

Authoritarianism and Sexual Aggression

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In Study 1, 198 men completed the Right Wing Authoritarianism, Sex Role Ideology, Hostility Towards Women, Acceptance of Interpersonal Violence, Adversarial Sexual Beliefs, and Rape Myth Acceptance scales, as well as measures of past sexually aggressive behavior and likelihood of future sexual aggression. As predicted, authoritarianism and sex role ideology were as closely related to self-reported past and potential future sexually aggressive behavior as were the specifically sexual and aggression-related predictors. Among 134 men in Study 2, authoritarianism and sex guilt positively correlated with each other and with self-reported past sexual aggression. In both studies, the relationship of authoritarianism and sexual aggression was larger in community than in university samples.

Some theories of sexual aggression focus on the proportion of rapists who exhibit different kinds of pathology, others emphasize individual differences that are related to sexual aggressiveness, and yet others focus on societal factors believed to be related to rape frequency (for a review, see Quinsey, 1984). From a sociological perspective (Koss, Leonard, Beezley, & Oros, 1985), cultural values determine sexual behaviors: Emphasis on male power and aggression, in combination with traditional sex-role stereotyping, develops rape-permissive attitudes in both men and women (Mosher & Tomkins, 1988). Recent research focusing on the beliefs, attitudes, and sexual experiences of the general population has shown that many men engage in sexual coercion, most of which falls short of rape.

Koss and her associates (e.g., Koss, 1988; Koss & Dinero, 1987; Koss & Leonard, 1984; Koss & Oros, 1982) have examined men's self-reported sexual behavior using the Sexual Experiences Survey. Koss and Dinero reported that, of a national sample of 2,972 male American college students, 4.4% reported that they had raped, 3.3% had attempted rape, 7.2% had been sexually coercive, 10.2% had made unwanted sexual contact, and 74.8% had been sexually nonaggressive. Similar figures were reported by Malamuth (1987) and by Rapaport and Burkhart (1984).

Compared with men who report having committed no sexual aggression, sexual aggressors hold stronger "pro-rape" attitudes (e.g., Feild, 1978), stronger adversarial sexual beliefs, and more pronounced sex role stereotypes (Burt, 1980; Koss et al., 1985; Koss & Dinero, 1987; Malamuth, Check, & Briere, 1986; Rapaport & Burkhart, 1984); are more accepting of interpersonal

violence (Burt, 1980; Koss et al., 1985; Malamuth, 1987; Rapaport & Burkhart, 1984); and are more hostile toward women and more likely to consider dominance a motive for sexual activity (Malamuth, 1987).

Recent research has primarily examined aggressors' attitudes toward women and rape. Although these attitudes are important and relevant, they may be only part of a picture involving attitudes toward "outsiders" in general: mentally ill and handicapped persons, lesbians and gay men, refugees, and so forth. Thus, it may be possible to view individual differences in sexual aggression, particularly as they relate to attitudes, from a more general perspective. The findings on sexual aggression noted above are highly suggestive of the attitudes of authoritarians. Nadler and Morrow (1959) found relationships between the California F Scale measure of authoritarianism and two types of negative attitudes toward women: Openly subordinating and chivalrous. Although their finding does not address sexual aggression itself, it is consistent with the related attitudes noted above.

Because of criticisms of the California F Scale, Altemeyer (1988) developed a three-factor model of "right wing authoritarianism." His model involves three covarying attitudinal clusters: *authoritarian submission*, or submission to perceived legitimate societal authorities; *authoritarian aggression*, aggressiveness toward groups or individuals that is perceived to be sanctioned by established authorities; and *conventionalism*, a high degree of adherence to social conventions perceived to be endorsed by society's established authorities. Altemeyer (1981, 1988) has amassed extensive psychometric support for both the Right Wing Authoritarianism (RWA) Scale and his model of authoritarianism. He has also reported that high scores on the scale are related to attitudes and beliefs relevant to authoritarianism, including preference for right-wing political parties, tolerance of government injustices such as wiretaps of union leaders or illegal drug raids, harsher sentences for low- versus high-status criminals, and fundamentalist religious belief.

It may be possible to integrate the general findings about sexual aggression toward women into current models of authoritarianism. The male authoritarian, conventional in his thinking toward women (as reflected by narrow, stereotypical beliefs about rape and traditional views about the role of women in

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society), suspicious of and threatened by the changes to the status quo wrought by the women's movement, and willing to use force against sanctioned targets in "appropriate" situations, may feel justified in using force to impose his will on women.

Study 1

The purpose of the first study was to examine the relationships among authoritarian and sexually aggressive attitudes and self-reported sexual coercion. Demonstration of a relationship between authoritarian beliefs and sexual aggression is important because it would link the literature on sexual aggression with the broader authoritarianism literature and would add theoretically important knowledge about the relationship between authoritarianism (and hence attitudes about a variety of social phenomena), attitudes toward women, and sexual coercion. We predicted positive correlation between authoritarianism and beliefs commonly associated with sexual aggression. We predicted that both authoritarian beliefs and beliefs justifying sexual aggression would correlate with self-reported past sexual aggression and future likelihood of sexual aggression.

Method

Subjects

We recruited 204 men aged 18 years and over ($M = 24.2$ years, $SD = 7.9$ years) from Queen's University and the Kingston community. Because much of the sexual aggression research has used university students, we included both students and nonstudents to examine responses of a nonstudent sample on various measures and to increase the generality of the results. We recruited men from undergraduate classes, through posters and other advertisements, and through the local Canada Employment Centre. They were paid \$5.00 for participating.

Measures

Each subject completed the following scales: A short demographic questionnaire, the RWA Scale (Altemeyer, 1988); the Sex Role Ideology (SRI) Scale, measuring prescriptive beliefs about the roles and behaviors appropriate for women and men (Kalin & Tilby, 1978); the Hostility Toward Women Scale (Check, Malamuth, Elias, & Barton, 1985); and Burt's (1980) Acceptance of Interpersonal Violence, Adversarial Sexual Beliefs, and Rape Myth Acceptance Scales. The Burt scales have been widely used with students and nonstudents and have repeatedly provided significant correlations with self-reported sexual aggression (Koss & Dinero, 1987; Malamuth, 1987).

Subjects also completed the Sexual Experiences Survey (Koss & Dinero, 1987) and the Likelihood of Forcing Sex measure (Malamuth, 1987). The latter has also been used extensively with student samples; it asks about the individual's likelihood of forcing sex or raping in a hypothetical detection- and punishment-free situation. Items asking about the likelihood of robbing a bank, drug trafficking, murdering a hated person, and engaging in various legal sexual behaviors were included as controls for "yea-saying." These items were appended to the end of the Likelihood of Forcing Sex measure and were analyzed separately. The Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960), which taps individuals' interpersonal sensitivity (Holden & Fekken, 1989), was included to assess the influence of social desirability.

Procedure

We administered the questionnaires as follows: The first page informed the participant of the general nature of the questions to come

and reminded him that all responses were confidential. The demographic questions appeared on the second page. The sexual aggression measures (Sexual Experiences Survey and Likelihood of Forcing Sex) were treated as one unit; the questionnaires primarily concerned with gender issues—Kalin and Tilby's (1978) Sex Role Ideology scale, Check et al.'s (1985) Hostility Toward Women scale, and Burt's (1980) Acceptance of Interpersonal Violence, Adversarial Sexual Beliefs, and Rape Myth Acceptance scales—were considered another unit; and the more general RWA and Marlowe-Crowne Social Desirability scales were a third unit. These three units were presented in all possible orders. Within the sexual aggression unit, the Likelihood of Forcing Sex measure, less threatening than the Sexual Experiences Survey, was always presented first. In the RWA-Marlowe-Crowne unit, the authoritarianism scale always preceded the social desirability scale. Within the gender issues unit, the three Burt scales were presented together but appeared in all possible orders, and the SRI, Hostility Toward Women, and grouped Burt scales were presented in all possible combinations.

Each subject was first given some idea of what to expect ("a questionnaire on social issues and behaviors") and was informed that his participation was voluntary and that he could discontinue participation at any time. He was then asked to sign a consent form that explained the nature of the study and the procedures to follow if he had any complaints about the study. Anonymity was assured. Questionnaires were identified only by an order code that did not appear on the consent form. When finished, the subject placed the questionnaires (not the consent form) in an unmarked brown envelope, sealed the envelope, and put the envelope into a box containing a large number of identical envelopes.

Results

A total of 198 subjects' data were used in the final analysis; 6 additional subjects' data were discarded because of erratic responding or because the subjects were too young. One subject stopped participating shortly after reading the first questionnaire.

Results from the sexual behavior measures are presented in Table 1. The Sexual Experience Survey data are consistent with those of Koss and Dinero (1987), Malamuth (1987), and Rapaport and Burkhart (1984). The proportions of those admitting some likelihood of forcing sex or raping are approximately one half of those reported by Malamuth.

Correlations between the attitudinal measures, the Sexual Experiences Survey, and the two Likelihood of Forcing Sex questions are shown in Table 2. All of the attitudinal measures correlated significantly with past sexually aggressive behavior, with the SRI scale the best univariate predictor. The RWA measure correlated .18 ($p < .05$) with likelihood of forcing sex or raping, and all of the sexual attitude measures correlated significantly with likelihood of forcing sex or raping.

Those scales addressing more general concerns—the RWA and SRI scales—correlated .78, whereas Burt's (1980) three specific attitude scales correlated .63 to .65 with each other. Because of these correlations, we carried out principal components analyses on the combined RWA and SRI scales and on the conglomerate of Burt's three scales.

The principal components analyses were carried out using the FACTOR programs of SPSS-X (RWA + SRI) and SPSS-PC+ (Burt's scales). For the combined RWA and SRI scales, using a parallel analysis program (see Horn, 1965) developed by Longman, Cota, Holden, and Fekken (1989), the analysis indi-

Table 1
Self-Reported Actual Past and/or Future Likelihood of Sexual Aggression, Study 1 (n = 198)

Category	%	n
Actual past and/or future likelihood of sexual aggression		
Either	41.4	82
Yes past and yes future	8.6	17
Yes past/no future	19.2	38
No past/yes future	13.6	27
Neither	58.6	116
Past sexual aggression (after Koss & Dinero, 1987)		
Past sexual aggression		
Rape	4.5	9
Attempted rape	4.0	8
Sexual coercion	7.6	15
Unwanted sexual contact	12.1	24
No past sexual aggression	71.7	142
Future likelihood of forcing sex and/or raping		
Either	22.7	45
Yes force sex/no rape	14.1	28
No force sex/yes rape	2.0	4
Yes force sex/yes rape	6.6	13
Neither	77.3	153

cated three meaningful factors at the 95% confidence level. Because the two scales were highly correlated, and because it seems reasonable to assume some degree of relationship between authoritarianism and sex role traditionalism in the real world, an oblique rotation was carried out using the OBLIMIN option of SPSS-X. Items with primary loadings above .4 were included in calculation of factor scores.

Results of the analysis following oblique rotation were as follows: The first factor contained 22 items, 17 from the RWA scale

Table 2
Correlation Matrix for Dependent and Independent Measures, Study 1 (n = 198)

Measure	LFS	RWA	SRI	HTW	AIV	ASB	RMA	M-C
SES	.14***	.26*	.31*	.26*	.28*	.26*	.29*	.02
LFS	1.00	.18***	.29*	.23***	.33*	.28*	.38*	-.17***
RWA		1.00	.78*	.36*	.51*	.48*	.54*	.21**
SRI			1.00	.50*	.62*	.62*	.64*	.11
HTW				1.00	.54*	.56*	.58*	-.22**
AIV					1.00	.63*	.65*	.01
ASB						1.00	.65*	.10
RMA							1.00	.07
M-C								1.00

Note. SES = Sexual Experiences Survey category; LFS = Likelihood of Forcing Sex category; RWA = Right Wing Authoritarianism scale total; SRI = Sex Role Ideology scale total; HTW = Hostility Toward Women scale total [n = 177]; AIV = Acceptance of Interpersonal Violence scale total; ASB = Adversarial Sexual Beliefs scale total; RMA = Rape Myth Acceptance scale total; M-C = Marlowe-Crowne Social Desirability scale total.

* p < .001. ** p < .01. *** p < .05.

and 5 from the SRI scale, and is here considered the *authoritarianism* factor. It contains items representative of all three of Altemeyer's (1981) covarying attitudinal clusters: (a) authoritarian aggression (e.g., RWA Item 9: "We have to crack down harder on deviants and troublemakers if we are going to save our moral standards and preserve law and order"); (b) authoritarian submission (e.g., RWA Item 3: "It is always better to trust the judgement of the proper authorities in government and religion than to listen to the noisy rabble-rousers in our society"); and (c) conventionalism (e.g., RWA Item 22: "If a child starts becoming unconventional and disrespectful of authority it is his parents' duty to get him back to the normal way"; or SRI Item 4: "The best thing a mother can teach her daughter is what it means to be a girl").

The second factor is a con-trait factor. Con-trait items reflect nonauthoritarian or nonsexist positions. This factor is therefore a result of the way the questions on a balanced scale are worded; it contains seven RWA items and one SRI item worded in the nonauthoritarian or nonsexist direction.

The third factor contained 13 items from the SRI scale with primary loadings above .4, and is considered the *sex role traditionalism* factor, focusing more specifically on sex roles than the authoritarian submission or conventionalism clusters of the authoritarianism factor.

The results of the analysis of the three Burt scales are described below. Again using the parallel analysis method, we considered three factors for interpretation. An oblique rotation was again carried out because the three scales were all intercorrelated at .63 or greater, and factors included those items with primary loadings above .4.

The first factor contained 13 items, drawn from all three of Burt's scales. These items included the three items from the Acceptance of Interpersonal Violence scale loading on Briere, Malamuth, and Check's (1985) "women enjoy sexual violence" factor. The factor also includes seven items from the Adversarial Sexual Beliefs scale, five of which loaded on Briere et al.'s "male dominance is justified" factor and three items from the Rape Myth Acceptance scale, two of which deal with sexual interpretations of women's actions (e.g., "When women go around braless or wearing short skirts and tight tops, they are just asking for trouble"). This factor could be considered the *male dominance* factor, with an emphasis on assertion of sexual dominance through violence.

The second factor contained the six questions at the end of the Rape Myth Acceptance scale dealing with disbelief of rape victims' claims. The identical factor was also reported by Briere et al. (1985). The third factor consisted primarily of items loading on the factor Briere et al. termed "victim responsible for rape," as well as the two items they termed the "rape reports as manipulation" factor and two items from the Acceptance of Interpersonal Violence scale dealing with vengeance and domestic violence.

Following these analyses, factor scores were computed for the three RWA + SRI factors and the three Burt scale factors using subjects' responses to the items loading on each factor. Descriptive statistics for the factor scales can be found in Table 3, and correlations between the factor scales and past and future sexual aggression measures are in Table 4.

We then computed hierarchical regressions, regressing the

Table 3
Descriptive Statistics for the Factor Scales, Study 1

Factor scale	<i>M</i>	<i>SD</i>	α	No. items	Possible range
RWASRI 1	76.2	25.0	.93	22	22–154
RWASRI 2	20.6	8.5	.79	8	8–56
RWASRI 3	29.4	12.0	.86	13	13–91
BURT 1	32.7	13.9	.90	13	13–91
BURT 2	9.6	3.6	.89	6	6–30
BURT 3	23.3	7.4	.75	11	11–77

Note. RWASRI 1 = Right Wing Authoritarianism (RWA) Scale + Sex Role Ideology (SRI) Scale authoritarianism factor; RWASRI 2 = RWA + SRI con-trait factor; RWASRI 3 = RWA + SRI sex role traditionalism factor; BURT 1 = Burt (1980) male dominance factor; BURT 2 = Burt disbelieve rape victims' claims factor; BURT 3 = Burt victims responsible/fabricate rape factor.

two sexual aggression measures onto these factors and scores on the Hostility Toward Women scale. As specified previously, the hierarchy of entry of the independent variables was ordered from most general to most specific: authoritarianism, sex role traditionalism, hostility toward women, and finally the three Burt scale factors. For all regressions throughout this article, the more conservative adjusted R^2 figures are reported where they differ from R^2 .

For the first regression, using past sexually aggressive behavior (Sexual Experiences Survey category) as the dependent variable, the authoritarianism factor was forced in first, with the sex role traditionalism factor entering second. The con-trait factor was not significantly correlated with the Sexual Experiences Survey category and was therefore excluded from the analysis. The Hostility toward women scale total was then entered, followed by the three factors derived from the Burt scales, which were entered in a block.

The authoritarianism factor, correlating .30 with the Sexual Experiences Survey, accounted for 9% of the variance. The sex role traditionalism factor was entered on the second step, bringing the R to .33 (adjusted $R^2 = .10$). Hostility toward women, entered on the third step, raised the R to .35 but did not affect the adjusted R^2 . Finally, the three factors from the Burt scales were entered, bringing the total R to .39 (adjusted $R^2 = .12$). A stepwise multiple regression using the variables described above (probability to enter < .05; probability to leave > .10) indicated significant unique contributions from the authoritarianism factor and the factor concerning disbelief of rape victims' claims. These two factors alone provide an R of .36 (adjusted $R^2 = .12$).

For the likelihood of forcing sex measure, the regression proceeded as follows: The authoritarianism factor was entered first; its correlation of .18 with the likelihood of forcing sex category meant that it accounted for 3% of the variance. The sex role traditionalism factor was entered next, bringing the R to .28 (adjusted $R^2 = .07$). The con-trait factor, correlating .20 with the likelihood of forcing sex measure, was entered on the third step. The addition of this factor increased the R to .30 (adjusted $R^2 = .07$). The Hostility Toward Women scale total was entered next, bringing the R to .31 (adjusted $R^2 = .08$). The three Burt scale factors were entered in a block on the fifth and final step, boosting the R to .41 (adjusted $R^2 = .13$). A step-wise regression, conducted as described above, included only the male dominance factor from the Burt scales, which alone provided an adjusted R^2 of .12.

Because there were significant correlations between student status, Sexual Experiences Survey category, and five of the six attitudinal scales, we analyzed data from the student and non-student samples separately. Correlations between sexual aggression measures and attitude measures were dramatically affected by student or nonstudent status.

For the nonstudents ($n = 41$), the correlations between the Sexual Experiences Survey category and the factor scales were

Table 4
Correlations Between Past and Future Sexual Aggression Measures, RWASRI and BURT Factors, and Hostility Toward Women, Study 1 ($n = 198$)

Measure	LFS	RWASRI1	RWASRI2	RWASRI3	HTW	BURT 1	BURT 2	BURT 3
SES	.14	.30*	.09	.30*	.26*	.30*	.28*	.20**
LFS		.18**	.20**	.28*	.23**	.35*	.24*	.31*
RWASRI 1		1.00	.51*	.64*	.38*	.62*	.31*	.55*
RWASRI 2			1.00	.45*	.28*	.27*	.12	.36*
RWASRI 3				1.00	.56*	.71*	.40*	.65*
HTW					1.00	.59*	.39*	.53*
BURT 1						1.00	.42*	.64*
BURT 2							1.00	.43*
BURT 3								1.00

Note. SES = Sexual Experiences Survey category; LFS = Likelihood of Forcing Sex category; RWASRI 1 = Right Wing Authoritarianism (RWA) Scale + Sex Role Ideology (SRI) Scale authoritarianism factor; RWASRI 2 = RWA + SRI con-trait factor; RWASRI 3 = RWA + SRI sex role traditionalism factor; HTW = Hostility Toward Women scale total ($n = 177$); BURT 1 = Burt (1980) male dominance factor; BURT 2 = Burt disbelieve rape victims' claims factor; BURT 3 = Burt victims responsible/fabricate rape factor.

* $p < .001$. ** $p < .01$.

in general higher than the same correlations using the whole sample. The likelihood of forcing sex measure did not significantly correlate with any of the attitudinal factors in the non-student sample, although a higher percentage of nonstudents (29% vs. 21% of students) admitted some likelihood of forcing sex or raping. Nonstudents admitting some likelihood were also younger than those admitting no likelihood ($M = 22.8$ vs. 28.8 years, $t = 1.88$, $p < .05$, one-tailed); in the nonstudent sample, age had the highest correlation with likelihood of future sexual aggression ($r = -.30$, $p = .05$).

A hierarchical regression conducted as described above, using self-reported past sexual aggression as the dependent variable, gave the following results: Entering the authoritarianism factor first, its correlation of .43 with the Sexual Experiences Survey category provided an R^2 of .16. The sex role traditionalism factor, entered next, raised the R to .57 (adjusted $R^2 = .28$). Entry of the hostility toward women total raised the R only to .58. Entering the male dominance and disbelief of rape victims' claims factors on the final step brought the total R to .65 (adjusted $R^2 = .31$). Because there were no significant correlations between likelihood of forcing sex and the attitudinal factors, that regression was not carried out.

The student sample ($n = 157$) provided a much different picture—lower attitudinal correlations with the Sexual Experiences Survey category and significant correlations between the attitude factors and likelihood of forcing sex. Again, hierarchical regressions were carried out using the sexual aggression measures as dependent variables. For the regression using self-reported past sexual aggression, only the four significantly correlated attitude factors were included. With a simple correlation of .18, entering the authoritarianism factor first accounted for only 3% of the variance. Next, inclusion of the sex role traditionalism factor increased the R to .20. Entering hostility toward women on the next step raised the R to .22. Finally, entering the male dominance factor did not affect the R , but did drop the adjusted R^2 to .02, capping off a rather dismal performance from these four predictors.

The predictors using the student sample fared somewhat better in the regression using likelihood of forcing sex as the dependent measure. The authoritarianism component, entered first, accounted for 5% of the variance; the sex role traditionalism factor, entered second, brought the R to .33 (adjusted $R^2 = .10$). Including the con-trait factor and then the hostility toward women factor served only to increase the R to .36; the adjusted R^2 was unaffected by these two steps. Bringing in the three Burt scale factors raised the R to .44 (adjusted $R^2 = .15$).

Discussion

As predicted, authoritarianism was positively and significantly correlated with self-reported sexual aggression. The authoritarianism factor, along with sex role traditionalism and male dominance factors, had the highest simple correlation with self-reported past sexual aggression. The results of the whole-sample regressions using past sexual aggression as the dependent variable also underline the significance of the sexual aggression–authoritarianism relationship.

As predicted, authoritarianism and specifically sexual attitudes significantly correlated with each other and with past sex-

ually aggressive behavior. Although authoritarianism, a general personality characteristic, can be seen as directly related to sexual aggression, this relationship appears to be somewhat independent of specifically sexual attitudes and mediated by them at the same time.

The relationship between authoritarianism and future likelihood of forcing sex or raping was significant, but was not as strong as that between authoritarianism and self-reported past sexual aggression. Those scoring higher on authoritarianism indicated in general more likelihood of forcing sex or raping than low-scoring individuals, yet the results of the regressions using likelihood of forcing sex or raping as the dependent measure indicate the more important contributions of other factors. Although specific factors such as male dominance may merit primary consideration in understanding the attitudes of men who admit some future likelihood of forcing sex or raping, other explanations explored below also warrant examination.

Men admitting both past sexual aggression and future likelihood of forcing sex or raping were more authoritarian than their counterparts admitting only past sexual aggression or future likelihood of forcing sex or raping, who were in turn more authoritarian than men indicating neither past nor potential future sexual aggression. This finding is particularly interesting in light of the low correlation ($r = .14$) between actual past and future likelihood of sexual aggression, a degree of correlation similar to that reported by Malamuth (1987). Given the differing patterns of correlations between the independent variables and actual past and future likelihood of sexual aggression across the whole sample and the student and nonstudent subsamples, it could be said that the relevance of authoritarianism to sexual aggression emerged despite this low correlation.

The hypothesized relationships between authoritarianism and self-reported past sexual aggression (which was not significantly correlated with social desirability) also emerged despite the positive correlation between authoritarianism and social desirability; more authoritarian individuals appeared more likely to manage the impressions they presented to others. Given this point, the correlations found between authoritarianism and the dependent measures of sexual aggression may represent the lower bound of this relationship.

The present results demonstrate that the Sexual Experiences Survey measures past sexual aggression relatively independently of social desirability. It has been shown (e.g., Koss et al., 1985) that if men are directly asked if they have ever raped anyone, almost none will say yes. On the other hand, the Sexual Experiences Survey questions, which address some very serious behaviors, are worded in ways that reduce the emotional consequences a man would encounter by admitting that he is a rapist. Response rates to these questions are therefore higher, and the survey questions that classify behaviors as rape or attempted rape provide a more realistic estimate of the prevalence of serious unreported sexual aggression.

It is not as clear from the results of the present study what responses on the likelihood of forcing sex questions reflect. The likelihood of forcing sex measure was negatively correlated with social desirability, indicating that individuals who were concerned with positive impression management (such as the high authoritarians), although they may harbor sexually aggressive tendencies, might not admit to them. The questions on the like-

likelihood of forcing sex measure, more so than those on the Sexual Experiences Survey, are not the kind of questions to which men concerned about their positive image are likely to respond affirmatively. Men admitting that they might force sex or rape in the future may wish to portray themselves as "tough guys."

The difference between student and nonstudent samples raises questions about the kind of man who admits to being likely to force sex in the future. The fact that age had the highest (negative) correlation with likelihood of future sexual aggression in the nonstudent sample may indicate that the major factor in determining admission of likelihood of future sexual aggression was youthfulness—younger subjects, for a variety of reasons (e.g., lack of sophistication, desire to be seen as tough or even dangerous), may be more willing to admit some likelihood of future sexual aggression.

For the student sample, on the other hand, likelihood of forcing sex was significantly correlated with all independent variables. In a student population, responding on the likelihood of forcing sex measure may be more closely allied with other responses to which the measure should theoretically be related. The influence of the educational experience (e.g., familiarization with the scientific process and liberalization of attitudes) may mean that the validity of the likelihood of forcing sex measure may be higher with university men, although the measure's negative correlation with social desirability still casts some doubt on whether it measures what it purports to.

Study 2

Authoritarians can be seen as people who believe themselves to be part of a morally superior segment of society, a group that espouses conservative, traditional values. Adorno, Frenkel-Brunswik, Levinson, and Sanford (1950) described authoritarians as individuals who would deny, even to themselves, the possibility that they could perpetrate acts (such as sexual aggression) that are against their moral convictions; these acts were referred to as *ego-alien*. Guilt inventories measure a predisposition to inhibit behavior that violates traditional law-and-order standards of morality (Mosher, 1979); individuals high in sex guilt, one of Mosher's (1966) three subcategories of guilt, would by definition be expected to adhere to traditional sexual standards (Mosher, 1973). Kelly (1985) found that authoritarians feel guilty about their sexuality, disapprove of sexual expression, and wish to control the sexuality of others.

In contrast with the positive relationship found in Study 1 between authoritarianism and sexual aggression, the literature on sex guilt appears to indicate the opposite. Individuals high in sex guilt have been found to be more likely to inhibit sexual behavior: They have lower levels of sexual experience (Langston, 1975; Mosher & Abramson, 1977; Mosher & Cross, 1969), have intercourse less frequently and with fewer partners (Mosher, 1973), have less explicit sexual fantasies (Follingstad & Kimbrell, 1986), and are more likely to conform to social expectations about sexual behavior (Langston, 1975). High sex guilt subjects purchase and use sexually explicit materials less frequently (Mosher, 1979; Schill & Chapin, 1972), view obscene slides more briefly, have more negative reactions to pornography, and are less aroused by sexually explicit material (Galbraith & Mosher, 1968; Mosher & Abramson, 1977).

Several studies support the contention that high guilt inhibits sexually aggressive behaviors. Persons (1970) found that serious offenders' frequency of sex crimes and violent crimes were significantly negatively correlated with guilt; sex guilt was the best predictor of past sexual crimes reported by offenders ($r = -.60$). Mosher (1979) found that undergraduate men higher in sex guilt reported that they were less likely to attempt sexual behavior with their dates, more likely to believe that coercive tactics were unjustified, and less likely to have used these coercive tactics with their dates than were lower scoring males. Mosher (1988) noted that past sexual aggression was negatively related ($r = -.53$) to scores on his measure of sex guilt. Mosher and Anderson (1986) did report, however, that men scoring higher on aggressive sexual behavior reported feeling more guilt during a guided imagery exercise in which they imagined themselves as rapists.

The three central results from Study 1 and the review above—a positive relationship between authoritarianism and sexual aggression, a positive relationship between authoritarianism and sex guilt, and a negative relationship between sex guilt and sexual aggression—appear paradoxical. The purpose of Study 2 was therefore to further examine the relationships among authoritarianism, sex guilt, and sexual aggression. We expected to replicate the finding from Study 1 of a significant positive relationship between authoritarianism and self-reported past sexual aggression. We also predicted a significant positive relationship between authoritarianism and sex guilt. Finally, we expected to find a positive relationship between sex guilt and sexual aggression, in spite of previous work indicating a negative relationship, because of the similarities between authoritarianism and sex guilt, particularly conventionalism. In Study 2 we also attempted to replicate the Study 1 finding of a larger relationship between authoritarianism and sexual aggression in a community sample than in a university student sample.

Method

Subjects

Subjects were 134 men aged 18 and over; 59 were recruited through the introductory psychology subject pool at Queen's University, and 75 community men were recruited primarily through an advertisement at the Canada Employment Centre in Kingston, although some subjects were recruited in a Toronto train station.

Measures

Each subject completed a number of measures: The RWA Scale (Altemeyer, 1988); Mosher's (1988) Revised Guilt Inventory (containing Sex Guilt, Hostility Guilt, and Guilty-Conscience subscales); the Sexual Experiences Survey (Koss & Dinero, 1987); Bentler's (1968) scale of heterosexual activity (adapted), a measure of subjects' heterosexual experience; and the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960). Subjects were also asked their age, marital status, student status and major, employment status (if not a student), and religious affiliation.

Procedure

Subjects were given some information about the nature of the study, were told that responses were confidential, and were informed that they

were free to stop participating at any time. Subjects agreeing to participate signed a consent form. A cover sheet on top of the questionnaires reiterated the information above. The demographic questions were presented first, followed by the six questionnaires presented in random order. Subjects were debriefed after participation, and community subjects were paid \$10.00.

Results

A total of 134 subjects' data were used. Data for 6 other subjects were discarded because they filled out the questionnaires incorrectly ($n = 3$), responded sporadically ($n = 2$), or discontinued participation ($n = 1$).

Overall, 44% of the sample were students ($n = 59$) and 56% community members ($n = 75$). The mean age for the entire sample was 24.7 years ($SD = 7.69$); the students' mean age was 20.2 ($SD = 5.25$) and the community subjects' mean age was 28.2 ($SD = 7.50$). This difference was statistically significant ($t = -6.95, p < .01$).

Using Koss and Dinero's (1987) classification scheme for past sexual aggression, 5.2% of subjects ($n = 7$) admitted to rape, 4.5% ($n = 6$) admitted behavior classified as attempted rape, 7.5% ($n = 10$) admitted sexually coercive behavior, 10.4% ($n = 14$) reported engaging in unwanted sexual activity, and 72.4% ($n = 97$) reported no sexually aggressive behavior. The percentage of respondents admitting some past sexual aggression (27.6%) was consistent with the findings of Study 1 and with previous work (e.g., Koss & Dinero, 1987).

The Pearson correlation matrix for past sexually aggressive behavior and attitudinal measures is shown in Table 5, and the matrix for sex guilt and sexual activity is shown in Table 6. As predicted, authoritarianism and sex guilt were significantly positively correlated and, as expected, both were also significantly positively correlated with self-reported past sexual aggression. Authoritarianism was the best univariate predictor of past sexual aggression.

Sex guilt was significantly negatively correlated with number of times engaging in sexual activity, number of sexual partners, type of sexual activity, and frequency of using sexually explicit material. A hierarchical multiple regression was conducted using the whole sample to determine the contribution of each variable in predicting past sexual aggression. Following Study

1, in which variables were entered from the most general to those most closely related to sexual behavior, the predictor variables were entered in the following order: authoritarianism, sex guilt, and level of sexual experience. Authoritarianism's univariate correlation of .34 with self-reported past sexual aggression accounted for 11% of the variance. The sex guilt factor was then entered but did not add significantly to the regression equation; the R remained at .34 (adjusted $R^2 = .10$). Sexual experience was entered on the third step, increasing the R to .41 (adjusted $R^2 = .15$). A stepwise multiple regression analysis, using a probability to enter $< .05$, probability to leave $> .10$ criterion, indicated unique contributions from authoritarianism and from sexual experience in explaining past sexually aggressive behavior. Authoritarianism was selected first ($r = .34, R^2 = .11$). The entry of sexual experience brought the R to .40 (adjusted $R^2 = .14$).

In addition to being older, community subjects reported significantly more sexual experience ($t = -4.54, p < .01$) and significantly more past sexual aggression ($t = -2.37, p < .05$). Because of these differences, hierarchical multiple regression analyses identical to that described above were conducted on the two subsamples. In the student sample regression, RWA's .35 correlation with past sexual aggression accounted for 12% of the variance. The addition of sex guilt raised the R to .42 (adjusted $R^2 = .14$). With level of sexual experience, the R increased to .44 (adjusted $R^2 = .15$).

Authoritarianism was again entered first in the community subsample hierarchical regression; with its .37 correlation with sexual aggression it accounted for 13% of the variance. Sex guilt was entered on the second step, increasing the R to .44 (adjusted $R^2 = .17$). On the third step, sexual experience brought the R to .48 (adjusted $R^2 = .19$).

The stepwise analyses of the student and community subsamples were quite different. Authoritarianism alone entered the regression in the student sample ($r = .35; R^2 = .12$). In the community sample, sex guilt entered first, with an $r = .39 (R^2 = .14)$. Sexual experience was the only other variable to enter this regression, raising the R to .46 (adjusted $R^2 = .19$).

The interaction between authoritarianism and sex guilt approached significance, suggesting that authoritarianism and sex guilt work together in promoting sexual aggression. Seventy per-

Table 5
Correlation Matrix for the Attitudinal Measures and
Past Sexual Aggression, Study 2 ($n = 134$)

Measure	GLTTOT	SEXGLT	HOSGLT	GLTCON	RWA	M-C
SES	.21***	.23**	.06	.21***	.34*	-.05
GLTTOT	1.00	.85*	.74*	.71*	.44*	.31**
SEXGLT		1.00	.31**	.50*	.53*	.29**
HOSGLT			1.00	.40*	.09	.20***
GLTCON				1.00	.36*	.22***
RWA					1.00	.33*
M-C						1.00

Note. SES = Sexual Experience Survey category; GLTTOT = Mosher Guilt Inventory total; SEXGLT = Sex Guilt subscale; HOSGLT = Hostility Guilt subscale; GLTCON = Guilty-Conscience subscale; RWA = Right-Wing Authoritarianism scale; M-C = Marlowe-Crowne Social Desirability scale.

* $p < .001$. ** $p < .01$. *** $p < .05$.

Table 6
Correlation Matrix for Sexual Activity and Related Variables, Study 2 ($n = 134$)

Measure	SEXGLT	SEXFREQ	NUMPRT	SEXTYP	AGE	PORN	RELIG	SES
SEXGLT	1.00	-.29**	-.21***	-.21***	.26**	-.41*	-.14	.23**
SEXFREQ		1.00	.59*	.61*	.39*	.26**	.05	.10
NUMPRT			1.00	.52*	.25**	.18***	.04	.18***
SEXTYP				1.00	.21***	.20***	-.01	.13
AGE					1.00	-.02	-.13	.20***
PORN						1.00	.17***	-.13
RELIG							1.00	-.08
SES								1.00

Note. SEXGLT = Sex Guilt subscale; SEXFREQ = Number of times engaging in sexual activity (with partner); NUMPRT = Number of sexual partners; SEXTYP = Level of sexual sophistication; AGE = Age; PORN = Number of times watching or reading sexual materials in last year; RELIG = Expressed membership in a faith (Yes/No); SES = Sexual Experience Survey category.

* $p < .001$. ** $p < .01$. *** $p < .05$.

cent ($n = 26$) of sexually aggressive respondents were in the top quartile of one or both predictors. The probability of a subject admitting sexual aggression if in the high range on both the authoritarianism and sex guilt measures was .41. In contrast, those scoring low in authoritarianism, sex guilt, or both, accounted for only 16% ($n = 6$) of sexually aggressive respondents.

Discussion

Because authoritarian conventionalism includes negative attitudes toward "improper" sexual activities such as premarital sex and masturbation, and because sex guilt could inhibit sexual behavior considered unconventional, it was predicted that authoritarianism would be positively correlated with sex guilt. This prediction was confirmed.

Sex guilt was significantly negatively correlated with a number of sexual behaviors, as predicted. In agreement with previous studies (Mosher, 1979; Langston, 1975), sex guilt was significantly negatively related to sexual experience, number of sexual partners, number of times engaging in sexual activity, and use of sexually explicit materials. Men high in sex guilt were less sexually active.

As in Study 1, authoritarianism was correlated with level of self-reported past sexual aggression; it was the best univariate predictor in Study 2. Authoritarianism was also related to a number of other sexual behaviors. Of particular interest, although high authoritarians reported less overall sexual activity than nonauthoritarians, they were more likely to report past sexual aggression; a greater proportion of their past sexual activity was therefore aggressive.

In opposition to Mosher and Anderson's (1986) finding, sex guilt was positively, rather than negatively, related to past sexual aggression. A number of factors may help account for these discrepant findings. Mosher and Anderson used a student sample. In our Study 2 student sample, the relationship between sex guilt and past sexual aggression was not significant, although there was a trend in the positive direction. However, in our Study 2 community sample, sex guilt was the best univariate predictor of past sexual aggression.

Of more importance, in our opinion, is the difference between previous studies and the present work in the method of

measuring self-reported past sexual aggression. The Sexual Experiences Survey, used in our research, asks specific questions about a range of sexually intrusive behaviors up to and including forced sexual intercourse. The majority of Aggressive Sexual Behavior Inventory items, however, address a restricted range of the most serious sexually aggressive behaviors, referring only to sexual intercourse ("having sex") or implying intercourse without specifying any particular sexual activity ("I have roughed a woman up a little so she would understand that I meant business").

In addition, a number of items express an explicit current of callous instrumental violence, tantamount to asking subjects point blank if they have committed rape; this type of question is particularly sensitive to socially desirable responding (Koss et al., 1985). It is a wonder that any subjects would endorse items such as "I have promised a woman that I would not harm her if she did everything I told her to do," or "I have forced a woman to have sex with me and some of my pals." It is therefore likely that the Aggressive Sexual Behavior Inventory is less sensitive and more subject to socially desirable responding than the Sexual Experiences Survey.

Both sex guilt and authoritarianism were significantly related to social desirability. However, both authoritarianism (as it had been in Study 1) and sex guilt were significantly related to sexual aggression despite their relationships with social desirability. It could again be argued that the strengths of the relationships between sexual aggression and authoritarianism and sex guilt may be higher than the present figures indicate.

The student and community samples again differed considerably. Students were younger, less sexually experienced, and reported less past sexual aggression than did the community sample. This difference may be attributable to the relative youthfulness and resultant sexual inexperience of the students (not to be confused with sexual inexperience stemming from personal inhibition and lack of heterosocial ability).

Because of the negative correlations between sex guilt and sexual behaviors in general, a significant positive relationship between sex guilt and sexually aggressive behaviors at first appears unlikely. In theory, someone high in sex guilt would be less likely to engage in any sexual activity than someone low in

sex guilt, especially if this activity was deemed socially undesirable. Yet subjects high in sex guilt did report more sexual aggression.

It is possible that men high in sex guilt, particularly those with an authoritarian perspective, are less heterosocially skilled and less often find or place themselves in sexual situations of mutual consent. High sex guilt is not synonymous with sexual abstinence, however, and these men in all likelihood seek sexual contact at some point. Given less ability to establish situations of mutual sexual consent, these men may turn to sexual aggression.

An authoritarian perspective can reduce or remove men's guilt over sexually aggressive behavior because authoritarians are likely to view at least some women as deserving it under certain circumstances. The probability of sexual aggression is increased when this perspective is abetted by beliefs about sexual aggression such as "women enjoy sexual violence" and "rape victims are responsible for what befalls them," and by disinhibitors such as alcohol.

Authoritarian men are able to rationalize the imposition of their will (in this case their sexual will) on women in part through their belief in the acceptability of aggression against these politically and physically weaker individuals. These men feel as well that their aggression is condoned by society, as exemplified through our society's emphasis on power, competition, and rugged individualism. These conclusions are similar to those of Malamuth (1988), who remarked on the importance of three factors in understanding aggression against women, one of which was a factor "promoting aggression against targets perceived as 'weaker,' less advantaged, etc." (p. 491)—an authoritarianism factor by another name.

The present two studies encourage an integrative approach toward understanding sexual aggression that recognizes the independent contributions of general factors such as authoritarianism, as well as contributions of specific factors such as sex guilt, attitudes toward women, and attitudes toward sex and sexuality.

References

- Adorno, T. W., Frenkel-Brunswick, E., Levinson, D. J., & Sanford, R. N. (1950). *The authoritarian personality*. New York: Harper & Brothers.
- Altemeyer, R. A. (1981). *Right-wing authoritarianism*. Winnipeg, Manitoba, Canada: University of Manitoba Press.
- Altemeyer, R. A. (1988). *Enemies of freedom: Understanding right-wing authoritarianism*. San Francisco: Jossey-Bass.
- Bentler, P. M. (1968). Heterosexual behavior assessment: 1. Males. *Behavior Research and Therapy*, 6, 21-25.
- Briere, J., Malamuth, N., & Check, J. V. P. (1985). Sexuality and rape-supportive beliefs. *International Journal of Women's Studies*, 8, 398-403.
- Burt, M. (1980). Cultural myths and support for rape. *Journal of Personality and Social Psychology*, 38, 217-230.
- Check, J. V. P., Malamuth, N. M., Elias, B., & Barton, S. A. (1985, April). On hostile ground. *Psychology Today*, pp. 56-58, 60-61.
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, 24, 349-354.
- Feild, H. S. (1978). Attitudes toward rape: A comparative analysis of police, rapists, crisis counsellors, and citizens. *Journal of Personality and Social Psychology*, 36, 156-179.
- Follingstad, D. R., & Kimbrell, C. D. (1986). Sex fantasies revisited: An explanation and further classification of variables affecting sex fantasy prediction. *Archives of Sexual Behavior*, 15, 475-487.
- Galbraith, G. G., & Mosher, D. L. (1968). Associative sexual responses in relation to sexual arousal, guilt, and external approval contingencies. *Journal of Personality and Social Psychology*, 10, 142-147.
- Holden, R. R., & Fekken, G. C. (1989). Three common social desirability scales: Friends, acquaintances, or strangers? *Journal of Research in Personality*, 23, 180-191.
- Horn, J. L. (1965). A rationale and test for the number of factors. *Psychometrika*, 30, 179-185.
- Kalin, R., & Tilby, P. J. (1978). Development and validation of a sex-role ideology scale. *Psychological Reports*, 42, 731-738.
- Kelly, K. (1985). Sex, sex guilt, and authoritarianism: Differences in responses to explicit heterosexual and masturbatory slides. *Journal of Sex Research*, 21, 68-85.
- Koss, M. P. (1988). Hidden rape: Sexual aggression and victimization in a national sample of students in higher education. In A. W. Burgess (Ed.), *Rape and sexual assault II* (pp. 3-25). New York: Garland Press.
- Koss, M. P., & Dinero, T. E. (1987). Predictors of sexual aggression among a national sample of male college students. *Annals of the New York Academy of Sciences*, 528, 133-147.
- Koss, M. P., & Leonard, K. E. (1984). Sexually aggressive men: Empirical findings and theoretical implications. In N. Malamuth & E. Donnerstein (Eds.), *Pornography and sexual aggression* (pp. 213-232). San Diego, CA: Academic Press.
- Koss, M., Leonard, K., Beezley, D., & Oros, C. (1985). Nonstranger sexual aggression: A discriminant analysis of the psychological characteristics of undetected offenders. *Sex Roles*, 12, 981-992.
- Koss, M. P., & Oros, C. (1982). Sexual experiences survey: A research instrument investigating sexual aggression and victimization. *Journal of Consulting and Clinical Psychology*, 50, 455-457.
- Langston, R. D. (1975). Stereotyped sex role behavior in college students. *Journal of Personality Assessment*, 39, 467-472.
- Longman, R. S., Cota, A. A., Holden, R. R., & Fekken, G. C. (1989). A regression equation for the parallel analysis criteria in principal components analysis: Mean and 95th percentile eigenvalues. *Multivariate Behavioral Research*, 24, 59-69.
- Malamuth, N. (1987). A multidimensional approach to sexual aggression: Combining measures of past behavior with present likelihood. *Annals of the New York Academy of Sciences*, 528, 123-132.
- Malamuth, N. (1988). Predicting laboratory aggression against female and male targets: Implications for sexual aggression. *Journal of Research in Personality*, 22, 474-495.
- Malamuth, N., Check, J. V. P., & Briere, J. (1986). Sexual arousal in response to aggression: Ideological, aggressive, and sexual correlates. *Journal of Personality and Social Psychology*, 50, 330-340.
- Mosher, D. L. (1966). The development and multitrait-multimethod matrix analysis of three measures of three aspects of guilt. *Journal of Consulting Psychology*, 30, 25-29.
- Mosher, D. L. (1973). Sex differences, sex experience, sex guilt, and explicitly sexual films. *Journal of Social Issues*, 29, 95-122.
- Mosher, D. L. (1979). Sex guilt and sex myths in college men and women. *Journal of Sex Research*, 15, 224-234.
- Mosher, D. L. (1988). Aggressive Sexual Behavior Inventory and Revised Guilt Inventory. In C. M. Davis, W. L. Varber, & S. L. Davis (Eds.), *Sexuality related measures: A compendium*. Lake Mills, IA: Graphic.
- Mosher, D. L., & Abramson, P. R. (1977). Subjective sexual arousal to films of masturbation slides. *Journal of Sex Research*, 21, 79-85.
- Mosher, D. L., & Anderson, R. D. (1986). Macho personality, sexual aggression, and reactions to guided imagery of realistic rape. *Journal of Research in Personality*, 20, 77-94.

- Mosher, D. L., & Cross, H. J. (1969). Sex guilt and premarital sexual experiences of college students. *Journal of Consulting Psychology, 33*, 472-477.
- Mosher, D. L., & Tomkins, S. D. (1988). Scripting the macho man: Hypermasculine socialization and enculturation. *Journal of Sex Research, 25*, 60-84.
- Nadler, E. B., & Morrow, W. R. (1959). Authoritarian attitudes toward women, and their correlates. *Journal of Social Psychology, 49*, 113-123.
- Persons, R. W. (1970). Intermittent reinforcement, guilt and crime. *Psychological Reports, 26*, 421-422.
- Quinsey, V. L. (1984). Studies of offenders against women. In D. Weisstub (Ed.), *Law and mental health: International perspectives* (Vol. 1, pp. 84-121). New York: Pergamon Press.
- Rapaport, K., & Burkhart, B. (1984). Personality and attitudinal characteristics of sexually coercive college males. *Journal of Abnormal Psychology, 93*, 216-221.
- Schill, T., & Chapin, J. (1972). Sex guilt and males' preference for reading erotic magazines. *Journal of Consulting and Clinical Psychology, 39*, 516.

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