

SEX OFFENDER TREATMENT

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The Confluence Model of Sexual Aggression: Combining Hostile Masculinity and Impersonal Sex

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ABSTRACT A model of the characteristics of sexually aggressive men is described which emphasizes the convergence of several interrelated factors. After enumerating the major factors included in the model and the way we have assessed each, we present data showing that these factors form two largely independent constellations, labeled *hostile masculinity* and *impersonal sexual orientation*. The development of the model is considered in the context of theory and research emphasizing the role of sexual and/or power motives underlying rape and other forms of sexual aggression. We compare some aspects of our model to the influential work of Donald Mosher and his associates in assessing the links between a "macho personality" and sexual aggression. Finally, we describe a "risk" analysis which illustrates the potential relevance of our model to clinical prediction. [*Copies of this paper are available from The Haworth Document Delivery Service: 1-800-342-9678.*]

Common wisdom and psychological research on rape and other forms of sexual aggression may be characterized by three views concerning the underlying motives for such behavior. The first emphasizes sexual motives whereas the second argues that power motives and desire for control are primary. The third view suggests that rape is a product or a synthesis of both of these types of motives.

Rape as Sex

As Palmer (1988) notes, until the early 1970's researchers held the view that while many motivations could be involved in any given rape, sex was the dominant motive (Amir, 1971; Gebhard et al., 1965; LeVine, 1959). For example, Kanin (1977, 1984) concluded that sexual aggression among college students is a function of placing a relatively high emphasis on the acquisition of sex experiences with the *incidental* use of force, "as a means to an end," to obtain sexual gratifications. The predominant underlying motivation for rape is assumed to be sexual rather than asserting power over women or a desire to hurt women. In this view, sexual aggression is seen as a form of temporary "sexual acting out."

Manifestations of sexual aggression in early adulthood are not thought to be indicative of problematic social interactions with women later in life. Sexual aggression, once it has occurred, is expected to decline with age both as sex drive dissipates and the availability of a steady sexual partner increases. Criticisms of this approach take issue with the postulation of a sex drive per se that declines with age as a primary motive for sexual aggression. In fact, the belief that rape will only occur among men who are sexually deprived is not substantiated by empirical research. For example, most rapists have stable sexual partners (Sanford & Fetter, 1979). Although such data do not directly contradict some theories incorporating sexual motives, they do cast doubt on some simplistic views of "rape as sex" (Palmer, 1988).

Rape as Power

The second position is that rape is nearly exclusively a matter of power, expressed by the use of violence, rather than sex. This view, attributed to the feminist movement by some authors (e.g., Sanders,

1980), sees the rapist as using sex to attain control and domination (Palmer, 1988). The implications here, unlike the sex only perspective, are that rape and sexual violence are expressions of a more generalized tendency toward dominance and control of women and that early tendencies toward domination may portend difficulties with women across the life span.

This view has also been criticized. Often, critics say, when proponents of this view maintain that rape is not a matter of “sex,” they are referring to sexual motivations, moods, or drives associated with “honest courtship,” love, and pair bonding. This definition of sex is unduly limiting (Palmer, 1988). Many men are capable of impersonal sex that is void of feelings of tenderness and affection. Most proponents of the power only perspective have not incorporated motivations or drives for impersonal sex.

Combining Motives

In the present article, we summarize some of the findings of a research program, studying men from the general population, which reveals that sexual aggressors are most likely to be relatively high on characteristics which we label as “hostile masculinity” and “impersonal sex.” These correspond, to some degree, to power and to sexual motivations, respectively. Before describing that model in greater detail, it is important to recognize other researchers who have also taken the position that both sexual and control-related motivations contribute to sexual aggression (e.g., Clark & Lewis, 1977; Ellis, 1989; Finkelhor, 1986; Mosher & Sirkin, 1984; Thornhill & Thornhill, 1992).

Although a discussion of the similarities and differences between each of those positions and ours is beyond the scope of the present article, we would like to briefly describe the important work of Donald Mosher and his associates. While we do not suggest that there is any necessary incompatibility between our profile of aggressors and theirs, we would like to note some differences, since at first glance our model and theirs may appear quite similar. We hope that future research will result in a successful integration of both models.

Mosher and associates argue that the profile of the sexual aggressor is one who has a “macho” personality, reflecting “an exaggerated mascu-

line style" (Mosher & Sirkin, 1984, p. 151). It includes calloused attitudes toward sex, a tendency to embrace violence and an attraction to dangerous experiences (Mosher & Sirkin, 1984). This personality profile is measured by the Hypermasculinity scale developed by these investigators. Mosher and Anderson (1986) examined the relationship between this scale and self-reported sexual aggression. There was an overall significant relationship between these two measures, $r(173) = .33, p < .001$. However, it appears that this association is largely due to the Calloused Sex Attitudes subscale, which was relatively highly correlated with sexual aggression, $r(173) = .55$. The other two subscales show significant, but considerably lower correlations with sexual aggression ranging from .23 to .26. Unfortunately, Mosher and Anderson (1986) do not report a regression analysis controlling for the overlap between the three subscales and enabling the determination of whether the latter two subscales added any significant prediction beyond that achieved by the Calloused Sex Attitudes subscale alone [Note 1].

We contend that a model of sexual aggression which incorporates several motives, factors or elements needs to demonstrate the superiority of the multiple-component model to a model focusing on single variables or motives only. The findings of Mosher and Anderson raise questions regarding whether they have actually identified several elements that contribute to sexual aggression or whether only one aspect of their model is actually directly relevant to sexually aggressive behavior. As we hope to demonstrate below, our findings suggest that each of the multiple components we have included in our model enables better prediction of sexual aggression than models that do not incorporate these components.

In addition, some key differences between our construct of "Hostile Masculinity" and Mosher's "Hypermasculinity" concern (1) the degree of specificity in the mechanisms hypothesized to cause aggression towards women, and (2) in the emphasis on hostility towards women. Mosher's work perceives aggression towards women as one manifestation of a general ". . . desire to appear powerful and to be dominant" (Mosher & Sirkin, 1984, 151). Mosher's work emphasizes general tendencies associated with violence, danger, and sensation seeking characteristics.

Although we also recognize that such characteristics can contribute to aggression against women and may be particularly useful within a hierarchical model that includes both general and specific mechanisms (Malamuth, 1988), we have placed more emphasis on specific mechanisms pertaining to men's attempts to control women's sexuality and other aspects of women's behavior (Malamuth, Heavey & Linz, 1993; Malamuth & Thornhill, 1994). We have also emphasized the role of men's hostility as a cause of aggression against women, which is not emphasized in Mosher's construct of the "macho" personality. Although we do not contend that the levels of sexual aggressors' hostility are outside the "normal" range, we suggest that this construct, as reflected in the Hostility Toward Women scale we developed (Check, 1985; Check, Malamuth, Elias, & Barton, 1985), plays an important role in this area.

THE CONFLUENCE MODEL OF SEXUAL AGGRESSION

Our model suggests that sexual aggression may be conceptualized as resulting from the *convergence* of several factors (Malamuth, 1986). Our approach is similar to some other theorizing, such as that of Sternberg and Lubart (1991) regarding creativity. These theorists have noted the utility of a multivariate approach in predicting creative performance. Their model includes intellectual processes, knowledge, intellectual style, personality, motivation, and environmental context as converging factors. Creative performance results from a *confluence* of these elements. Similarly, we maintain that sexual aggression is the result of the confluence or interactive combination of the motivation, disinhibition and opportunity predictor variables. A relatively high level on each of these characteristics contributes to sexual aggression, although we do not argue that any particular factor constitutes a necessary condition for such aggression to occur. We also suggest that the motivation and disinhibition factors form constellations that may be meaningfully organized into two major paths, so that sexual aggression may be best understood as the interaction between (1) relatively high levels of "impersonal" (sometimes referred to herein as "promiscuous") sex and (2) hostile, controlling characteristics which both enable an individual to overcome the inhibitions that could prevent the use of coercive tactics and enhance the

gratification derived by a man using sex as a means of asserting power and venting anger.

Additionally, our model suggests that factors contributing to sexual aggression may be expressed in behaviors that are not *overtly* aggressive. In other words, sexually aggressive behavior is not considered an isolated response but an expression of a way of dealing with social relationships and conflicts with women in general. We have predicted that many of the same factors that contribute to self-reports of sexual aggression and aggression in the laboratory would also contribute to other forms of dysfunctional relationships with women, such as men's domineeringness in conversations with women (Malamuth & Briere, 1986; Malamuth & Thornhill, 1994) and a generally poor quality of romantic relationships.

Early research (Malamuth, 1986) related to this model concentrated on three interrelated categories of proximate causes of aggression against women: (1) the *motivation* to commit the aggressive act, (2) *reductions in inhibitions* that might prevent aggression from being carried out, and (3) the *opportunity* for aggressive acts to occur. While it is useful to think of these as distinct categories, in reality they may sometimes not be clearly separable. In our research program we have primarily used six predictor variables conceived as falling into these three categories. We should note, however, that while differentiating these factors into the three categories is theoretically useful (Malamuth, 1986), some of these six variables may have effects at multiple category levels.

Measurement of Variables in Confluence Model

(1) Sexual Responsiveness to Rape

The ratio of sexual arousal to rape portrayals compared with arousal to consenting sex portrayals has been suggested as a discriminator between rapists and nonrapists (Abel, Barlow, Blanchard & Guild, 1977; Barbaree & Marshall, 1991; Quinsey, 1984). Although considerable research has shown that sexual responsiveness to rape alone is not a particularly good indicator of being a rapist (e.g., Malamuth & Check, 1981), such responsiveness may reveal some motivation to sexually aggress. We have used direct genital measurement of physiological arousal (i.e., penile tumescence) to depictions of rape as compared with arousal to mutually consenting sex.

(2) Dominance Motive

The view has been widely expressed that the desire to dominate women is an important motive of sexual aggression (e.g., Brownmiller, 1975). Studies of convicted rapists have shown the importance of the offender's desire to conquer and sexually dominate his victim (e.g., Groth, 1979; Scully & Marolla, 1985). The self-report measure used in our research to assess this dominance construct was part of a larger instrument developed by Nelson (1979) that asked respondents the degree to which various feelings and sensations are important to them as motives for sexual behavior. The subscale assessing dominance (8 items) refers to the degree to which feelings of control over one's partner motivate sexuality (e.g., "I enjoy the feeling of having someone in my grasp"; "I enjoy the conquest").

(3) Hostility Toward Women

Studies of convicted rapists have also emphasized the role of hostility toward women (e.g., Groth, 1979). Such hostility may motivate the behavior as well as remove inhibitions when the victim shows signs of suffering (Malamuth, 1986). This construct was measured by the Hostility Toward Women scale (30 items) mentioned earlier (Check, 1985; Check, Malamuth, Elias & Barton, 1985).

Examples of items are "Women irritate me a great deal more than they are aware of," and "When I look back at what's happened to me, I don't feel at all resentful towards the women in my life."

(4) Attitudes Facilitating Aggression Against Women

Burt (1978, 1980) theorized that certain attitudes play an important role in contributing to sexual aggression by acting as "psychological releasers or neutralizers, allowing potential rapists to turn off social prohibitions against injuring or using others" (1978, 282). She developed several scales to measure attitudes that directly and indirectly support aggression against women. The scale developed by Burt that we have used most frequently (because it measures attitudes that directly condone the use of force in sexual relationships) has been the Acceptance of Interpersonal Violence (AIV) against women scale.

Five of the six items measure attitudes supporting violence against women, whereas the sixth concerns revenge. An example of an item is "Sometimes the only way a man can get a cold woman turned on is to use force." In some of the studies we have also used two of Burt's other scales, those assessing Rape Myth Acceptance (RMA) and Adversarial Sexual Beliefs. These scales assess attitudes more indirectly supportive of aggression.

(5) Antisocial Personality Characteristics/Psychoticism

Rapaport and Burkhart (1984) suggested that, although certain factors may provide a context for sexually aggressive behavior, the actual expression of such aggression occurs only if the person also has certain personality "deficits." Studies assessing such deficits (e.g., psychopathy) have generally failed to show correlations between such measures alone and sexual aggression (e.g., Koss & Leonard, 1984) although such measures do relate to antisocial behavior generally. Moreover, testing of Rapaport and Burkhart's proposal requires assessment of the interaction between general antisocial personality characteristics and specific factors related to aggression against women. In our research, we have sometimes measured such general antisocial personality characteristics with the Psychoticism (P) scale of the Eysenck Personality Questionnaire (Eysenck, 1978).

(6) Sexual Experience

The Sexual Behavior Inventory (Bentler, 1968) was used to assess subjects' conventional heterosexual experiences including such acts as fondling of breasts, intercourse and oral sex. In some of the research, we also assessed other aspects of sexual experience, such as age of first intercourse, the number of people with whom the subject has had intercourse, and extra-relationship sex.

In some of our research (e.g., Malamuth, 1986), sexual experience was primarily treated as an "opportunity" variable, reasoning that the degree to which men engaged in dating and sexual behavior may affect the extent to which they had the opportunity to use coercive tactics. In later research (e.g., Malamuth et al., 1991) we placed more emphasis on this variable as an individual differences characteristic of men. In general,

our research to date has been primarily focused on men's traits and has not given much attention to how such characteristics may interact with situational variables, such as the opportunity dimension. As the research progresses further, it clearly will be important to give greater attention to such situational factors.

Dependent Variable: Sexual Aggression

Sexual aggression, our primary dependent variable, was measured by the self-report instrument developed by Koss and Oros (1982). It assesses a continuum of sexual aggression including psychological pressure, physical coercion, attempted rape and rape. Subjects respond using a true-false format to nine descriptions of different levels of sexual coercion. An example of an item is "I have had sexual intercourse with a woman when she didn't want to because I used some degree of physical force (twisting her arm, holding her down, etc.)." Although sexual aggression generally was used as the dependent measure we were interested in predicting, we have also used sexual aggression as a predictor of other forms of conflict in relationships with women in our longitudinal study.

Early Tests of Multiple Factors in the Model

Malamuth (1986) began to explore this model by testing the association of the six predictor variables discussed above to sexual aggression. These predictors included arousal to sexual aggression, dominance as a motive for sex, hostility toward women, attitudes supporting violence, psychoticism and sexual experience. Data were available for 95 subjects on all of these predictors and for 155 on all of the measures except sexual arousal (sixty subjects did not wish to participate in this type of assessment).

To begin, the simple correlation of each of these predictors with sexual aggression was examined. All of the predictors except psychoticism were significantly related to self-reported sexual aggression. The association between psychoticism and sexual aggression only approached significance. Interestingly, the one measure which did not share method variance with sexual aggression, the penile tumescence index of sexual

arousal, showed relatively strong relationship with aggression (at $r = .43$, $p < .001$).

Next, Malamuth (1986) examined whether these predictors provided overlapping prediction of sexual aggression. When all of the six predictors were entered into a regression equation, four made significant unique contributions (arousal to sexual aggression, Hostility Toward Women, attitudes supporting violence and sexual experience). Thus, these predictors did not provide predominantly overlapping prediction in that a combination of them was superior to any individual one for predicting levels of sexual aggressiveness.

Finally, Malamuth (1986) examined whether a model containing interactive terms would afford greater prediction than that of a simple additive model. Comparison revealed that models containing interactive effects accounted for a significantly greater percentage of the variance (45% for all 155 subjects and 75% for the 95 subjects) than equations containing additive effects only (30% and 45%, respectively).

To further examine the interactive nature of the predictors and to illustrate the potential for clinical prediction, each subject was classified as having either a high or low score on each predictor variable based on whether they scored above or below the median for that characteristic. Subjects were then divided into groups based on the number of predictors for which they scored "high." This approach is analogous to classifying a characteristic as present or not by defining presence as a relatively high score. A person scoring above the median on all the variables would possess all the characteristics. Level of sexual aggression was then compared across each group. This analysis indicated that those individuals scoring high on each of the six predictors had engaged in significantly more self-reported sexual aggression than those scoring high on fewer predictors. In general, the results again suggested an increase in levels of sexual aggression beyond what an additive model would predict.

Overall these data indicated that these six predictors can be used to predict sexual aggression and that these variables, in combination, can have a synergistic effect whereby high levels of most or all of these characteristics yields a higher level of sexual aggression than would be predicted by a simple additive model. The overall findings have been replicated in another cross-sectional study (Malamuth & Check, 1985).

Two Trajectories: Hostile Masculinity and Impersonal Sex/Sexual Promiscuity

In a further development of this work, Malamuth, Sockloskie, Koss and Tanaka (1991) included the motivation and disinhibition factors in a more broadly conceived model. According to this model, the ontogeny of coerciveness can often be traced to early home experiences and parent-child interactions. Family interactions lay the foundation for enduring cognitive (Dodge, Baites & Pettit, 1990), emotional/attachment (Kohut, 1977) and behavioral (Patterson, DeBaryshe & Ramsey, 1989) responses. Home environments that include violence between parents (O'Leary, 1988) and child abuse, especially sexual abuse (Fagan & Wexler, 1988), may lead to developmental processes that later affect aggression against women. In particular, individuals experiencing this type of home environment may develop adversarial or hostile "schema" related to male-female relationships. They may also develop feelings of shame (especially about sex) and inadequacy, which may lead to self-protective aggrandizing, anger and an exaggerated need to control intimates.

A hostile home environment also increases the likelihood that the individual may associate with delinquent peers and participate in antisocial behaviors (Patterson et al., 1989). This may promote the development of some characteristics affecting aggression against women. For example, affiliation with delinquent peers may encourage hostile cognitions, including reinforcing those originating in the home environment. This (as well as some home environments) may also interfere with the mastery of critical developmental skills, such as managing frustration, delaying gratification, negotiating disagreements, and forming a prosocial identity (Newcomb & Bentler, 1988). Thus, being affiliated with a delinquent subculture may lead to the early adoption of some "adult" roles without having gone through the maturational processes to develop skills that contribute to success in these roles, e.g., impulse control. The process may lead to individuals who are more likely to use domineering and coercive tactics when experiencing frustration. These early childhood and adolescent characteristics may lead to men's characteristics that contribute to their engaging in sexual aggression and other behaviors.

Malamuth et al. (1991) suggested that these characteristics may be described in two “paths” or constellations of factors [Note 2].

The Hostile Masculinity Path

Delinquency may affect attitudes, rationalizations, motivations, emotions and personality characteristics that increase the likelihood of coercive behavior (Patterson et al., 1989). A subculture of delinquent peers may aid in the development of such attitudes and personality characteristics, although the general cultural environment may also foster and/or reinforce attitudes and personality characteristics conducive to violence against women (Burt, 1980). Subcultures and societies that regard qualities such as power, risk-taking, toughness, dominance, aggressiveness, “honor defending” and competitiveness as “masculine” may breed individuals hostile to qualities associated with “femininity.” For these men “aggressive courtship” and sexual conquest may be a critical component of “being a man” (Gilmore, 1990). Men who have internalized these characteristics are more likely to be controlling and aggressive toward women in sexual and non-sexual situations.

The path encompassing such characteristics was labeled by Malamuth et al. (1991) the “Hostile Masculinity” path. We believe that most of the predictors assessed in the research described above (i.e., Malamuth, 1986) are primarily part of this path. These include sexual arousal in response to aggression, dominance motives, hostility toward women and attitudes facilitating aggression against women. We believe that these are components of a controlling, adversarial male orientation toward females that is likely to be expressed in diverse ways.

The Sexual Promiscuity Path

The second path, hypothesized to be relevant to sexual aggression involves delinquent tendencies expressed as sexual acting out (Elliott & Morse, 1989; Newcomb & Bentler, 1988). The accelerated adoption of adult roles often results in precocious sexual behavior. Boys who develop a high emphasis on sexuality and sexual conquest as a source of peer status and self-esteem may use a variety of means, including coercion, to induce females into sexual acts. Of course, some boys and men may have this orientation to sexuality without necessarily having had a visible

delinquent background (Kanin, 1977). Moreover, some males may have a promiscuous sexual orientation without using coercive tactics.

The Interaction of the Two Paths

Malamuth et al. (1991) hypothesized that the degree to which a person possesses characteristics of the "hostile" path will determine whether sexual promiscuity leads to sexual aggression. In other words, the hostility path may "moderate" (Baron & Kenny, 1986) the relationship between sexual promiscuity and sexual aggression. This would be expressed as a statistical interaction. Because testing for interaction effects is problematic when using structural equation modeling with latent variables (see Bollen, 1989; Kenny & Judd, 1984), the investigators first tested a "simplified" model evaluating the sexual promiscuity and hostility paths as "main effects." Supplementary analyses were then conducted to test the hypothesized interaction effect.

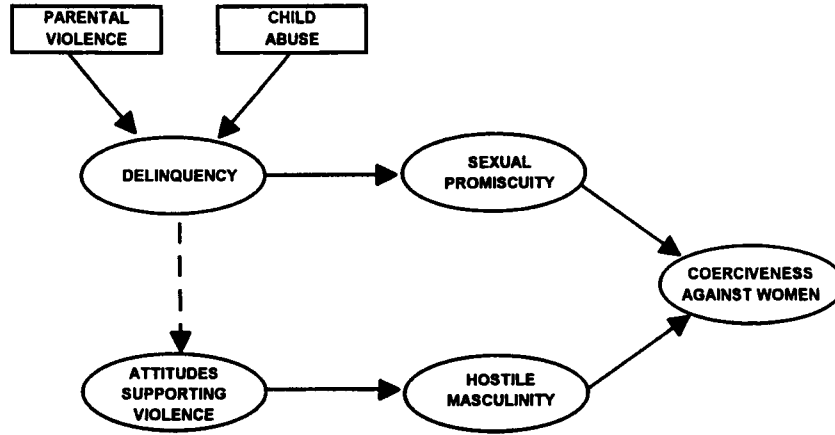
As noted in earlier sections, our model contends that factors that contribute to coercive sexual behavior are likely to be expressed in many ways that have a negative impact on men's relationships with women (also see Malamuth & Briere, 1986). In keeping with this expectation, Malamuth et al. (1991) also predicted that higher scores on the hostility factor would result in more social isolation from women (i.e., fewer platonic relationships).

TESTING THE MODEL WITH A NATIONAL SAMPLE

Using latent-variable structural equation modeling, Malamuth et al. (1991) tested a model, shown in Figure 1, based on the theoretical framework described above using data from a large nationally representative sample of male post-secondary students.

This model describes how early home experiences of parental violence and/or child abuse begin a process that, through two different trajectories, may lead to coercive behavior toward women. As discussed above, the first step in this progression is involvement in delinquent activity. This delinquent activity is the hypothesized beginning point for both trajectories. In the first, delinquency leads to the development of attitudes which support violent behavior. These attitudes are associated with the development of hostile masculinity that can be characterized as a style of

• *Figure 1: Model Testing and Replication with National Sample*



self-functioning involving controlling, self-absorbed, “one upsmanship” personality characteristics. Hostile masculinity is predictive of both the use of sexual and nonsexual coercion against women as well as having difficulty sustaining relationships with women.

The second trajectory described by this model involves the association of delinquency with high levels of sexual promiscuity. Sexual promiscuity, when combined with high levels of hostile masculinity, was expected to be predictive of increased use of sexual coercion against women. Based on our theorizing that sexual aggression in part reflects general coerciveness in relations with women, there was also hypothesized to be a common factor underlying sexual and nonsexual coercion of women. We should note, however, that our theorizing and research has also supported a hierarchical approach (Malamuth, 1988) that incorporates both relatively general mechanisms underlying various antisocial behaviors and more specific mechanisms particularly relevant to sexual aggression (Malamuth, Linz, Heavey, Barnes & Acker, 1995).

Although the development of this model was guided by the theory outlined above, the initial model was refined using half of the available sample and then cross-validated using the second half of the sample. This model fit the data well in both sample halves with one exception: a consistent relationship between delinquency and attitudes supporting violence was not found. This path was significant in only one of the sample halves and is therefore shown as a broken line in Figure 1. This suggests that the hostility and sexual promiscuity paths may be relatively independent trajectories and that attitudes supporting violence and hostile masculinity may stem from experiences other than an abusive home environment and delinquency.

As noted earlier, Malamuth et al. (1991) hypothesized that the presence of hostile masculinity would moderate the extent to which sexual promiscuity leads to sexual aggression. Hierarchical multiple regression using component scores on hostile masculinity and sexual promiscuity was used to explore this hypothesis. This revealed a significant interaction between sexual promiscuity and hostile masculinity when predicting sexual aggression. No interaction was found when predicting nonsexual aggression.

To further explore this interaction, subjects were divided into three groups based on their levels of hostile masculinity and sexual promiscuity. A 3 x 3 analysis of variance was performed with sexual aggression scores as the dependent variable. This analysis yielded significant effects for hostile masculinity, sexual promiscuity and the interaction. Trend analyses within each level of sexual promiscuity revealed no effects within the lowest level, a linear trend of increasing sexual aggression within the middle level of sexual promiscuity, and a quadratic trend of increasing sexual aggression within the highest level of sexual promiscuity. Similar to the synergistic pattern described earlier, the group that was high on both sexual promiscuity and hostile masculinity reported higher levels of sexual aggression than all other groups.

REPLICATING AND EXTENDING THE CONFLUENCE MODEL

Recently we have been involved in research aimed at refining and extending the confluence model (Malamuth, Linz et al., 1995). In this research, we have used the confluence model to predict difficulties in men's relations with women in a 10 year longitudinal study. We also sought to clarify the specific nature of the sexual promiscuity and hostile masculinity paths. We began this research with the hypothesis that the same two path "causal structure" would be useful for the longitudinal prediction of sexual aggression as well as for the prediction of general dysfunction in relations with women. As discussed above, it is our belief that the factors leading to sexually aggressive behavior (e.g., tendencies to dominate, monopolize, control and manipulate women) are indicative of a particular pattern of relating to women in social relationships. We therefore expected that the factors specified in the confluence model of sexual aggression would also be predictive of a fairly wide range of relationship problems with women. In particular, we expected that the central paths comprising the confluence model would predict general distress in romantic relationships as well as heightened levels of physical and verbal aggression.

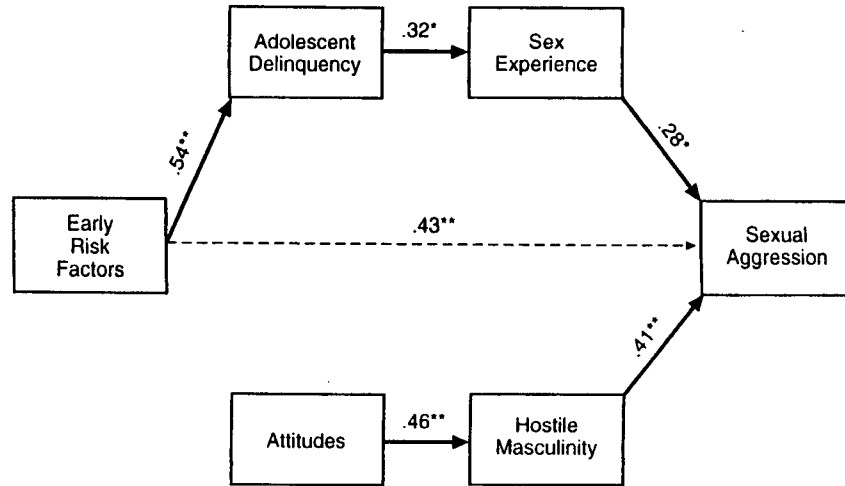
This study involved following up approximately 150 men who had participated in several of the studies conducted approximately 10 years earlier. Four primary outcome measures were assessed. First, men were asked to report on their level of sexual aggression during the 10 years

subsequent to their initial participation using a modified version of the scale developed by Koss and Oros (1982). Nonsexual aggression was assessed with regard to the subject's current or most recent romantic partner using the physical and verbal aggression subscales of the Conflict Tactics Scale (Straus, 1979) and the verbal aggression subscale of the Spouse Specific Assertiveness Inventory (O'Leary & Curley, 1987). Finally, general distress in the subject's current or most recent relationship was assessed using several measures of relationship quality and stability (Booth & Edwards, 1983; Larzelere & Huston, 1980; Spanier, 1976).

We began by attempting to replicate the model developed by Malamuth et al. (1991) using cross-sectional data. This model, shown in Figure 2, follows the two path structure. In the first path, early home experiences, such as family violence and childhood abuse, predict involvement in delinquent activities and promiscuous sexual experience which is predictive of increased levels of sexual aggression. The second path begins with attitudes supportive of violence which are associated with hostile masculinity, which is predictive of increased levels of sexual aggression. Overall, the data showed that all the structural links found in Malamuth et al. (1991) were successfully replicated here. However, one additional path, a direct link between early risk factors and sexual aggression, was present in these data. Additional analyses examining the interaction of sexual promiscuity and hostile masculinity again indicated that sexual aggression is associated with the confluence of high levels on both of them.

Next we tested a model adding the longitudinal data. We hypothesized that the same general causal structure would be useful for longitudinal prediction of conflictual relationships with women. Further, we expected that the two path causal structure would allow prediction above that afforded by Time 1 sexual aggression. The outcome measure of conflict with women used in this model was composed of measures of sexual aggression, non-sexual aggression and relationship distress. With the addition of two incidental paths suggested by the modification indices, this model fit the data well. This again supports the usefulness of the two path causal structure in understanding dysfunctional and aggressive relations with women.

• **Figure 2: Cross-Sectional Prediction of Early Sexual Aggression Using Sexual Promiscuity and Hostile Masculinity Paths**



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

NOTE: Standardized Regression Coefficients are shown for revised model. Dashed lines indicate path added based on modification indices.

Having established the usefulness of the model for longitudinal prediction of conflict with women, we attempted to refine several aspects of the model using Time 2 measures only. For example, we sought to further explore the role of sex drive in sexual aggression and to examine the role of proneness to general hostility.

As discussed above, various theorists have argued that a sexual motive or “drive” is an important factor in sexual aggression. In refining our model, we speculated that sex drive is not a unitary concept but may include a variety of types of motives. As such, we hypothesized that only certain facets or expressions of this “drive” would serve as motivational factors for sexual aggression. In particular, we believed that the attraction to “impersonal sex” would be associated with increased sexual aggression whereas sex drive more generally conceived would not. Analyses from our longitudinal study generally supported this contention. They showed that sexual aggression earlier in life was predictive of such “impersonal” sexual reactions later in life as more frequent sexual arousal when looking at attractive unknown women and of having more extra-relationship affairs in later life. In contrast, early sexual aggression was not predictive of responses that might reflect a more “personalized” orientation to sexuality, such as degree of pleasure derived from sex, frequency of sex with a woman, or number of orgasms per week.

Finally, we used these data to explore the role of emotional dyscontrol in aggressive behavior. Various researchers have emphasized the importance of assessing negative affect in the study of aggression (e.g., Averill, 1982; Berkowitz, 1990; 1993; Hall & Hirschmann, 1991). We measured individual differences in the extent to which men experience high affective intensity, particularly negative affect, and the extent to which such affect influences motor tendencies as reflected in impulsivity. Such an emotional syndrome in which high levels of negative affect and related motor tendencies are relatively frequently and easily activated would seem highly relevant to conflict and aggression generally. We hypothesized that higher levels of this syndrome would have a direct link with nonsexual conflict with women, which would occur as a function of a general tendency to “strike out” verbally and/or physically at anyone in one’s proximity, and an indirect impact on sexual aggression mediated by the specific emotions and cognitions related to women that are

represented by the hostile masculinity construct. The data supported these relationships. In our fully elaborated model, using Time 2 data, a construct labelled "proneness to general hostility" showed direct links to men's experiencing relationship distress and aggression towards women and an indirect link to sexual aggression, mediated by the construct we labelled "hostile masculinity." Thus, the tendency for men to experience high levels of negative affect intensity with concomitant impulsivity may play an important role in men's conflict with and aggression towards women.

Risk Analyses

Although the data gathered in our research program strongly suggest that the use of multiple factors enables better statistical prediction of sexual aggression than the use of single factors, they could be due to at least two possibilities. One is that different factors cause different individuals to commit such aggression whereas the other is that the combination of several factors results in such aggression. While some models have suggested the former possibility of "alternative routes" leading to a similar outcome (e.g., Hall & Hirschmann, 1991), ours has stressed the latter possibility.

To test these two possibilities and to examine our model's utility for clinical "prediction," we performed various "risk analyses" in our research program. For example, we conducted such an analysis using the cross-sectional data gathered at Time 2 of the longitudinal study described above (i.e., when the men were, on the average, about thirty years old). For each "predictor," a relatively high score was defined as falling in the upper third of the distribution of the sample. Subjects were then divided according to the number of predictors on which they scored either high or low, using six variables. This approach is analogous to classifying a characteristic as present or not by defining presence as a relatively high score. A person scoring in the top third on all of the variables would possess all the characteristics.

This classification scheme yielded six groups. An analysis of variance comparing the sexual aggression levels of these groups yielded a significant effect. Of the 27 subjects who did not score in the top third of the distribution on any of the six predictors, only 15% showed some level of

sexual aggression. In contrast, of the 9 subjects who scored in the top third of the distribution on all six predictors, 89% showed some level of sexual aggression. Those falling between these two extremes showed a general pattern of increased likelihood of sexual aggression with a greater number of “risk” factors. However, in keeping with our model’s emphasis on the confluence of several factors, the clearest difference was between the group scoring relatively high on all six “risk” factors and all other subjects. Indeed, statistical comparisons showed that this group (with all of the “risk” characteristics) was significantly higher in sexual aggression than all other groups.

NOTES

1. We are concerned about the suitability of one of the items on Mosher’s Calloused Sex subscale. Subjects are required to choose between the alternatives “I only want to have sex with women who are in total agreement” vs. “I never feel bad about my tactics when I have sex.” Although such an item may not have direct content overlap with the measure used to assess sexual aggression (which specifically asks about the subject’s own actions), it would be surprising if there wasn’t a strong association between men’s reports of having engaged in sexual aggression and their reports of only wanting to have sex with fully willing partners. Questions may be raised whether such an item reflects an “attitude” or a general statement about the man’s willingness to engage in coercive sex.

2. We recognize that there is a value judgment often associated with the term “sexual promiscuity,” but we use it here without any pejorative meaning implied. This term and “impersonal sex” are often used interchangeably in this article.

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AUTHORS' NOTES

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