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Rape and Physical Violence: Comparison of Assault Characteristics in Older and Younger Adults in the National Women's Study

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This study compared characteristics of recently occurring assaults against younger adults (age 18–34 years) with those of distant-past assaults against older adults (age 55–89 years) when they were younger. Responses of a subset of participants in the National Women's Study were the source of data for this study. With the exception of perceived life threat during assault (more prevalent in younger women), assault characteristics did not vary greatly by age in terms of proportions reporting that they had seen the perpetrator before; the event was one in a series; they or the perpetrator were under the influence of a substance; they actually experienced injury; and they reported the assault to authorities. Consistent with previous research, younger women reported greater prevalences of assault than older women.

KEY WORDS: rape; violence; older adult; assault; prevalence.

Characteristics of rape and physical assault of women that occurred during the early part of the twentieth century may differ from contemporary instances of this violence. This potentiality is supported by fluctuating levels of violence in the United States (Rennison, 2000) and by changing roles of women in this and other countries. That is, it is not unreasonable to expect that the nature of violence against women has changed as their social and political roles evolve and as overall levels of violence increase or decrease. Additional factors, such as

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violence awareness campaigns and increased criminal justice system involvement in familial conflict in the latter part of the twentieth century may also affect the manner in which violence against women occurs. However, cohort-based variation in these forms of assault remains understudied. Although epidemiological research consistently demonstrates that older adults report experiencing fewer episodes of lifetime interpersonal violence than younger adults (Bachman, Dillaway, & Lachs, 1998; Muram, Miller, & Cutler, 1992; Norris, 1992), no large-scale comparisons of trauma characteristics contrasting assaults that occurred recently with those that occurred in the early part of the twentieth century (i.e., cohort-based differences) are available. Rather, existing research compares recent assaults against younger adults with recent assaults against older adults. By contrast, cohort-based analyses would compare characteristics of recently occurring assault against younger adults with those of distant-past assaults against older adults when they were younger. Such study provides insight about the changing nature of assaultive violence and may offer some clues as to why older adults report significantly less lifetime violence compared to younger adults.

Psychologically and psychiatrically oriented epidemiologists generally choose to study assault characteristics that are associated with heightened psychological and emotional distress. For instance, Kilpatrick, Resnick, and colleagues determined that subjective interpretation of life-threat severity during trauma predicted later emotional problems (Kilpatrick et al., 1989; Kilpatrick & Resnick, 1993; Resnick, Kilpatrick, Dansky, Saunders, & Best, 1993). Additional trauma characteristics significantly associated with poorer posttrauma adjustment include frequency, duration, and severity of trauma exposure. Norris and Kaniasty (1994) noted, for instance, that multiply traumatized individuals have generally poorer outcomes than individuals who have experienced a single traumatic event. Similarly, in a review of domestic violence investigations, Golding (1999) found that there was a dose–response relationship between the severity and duration of violence and development of PTSD and depression in victims. In addition to characteristics of assaultive violence, study has also focused on contextual factors, namely substance abuse. Buss, Abdu, and Walker (1995) found that the majority of victims of physical assault who presented at a small city trauma center were under the influence of drugs or alcohol at the time of their attack. Moreover, 60% of victims reported that their assailants were intoxicated as well.

Existing investigations examined potentially important aspects of criminal victimizations, but only a few have focused on the differences in assault characteristics between older and younger adult victims, and none examined cohort-based differences across the age groups (i.e., examining assaults against older adults when they were younger vs. assaults against young adults). Nonetheless, a brief review of age-based (as opposed to cohort-based) differences is warranted. Using data from the 1992–94 National Crime Victimization Survey, Bachman et al. (1998) found that older adult women were more likely to be physically assaulted in their

homes by strangers compared to younger adults, and twice as many assaulted older adults required medical care. Older adult women were more likely to be attacked by strangers, and were also more likely to be sexually assaulted in their home and to sustain genital injuries (e.g., lacerations) following rape (Muram et al., 1992). According to a 1995 Bureau of Justice Statistics report (Bachman & Saltzman, 1995), older adult robbery victims were more likely to face armed perpetrators and were more often attacked by multiple assailants relative to younger adults. The increased likelihood of being attacked by multiple, armed assailants in places thought particularly safe (e.g., in one's home) may place older adult victims at an increased risk for later emotional problems.

This study was conducted in order to compare characteristics of assaults against older adults (e.g., assaults occurring during the early part of the twentieth century) with more recently occurring assaults against younger adults. In addition, age-based differences in reporting rates were also outlined.

Method

Participants

Participants were enrolled in the National Women's Study, a longitudinal research project in which a national household probability sample of 4,009 adult women were randomly selected by Random Digit Dialing methodology and interviewed by telephone. The National Women's Study methodology is described in considerable detail elsewhere (Resnick et al., 1993). Schulman, Ronca, Bucuvalas, Inc., a survey research firm, conducted all sampling and interviewing. Sample construction was a four-stage procedure. In Stage 1, a stratified sample of U.S. counties was constructed using four census regions (i.e., East, West, North, and South) and three size-of-place (i.e., central city, standard metropolitan statistical area, and nonstandard metropolitan statistical area) strata (United States Bureau of the Census, 1991). This yielded a total of 12 mutually exclusive and exhaustive groupings of the total U.S. population. The number of primary sampling units selected within each of the 12 strata was proportional to the number of people residing within that stratum. In Stage 2, one telephone number per primary sampling unit was selected using random digit dialing (RDD) procedures. In Stage 3, RDD-selected telephone numbers were called to identify residential households. In Stage 4, household respondents were screened on the basis of sex and age to identify eligible participants. This four-stage sampling procedure yielded a national probability sample of female adults (age 18 and older) from telephoned households.

Of the total 4,009 women, 2,009 were a national household probability sample of U.S. female adults (age 18 and older), and 2,000 were an oversample of women aged 18–34 years. This oversample was incorporated into the study design to maximize the likelihood of including participants who had experienced assault or

substance use (Resnick et al., 1993, provide demographic characteristics of the original study sample, weighted by age and race to reflect national averages of these variables. In addition, detailed information on the sampling methodology is also provided in that paper).

Data from initial interviews of women aged 18–35 and 55–89 were the primary focus of consideration in this study. Women aged 36–54 were excluded from the study to enhance contrast between the two age cohorts and to focus analyses on younger adults and older adults, as opposed to middle-aged adults. Specifically, middle-aged women can be expected to be a heterogenous group, a proportion of whom will overlap considerably with younger adults, and another fraction of whom will overlap significantly with older adults. This study, therefore, focused on the two ends of the adult age spectrum. Considering the older adult subsample ($n = 549$), the mean age of older adult participants was 67.0 years ($SD = 7.78$). Eighty-eight percent were White, 6.7% were African American, 2.6% were of at least partial Hispanic origin, 2.0% were Native American, and approximately 3.5% were members of other ethnic groups or chose not to answer the question (Note that the classification of "Hispanic" was not mutually exclusive of other ethnic groups). With respect to highest educational achievement, 28.1% did not graduate from high school, 36.2% were high school graduates, and 8.2% were college graduates.

Considering the younger adult subsample ($n = 2{,}669$), the mean age was 27.8 years ($SD = 4.66$). Eighty-three percent were White, 10.3% were African American, 8.5% were of at least partial Hispanic origin, 3.0% were Native American, and approximately 3% were members of other ethnic groups or chose not to answer the question. With respect to highest educational achievement, 11.2% did not graduate from high school, 39.8% were high school graduates, and 16.4% were college graduates.

In addition to differences in age, a significantly greater proportion of younger adults reported completing college, $\chi^2(1, N = 3{,}218) = 10.01$, $p < .01$, and high school, $\chi^2(1, N = 3{,}218) = 23.41$, $p < .001$. With respect to race, a significantly smaller proportion of older respondents were Black, $\chi^2(1, N = 3{,}218) = 6.49$, $p < .05$, and a significantly larger proportion of older respondents were White, $\chi^2(1, N = 3{,}218) = 8.49$, $p < .01$.

Procedure

Following selection of households, a telephone call was placed to the randomly generated number. In households with more than one adult woman, the most recent birthday method was used to select one woman for interview. If potential participants agreed to be interviewed, they were informed that they would be contacted twice more over the following 2 years. Follow-up interviews were conducted both 1 year and 2 years after the initial interview.

Female interviewers collected all data using a computer-assisted telephone interview (CATI) procedure in which each question in the highly structured telephone interview appeared on a computer screen and was read verbatim to respondents. Supervisors listening to real-time telephone interviews while monitoring the CATI interview on their own computer performed random checks of each interviewer's assessment behavior and data-entry accuracy at least twice during each shift. When an error was detected, supervisors required its correction and discussed it with the interviewer following the interview. If the error was detected again in following interviews, the interviewer was removed from the study.

Variables

Specific questions used to construct the following variables are available from the first author and outlined in greater depth in Kilpatrick, Acierno, Resnick, Saunders, and Best (1997). Vaginal rape and anal rape were defined as coerced (i.e., threat of harm) or forced penetration of the vagina or anus by the perpetrator's penis, whereas Oral Rape involved coerced or forced penetration of the vagina or anus by the perpetrator's mouth or tongue; or being coerced or forced to put another's genitalia in one's mouth. Finally, digital rape was defined as coerced or forced penetration of the vagina or anus by the perpetrator,s fingers or objects.

Physical assault was defined as being attacked by someone with the intent to kill or seriously injure and was classified as "with" or "without" a weapon. For both rape and physical assault, the variable "Ever Seen Perpetrator" was defined by victim report indicating that they had seen the perpetrator before the assault on at least one occasion. Subjective Life Threat During Event referred to respondent report that during the incident, they thought they might be killed or seriously injured, whereas Actual Injury referred to injury secondary to assault described as either serious or minor by respondents (both "minor" and "serious" injuries were coded as "suffered injury"). Substance Use referred to victim report of their drug or alcohol use, or their impressions of perpetrator drug or alcohol use immediately preceding the incident. Finally, Reported to Authorities referred to victim report of the assault to police or other authorities.

Results

Data are presented in terms of prevalences, univariate odds ratios (ORs), and 95% confidence intervals (CIs), which were determined using the SPSS statistical package for Windows, version 10. The low number of older adults who reported victimization raised our concern about Type II error. As a result, no correction for multiple comparisons (e.g., Bonferroni) to control Type I error was applied.

A smaller proportion of older compared to younger women reported experiencing vaginal (5.3 vs.14.4%), oral (0.5 vs. 5.4%), anal (0.2 vs. 2.1%), and digital

Table 1. Comparisons of Rape and Physical Assault Characteristics Between Age Groups

	Older adult % (*n*)	Younger adult % (*n*)	Older versus younger OR	95% CI
Prevalence of assault[a]				
Forced vaginal rape	5.3 (29)	14.4 (385)	0.33***	0.22–0.49
Forced oral rape	0.5 (3)	5.4 (143)	0.10***	0.03–0.31
Forced anal rape	0.2 (1)	2.1 (56)	0.09**	0.01–0.62
Forced digital rape	2.2 (12)	7.5 (199)	0.28***	0.15–0.50
Any type of rape	6.2 (34)	17.4 (464)	0.31***	0.22–0.45
Physical assault with weapon	3.5 (19)	7.6 (202)	0.44***	0.27–0.71
Physical assault without weapon	2.6 (14)	8.6 (228)	0.28***	0.16–0.48
Any physical assault	5.5 (30)	12.6 (336)	0.40***	0.27–0.59
Characteristics of sexual assault[b]				
Repeated rape among victims	21.2 (7)	36.8 (170)	0.46	0.20–1.09
Expected severe or fatal injury (rape)	29.0 (9)	54.2 (245)	0.34**	0.16–0.77
Actual injury (rape)	18.2 (6)	29.1 (134)	0.54	0.22–1.34
Rape victim substance use	15.2 (5)	10.5 (48)	1.52	0.56–4.13
Perpetrator substance intoxication (rape)	33.3 (9)	48.1 (180)	0.54	0.24–1.23
Rape reported to authorities	9.1 (3)	15.2 (70)	0.56	0.17–1.89
Ever seen perpetrator (rape)	97.0 (32)	83.6 (388)	6.25	0.84–50.0
Characteristics of physical assault[c]				
Repeated physical assault among victims	42.9 (12)	40.2 (134)	1.11	0.51–2.43
Expected severe or fatal injury (assault)	67.9 (19)	85.6 (285)	0.36**	0.15–0.83
Actual injury (assault)	51.7 (15)	66.5 (222)	0.54	0.25–1.16
Assault victim substance use	3.4 (1)	7.6 (25)	0.43	0.60–3.30
Perpetrator substance intoxication (assault)	52.2 (12)	61.3 (173)	0.68	0.29–1.61
Physical assault reported to authorities	51.7 (15)	46.4 (154)	1.25	0.58–2.66
Ever seen perpetrator (assault)	75.9 (22)	83.6 (280)	0.62	0.25–1.52

Note. Analyses of rape and assault characteristics employed only those women who reported being raped or assaulted. OR: odds ratio; CI: confidence interval.
[a] $N = 549$ for older adult; $N = 2{,}660$ for younger adult.
[b] $N = 34$ for older adult; $N = 464$ for younger adult.
[c] $N = 30$ for older adult; $N = 336$ for younger adult.
$^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

(2.2 vs. 7.5%) forms of rape (see Table 1). The average age of first rape for both older and younger adult victims was about 14 years (older women $M = 13.9$ years, $SD = 7.9$ years; younger women $M = 14.0$ years, $SD = 6.4$ years, $F < 1$). Analyses of assault characteristics that follow later referred to each woman's first rape event. With the exception of subjective impressions of life threat, there were no significant differences in contextual or characteristic aspects of the rape events (see Table 1). One-half of the younger adult women, compared to only a third of the older women, reported thinking that their lives were in danger or that they would be seriously injured during the rape. However, both age groups reported experiencing similar risk of actual injury. Among rape victims, approximately one-fifth to one-third suffered repeated rapes, and almost all had seen the perpetrator before. Very few victims reported being intoxicated during the assault, but one-third to one-half indicated that perpetrators were probably under the influence of alcohol or drugs.

Finally, fewer than one-fifth of victims reported the incident(s) to authorities such as the police.

As with sexual assault, older adults were less likely to report being physically assaulted with a weapon (3.5 vs. 7.6%), and without a weapon (2.6 vs. 8.6%). The average age of first physical assault for older women ($M = 31.9$ years, $SD = 15.9$ years) was significantly different than the average age of first assault for younger women, $M = 18.6$ years, $SD = 6.3$ years; $F(1, 196) = 44.61$, $p < .001$; see Table 1. Younger women were more likely to report that they thought they would be killed or seriously injured during the assault. Nearly half of both age groups indicated that the assaults were repeated events and more than three quarters of both age groups were at least somewhat familiar with the perpetrator. About half of respondents indicated that they actually were injured during the assault, about half noted that the perpetrator was intoxicated, and a similar proportion reported the event to police or other authorities. Less than 10% of victims indicated that they were using drugs or alcohol at the time of the physical assault.

Discussion

Overall, findings of this study were consistent with previous investigations in which prevalence of reported interpersonal victimization was lower in older, compared to younger adult women (Bachman et al., 1998; Muram et al., 1992; Norris, 1992). Although older and younger women evidenced great differences in reported prevalence of victimization events, they did not report that the characteristics of their assault were hugely different. With the exception of perceived life threat during both forms of victimization, women from each age group did not differ greatly in terms of our study variables. That is, statistically similar proportions of both groups reported that they had seen the perpetrator before, that the event was one in a series, that they or the perpetrator or both were under the influence of a substance, that they actually experienced injury, and that they reported the assault to authorities.

The fact that older adults consistently report experiencing fewer episodes of lifetime interpersonal violence than younger adults do is somewhat counterintuitive because older adults, while at a reduced risk of assault as seniors, were younger adults at one time, and thus at an overall greater risk (i.e., they have experienced increased risk of being assaulted as younger adults in addition to the reduced risk as older adults). There are several potential explanations for differences in reporting rates. One explanation is that violence levels were lower during the years when the older adult women in our sample were most likely to be victimized (i.e., when they were younger than 35 years old). Differences in levels of interpersonal violence across the century are difficult to detect, however, because all major crime incidence surveys (e.g., the Federal Bureau of Investigations Uniform Crime Reports and the Bureau of Justice Statistics National Crime Victimization Survey)

either were not in existence early on, or have undergone revision over this century, with even more extensive revisions in the past three decades. Thus, changing definitions of assault events, coupled with changing methods of assessing those assault events, preclude any detailed cross-cohort comparisons. Alternatively, it may be the case that older adults simply do not report some violent events, either due to memory bias, fear of negative consequences to victims who report, or to generation-specific prohibitions against such disclosure (e.g., they did not grow up watching talk shows glorifying self-disclosure). There is some indirect evidence that older adults are more reticent to report instances of criminal victimization. Specifically, an investigation of crime-reporting in a community sample revealed that reporting rates were higher for recent crimes (i.e., those that had occurred within 5 years of the investigation; Kilpatrick, Saunders, Veronen, Best, & Von, 1987). Victims who had been assaulted several years earlier were less likely to have reported the crime to the authorities. Although specific age comparisons were not made by these researchers, it is likely that the group of individuals who were victimized several years prior to the investigation was composed largely of older adults. A final explanation of cohort-based differences in overall prevalence of reported victimizations involves mortality. Negative health effects of assault are well demonstrated (see Resnick, Acierno, & Kilpatrick, 1997, for review) and include both medical problems and behaviors detrimental to health such as cigarette and other substance use (Acierno, Kilpatrick, Resnick, Saunders, & Best, 1996; Kilpatrick et al., 1997). Thus, it is not unreasonable to expect that victims might die at an earlier age than nonvictims, and consequently, not be available to report past victimization. Overall, it is likely that some combination of all of these factors accounts for differences in reported prevalence across age groups.

The finding that assault characteristics were very similar for both rape and physical assault across age groups was surprising. If older women are biased against reporting victimization (i.e., either due to cultural prohibitions or memory deficits), one might expect this bias to also manifest itself in some way when these women do actually describe assault events. That is, those factors operating to reduce overall reporting in older adults might logically operate to alter the characteristic description of those events that are reported. For example, if the effects of social stigma are more powerful in determining *whether* a victimization event is disclosed by older, relative to younger adults, one might predict that social stigma would also affect *how* an event is reported across age groups. For example, one might expect older women to report less victim substance use. However, once victimized, older women represented their assaults in much the same way as younger women. Moreover, older women reported being raped at about the same age as younger women. These data lend very limited support to the notion that prevalence differences are real and that younger women currently experience more interpersonal assault than older women did when they were younger. This conclusion is tempered, however, by the low power reflected in some analyses.

Specifically, the number of older adult women reporting victimization was very small, and the possibility of Type II error must be considered. This point becomes particularly apparent when considering prevalences that do not significantly differ, but are separated by 10–15 percentage points.

Overall, the likely explanation for the dramatic differences in prevalence of interpersonal victimization across age groups involves an interaction of reporting bias and cohort effects, with older adult women being less likely to report an assault that actually happened, and younger women living in a more violent society. Data exist in the rape literature to support both of these possibilities. With respect to the contention that younger women are living in a more violent society, a 1991 study documented that more women reported being raped the previous year than in any year in U.S. history (U.S. Senate Committee on the Judiciary, 1991). This trend is not solely attributable to increased rates of reporting or evolving definitions of rape, however, as the authors noted that unreported rapes were increasing at a faster rate than reported rapes.

At the same time, empirical evidence supports the hypothesis that older adults may be less likely to interpret coerced sexual contact as rape, or may simply be less inclined to report acknowledged rapes or sexual assaults. For instance, older adults score higher on rape myth acceptance measures, indicating that they do not deem many instances of coerced sexual contact as rape or sexual assault (Kalra, Wood, Desmarais, Verberg, & Senn, 1998). Even if the event is recognized as sexual assault, individuals who score higher on measures of rape myth acceptance may feel that they were to blame for the event, which could also result in a failure to report being assaulted. Finally, a study designed to identify factors associated with rape-reporting found that women who do not report rapes believe that the assaults were private, personal matters (Bachman, 1993). Although this study did not directly compare older and younger women, it is certainly conceivable that this belief is especially characteristic of older women, and that they would therefore be less likely to report past rapes.

To our knowledge, this investigation represents the first cohort-based comparison of contextual and characteristic aspects of sexual and physical assault. Although this investigation is illuminating in demonstrating largely similar interpersonal violence characteristics experienced by younger and older adults (when they were younger), it is not without limitations. Most notably, the retrospective nature of the design introduces the possibility that memory biases and recall difficulties may have influenced the findings. Given that younger adults were asked to recall relatively recent assaults, whereas older adults were asked to recall assaults that occurred many years ago, differential recall bias is certainly possible. Longitudinal designs would be necessary to fully evaluate or control for such a possibility. Unfortunately, such data are simply not available at this time. As mentioned, major crime incidence surveys were either not in existence or have undergone substantial revision since the early part of the twentieth century. In the

absence of detailed information about distant-past assault characteristics, these data provide the most direct examination of cohort-based variation in contextual aspects of sexual and physical assault. Another possible limitation of this investigation pertains to the physical limitations that can occur with advanced age, including mortality. Specifically, some of the older adult women may have had difficulty hearing the interviewer on the telephone, and this difficulty may have influenced their reports of assaults or details of victimizations that they experienced. Finally, conclusions must be made in light of the potential that limited sample size contributed to nonsignificant findings. Overall, although older and younger adults reported great differences in the prevalence of assault, they did not appear hugely dissimilar in terms of the character of victimization.

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