Sexual Aggression and Love Styles: An Exploratory Study

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The relationship between sexual aggression and theoretical love styles was studied. Based on self-reported sexual history, 63 college men were grouped as having either consensual sexual experience only (n = 33) or having verbally coercive sexual experience (n = 30). Analyses were conducted using six love style scales, likelihood to rape, likelihood to use sexual force, masculinity, and sociopathy to predict sexual coercive group membership. Logistic regression indicated that the Ludus love style, a manipulative, game-playing orientation towards intimate relationships, was the best predictor of sexual coercive as other dispositions related to sexual aggression. These results suggest that the Ludus love style may serve as a unifying construct for dispositions related to sexual aggression. This study constitutes an initial attempt to link sexually coercive behaviors to a theoretical model of sexual coercion.

KEY WORDS: relationships; love styles; sexual coercion; dating aggression.

INTRODUCTION

The prevalence of sexual aggression in dating relationships has been widely documented. Studies have found that between 40 and 60% of college

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men have used verbal coercion to obtain sexual intercourse, while approximately 8% have reported sexual aggression that meets a legal definition of rape or attempted rape (Craig *et al.*, 1989; Koss *et al.*, 1987; Muehlenhard and Linton, 1987). Attempts to understand sexual aggression have focused on a variety of dispositions of sexually aggressive men. Malamuth (1986) theorized that an interaction among such personality factors is related to a history of sexual aggression. He reported that sexual arousal in response to violence, desires to be sexually dominant and powerful, hostility towards women, and positive attitudes toward sexual aggression, were all related to self-reports of sexual aggression.

Briere and Malamuth (1983) also investigated the relationship between dispositions and the likelihood to be sexually aggressive. Men were asked how likely they would be to rape or force a woman to do something sexual she did not want to do if they were assured of not getting caught. Men who indicated a proclivity to rape or force endorsed more sexually aggressive attitudes, held more adversarial sexual beliefs, and were more accepting of domestic violence. Similar characteristics have been shown to be related to arousal to rape depictions, endorsement of higher levels of laboratory aggression against a female confederate (Malamuth, 1983, 1988), and more sexually aggressive histories (Greendlinger and Byrne, 1987; Malamuth, 1988).

In addition to self-reported propensity to rape or use sexual force, personality traits such as an adherence to traditional sex roles and antisocial personality characteristics also have provided explanations for the motivation to be sexually aggressive (Burt, 1980; Check and Malamuth, 1983; Malamuth, 1986; Petty and Dawson, 1989; Quackenbush 1989; Rapaport and Burkhart, 1984). Thus, studies have identified an array of dispositions related to sexual coercion, although the interrelationships among these characteristics are unclear. It also remains ambiguous as to how these and other dispositions lead to sexually aggressive behavior. It seems as if these personality characteristics are missing a unifying structure to explain their expression in interpersonal relationships. One such construct may be an orientation towards intimate relationships. Therefore, dispositions directly tied to the formation of intimate relationships, such as Lee's (1973) typology of love styles, in conjunction with other relevant personality characteristics, may help to further explain sexual coercion.

Lee (1973) described six styles of love which reflect various characteristics of intimate relationships. The six love styles are *Eros*, a passionate, romantic love style that includes a powerful attraction to physical appearance; *Ludus*, a noncommittal, game-playing style of love which can involve multiple relationships with no emotional depth and in which sex is for fun (Levy, 1989); *Storge*, companionate love, in which love relationships develop out of friendships; *Mania*, an intensely passionate, possessive, and dependent style of love; *Pragma*, a logical approach to love, in which an individual uses a "shopping list" of characteristics to find the perfect match (Levy, 1989); and *Agape*, an altruistic, selfless style of love.

C. Hendrick and Hendrick (1986) developed the Love Attitudes Scale as a measure of Lee's love styles. The scale consists of 42 items (7 for each love style) which tap attitudes, beliefs, and expectations related to the theoretical basis of each love style. A factor analysis of the Love Attitudes Scale confirmed the construction of each of the six subscales (C. Hendrick and Hendrick, 1986). In addition, research utilizing the Love Attitudes Scale has found convergent relationships between the love styles and personality characteristics such as self-esteem, gender roles, sensation seeking, and various sexual attitudes (C. Hendrick and Hendrick, 1986, 1988; Bailey *et al.*, 1987; S. Hendrick and Hendrick, 1987).

With respect to sexual aggression, the noncommittal, game-playing style of love, Ludus, may covary with sexual coercion. The Ludus love style has been shown to be related to positive self-esteem in men (S. Hendrick and Hendrick, 1987), extroversion (Lester and Philbrick, 1988), sensation seeking (Richardson *et al.*, 1988) and higher levels of disinhibition, aggression, and a greater desire to date (Woll, 1989). The Ludus love style has also been shown to be related to higher levels of masculinity (Bailey *et al.*, 1987). Additionally, Levy and Davis (1988) have shown that the Ludus love style is related to higher levels of conflict/ambivalence and lower levels of intimacy, viability, passion, commitment, and relationship satisfaction. Thus, dimensions of the Ludus love style which conceptually overlap with dispositions related to sexual coercion suggest a relationship between Ludus and sexual coercion.

The present study provides an initial investigation of the relationship between theoretical love styles and sexual coercion among college men. We hypothesized that endorsement of a relationship orientation characterized by a lack of commitment and little emotional depth, characteristics of the Ludus love style, would be related to dispositions previously associated with sexual aggression, specifically, masculinity, sociopathy, and an increased likelihood to be sexually aggressive. In addition, we hypothesized that the Ludus love style would be the strongest predictor of sexual coercion of the six love styles. Finally, we hypothesized that the Ludus love style would predict sexual coercion over and above the dispositions of interest, providing evidence for the Ludus love style as a unifying construct related to sexual coercion.

METHOD

Subjects

Eighty-four college men who had never been married were recruited from undergraduate psychology courses at a moderate size, urban university. Their mean age was 19.3 years (SD = 2.0), 74% were Caucasian, and 60% were involved in a dating relationship at the time of study.

Subjects were divided into three groups based on their sexual history as measured by the Sexual Experiences Survey (Koss and Oros, 1982). Subjects who did not endorse the first item, "Have you ever had sexual intercourse with a woman when you both wanted to?", or any subsequent items, were grouped as sexually inexperienced (n = 21). Subjects who only endorsed this first item were classified as having only had consensual sexual experiences (n = 33). The average age of this group's first consenting sexual experience was 17.2 years (SD = 1.4). Subjects who endorsed an item indicating verbal sexual coercion, such as using threats to end the relationship, pressure with continual arguments, or saying things they really did not mean to obtain sexual intercourse were classified as sexually coercive (n = 30). The average age of this group's first consenting sexual experience was 16.0 years (SD = 2.0). One subject from the sexually coercive group also indicated the use of physical force to obtain unwanted sexual intercourse.

To equate subjects on sexual experience, sexually inexperienced subjects were excluded, leaving the consensually experienced group and the verbally coercive group for data analysis. The mean age of the subjects in the consensually experienced group was 19.45 years and 79% were Caucasian. The mean age of the subjects in the sexually coercive group was 19.60 years and 67% were Caucasian.

Measures and Procedure

Sexual Experiences Survey. This self-report measure is a widely used, 13-item inventory of sexual history, including sexual aggression (Koss and Oros, 1982). As evidence for the validity of the measure, Koss and Gidycz (1985) reported correlations of .73 for women and .61 for men between the self-report measure and a subsequent interview. Koss and Gidycz also reported 93% agreement in self-report of sexual aggression when the measure has been administered 2 weeks apart. Subjects were also asked to provide the age or ages at which any endorsed situations occurred.

Love Attitudes Scale. This 42-item scale was developed by C. Hendrick and Hendrick (1986) as a measure of Lee's (1973) typology of six love styles. Responses were made on a 5-point scale ranging from strongly disagree to strongly agree. C. Hendrick and Hendrick (1986) reported test-retest correlations ranging from .60 to .82 for the six subscales. Extensive factor-analytic studies provide evidence for the content structure and independence of subscales (C. Hendrick and Hendrick, 1986). Sample items from the subscales are (i) Eros: "My lover and I were attracted to each other immediately after we first met"; (ii) Ludus: "I try to keep my lover a little uncertain about my commitment to him/her"; (iii) Storge: "The best kind of love grows out of a long friendship"; (iv) Mania: "When my lover doesn't pay attention to me, I feel sick all over"; (v) Pragma: "I try to plan my life carefully before choosing a lover"; (vi) Agape: "I cannot be happy unless I place my lover's happiness before my own."

Likelihood to Rape and Force Scales. Two items assessing sexual aggression propensity were taken from the Attraction to Sexual Aggression Scale (Malamuth, 1989a). The two items ask "If you were sure that no one would ever find out and that you'd never be punished for it, how likely would you be to (1) rape a female (2) force a female to do something sexual she didn't want to do?" Subjects responded on a 7-point scale ranging from very unlikely to very likely. Malamuth (1989a) reported test-retest reliability on the likelihood to rape item of .66 and .74 for likelihood to force item.

Bem Sex-Role Inventory (Bem, 1974). The Masculinity scale was used in this study, with adjectives such as independent, athletic, and assertive rated on a 7-point scale.

Sociopathy Scale. This measure is composed of 20 true-false items taken from the Psychopathic Deviate scale of the Minnesota Multiphasic Personality Inventory. The Sociopathy Scale has demonstrated acceptable levels of reliability and convergent validity (Penner and Spielberger, 1988). Items include: "When I get bored I like to stir up some excitement" and "I don't blame anyone for trying to grab everything he can in this world."

Subjects were also asked to provide information regarding their current dating relationships. All measures were completed anonymously in small groups.

RESULTS

The means and standard deviations for the consensually experienced and verbally coercive groups for the six love styles, the likelihood to rape item, the likelihood to force item, and the masculinity and sociopathy scales are presented in Table I.

The intercorrelations among the variables are presented in Table II. Significant relationships were found between the Ludus love style and self-report of verbal coercion and likelihood to rape (p < 0.01), as well as so-ciopathy and the likelihood to use sexual force (p < 0.05).

Sexual Coercion and Love Styles

To initially investigate the relationships between the theoretical love styles and self-report of sexual coercion, a stepwise logistic regression was performed, with sexual experience (noncoercive versus coercive) as the dichotomous criterion variable and the six love styles serving as the predictor variables. The resulting equation completed after only one step, with the Ludus love style being the only variable entering the equation, confirming our a priori hypothesis. The model had a likelihood ratio $\chi^2(61) = 75.06$, p = 0.11, indicating a good fit between the data and the model. The Ludus love style was the only love style that significantly predicted group membership, correctly classifying 66.67% of the men into the sexual coercion groups (see Table III).

Sexual Coercion, Love Styles, and Personality Characteristics

To further investigate the hypothesized relationship between the Ludus love style and personality characteristics previously associated with

	Sexual experience groups						
	Consensua	1 (n = 33)	Coercive $(n = 30)$				
Scale	x	SD	x	SD			
Love styles							
Eros	27.09	4.16	26.48	2.95			
Storge	25.70	5.61	26.88	3.91			
Pragma	19.45	5.39	21.16	5.16			
Ludus	18.73	5.52	24.04	5.50			
Mania	21.54	5.79	22.04	4.61			
Agape	26.94	4,94	24.16	6.03			
Likelihood to rape	1.33	1.08	2.44	2.42			
Likelihood to force	1.76	1.39	3.32	2.50			
Masculinity	5.23	0.61	5.51	0.51			
Sociopathy	11.91	2.27	12.30	2.16			

 Table I. Means and Standard Deviations for Measures as a Function of Type of Sexual Experience

T	able II. Correl.	Table II. Correlation Coefficients for Love Styles, Masculinity, Sociopathy, and Likelihood to Rape and Force	nts for Love Si	tyles, Masculin	ity, Sociopa	thy, and Lik	celihood to	Rape and	Force	
	Sexual				Likelv		ב	Love styles		
	experience	Sociopathy	Masculinity Likely rape	Likely rape	force	Ludus	Eros	Storge	Mania	Pragma
Sociopathy	.10	Ì								
Masculinity	.16	.23								
Likely rape	.46 ^b	.10	02							
Likely force	.49 ^b	90.	.14	.80						
Ludus	$.46^{b}$	$.26^{d}$.15	$.34^{b}$.31 ^b					
Eros	.02	05	.07	09	.01	48	ł			
Storge	.01	.04	.20	25	18	.01	.04	1		
Mania	.03	80.	19	.10	.17	00.	.16	08		
Pragma	80.	.03	.21	18	60'-	.12	06	.274	.18	
Agape	27 ^a	02	.07	22	12	49	.58	.28"	.28"	.12
$^{d}_{k}p < .05.$										
p' < .01.										

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Love styles	B	SE	Significance	R
Ludus	.17	.05	.01	.30
Eros			.09	.10
Storge			.65	.00
Pragma			.63	.00
Mania			.99	.00
Agape			.69	.00

 Table III. Logistic Regression Equation for Love

 Styles as Predictors of Sexual Coercion

sexual aggression, a logistic regression was performed with type of sexual experience again serving as the dichotomous criterion variable. To test the hypothesis that Ludus would account for a significant proportion of unique variance, the Ludus love style was forced to enter into the equation as the first predictor variable, and subsequently the likelihood to force, the likelihood to rape, masculinity, and sociopathy were entered in a stepwise fashion. Beyond the 66.67% classification of the men by the Ludus love style, the likelihood to use sexual force served as a significant predictor of group membership. The combination of the Ludus love style and the likelihood to force variable resulted in the correct classification of 69.8% of the subjects. This model had a likelihood ratio $\chi^2(60) = 68.11$, p = 0.22, indicating a slightly improved fit between the data and the model than demonstrated by Ludus alone. None of the other disposition variables accounted for a significant proportion of the remaining variance (see Table IV).

DISCUSSION

These results confirm the hypothesis that the Ludus love style, a manipulative, game-playing approach to intimate relationships, is related to several of the disposition variables associated with sexual aggression, such as the likelihood to rape, the likelihood to use sexual force, and sociopathy.

Measures	В	SE	Significance	R
Ludus	.14	.05	.01	.24
Likelihood to force	.39	.17	.02	.22
Likelihood to rape			.79	.00
Masculinity			.38	.00
Sociopathy			.83	.00

 Table IV. Logistic Regression Equation for Predictors of Sexual Coercion

The results also confirm our hypothesis that of the six love styles, the Ludus love style is the best predictor of verbal sexual coercion. In addition, the Ludus love style is as good of a predictor of verbal coercion as other attitudes and dispositions related to sexual aggression, such as the likelihood to rape or use sexual force, masculinity, and sociopathy. The likelihood to use sexual force, in combination with Ludus, only slightly improved the overall classification rate of subjects. The results of this initial study, however, should be interpreted cautiously. Although statistically reliable, the proportion of variance accounted for by Ludus was relatively small.

These data suggest that the Ludus love style may provide a unifying construct for personality characteristics related to sexual coercion in dating relationships. In this way, a love style may be analogous to the selective exposure element of Craig's (1990) adaptation of the situational model to coercive sexuality. According to this model, persons actively select and manipulate situations to allow for the expression of their dispositions and traits. It is in the selection of dating situations where a love style may have explanatory power, such that it may serve in the selection of dating situations in which the dispositions related to sexual aggression may be enacted. Relationships that men with a Ludus style of loving develop, therefore, may be characterized by game playing, lack of commitment, and possibly sexual coercion.

The self-reported likelihood of using sexual force slightly improved the overall classification of men into the two sexual experience groups. The relationship between the likelihood to rape or use sexual force and the self-reported history of sexual aggression has been previously established (Greendlinger and Byrne, 1987; Malamuth, 1988). In addition, the role of the likelihood items and previous sexual aggression as predictors of both attitudes and arousal to sexual aggression has also been demonstrated (Malamuth, 1989b). Nevertheless, the present results suggest that the Ludus love style is at least as predictive of sexual coercion as the likelihood items.

Neither sociopathy nor masculinity added to the classification of subjects as coercive or noncoercive. However, sociopathy appears to be slightly related to the Ludus love style, as demonstrated by the bivariate correlation between the two. Although previous research has linked sociopathy to sexual aggression (Petty and Dawson, 1989; Rapaport and Burkhart, 1984), such a relationship was not found in the present study. In addition, masculinity was found not to be related to the Ludus love style, failing to replicate previous research (Bailey *et al.*, 1987). Higher levels of masculinity also were not found to be related to the self-report of sexual coercion, nor was it found to contribute to the classification of subjects. Perhaps masculinity is not related to actual aggressive behaviors, rather, as demonstrated

by previous research, it is related to the attitudes and dispositions associated with sexual aggression (Burt, 1980; Check and Malamuth, 1983; Quackenbush, 1989). Further research is needed to explore the relationship between masculinity and sexual coercion.

In summary, the present study supports the hypothesized relationship between the Ludus love style and the self-reported history of sexual coercion. More specifically, the results suggest that the Ludus love style predicts self-reported coercive behavior as well as other attitudes and dispositions related to sexual aggression. This result suggests that the Ludus love style may serve as a unifying construct for the personality characteristics related to sexual aggression. Future research should investigate the relationships among the Ludus love style and other dispositional characteristics in relation to sexual aggression. Studies with larger samples and a greater diversity of measures, both of dispositions and love styles, may develop stronger and more parsimonious models of sexual coercion. Future research may also treat sexual coercion as a dimension, rather than categorically. Such studies would be conceptually different from the present research but may also be more statistically sensitive to relationships among characteristics tied to sexual coercion.

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