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The Role of Victim–Offender Relationship in Women’s Sexual Assault Experiences

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This study’s goal is to identify differences in background, assault, and postassault factors according to the victim–offender relationship. A mail survey is conducted with more than 1,000 female sexual assault survivors (response rate 90%) recruited from college, community, and mental health agency sources. Stranger assailants are associated with a greater victim perceived life threat, more severe sexual assaults, and ethnic minority victims. Positive social reactions do not vary according to the victim–offender relationship, but stranger victims report more negative social reactions from others than do victims of acquaintances or romantic partners. Assaults by strangers and relatives are associated with more posttraumatic stress disorder (PTSD) symptoms than assaults by acquaintances and romantic partners. As expected, survivors’ social cognitive responses to rape and social reactions from support providers are stronger correlates of PTSD symptoms than demographic or assault characteristics in general, but correlates vary across victim–offender relationship groups.

Keywords: *sexual assault; victim–offender relationship; women*

Research shows that approximately two thirds of sexual assaults are committed by known offenders (including friends, acquaintances, intimate partners, and relatives), of which up to 15% may be committed by husbands or romantic partners (Russell, 1990; Tjaden & Thoennes, 2000). In contrast, one third of sexual assaults are committed by strangers (Bureau of Justice

Statistics, 2003). A few differences have been found in assaults by different perpetrators. Two earlier studies of representative college and community samples found that assaults by strangers and husbands or intimates were more violent than acquaintance rapes (Koss, Dinero, Seibel, & Cox, 1988; Ullman & Siegel, 1993). Recent studies of nonrandom samples also suggest that intimate sexual assaults may differ from acquaintance sexual assaults. Stermac, DelBove, and Addison (2001) compared 547 spouse, boyfriend, and acquaintance female sexual assault victims seeking hospital-based treatment. Boyfriends were more likely to use physical violence than acquaintances, but not more than husbands. Both boyfriend and spouse victims had more physical injuries than acquaintances did. In an earlier study of 1,162 treatment seeking women, Stermac, Dumont, and Dunn (1998) also found intimate partner sexual assaults were more similar to stranger assaults, as both had greater physical violence and injuries than acquaintance assaults.

The victim–offender relationship may be an important factor in the effects of sexual assault for the victim. The psychosocial aftermath of rape may vary according to the victim–offender relationship, even though most survivors have a range of symptoms that are typically greater than those of nonvictimized women (Resick, 1993). Sexual assault has many harmful psychological effects with posttraumatic stress disorder (PTSD), one of the most common sequelae (Foa & Riggs, 1993). Although some research suggests that PTSD and fear may be more common in victims of stranger rape (Bownes, O’Gorman, & Sayers, 1991; Ellis, Atkeson, & Calhoun, 1981), depression and anxiety are common among sexual assault victims, regardless of relationship to the perpetrator (Koss et al., 1988; Ullman & Siegel, 1993). Koss et al. (1988) found no differences in psychological symptoms by the victim–offender relationship, whereas Ullman and Siegel (1993) found more sexual distress for women attacked by intimates, more fear and anxiety for stranger victims, and no difference in depression by the victim–offender relationship. Culbertson and Dehle (2001) compared 206 female college victims of sexual assaults (classification based on self-reported degree of relationship and level of previous sexual intimacy) on trauma symptoms using the Impact

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of Events Scale and found more hyperarousal and intrusion symptoms for cohabiting, married, and acquaintance victims than for victims of less well-known perpetrators (e.g., dates, other sexual partners).

Differences in symptoms based on the victim–offender relationship may be due in part to the ways formal and informal support systems react to different types of assaults. Rape is socially constructed, and not all victims are treated in the same manner in American society. Because stranger rapes are still viewed as more serious and legitimate (Estrich, 1987) than rape by acquaintances or romantic partners or husbands (Pollard, 1992), survivors and people around them may evaluate assaults differently based on this factor. Acquaintance rape victims are less likely to label their assaults as rapes than women assaulted by strangers and less likely to report their assaults to the police (Bureau of Justice Statistics, 2003; Koss, 1985), although this may be changing (at least among college women) with greater rape awareness in recent years (Fisher, Daigle, Cullen, & Turner, 2003b). Even if women are more likely to self-label as rape victims (Fisher, Daigle, Cullen, & Turner, 2003a) and report their assaults to the police (Bachman, 1993, 1998; Baumer, Felson, & Messner, 2003), victims may be treated differently depending on their relationship to the perpetrator (Campbell et al., 1999). Despite rape law reforms (Spohn & Horney, 1992), the American legal system still largely prosecutes stranger rapes and discards cases perceived to be less “winnable” (Frohmann, 1991), such as cases with victims of devalued social statuses (e.g., young, ethnic minority, prostitutes) and cases in which a consent defense may be easily alleged (e.g., acquaintance, alcohol-related rapes). Among the few cases in which convictions actually result, sentencing remains lighter for nonstranger cases (McCormick, Maric, Seto, & Barbaree, 1998; Simon, 1996). Additionally, victims’ help seeking from friends and family, who are most frequently told about the assault, may vary according to the victim–offender relationship (Kaukinen, 2002).

Few studies have examined whether psychosocial correlates of recovery differ for women with different prior relationships to their attackers. However, research generally shows that sexual assault trauma may be mitigated or exacerbated by the following: (a) preassault factors such as a history of previous trauma (Koss, Figueredo, & Prince, 2002; Nishith, Mechanic, & Resick, 2000), (b) assault-related factors such as perceived life threat during assault and assault characteristics (Kilpatrick, Saunders, Amick-McMullan, & Best, 1989; Resnick, Kilpatrick, Dansky, Saunders, & Best, 1993), and (c) postassault attributions of blame, coping strategies, and social reactions from persons told about the assault (Frazier, 2003; Ullman, 1996; Ullman & Filipas, 2001; Valentiner, Riggs, Foa, & Gershuny, 1996). Recent studies

have examined how background characteristics of survivors, assault-related variables, and postassault social cognitive factors relate to psychological symptoms (Koss et al., 2002; Frazier, 2003), but few have addressed the role of the victim–offender relationship in depth. Koss et al.'s (2002) recent study of rape victims identified from a representative sample of employed women included the victim–offender relationship as part of an assault severity construct. Frazier's (2002) longitudinal study had predominantly stranger rape victims recruited at hospital emergency rooms fairly soon after their assaults. Few studies have addressed contextual factors such as social reactions to victims' assault disclosures, which may be important for recovery (Andrews, Brewin, & Rose, 2003; Davis, Brickman, & Baker, 1991; Ullman & Filipas, 2001; Zoellner, Foa, & Brigidi, 1999).

Several recent cross-sectional studies of rape survivors have examined correlates of PTSD symptoms and focused on additional psychosocial factors such as coping strategies and social reactions to disclosure of rape. These studies suggest that women assaulted by different perpetrators may be treated differently. Ullman (1996) found that women assaulted by known offenders in a convenience sample had more psychological symptoms and poorer self-rated recovery in regressions controlling for assault history, assault characteristics, postassault coping, and social reactions. Campbell et al. (1999) used adaptive sampling to obtain a diverse sample of urban rape survivors and found that nonstranger rape victims who received minimal assistance from legal or medical systems and encountered victim-blaming behaviors from system personnel had greater PTSD symptoms. However, high-risk victims who received sustained mental health services after these negative experiences had a significant decrease in symptoms. Finally, Ullman and Filipas (2001) studied a diverse sample of 323 urban sexual assault survivors recruited from community, college, and mental health agency sources. Less education, greater perceived life threat, and more negative social reactions were related to more PTSD symptoms. Although the victim–offender relationship became nonsignificant in multivariate analyses, bivariate analyses showed that stranger rape victims had more PTSD symptoms and that women assaulted by known men were more likely to delay disclosure. These latter two studies had racially diverse samples and assessed social reactions to victims' disclosures unlike other studies, yet neither used representative sampling nor had a longitudinal design. One methodological problem with identifying the role of the victim–offender relationship in the development of psychological symptoms is that assault characteristics are often associated with the victim–offender relationship. For example, offender violence has been shown to be greater for stranger

and intimate assaults compared to acquaintance incidents (Koss et al., 1988; Ullman & Siegel, 1993). These other factors may “win out” in multivariate analyses in which a set of assault characteristics are used together as predictors of dependent variables such as reporting, help seeking, and even psychological symptoms.

Present Study

In the present study, a large, diverse, urban sample of sexual assault victims was recruited from a major metropolitan city in the Midwest. Our large sample allowed for analyses to be done both between and within different victim–offender relationship groups, unlike previous studies. In previous hierarchical blockwise regression analyses (including background, trauma history, assault characteristics, and postassault variable sets) with all women in this sample, the victim–offender relationship (stranger or known assailant) was not significantly related to PTSD symptoms (Ullman, Filipas, Townsend, & Starzynski, in press). In the present study, we expected that women assaulted by different offenders would have different backgrounds, assault characteristics, and postassault experiences. In our previous study, we did not compare all victim–offender relationship groups explicitly. By comparing different types of known offenders, we hope to illuminate differences that are typically obscured when all known offenders are lumped together. Although the dichotomous victim–offender relationship variable did not predict PTSD symptoms in our prior analysis (Ullman et al., in press), correlates of symptoms still may be distinct within specific perpetrator groups. We also expected histories of child sexual abuse (CSA) and other traumatic life events would be more common for stranger rape victims, possibly because they may be more likely to come from disadvantaged socioeconomic circumstances that increase their risk of multiple types of victimization (Kilpatrick, Resnick, Saunders, & Best, 1998). We expected more life-threatening, violent, completed rapes for stranger victims than for other victim–offender relationship groups (Koss et al., 1988; Ullman & Siegel, 1993). Depression was expected to be similar regardless of the victim–offender relationship, but we expected a curvilinear relationship of the victim–offender relationship with PTSD symptoms, consistent with past research (i.e., more PTSD for strangers and relatives than for acquaintances; Koss et al., 1988; Ullman & Siegel, 1993). Other hypotheses regarding psychosocial aftermath variables were not made because of the exploratory nature of these analyses. Hypotheses for correlates of PTSD symptoms were similar across the victim–offender relationship groups and based on past research on sexual assault victims generally.

Perceived life threat during assault, assault severity (Frazier et al., 1997; Kilpatrick et al., 1989; Ullman, 1996; Ullman & Filipas, 2001), negative social reactions, avoidance coping, and characterological self-blame were each expected to relate to more PTSD symptoms (Koss et al., 2002; Ullman, 1996; Ullman & Filipas, 2001). Present control over the recovery process was expected to relate to fewer symptoms (Frazier, 2003), and positive social reactions were expected to be weakly positively related or unrelated to PTSD symptoms (Ullman, 1999). Avoidance coping and negative social reactions were expected to be the strongest correlates of PTSD symptoms for all groups (Campbell et al., 1999; Ullman, 1996; Ullman & Filipas, 2001).

Method

Sample

The present study analyzed mail survey data from the first wave of a longitudinal study of sexual assault survivors' recovery in a large midwestern metropolitan area and was approved by the University of Illinois at Chicago's Institutional Review Board. Fliers, advertisements, and notices were distributed during a 1-year period on college campuses, in the community, and at mental health agencies and rape crisis centers. Fliers to recruit women were posted in a variety of locations, including bookstores and other public places where women congregate (e.g., academic buildings, college dormitories). Fliers requested participation of women age 18 and older with unwanted sexual experiences since age 14 for a 45-minute confidential mail survey. The survey was mailed to women along with a cover letter and information sheet describing the study, a list of community resources for women survivors of violence, and a postcard asking if they would be willing to be recontacted regarding participation in a 1-year follow up survey or an in-depth interview. All surveys had identification numbers but no other identifying information. After returning the survey, women were sent \$20 for their participation. Of those who called and requested a survey, 1,084 women returned the Wave 1 survey—a 90% response rate.

Measures

Basic background information collected included age at the time of the survey (in years), race (White, Black, Hispanic, Asian or Pacific Islander, American Indian or Alaskan Native, Other), household income (six ordinal categories ranging from \$10,000 or less to \$50,000 or more), education

(1 = less than 12th grade; 2 = high school graduate; 3 = some college; 4 = college graduate or beyond), currently employed (yes or no), current school status (in school or not), marital status (single, married, divorced or separated, widowed, or cohabitating), and parental status (no children or children).

Assault characteristics. A modified version of the Sexual Experiences Survey (SES; Koss & Gidycz, 1985) was used to identify completed rape and attempted rape victims and women experiencing unwanted sexual contact and sexual coercion. The questions assessed adult sexual victimization from age 14 on, consistent with the age criteria used in the SES. Only lifetime prevalence was assessed in the first wave of this study. We also asked each SES question with respect to experiences before age 14 to assess child sexual assault experiences following Koss, Gidycz, and Wisniewski (1987). In the SES, rape was defined by questions assessing vaginal, oral, or anal intercourse without consent by force or threat of force or when the victim was intoxicated (e.g., “Has a man made you have sex by using force or threatening to harm you? When we use the word *sex*, we mean a man putting his penis in your vagina even if he didn’t ejaculate (come)”). The word *rape* was not used in the screening questions. Attempted rape was defined as the same experiences just described except that the items were worded the “man tried to make you have sex” but “that intercourse did not occur.” Sexual coercion was coded only (a) if no completed or attempted rape items were endorsed and (b) if respondents reported sexual intercourse subsequent to the use of menacing verbal pressure or misuse of authority, but no threats of force or actual physical force were used. Sexual contact was coded if none of the previous higher levels of sexual victimization occurred and women reported experiencing unwanted fondling or kissing that did not involve attempted penetration subsequent to verbal pressure, misuse of authority, threats of harm, or actual physical force. The SES has reported internal consistency reliability of .69 and test-retest reliability at 1 week apart of 93% (Koss & Gidycz, 1985). Highest severity of sexual victimization was coded continuously according to Koss et al.’s (1987) guidelines (e.g., sexual contact, sexual coercion, attempted rape, completed rape). Respondents were asked questions about assault characteristics, social support, social reactions, and psychological symptoms with respect to the most serious sexual assault if they had multiple experiences as reported on the SES (see measures below). Questions about details of the assault included the following: age at the time of the incident (in years), relationship to the perpetrator (stranger, nonromantic acquaintance, casual or first date, romantic acquaintance, husband, relative), physical injuries (ranging from mild soreness and

bruises to knife or gunshot wounds), sexual acts (fondling, oral penetration, vaginal penetration) suffered during the assault (yes or no for each item), coercive tactics used by the perpetrator (e.g., threats of force, physical force, weapons), and perception of life threat during the assault (yes or no).

Lifetime histories of traumatic events were assessed with Goodman, Corcoran, Turner, Yuan, and Green's (1998) Stressful Life Events Screening Questionnaire, which is composed of 10 behaviorally specific screening items assessing a variety of traumatic events of an interpersonal nature (e.g., "Were you ever in a life-threatening accident?"). Because many of these traumatic events are related to psychological distress and PTSD (Resnick et al., 1993), this measure was scored as the summed number of events experienced by each respondent (excluding adult and child sexual assault already assessed by the SES). Respondents were also asked if they reported the same incident under more than one item. If so, it was counted as one event. Psychometric data are excellent with good test-retest reliability (median Kappa = .73), adequate convergent validity (with a lengthier interview) with a median Kappa of .64, and good discrimination between Criterion A and non-Criterion A events.

Current social support. Characteristics of women's current social support network including measures of social contact and social resources from the Social Activities Questionnaire of the RAND Health Insurance Experiment (Donald & Ware, 1984). Social contact items included the following: the number of close friends you feel you can confide in and one question about how well you are getting along with people these days (*not as well as usual, same as usual, better than usual*). Social resources were assessed with items about the frequency of social contact with informal and formal social network members in the past month (mean of responses to five Likert-type items about frequency of contact with friends, relatives, and religious service attendance with ordinal responses from 1 = *every day* to 7 = *less than five times a year*).

Assault-specific social support. Women were asked if they had ever told anyone about the assault (yes or no) and if so, the timing of their first disclosure ranging from 1 (*immediately after the assault*) to 5 (*more than 1 year after the assault*). Social support in response to disclosure of assault was assessed by asking whether they had ever talked with several sources (yes or no) about the assault (e.g., friend or relative, mental health professional, clergy, police, rape crisis center, others) and whether each of these sources was helpful.

Social reactions to assault disclosure. The Social Reactions Questionnaire (SRQ; Ullman, 2000) was administered to victims disclosing assault and assessed how often (0 = *never* to 4 = *always*) they received each of 48 different reactions from persons told about the assault. No time frame was specified so that respondents could report on all reactions they received since the assault. The revised SRQ measure had eight hypothesized types of social reactions, each assessed with six items (see Ullman, 2000, for factor analysis). Three positive social reactions assessed were (a) tangible aid or information support (e.g., help or information), (b) emotional support (e.g., expressions of love, caring, esteem), and (c) validation or belief (e.g., nonjudgmental attitude toward victim). The mean number of positive social reactions across these domains was analyzed here. Five negative social reactions assessed were the following: (a) taking control of the victim's decisions, (b) blaming the victim, (c) treating the victim differently (e.g., stigmatizing responses), (d) distraction (e.g., telling the victim to move on with her life), and (e) egocentric behavior (e.g., responses in which the support provider focuses on his or her own needs instead of the victim's). The mean number of negative social reactions reported across these domains was analyzed. A recent study ($N = 323$) of the psychometric characteristics of the SRQ (Ullman, 2000) using a similar recruitment strategy as we used in the sample studied here showed good test-retest reliability (Pearson's r ranged from .68 to .77), construct validity as shown by factor analysis, convergent validity with expected correlations of positive and negative social reactions with other social support and psychological symptom measures, and concurrent validity, assessed by correlating SRQ subscales with social reactions coded from open-ended questions about helpful and unhelpful responses to sexual assault disclosure (Ullman, 2000).

Attributions of self-blame were assessed with Frazier's (2003) Rape Attribution Questionnaire (RAQ), a valid and reliable 25-item self-report measure of attributions made by sexual assault victims about why the assault occurred. Five 5-point Likert-type scales assessed attributions made in the past 30 days for assault. In this study, the Characterological Self-Blame subscale (e.g., I am just the victim type) was examined, as recent studies show it has particularly harmful effects (Koss et al., 2002). Reliability data were obtained by Frazier from a sample of female victims seen at an emergency room following sexual assault and a sample of sexual assault survivors identified by a random telephone survey. Subscale alpha coefficients ranged from .77 to .89, and test-retest reliability coefficients ranged from .68 to .80 (Frazier, 2002).

Perceived control over recovery related to the rape was assessed using Frazier's supplemental perceived control items, also part of the RAQ (Frazier, 2002, 2003). Women were asked about their perceptions of control during the

past 30 days related to their sexual assault experience. In this study, we analyzed perceptions of present control over the recovery process ($\alpha = .81$) found to be protective against PTSD in Frazier's (2003) longitudinal study of predominantly stranger rape victims from a hospital emergency room.

Avoidance coping. The Brief COPE, a 28-item self-report scale assessing a variety of approach and avoidance coping strategies (Carver, Scheier, & Weintraub, 1989) with 4-point Likert-type scales computed as unweighted sums of responses to two items making up each scale. The COPE has been widely used in studies of stressed populations, has good internal consistency reliability (alphas of .60 or greater except for one), and test-retest reliability (correlations of .46 to .86). A composite avoidance coping scale was computed from behavioral disengagement, denial, and self-distraction subscale items.

Depressive symptoms. Depression was measured by the CESD-10 (Andresen, Carter, Malmgren, & Patrick, 1994), a shortened version of the Center for Epidemiologic Studies–Depression Scale (CES-D), a screening depression scale developed to measure current depressive symptomatology in the general population (Radloff, 1977). The 10 items of the shortened form are rated on a 4-point scale (range = 0 to 3) according to how often the respondent felt that way during the past week. The total score is the sum of the items after reversing the two positive mood items. Higher scores indicate a higher level of depressive symptoms. We used the mean of the depressive item scores to indicate the average frequency with which respondents experienced depressive symptoms. Cronbach's alpha of the CES-D was found to be .85 in the general population and .90 for patients. The content, concurrent, and discriminant validity have been supported (Radloff, 1977; Weissman, Sholomskas, Pottenger, Prusoff, & Locke, 1977). The CESD-10 correlated highly with the 20-item scale (Pearson's $r = .97$; Andresen et al., 1994).

Posttraumatic stress symptom severity. The Posttraumatic Stress Diagnostic Scale (PDS) was used to assess PTSD symptom severity (Foa, 1995). The PDS is a 17-item brief self-report instrument used to provide a reliable diagnosis of PTSD based on *DSM-IV* criteria and quantification of the severity of PTSD symptoms according to recommendations provided by Foa. This scale was selected because it has been validated with sexual assault victims unlike other available measures (Foa, Cashman, Jaycox, & Perry, 1997). Normative data on the PDS indicated good test-retest reliability ($k = .74$) for the PTSD diagnosis during an average of a 2-week interval, 87.3% agreement between diagnoses for the two administrations, and a

Pearson correlation of .83 for symptom severity scores for the two administrations. The 17-item scale has good internal consistency ($\alpha = .92$) and validity with a correspondence between the PDS and the Structured Clinical Interview for *DSM-IV* Axis I disorders PTSD module (PTSD diagnoses of $k = .59$), of 79.4% agreement between the two measures. PTSD symptom severity was computed by summing response weights to items corresponding to *DSM-IV* criteria for PTSD: (a) re-experiencing, (b) numbing or avoidance, and (c) arousal criteria symptoms. Instructions were modified to refer to women's sexual assault experience, and respondents rated how often each symptom bothered them in the past month from 0 (*not at all*) to 3 (*almost always*).

Results

Sample Demographics

Most women were currently unmarried (88.7%) and of an ethnic minority (62.9%), with 46.2% African American (46.2%) and 37.1% Caucasian. Women were an average of 32.47 years old ($s = 10.96$), and 44% had children. Thirty-nine percent had some college education, one third had completed college or beyond, and one third had completed a high school degree or less. Half were currently employed, and one third were currently in school (28.8%). Forty percent of women had incomes of \$10,000 a year or less, 36% had incomes between \$10,000 and \$30,000, and one quarter had incomes of more than \$30,000 per year.

Most women in this sample had either one traumatic event (16.7%) or two or more events (71.3%) in their lifetimes. In terms of current social support, women had an average of 4.82 confidants ($s = 4.76$), and most were getting along with others the same as usual (55.4%) or better than usual (26.8%), with only 17.9% getting along with others not as well as usual. Women's average frequency of social contact with friends and family was between once a week and 2 to 3 times per month. In addition, 54.5% had a history of CSA, and one third of CSA survivors experienced abuse involving penetration (27.7%). Most women had experienced completed rape (71.4%), with the remainder experiencing some lesser form of sexual victimization, according to responses on the SES. Women's assaults occurred at an average age of 19.22 ($s = 7.92$). Nearly half were assaulted by acquaintances (45%), whereas fewer were attacked by romantic partners or husbands (22.4%), strangers (20%), or relatives (12%). Two thirds of assaults involved physical attack and ended in intercourse (64%), and half involved minor additional physical injuries (e.g., bruises, soreness, cuts).

Most women were very or extremely upset at the time of the assault (76.9%) and told someone about their assault (80%). One third told someone immediately after the assault (33.1%), 29% waited days to weeks after, and more than a third told a year or more later (37.3%). Women told various informal and/or formal support sources, with most telling a friend (84.8%) or a romantic partner (65.1%). Nearly half had told relatives (47.2%) and mental health professionals (46.6%), whereas 39.3% told parents. Less than one third told doctors, police, clergy, or rape crisis support sources. About two thirds of women telling each support source said they were helpful, except police and parents who were rated as helpful in half or fewer of the cases. Women reported an average frequency of 1.04 negative social reactions ($s = .93$) and 2.02 positive social reactions ($s = .83$) from people they told about the assault on the 48-item SRQ. Women reported an average of 19 PTSD symptoms ($s = 12.34$) and 11.14 depressive symptoms ($s = 5.08$). Mean characterological self-blame was 2.59, $s = 1.30$ ($\alpha = .76$), mean avoidance coping was 2.02, $s = 1.07$ ($\alpha = .74$), and mean present control was 3.76, $s = 1.12$ ($\alpha = .72$). Mean substitution was done for all computed variables at the ordinal level or higher that were missing 20% or fewer cases.

Bivariate Analyses

One-way ANOVAs and cross-tabulations were done to compare assaults by strangers, acquaintances, romantic partner or husbands, and relatives. Table 1 has means and statistics for all analyses. Post hoc tests comparing means were done using Tukey's HSD test ($p < .05$). Only tests in which $p < .001$ are considered significant to control for Type 1 error using a Bonferroni adjustment ($.05/30 = .006$). One-way ANOVAs showed differences in age, race (marginally significant), and education by the victim-offender relationship. Victims of strangers were older than victims of acquaintances and romantic partners. More stranger, romantic partner, and relative victims were ethnic minority, whereas similar percentages of acquaintances were White and ethnic minority. Acquaintance victims had more education than victims of strangers or relatives. Stranger victims had more severe sexual assaults than romantic partner or relative victims. A higher percentage of stranger victims had life threat during the assault than victims of relatives, romantic partners, or acquaintances. Victims of relatives and strangers had assaults occurring less recently than other groups, and victims of relatives delayed disclosure the longest after the assault. The number of lifetime traumas was greatest for stranger victims as hypothesized, but a post hoc test showed that the mean number of traumas was significantly

Table 1
Comparisons of Different Victim–Offender Relationships (Means and Percentages)

| Predictor | Partner or | | | | <i>F</i> / χ^2 | <i>df</i> | <i>p</i> |
|--|------------|--------------|---------|----------|---------------------|-----------|----------|
| | Stranger | Acquaintance | Husband | Relative | | | |
| Demographics | | | | | | | |
| Age | 36.02 | 31.10 | 31.58 | 33.22 | 9.82 | 3,927 | .000* |
| Race (minority) | 65.4% | 54.3% | 58.4% | 70.8% | 13.88 | 3,933 | .003 |
| Education | 2.66 | 3.04 | 3.04 | 2.75 | 8.20 | 3,926 | .000* |
| Trauma history | 3.64 | 2.85 | 3.21 | 3.18 | 5.91 | 3,877 | .001 |
| Childhood sexual assault severity | 1.96 | 1.42 | 1.21 | 2.93 | 32.77 | 3,905 | .000* |
| Assault characteristics | | | | | | | |
| Years since assault occurred | 15.18 | 11.73 | 9.87 | 20.67 | 20.62 | 3,906 | .000* |
| Assault severity | 3.73 | 3.58 | 3.44 | 3.10 | 11.02 | 3,914 | .000* |
| Violence | 4.09 | 2.65 | 2.78 | 2.49 | 37.04 | 3,924 | .000* |
| Sexual acts | 4.71 | 4.45 | 4.71 | 3.96 | 17.47 | 3,924 | .000* |
| Physical injury | 1.95 | 1.44 | 1.48 | 1.24 | 14.02 | 3,911 | .000* |
| Life threat | 81.4% | 39.7% | 27.3% | 50.5% | 137.67 | 3,918 | .000* |
| Postassault experiences | | | | | | | |
| Timing of disclosure | 2.25 | 2.81 | 2.93 | 4.00 | 23.96 | 3,741 | .000* |
| Self-blame | 12.63 | 13.15 | 12.91 | 12.03 | 1.88 | 8,922 | .132 |
| Avoidance coping | 12.41 | 11.64 | 12.01 | 12.64 | 2.35 | 3,881 | .071 |
| Control | 3.73 | 3.71 | 3.75 | 3.56 | 2.03 | 3,927 | .108 |
| Positive reaction | 2.08 | 1.98 | 2.02 | 1.94 | .69 | 3,745 | .561 |
| Negative reaction | 1.15 | .98 | .94 | 1.15 | 4.42 | 3,745 | .000* |
| Depression | 1.65 | 1.59 | 1.55 | 1.69 | 1.23 | 3,932 | .297 |
| Posttraumatic Stress Disorder symptoms | 1.18 | 1.02 | 1.05 | 1.32 | 6.37 | 3,929 | .000* |

greater for strangers than for acquaintances only. CSA severity was greater for victims of relatives than victims of all other perpetrators, and it was also greater for strangers than for acquaintances. There were no differences by the victim–offender relationship in self-blame, avoidance coping, present control over recovery, positive social reactions, or depressive symptoms. Victims of strangers received more negative social reactions than victims of acquaintances. Victims of relatives received more negative reactions than victims of romantic partners and acquaintances and had more PTSD symptoms than all other victim–offender relationship groups. Stranger victims had more PTSD symptoms than acquaintance or romantic partner victims.

Regression Analyses

Regression analyses were done with demographic or background variables, assault characteristics, and postassault factors to determine the relative contributions of these factors to PTSD symptom severity of survivors. Initial correlational analyses were done to identify variables not contributing to the dependent variable. A surprising finding was that time since the assault did not relate to current PTSD symptoms and therefore was not included in the models. Table 2 presents standardized beta coefficients for each of four victim–offender relationship groups. Although the original sample had 1,084 women, only women with a sexual assault experience reported on the SES and those who told someone about the assault were included in the analyses. Given that approximately 20% of women did not disclose sexual assault and 7.4% did not endorse items on the SES, this reduced the sample to approximately 793 cases. Missing data randomly distributed across the other predictors in the model further reduced the sample size, yet a large sample remained.

Regressions were run for each victim–offender relationship group separately to determine if different demographic, assault, and postassault factors were related to PTSD symptom severity. Older women had fewer PTSD symptoms when assaulted by relatives. Race and education were unrelated to PTSD symptoms for all victim–offender relationship groups. More severe sexual assaults were related to greater PTSD symptoms for women assaulted by acquaintances and romantic partners or husbands. Perceived life threat was related to more PTSD symptoms for women assaulted by acquaintances and relatives. Greater attributions of characterological self-blame were related to greater PTSD symptom severity for stranger, acquaintance, and partner or husband victims. Avoidance coping was related to more symptoms for strangers, acquaintances, and relatives. Control over the recovery process in the present was related to less PTSD symptom severity for partner and husband assault victims only. For all relationships, positive social reactions to disclosure were unrelated to PTSD symptoms, and negative social reactions were related to greater PTSD symptoms.

Discussion

Sexual assault is associated with women's mental health through a variety of psychosocial pathways. Although sexual assault victims have more symptoms of depression, anxiety, and PTSD than nonvictims do (Foa & Riggs,

Table 2
Correlates of Posttraumatic Stress Disorder Symptom Severity for Different Victim–Offender Relationships

| Predictor | Stranger | Acquaintance | Partner or Husband | Relative |
|--------------------------------|----------|--------------|--------------------|----------|
| Age | -.08 | -.03 | .00 | -.27** |
| Race | .03 | .04 | .04 | -.08 |
| Education | -.01 | .10 | -.04 | -.08 |
| Assault severity | .07 | .10* | .15* | -.04 |
| Life threat | .02 | .16** | .09 | .24** |
| Self-blame | .15* | .13** | .25** | .09 |
| Avoidance coping | .51** | .41** | .10 | .44** |
| Present control | -.09 | -.04 | -.22** | -.09 |
| Positive reactions | .02 | .07 | .09 | .06 |
| Negative reactions | .22** | .23** | .25** | .34** |
| <i>F</i> | 15.20 | 22.63 | 7.53 | 8.73 |
| <i>df</i> | 10,119 | 10,294 | 10,128 | 10,67 |
| Adjusted <i>R</i> ² | .52 | .42 | .32 | .50 |

* $p < .05$. ** $p < .001$.

1993), not all victims show lasting effects. The victim–offender relationship is an important contextual factor that may be associated with different psychosocial outcomes for sexual assault survivors. This study revealed several differences in sexual assaults according to the victim–offender relationship and differences in correlates of psychological sequelae in different victim–offender relationship groups. We assessed a range of domains that may affect recovery of women, including demographics, trauma histories, assault characteristics, and postassault social cognitive and interpersonal factors in a large, diverse urban sample of rape survivors recruited from the community, college campuses, and mental health agencies. Analyses were conducted within four victim–offender relationship groups at bivariate and multivariate levels to examine how background, assault, and postassault variables may differ by the victim–offender relationship and how these factors may relate to recovery within each group. Some differences by the victim–offender relationship in race and education were found, which may be due to using a convenience sample, as past representative studies found few differences by race in sexual assault (Koss et al., 1988; Ullman & Siegel, 1993). We found that a higher percentage of victims were ethnic minority for all victim–offender relationship groups except for acquaintances. This may indicate a greater risk of assault by strangers, relatives, and romantic partners, or these differences

may be due to our convenience sample method. Acquaintance sexual assault was evenly split between Whites and minorities, indicating similar risk in our sample of this type of assault. Acquaintance sexual assault victims had more education in our sample than other victims, and it seems more likely that risk of this type of rape would be unrelated to socioeconomic status. Wyatt (1992) has argued that ethnic minority women may face more dangerous living circumstances and cite these circumstances as a reason for their assaults. This is especially likely to be true if they have lower overall socioeconomic status (which was the case in our sample). Lower socioeconomic status very likely confers higher risk of stranger rape for ethnic minority women, whereas race differences may disappear when socioeconomic status is held constant. More attention is needed to examine the intersection of race and social class in relation to risk of sexual assault by different perpetrators for representatively sampled women.

As expected and consistent with past research, we found that stranger victims were subjected to more violence and perceived greater life threat (Koss et al., 1988; Ullman & Filipas, 2001). Relatives and romantic partners did not have more violent assaults than acquaintances, contrary to past research that showed a curvilinear relationship of the victim-offender relationship with violence, which was greater for strangers and intimates than for acquaintances (Koss et al., 1988; Stermac et al., 2001; Stermac et al., 1998; Ullman & Siegel, 1993). More traumatic events were found for stranger victims, and greater CSA severity was found for stranger and relative victims, compared to other groups. It is likely that more socioeconomically disadvantaged women in our sample had greater overall exposure to stranger rape and other traumatic life events, which resulted in this association. It is unclear why sexual abuse in childhood was greater for victims of stranger rape but understandable that it was greater for those sexually assaulted in adulthood by relatives, because both forms of victimization can be associated with the family context. Victims of strangers and relatives appear to have greater risk of PTSD because of more violence and worse trauma histories than acquaintance rape victims, though a representative sample is needed to verify that this is not an artifact of our sample. An interesting finding was that many individual social cognitive factors such as self-blame, control, and coping did not differ by the victim-offender relationship, which suggests that these individual responses may be determined by other individual difference or contextual factors. Positive social reactions and depression did not differ by the victim-offender relationship, but strangers and relatives had more PTSD symptoms and negative social reactions, which may reflect their more violent assaults. Past research shows

that more violent assaults are related to more negative reactions (Ullman, 1996; Ullman & Filipas, 2001) and more PTSD (Koss et al., 2002; Ullman & Filipas, 2001).

We found a number of differences according to the victim–offender relationship in this study. Few studies examine this factor in depth, yet representative sample studies are needed to determine if these findings are reflective of assaults generally. Unfortunately, even past studies of large samples such as the National Crime Victimization Survey have been unable to examine how women of different race or ethnic groups may vary in risk of sexual assault by different perpetrators because of small numbers of assaults detected (Bureau of Justice Statistics, 1994). Clearly, relative and stranger victims are at higher risk, with more violence, life threat, and negative social reactions in our sample. However, these differences could be due to more violence exposure, as suggested by more extensive trauma histories and CSA histories for these groups in our study.

A significant finding of this study was that negative social reactions were significant predictors of PTSD for all victim–offender relationship groups, suggesting the importance of this factor in understanding sexual assault trauma. Second, avoidance coping and self-blame were significant predictors of PTSD symptoms for most groups, consistent with past research (Koss et al., 2002; Ullman, 1996; Valentiner et al., 1996). Finally, PTSD of spouse or romantic partner victims was least well predicted by the regression model. Our within-group regressions suggest that there may be both distinct and overlapping correlates of PTSD for different victim–offender relationship groups. Certain factors such as negative social reactions are harmful for all groups as shown for victims in general in past work (Andrews et al., 2003; Campbell et al., 1999; Ullman & Filipas, 2001; Zoellner et al., 1999), and this is also true for the most part for avoidance coping and self-blame as well. However, other factors such as assault severity and life threat may differ in their effects for women assaulted by different perpetrators. It is unclear why present control over recovery was only significant for romantic partner or husband assaults. Possibly these women have terminated chronically abusive relationships and have enhanced control that has helped them to recover. Conversely, women may be able to exert less control in response to more unpredictable assaults by strangers, dates or acquaintances. This needs to be studied in representatively sampled victims.

Exploratory regressions within victim–offender relationship groups showed that assault severity and life threat were related to PTSD symptoms for several nonstranger victim–offender relationship groups, which may be because stranger victims have less variability on these factors. We expected

these variables to predict PTSD for all groups, but because stranger assaults are more homogeneous and characterized by violence and life threat, these variables may have less predictive power in within-group victim–offender relationship analyses. As hypothesized, most social cognitive factors were related to PTSD symptoms similarly for different victim–offender relationship groups. Self-blame and avoidance coping were related to PTSD symptoms for most groups as in past research (Frazier, 2003; Koss et al., 2002; Ullman & Filipas, 2001). But perceived control over the recovery process was only related to fewer symptoms for victims of romantic partners, a finding that we expected for victims of other perpetrators, given that Frazier (2003) found this in a predominantly stranger rape sample. Positive social reactions were unrelated to PTSD for all groups as expected (Ullman, 1999).

This study had a number of strengths and several limitations. Our measures were standardized measures with known validity and reliability, which is an improvement over past research (Ullman, 1996). This sample was also quite diverse in terms of both race and socioeconomic status, which is also not typical of many past studies of rape victims. Our large sample size led to high statistical power in the study, which may have led to highly significant p values that may not all reflect important differences. Our study is limited by its cross-sectional design and nonrepresentative sample, which preclude making any generalizations of our findings to representatively sampled rape victims. We did not have a separate domestic violence question that could have been helpful for determining if partner violence may be a partial explanation for some differences observed between the victim–offender relationship groups here. We do not know if romantic partner assaults are part of ongoing domestic violence or if they are more isolated incidents, but this could arguably be a unique and different assault context than other known offender rapes. Similarly, one could argue that rape by relatives is a form of family violence that could be related to earlier sexual abuse as a child, which has been associated in past research documenting child to adult sexual revictimization (Arata, 2002; Messman & Long, 1996). Clearly, studies of the victim–offender relationship should assess multiple forms of violence against women including domestic violence and child sexual assault to fully understand recovery from adult sexual assault.

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