

1 Running head: PARTNER ABUSE AND HETEROSEXUAL HIV RISK

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6 Past Abuse by an Intimate Partner and Women's Heterosexual HIV Risk

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**Abstract**

32 **Context:** Recent studies suggest that domestic violence may contribute to increased HIV risk in  
33 numerous ways.

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35 **Objective:** The objective of this study was to investigate direct and indirect associations  
36 between a woman's past abuse by an intimate partner and her current heterosexual HIV risk.

37

38 **Patients:** One hundred forty-one women of diverse ethnicities were recruited

39

40 **Setting:** Four urban community-based health clinics.

41

42 **Design:** Data were collected through four structured in-person interviews, over an 18-month  
43 period. Structural equation modeling was used to compare pathways of heterosexual HIV risk  
44 for those with and without a history of abuse.

45

46 **Main outcome measures:** Measures included seven areas related to past abuse and HIV risk  
47 behaviors. Psychometrically valid and reliable instruments from other HIV/AIDS research were  
48 adapted for this study.

49

50 **Results:** Over half of the participants reported past physical, emotional, or sexual abuse by an  
51 intimate partner. Women with past abuse reported higher rates of sexual coercion, depression,  
52 passive coping, and current partner abusiveness. They had riskier current partners, but the  
53 association of abuse with amount of unprotected intercourse was mediated by several factors that  
54 differed by group. Among abused women, depression and coercion were associated with more  
55 unprotected intercourse; partner abusiveness, passive coping and coercion were associated with  
56 greater partner risk. Among non-abused women, less involved relationships and less  
57 communication about safer sex were associated with greater partner risk.

58

59 **Conclusions:** This study suggests that a woman's past history of abuse is associated with  
60 behaviors that place her at risk for HIV. Prevention work may need to take into account  
61 women's experiences of abuse and depression, and specially tailor interventions for women with  
62 abusive partners.

63

64 **Key words:** HIV risk, heterosexual, women, intimate partner violence

65 Violence against women is commonplace. An estimated six million physical assaults per year  
66 are directed at 1.9 million adult women,<sup>1</sup> and nearly 25% of all women in the US have experienced  
67 sexual or physical violence by their current or former intimate partners.<sup>2</sup> Recent research has found  
68 associations between violence against women and HIV serostatus. For instance, women living with  
69 HIV are more likely than women of negative or unknown serostatus to have experienced rape, physical  
70 assault, or robbery/attack.<sup>3,4</sup> Among women receiving HIV-related care, the lifetime prevalence of  
71 physical or sexual abuse by an intimate male partner is estimated to be 74% or higher.<sup>5</sup>

72 Related research suggests several causal pathways whereby intimate partner violence may lead  
73 to increased HIV risk.<sup>6,7</sup> By engaging in high-risk sexual behavior, such as having multiple sex  
74 partners and unprotected anal intercourse,<sup>8-12</sup> a history of partner abuse has been linked with  
75 substance abuse, which, in addition to being a means of infection,<sup>13,14</sup> can blur sexual decision  
76 making.<sup>15</sup> Patterns of high-risk behavior identified among violent male partners, may translate into  
77 increased HIV risk for their female partners.<sup>16,17</sup> The negotiation of safer sexual practices may be  
78 hindered if a woman has limited relationship power,<sup>17,18</sup> and requesting condom use may in fact  
79 increase her risk of abuse.<sup>19-21</sup> Even with evidence to suggest a more complex male response to such  
80 requests,<sup>22</sup> female anticipation of partner violence appears to have a real effect on the latter's sexual  
81 behavior, including reduced condom requests,<sup>23</sup> and possible reluctance to get HIV tested or reveal  
82 positive HIV serostatus for fear of partner violence.<sup>24-26, 5</sup> Additionally, social conditions, such as  
83 subordination of women<sup>27-29</sup> and certain cultural beliefs (e.g., concerning women's roles)<sup>27,30</sup> may  
84 contribute to both violence against women and HIV risk.

85 Empirical research addressing these relationships is limited, focusing primarily on women in  
86 drug treatment, female partners of male drug users, or women living with HIV. Higher than average  
87 rates of partner abuse have been reported among these groups.<sup>31-34</sup> To date, few studies have  
88 investigated in detail the associations between partner abuse and current heterosexual HIV risk.  
89 Numerous studies have focused on childhood sexual abuse and HIV risk, finding significant

90 associations<sup>15, 35-41</sup> and indirect effects.<sup>42</sup> Miller<sup>6</sup> proposes that increased HIV risk is mediated by the  
91 sequelae of long-term sexual abuse in women, and suggests a model identifying various causal  
92 pathways, including drug use, risk-taking, and psychopathology.

93 Identifying the possible connections between intimate partner abuse and HIV risk is crucial to  
94 developing effective interventions to prevent the heterosexual spread of HIV. The goal of this study  
95 was to explore the direct and indirect associations between past abuse by a partner and current  
96 heterosexual HIV risk.

97 Specifically, we sought to:

- 98 (1) Document what kinds of partner abuse study participants had experienced;
- 99 (2) Examine the relationship between past partner abuse and heterosexual HIV risk;
- 100 (3) Identify factors that might mediate the relationship between past partner abuse and  
101 heterosexual HIV risk; and
- 102 (4) Compare the pathways to heterosexual HIV risk for women who have and have not been  
103 abused by a partner.

## 104 **METHODS**

### 105 **Study Participants**

106 Participants were women taking part in a study of HIV counseling and testing. They were  
107 either voluntarily seeking HIV counseling and testing (n=152), or using other clinic services and who  
108 had never been tested for HIV (n=78). Pregnant women were excluded. Volunteers were recruited  
109 sequentially from four urban community-based health clinics, and represented diverse client  
110 populations (described in previous publications<sup>42,43,44</sup>). Approximately 80% of eligible women agreed  
111 to participate, and their demographics were typical of all women using the clinics.

112 Of 230 women recruited, 165 (74.6%) completed the 18-month study period. Women  
113 completing the study were more likely to be Caucasian, have more education, and be employed at

114 baseline than those who did not (all  $p < .05$ ). There were no differences in heterosexual HIV risk at  
115 baseline. Excluded from the analyses were women testing positive for HIV antibodies ( $n=8$ ) during the  
116 study, women who had sex only with women ( $n=15$ ), and those not sexually active during the entire  
117 study period ( $n=6$ ). These exclusions (2 women met more than 1 criterion) resulted in a final sample of  
118 141.

119 Participants were diverse in social and demographic backgrounds. The age range was 18-56  
120 years (mean 30.8,  $SD=8.2$ ), and ethnic mix was white (54.6%), African American (31.2%), Latina  
121 (12.1%), and other (2.1%). Education ranged from no formal education to graduate degrees; 56.7% had  
122 completed 12 years of school or less. The majority (58.9%) were employed. Annual personal income  
123 was distributed as follows: below \$6,000 (24.8%), \$6,000-11,999 (28.4%), \$12,000-17,999 (15.6%),  
124 \$18,000-\$56,000 (31.2%). Fifty-six percent of participants had one or more children.

### 125 Procedures

126 The data were collected through structured in-person interviews, conducted by trained  
127 interviewers with at least a Masters degree in psychology. Interviews occurred at baseline, and at two  
128 weeks, and three, twelve, and eighteen months follow-up. Interviews were conducted in Spanish or  
129 English, as required, and were aided by specific verbal instructions and response cards. Further details  
130 about recruitment and interview procedures are described elsewhere.<sup>41</sup>

### 131 Measures

132 In light of research findings reviewed above, the following seven topics were measured:  
133 heterosexual HIV risk, past abuse of a partner, past experiences of coercion, psychological factors,  
134 current relationship factors, and sociodemographic characteristics. Psychometrically valid and reliable  
135 instruments from other HIV/AIDS research were adapted for this study, and simplified to enhance  
136 comprehension.

**Heterosexual HIV Risk**

Heterosexual HIV risk was assessed at the final interview, and was operationalized as two components:

Unprotected Intercourse. The behavioral measure of HIV risk was the number of acts of unprotected vaginal and anal intercourse during the month preceding the final interview. Questions similar to those developed for the Multicenter AIDS Cohort Study<sup>45</sup> were used, adding sexual activities specific to women. Respondents reported the number of times they had vaginal and anal intercourse, and the number of times condoms were used. The one-month time frame was selected to include variance in sexual activity, yet allow accurate recall.<sup>46</sup> The square root of this variable was used due to the skewed distribution of women not having intercourse.

Partner Risk. For each sexual partner during the previous month, participants rated the likelihood (from 0="definitely not" to 4="definitely yes") that he had HIV or injected drugs, had sex with men or had sex with other women. Partner risk was categorized as high (probably or definitely has HIV or had sex with men or injected drugs), moderate (unsure about MSM or IDU, or probably/definitely had multiple partners), uncertain (MSM, IDU unlikely, unsure about multiple partners), or no known risk based on the highest level of any partner's risk. These data represent women's assessments; their accuracy is unknown.

**Past Abuse by a Partner**

Participants were asked at the 12-month follow-up interview "Have you ever been involved with a partner who you felt was abusive?" Those who answered "yes" were asked to describe the circumstances, the relationship, and the type and time period of abuse. Descriptions of abuse were categorized, by the agreement of two coders, as physical, emotional, and sexual. Although participants were not asked to identify the perpetrator, who might have been a current partner, nearly all indicated that the perpetrator was a past partner.

## **Past Experiences of Coercion**

Questions about coercion were developed for this study.

Coercion to have sex. Women were asked “How often have you had sex when you didn’t really want to because of the following circumstances...”. The seven circumstances represented a range of coercion, from “You wanted to please the other person” to “The person physically forced you to have sex.” Responses, using Likert-type scale from 1 (never) to 5 (always), were averaged. Cronbach’s alpha was 0.86, indicating good internal consistency.

Coercion not to use a condom. Questions were developed for this study. Women were asked whether in the past six months they had “started out thinking that you would use a condom, but ended up not using one.” “No” was coded as 0. If yes, they were asked how often it was because of eleven different reasons representing a range of coercion, from “You didn’t want to bother” to “The person forced you to have sex without a condom.” Responses, using Likert-type scale from 1 (never) to 5 (always), were averaged. Cronbach’s alpha was 0.85.

## **Psychological Factors**

Psychological predictors were selected based on their relevance in previous studies of HIV risk. All were assessed at the 12-month follow-up interview.

Self-esteem. The Rosenberg Self-esteem Scale<sup>47,48</sup> was administered. Responses, using a Likert-type scale from 1 (strongly disagree) to 5 (strongly agree), were averaged. Cronbach’s alpha was 0.88. Higher self-esteem was expected to be associated with lower HIV risk.

Anxiety and depression. The short version of the Hopkins Symptom Checklist provided independent measures of anxiety and depression.<sup>49</sup> Answers ranged from 0 (“not at all”) to 3 (“often”) on a Likert-type scale. “Headaches” was removed from the anxiety scale to improve the internal consistency. Cronbach’s alpha was 0.88 for depression and 0.86 for anxiety. Anxiety and depression were expected to be associated with greater HIV risk.

185 Coping strategies. As in previous AIDS research,<sup>50</sup> the Ways of Coping Scale (WOC)<sup>51</sup> was  
186 applied to measure the women's coping strategies used during the previous month. Responses were  
187 scored on a four-point Likert-type scale. The internal consistency of the original eight WOC sub-scales  
188 varied widely, ranging from 0.41 to 0.80. Based on empirical and theoretical considerations, we  
189 divided coping styles into passive (e.g., wishing the situation would go away) and active strategies  
190 (e.g., talking to someone who could do something concrete about the problem).<sup>52-56</sup> Cronbach's alphas  
191 for passive and active coping were 0.69 and 0.74, respectively. We expected active coping strategies to  
192 be associated with lower HIV risk, and passive coping strategies to be associated with greater HIV risk.

193 Efficacy. Six items, devised for this study, assessed self-efficacy pertaining to HIV at the final  
194 interview. Participants were asked to rate how certain they were that they could act to improve their  
195 health or reduce risk. Responses ranging from 0% ("very unsure") to 100% ("very sure") were  
196 averaged. Factor analysis produced two factors: efficacy for implementing safer sex (e.g., successful  
197 condom use) and efficacy for addressing partner risk (e.g., talking with partner about AIDS). Each  
198 factor was used separately. Cronbach's alpha was 0.89 for efficacy for safer sex, and 0.80 for efficacy  
199 for communication with partner. Greater efficacy for safer sex was expected to predict safer sexual  
200 practices and greater efficacy for partner risk was expected to predict lower partner risk.

## 201 **Drug Abuse**

202 Participants were asked about specifics of current substance use, as well as whether they had  
203 ever had "a problem with drugs." An affirmative response to the latter question was used to identify a  
204 broader spectrum of women who had abused drugs over time.

## 205 **Current Relationship Factors**

206 Relationship involvement. This was determined by a hierarchical series of questions, used to  
207 devise a four-level ordinal variable: (1) single (not involved in any relationship), (2) having a regular

208 sexual partner, (3) committed or married but not cohabiting, or (4) committed or married and  
209 cohabiting.

210 Partner's abusiveness. Participants were asked how often (from 1=never to 5=always) their  
211 current or most recent partner had done each of 13 acts that represent a range of abuse by a partner  
212 (adapted from Straus and colleagues<sup>57</sup>), from "keep track of how you spend your time" to "shove, slap,  
213 kick, hit or bite you." Cronbach's alpha was 0.89. Because the distribution was skewed, this variable  
214 was re-coded into quartiles.

215 Relative power. Participants were asked "What is the overall balance of power in the  
216 relationship?" Each responded by allocating a total of 100% (in increments of 10%) between herself  
217 and her partner (e.g., 50-50, 70-30).

### 218 **Sociodemographic Characteristics**

219 Sociodemographic characteristics included age, number of children, race/ethnicity, education,  
220 employment, income, and whether or not the participant had ever sought and received HIV counseling  
221 and testing.

### 222 **Statistical Analyses**

223 First, the authors examined descriptive information on past abuse by a partner. Then, bivariate  
224 analyses (Pearson correlation, Student's t, and Chi-square) were used to assess the direct associations  
225 between past partner abuse and several components of heterosexual HIV risk. Comparisons by type of  
226 abuse were not feasible because too few women gave detailed descriptions of abusive experiences.

227 Next, to identify variables that might mediate associations between partner abuse and HIV risk,  
228 bivariate analyses examined associations between past partner abuse and predictor variables (past  
229 experiences of coercion, psychosocial factors, drug abuse, current relationship factors, and  
230 sociodemographic characteristics) and associations between predictor variables and two components of

heterosexual HIV risk (unprotected intercourse and partner risk). Significant findings ( $p < .05$ ) were used to select variables to include the subsequent model.

Finally, to learn how past abuse might shape the pathways to HIV risk, we compared two groups – women with a history of abuse and those without – using structural equation modeling. The initial model for both groups included all hypothesized relationships between predictors and heterosexual HIV risk (unprotected intercourse and partner risk), provided there was a significant bivariate association in one or both groups. Regarding relationships between the two dependent measures, it was hypothesized that partner risk might influence unprotected intercourse, but not the reverse. Then, any relationship between a predictor and outcome where gamma was non-significant ( $t < 1.65$ ) for both groups was set to zero. Following Bollen's guidelines,<sup>58</sup> we compared the models for abused and non-abused women by comparing model forms, and, then, comparing parameter values.

## **RESULTS**

### **Past Partner Abuse**

Seventy-three women (51.8%) reported past physical, emotional, sexual or unspecified abuse by a partner (Table 1). Nearly one-half of those who described abuse, reported a history of two or three types.

### **Past Partner Abuse and Heterosexual HIV Risk**

There was no difference in the amount of unprotected intercourse between the abused and the non-abused women (Table 2). Nor did they differ in: abstinence from sexual intercourse, any unprotected intercourse, or, among those who engaged in intercourse, the percentage of time they used condoms.

Regarding partner risk, women abused by a partner in the past had riskier current partners ( $p < .001$ ). Post-hoc analyses revealed that among abused women, two had a partner with HIV and seven others had partners who injected drugs or had sex with men, compared with none and two,

255 respectively, for non-abused women (12% vs. 3%;  $\chi^2=8.43$ ,  $p<.05$ ). These associations remained  
 256 stable even after controlling for number of sexual partners.

257 Unprotected intercourse and partner risk were negatively correlated ( $r=-.23$ ,  $p<.01$ ), indicating  
 258 that women with riskier partners had less unprotected intercourse. However, looking at the two groups  
 259 separately, a significant correlation between unprotected intercourse and partner risk occurred among  
 260 the abused women ( $r=-.29$ ,  $p=.02$ ), but not among the non-abused women ( $r=-.20$ ;  $p=.11$ ).

### 261 Factors Associated with Past Partner Abuse and Heterosexual HIV Risk

262 When comparing the abused and not abused groups (Table 3), abused women had experienced  
 263 more coercive sex ( $t=-3.5$ ,  $p<.001$ ) and coercion not to use a condom ( $t=-3.3$ ,  $p<.001$ ), and they had  
 264 more abusive current partners ( $\chi^2=14.5$ ,  $p<.01$ ). They were also more likely to be depressed ( $t=-2.4$ ,  
 265  $p<.05$ ) and use passive coping methods ( $t=-2.5$ ,  $p<.01$ ). The groups did not differ in anxiety, self-  
 266 esteem, or efficacy, or in terms of relationship involvement, relative power in the relationships, and  
 267 drug usage. Sociodemographically, the abused women were older ( $t=20.1$ ,  $p<.001$ ), and more likely to  
 268 have been tested for HIV ( $\chi^2=6.7$ ,  $p<.05$ ).

269 Regarding predictors associated with unprotected intercourse and partner risk (Table 4), five  
 270 factors were significantly associated with unprotected intercourse: lower efficacy for safer sex, more  
 271 involved relationships, less relative power in relationships, greater likelihood of having children, and  
 272 lesser likelihood of having education beyond high school. Six factors were associated with partner risk:  
 273 coercion not to use condoms, lower efficacy for partner communication about HIV, less involved  
 274 relationships, more abusive current/recent partners, more drug abuse, and greater likelihood of HIV  
 275 testing.

### 276 Comparing Models of Heterosexual HIV Risk by Past Partner Abuse

277 For women who had been abused by a partner (Figure 1), there were five significant predictors  
 278 of more unprotected intercourse: more depression, higher efficacy for safer sex, more coercion not to  
 279 use a condom, less power in the current relationship, and higher education. Use of passive coping

280 strategies and a more abusive current partner predicted greater partner risk; coercion not to use a  
281 condom predicted lower partner risk.

282 For women who had not been abused by a partner (Figure 2), there were two significant  
283 predictors of more unprotected intercourse: lower efficacy for safer sex and less power in the current  
284 relationship. There were three significant predictors of greater partner risk: use of passive coping  
285 strategies, lower efficacy for communicating about partner risk, and a less involved relationship.

## 286 DISCUSSION

287 This study documents that women with a history of abuse by an intimate partner have a greater  
288 number of determinants that place them at a higher risk for HIV than their non-abused counterparts.  
289 These women – 52% in this sample – had riskier partners as well as higher rates of depression,  
290 coercion, passive coping, and current partner abusiveness. Moreover, this particular constellation is  
291 consistent with Stark and Flitcraft’s description of a battering syndrome.<sup>59</sup> Furthermore, for these  
292 women, less relative power in a relationship was associated with more unprotected intercourse.

293 Elevated partner risk for HIV was associated with both past and current partner abuse. Several  
294 interpretations are possible. First, given that the essential core of abusive behavior is control,<sup>60</sup> a  
295 current partner’s risky conduct *per se* may be another form of victimization or re-victimization.  
296 Second, a woman’s exhortation for a controlling partner to avoid risky behavior is unlikely to be  
297 heeded. Third, withholding HIV risk information could be another way to maintain control.

298 It is notable that the abused women were more likely to get tested for HIV. Given their greater  
299 use of passive coping strategies, HIV testing may constitute an alternative strategy for coping with their  
300 current partner’s elevated HIV risk.

301 Although bivariate analyses indicated that past abuse by a partner had no direct effect on HIV  
302 risk from unprotected intercourse, the structural equation models for abused and non-abused women  
303 were distinct. They shared only two common features, whereas the differences between the two models  
304 were striking. For the abused women, coercion not to use a condom predicted both more unprotected

305 intercourse and partners with fewer risk factors. Considering that such coercion was greater among the  
306 abused women, it may have shaped these women's expectations such that they assume they are unable  
307 to request condom use. If so, then this same expectation may lead women who have experienced such  
308 coercion to select safer partners, as an alternative means of reducing HIV risk.

309 Likewise, among the abused women, depression was associated with unprotected intercourse,  
310 and passive coping and abusiveness of the woman's current partner were associated with riskier  
311 partners. Given the contemporaneous measurement of the outcomes and psychological variables, those  
312 associations could be in either direction (e.g., sexual risk-taking could lead to depression, or vice-  
313 versa); however, the occurrence of abuse preceded the other measures.

314 Surprisingly, the degree of women's involvement in their relationships did not predict  
315 unprotected intercourse or partner risk among the abused women. More difficult to interpret, however,  
316 was the finding that women having more unprotected intercourse had more education and rated  
317 themselves as having greater self-efficacy (i.e., *more* certain that they could get their partner to use a  
318 condom if desired). Their risky behavior may reflect calculated risk-taking. Their efficacy ratings  
319 could mean that they take personal responsibility for failures to use condoms; or, they may have  
320 internalized pressure from their partner and developed a sophisticated form of denial.

321 Non-abused women were less involved with higher-risk partners and are more able to talk to  
322 their partners about HIV risk. For these women, partner risk may even be a specific criterion in  
323 determining how involved to become. In contrast, abused women may not feel entitled to choose or  
324 reject a partner on the basis of his risk; and if their current partner is abusive, they may be less able to  
325 limit involvement or leave on the basis of the partner's HIV risk.

326 The strengths of this study include its broad demographic, social, and psychological indicators.  
327 It goes beyond previous research by empirically testing the value of a theoretical model, predicting  
328 multiple indicators of heterosexual HIV risk for women both with and without a history of abuse.  
329 However, it is limited by a clinic-based sample that was not randomly selected; because two-thirds

330 were testing for HIV, they may have higher than average HIV risk. Also, the sample is relatively small  
331 given the number of variables in the model. The generalizability of these results, therefore, remains to  
332 be demonstrated. Future research should examine the nature of relationships and the interpersonal  
333 context of decision-making for heterosexual women. In particular, it is important to disentangle the  
334 respective roles of past abuse and coercion, passive coping, and selecting partners who are abusive and  
335 have HIV risk factors.

336 HIV occurs in very disparate groups, and meeting the intervention needs of these separate  
337 groups is one of the greatest challenges of prevention.<sup>61</sup> Therefore, these findings have implications for  
338 those who work to prevent HIV among heterosexual women.<sup>11</sup> Initially, healthcare workers must  
339 ascertain whether abuse has occurred, not making assumptions based on high education or high  
340 efficacy beliefs. Abused women should be assessed and treated for depression as needed. They may  
341 also require help to develop more assertive, yet safe, ways of coping with HIV risk, including  
342 alternatives to condom use and limiting involvement with men who exhibit abusive or risky behaviors.  
343 Developing interventions that address abusive interpersonal relationships would add another tool to the  
344 preventionist's armamentarium that may help to further stem the HIV epidemic among women.

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Table 1

501

Past Abuse by an Intimate Partner

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Type of abuse	%	(n)	%	(n)
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508

<u>Any Abuse</u> *			51.8%	(73)
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509

Any physical abuse	29.8	(42)		
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510

Any emotional abuse	22.7	(32)		
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511

Any sexual abuse	12.1	(17)		
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512

Not specified	10.6	(15)		
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513

<u>Only one kind of abuse reported</u>			22%	(31)
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514

Only physical abuse	13.5	(19)		
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515

Only emotional abuse	8.5	(12)		
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516

Only sexual abuse	0	(0)		
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517

<u>More than one kind of abuse reported</u>			19%	(27)
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518

Physical and emotional	7.1	(10)		
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519

Physical and sexual	4.9	(7)		
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520

Emotional and sexual	2.8	(4)		
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521

Physical, emotional and sexual	4.3	(6)		
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522

<u>Number of types not specified</u>			11%	(15)
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523

\* Total exceeds 73 (51.8%) because respondents could list more than one type of abuse

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Table 2

Bivariate Associations of Past Abuse by a Partner and Heterosexual HIV Risk

	Past Abuse	No Past Abuse	Statistical Test
	by a Partner	by a Partner	for Group
	(n=73)	(n=68)	Differences
<u>Behavioral Risk:</u>			
Acts of unprotected intercourse	M=4.77	M=4.57	t=0.16
(number of acts in past 30 days)			
Abstained from all			
sexual intercourse	31.5%	22.1%	$\chi^2=1.60$
Engaged in any unprotected			
sexual intercourse	53.4%	54.4%	$\chi^2=0.01$
Percent of acts using condoms			
(among sexually active)	M=30.6%	M=34.3%	t=0.42
<u>Partner Risk:</u>			
No known risk	11	33	$\chi^2=17.85^{**}$
Uncertain	34	40	
Moderate	33	24	
High	21	3	

\*\*p&lt;.001

Table 3  
 Bivariate Associations of Predictors with Past Abuse by a Partner

Variable	Range	Past Abuse by a Partner (n=73) Mean	No Past Abuse by a Partner (n=68) Mean
<u>Past Coercion:</u>			
Coerced to have sex ***	1-5	2.1	1.7
Coerced not to use a condom ****	0-5	1.3	0.6
<u>Psychological:</u>			
Self-esteem	1-5	3.9	4.0
Depression *	0-3	0.9	0.7
Anxiety	0-3	0.6	0.5
Active coping	1-4	3.2	3.2
Passive coping **	1-4	2.6	2.4
Efficacy - safer sex	0-100%	76	81
Efficacy - partner communication	0-100%	82	86
<u>Current Relationship:</u>			
Relative power	0-100%	53	54
		<u>Percent</u>	<u>Percent</u>
<u>Involvement:</u>			
No relationship		27	18
Regular partner		11	12
Committed/married not cohabit		30	25

572	Committed/married and cohabit		32	46
573	Partner abusiveness: **			
574	1 <sup>st</sup> quartile (1.000 - 1.214)		18	25
575	2 <sup>nd</sup> quartile (1.214 - 1.429)		22	44
576	3 <sup>rd</sup> quartile (1.429 - 1.857)		21	16
577	4 <sup>th</sup> quartile (1.857 - 3.93)		40	15
578	<u>Drug Abuse</u>	No/Yes	23	15
579	<u>Sociodemographics:</u>			
580	Tested for HIV **	No/Yes	71	50
581	African American or Latina	No/Yes	45	56
582	Children	No/Yes	57	54
583	Education beyond high school	No/Yes	58	56
584	Employed	No/Yes	60	57
585		<u>Range</u>	<u>Mean</u>	<u>Mean</u>
586	Income (annual)	\$0-54,000	\$12,632	\$13,956
587	Age ***	18-56	32.0	28.7

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588  
589 \* p<0.05    \*\* p<0.01    \*\*\* p<0.001

Table 4						
<u>Bivariate Associations of Predictors with Unprotected Intercourse and Partner Risk</u>						
		<u>Unprotected Intercourse</u>			<u>Partner Risk</u>	
	<u>r</u>	<u>F</u>	<u>t</u>	<u>r</u>	<u>F</u>	<u>t</u>
<u>Past Coercion:</u>						
597	Coerced to have sex	0.07			0.11	
598	Coerced not to use a condom	0.11			0.18*	
<u>Psychological:</u>						
600	Self-esteem	0.10			-0.11	
601	Depression	0.08			0.14	
602	Anxiety	-0.02			0.15	
603	Active coping	-0.02			0.03	
604	Passive coping	0.07			0.15	
605	Efficacy – safer sex	-0.32***			-0.05	
606	Efficacy – partner communication	0.004			-0.20*	
<u>Current Relationship:</u>						
608	Relative power	-0.17*			0.07	
609	Involvement		6.3***			5.5***
610	Partner abusiveness		0.58			5.1**
611	<u>Drug Abuse</u>			-1.4		-2.3*

612	<u>Sociodemographics:</u>			
613	Tested for HIV		0.25	-2.9**
614	African American or Latina		-0.52	-1.04
615	Children		-2.9**	0.92
616	Education beyond high school		2.7**	0.11
617	Employed		1.4	-0.54
618	Income	-0.001		0.12
619	Age	-0.12		-0.12