

# PENILE RESPONSES TO NONSEXUAL VIOLENCE AMONG RAPISTS

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The penile circumference responses of 44 rapists to audiotaped narratives describing neutral heterosocial interactions, consenting sex, rape, and nonsexual violence towards women were related to ratings of the amount of physical damage to the rape victims as described in the offenders' police reports. A ratio formed for each rapist by dividing the average penile response to nonsexual violence narratives by the average response to consenting sex was significantly related to whether or not the rapists had seriously injured their victims.

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**I**t is generally agreed that measures of penile tumescence best reflect male sexual arousal and preference for various sexual stimuli (Zuckerman, 1971). In the area of sexual deviance Freund (1967) demonstrated, in pioneering work, that child molesters' penile responses to slides of persons who varied in age and gender were related in a lawful manner to their histories of victim choice. Freund's results have been repeatedly confirmed; for example, Quinsey, Steinman, Bergersen, & Holmes (1975) found that penile responses to slides of persons varying in age and gender differentiated child molesters from non-sex-offender patients and

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community control subjects, whereas subjects' rankings of the slides in terms of sexual attractiveness did not. In addition, child molesters responded more to the types of slide that matched their history of victim choice. There are, however, problems with measures of penile tumescence in the area of sexual deviance, particularly faking, (see Laws & Holman, 1978; Quinsey & Carrigan, 1978) but these measures still appear to be the best available.

The idea that rapists might be differentiable from nonrapists on the basis of sexual arousal patterns is relatively recent. In essence, the idea is that rapists may be different from nonrapists in the amount of sexual arousal they exhibit to descriptions of coercive sexual behaviors. A number of previous investigations have shown that rapists can be differentiated from nonrapists on the basis of their penile responses to audiotaped descriptions of consensual heterosexual intercourse and rape (Abel, Barlow, Blanchard, & Guild, 1977; Abel, Becker, Blanchard, & Djenderedjian, 1978; Barbaree, Marshall, & Lanthier, 1979; Quinsey, Chaplin, & Varney, 1981). These studies have found that rapists respond relatively more to rape cues than nonrape cues in comparison to nonrapists. This difference has been expressed by the "rape index": the mean response to rape scenes divided by the mean response to consenting sex scenes.

Rape narrations contain descriptions of both sexual activity and violence. Barbaree et al. (1979) have interpreted the above studies as indicating that sexual arousal in most rapists is not inhibited by the violence in rape episodes as is the nonrapists' arousal. Quinsey et al. (1981) included descriptions of nonsexual violence towards women and found that rapists, as a group, did not show much sexual arousal to them, although nonsexual violence ratios (the mean response to nonsexual violence divided by the mean response to consenting sex scenes), which may be a more sensitive statistic, were not employed in the analyses. Thus rapists and normals on average give essentially similar responses to nonsexual violence; a finding consistent with Barbaree et al.'s interpretation.

Although rapists as a group do not respond very highly to descriptions of nonsexual violence, we have found that a small

number of rapists do exhibit marked arousal to these descriptions. Abel et al. (1977, 1978) have also found that some rapists respond to nonsexual violence. Moreover, these investigators report (1978) that "sadistic rapists can be identified by their large erections to scenes depicting a nonsexual, physical assault on the victim." In addition, Abel and his associates found "a strong correlation between rape indices and the rapist's likelihood of having injured his victims during the act of rape." Unfortunately, Abel and his associates do not describe these data in enough detail for us to know the actual size of these relationships.

In order to investigate the magnitude of the relationship between rapists' sexual arousal to depictions of nonsexual violence and amount of physical damage to previous rape victims, a relatively large sample of rapists who have committed sexual assaults ranging in severity from no victim damage to victim death and subsequent mutilation is required. In addition, an objective rating scale based upon the amount of victim damage must be developed.

There are problems in interpreting a victim damage scale, however. Some of the damage to victims (or lack of it) occurs fortuitously and therefore may not reflect whether or not the rapist finds physical violence per se sexually arousing. Similarly, intentional damage to victims in a sexual assault can occur, for example, because the rapist does not want to leave a witness. These problems indicate that we should not expect an extremely high relation between victim damage and sexual arousal patterns. In our previous work (Quinsey et al., 1981) we attempted to assign rapists to sadistic and nonsadistic categories based on their offense descriptions in an attempt to circumvent these problems, but failed to agree among ourselves on our categorizations. However, because of the importance of the magnitude of the relationship between rapists' sexual arousal to nonsexual violence and the rapists' dangerousness for practical assessment purposes, victim damage scores were used in the present investigation despite their limitations, as they at present represent the only way of addressing the problem.

## METHOD

### SUBJECTS

Rapists were recruited from within the maximum security Oak Ridge Division of the Mental Health Centre in Penetanguishene, Ontario. Each rapist had committed at least one sexual offense against an unwilling adult or teenaged female. Most of these offenses involved vaginal penetration but occasionally buggery or fellatio instead. Data taken from the 20 rapists in our earlier study (Quinsey et al., 1981) were reanalyzed and an additional 24 rapists were tested.

The average age of these 44 rapists was 26.1 years ( $SD = 6.7$ ); 36 were diagnosed as personality disordered, 7 as psychotic, and 1 as retarded.

### APPARATUS AND PROCEDURE

The same apparatus and procedure was used as reported by Quinsey et al., (1981). Briefly, subjects were seated in an electrically shielded room and listened to audiotapes through a speaker. Penile circumference was measured by a mercury in rubber strain gauge. Each subject was instructed to listen carefully to the situations on the tape and to imagine that he was the person "saying it."

### STIMULI

There were 18 audiotaped situations, each narrated by a male in the first person, past tense. Of these, three were neutral narratives that involved nonsexual and nonaggressive heterosexual interactions; one of these, for example, involved a man arranging for an airplane flight to Florida with a female travel agent. Five narratives involved foreplay and sexual intercourse with a willing spouse or girlfriend; these narrations were very explicit and described the setting, the sexual behaviors, the

female's figure, sexual arousal and behavior, and so on. There were five rape narratives in which significant force was used in achieving intercourse with an unwilling female stranger. These rape narrations all involved the rape of a female stranger. The stories reflected aspects of rape descriptions found in the police reports describing rapes perpetrated by the rapists whom we assessed. Each story was, however, entirely fictional and designed to be short, brutal, and completely unambiguous; the contrast between the consenting and nonconsenting series was deliberately maximized. The rape narratives described the female's appearance, the sexual acts involved, the female's attempts at resistance, and the man's physical overpowering of the victim. The following gives the flavor of the rape narratives: "I tackle her from behind. Rolling her over I slap her face a couple of times which only temporarily stops her hysterical screaming. More determined than ever, I rip her dress to shreds, leaving her completely naked on the ground. As she moans in pain I force her to get on her hands and knees and in this position I lift her ass high and push her face into the ground. Completely degraded, she doesn't move as I drive my hard cock mercilessly into her." An additional five narratives involved no sexual activity but described a woman receiving a beating and being physically hurt. The following example comes from a narrative describing the mugging of a passing woman: "I run after her, catching her from behind. She screams in terror, fighting to free herself from my grasp until she falls. I grab her by the back of her head and grind her face into the ground. That will shut her up. I squeeze her by the throat, my fingers tightly together, not allowing her a single breath. Standing over her prostrate body, I kick her several times as hard as I can."

#### **OFFENSE SEVERITY RATINGS**

The most serious sexual assault as described by the police reports was independently identified by two raters for each patient. Victim damage in this assault was rated on a seven-point scale: no damage, slight damage with no weapon, slight damage with weapon, victim treated in clinic and released, victim treated in hospital and stayed at least one night, victim death, and victim

death with postdeath mutilation (as shown by autopsy reports). Of the 44 ratings there were 4 interrater disagreements (usually because of insufficient information) and these were resolved by discussion.

#### TREATMENT OF THE DATA

The magnitude of the largest penile response elicited by each narration was recorded. Each subject's responses were analyzed in three forms: raw scores (mm of change in penile circumference), z scores (based upon all of his responses during the session), and the rape index. The raw and z scores were averaged within a stimulus category for each subject prior to analysis of variance. The rape index was calculated, following Abel et al. (1977), by dividing the mean raw score to the rape narratives by the mean raw score of the consenting sex narratives for each subject. In addition, a similar nonsexual violence ratio was calculated by dividing the mean response to the nonsexual violence narrations by the mean response to the consenting sex narratives.

### RESULTS AND DISCUSSION

The mean severity rating was 2.93 (SD = 1.97); 17 of the rapists caused no victim damage and 6 had killed their victims; 3 of these 6 were given ratings of 7. The mean raw responses to nonsexual violence, the corresponding z scores, the nonsexual violence index, and the rape index were not correlated significantly with the offense severity ratings, although all were in the predicted direction.

Because Abel et al. (1978) found that the likelihood of victim damage was related to sexual arousal responses to nonsexual violence, a dichotomous offense severity variable was used in further analyses. This variable assigned subjects to either a serious victim damage group (ratings of 4 to 7 inclusive) or a none to slight victim damage group and was selected so as to divide the group approximately in half.

As shown in Table 1, the measures of relative penile response to nonsexual violence (z scores and nonsexual violence indices) were

significantly different in the two groups. There is, therefore, a relationship between sexual arousal to nonsexual violence among rapists and the probability they physically hurt their victims. In contrast to Abel et al.'s (1978) report, however, no relationship between the rape index and offence severity was found. This pattern of data indicates that the amount of victim damage is related to laboratory measures of sexual arousal to nonsexual violence but that the relationship is not large and that it does not appear to be linear.

If we assume that sexual arousal to nonsexual violence is related to the propensity to inflict victim damage but that the offense severity data are affected by fortuitous phenomena then we should expect a particular pattern of data. Specifically, rapists with victim damage scores of 7 should all have high responses to nonsexual violence, because rapists don't simply mutilate their dead victims by chance or to remove witnesses. Of course, rapists with lower scores may have simply not removed a witness or may not have killed their victims because the victims may have been lucky (several were left for dead and survived), because the rapists were scared away, and so on. Thus we would expect more variability at the low end of the scale than at the high end.

Table 2 presents the relevant data. The Ns are too small to compare the sexual arousal variance at each rating but the means indicate that persons who sexually assault and kill (as well as sometimes mutilate) their victims do not necessarily respond sexually to nonsexual violence. Viewing the data from a perspective of clinical assessment, it is of interest to look at the classification accuracy of the nonsexual violence ratios. Adopting a cutoff nonsexual violence ratio of 1.0, 2 of 25 rapists would be misclassified into the low severity group and 13 of 19 rapists into the high severity group. Although the classification is better than chance ( $\chi^2$  (1 d.f.) = 4.03,  $p < .05$ ), there is a 34% error rate. A cutoff of .8 yields a 32% error rate.

Table 2 shows an elevated proportion of psychotic rapists at the high end of the offense severity scale. This proportion, however, is based on too few rapists for statistical evaluation and it should be remembered that the diagnosis was not made blindly with respect to the offense. It would be expected that the more bizarre the offense, the more likely a psychotic diagnosis would be applied.

TABLE 1  
Measures of Sexual Arousal in the Two Victim Damage Groups

Measure	Slight victim damage (N = 25)		Serious victim damage (N = 19)		t	p (two-tailed)
	M	SD	M	SD		
1 Raw nonsexual violence	.778	.659	1.095	1.747	.81	NS
2 z nonsexual violence	-.546	.244	-.301	.340	2.58	<.05
3 NSV/consenting sex	.452	.309	.791	.517	2.65	<.05
4 Rape/CS	1.332	.597	1.644	1.188	1.11	NS

In conclusion, it appears that nonsexual violence ratios are related to the commission of previous rapes in which the victim was physically hurt but that the rape index is not. Sexual responsiveness to nonsexual violence as tested in the laboratory does not, however, appear to be necessary for the commission of very serious sexual crimes. The magnitude of the relationships between measures of sexual arousal to nonsexual violence and previous offense severity ratings is not large but may be attenuated by chance phenomena which affect the amount of rape victim damage.

The implications of these findings are that caution should be used in interpreting nonsexual violence ratios. A large response to nonsexual violence, however, should not be ignored and further research is required which examines in detail those rapists who become sexually aroused by nonsexual violence. However, it may well be that sexual responses to nonsexual material are highly idiosyncratic and occurred in the present study more or less by chance because the particular nonsexual material used in our laboratory happened to resemble the context of sexual fantasies



**TABLE 2**  
**Nonsexual Violence Ratios and Diagnosis as a Function of**  
**Offense Severity**

Offence severity			
Rating	N	Number Psychotic	Mean NSV/CS
1	17	3	.494
2	5	0	.356
3	3	0	.380
4	11	0	.945
5	2	1	.890
6	3	1	.313
7	3	2	.633

used by some of our patients. Research which examines rapists' sexual arousal to a wide variety of stimulus material is required to clarify these results and provide a theoretical account of why some men respond sexually to nonsexual aggressive material.

Apart for the need for further theoretical research, these data have implications for clinical assessment. Sexual preference data are relevant to two separable clinical decisions: (1) decisions about whether or not to attempt to modify the offender's sexual arousal patterns with treatment, as well as choosing the particular aspects of sexual arousal to target for intervention and (2) decisions about whether or not to release a sex offender from an institution. Sexual arousal to nonsexual violence in a person who has committed violent rape in the past would appear to be a legitimate target for intervention. The worst outcome in the event of an error would be that a rapist receives a short term treatment that he does not need. Thus, clinically, these ratios could be quite useful. On the other hand, these nonsexual violence ratios, because they are not precise, are of much less help in arriving at a release decision. These ratios could, in fact, be used in a most conservative fashion if the decision maker were to conclude that

all offenders who have high ratios are extremely physically dangerous to others and that all those who have low ratios have been inconclusively assessed. To be truly useful in making release decisions, these ratios will have to be made more accurate in future retrospective studies of the type reported here and then evaluated in prospective studies of assessed and released rapists. The importance and difficulty in making release decisions regarding violent sex offenders justifies this kind of a research and development effort.

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