMed: 16761854]
- Spencer RA, Renner LM, & Clark CJ (2016). Patterns of dating violence perpetration and victimization in U.S. young adult males and females. *Journal of Interpersonal Violence*, 31, 2576–2597. [PubMed: 25846756]
- Stover CS (2013). Fathers for change: A new approach to working with fathers who perpetrate intimate partner violence. *Journal of the American Academy of Psychiatry and the Law*, 41, 65–71.
- Stover CS, McMahon TJ, & Easton C (2011). The impact of fatherhood on treatment response for men with co-occurring alcohol dependence and intimate partner violence. *The American Journal of Drug and Alcohol Abuse*, 37, 74–78. [PubMed: 21090960]
- Straus MA, Hamby SL, Boney-McCoy S, & Sugarman DB (1996). The revised Conflict Tactics Scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues*, 17, 283–316.
- Stuart GL (2005). Improving violence interventions outcomes by integrating alcohol treatment. *Journal of Interpersonal Violence*, 20, 388–393. [PubMed: 15722492]
- Stuart GL, Meehan JC, Moore TM, Morean M, Hellmuth J, & Follansbee K (2006). Examining a conceptual framework of intimate partner violence in men and women arrested for domestic violence. *Journal of Studies on Alcohol*, 67, 102–112. [PubMed: 16536134]
- Stuart GL, Temple JR, Follansbee KW, Bucossi MM, Hellmuth JC, & Moore TM (2008). The role of drug use in a conceptual model of intimate partner violence in men and women arrested for domestic violence. *Psychology of Addictive Behaviors*, 22, 12–24. [PubMed: 18298227]
- Tabachnick BG, & Fidell LS (2007). *Using Multivariate Statistics* (5th ed.). New York: Allyn and Bacon.

- Teitelman AM, Ratcliffe SJ, Morales-Aleman MM, & Sullivan CM (2008). Sexual relationship power, intimate partner violence, and condom use among minority urban girls. *Journal of Interpersonal Violence*, 23, 1694–1712. [PubMed: 18349344]
- Thompson MP, Saltzman LE, & Johnson H (2003). A comparison of risk factors for intimate partner violence-related injury across two national surveys on violence against women. *Violence Against Women*, 9, 438–457.
- Tilley D, & Brackley M (2005). Men who batter intimate partners: A Grounded Theory study of the development of male violence in intimate partner relationships. *Issues in Mental Health Nursing*, 26, 281–297. [PubMed: 16020047]
- Tjaden P, & Thoennes N (2000). Extent, nature, and consequences of intimate partner violence: Findings from the National Violence Against Women Survey. Washington DC: National Institute of Justice and Centers for Disease Control.
- Warner TD (2010). Violent acts and injurious consequences: An examination of competing hypotheses about intimate partner violence using agency-based data. *Journal of Family Violence*, 25, 183–193.
- Wartig SL, Forshaw MJ, South J, & White AK (2013). New, normative, English-sample data for the short form of Perceived Stress Scale (PSS-4). *Journal of Health Psychology*, 18, 1617–1628. [PubMed: 24155195]
- Wenger MR (2015). Patterns of misreporting intimate partner violence using matched pairs. *Violence and Victims*, 30, 179–193. [PubMed: 25929136]
- Whitaker DJ, Haileyesus T, Swahn M, & Saltzman LS (2007). Differences in frequency of violence and reported injury between relationships with reciprocal and nonreciprocal intimate partner violence. *American Journal of Public Health*, 97, 941–947. [PubMed: 17395835]
- Williams DR, Yu Y, Jackson JS, & Anderson NB (1997). Racial differences in physical and mental health: Socioeconomic status, stress and discrimination. *Journal of Health Psychology*, 2, 335–351. [PubMed: 22013026]

Figure 1.

Respecified, multiple-group path model.

Note. This figure displays (a) indirect associations of age, employment status, psychological and physical FMPV, substance use, and criminal justice involvement with psychological and physical IPV and (b) direct associations between psychological and physical FMPV and IPV. Standardized path estimates and odds ratios are reported for African American, White, and Hispanic/Latino fathers, respectively. FMPV = female-to-male partner violence; IPV = intimate partner violence.

^m $p < .10$, $^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$.

Table 1.Comparison of Sample Characteristics by Racial/Ethnic Group ($N = 1,971$).

Sample Characteristics	Racial/Ethnic Groups			<i>p</i>
	African American Men ($n = 933$) <i>M</i> (<i>SD</i>)/%	White Men ($n = 795$) <i>M</i> (<i>SD</i>)/%	Hispanic/Latino Men ($n = 243$) <i>M</i> (<i>SD</i>)/%	
Age	33.77 (8.56) ^a	34.48 (9.07) ^a	31.24 (9.20) ^b	.000
Employment status (% employed)	21.4 ^a	38.4 ^b	19.9 ^a	.000
Psychological FMPV	0.73 (0.92) ^a	1.11 (1.10) ^b	0.77 (0.95) ^a	.000
Physical FMPV	0.34 (0.68) ^a	0.47 (0.84) ^b	0.38 (0.71) ^{a,b}	.001
Alcohol use past 30 days (% users)	26.6 ^a	25.5 ^a	18.4 ^b	.012
Marijuana use past 30 days (% users)	13.4 ^a	5.0 ^b	7.4 ^b	.000
Criminal justice involvement (%)				.000
None	22.8 ^a	35.9 ^b	31.5 ^b	
Misdemeanors only	10.7 ^a	21.5 ^b	11.7 ^a	
Felonies only	29.3 ^a	11.2 ^b	24.7 ^a	
Misdemeanors and felonies	37.2 ^a	31.4 ^b	32.1 ^{a,b}	
Perceived stress	6.7 (3.82) ^a	7.27 (3.26) ^b	6.51 (3.98) ^a	.000
Psychological IPV	0.71 (0.86) ^a	0.97 (0.88) ^b	0.76 (0.92) ^a	.000
Physical IPV	0.21 (0.50) ^a	0.20 (0.46) ^b	0.20 (0.51) ^a	.791

Note. FMPV = female-to-male partner violence.

^a Means/percentages without a common superscript letter are significantly different from one another ($p < .05$).

^b Means/percentages without a common superscript letter are significantly different from one another ($p < .05$).

Table 2.

Correlation Coefficients.

Study Variables	1	2	3	4	5	6	7	8	9	10
1. Age	—									
2. Employment status	.02	—								
3. Psychological FMPV	-.01	.07**	—							
4. Physical FMPV	-.05	-.00	.42**	—						
5. Alcohol use	-.01	.08**	.03	.00	—					
6. Marijuana use	-.10*	-.05*	-.01	-.02	.26**	—				
7. Criminal justice	.04	-.19**	.03	.12**	-.06*	.10*	—			
8. Perceived stress	-.01	.07**	.21**	.24**	.05*	-.01	.18**	—		
9. Perpetration of psychological IPV	-.01	.03	.61**	.32**	.01	.01	.09**	.18**	—	
10. Perpetration of physical IPV	-.01	.01	.25**	.55**	.03	.01	.12**	.18**	.34**	—
<i>M</i> /threshold/mode	33.32	0.28	0.87	0.39	0.25	0.09	2.00	6.91	0.81	0.18
<i>SD</i>	8.66	0.45	1.00	0.74	0.43	0.29	1.23	3.63	0.88	0.45
Range	0–71	0–1	0–1	0–1	0–1	0–1	0–4	0–16	0–1	0–1

Note. Pearson's product-moment correlation coefficients were used for correlations between continuous variables, point-biserial or polyserial correlation coefficients were used when one of the variables was dichotomous, phi-coefficients were used for two dichotomous variables, and Spearman's Rho coefficients were used for the ordinal variable (i.e., criminal justice system involvement). Means are reported for continuous variables, thresholds for categorical variables, and mode for the ordinal variable.

FMPV = female-to-male partner violence; criminal justice = criminal justice involvement; IPV = intimate partner violence.

* $p < .05$.

** $p < .01$.

Table 3.

Significant Indirect Paths in a Model Examining the Mediating Role of Perceived Stress in the Relations Between Stressors and IPV ($N = 1,971$).

Indirect Effect			β	b	SE	p
African American ($n = 933$)						
Employment	→	Psychological IPV by self	.010	.020	.008	.015
Psychological FMPV	→	Psychological IPV by self	.028	.027	.001	.000
Physical FMPV	→	Psychological IPV by self	.009	.012	.006	.030
Alcohol	→	Psychological IPV by self	.011	.021	.008	.012
Marijuana	→	Psychological IPV by self	-.007	-.019	.010	.056
Criminal justice	→	Psychological IPV by self	.025	.019	.005	.000
White ($n = 795$)						
Psychological FMPV	→	Psychological IPV by self	.025	.020	.007	.004
Criminal justice	→	Psychological IPV by self	.009	.006	.003	.026
Psychological FMPV	→	Physical IPV by self	.027	.011	.004	.008
Criminal justice	→	Physical IPV by self	.010	.003	.002	.035
Hispanic/Latino ($n = 243$)						
Physical FMPV	→	Psychological IPV by self	.033	.033	.016	.044
Criminal justice	→	Psychological IPV by self	.035	.026	.011	.023

Note. Direct Paths between female-to-male partner violence and intimate partner violence are included in this model. IPV = intimate partner violence; FMPV = female-to-male partner violence.

Table 4.

Nonsignificant Indirect Paths Among Hispanic/Latino Men.

Indirect Effect			β	<i>b</i>	<i>SE</i>	<i>p</i>
Employment	→	Psychological IPV by self	.014	.034	.025	.179
Physical FMPV	→	Psychological IPV by self	.010	.013	.016	.414
Alcohol	→	Psychological IPV by self	-.015	-.035	.025	.167
Marijuana	→	Psychological IPV by self	.017	.058	.038	.132
Psychological FMPV	→	Physical IPV by self	.016	.009	.008	.231
Marijuana	→	Physical IPV by self	.008	.016	.015	.290
Criminal justice	→	Physical IPV by self	.017	.007	.006	.214

Note. *n* = 243 (Hispanic men). IPV = intimate partner violence; FMPV = female-to-male partner violence.