

Resistance to Sexual Assault: Who Resists and What Happens?

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Abstract: To determine who resists sexual assault and what happens, data were examined from a probability sample of 3,132 adult community residents of Los Angeles, California. Seventy-five per cent of the respondents reporting an assault ($n = 365$) indicated that they had attempted to resist their most recent assault; talking was the most frequently used resistance strategy. The strongest predictor to emerge in the multivariate analyses of resistance was

timing of assault: respondents assaulted only in childhood were less likely to resist than either respondents assaulted only in adulthood, or respondents assaulted in both phases. Univariate analyses indicated that resistance reduced the probability of sexual contact, however multivariate analyses suggested that assailant use of force was the most important determinant of assault outcome. (*Am J Public Health* 1989; 79:27-31.)

Introduction

Legal thought has been concerned with the topic of resistance to sexual assault because victim resistance has been considered the proof that sexual overtures are unwanted. Victims of sexual assault are unique in this respect—victims of no other violent crime are expected to meet their assailant with resistance.¹ While most states no longer require proof of resistance in criminal rape proceedings, societal norms still emphasize resistance as one way to legitimize a victim's claim that sexual contact was unwanted.

Research on resistance to sexual assault has focused largely on the relative effectiveness of various strategies in deterring assault and physical injury. Conclusive statements about strategy effectiveness have been preempted, however, by the variability in definitions of resistance across studies. For example, screaming has been alternatively grouped with other verbal strategies or with more aggressive physical strategies. Studies of resistance have been limited also by their reliance on respondents who report assault to the police or who utilize rape crisis centers. Biased estimates of the probability of resistance may emerge because reported assaults are known to differ in important ways from non-reported assaults,² and the dimensions on which these assaults differ may be related in turn to the use of specific resistance strategies. Successful resistance strategies (those deterring assault) may be under reported as well.³⁻⁵ Despite these biases and definitional problems, the empirical research converges to support one important conclusion: resistance reduces the probability of an assault being completed.

Fewer studies have examined the relation between resistance and physical injury other than rape. Two investigations suggest that resistance may be costly to the victim in terms of physical injury.^{6,7} In contrast, other researchers^{8,9} conclude that resistance does little to increase one's chances of injury. One analysis that took timing into account addresses this apparent contradiction.¹⁰ While a variety of resistance strategies are associated with increased victim injury, the chronology shows that victim resistance increases in response to injury. These and other data¹¹ led Furby and Fischhoff³ to suggest that more assertive strategies are

associated with greater chances of injury, but these strategies are consequences, not causes, of increased injury.

The research reported here differs from most studies of resistance because the sample is community-based and the respondents are not selected specifically because of their sexual assault experience. Also, data are gathered from men, as well as women, and from Hispanics, as well as Whites who are not Hispanic. (Prevalence of assault for this sample is reported elsewhere.^{12,13}) The first aim of this research is to determine the degree to which demographic characteristics and circumstances of assault are associated with resistance strategy. One prior study found that female rape victims reported greater resistance if they knew their assailant, if no weapon was present, and if they displayed certain personality characteristics (such as dominance and internal locus of control).¹⁴

Like other investigations, this research also examines the relation of resistance to assault outcome, including physical injury. Multivariate analyses allow for a test of independence among the variables associated with resistance or outcome.

Methods

The data are from the Los Angeles Epidemiologic Catchment Area (ECA) study, one of five sites of the National Institute of Mental Health (NIMH)-initiated collaborative ECA program. Respondents at the Los Angeles site were also asked a series of questions regarding lifetime sexual assault. The design and methodology of the ECA surveys are described elsewhere.^{15,16}

Sample

The ECA sample consists of 3,132 adults (18 years of age and older) from two catchment areas. One catchment area contains predominantly Hispanic Americans (83 per cent) and the other contains largely non-Hispanic Whites (63 per cent) but also many Hispanics (21 per cent). Eighty-seven per cent of the Hispanic Americans in the two catchment areas are of Mexican origin. Respondents chose whether to take the interview in English or Spanish. The survey instrument allowed easy switching from one language to another.

The sample, stratified by catchment area, was selected using a two-stage probability technique. One adult from each household was randomly selected for inclusion using the Kish procedure.¹⁷ Respondents were interviewed in person, with an overall completion rate of 68 per cent. Among those consenting to the interview, less than 1 per cent (21 of 3,132 respondents) refused to answer the filter question on experience with sexual assault.

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The data presented here represent the experiences of the 365 respondents in the Los Angeles ECA sample who provided data about resistance in response to their lifetime experience with pressure or force to have sexual contact. The demographic characteristics of these respondents are presented in Table 1.

Instrument

Lifetime sexual assault was assessed using the question: "In your lifetime, has anyone ever tried to pressure or force you to have sexual contact? By sexual contact I mean their touching your sexual parts, your touching their sexual parts, or sexual intercourse?" Those answering affirmatively were asked if they had ever been forced or pressured for sexual contact before age 16 (childhood sexual assault). Detailed information was collected from all assaulted respondents concerning the most recent assault. Among other questions, respondents were asked: time elapsed since assault; the relation of the assailant to the respondent; the kind of pressure or force used; whether physical harm occurred and when; the type of sexual activity that occurred; and whether resistance strategies were used. (A more detailed description of this instrument is reported elsewhere.¹²)

Operationalization of Variables

The data presented here focus on two aspects of resistance to assault: the correlates of resistance and the relation of assault resistance with reported outcome. Respondents reporting any sexual assault were asked the following question: "We are interested in the kinds of situations in which people may decide to resist sexual contact. The most recent time you were pressured or forced into sexual contact did you try to resist?" Respondents who indicated they had tried to resist were then asked: "What did you do?" Interviewers recorded the respondents' answers verbatim.

Correlates of resistance examined in this research include respondent demographic characteristics and assault circumstances:

- The *demographic variables* are: gender, age at interview (dichotomized at younger than 40 years and 40 years or older), ethnicity (Hispanic or other White), and education (dichotomized at the median years of education within ethnic group, i.e., 10 among Hispanics, 14 among other Whites).
- *Circumstances surrounding the assault* are: whether the respondent had experienced one compared to two or more lifetime assaults; whether the most recent

assault had occurred during childhood (below age 16) or during adulthood (this group was subdivided into respondents assaulted only in adulthood and those assaulted in adulthood with at least one prior assault in childhood); the time elapsed since this assault; what kind of pressure or force the assailant used (described below); and the respondent's relation with the assailant (described below).

The question on pressure or force asked the respondent to indicate from a list all strategies that applied. For purposes of analyses, these assailant strategies were classified as either *pressure* (they tried to talk you into it; you were afraid they wouldn't like or love you; they bribed you) or *force* (they said they would hurt you; they scared you because they were bigger or stronger; they pushed, hit, or physically restrained you; they threatened you with a weapon; they drugged you or got you drunk; they physically harmed or injured you). Those indicating physical harm were also asked the following three questions: "Were you hurt *before* sexual activity took place?"; "Were you hurt *during* sexual activity?"; "Were you hurt *after* sexual activity had taken place?"

The respondent's relation to the assailant was classified for analyses as stranger, acquaintance (includes friend), intimate (lover, spouse), relative, and other. Regarding assault outcome, respondents were asked: "What kinds of sexual activity resulted?" A list of applicable responses included: none, attempted sexual contact only; they touched your sexual parts (genitals or breasts); they had you touch their sexual parts; intercourse; something else.

Results

Resistance Strategies

All responses to the open-ended question on resistance strategies used in the most recent assault were reviewed and content analyzed in order to develop coding categories. Up to two resistance strategies per respondent were coded. Very few respondents reported more than two resistance strategies or refused to answer this question (about 1 percent for each). This content analysis yielded six categories: talking; reasoning; saying no sexual interest; loud or angry talking; fleeing; and physically fighting.

Other resistance strategies were infrequently occurring responses (less than 4 per cent) that could not be classified in these six categories, such as "throwing up" or "making him take me home." Some respondents were classified into the no resistance category, even though they reported they had attempted to resist assault, if their resistance strategy indicated no apparent resistance. Three raters (JMG, JAS, JMS) independently classified each of the open-ended responses. All three raters agreed on the category 90 per cent of the time; two of three raters agreed 98 per cent of the time. The raters discussed the responses for which there was complete disagreement and consensus was achieved.

Table 2 presents the frequencies for reported use of each of the six categories of resistance strategies. These data are presented for all respondents, for men, and for women. As shown in Table 2, talking was the most frequently used resistance strategy (27 per cent), followed by physically fighting (23 per cent). Saying no sexual interest or loud/angry talking were used less often (3 and 4 per cent, respectively), while fleeing (15 per cent) and reasoning (11 per cent) were used more often. Combining all resistance strategies, 75 per cent of the respondents indicated they had attempted to resist their most recent assault.

TABLE 1—Demographic Characteristics of Respondents Reporting Sexual Assault, Los Angeles Epidemiologic Catchment Area Site

Sex, Age	Mexican American	Other White	Other	Total
Men^a				
Age (years)				
18-39	28	51	11	90
40+	6	24	3	33
Total	34	75	14	123
Women^b				
Age (years)				
18-39	46	110	11	167
40+	16	52	2	70
Total	62	162	13	237
Total	96	237	27	360

^aThe data for two men are omitted because they did not report their age.

^bThe data for three women are omitted because they did not report their age.

TABLE 2—Frequency^a of Use of Resistance Strategies for All Assaulted Respondents, for Women, and for Men

Resistance Strategy	All Respondents n = 365 Per Cent ^b (n)		Women n = 240 Per Cent ^b (n)		Men n = 125 Per Cent ^b (n)	
Talking	27	(91)	23	(49)	35	(42)
Reasoning	11	(36)	10	(21)	13	(15)
Saying no sexual interest	3	(11)	3	(6)	4	(5)
Loud/angry talking	4	(15)	7	(15)	0	(0)
Fleeing	15	(49)	17	(36)	11	(13)
Physically fighting	23	(77)	30	(64)	11	(13)
No resistance	25	(84)	22	(47)	31	(38)

^a Weighted for sample design and non-response.^b Percentages do not sum to 100 because respondents could identify multiple strategies.

Correlates of Resistance

To examine the correlates of resistance, the strategies presented in Table 2 were aggregated into verbal resistance (talking, reasoning, saying no sexual interest, loud/angry talking), physical resistance (fleeing, physically fighting), and no resistance. Respondents who indicated use of both verbal and physical resistance were classified with the physical resisters. The findings were unchanged if this latter combination strategy was considered separately.

The rates (per cent reporting) of each resistance strategy were first examined as a function of gender, ethnicity, age, and educational attainment. These rates were calculated using SESUDAAN, a specialized SAS subprogram which calculates rates and asymptotic approximations of exact standard errors in clustered samples.¹⁸ Analyses of ethnicity and educational attainment included only the Hispanic and other White respondents, as only these groups were sufficiently represented in the sample to permit comparison of rates and computation of median educational level.

Age at interview, ethnicity, and educational attainment were unrelated to the use of resistance strategy. Women were more likely to use physical (or combination) resistance strategies than men (46.6 per cent, 99 per cent confidence intervals [CI] = 36.9, 56.3 versus 22.0 per cent, 99 per cent CI = 11.8, 32.2). In contrast, men were more likely than women to use verbal strategies (46.9 per cent, 99 per cent CI = 35.1, 58.8 versus 31.1 per cent, 99 per cent CI = 22.3, 40.7) or no strategies (31.1 per cent, 95 per cent CI = 22.0, 40.2 versus 21.8 per cent, 95 per cent CI = 17.0, 26.7).

Turning to the circumstances surrounding the most recent sexual assault, the number of lifetime assaults, the time elapsed since the most recent assault, and the respondent's relation to the assailant were all unrelated to resistance strategy. Respondents whose most recent assault was during childhood (at age 15 or younger) were more likely to offer no resistance (46.9 per cent, 99 per cent CI = 31.1, 62.8) than either respondents assaulted only in adulthood (21.6 per cent, 99 per cent CI = 14.1, 29.2) or those assaulted in both adulthood and childhood (16.5 per cent, 99 per cent CI = 4.7, 28.4). Additionally, respondents assaulted only in childhood were less likely to use verbal resistance (17.7 per cent, 99 per cent CI = 4.4, 31.0) than the two adult groups (44.4 per cent, 99 per cent CI = 33.9, 54.8 and 32.2 per cent, 99 per cent CI = 19.2, 45.2, respectively). Use of physical or combination of strategies was equivalent for those assaulted only in childhood (35.4 per cent) or only in adulthood (34.0 per cent), and was more prevalent among respondents assaulted during both life phases (51.2 per cent, 99 per cent CI do not overlap with other groups). Respondents whose assailant used pres-

sure were more likely to use verbal strategies (46.0 per cent, 99 per cent CI = 35.8, 56.3) than were respondents whose assailants used force (21.3 per cent, 99 per cent CI = 9.7, 32.9). Complementary findings emerged for physical or combination strategies: these strategies were more common among those experiencing force (56.9 per cent, 99 per cent CI = 40.8, 73.0) than pressure (26.3 per cent, 99 per cent CI = 15.7, 36.8). The probability of offering no resistance was unrelated to the assailant's use of pressure (27.7 per cent) or force (21.8 per cent).

To control for the possibility of shared variance among the correlates of resistance, all variables were examined simultaneously in a logistic regression analysis, using the SAS CATMOD procedure.¹⁹ For this analysis, resistance was categorized as a dichotomous (yes/no) variable. As shown in Table 3, developmental timing of assault was the strongest predictor of resistance. Respondents assaulted only in childhood were less likely to resist than either respondents assaulted only in adulthood (odds ratio [OR] = .18, 95 per cent CI = .60, .52) or respondents assaulted in both life phases. Inclusion of all two-way interaction terms in the model did not increase the ability to predict resistance.

Relation of Resistance to Assault Outcome

Assault outcome was examined in three ways. First, outcome was dichotomized as aggregated categories of: contact (they touched your sexual parts, they had you touch their sexual parts, intercourse, something else involving contact, e.g., oral sex) compared to no contact (category of none, attempted sexual contact only). Second, outcome was dichotomized as intercourse (oral, anal, or vaginal) compared to all other outcomes, and third, outcome was dichotomized into categories of physical harm compared to no harm. Data on physical harm were obtained from the question on the type of pressure or force utilized by the assailant; one response option was, "They physically harmed or injured you."

The rates (per cent reporting) of each resistance strategy were examined as a function of contact, intercourse, and physical harm. Those experiencing contact were more likely to employ no resistance strategy (31.2 per cent, 99 per cent CI = 23.5, 38.9) than those with no contact (13.1 per cent, 99 per cent CI = 5.4, 20.9). The two groups were equally likely to employ physical plus combination strategies (38.8 per cent compared to 37.7 per cent), and those experiencing no contact reported a greater use of verbal strategies than those with contact (48.1 per cent, 95 per cent CI = 36.6, 59.7 versus 31.1 per cent, 95 per cent CI = 25.2, 37.1). Data on intercourse as an outcome compared to the aggregated categories of all other sexual activity showed no relation with resistance.

TABLE 3—Predictors of Resistance to Sexual Assault: Multiple Logistic Regression Analysis

Variables	Coefficient	S.E.	Odds Ratio	95% Confidence Interval Limits	
				Lower	Upper
Sex (Female, Male)	-0.09	0.19	0.92	0.63	1.35
Age at Interview (40 or Above, Below 40)	-0.40	0.21	0.67	0.45	1.01
Ethnicity (Other, White, Hispanic)	0.14	0.19	1.14	0.79	1.64
Education (Above Ethnic-Specific Median, Below)	-0.12	0.18	0.89	0.62	1.27
Number of Lifetime Assaults (2 or more, 1)	-0.28	0.22	0.76	0.50	1.16
Timing of Assault					
Childhood only vs Adulthood only	-1.69	0.54	0.18	0.06	0.52
Childhood only vs. Child and Adulthood	-2.15	0.70	0.12	0.03	0.45
Assault Recency (Above Median, Below)	-0.10	0.21	0.90	0.60	1.35
Assailant Method (Force, Pressure)	0.11	0.18	1.12	0.78	1.61
Relation to Assailant (Known, Stranger)	0.01	0.23	1.01	0.65	1.57

Likelihood ratio = 0.67

To determine whether resistance was related to assault outcome independently of other potential correlates of outcome, resistance, demographic variables, and characteristics of the assault were all included as predictors of assault outcome (contact, intercourse) in logistic regression analyses. The most important determinant of contact was assailant use of force, with force (OR = 1.62, 95 per cent CI = 1.21, 2.17) more likely to result in contact than pressure. The probability level for the likelihood ratio chi-square for this regression model was very low (.01), suggesting that the model was not a good fit. Inclusion of all two-way interaction terms did not improve model fit. Thus, these results should be viewed as tentative.

Predicting intercourse with these variables resulted in the same effect for assailant use of force. Specifically, force was (OR = 1.41, 95 per cent CI = 1.06, 1.87) more likely to result in intercourse than pressure. The other independent predictor was time of assault: those assaulted only in adulthood (OR = 1.83, 95 per cent CI = 0.05, 0.50) and those assaulted both in adulthood and childhood were (OR = 1.70, 95 per cent CI = 0.05, 0.62) more likely to have intercourse than those assaulted only in childhood. Similar to the regression predicting contact, the probability level of the likelihood ratio chi-square was quite low.

Turning to the data on physical harm, respondents who reported that they were physically harmed were more likely to report the use of physical plus combination resistance strategies than respondents reporting no harm (67.6 per cent, 99 per cent CI = 43.5, 91.8 compared to 35.3 per cent, 99 per cent CI = 26.9, 43.6), and they were less likely to report verbal resistance than respondents who were not harmed (16.1 per cent, 99 per cent CI = 0.2, 32.2 compared to 39.2 per cent, 99 per cent CI = 31.0, 47.3). A similar trend emerged for no resistance strategy (16.2 per cent, 95 per cent CI = 2.7, 29.8 compared to 25.6 per cent, 95 per cent CI = 20.2, 30.9). To further explore the relation between physical harm and sexual assault, data concerning when the physical harm occurred were examined. Of the 34 respondents who report-

ed physical harm, 29 answered the questions about when harm occurred. For 23 respondents (79 per cent), harm took place before sexual activity; 6 respondents (21 per cent) reported being hurt during or after sexual activity exclusively. Data were not gathered on when resistance was offered.

Discussion

These data, gathered from a probability sample of community respondents, are the first to address comprehensively, and with multivariate analyses, the question of who resists sexual assault. In both univariate and multivariate analysis, individuals whose most recent assault occurred in adulthood (age 16 or older) are more likely to report they resisted than individuals whose most recent assault occurred in childhood. Several factors may contribute to the lower likelihood of resistance among children and adolescents. Children may be more trusting of others and less able to distinguish at onset an act of affection from an attempt at sexual contact. This is exacerbated by less restrictive societal norms for touching a child (in a non-sexual way) compared to touching an adult. Further, children are socialized to be deferent and obedient, particularly to those in positions of authority or power. Respondents assaulted only in adulthood were equally likely to resist as those assaulted in adulthood and childhood, but the strategies of the two groups differed. Respondents assaulted during both life phases reported greater use of physical strategies and less use of verbal strategies.

Univariate analyses show that resistance strategy matches assailant strategy, i.e., use of force by the assailant is associated with physical resistance by the victim, and use of pressure by the assailant is associated with victim verbal resistance. The finding that women are more likely than men to utilize physical resistance probably reflects that for those describing an adult assault, harm or threat of harm is more frequently reported by female than male respondents.¹³

Regarding the relation between resistance and outcome of assault, our univariate analyses corroborate prior research in

showing that resistance, particularly verbal, reduces the probability of sexual contact. Physical resistance, on the other hand, is associated with increased likelihood of contact. These effects did not emerge in multivariate analyses, suggesting that the relation of resistance to outcome is a function of other variables measured in this study, most likely assailant use of force. Also relevant to assault outcome is that physical harm relative to no harm was associated with greater use of physical resistance strategies. The majority (79 per cent) of those harmed indicate that harm commenced prior to sexual activity; thus like other investigations,^{10,11} these findings imply that physical resistance is more likely to be a consequence of the sexual assault rather than provoking further injury. Taken together, these results suggest that assailant use of force is more effective than verbal pressure in accomplishing the assailant's aim, and that use of force acts as a stimulus for victim physical resistance.

It is important to note, however, that these data do not describe the resistance experiences of persons who were physically harmed to the point of incapacitation or death.

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