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. ج: Attraction to Sexual Aggression and Physical Affection: An Initial Investigation Mary Ellen Benjamin Department of Educational Psychology and Counselling McGill University, Montréal March 1993

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of Doctor of Philosophy

Running head: Affection and sexual aggression



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Mary Ellen Benjamin Department of Educational Psychology and Counselling McGill University

Shortened Title of Thesis:

Attraction to Sexual Aggression and Physical Affection Variables

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Abstract

Research has demonstrated that for a significant minority of men, exposure to sexually violent media results in a series of changes. These men are more likely to be sexually aroused by sexually violent stimuli, and also believe in certain rape myths and admit a greater likelihood to sexual aggression. The construct Attraction to Sexual Aggression, which comprises the affective, cognitive and behavioral responses to sexually aggressive media, has been proposed by Malamuth (1989a, 1989b). The Attraction to Sexual Aggression Scale has been developed as a dependent measure of the construct. A study by Malamuth and Check (1983) proposed that lack of pleasurable physically affectionate experiences with women may contribute to sexual aggression. This proposal reflects the theory put forward by Prescott (1977), who hypothesized that lack of physical affection at critical stages of development results in a greater propensity towards aggressive behavior. The current study is an initial investigation into attraction to sexual aggression and physical affection experiences.

Résumé

Les recherches ont démontré qu'une minoritée significative d'hommes réagissent d'une façon particulière aux médias sexuellement violents d'une façon particulière. Ces hommes ont plus de chances d'être stimulés sexuellement par ces médias, croient aux mythes sur le viol et admettent une certaine attirance envers l'agression sexuelle. La théorie de l'attrait envers les agressions sexuelles, qui inclut les réponses affectives, cognitives, et comportementales, a été proposée par Malamuth. Ce dernier a construit une échelle de mesure nommée, "The Attraction to Sexual Aggression Scale". Selon lui, le manque d'affection physique peut être en partie responsable de l'agression sexuelle. Cet énoncé rejoint la théorie de Prescott qui émit l'hypothèse que le manque de l'affection physique aux étapes critiques du développement mène aux comportements agressifs. Ce travail porte sur l'évaluation initiale des liens entre l'attrait envers les agressions sexuelles et le vécu affectif.

Introduction

Much of what is known today about sexual aggression in the noncriminal population has evolved as a result of studies into the effects of sexually explicit materials upon the attitudes and behavior of consumers. Specifically, the concern about pornography has centered around the contention that exposure to sexually explicit materials predisposes the consumer to inappropriate, excessive, or aggressive sexual behavior. The establishment of the United States President's Commission on Obscenity and Pornography in 1968 began a series of empirical investigations whose underlying purpose was to determine whether or not exposure to sexually explicit materials influences behavior and, if so, to what extent that behavior is harmful to others. The contributors to the Commission reported that pornography was not harmful, that there was little agreement on what it was (Wilson & Abelson, 1972), that criminals convicted of sexual crimes had had in fact less exposure to it than 'normals' (Goldstein & Kant, 1974), and its main effect on subjects' behavior seemed to be a short term rise in sexual activity (Mann, Sidman, & Starr, 1973).

In contrast to these early studies which relied largely on subjects' self report, later studies adopted the more sophisticated laboratory methods of exposing subjects to pornographic stimuli and measuring their reactions. Not surprisingly, the main effect of erotic and non-violent sexual stimuli is sexual arousal which leads to an increase in either intercourse or masturbation immediately following exposure for both men and women, with few differences between the sexes (Schmidt, 1975; Schmidt & Sigusch, 1970; Schmidt, Sigusch, & Schafer, 1973). Mann, Sidman, and Starr (1973) noted that this increase in frequency of intercourse or masturbation immediately following exposure did not alter weekly frequency rates of sexual activity for married couples, but rather led to their choosing the evening immediately following exposure as opposed to any other evening.

Despite these early conclusions that exposure to sexually explicit materials does not lead to increases in harmful behavior, the changing content of pornographic materials from the merely erotic and sexual in varying degrees of explicitness to the combination of sexual and violent images has led to suggestions that exposure to violent sexual stimuli conditions men to associate sexual arousal with violence (Donnerstein, Linz, & Penrod, 1987). Furthermore, critics charge that violent sexual stimuli contributes to an atmosphere which at best denigrates women and women's sexuality and, at worst promotes sexual aggression against women (Lederer, 1980). Concern for the possible link between exposure to violent sexual stimuli and sexually violent behavior has resulted in two more government reports, the Attorney General's Commission on Pornography Report (1986) in the United States and in Canada, the Report of the Special Committee on Pornography and Prostitution (Canada, 1985). While much of the research conducted after 1975 has focused upon investigating a link between exposure to violent sexual stimuli and sexually violent behavior, the Special Committee on Pornography and Prostitution (Canada, 1985) found little conclusive scientific evidence to support such a position. Despite this conclusion, pornography remains a sensitive social issue. The Attorney General's Commission (1986) based its recommendations on much of the same research as did the Canadian Committee (1985). In reporting the activities of a special workshop convened in order to report to the Attorney General, Koop (1987) stated that pornography does

contribute to attitudes and behavior which in turn are harmful and even destructive to people and to society. The controversy continues.

As the content of pornography has changed over the last thirty years, so has the nature of the research stimuli. Research conducted in the late sixties and early seventies used still photos of partially nude or nude women, or audio-visual stimuli, much of it developed especially for the purposes of research (e.g., films used to assess arousal by Schmidt (1975)). Since then, however, the stimuli used in sexual aggression research has varied considerably and includes audio-taped stories, written stories, as well as widely distributed feature length movies and video (Linz, 1989).

Terminology

The last two decades have seen a shift in social and scientific concern from pornography to sexual aggression. Concern originally focused on anti-social attitudes and behavior being the direct result of exposure to sexually explicit materials. Since the early seventies, the field has broadened to encompass a much wider range of behavior, sexual aggression, which results from many factors, including exposure to sexually explicit media.

Review of the Literature

Sexual Aggression and Pornography

In looking back over the literature on sexual aggression and on pornography, one of the impressions which emerges is that of the evolution from a relatively simple cause and effect type model to a complex and statistically sophisticated interactive model which reflects a variety of influences. The earlier univariate models tend to focus upon either the affective or cognitive components which are believed to lead to the likelihood to sexually aggress, and have a certain sophistication from the point of view of experimental design. The later models take the expanded view that sexual aggression results from the interaction of a number of variables - physiological, affective, cognitive, and developmental. As well, the theories underlying sexual aggression reflect the fact that it is very much a multidisciplinary field which has been extensively studied by feminists, social psychologists, communication theorists, clinical psychologists and forensic scientists. Table 1 lists the most frequently researched variables.

Many of the experiments reviewed below follow similar procedures. A subject, who may or may not have been previously provoked, is exposed to a stimulus, usually a film or a story. Depending upon the condition, the content of the stimulus may be either sexual, sexual and aggressive, or neutral. A variety of dependent measures - mostly self report questionnaires, as well as devices such as penile strain gauges - determine the subject's response.

Table 1

Researched Variables on the Impact of Violent Pornography and Sexual Aggression

Sociocultural	Affective/Cognitive	Sexual
attitudes	sexual arousal	frustration
sex role stereotypes	sexual desire	motivation
maladjustment	fantasies	
beliefs	hostility	
	psychopathology	

Behavioral likelihood to force/likelihood to rape past coercive behavior criminal behavior

The Sociocultural Model

The sociocultural model posits that pornography is part of a larger culture, "which promotes and condones rape, woman-battering, and other crimes against women" (Lederer, 1980, p.20). As such, pornography may not be a significant contributor to individual acts of sexual violence but provides an added stimulus to other influential factors such as belief in rape myths, greater acceptance of interpersonal violence, sexually aggressive fantasies, and so on. The feminist writers such as Lederer (1980) constitute a very vocal lobbying group against pornography, in particular violent pornography. However, they have contributed little in the way of empirical evidence to support their views.

There is substantial evidence which suggests that exposure to aggressive pornography does result in changes in attitudes towards women and rape. Malamuth and Check (1981) reported that male subjects who viewed a sexually violent film as part of a campus film series expressed a greater acceptance of interpersonal violence against women than those subjects who saw a non-sexual and non-violent film. The subjects did not know that they were participating in an experiment, and did not see any relationship between the films they signed up to see and the questionnaires which they filled out several weeks after the viewing.

In contrast to the data yielded by Malamuth and Check's field experiment, Padgett, Brislin-Slutz and Neal (1989) found that the number of hours of exposure to pornography did not adequately predict attitudes towards women. In fact, the patrons of the adult theater who viewed more pornography than the male and female college students in the sample, had more favorable attitudes towards women than the students. In another study reported by the same authors, attitudes towards women did not change significantly as a result of exposure to erotica.

An experiment designed to explore the consequences of continued exposure to pornography on beliefs in general and attitudes towards women conducted by Zillman and Bryant (1982) showed a number of significant changes in attitudes and perceptions. Massive exposure to stimuli which showed "uncommon" sexual practices such as group sex, led subjects to believe that these practices were much more common than reported by either Kinsey or Hunt (Zillman & Bryant, 1982). Furthermore, exposure promoted what the authors termed "sexual callousness toward women", in the sense of loss of compassion and support for women's causes and recommendations for reduced sentences for rapists.

Malamuth and Check (1985) tested the hypothesis that men exposed to pornography which depicted women as enjoying rape would express a belief in similar types of rape myths. Portraying women as enjoying rape does increase males' belief in this rape myth. As well, pornography which not only shows that the woman enjoys the rape but also becomes aroused, may help support attitudes and beliefs generally in favour of rape and sexual force (Malamuth & Check 1980a; Malamuth & Check, 1985).

Exposure to violent sexual stimuli also serves to justify men's sexual aggression (Malamuth, 1984). Hall and Hirschman (1991) refer to belief in rape myths and justifications for rape as cognitive appraisals which may be conditioned through cultural or social processes. The process is as follows: the more a man views stimuli which depict sexually aggressive behavior towards women in a neutral or positive fashion, the less likely he is to view that behavior as morally wrong. Given the assurance that he will not be caught by authorities, he may admit an increased likelihood to rape or force.

Yet another cognitive variable which appears to be related to both the likelihood to rape or force, and past coercive behavior, is coercive sexual fantasies (Greendlinger & Bryne, 1986). At least one study demonstrated that exposure to sexually violent stimuli produces sexually violent fantasies (Malamuth, 1981). Greendlinger & Bryne (1986) explored the role of coercive sexual fantasies in men and the link with past sexual aggression. Coercive fantasies were significantly correlated with likelihood to rape, rape myth acceptance, and aggressive tendencies. As well, past coercive sexual behavior correlated significantly with coercive sexual fantasies and aggressive tendencies. However, Greendlinger and Byrne report that past coercive sexual behavior and likelihood to rape were not significantly associated with each other. The authors acknowledge that the link between a coercive sexual fantasy, attitudes supporting rape, and actual coercive sexual behavior is tenuous and to date, poorly understood.

Likelihood to Rape or Force

Malamuth and Check (1980a, 1980b, 1983) identified a group of men within the "normal" population of males (as opposed to convicted sex offenders) who acknowledge a likelihood to rape or likelihood to force. Likelihood to rape is defined as the self reported inclination to rape or aggress against a woman if the subject is assured that he would not be caught or punished. Likelihood to force is defined as the self reported likelihood to force a woman to do something sexual that she doesn't want to do if given the same type of assurances. In reviewing a number of studies, Donnerstein, Linz and Penrod (1987) state that high likelihood to rape or force ratings occur consistently in up to 30% of subjects tested.

The two characteristics which appear to best differentiate men who admit a certain likelihood from men who admit no likelihood at all are 1) having callous attitudes about rape and belief in rape myths (e.g., agreeing with a statement such as, "Women like to be raped") and, 2) to be sexually aroused by rape depictions (Malamuth & Donnerstein, 1984).

Several studies have looked at why some men acknowledge likelihood to rape or force. Briere and Malamuth (1983) tested alternative hypotheses that the likelihood was related either to sociocultural factors such as attitudes and beliefs, or to sexual factors such as sexual frustration or

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maladjustment. These results indicate that sexual factors do not explain a high likelihood to rape or force. Briere and Malamuth (1983) concluded that likelihood to rape or force was consistent with calloused attitudes towards rape and belief in rape myths. A later study (Malamuth, Check & Briere, 1986) rejected the importance of sexual factors in explaining sexual arousal to aggression and supported the sociocultural model.

When referring to likelihood to rape or force, it is important to distinguish between those men who become sexually aroused by rape depictions in which the woman becomes sexually aroused and appears to enjoy the sexual act, and those in which the rapist clearly acts against the woman's will. While some men become sexually aroused by rape depictions where the woman becomes aroused as well, other men become aroused and admit a likelihood to rape or force when the woman professes disgust (Check & Malamuth, 1983). This distinction is important for several reasons. First, it serves to differentiate those men who admit a likelihood to rape or force despite the negative reactions of the woman. Second, it demonstrates the importance of the portrayal of the woman's response to sexual aggression. A positive response on the part of the woman increases sexual arousal in some men (Malamuth & Check, 1983). As well, assigning negative characteristics to the woman such as the reputation of being sexually "loose" enhances likelihood to rape or force (Smeaton & Bryne, 1987).

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Arousal Models

"Sexual arousal in the male perpetrator is an obvious and important component in most acts of rape" (Barbaree & Marshall, 1991, pg.622). Equally obvious is the role that emotional arousal - anger in particular plays in rape. Sexually aggressive behavior results from the complex interaction of both sexual arousal and arousal to anger, according to Barbaree and Marshall, who proposed a 6 model explanation of arousal in rape. Each of these models focuses upon a different relationship between the aggressive aspects of rape and the rapist's sexual response. Briefly, the control models postulate that the rapist is unable to suppress his sexual arousal, and/or has a preference for coercive sex, as opposed to the nonrapist who may in fact be aroused but is able to control or suppress his arousal. The excitatory model assumes that the violence excites the sexual aggressor.

In particular, two models have provoked a number of studies: the disinhibition model and the inhibition model. Basically, the inhibition model proposes that emotional and/or cognitive responses to the rape descriptions inhibit the subject's arousal to the sexual aggression in some way. On the other hand, the disinhibition model proposes the reverse - that the subject's emotional state or cognitive set increases the sexual arousal. Inhibitors to sexual arousal to rape include positive attitudes towards women and sensitivity to her pain and suffering. The effects of these variables upon the likelihood to rape or force scales have been enumerated in previous sections of this review.

The disinhibition model of sexual aggression best explains acquaintance rape or date rape, and thus may account for the greatest number of rapes (Barbaree & Marshall, 1991). Check and Malamuth (1983) noted some

Affection and sexual aggression

interesting reactions to differences between acquaintance and stranger rape. Their subjects reported greater arousal to the acquaintance rape story, and perceived the woman's response to rape more favorably in the acquaintance rape story than in the stranger rape story. Other disinhibitors include anger, negative attitudes towards women, exposure to violent sexual stimuli, and alcohol.

Physiological Arousal

The physiological arousal aspect of sexual aggression has been extensively studied in both convicted sex offenders and in so-called "normal" males. As Hall and Hirschman (1991) point out, the physiological arousal model implies that in some men arousal is so compelling that they lose control of their behavior. Probably the best argument against arousal as the most important predisposing factor in sexual aggression is the finding that many sexual offenders are not highly aroused, together with the fact that many nonsexually aggressive males experience a degree of sexual arousal to sexually violent stimuli.

An early hypothesis to be tested involved the potential differences in sexual arousal between convicted rapists and sex offenders, and "normals" who professed a strong inclination to rape. Abel, Barlow, Blanchard and Guild (1977) found that men who admit a strong inclination to rape but who have not raped, are sexually aroused by the same materials as those which arouse convicted rapists. The finding that a significant minority of otherwise "normal" men have a strong inclination to rape, who respond to sexually violent stimuli by becoming sexually aroused, and who thus resemble convicted rapists in some ways, is important. This suggests that there is something unique to the perceptions and/or experience of sexual violence that differentiates the two groups. One of these differences may be the ability to respond to both sexual and aggressive cues simultaneously, a response which is inhibited in most men (Barbaree & Marshall, 1991).

Studying convicted sex offenders and comparing their reactions to other men poses a number of methodological problems, not the least of which is the reliability of the offenders to report accurately what induced them to rape. The conclusion reached by Abel (cited in Barbaree & Marshall) as well as by Malamuth (1983, 1986) and Malamuth and Check (1983) was that the inclination to rape and/or sexually aggress is a variable which occurs across the general population of males. A much earlier study by Goldstein and Kant (1974) noted that convicted sex criminals had had less exposure to pornography and came from repressive sexual backgrounds.

The finding that sexual arousal to violent stimuli occurs in the noncriminal population has led to considerable research, in particular amongst university students. In particular, the laboratory studies conducted by Malamuth and his associates allowed the comparison between objective measures and self report scales of sexual arousal to sexual aggression. Malamuth, Check and Briere (1986) conducted two experiments in which they studied the relationship between aggression and sexual arousal, and compared penile strain gauges and/or self reported degree of arousal. They identified two distinct groups. For the first group, who represent 70% of the sample, the presence of aggression in conjunction with sexually stimulating material inhibited arousal. In the remaining 30% of subjects who reported a relatively high level of arousal to sexual arousal, particularly when it as measured by penile tumescence. Malamuth et al. (1986) also concluded that men who report a high sexual arousal to rape also acknowledge a greater acceptance of violence against women and wish to dominate women than those who are not aroused by sexual force or rape. This study confirmed the usefulness of the self reported sexual arousal scale, as opposed to penile tumescence strain gauges.

Anger and Aggression Studies

The hypothesized relationship between sex and aggression dates back to Freud, although the effects of sexual arousal on behavioral aggression have not been widely investigated. Indeed, it is presumed that in the so-called "normal" male, sexual arousal and anger cannot occur simultaneously (Barbaree and Marshall, 1991). A very early study by Jaffe, Malamuth, Feingold and Feshbach (1974) looked at the potential effects of sexual arousal on behavioral aggression in order to assess the relative importance of sexual arousal versus general arousal to stimuli. Unlike later studies, this one used only erotic and neutral stimuli, as opposed to sexually violent stimuli. Behavioral aggression was measured by electric shocks administered by a bogus shock machine. The results, that sexually aroused men and women delivered more intense shocks than nonaroused subjects, suggest a link between sex and aggression.

One of the predominant characteristics of rapists, according to Groth (1979) is hostility towards women. Check and Malamuth reported the initial development of the thirty item Hostility Towards Women Scale in 1983. The scale became the subject of Check's (1985) unpublished doctoral thesis. Items included statements such as "Women irritate me a great deal more than I am 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". Closely related to hostility are personality factors, such as antisocial characteristics.

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These have been measured by the Psychothesism Sec13 of the Eysenck A croonancy Questionnaire. As Malamuth (1986) states, the P scale reflects a variable which stretches across the normal, non psychiatric population, and has been shown to relate closely to sexual aggression.

While Malamuth and his associates have looked at variables such as the sexually violent content of pornography, attitudes, and some personality traits such as hostility, as potential predictors of sexual aggression, another series of studies have focused upon the affective factors such as anger as the predominant contributors to sexual aggression. An experiment by Baron and Bell (1977) provides a good example of how anger has been investigated.

Baron and Bell hypothesized that exposure to mild erotica would inhibit aggression and conversely, that exposure to more arousing stimuli would facilitate aggression. Male subjects were first either angered or treated in a neutral manner by a confederate, and then exposed to different types of pictorial stimuli, including mildly erotic and explicit sexual pictures. Subsequent to viewing the pictures, subjects were given the opportunity to aggress by means of administering an electric shock against the confederate who had initially treated them. Interestingly, Baron and Bell found that exposure to mild erotica facilitated aggression, while exposure to more explicit sexual stimuli had no apparent effect upon subject's aggressive behavior.

Mueller and Donnerstein (1981) investigated the effects of film facilitated arousal upon pro or antisocial behavior in two similar experiments. Again, subjects were first treated in a positive or neutral fashion by a confederate, and then exposed to either an arousing or neutral, i.e., nonarousing, film. Following exposure, subjects were instructed to either reward or punish the confederate by means of a modified Buss machine. The second experiment replicated the first, except that the neutral condition was made less positive. The data strongly support the notion that arousal from one source transfers to another: in the first study, subjects who viewed the arousing film rewarded the confederate, regardless of the treatment. The second study confirmed the excitation transfer model in that subjects who were treated in a positive fashion and shown an arousing film rewarded more, while subjects who received negative treatment and viewed the arousing film rewarded less.

Donnerstein (1983) maintains that the aggression in violent sexual stimuli triggers aggressive responses in subjects, and that they associate actual women with women in films. In a study designed to assess the influence of aggressive erotica on aggressive behavior towards women, Donnerstein found an increase in aggression towards women in previously angered males only after exposure to the aggressive erotic film. He suggests that the combination of anger arousal and sexual arousal lead to heightened aggressive responses towards women, and speculates that the men unconsciously transfer their angry feelings towards the confederate and/or towards the woman in the film on to whatever woman with whom they are subsequently paired.

According to Donnerstein (1983), previously angered subjects respond differently to victim pain cues. He cites a 1977 study by Baron in which victim pain cues actually increased aggression in highly provoked subjects, whereas in non-angered subjects, victim pain cues reduced aggression. A possible explanation for this is what Hall and Hirschman (1991) refer to as affective dyscontrol which occurs in individuals who have difficulty modulating affect. The conclusions drawn by Donnerstein (1983) consistently point to a number of factors which Malamuth and his associates have also isolated. They also specifically point to violent content as opposed to sexual content as the primary trigger of sexual aggression. As Donnerstein (1983) writes,

[These studies] point to the importance of the female's association with observed violence as a critical component in the facilitation of aggression toward women. As we have seen, aggression toward male targets is not affected by exposure to aggressive erotica in which a female is the victim. Furthermore, while anger instigation does tend to heighten the level of aggression, facilitated aggression can occur in the absence of prior instigation. These findings suggest that even nonsexual images of aggression toward women can act to increase the likelihood of subsequent aggressive behavior towards female victims.

Second, these studies point to the role of the victim's reaction in the film as a crucial factor in how male subjects behave toward a female. As we noted earlier, a common theme in pornography is that women enjoy aggression (p.233).

Multivariate Models

Looking back over the research cited so far in this review, a number of variables emerge fairly consistently as being related to sexual aggression. To begin, the sexually violent content of the stimulus, as well as characteristics of the woman in the stimulus, i.e., that she enjoys the violence, and that she knows the perpetrator, may provoke aggressive responses in some subjects. As well, subjects who espouse attitudes which generally favour sexual aggression, who become aroused by sexual violence, and who believe that sexual violence is arousing to others, also contribute to a self reported likelihood to sexually aggress. Other work has emphasized childhood experiences (Groth, 1977).

Much of the research which has so far been cited in this review focuses on direct effects of media violence, namely the thought patterns and affective responses to certain types of media depictions. It has been clearly demonstrated that exposure to sexually violent materials results in antisocial attitudes and aggressive behavior in a small but statistically significant group of men (Donnerstein, Linz, & Penrod, 1987). A major question to emerge from all the different studies on sexual aggression and sexually violent pornography is: if and how do all these variables interact to produce sexually aggressive behavior?

Malamuth (1986) tested the predictive value of three theoretical models of the causes of sexual aggression: the single factor model, which postulates that sexual aggression stems from a single factor; the additive model, which suggests that several factors combine sequentially; and the interactive model, which presumes that a number of factors interact. The dependent measure consisted of self reported past sexual aggression with acquaintances. Predictors included arousal, hostility towards women, the

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urge to dominate, attitudes facilitating aggression, and sexual experience. As expected, all of the factors significantly contributed to predicting naturalistic (self reported past acts, as opposed to likelihood to aggress models or laboratory aggression) sexual aggression. Furthermore, the interactive model in which factors combine in a synergistic fashion, results in high levels of sexual aggression. By contrast, any single factor operating alone is extremely unlikely to produce sexual aggression.

Two models of sexual aggression have been proposed which integrate many of the previous findings. Recently, Hall and Hirschman (1991) proposed a complex multivariate model of sexual aggression which incorporates many of these earlier findings. The theory rests upon four important components: physiology, cognitive appraisal, affective dyscontrol, and specific developmentally related personality factors. According to the theory, sexually aggressive behavior results from the complex interaction of all of these components.

The physiological aspect of sexual aggression has been extensively studied in both convicted sex offenders and in the so-called "normal" environment. As Hall and Hirschman (1991) point out, the physiological arousal model implies that in some men arousal is so compelling that they lose control of their behavior. Probably the best argument against arousal as the most important predisposing factor in sexual aggression is the finding that many sexual offenders are not highly aroused, together with the fact that many non sexually aggressive men admit to a certain arousal to sexually violent stimuli.

The factors which have been consistently found to influence sexually aggressive tendencies are the cognitive factors - belief in rape myths and rape supportive attitudes. Hall and Hirschman (1991) suggest that the decision to rape may be based upon certain cognitive appraisals: negative perceptions of women, the belief that women enjoy rape, excuses such as over indulgence in alcohol. Many of the studies cited here point to the importance of cognitive factors, in particular negative attitudes towards women and rape-supportive attitudes.

The third component cited by Hall and Hirschman is affective dyscontrol. Theoretically, negative affective states such as depression, anger and hostility may provide the basis for sexual aggression in some males. The role that affective dyscontrol plays in sexual aggression has been clearly delineated by researchers such as Donnerstein, and Barbaree and Marshall.

Developmental issues may well be the cause of certain personality traits which may interact with the other three factors in producing sexually aggressive behavior. In particular, family violence, parental neglect, physical and/or sexual abuse and other negative aspects of the family of origin may well help to create antisocial personality characteristics, which in turn influence sexual aggression. This component is considered widely responsible for certain types of sexual offenders (Hall & Hirschman, 1991).

Malamuth and Briere's (1986) model looks at the influence of both nonsexual and sexual violence in the media as being major influences in the cultural forces which form attitudes and beliefs regarding male-female relationships. They cite a number of content analyses which point to a substantial amount of nonsexual media violence, which in conjunction with an increase over the past decade in the sexual media violence, provides a global environment which supports violence in general against women. The other half of the model looks at individual experiences, such as home environment and traumatic events. The indirect effects model posits that underlying each of these two major originating variables, namely cultural forces and individual experiences, lie intermediate variables which have a major indirect influence on sexually aggressive behavior.

Malamuth, Sockloskie, Koss, and Tanaka (1991) conducted a large scale study of the characteristics of aggressors against women, which tested a structural equation model incorporating direct and indirect effects of both sexual and nonsexual aggression. With a sample of 2,652 college men from across the United States, the stated goal of this research was to develop "a parsimonious model encompassing the "central" causes of aggression against women" (p.671). The model consisted of two main paths, delinquency being the central focus of one and sexual acting out being the focus of the other. All of the variables included in the model were hypothesized to belong to latent factors, and all of the variables were derived from the results of previous studies. Of these, the most frequently cited in past research are attitudes supporting aggression and hostile masculinity. The dependent measures for these factors included Check's (1985) Hostility Toward Women Scale and Burt's (1980) Rape Myth Acceptance Scale, Acceptance of Interpersonal Violence Scale, and the Adversarial Sexual Beliefs Scale.

The model also included two variables measuring hostile childhood experiences, which are presumed to influence the delinquency path in particular. The inclusion of variables measuring the home environment in the family of origin represents an important step in beginning to understand the etiology of sexual and non-sexual aggression. According to the authors, the general framework of the model reflects the ecological approach to human development which moves from smaller to greater units of influence, beginning with the home environment and ending with broad cultural values. The home environment variables measure parental violence and child abuse, which in turn reflects the often reported fact that sexual abusers have been themselves victims of physical and sexual abuse.

Overall, the results of this study confirm the model's usefulness in explaining both sexual and nonsexual aggression. Of particular importance to the current study are the findings to do with home environment. Child abuse and family violence significantly affected both sexual and nonsexual aggression. The authors conclude that the variables in the model constitute important parts of the puzzle, and that a comprehensive theory is needed which incorporate all the factors identified by different researchers as contributing to sexual aggression.

Attraction to Sexual Aggression

A series of conclusions can be drawn from the research on violent pornography. First has been the identification of certain cognitive, affective, and behavioral components of sexual aggression which may be altered or evoked due to exposure to sexually violent stimuli. A second conclusion to be drawn from the likelihood to rape studies is that the tendency to sexually aggress is a continuum involving the complex interaction of a number of factors. At one end of this continuum is little or no inclination to rape, characterized by rape negative attitudes and beliefs and no sexual arousal to sexual violence, and at the other end, a high inclination to rape with attitudes, beliefs and sexual arousal patterns reflecting sexual violence. A third conclusion involves the lack of a single dependent measure to succinctly assess the affective, cognitive, and behavioral components of sexual aggression. Much of the research cited above has used the same instrumentation and dependent measures. The attitude scales most widely used include Burt's Rape Myth Acceptance Scale, the Adversarial Beliefs Scale, Acceptance of Interpersonal Violence, and Check's Hostility Toward Women Scale. Sexual arousal has been assessed objectively by penile strain gauges, and as well by subjective self report on percentage of arousal. Past sexual aggression and likelihood to aggress has been largely self report as to past experiences or likelihood, in the form of one or two questions on a questionnaire.

In response to criticisms (Brannigan & Goldenberg, 1987; Mould, 1988) of the validity of measures such as likelihood to rape and likelihood to force, Malamuth (1989a, 1989b) proposed a broad construct, attraction to sexual aggression, and a scale (see Appendix A) designed to measure the complex lure of sexual aggression and the likelihood to engage in a series of sexual behaviors.

The construct of attraction to sexual aggression refers to the belief that aggressing sexually is likely to be a sexually arousing experience, both to aggressors and victims, so that the respondent believes that he might aggress in were it not for fear of punishment or other inhibitory factors. The scale is particularly designed to identify those men for whom the idea of sexual coercion is sexually arousing, beyond that which would occur with a willing partner (Malamuth, 1989a, p.30).

Malamuth (1989a, 1989b) reported on the development and validation of the Attraction to Sexual Aggression Scale or ASA Scale, which was tested on over 300 subjects in a series of three experiments. The ASA scale consists of a series of scales which measure attraction to the following: conventional sex, deviant sex, homosexuality, sexual aggression, bondage without consent and unconventional sex. Malamuth (1989a) reported high significant correlations between the different scales which together make up the ASA Scale (see Table 3), as well as high significant correlations between the ASA scale and predictor variables known to contribute significantly to various aspects of attraction to sexual aggression (see Table 4). The attitude composite refers to the Rape Myth Acceptance Scale, the Acceptance of Interpersonal Violence Scale and the Adversarial Sex Beliefs Scale, all of which have been shown to be predictive of sexually aggressive tendencies and likelihood to rape.

Somatosensory Theory

In attempting to explain the inverse relationship between sexual experience and sexual arousal to rape depiction noted in a study reported in 1983, Malamuth and Check proposed that this relationship might be caused by a lack of somatosensory pleasurable experience with the opposite sex (Prescott, 1975,1977). The somatosensory theory as proposed by Prescott (1975, 1977) suggests that the presence of satisfactory, physically affectionate bonds in human relationships precludes the possibility of developing hostile relationships and/or aggressive tendencies. Prescott (1977) writes that " the failure to develop affectional bonds in human relationships is the primary cause of human violence" (p.431) and supports this theory with results from animal and child abuse studies, and with cross-cultural data.

The forming of affectional bonds lies at the center of attachment behavior, which Bowlby (1981) considered to be instinctive behavior for

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humans. Affection is the result of a complex series of behaviors and feelings. Harlow (cited in Bowlby, 1981) distinguished five affectional systems which include infant-mother and mother-infant attachment behaviors, age-mate or peer relations, sexual and heterosexual interactions, and paternal affectional systems. The primary way in which affection is expressed is through physical touch, although the quality and quantity of the physical contact changes due to the type of affectional relationship. The work of Harlow (1974), and that of Ainsworth (cited in Schwartz, Money & Robinson, 1981) and Bowlby (1981) concluded that the development of affectional bonds must begin at the infant-mother and mother-infant stage, and that disruption at any stage of development results in problems in later stages.

According to Schutz (1967), affection is one of three dimensions according to which human beings relate. The other two are inclusion and control. Schutz (1967) stated that affection must first be experienced in the parental relationship in order for it to be experienced in other relationships.

Since affection is based on the building of emotional ties, it is usually the last phase to emerge in the development of a human relation, following inclusion and control. In the inclusion phase, people must <u>encounter</u> each other and decide to continue their relation; control issues require them to <u>confront</u> each other and work out how they will be related; then, to continue the relation, affection ties must form and people must <u>embrace</u> each other to form a lasting bond (pg.196).

While Bowlby (1981) theorized that attachment behavior, including the forming of affectional bonds, was a separate class of behavior with its own dynamic, as opposed to either feeding behavior or sexual behavior, there exists substantial evidence to suggest that physical contact, sexual adjustment, and aggressive or affectionate behavior are related to each other in fundamental ways in primates and in humans. Montagu (1986) claimed that physical contact or touching is of prime importance to the development of the human being. The skin is by far the largest organ of the human body, as well as being the most sensitive sensory organ. As well, touch is the primary method of communication at birth between parent or care giver and child. As Schwartz, Money, and Robinson (1981) noted, the human neonate's central nervous system is comparatively speaking immature at birth, and it seems likely that fondling, stroking, and touching play critical roles in post-natal brain development which may have serious psychological ramifications. Bowlby and Spitz (cited in Schwartz, Money, & Robinson, 1981) both observed that amongst institutionalized children there was a critical period during which children who are deprived of parental affection risked long term negative effects on their ability to form attachments as adults. Physical contact and affectional bonding have been studied in primates (Harlow, 1974; Seay, Hansen, & Harlow, 1962). Harlow and his associates (Harlow, 1974) noted that contact comfort is the primary factor in the infant-mother relationship amongst rhesus monkeys; successful mothering depends in part upon maximal ventral contact and in experiments, baby rhesus monkeys consistently chose cloth mothers who offered contact comfort over wire mothers who offered food (Harlow, 1974).

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Lack of sufficient sensory stimulation in the form of touching definitely affects the sexual adjustment in primates (Harlow, 1974) and tangential evidence points to links between the quantity and quality of childhood affectionate experiences and later sexual adjustment in humans as well. The so-called motherless monkeys who were deprived of physical contact as infants grew up to be incompetent adults who were unable to tolerate physical contact from peers or achieve satisfactory coitus. Socially deprived females did not know how to adopt a position enabling intromission (Harlow, 1974).

For humans, the relationship between physical affection and sexual adjustment is less obvious, although some data exist to indicate a potential relationship. Normal sexual functioning in nondysfunctional couples incorporates a lot of nongenital as well as genital touching which is aimed at giving sexual pleasure. Masters and Johnson (cited in Schwartz, Money, & Robinson, 1981) have noted the difficulties with intimate touching in couples who are experiencing sexual dysfunctions, and suggested that discomfort at being stroked by one's sexual partner may have to do with early somatosensory deprivation. Schwartz, Money, and Robinson (1981) explained this phenomenon biologically: sexual and genital responses are innate, while the integration of the neuromuscular reflexes necessary to initiate and complete sexual intercourse which would result in competent adult reproductive and sexual behavior must be developed through experience. Schwartz, Money and Robinson (1981) cited Masters and Johnson's (1970) claim that the inhibition of physical touch and sexual rehearsal may contribute to the relatively high rate (50%) of couples experiencing intimacy disorders.

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A study (Olson & Worbey, 1984) of perceived mother-daughter relations as a factor in adolescent pregnancy underlined the complex relationship between sexual functioning, intimacy and closeness and affectional bonding between parent and child. Olson and Worbey (1984) cited LeShan's (1982) assertion that teenagers who have troubled relationships with parents, who do not feel loved, seek intimacy and closeness with their partners and that sexual relations are termed "difficult and unpleasant" (p.782). As hypothesized, Olson and Worbey's pregnant adolescent subjects perceived less love in their relationships with their mothers than their non-pregnant counterparts, although interestingly enough, the two groups did not differ in their perceptions of maternal affection.

Wallace (1981) studied the importance of affectional climate in the family of origin and the experience of subsequent sexual-affectional behaviors. The results drawn from a small sample (N = 32 males and 25 females) of volunteer subjects who phoned a sex information number point to some interesting relationships which support somatosensory theory. Men reported less physical affection in their families of origin, and are less receiving and giving of physical affection in the present than women. On the other hand, women reported more physical affection in the past and are more prone to express affection both verbally and physically than the men. Another interesting finding that is particularly relevant to this study is that amongst men, attitudes towards physical punishment act as a significant mediator of current sexual experience.

The Statement of the Problem

The research reviewed earlier in this paper points to sexual aggression as a continuum, with little or no inclination to aggress and negative attitudes towards rape at one end of the scale, and sadistic rape at the other. Variables such as the motivation to have sex for physical pleasure as opposed to the need to dominate or inflict pain contribute significantly to sexual aggression. Studies cited earlier by Malamuth and Check(1983,1985), as well as by Malamuth (1988) clearly show that men who are attracted to sexual aggression do not seek out sexual relationships because they wish to give or receive sexual pleasure, but rather because they wish to dominate women. Sexual arousal to a woman's expression of disgust at being raped is an important factor in attraction to sexual aggression. Furthermore, Donnerstein (1983) observed that when individuals are highly provoked prior to exposure, victim pain cues actually serve to increase aggression. This finding among the so-called normal population is reflective of findings amongst the population of convicted rapists (Cohen, Garofalo, Boucher, & Seghorn, 1977; Groth, 1979). Cohen and his associates observed that rapists often had a long history of difficulties with relationships with women, combined with an active sex life. The relationships were marked by periodic violence, and in general, the rapists tended to experience women as hostile, demanding, and unfaithful. Earlier physical experiences with women in a striking number of cases involved pre-pubertal sexual abuse with older women, frequently the mother. "These experiences appear to be directly associated not only with the generalized aggressive display, but also with the development of rape fantasies and with the rape itself "(Cohen et al., 1977, p. 300). It may well be that the anger mobilized in some men by inappropriate physical

contact underlies the urge to rape. As well, the life histories of many of the convicted rapists interviewed by Groth (1979) almost inevitably point to a lack of any close, emotionally intimate relationship with other persons, either male or female. The rapists almost unanimously claim that rape is not motivated by sexual arousal or desire, but rather by an overpowering rage. They frequently experience sexual dysfunctions during the rape in the form of premature or retarded ejaculation, impotence, or lack of sexual satisfaction (Groth, 1979).

In view of the well documented evidence that physical touching and affection is fundamental to personality and sexual development, it is indeed surprising that variables deriving from somatosensory theory have not been examined in order to determine their relationship with sexual aggression. Several studies (Malamuth, 1986; Malamuth & Check, 1983, 1985) have noted positive relationships between anti-social personality traits as measured by the Eysenck Psychoticism Scale and the motivation to have sex in order to dominate women, as opposed to the wish to give and receive sexual pleasure, and attitudes favoring sexual aggression. Malamuth and Check (1983) refer to somatosensory theory as a possible explanation as to why men who have had negative sexual experience are aroused by rape depictions, but the theory has in fact not been investigated further with regard to its possible link to sexually aggressive reactions to violent pornography. Lack of physical affection during early childhood may in fact account for some of the anti-social tendencies noted in men who express a high likelihood to rape, or who have raped, and/or who become sexually aroused by sexually violent stimuli.

The Purpose of the Study

The purpose of this study was to investigate the relationship between the new construct proposed by Malamuth (1989a, 1989b), attraction to sexual aggression and physical affection variables. Other models which have attempted to explain why some otherwise normal men respond aggressively to violent sexual stimuli have been either unsuccessful (e.g., the psychopathology model, or sexual factors such as sexual frustration or dysfunction) or are limited in their ability to explain the presence of sexual aggression (e.g., the sociocultural model).

The current study looked at the possible relationship amongst the variables physical affection in the family of origin, current sexual pleasure, attitudes towards women and attitudes towards rape, attitudes favoring physical punishment and attraction to sexual aggression. The data obtained from this experiment will help explain why some men are more prone to coerce others, as well as to explain why some men are not prone to coercion. Sexually aggressive responses were measured by the Attraction to Sexual Aggression Scale (Malamuth, 1989a, 1989b) (Appendix A), and affection was measured by the Index of Human Affection (Prescott & Wallace, 1981)(Appendix B) and the Affectional History Questionnaire (Wallace, 1979) (Appendix C).

Basis for the Current Study

The following are predictions which are based upon theoretical considerations or past research, and which were tested:

1) that there is a linear relationship between physical affection and attraction to sexual aggression;

2) that a significant minority of subjects will acknowledge a high attraction to sexual aggression following exposure to sexually violent stimuli;
3) that a majority of subjects will not acknowledge a high attraction to sexual aggression following exposure to sexually violent stimuli;
4) that the minority of men who acknowledge a high attraction to sexual aggression will have positive attitudes towards rape and physical punishment, less current sexual pleasure, and will have received less physical affection in their families of origin;

5) that the majority of men who are not attracted to sexual aggression will have negative attitudes towards rape and towards physical punishment, will experience more current sexual pleasure, and will have received more physical affection in their families of origin;

6) that attitudes towards rape and towards physical punishment, current sexual pleasure, and affection in the family of origin all contribute to attraction to sexual aggression.

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Method

Subjects

Subjects were recruited from the general population of anglophone males in Montreal, as well as from different segments of McGill and Concordia Universities. Ads were placed in two campus newspapers, as well as a weekly newspaper serving the downtown area of the city. The ad read as follows:

Doctoral candidate in Counselling Psychology needs subjects for research in sexual behavior. Subjects must be male, over the age of 18, English speaking and willing to spend approximately 2 hours reading sexually explicit material and filling in questionnaires. Responses will be kept strictly confidential. Subjects must be available on January 22nd or 24th, 1991 from 6 to 8 p.m.

In addition to the ad, classes were visited and volunteers were asked to sign up for either one of two experimental sessions. A total of 20 subjects turned up at the first two experimental sessions which took place in an auditorium of the McGill University Faculty of Education Building.

In order to facilitate recruitment, McGill University fraternities were contacted, and the president was asked to solicit volunteers to participate on the evenings during which regularly scheduled meetings were held. As well, two groups of business executives participated in the study. These sessions took place in large meeting rooms in the subjects' fraternity houses or office.

Initially, the decision to recruit volunteers from the English speaking population was based on the assumption that cultural and religious factors influence sexual attitudes and child-rearing practices. In view of Québec

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being a francophone, Catholic province with potentially different values and traditions from those of other linguistic or religious groups, it seemed quite possible that differences in both physical affection and attraction to sexual aggression might be attributable to differences in mother tongue. As well, subjects had to have a sufficient command of the language in order to read the passages and answer the questions. However, difficulties in recruiting adequate numbers of subjects and the relatively small number of subjects whose mother tongue was not English resulted in their inclusion in the study.

In total, 138 subjects completed the experiment. Demographic characteristics of 135 subjects are listed below in Table 2. 3 subjects did not fill out the demographic information. All subjects whose mother tongue was not English had sufficient command of the language to read several passages and answer questions in the language. The "Other" category under the heading Religion includes all those subjects who do not practice religion, but who nonetheless come from Judeo-Christian traditions. Subjects' age ranged from 18 to 67, with a mean of 24.7 and a standard deviation of 9 years. 94 out of 138 subjects were between 18 and 22 years of age.

Table 2

Sample Demographics, N=135

Occupation		Mother to	Mother tongue		Religion	
Student	105	English	115	Protestant	43	
Executives	27	French	11	Catholic	37	
		Other	8	Jewish	12	
				Other	43	
Age	18-22	23-29	30-39	40-50	55-67	
•	96	18	9	8	4	

Design

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The design closely resembled the design of many of the studies into sexual aggression and the two stories (see Appendices D and E) which constituted the experimental conditions were those used by Malamuth (1989a,1989b, 1986), Malamuth and Check (1983, 1985), and Abel and his colleagues (Abel, Barlow, Blanchard, & Guild, 1977). The resemblance was deliberate in order to be able to compare these results with those of other studies.

Procedure

The experimental sessions took place either in the large auditorium in the Faculty of Education Building at McGill University, or in large meeting rooms in subjects' fraternity house or place of business. All sessions transpired in January or February 1991. The experimenter for all but 10 subjects was the same; both experimenters were professionally attired men who were instructed to adopt a neutral but firm attitude when giving the instructions.

When all the subjects had arrived in the room, the experimenter thanked subjects for their participation. He then told them that the purpose of the experiment was to look at sexual behavior and that if they wanted more information, they could talk to the researcher after the experiment was over. He reminded them that their participation was voluntary, that their responses were both anonymous and confidential, and that they could leave at any time. Subjects were also told that it was important to try to answer all the questions, even though some might look the same, and that they complete envelopes 1, 2 and 3 in that order. Only one person out of 138 subjects left before finishing the study, although there were a number of partially completed questionnaires. The experimenter then handed out in numerical order even and odd numbered packages which consisted of three envelopes.

Each package consisted of three brown envelopes which were encoded with either an even or an odd number which corresponded to the encoded questionnaires. Envelopes were numbered 1, 2, or 3 to reflect the order in which they were to be completed. Envelope 1 contained items relating to demographics such as age and religious preference, a short passage of sexually explicit material describing a woman masturbating (see Appendix F) and the baseline measures. These were the Index of Human Affection (Prescott & Wallace, 1981), the Affectional History Questionnaire (Wallace, 1979), and the short form of the Attraction to Sexual Aggression Scale (Malamuth, 1989a). Once these were completed, subjects opened envelope number 2, which contained a story of approximately 1000 words describing either consenting sex or acquaintance rape (see Appendices D and E). Subjects who received even numbered materials read the rape condition first, while those who received odd numbers read the consent condition first. All subjects received the same treatment, although in a different order. After reading the story, subjects filled in the Attraction to Sexual Aggression Scale and were asked to indicate their perceived level of sexual arousal in increments of 10% (see Appendix G). Subjects then opened envelope 3 and read either the rape or the consent story, filled out another Attraction to Sexual Aggression Scale and indicated their level of sexual arousal. As well, Envelope 3 contained a debriefing sheet (see Appendix H) and a letter thanking them for their participation. Subjects could leave when they had finished, which was under an hour for most subjects.

The decision not to use a physiological measure of arousal was motivated by several factors. As Malamuth, Check and Briere (1986) state, the benefits of including such a measure are unclear despite considerable debate amongst researchers. Furthermore, the cost of these devices and the polygraph to read the changes in penile tumescence, as well as the time which it takes to instruct subjects as to their use, did not justify their inclusion. Because sexual arousal to aggression differentiates subjects with a higher attraction to sexual aggression, it was decided to include a self reported sexual arousal scale which measures sexual arousal in increments of 10%.

The dependent variables are factor variables derived from the Attraction to Sexual Aggression Scale (Malamuth, 1989a), while the independent variables are physical affection in family of origin, current sexual pleasure, attitudes towards women, and attitudes towards rape, and attitudes towards physical punishment. The goal of the study was first of all to see what role, if any, the physical affection variables play in explaining attraction to sexual aggression, as well as to explore the possible relationship between exposure to sexually pleasurable stimuli, sexually aggressive stimuli, physical affection and attraction to sexual aggression.

Design Validity

The design is basically a repeated measures factorial design. All subjects were exposed to both the consenting sex and the rape conditions and their responses were measured after each exposure. There have been no studies to date on physical affection variables in response to exposure to sexually explicit and/or sexually violent materials. Hence, a repeated measures design in which each subject served as his own control allowed the possibility of isolating the variance due to individual differences on both the sexual aggression and the human affection factors across all the treatments.

The major threats to the validity of such a design arise from practice effects due to repeated testing, sensitization to stimulus materials, and carry-over effects from one potentially arousing condition to another. With reference to carry-over effects, Malamuth (1989a,1989b) has clearly shown that sexual arousal enhances the effects of attraction to sexual aggression in the group of men who respond positively to sexually violent materials. However, attraction to sexual aggression is a relatively stable trait and men who are aroused by depictions of consenting intercourse tend not to be aroused by sexually aggressive stimuli (Malamuth, Check & Briere, 1986).

The design does remain vulnerable to both practice effects of repeated testing and over-exposure to similar conditions. For this reason, the decision was made to use the short (10 items instead of 14) version of the Attraction to Sexual Aggression Scale. This version has been shown to be reliable in shortened form. Malamuth (1989a) reported that the short version (10 items instead of 14) of the scale correlated .93 with the longer version, and the test-retest correlation between the two short versions was .76. The short version of the Attraction to Sexual Aggression Scale eliminates the first 4 items which subjects most often did not answer.

The 3 studies conducted by Malamuth in order to validate the Attraction to Sexual Aggression Scale (Malamuth 1989a, 1989b), as well as the investigation into the factors contributing to naturalistic sexual aggression (Malamuth, 1988) have been repeated measures designs in which the subjects have all been exposed to virtually identical stories. The stories used in the current study closely resemble those used in earlier studies. If there is any carry-over effect, or fatigue resulting from reading the same material more than once, it does not appear to have influenced previous results.

Mould (1988) has charged that laboratory induced aggression lacks external validity and that subjects may in fact respond aggressively in order to please the experimenter, a phenomenon referred to as demand characteristics. In response to the latter criticism, evidence cited by Affection and sexual aggression

Berkowitz and Donnerstein (1982) and by Donnerstein and his colleagues (1987) suggests that subjects in the laboratory setting may temper their aggressive responses to sexually violent stimuli, rather than exaggerate them, in order not to appear abnormal. As well, Mould (1988) questions the validity of measures such as likelihood to rape and rape proclivity as valid predictors of actual aggressive behavior, and expresses a deep concern that Malamuth, Donnerstein and Linz claim a stronger relationship between the researched variables than their results warrant. In response to Mould's (1988) criticisms, Malamuth (1988) and Donnerstein and Linz (1988) point to actual changes in behavior as a result of exposure to sexually violent stimuli and argue that Mould (1988) is more concerned with their interpretation of their results, rather than with the results themselves.

In order to test the construct validity of attraction to sexual aggression and the self-reported likelihood to rape, Malamuth (1986,1988, 1989b) conducted 3 studies into the predictive ability of attraction to sexual aggression, self-reported intent to coerce and actual behavioral aggression. In one study (Malamuth, 1988) which was conducted over a period of 2 years, variables such as sexual arousal to rape, acceptance of interpersonal violence, and dominance as a sexual motive were highly predictive of incidents of laboratory aggression against a female, as opposed to a male, target. Another study by Malamuth (1986) which looked at potential predictors of self-reported sexual aggression concluded that sexual arousal to rape, self-reported sexual arousal to rape, the wish to dominate women, acceptance of interpersonal violence against women, and actual sexual experiences were all significantly related to self-reported incidents of sexual aggression. These findings suggest that the variables self-reported likelihood to rape, sexual arousal to sexual aggression and attitudes favouring sexual violence are in fact valid predictors of sexually aggressive behavior. The construct validity of attraction to sexual aggression was extensively tested by Malamuth (1989b) in a series of three studies. These data confirm the usefulness of the self-reported likelihood to coerce measures and suggest that attraction to sexual aggression is an even better measure.

Limitations

The study was necessarily limited to English speaking men who lived in Montréal at the time of the experiment. Furthermore, it was limited by the lack of behavioral measures of either sexual affection or sexual aggression. As well, the impact of such factors as age, cultural differences, and physical health upon the dependent variables is not known.

Materials

Research into responses to sexually explicit material has used a variety of different stimuli, including videotapes, audiotapes, full length feature films, and films developed expressly for the purposes of research (Linz, 1989). The nature and content of the stimulus has changed according to perceptions of the content of mass-market pornography, from "cheesecake" still photographs to extremely explicit sexually violent video-clips. To date, no studies have been conducted into the changes due to the different communications media. Linz (1989) in his extensive review of changes in attitudes towards rape and sexually explicit stimuli does not indicate that changes in attitudes differ across media, but are evoked primarily as a result of the content of the media. The decision to use stories for the current study was motivated primarily by the ease with which the content can be controlled. A story can be identical, except for key passages which manipulate variables which contribute to attraction to sexual aggression such as rape/consenting sex, arousal/disgust, acquaintance/ stranger and so on. The stories which constitute the experimental conditions closely resemble those used by Abel and his associates (Abel, Barlow, Blanchard & Guild, 1977), and those used by Malamuth (1989a, 1989b) in order to develop the Attraction to Sexual Aggression scale. Hence, these stories have effectively differentiated those men who are attracted to sexual aggression from those who are not.

Past research indicates that men who admit the greatest likelihood to rape or force, who are most aroused by sexual violence, are aroused even when the woman professes disgust at being raped. Attraction to sexual aggression is further enhanced when the rapist knows the victim (acquaintance rape) (Check, personal communication, April 1990). Because only 15-20% of men acknowledge an attraction to sexual aggression (Malamuth, 1989a,1989b), stories containing elements which are known to enhance the aggressive effect were chosen.

Instruments

The Attraction to Sexual Aggression Scale (Malamuth, 1989a, 1989b) was developed in order to measure the construct, attraction to sexual aggression. The instrument responds to criticism levelled at previous attempts at measuring likelihood to force and likelihood to rape (Mould, 1988) in that it is a compilation of several scales which combine to form the construct, attraction to sexual aggression. The intercorrelations amongst the scales are reported in Table 3. Furthermore, it avoids a single item assessment of likelihood to force or rape (Malamuth, 1989a). Malamuth (1989a) reports that on all 14 items the Attraction to Sexual Aggression Scale yields high internal consistency, alpha coefficient = .91. The other scales included also yield high alpha coefficients: Attraction to Bondage (without consent) scale = .92, Attraction to Unconventional Sex = .85, Attraction to Conventional Sex = .89, Attraction to Deviant Sex = .83 and Attraction to Homosexuality = .78.

Malamuth (1989b) reports that the scale is useful in differentiating those men who are prone to sexual aggression and those who are not. Table 4 presents the correlations between variables known to contribute to sexual aggression and the Attraction to Sexual Aggression Scale. Data from three studies (Malamuth 1989b) indicate that 83% to 97% of subjects report no likelihood to commit pedophilia, transvestism, or murder, while between 80% and 84% indicate no likelihood to rape. When the term "forced sex" is used, a significantly larger number of men indicate some likelihood to committing it than pedophilia, murder, rape, transvestism, homosexuality and armed robbery. Frequency distribution for reported likelihood of sexual and violent acts across two studies are presented in Table 5. The original version of the Scale contained 14 items, the first four of which are excluded from the short form. Malamuth (1989b) found that deleting these items did not significantly alter the findings and that although the response rate to all items was excellent, the tendency was for some subjects to leave these four items unanswered. The attraction scales are 5 point Likert scales which range from Not at All (1) to Very Likely (5).

Table 3

Pearson Correlations Among the Attraction Scales

Scale	1	2	3	4	5	6
1. Conventional	1.00	.02	.09	05	.15*	.39***
2. Deviant Sex		1.00	.32***	.48***	.34***	.17
3.Homosexuality			1.00	.21**	.23**	.25**
4. Sexual Aggression				1.00	.55***	.30***
5. Bondage					1.00	.47***
6. Unconventional Sex						1.00

* p<.01; ** p<.001; *** p<.0001; **** p<.0001

Table 4

Pearson Correlations Between Predictors and Criterion Measures

	Predictors				
	ASA	LF	LR	LFR	
Attitude Composite	.41****	.29****	.33***	.29***	
Perceptions Composite	.28**	.19*	.22**	.11	
Behavioral Items					
Did Force Sex	.33****	.34****	.16**		
.30***					
Will Rape	.30****	.25***	.28****	.21***	
Will Force Sex	.58****	.60****	.44****	.49****	
Enjoyed Forcing	.31*	.34*	.12	.35*	

ASA = Attraction to Sexual Aggression scale; LF = Likelihood to Force item; LR = Likelihood to Rape item; LFR - Likelihood to Force/Rape index.

* p < .05; ** p< .01; *** p < .0001; **** p < .0001

Table 5

Frequency distribution of "reported likelihood" of sexual and violent acts. Study 1, N=189 subjects

	not at all likely		Very likely				
	1	2	3	4	5	Mean	
Armed robb	-						
	139 (74%)	18 (10%)	16 (9%)	6 (3%)	10 (5%)	1.58	
Bondage (without consent)							
Whipping, spanking	106 (56%)	28 (15%)	26 (14%)	15 (8%)	12 (6%)	1.93	
-10	126 (67%)	25 (13%)	16 (9%)	12 (6%)	10 (5%)	1.71	
Rape	159 (84%)	10 (5%)	4 (2%)	8 (4%)	8 (4%)	1 .39	
Forced sex	118 (62%)	32 (17%)	21 (11%)	10 (5%)	8 (4%)	1.72	

Table 5 Cont'd

Frequency distribution of "repc tred likelihood" of sexual and violent acts. Study 2, N=155 subjects

	not at all likely			Very likely				
	1	2	3	4	5	Mean		
Armed robb	ery							
_	110 (719	%) 24 (16%	6) 9(6%)	4 (3%)	8 (5%)	1.55		
Bondage (without consent)	76 (50%)	21 (14%)	29 (11%)	12 (8%)	17 (11%)	2.17		
Whipping, spanking				•				
	100 (65%)	21 (14%)	22 (14%)	6 (4%)	6 (4%)	1.7		
Rape	124 (80%)	15 (10%)	8 (5%)	2 (1%)	6(4%)	1.3		
Forced sex	86 (56%)	36 (24%)	21 (14%)	6 (4%)	6(4%)	1.7		

The Index of Human Affection (Wallace, 1981) is a revised version of the Somatosensory Index of Human Affection developed by Prescott (1975,1977) and Wallace in order to measure dimensions of somatosensory experience. It consists of 100 items which tap into dimensions of human affection, exposure to media violence, physical contact in family of origin, and beliefs and attitudes about physical punishment and violence. Subjects answer each question with a number ranging from 1 Agree Strongly to 6 Disagree Strongly. The present version of the scale consists of items which have been tested and retained over years of study, which together make up factors such as family of origin and parenting (alpha coefficient = .90), nonsexual physical violence (alpha coefficient = .69), attitudes favoring physical punishment, and attitudes towards rape (alpha coefficient = .76). Prescott (1975) demonstrated that among college students, factors such as favorable attitudes to physically violent punishment correlate strongly with negative attitudes to sexual pleasure and the belief that violence is necessary to solve problems. Using the first 100 items of the Index, as well an Affectional History Questionnaire, Wallace (1981) found further support for many of the scale items such as current physical affection and affection in family of origin as predictors of sexual experiencing, in particular among males. In a personal communication (November 26, 1989), Wallace stated that the current version of the Somatosensory Index of Affection has both content validity and discriminant validity. It has been used with sexual offenders and convicted criminals, the most recent study being doctoral research in the state of Washington.

The Affectional History Questionnaire (Wallace, 1981) was derived from a questionnaire developed by Lieber, Plumb, Gerstenzang, and Holland (1976) to look at the communication of affection between cancer patients and their spouses. It consists of 27 questions which tap into various aspects of expressing affection amongst family members and friends, past and current. Questions such as "Did your parents show affection for you by hugging or kissing you, by telling you, doing things for you, or giving you presents?" ask subjects to differentiate between physical and nonphysical affection. It was developed in order to provide greater information about affectional climate in the family of origin. The response format is a 6 point agree-disagree Likert scale.

Wallace (1981) reported significant differences between men and women on certain questionnaire items which he claims reflect traditional sex-role scripting. The means and standard deviations for men on questionnaire items pertaining to this study are presented in Table 6. Factor analysis of the questionnaire items pertaining to affectional history yielded nine factors. The first factor, which Wallace (1981) labelled General Affectional Interaction, accounted for over 57% of the variance, and consists of items directly related to physically expressed affection. Other modes of expressing affection which are less intimate and more physically distant, such as giving gifts or doing things for someone loaded on separate factors and accounted for significantly less variance (Wallace, 1981).

Table 6

Affectional History Means and SDs for Men

Item	mean	SD	
	mean	30	
Parents showed affection			
by doing things for you	2.34	1.15	
You showed affection for			
parents by kissing them	3.78	1.58	
You show affection to partner			
by telling him/her	1.90	1.08	
You make physical contact			
with close friends	2.65	1.50	
I tolerate pain well	3.22	1.48	
Physical punishment should			
be allowed in schools	5.22	1.10	
I have orgasms less than			
once a week	5.27	1.44	
I would like to be held and			
hugged without having to			
have sex	2.13	1.02	

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Results

Both the descriptive and the results of the inferential statistics will be presented in this chapter. Statistical analysis was performed using Systat 5.1 and SPSS. Results will focus first on the development of the dependent variables, derived from the pretest Attraction to Sexual Aggression Scale, the rape condition Attraction to Sexual Aggression Scale, and the consent condition Attraction to Sexual Aggression Scale.

Then attention will turn to the development of the independent variables, consisting of factors obtained from the analysis of responses to the Index of Human Affection and the Affectional History Questionnaire. The results of the inferential statistics will be presented according to the predictions or assumptions which guide the study.

Some questionnaires were not completed, with the result that there are missing data. For this reason, the number of cases used in each calculation will be noted when applicable.

The Dependent Variables

The Attraction to Sexual Aggression Scale is the latest in a series of dependent variables used in the research into the effects of exposure to sexually explicit materials. Previous experiments have used a variety of behavioral and/or paper and pen instruments whose purpose has been to measure variables believed to contribute to sexual aggression. All of the measures fall short of perfect prediction of sexual aggression for very obvious ethical reasons - social scientists cannot be seen as encouraging in any way anti-social behavior.

Many of the studies done by Donnerstein and his associates which are reviewed in <u>The Question of Pornography</u> (Donnerstein, Linz & Penrod, Affection and sexual aggression

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1987) use the Buss paradigm in order to measure aggressive behavior. Simply put, the Buss paradigm assumes that administering an electric shock or other adverse stimuli somehow simulates aggressive behavior which can be generalized to situations outside the laboratory. Other experiments have attempted to see the relationship between physiological and sexual arousal and arousal to anger by somehow or other provoking the subject to verbally aggress a confederate. A good example of this type of study is that reported by Mueller and Donnerstein (1981) in which subjects were first treated in either a positive or a neutral fashion and then shown an arousing erotic film or a nonarousing control film. Then they either punished by means of a modified Buss machine, or rewarded a confederate for performance on a memory task. The first experiment did not support the hypothesis that the arousing film would increase punitive behavior. The second experiment, in which the subject was treated in a negative (as opposed to neutral) manner, confirmed that previously provoked subjects will react more punitively after viewing sexually arousing stimuli.

While laboratory studies provide the opportunity to study phenomena in isolation, and consequently tend to yield consistent results, they are nonetheless subject to "demand characteristics" and to charges that the lab is an artificial environment which bears little resemblance to "normal life". In response to these criticisms, Malamuth and Check (1983) conducted a field experiment in which subjects viewed feature films as part of a campus film series. Results showed that there were few differences between laboratory and field experiments with regard to changes in attitudes and beliefs about rape. While Donnerstein, Linz and Penrod (1987) stand by the validity of laboratory investigations into aggressive behavior, Eysenck

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(1984) suggests that any experimentally induced behavior should be viewed with caution.

Assessment of sexual arousal to sexually violent stimuli in male subjects has also been the focus of some controversy. A number of studies conducted by researchers such as Abel, Barlow, Blanchard and Guild (1977) and Malamuth and Check (1983) used penile tumescence and self report measures. Measuring penile tumescence requires the subject to lower his pants and attach a strain gauge, which measures penile circumference, around his penis. Apart from the obvious difficulties in terms of cost of equipment and ensuring adequate privacy, as well as tracking down subjects willing to comply to this invasive procedure, Malamuth and Check (1983) cite substantial evidence that change in penile circumference represents a limited measure of physiological arousal. A videotaped study by Farkas, Evans & Sine (1979) provides evidence that change in penile length occurs before change in penile circumference. Thus, a subject may be in fact quite aroused before his penis circumference reflects that state. Consequently, assessment of sexual arousal has been done by means of an 11 point scale ranging from 0% (not at all sexually arousing) to 100% (very sexually arousing) on which the subject rates his own perception of his arousal.

The most consistent and reliable measures of components which appear to contribute to sexual aggression have been the cognitive measures. These assess attitudes and beliefs about rape and sexual violence against women. Burt (1980) developed several of the more widely used instruments: the Acceptance of Interpersonal Violence Scale, the Rape Myth Acceptance Scale, and the Adversarial Beliefs Scale. These are multi-item scales, which require the subject to respond from 1 (strongly disagree) to 7

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(strongly agree) to statements such as, "Many women have an unconscious desire to be raped and may then unconsciously set up a situation in which they are likely to be attacked," and "A woman will only respect a man who will lay down the law to her" (Malamuth & Check, 1981).

Yet another scale measuring a variable which has appeared to contribute substantially to sexually aggressive behavior is one developed by Check (1985), the Hostility Toward Women Scale. Subjects answer 30 true or false statements such as, "I feel upset even by slight criticism by a woman" and, "I rarely become suspicious with women who are more friendly than I expected". Check (1985) reports reliability and validity data in his unpublished doctoral thesis.

The purpose of all these investigations has ultimately been to identify characteristics of men who admit some likelihood to commit sexually aggressive acts. The acts include both rape and forcing a woman to do something sexual that she does not want to do. Malamuth and his associates have labelled these tendencies likelihood to rape, likelihood to force, and likelihood to force or rape, (Malamuth 1989a). The likelihood to engage in sexual aggression has been measured by items which ask the subject to indicate from 1 (Not at all likely) to 6 (Very likely) the possibility of engaging in certain acts if they were given the assurance that they would not suffer any negative consequences. Briere and Malamuth (1983) report substantial evidence in favor of likelihood to rape and likelihood to force as valid measures of sexually aggressive tendencies. Twenty- eight percent of their sample of university students acknowledged some likelihood to both force and rape. Scores on measures such as the Rape Myth Acceptance Scale, Acceptance of Interpersonal Violence Scale and the Adversarial Beliefs Scale (Burt, 1980) predict likelihood to rape and likelihood to force (Briere & Malamuth, 1983).

While likelihood measures appear to have considerable credibility, they have been the object of a number of criticisms. An obvious one concerns the well known propensity of subjects in sex research to misrepresent themselves in some way. Brannigan and Goldenberger (1987) question whether or not the self reported likelihood to sexually aggress differs from the self reported likelihood to commit other socially undesirable acts. The implication of this criticism is simply that many individuals might acknowledge a greater likelihood to a variety of acts if given the assurance of not being caught. Another concern raised by Mould (1988) has been the reliance on a one or two item assessment of attraction to sexual aggression, such as likelihood to rape or force statements.

In order to respond to these and other criticisms, Malamuth (1989a, 1989b) proposed the construct, attraction to sexual aggression, which reflects the belief that sexual aggression is a sexually arousing experience. The Attraction to Sexual Aggression Scale is designed to measure the degree to which a man might find sexual aggression appealing. The scale addresses some of the problems posed by previous research. First, it is a multi-item scale which contains questions concerning a number of conventional and unconventional sexual practices. Second, studies validating the scale (Malamuth 1989b) contained questions as to subjects' likelihood to commit armed robbery and murder, in order to compare rape and forced sex with other socially undesirable but non-sexual behaviors. Malamuth (1989b) reported that there appears to be a tendency towards deviance - men who admit some likelihood to one type of socially prohibited behavior such as murder, also admit a likelihood to another such

as pedophilia. Frequency data for the likelihood to commit various antisocial acts collected by Malamuth are listed in Table 5.

The Attraction to Sexual Aggression Scale consists of four different sections. The first section asks the respondent to estimate the percentage of men who would find certain sexual activities to be sexually arousing; the second section focuses on the percentage of women the respondent believes to find the same activities to be arousing. The third section asks the respondent to estimate his own percentage of sexual arousal with reference to these activities. For each of the first three sections of the scale, the list of sexual activities is the same: necking, petting, oral sex, heterosexual intercourse, anal intercourse, male homosexual acts, group sex, bondage (without consent), whipping and spanking, rape, and forcing a woman to do something sexual she didn't want to do. The range of possible answers is from 0% to 100% for the percentage of men and women who would find these activities arousing, and for the respondent's estimate of the percentage of his own sexual arousal.

The last section of the scale asks about the likelihood to engage in certain activities if one were given the assurance that one would not be caught. These consist of the following activities: anal intercourse, group sex, homosexuality, bondage, whipping and spanking, rape, forcing a woman to do something she didn't want to do, transvestism and pedophilia. The range of possible answers is from 1 (not at all) to 5 (very likely).

There does not appear to be any evidence in the literature to suggest that attraction to homosexual sex or to transvestism or to pedophilia have any relationship to attraction to sexual aggression. Therefore, the focus is on the scales directly linked to the research assumptions - attraction to sexual aggression and likelihood to sexual aggression. The attraction to conventional and unconventional sex scales and the likelihood to conventional and unconventional sex scales were included in some tables in order to highlight potential differences between the high and low physical affection groups. Previous research has clearly demonstrated that self reported sexual arousal to sexually violent stimuli contributes to attraction to sexual aggression. After reading each story, the subjects estimated their sexual arousal on a scale of 0% to 100%. This scale was also included in the study.

Malamuth (1989a) reported high internal consistency for the scales. The Attraction to Conventional Sex scale which included items to do with necking, oral sex, and heterosexual intercourse, yielded an alpha of .89. The Attraction to Unconventional Sex, composed of items concerning anal intercourse and group sex, had an alpha of .85. The Attraction to Sexual Aggression scale consists of items referring to rape and "forcing a woman to do something she didn't want to do", an alpha of .91. As well, Malamuth (1989a) reported that factor analyses confirmed the validity of the scales.

Common factor analyses on responses to items on the pretest, the rape and the consenting sex Attraction to Sexual Aggression Scales indicated that the factor structure closely resembled the attraction scales described by Malamuth (1989a). Consequently, the decision was made to create new variables for each attraction scale, which were composed of the means of the items presented in Table 7. The scales are a) Attraction to Conventional Sex b) Attraction to Unconventional Sex c) Attraction to Sexual Aggression.The range of these subscales is 1 to 11. As well, two variables were created as a composite of the likelihood items, namely Likelihood to Unconventional Sex and Likelihood to Aggressive Sex . The range of the likelihood subscales is 1 to 5. The Pearson correlations of individual items

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which contribute to the new variables created are presented in Appendix I. Means and standard deviations of these new variables are found in Table 8. Pearson correlations of the new variables are reported in Table 9.

The likelihood scales range from 1 (not at all) to 5 (very likely). As Malamuth (1984,1989a) suggests, the most useful method of looking at these data is to divide subjects between those who admit no likelihood of committing certain acts or 1, and those who can conceive of possibly engaging in them or 2 to 5. Frequency data on the self reported likelihood to commit various acts if given the assurance of not being caught are reported in Tables 10, 11, and 12. As can be seen from the frequency data on the pretest Attraction to Sexual Aggression Scale, 35% of subjects responded by "Not at all" when asked their likelihood to bondage, 50% for whipping and spanking, 82% for rape, and 60% for forcing a female to do something she didn't want to do. These percentages compare favorably with those reported by Malamuth (1989a), which are listed in Table 5.

The baseline measure which differentiates between those subjects with high attraction to sexual aggression and those with low attraction to sexual aggression is the mean of the Z-transformed pretest attraction scale, and the pretest likelihood to aggress. The range of this baseline measure is 1 to 6. Finally, in order to see whether or not individuals with low, medium or high levels of attraction to aggression and likelihood to aggress differed with respect to their responses on the physical affection measures, this measure was divided into three levels of attraction to sexual aggression groups: Level 1 consists of those subjects with low attraction to sexual aggression and ranges from 1 to 2; level 2 consists of 3 and 4 and comprises the mid range of subjects; and level 3 is 5 and 6 and contains those subjects who admit to a high attraction to sexual aggression. Means

and standard deviations of the baseline measure of attraction to sexual aggression and the 3 levels of aggression group are listed in Table 13.

 Table 7

 Items Contributing to New Variables Representing Attraction Subscales

Pretest Attraction Scales	Scale items included in new variable
Conventional Sex	1,2,3,4,14,15,16,17,27,28,29,30
(items include necking, petting,	
oral sex and heterosexual intercour	rse)
Unconventional Sex	5,6,7,18,19,20,31,32,33
(items include anal intercourse,	
male homosexual acts, and group s	sex)
Sexual Aggression	8,9,10,11,21,22,23,24,34,35,36,37
(items include bondage, whipping,	
spanking, rape and force)	·
Likelihood to	
Unconventional Sex	40,41,42
Likelihood to Sexually	
Aggress	43,44,45,46

Table 7 Cont'dItems Contributing to New Variables Representing Attraction Subscales

Rape Attraction Scales	Scale items included in new variable
Conventional Sex	1,2,3,4,14,15,16,17,27,28,29,30
(items include necking, petting,	
oral sex and heterosexual intercou	irse)
Unconventional Sex	5,6,7,18,19,20,31,32,33
(items include anal intercourse,	
male homosexual acts, and group	sex)
Sexual Aggression	8,9,10,11,21,22,23,24,34,35,36,37
(items include bondage, whipping	,
spanking, rape and force)	
Likelihood to	
Unconventional Sex	40,41,42
Likelihood to	· · · · · · · · · · · · · · · · · · ·
Sexually Aggress	43,44,45,46

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Table 7 Cont'dItems Contributing to New Variables Representing Attraction Subscales

Consenting Sex Attraction Scales	Scale items included in new variable
Conventional Sex	1,2,3,4,14,15,16,17,27,28,29,30
(items include necking, petting,	
oral sex and heterosexual intercour	rse)
Unconventional Sex	5,6,7,18,19,20,31,32,33
(items include anal intercourse,	
male homosexual acts, and group	sex)
Sexual Aggression	8,9,10,11,21,22,23,24,34,35,36,37
(items include bondage, whipping,	
spanking, rape and force)	
Likelihood to	
Unconventional Sex	40,41,42
Likelihood to	
Sexually Aggress	43,44,45,46



Means and Standard Deviations (SD) of New Attraction and Likelihood Variables (N=136)

Pretest	Mean	SD
Attraction to Conventional Sex (PCON)	8.97	1.32
Attraction to Unconventional Sex (PUNCON)	3.75	1.27
Attraction to Sexual Aggression (PAGG)	2.87	1.25
Likelihood to Unconventional Sex (PLKUNC)	2.32	.97
Likelihood to Sexual Aggression (PLKAGG)	1.87	.91
Rape	Mean	SD
Attraction to Conventional Sex (RCON)	8.59	2.52
Attraction to Unconventional Sex (RUNCON)	3.36	1.55
Attraction to Sexual Aggression (RAGG)	2.36	1.40
Likelihood to Unconventional Sex (RLKUNC)	2.16	1.12
Likelihood to Sexual Aggression (RLKAGG)	1.62	.96
Consenting Sex	Mean	SD
Attraction to Conventional Sex (CCON)	8.71	2.35
Attraction to Unconventional Sex (CUNCON)	3.35	1.51
Attraction to Sexual Aggression (CAGG)	2.34	1.24
Likelihood to Unconventional Sex (CLKUNC)	2.16	1.11
Likelihood to Sexual Aggression (CLKAGG) Table 9	1.68	.97

Pearson Correlations Among New Variables of the Pretest, the Consenting Sex and the Rape Attraction to Sexual Aggression Scales (n=138)

	PCON	PUNCON	PAGG	PLKUNC	PLKAGG
PCON	1.00				
PUNCON	0.278	1.00			
PAGG	0.154	0.639	1.00		
PLKUNC	0.209	0.633	0.431	1.000	
PLKAGG	0.163	0.400	0.692	0.614	1.00
CCON	0.600	0.143	0.062	0.111	0.112
CUNCON	0.175	0.712	0.489	0.554	0.379
CAGG	0.125	0.457	0.752	0.394	0.655
CLKUNC	0.160	0.529	0.334	0.770	0.494
CLKAGG	0.155	0.318	0.559	0.491	0.761
RCON	0.568	0.229	0.145	0.241	0.205
RUNCON	0.217	0.734	0.505	0.599	0.393
RAGG	0.111	0.501	0.779	0.439	0.675
RLKUNC	0.169	0.560	0.354	0.831	0.518
RLKAGG	0.139	0.380	0.616	0.531	0.818

Note. Acronyms are used in the correlation tables in order to preserve space. Refer to Table 8 in order to see the full name of each variable.

Table 9 (Cont'd)

Pearson Correlations Among New Variables of the Pretest, the Consenting Sex and the Rape Attraction to Sexual Aggression Scales (N=138)

	CCON	CUNCON	CAGG	CLKUNC	CLKAGG
CCON	1.00				
CUNCON	0.503	1.00			
CAGG	0.386	0.702	1.00		
CLKUNC	0.466	0.760	0.552	1.00	
CLKAGG	0.407	0.566	0.769	0.687	1.00
RCON	0.741	0.432	0.341	0.365	0.350
RUNCON	0.424	0.914	0.661	0.689	0.521
RAGG	0.261	0.639	0.899	0.494	0.702
RLKUNC	0.316	0.656	0.462	0.848	0.569
RLKAGG	0.304	0.522	0.751	0.599	0.879
	RCON	RUNCON	RAGG	RLKUNC	RLKAGG
RCON	1.00				
RUNCON	0.544	1.00			
RAGG	0.404	0.718	1.00		
RLKUNC	0.510	0.724	0.550	1.00	
RLKAGG	0.430	0.574	0.804	0.646	1.00.

Frequency Data on Self Reported Likelihood Items on Pretest Attraction to Sexual Aggression Scale (N=135)

	not at all				very likely
	1	2	. 3	4	5
Bondage	48	40	24	12	11
Whipping, Sp	panking				
	68	36	15	8	8
Rape					
	111	12	5	3	4
Forcing a fen	nale to do sor	nething she d	idn't want to	do	
	82	34	11	4	4

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Erequency Data on Self Reported Likelihood Items on Rape Attraction to Sexual Aggression Scale (N=135)

- <u></u>				<u>_</u>	
not	at all				very likely
	1	2	3	4	5
Bondage (7 no an	swers)				<u> </u>
Rape-Consent	28	16	10	6	3
Consent-Rape	34	19	9	2	1
Whipping, Spanki	ing (7 no	answers)			
Rape-Consent	35	14	7	2	5
Consent-Rape	40	15	5	3	2
Rape (8 no answe	ers)				
Rape-Consent	51	5	3	1	3
Consent-Rape	55	6	2	0	1
Forcing a female	to do sor	nething she d	lidn't want to	o do (7 no a	nswers)
Rape-Consent	41	9	8	1	4
Consent-Rape	40	18	4	1	2



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Frequency Data on Self Reported Likelihood Items on Consenting Sex Attraction to Sexual Aggression Scale (N=135)

	-				
not	at all			ve	ry likely
	1	2	3	4	5
Bondage (7 no an	swers)	····		~	
Rape-Consent	27	18	9	5	5
Consent-Rape	31	19	10	2	2
Whipping, Spanki	ing (8 1	no answers)			
Rape-Consent	37	13	7	3	4
Consent-Rape	30	20	9	3	2
Rape (7 no answe	ers)				
Rape-Consent	54	2	5	1	2
Consent-Rape	53	5	2	3	1
Forcing a female	to do s	something she d	idn't want to	do (7 no ans	wers)
Rape-Consent	45	6	7	3	2
Consent-Rape	40	14	5	3	2



Table 13Descriptives - Attraction to Sexual Aggression Grouping Variable

Attraction to Sexual Aggression Grouping Variable = Mean of the Ztransformed Pretest Attraction to Sexual Aggression Variable (PAGG) and the Z-transformed Pretest Likelihood to Aggress Variable (PLKAGG)

No.	136
Minimum	1
Maximum	6
Mean	2.64
Standard dev	0.920

Means and Standard Deviations of <u>3 levels of Attraction to Sexual</u> Aggression Grouping Variable (N=136)

Level	Mean	SD	Minimum	Maximum	N
1 Low Attraction:	1.87	.338	1	2	77
2 Mid Attraction:	3.27	.45	3	4	48
3 High Attraction	: 5.27	.47	5	6	11

The Independent Variables

The independent variables were derived from factor variables created from the means of items contributing to factors on two different questionnaires, the Index of Human Affection and the Affectional History Questionnaire. As Prescott, Wallace, and Vandervoort (1974) write, the first of several versions of the Somatosensory Index of Affection was designed to measure the effects of inadequate physical affection on behavior. This questionnaire contained 43 items which focused on parentchild physical affection and physical violence, the role of pleasure and violence in society, and attitudes and behaviors towards sex and drug use. The scale was administered to roughly 100 college students in the San Francisco-Berkeley area. Prescott, Wallace and Vandervoort (1974) presented the results of a principal components factor analysis to the annual meeting of the National Council on Family Relations in St. Louis in October, 1974. In 1976, Prescott presented a paper on somatosensory deprivation at the Second World Congress of Sexology, held in Montréal in the fall of 1976. An expanded version of the questionnaire which contained 103 items was administered to 195 students from an Eastern American university and 503 students from Québec. In 1978, Prescott, LaFortune, Levy, and Wallace presented the results of the questionnaire to the Third International Congress of Sexology in Rome.

The questionnaire has contained as few as 43 items and as many as 200, and has been referred to as the Somatosensory Index of Human Affection and the Index of Human Affection. The questionnaire used in this study was sent to me by one of the authors, Wallace, and is entitled the Index of Human Affection. In a personal communication (November 26, 1989), Wallace stated that one might use either the full 200 item version, or an 67

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abbreviated version, which is the first 100 items. I chose the latter, and for simplicity's sake, refer to it as the Index of Human Affection.

The Index of Human Affection contains questions which probe into attitudes and behaviors on topics such as touching and physical affection in the family of origin, alcohol and drug abuse, attitudes towards rape and physical punishment, and the role of pleasure and pain in sexual relationships. The questionnaire includes items such as, "I often feel like hitting someone", "Alcohol is more satisfying than sex", and " Natural fresh body odors are often offensive". Answers range from 1 (Agree Strongly) to 6 (Disagree Strongly).

In all, Prescott and Wallace have collected data on the Index of Human Affection from almost 5000 subjects. As Prescott, LaFortune, Levy and Wallace (1978) assert, these data demonstrate,

a) a significant inverse relationship between parental affection and punishment; b) deprivation of parental physical affection is significantly linked to negative and destructive sexual attitudes and behaviors including sexual violence and alcohol/drug abuse; and c) females are significantly more impaired in psychosexual functioning than males by deprivation of parental physical affection (pg.1).

A series of common factor analyses were performed on the Index of Human Affection in order to determine how many factors accounted for the greatest amount of variance. Items with factor loadings over .400 were isolated, and it was decided that a 10 factor solution, varimax rotation best described the data. The 10 factors extracted accounted for a total of 43.5% of the variance. The factor loadings of the variables contributing to e2ch factor of the Index are listed in Table 14. Finally, factor variables which

range from 1 to 6 were created from the means of the items contributing to the factors.

The Affectional History Questionnaire was derived from an instrument developed for research into the affectional needs of cancer patients (Leiber, Plumb, Gerstenzang, and Holland, 1976). This original series of questions focused on affectional needs and customary modes of expression, as well as on areas of specific relevance to health professionals who treat cancer patients. Wallace's (1981) version looks at affectional experiences with family of origin and the ways in which affection was expressed as well as current modes of affection with a partner or spouse. In each category of question, a number of different ways of expressing affection are given so as to determine the modality, e.g., "Your parents showed their affection for you by: hugging you, kissing you, doing things for you, telling you, giving you presents". For each of the 80 items, answers range from 1 (Agree Strongly) to 6 (Disagree Strongly).

A series of common factor analyses were performed on the results of the Affectional History Questionnaire, and it was decided that a three factor solution, varimax rotation best described the data. The three factors extracted together accounted for 24.96% of the variance. The individual variables with factor loadings over 400 which make up each of the factors are presented in Table 15. Factor variables were created from the means of the items contributing to each factor. Finally, in order to group subjects according to their physical affection experiences, a grouping factor variable was created from the means of the three factors extracted from the Affectional History Questionnaire. In order to differentiate those subjects according to their physical affection experiences, this affection grouping variable was divided into three levels: high, mid and low. The means and

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standard deviations of all the physical affection factor variables are listed in Table 16. Pearson correlations which show the relationships between the physical affection factor variables are listed in Table 17. Descriptive statistics of the affection grouping variable are found in Table 18.

Table 14

Factor Loadings and Items Contributing to Factors on the Index of Human Affection

Factor 1 Violence and Sex
.439 IHA 8 I often get uptight about being touched
.710 IHA 26 I enjoy sex films where the sex partner is physically
beaten or hurt
.474 IHA 36 I often feel like hitting someone
.679 IHA 50 I sometimes feel like raping someone
.615 IHA 51 I usually enjoy the rape scenes in movies
.495 IHA 53 I get hostile and aggressive when I smoke marijuana
.438 IHA 54 I often feel I am sexually taken advantage of
.435 IHA 56 I often feel unhappy, sad or depressed
.635 IHA 57 I sometimes feel like killing myself
.484 IHA 58 I sometimes feel like killing someone else
.691 IHA 59 I have been accused of raping someone before
.656 IHA 63 Some women deserve to be raped
.653 IHA 83 Rape scenes in movies give me ideas of raping someone
.431 IHA 85 I do not trust women very much
.415 IHA 86 Some women enjoy being raped
.743 IHA 89 I would rape someone if I knew I wouldn't be caught

Table 14 (Cont'd)

Factor Loadings and Items Contributing to Factors on the Index of Human Affection

Factor 2 Sex and Substance Abuse

.661 IHA 12 I use and experiment with drugs quite often
.690 IHA 13 I smoke marijuana quite often
.548 IHA 14 I drink alcoholic beverages quite often
.555 IHA 19 I take drugs more often than I experience orgasm
.477 IHA 24 I often do things without thinking about them
.486 IHA 40 I often dream of either floating, flying, falling or climbing
.543 IHA 44 I remember when I ran away or wanted to run away from home
.539 IHA 60 I have been knocked out at least once in my life

- .506 IHA 61 I have several scars on my body
- .420 IHA 71 I often have sex just to be held and hugged

Factor 3

.489 IHA 4 My mother does not really care about me

.416 IHA 5 My father does not really care about me

.792 IHA 18 Drugs are more satisfying then sex

.758 IHA 19 I take drugs more often than I experience orgasm

.725 IHA 45 Marijuana is more satisfying than sex

.437 IHA 48 I have been or need to be treated for venereal disease

.407 IHA 53 I get hostile and aggressive when I smoke marijuana

.466 IHA 62 I prefer homosexual or lesbian sex relationships

.423 IHA 69 I often have had sex when I didn't want it.

Table 14 (Cont'd)Factor Loadings and Items Contributing to Factors on the Index of HumanAffection

Factor 4 Parent-Child Physical Affection

.496 IHA 2 My mother did not hug and kiss me alot
.537 IHA 3 My father did not hug and kiss me alot
.414 IHA 4 My mother does not really care about me
.537 IHA 5 My father does not really care about me
.496 IHA 6 My parents have many unfriendly arguments
.676 IHA 28 My mother has not adequately discussed sex with me
.669 IHA 29 My father has not adequately discussed sex with me
.628 IHA 34 I remember when my father physically punished me alot

.439 IHA 67 I am against marriages between blacks and whites.

.560 IHA 69 I have often had sex when I didn't want it

.434 IHA 86 Some women enjoy being raped

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Factor 5 Attitudes Towards Incest

- .748 IHA 80 Fathers and daughters who agree to have sex together should be severely punished
- .735 IHA 81 Mothers and sons who agree to have sex together should be severely punished
- .706 IHA 82 Brothers and sisters who agree to have sex together should be severely punished

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Table 14 (Cont'd) Factor Loadings and Items Contributing to Factors on the Index of Human Affection

Factor 6 Attitudes Towards Physical Punishment

.596 IHA 21 Hard physical punishment is good for children who disobey alot

.513 IHA 22 Physical punishment should be allowed in schools

.479 IHA 32 Capital punishment should be permitted by society

.653 IHA 37 Physical punishment and pain help build a strong moral character

.429 IHA 95 I am proud of my country

Factor 7 Masturbation

.536 IHA 9 Nudity within the family has a harmful influence upon children

.474 IHA 39 Prostitution should be punished by society

.686 IHA 74 As a child I rarely, if ever, masturbated

.657 IHA 75 As a teenager I rarely, if ever, masturbated

.609 IHA 76 As an adult I rarely, if ever, masturbated

Factor 8 Inter-racial Sexual Relations

.685 IHA 65 White men should not have sex with black women .741 IHA 66 Black men should not have sex with white women .624 IHA 67 I am against marriages between blacks and whites

Factor 9 Sex and Pleasure

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.416 IHA 33 Violence is necessary to really solve our problems

- .471 IHA 46 I usually do not get much pleasure from my sexual activity
- .570 IHA 97 Orgasms rarely give me a floating, drifting, floating feeling

.655 IHA 98 Orgasms rarely make my body feel warm all over

.670 IHA 99 Orgasms rarely make my entire body react, e.g. waves of sensations

Table 14 (Cont'd)Factor Loadings and Items Contributing to Factors on the Index of HumanAffection

Factor 9 Sex and Pleasure Cont'd

.486 IHA 100 Orgasms with my sex partner rarely make me feel that our bodies are one.

Factor 10

.524 IHA 31 Abortion should be punished by society
.615 IHA 55 I often pray to God for help with my problems
.449 IHA 77 I personally know a family where the father had sex with his daughter
.508 IHA 94 Religion and not science will ultimately solve our problems.

Table 15

Factor Loadings and Items Contributing to Factors of the Affectional History Questionnaire

Factor 1 Parental Affectional System

Your parents showed affection for each other by:

AF 1.671 Telling each other

- AF 2 .729 Embracing/hugging
- AF 3 .630 Giving each other gifts
- AF 4 .667 Kissing each other
- AF 5.599 Doing things for each other

Table 15 (Cont'd)Factor Loadings and Items Contributing to Factors of the AffectionalHistory Questionnaire

Your parents showed affection for you by:

- AF 6.732 Hugging you
- AF 7 .722 Kissing you
- AF 8.402 Doing things for you
- AF 9.612 Telling you
- AF 11 .723 Your immediate family openly expressed affection for each other
- AF 14 .602 When your immediate family got together with other relatives and close friends they greeted you by embracing/hugging you

You showed affection for your parents by:

AF 16 .570 Telling them

AF 18 .705 Embracing/hugging them

AF 19 .613 Kissing them

When your immediate family got together with relatives and close friends you greeted them by:

AF 27 .419 Kissing

AF 29 .560 Embracing/hugging

Factor 2 Partner Affection

AF 20.466 At a social gathering your parents would react with disapproval if they saw a married couple kissing

When you show affection for your partner you do it by: AF 45 .439 Telling him/her AF 46 .440 Doing things for him/her AF 47 .660 Kissing AF 48 .696 Embracing/hugging



Table 15 (Cont'd)Eactor Loadings and Items Contributing to Factors of the AffectionalHistory Questionnaire

When you show affection for your partner you do it by:
AF 49 .413 Giving presents
AF 50 .638 Having sexual intercourse
AF 53 .433 When you want to be physically close to your partner you feel free to say so.
AF 54 .446 You dislike holding your partner

Your partner shows affection for you by:

AF 61 .602 Embracing/hugging you

AF 62 .630 Kissi_g

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AF 63 .642 Wanting to have sex

AF 78 .563 You and your partner enjoy giving each other massage

Factor 3 Negative Attitudes Towards Physical Affection Your reaction to your body at puberty was AF 31 .456 Shame AF 32 .444 Fright

You regard your desire to hold your partner/spouse as: AF 37 .488 Troublesome AF 38 .448 Childish AF 39 .480 Something to keep secret

Table 15 (Cont'd)Eactor Loadings and Items Contributing to Factors of the AffectionalHistory Questionnaire

You would disapprove if you saw a couple at a social gathering Af 41 .507 Kissing AF 42 .637 Embracing/hugging AF 43 .570 Holding hands AF 44 .645 Walking with arms around each other AF 51 .463 Your partner dislikes being held

If you are unable to hold someone or be held when you desire physical closeness you tend to:

AF 68.404 Take a drink

AF 69 .470 Feel tense, anxious

;

AF 70 .501 Become angry

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Variable	Mean	Std Dev	Minimum	Maximum	Valid N
FCTR1	5.26	.68	1.00	6.00	136
FCTR2	4.28	1.04	1.10	6.00	136
FCTR3	5.63	.52	1.56	6.00	136
FCTR4	4.60	.80	1.91	6.00	136
FCTR5	3.37	1.78	1.00	6.00	136
FCTR6	4.14	.91	1.40	6.00	136
FCTR7	4.34	1.13	1.00	6.00	136
FCTR8	5.67	.91	1.00	6.00	136
FCTR9	4.92	.85	2.50	6.00	136
FCTR10	4.96	1.03	1.25	6.00	136
AFCTR1	2.51	.98	1.00	5.38	133
AFCTR2	1.89	.76	1.00	6.00	132
AFCTR3	1.96	.75	1.00	5.00	132
AFCTSCR	2.125	.59	1.08	4.54	133

Means and Standard Deviations of Physical Affection Factor Variables

Note. Because of space limitations, acronyms for factor variables are used in this table, and in the correlation tables. The names of the factor variables are listed below. FCTR3 and FCTR10 do not have names because they do not appear to embrace a single theme.

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- FCTR1 Violence and Sex
- FCTR2 Sex and Substance Abuse
- FCTR4 Parent-Child Physical Affection
- FCTR5 Attitudes Towards Incest
- FCTR6 Attitudes Towards Physical Punishment
- FCTR7 Masturbation
- FCTR8 Inter-racial Sexual Relations
- FCTR9 Sex and Pleasure
- AFCTR1 Parental Affectional System
- AFCTR2 Partner Affection
- AFCTR3 Negative Attitudes Towards Physical Affection
- AFCTFCR Affection Grouping Variable

Table 17

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Pearson Correlations Between Physical Affection Factor Variables * - significant .05 ** significant .01 (2-tailed)

	FCTRI	FCTR2	FCTR3	FCTR4	FCTR5
FCTR1	1.000	.2177*	.4726**	.3107**	0321
FCTR2	.2177*	1.000	.2847**	0617	.0610
FCTR3	.4726**	.2847**	1.000	.3954**	0270
FCTR4	.3107**	0617	.3954**	1.000	.0746
FCTR5	0321	.0610	0270	.0746	1.000
FCTR6	.0912	0030	0423	.0667	.2097*
FCTR7	0623	0630	1187	.0610	.2788**
FCTR8	.0711	0517	.0321	.2893**	.1947*
FCTR9	.1313	0021	.0576	.0419	0270
FCTR10	.1107	0328	0629	.0377	.0489
AFCTR1	0946	.1087	1048	5489**	.0822
AFCTR2	0748	.1996*	0336	1835*	0843
AFCTR3	4011*	0777	2712**	1153	0397
	FCTR6	FCTR7	FCTR8	FCTR9	FCTR10
FCTR1	.0912	0623	.0711	.1313	.1107
FCTR2	0030	0630	0517	0021	0328
FCTR3	0423	1187	.0321	.0 <i>5</i> 76	0629
FCTR4	.0667	.0610	.2893**	.0419	.0377
FCTR5	.2097*	.2788**	.1947*	0270	.0489
FCTR6	1.000	.0770	.1161	.1493	.1295
FCTR7	.0770	1.000	.1075	.0285	.0675
FCTR8	.1161	.1075	1.000	.0748	0174
FCTR9	.1493	.0285	.0748	1.000	0404
FCTR10	.1295	.0675	0174	0404	1.000
AFCTR1	0350	.0063	1692	0665	0101
AFCTR2	.0177	.0545	0255	2647**	0976
AFCTR3	.0723	.0771	.0543	1555	1108
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Table 17 (Cont'd) Pearson Correlations Between Physical Affection Factor Variables * - significant .05 ** significant .01 (2-tailed)

FCTRI	AFCTR1 0946	AFCTR2 0748	AFCTR3 4011**
FCTR2	.1087	.1996*	0777
FCTR3	1048	0336	2712**
FCTR4	5489**	1835*	1153
FCTR5	.0822	0843	0397
FCTR6	0350	.0177	.0723
FCTR7	.0063	.0545	.0771
FCTR8	1692	0255	.0543
FCTR9	.0665	2647**	1555
FCTR10	0101	0976	1108
AFCTR1	1.000	.2647**	.0972
AFCTR2	.2647**	1.000	.2612**
AFCTR3	.0972	.2612**	1.000

Table 183 Levels of Affection Grouping Variable

High Affection	1-1.99 AFCTSCR (Mean of AFCTR1, AFCTR2 and AFCTR3)

Mid Affection2-2.99 AFCTSCR

Low Affection 3-6 AFCTSCR

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Analyses of Aggression and Affection Variables

Preliminary analysis of all the factor variables included Pearson correlations, which are listed in Appendix J. Of particular note are a number of significant correlations between negative attitudes towards physical affection or AFCTR3, and the attraction to sexual aggression and likelihood to aggress variables on the Pretest and the Rape condition scales: PAGG (.26, p<.05), PLKAGG (.29, p<.01), RAGG (.27,p<.01) and RLKAGG (.24,p<.01). As well, a high number of significant positive correlations emerged between the rape condition arousal scale (RAROUS) and the following variables: PUNCON (.33, p<.01), PAGG (.44, p<.01), PLKUNC (.21, p<.05), PLKAGG (.25, p<.05), CAGG (.31, p<.01), CLKAGG (.30, p_<.01), RUNCON (.21, p_<.05), RAGG (.40, p<.01) and RLKAGG (.36, p<.01). This is suggestive of a relationship between sexual arousal after the rape condition and the likelihood to aggress and to have unconventional sex, as well as the attraction to sexual aggression and to unconventional sex. This effect appears to be less pronounced after the consenting sex condition. Pearson correlations were also computed between the physical affection factors derived from the Affectional History Scale which form the basis of the physical affection grouping variable and the aggression grouping variable. These are listed in Table 19. Crosstabulation of the affection groups and the aggression groups revealed three groups of subjects, as can be seen in Table 20.

Table 19Pearson Correlations - Affection Factor Variables and AggressionGrouping Variable

	AFCTR1	AFCTR2	AFCTR3	AFCTGRP	NEWAGGRP
AFCTR1	1.000				
AFCTR2	0.278	1.000			
AFCTR3	0.092	0.265	1.000		
AFCTGRP	0.660	0.662	0.536	1.000	
NEWAGGRI	P -0.02/4	0.122	0.231	0.107	1.000
NEWAGON	-0.024	0.122	0.231	0.107	1.000

AFCTR1 = parental affectional system

AFCTR2 = partner affection

AFCTR3 = negative attitudes towards physical affection

- AFCTGRP = mean of AFCTR1, AFCTR2, and AFCTR3, affection grouping variable
- NEWAGGRP = mean of pretest attraction to sexual aggression and pretest likelihood to aggress, aggression grouping variable

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Table 20 Cross Tabulation: Aggression Groups (Rows) by Affection Groups (columns)

FREQUENCIES

	•	1.000	2.000	3.000	TOTAL
1.000	1	36	34	6	77
2.000	2	22	20	4	48
3.000	1	2	7	1	11
TOTAL	4	F 60	61	11	 136

TABLE OF AGGRESSION GROUPS (ROWS) BY AFFECTIONGROUPS (COLUMNS)

PERCENTS OF TOTAL OF THIS (SUB)TABLE

	•	1.000	2.000	3.000	TOTAL	Ν
1.000	0.74	26.47	25.00	4.41	56.62	77.00
2.000	1.47	16.18	14.71	2.94	35.29	48.00
3.000	0.74	1.47	5.15	0.74	8.09	11.00
TOTAL N	2.94 4	44.12 60	44.85 61	8.09 11	100.00 136	

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The Relationship Between Physical Affection and Attraction to Sexual Aggression

The current study makes the basic presumption that there is a relationship between a man's experience of physical affection and his attraction to sexual aggression and likelihood to sexually aggress. In order to test this relationship between physical affection and attraction to sexual aggression, a series of multivariate repeated measures analyses were conducted. The dependent variables were the attraction to sexual aggression and the likelihood to sexual aggression variables at pretest, following the rape condition and following the consenting sex condition. For all tests, the between subjects factors were two levels of order: rape-consent and consent-rape and three levels of the affection grouping variable. The within subjects factor was three levels of time: pretest, time 2 and time 3. Means and standard deviations for aggression variables are presented in Table 21, and the results are in Table 22. Means and standard deviations for the likelihood to aggress variables can be found in Table 23, and the results of the multivariate analyses are listed in Table 24.

Means and Standard Deviations for Physical Affection Groups and Attraction to Sexual Aggression: N=129.

Dependent Variable. Fi	etest attraction to s	exual aggression	
Group	Mean	Std. Dev.	Ν
High Affection		<u> </u>	
Rape-Consent	2.613	1.202	31
Consent-Rape	2.655	.974	29
Mid Affection			
Rape-Consent	3.172	1.441	29
Consent-Rape	2.967	1.273	30
Low Affection			
Rape-Consent	3.250	.500	4
Consent-Rape	3.167	1.602	6
Dependent Variable: Co	onsenting sex attrac	tion to sexual agg	gression
Dependent Variable: Co Group	onsenting sex attrac Mean	tion to sexual agg Std. Dev.	gression N
-	-		-
Group	-		-
Group High Affection	Mean	Std. Dev.	N
Group High Affection Rape-Consent	Mean 2.129	Std. Dev.	N 31
Group High Affection Rape-Consent Consent-Rape	Mean 2.129	Std. Dev.	N 31
Group High Affection Rape-Consent Consent-Rape Mid Affection	Mean 2.129 2.207	Std. Dev. 1.176 .902	N 31 29
Group High Affection Rape-Consent Consent-Rape Mid Affection Rape-Consent	Mean 2.129 2.207 2.828	Std. Dev. 1.176 .902 1.441	N 31 29 29
Group High Affection Rape-Consent Consent-Rape Mid Affection Rape-Consent Consent-Rape	Mean 2.129 2.207 2.828	Std. Dev. 1.176 .902 1.441	N 31 29 29

Table 21 (Cont'd)

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Means and Standard Deviations for Physical Affection Groups and Attraction to Sexual Aggression: N=129.

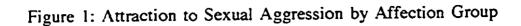
Dependent Variable: Rape attraction to sexual aggression						
Group	Mean	Std. Dev.	N			
High Affection	<u> </u>					
Rape-Consent	2.194	1.223	31			
Consent-Rape	2.138	1.125	29			
Mid Affection						
Rape-Consent	3.000	1.852	29			
Consent-Rape	2.400	1.102	30			
Low Affection						
Rape-Consent	3.000	1.414	4			
Consent-Rape	1.833	1.722	6			

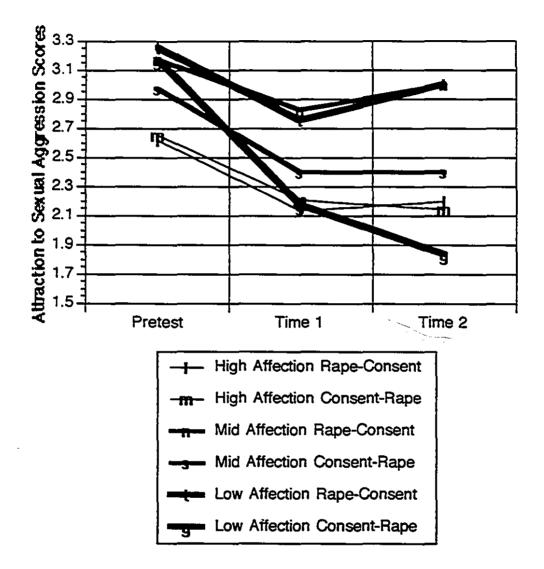
Table 22	
Repeated Measures MANOVA Attraction to Sexual Aggression by Physical	
Affection Groups N=129	

Dependent variables	-		-	ex Attractio	n to
	Sexual Agg		ariables		
Between Subjects 1					
Source of variation	SS	DF	MS	E	Sig of E
Within cells	522.02	123	4.24		
Affection Group	20.36	2	10.18	2.40	.095
Order	5.45	1	5.45	1.28	.259
Affection Group					
by Order	5.34	2	2.67	.63	.535
Within Subjects Ef Source of variation	SS	DF	MS	E	Sig of E
Within cells	84.05	5 246	.34		
Time	13.19	2	6.59	19.30	.000
Affection Group					
by Time	.85	4	.21	.62	.645
Order by Time	2.26	2	1.13	3.31	.038
Affection Group					
by Order by Time	1.17	4	.29	.85	.493

As the results suggest, there were no significant main effects between subjects at pretest, although the effect for the physical affection grouping variable approaches significance. Follow-up multivariate tests of significance for within subjects effect order by time were significant: Hotellings E = 3.31 (2,122), p<.05. Subsequent univariate E test showed a

significant order by time interaction effect at Time 2: E=5.99 (1.123). p<.05. Hotellings multivariate E test for the within subject effect of time showed a significant effect for time, E=15.15 (2,122), p<.001. Univariate results indicated that this significance was true for both Time 2, E=25.65 (1,123), p<.001 and Time 3, E=11.54 (1,123), p<.001. As can be seen in Figure 1, examination of the means reveals that the attraction to sexual aggression scores for all affection groups do not vary much at the pretest, and that as subjects are exposed to the stimuli, more variability occurs. In particular, the greatest difference occurs with the low affection group between the pretest and the attraction to sexual aggression consenting condition at Time 1, and again at Time 2. The greatest differences between affection group means occur at Time 2. The groups which vary least on the attraction to sexual aggression across time are the high affection group and the mid affection group who received the rape condition first. The low affection group who received the consenting sex condition first had lower attraction to sexual aggression as a result of increased exposure.





Means and Standard Deviations for Physical Affection Groups and Likelihood to Sexual Aggression N=129.

Dependent Variable:	Pretest likeliho	od to sexually ag	gress	
Group	Mean	Std. Dev.	N	
High Affection	·			
Rape-Consent	1.742	.855	31	
Consent-Rape	1.759	.786	29	
Mid Affection				
Rape-Consent	2.069	1.132	29	
Consent-Rape	1.967	.928	30	
Low Affection				
Rape-Consent	1.750	.957	4	
Consent-Rape	1.667	1.033	6	
Dependent Variable	: Consenting se:	x likelihood to sex	ually aggress	
Group	Mean	Std. Dev.	N	
High Affection	<u>. </u>			
Rape-Consent	1.645	.915	31	
Consent-Rape	1.552	.686	29	
Mid Affection				
Rape-Consent	1.931	1.132	29	
Consent-Rape	1.833	1.085	30	
comont rapo				
Low Affection				
-	1.500	1.000	4	



Table 23 (Cont'd) Means and Standard Deviations for Physical Affection Groups and Likelihood to Sexual Aggression N=129.

Dependent Variable: Rape attraction to sexual aggression						
Group	Mean	Std. Dev.	Ν			
High Affection			<u> </u>			
Rape-Consent	1.581	.958	31			
Consent-Rape	1.448	.632	29			
Mid Affection						
Rape-Consent	1.966	1.210	29			
Consent-Rape	1.733	.907	30			
Low Affection						
Rape-Consent	1.500	1.000	4			
Consent-Rape	1.167	.983	.6			

Table 24 Repeated Measures MANOVA Likelihood to Sexual Aggression by Physical Affection Groups N=129

Dependent Variables: Pretest, consenting sex and rape attraction to sexual aggression

Between Subjects Effects for Time 1								
Source of variation	SS	DF	MS	E	Sig of E			
Within cells	289.43	123	2.35	<u></u>				
Affection Group	9.89	2	4.95	2.10	.127			
Order Affection Group	.91	1	.91	.39	.536			
by Order	.17	2	.09	.04	.964			

Within Subjects Effects Involving Time					
Source of variation	SS	DF	MS	E.	Sig of F
Within cells	46.74	246	.19		
Time	2.38	2	1.19	6.25	.002
Affection Group					
by Time	.23	4	.06	.30	.877
Order by Time Affection Group	.26	2	.13	.69	.505
by Order by Time	.07	4	.02	.09	.985

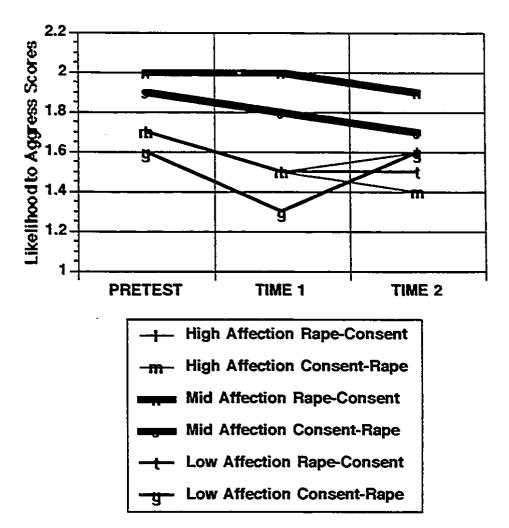
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Repeated measures MANOVA for between subjects differences at Time 1 revealed no significant main effects or interaction effects for the likelihood to aggress variables. Nonetheless, follow-up multivariate and univariate tests of significance did yield interesting findings. Hotellings multivariate E test for the main within subject effect for time was significant, E=6.63 (2,122), p<.001. Significant univariate tests showed a significant within subject difference at Time 1, E=13.13 (1,123), p<.001. Again, close examination of the means indicates that the greatest differences on the likelihood to aggress scale between the affection groups occur at time 1.The greatest within group variability occurs in both the low affection group and the high affection group who receive the consenting sex condition first at time 1, and the rape condition at time 2. These results can be seen in Figure 2.

In summary, while these findings do not definitively support the major assumption that a man's experience of physical affection has any bearing upon his attraction to sexual aggression, there is nonetheless some evidence to suggest the experience of physical affection may contribute to attraction to sexual aggression. The results show that while men with medium physical affection experiences do not appear to vary much in terms of their attraction to sexual aggression as a result of either increased exposure or the type of stimuli, men with low physical affection experiences do vary significantly. As well, men with high physical affection experiences who read the consenting sex story first have a significantly lower likelihood to aggress after exposure to the rape story.





The Relationship Between Exposure to Sexually Violent Stimuli and Attraction to Sexual Aggression

Another prediction posited by the current study involved the proportion of men who acknowledged a high level of attraction to sexual aggression following exposure to sexually violent stimuli: specifically that a significant minority of men would report high attraction to sexual aggression following the rape condition. As previous research has

Affection and sexual aggression

indicated, sexual arousal to sexually violent stimuli is closely related to a higher likelihood to sexually aggress, and to attraction to sexual aggression. The correlational data listed in Table 25 suggest that there is a strong and consistent effect between variables related to attraction to sexual aggression and self reported sexual arousal after reading the rape passage. This same effect is suppressed after reading the consensual sex passage.

Table 25		
Pearson Correlations - Ar	ousal_and_Sexual_Ag	gression Variables
	<u> </u>	
	Rape story	Consenting sex story
Pretest attraction		
to sexual aggression	.4414**	.0509
Pretest likelihood		

Pretest attraction			
to sexual aggression	.4414**	.0509	
Pretest likelihood			
to aggress	.2546**	.0507	
Consent attraction		<u> </u>	
to sexual aggression	.3121**	.0785	
Consent likelihood			
to aggress	.2978**	.1187	
Rape attraction			

to sexual aggression	.4010**	0244	
Rape likelihood to aggress	.3571**	.0238	
High, mid and low aggression groups	.3978**	.0167	

** Significant .01 (2-tailed)

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A repeated measures MANOVA with high, mid and low levels of aggression group as the between group factor and order as the within subject factor was performed. This test confirmed that the level of attraction to sexual aggression as measured by three levels of aggression groups significantly differentiated between those men who expressed sexual arousal after the rape condition and those who expressed sexual arousal after the consent condition, E=4.49, (1,121) p<.05. Aggression group means are in Table 26, cell means and standards deviations are in Table 27, and results are in Table 28.

T_{-1}	1.	nc.
Tal	Die	20

Means - Sexual Arousal to Consenting Sex and Rape by Aggression Groups N=127

Dependent variable:	Sexual arousal to	consenting sex	
Group	Mean	N	
Low Aggression	7.168	71	
Mid Aggression	7.106	46	
High Aggression	7.666	10	
Dependent variable:	Sexual arousal to	o rape	
Group	Mean	N	
Low Aggression	3.776	71	
Mid Aggression	4.291	46	
High Aggression	7.541	10	

1

Cell Means and Standard Deviations- Sexual Arousal to Consenting Sex and Rape by Aggression Groups and Order N=127

Dependent variable:	Seruar arousa	i to consenting sex		
Group	Mean	Std. Dev.	N	
Low Aggression			· · · · · · · · · · · · · · · · · · ·	
Rape-Consent	7.222	2.486	36	
Consent-Rape	7.114	2.447	35	
Mid Aggression				
Rape-Consent	6.545	2.632	22	
Consent-Rape	7.667	2.461	24	
High Aggression				
Rape-Consent	6.333	3.204	6	
~ ~	0 000			
Consent-Rape	9.000	2.160	4	
Consent-Rape Dependent variable: Group			4 N	
Dependent variable:	Sexual arousa	l to rape		
Dependent variable: Group	Sexual arousa	l to rape		
Dependent variable: Group Low Aggression	Sexual arousa Mean	l to rape Std.Dev.	N	
Dependent variable: Group Low Aggression Rape-Consent	Sexual arousa Mean 4.639	l to rape Std.Dev. 2.356	N 36	
Dependent variable: Group Low Aggression Rape-Consent Consent-Rape	Sexual arousa Mean 4.639	l to rape Std.Dev. 2.356	N 36	
Dependent variable: Group Low Aggression Rape-Consent Consent-Rape Mid Aggression	Sexual arousa Mean 4.639 2.914	l to rape Std.Dev. 2.356 1.738	N 36 35	
Dependent variable: Group Low Aggression Rape-Consent Consent-Rape Mid Aggression Rape-Consent	Sexual arousa Mean 4.639 2.914 4.500	l to rape Std.Dev. 2.356 1.738 2.483	N 36 35 22	
Dependent variable: Group Low Aggression Rape-Consent Consent-Rape Mid Aggression Rape-Consent Consent-Rape	Sexual arousa Mean 4.639 2.914 4.500	l to rape Std.Dev. 2.356 1.738 2.483	N 36 35 22	

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Repeated Measures MANOVA : Sexual Arousal to Consenting Sex and Rape by Aggression Groups and Order. N=127

Source of variation	SS	DF	MS	F	Sig of F
Within cells	1036.16	121	8.56		<u> </u>
Aggression Group	76.90	2	38.45	4.49	.013
Order	.81	1	.81	.10	.758
Aggression Group					
by Order	31.88	2	15.94	1.86	.160

Tests of Within Subjects Effects Involving Time Tests of Significance For Time 2

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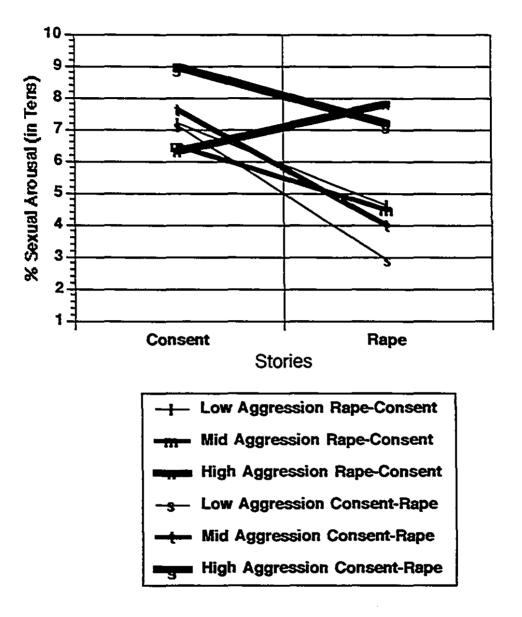
Source of variation	SS	DF	MS	E "	Sig of E
Within cells	401.69	121	3.32		·
Time	143.12	1	143.12	43.11	.000
Aggression Group					
by Time	45.64	2	22.82	6.87	.001
Order by Time	36.61	1	36.61	11.03	.001
Aggression Group					
by Order by Time	3.09	2	1.55	.47	.629

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As can be seen in Figure 3, the results show clearly that all the subjects experienced a high level of sexual arousal to the consenting sex story, with a significant between group difference for the two groups of men who acknowledged a high pretest attraction to sexual aggression. Those men with high pretest attraction to sexual aggression who received the Affection and sexual aggression

consenting sex story first rated their level of sexual arousal after the consenting sex story significantly higher than the high pretest attraction to sexual aggression men who received the acquaintance rape story first. The men who were highly attracted to sexual aggression who received the consenting sex story second also rated their sexual arousal after the acquaintance rape significantly higher than those men who form the middle or low attraction groups of men. In summary, the subjects with high attraction to sexual aggression respond to sexually violent stimuli with a significantly greater sexual arousal than men with some or little attraction to sexual aggression. Furthermore, some men who are highly attracted to sexual aggression become more aroused to sexual violence than to consenting sex.

Figure 3: Sexual Arousal by Condition, Order



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In order to test whether exposure to sexually violent materials resulted in increased attraction to sexual aggression and in increased likelihood to aggress, a series of repeated measures MANOVAs were performed. The within subjects factor was three levels of time and the between subjects factors were two levels of order and three levels of aggression group. The first test was done on the attraction to sexual aggression variables, and the second on the likelihood to aggress variables. Means and standard deviations for the attraction to sexual aggression variable: are reported in Table 29, and the MANOVA results in Table 30. Means and standard deviations for the likelihood to aggress variables are found in Table 31, and MANOVA results in Table 32.

Means and Standard Deviations for Aggression Variables By Aggression Groups, N=133

Dependent Variable: Pretest attraction to sexual aggression				
Group	Mean	Ν		
Low Aggression				
Rape-Consent	2.026	.434	38	
Consent-Rape	2.000	.338	36	
Mid Aggression				
Rape-Consent	3.500	.598	22	
Consent-Rape	3.577	.643	26	
High Aggression				
Rape-Consent	6.000	.632	6	
Consent-Rape	5.800	.447	5	

Dependent Variable: Consenting sex attraction to sexual aggression Group Mean Std.Dev. N

Gloup	wicali	Std.Dev.		
Low Aggression				
Rape-Consent	1.737	.554	38	
Consent-Rape	1.750	.500	36	
Mid Aggression				
Rape-Consent	2.864	1.125	22	
Consent-Rape	2.654	1.164	26	
High Aggression				
Rape-Consent	5.500	.837	6	
Consent-Rape	3.600	2.302	5	

Table 29 (Cont'd)

Means and Standard Deviations for Aggression Variables By Aggression Groups N=133

Dependent Variable: Rape attraction to sexual aggression				
Mean	Std. Dev.	Ν		
<u> </u>	· · · ·			
1.737	.724	38		
1.583	.500	36		
3.045	1.174	22		
2.731	1.151	26		
6.000	1.673	6		
3.600	2.302	5		
	1.737 1.583 3.045 2.731 6.000	1.737 .724 1.583 .500 3.045 1.174 2.731 1.151 6.000 1.673	1.737 .724 38 1.583 .500 36 3.045 1.174 22 2.731 1.151 26 6.000 1.673 6	

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Table 30 Repeated Measures MANOVA: Attraction to Sexual Aggression by Aggression Groups, Order N=133

Dependent variables: Pretest, consenting sex and rape attraction to sexual aggression

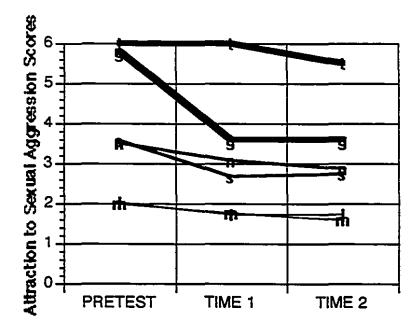
Source of variation	SS	DF	MS	E S	Sig of E
Within cells	167.76	127	1.32		
Aggression Group	370.23	2	185.11	140.14	.000
Order	17.28	1	17.28	13.08	.000
Aggression Group					
by Order	15.07	2	7.54	5.70	.004

Between subjects effects for Time 1

Source of variation	SS	DF	MS	E Si	g of E
Within cells	94.54	254	.37		<u> </u>
Time	27.13	2	13.57	36.45	.000
Aggression Group					
by Time	7.92	4	1.98	5.32	.000
Order by Time	7.78	2	3.89	10.45	.000
Aggression Group					
by Order, by Time	5.94	4	1.49	3.99	.004

Hotellings multivariate F test for aggression group by Order by Time was significant, E=2.987 (4,250) p<.05. Follow-up univariate tests showed a significant 3 way interaction effect at Time 1. E=5.778 (2,127), p<.05. Hotellings multivariate E test for the 2 way interaction Order by Time, was highly significant, E=8.223 (2,126) p<.001, and the univariate E test for the 2 way interaction Aggression Group by Time was significant at Time 1, E=3.701 (2,127) p<.05. There was also a significant effect for time: Hotellings E = 27.32 (2,126), p<.01 and univariate E tests showed significant differences at both Time 1, E=39.690 (1,127) p<.01, and Time 2, E=31.709 (1,127) p<.01.





Low Aggression Rape-Consent
 Low Aggression Consent-Rape
 Mid Aggression Rape-Consent
 Mid Aggression Consent-Rape
 High Aggression Rape-Consent
 High Aggression Consent-Rape



These results demonstrate clearly that there exist significant differences between subjects according to their level of attraction to sexual aggression before exposure to sexual stimuli. Furthermore, the level of attraction to sexual aggression prior to exposure influences the level of attraction to sexual aggression after exposure. There is an added within subject effect both for the nature of the stimuli, and for the number of exposures. The greatest within group variability occurs with the high attraction to sexual aggression group who received the consenting sex condition at Time 2. These subjects' Attraction to Sexual Aggression decreased significantly after exposure to the consenting sex story, and remained the same after exposure to the acquaintance rape story.

Table 31

Dependent Variable: Pretest likelihood to aggress					
Group	Mean	Std. Dev.	N		
Low Aggression	···				
Rape-Consent	1.395	.595	38		
Consent-Rape	1.361	.487	- 36		
Mid Aggression					
Rape-Consent	2.227	.813	22		
Consent-Rape	2.346	.846	26		
High Aggression					
Rape-Consent	3.667	1.033	6		
Consent-Rape	2.800	.919	5		

Means and Standard Deviations for Likelihood to Aggress Variables By Aggression Group, Order (N=133) Table 31 (Cont'd) Means and Standard Deviations for Likelihood to Aggress Variables By Aggression Group, Order (N=133)

Group	Mean	Std. Dev.	N
Low Aggression			
Rape-Consent	1.263	.601	38
Consent-Rape	1.278	.513	36
Mid Aggression			
Rape-Consent	2.091	1.019	22
Consent-Rape	1.923	1.017	26
High Aggression			
Rape-Consent	3.500	.837	6
Concert Dama	2.600	1.673	5
Consent-Rape	2.000	1.075	5
Dependent variable:			N
Dependent variable: Group	Rape likelihoo	d to aggress	
Dependent variable:	Rape likelihoo	d to aggress	
Dependent variable: Group Low Aggression	Rape likelihoo Mean	d to aggress Std. Dev.	N
Dependent variable: Group Low Aggression Rape-Consent	Rape likelihoo Mean 1.158	d to aggress Std. Dev. .638	N 38
Dependent variable: Broup Low Aggression Rape-Consent Consent-Rape	Rape likelihoo Mean 1.158	d to aggress Std. Dev. .638	N 38
Dependent variable: Group Low Aggression Rape-Consent Consent-Rape Mid Aggression	Rape likelihoo Mean 1.158 1.194	d to aggress Std. Dev. .638 .467	N 38 36
Dependent variable: Group Low Aggression Rape-Consent Consent-Rape Mid Aggression Rape-Consent Consent-Rape	Rape likelihoo Mean 1.158 1.194 2.136	d to aggress Std. Dev. .638 .467 .941	N 38 36 22
Dependent variable: Group Low Aggression Rape-Consent Consent-Rape Mid Aggression Rape-Consent	Rape likelihoo Mean 1.158 1.194 2.136	d to aggress Std. Dev. .638 .467 .941	N 38 36 22

Repeated Measures MANOVA: Likelihood to Aggress by Aggression Groups, Order (N=133)

Dependent variables: Pretest, consenting sex and rape likelihood to aggress

Between subjects effe Source of variation	SS	DF	MS	F	Sig of F
Within cells	171.21	127	1.35		
Aggression Group	126.21	2	63.11	46.81	.000
Order Aggression Group	7.61	1	7.61	5.64	.019
by Order	7.27	2	3.69	2.73	.069

Source of variation	SS	DF	MS	E S	ig of E
Within cells	48.86	254	.19 ·		
Time	2.27	2	1.14	5.91	.003
Aggression Group					
by Time	.46	4	.12	.60	.664
Order by Time	.62	2	.31	1.60	.203
Aggression Group					
by Order by Time	1.14	4	.29	1.49	.206

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Affection and sexual aggression

Follow-up multivariate tests of significance for within subject effects for a 3 way interaction Aggression Group by Order by Time were not significant. However, a univariate E test for the 3 way interaction within subjects effect was significant at Time 2, E=3.106 (2,127), p<.05. Hotellings multivariate E test for the within subject effect of time was significant, E=5.918 (2,126) p<.01, and the univariate E test was significant for Time 2, E=11.91 (1,127) p<.01. These results are presented in Figure 5.

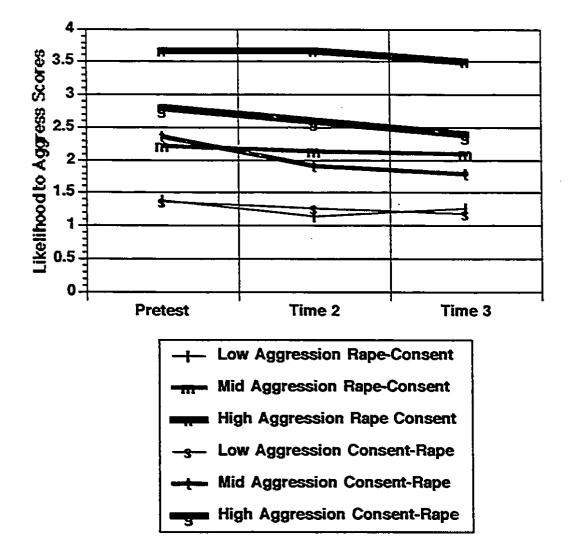


Figure 5: Likelihood to Aggress by Order, Aggression Group

In summary, the findings are consistently in favour of the conclusion that the level of attraction to sexual aggression does effectively differentiate men who respond positively, i.e., are attracted to and are aroused by sexually violent stimuli, and those who are not. Furthermore, there are distinct between groups differences amongst subjects as to their pretest attraction to sexual aggression scores which, for the high attracted group who receive the sexually violent stimuli first, continue to differentiate them from other subjects. This between groups difference also affects the likelihood to aggress scores. However, the likelihood to aggress does not appear to change as a result of number of exposures or order - either a subject admits a certain likelihood to aggress, or he does not.

Attraction to Sexual Aggression, Violence and Sex and Attitudes Towards Physical Punishment

The factor variable violence and sex includes statements such as, "Some women enjoy being raped", and "I sometimes feel like raping someone". As such, it contains items which measure attitudes which have been shown to contribute to attraction to sexual aggression. However, it also includes statements such as, "I sometimes feel like killing myself", and "I often feel like I am sexually taken advantage of".

Analysis of variance between violence and sex and three levels of aggression group revealed significant main effects for aggression group, E=17.073, p<.00. This can be seen in Figure 6. Means are in Table 33, and results of the ANOVA are in Table 34.

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Means: Violence and Sex by Aggression Group, Order (N=136)

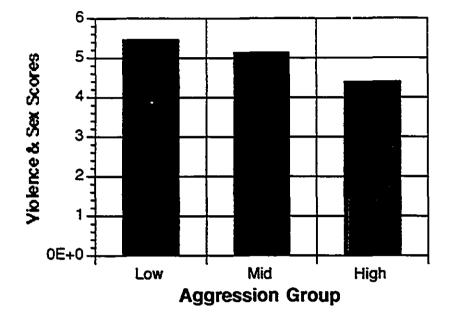
Mean	N	
5.47	77	·_ ·- ·- ·
5.13	48	
4.38	11	
	5.47 5.13	5.47 77 5.13 48

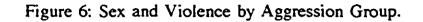
Table 34

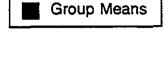
Analysis of Variance, Violence and Sex by Aggression Group and Order (N=136)

Source of variation	SS	DF	MS	E	Sig of E
Main Effects	12.719	2	6.359	17.073	.000
Aggression Group	12.719	2	6.359	17.073	.000

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Subjects who responded positively to statements such as, "Hard physical punishment is good for children who disobey alot", and, "Physical punishment and pain help build a strong moral character", also would hypothetically be more highly attracted to sexual aggression. Analysis of variance between the attitudes to physical punishment variable and three levels of aggression group yielded no significant differences between groups. Means are in Table 35, and results are in Table 36.

Means: Attitudes Towards Physical Punishment by Aggression Group, Order, N=136.

Aggression Group	Mean	N	
Low	4.09	77	
Mid	4.20	48	
High	4.24	11	

Table 36

Analysis of Variance, Attitudes Towards Physical Punishment by Aggression Group and Order (N=136)

Source of variation	SS	DF	MS	E	Sig of F
Main Effects	.440	2	.220	.261	.771
Aggression Group	.440	2	.220	.261	.771

Attraction to Sexual Aggression and Negative Attitudes Towards Physical Affection

It makes theoretical sense to assume that a man who is highly attracted to sexual aggression would also have negative attitudes towards physical affection. The factor variable which measured this attitude contains statements such as " You regard your desire to hold your partner/spouse as: troublesome, childish, something to keep secret", and " Your reaction to your body at puberty was: shame, fright". Analysis of variance between the factor variable negative attitudes towards physical affection and three levels of aggression group revealed significant main effects for aggression group. Means are in Table 37, and analysis of variance results are in Table 38.

Table 37

Means: Negative Attitudes Towards Physical Affection by Aggression Group and Order (N=136)

Aggression Group	Mean	N	
Low	1.86	75	<u>,</u>
Mid	2.02	46	
High	2.56	10	

Analysis of Variance, Negative Attitudes Towards Physical Affection by Aggression Group and Order (N=136)

Source of variation	SS	DF	MS	E	Sig of E
Main Effects	4.549	2	2.274	4.326	.015
Aggression Group	4.549	2	2.274	4.326	.015
			•		

These results (see Figure 7) show that men who have the highest attraction to sexual aggression also have significantly more negative attitudes to physical affection than their counterparts in the mid and low attraction to sexual aggression groups.

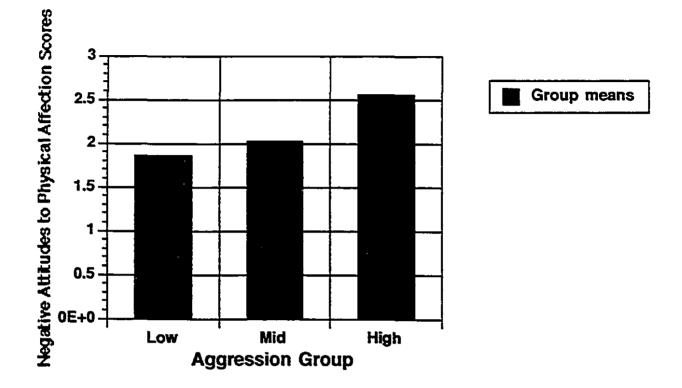


Figure 7: Negative Attitudes Towards Physical Affection by Aggression

Attraction to Sexual Aggression and Sexual Pleasure

It was hypothesized that attraction to sexual aggression was related to the experience of sexual pleasure. In other words, men who have a low attraction to sexual aggression would experience more sexual pleasure and would be more affectionate with their partners. Sexual pleasure was measured by negative responses to statements such "Orgasms rarely make my body feel warm all over" and, "Orgasms with my sex partner rarely make me feel that our bodies are one". Group means for sexual pleasure variable are listed in Table 39, and analysis of variance results are listed in Table 40.

Means: Sexual Pleasure by Aggression Group (N=136)

Aggression Group	Mean	N	
Low	5.00	77	<u>_</u> _
Mid	4.88	48	
High	4.50	11	

Table 40

Analysis of Variance, Sexual Pleasure by Aggression Group (N=136)

Source of variation	SS	DF	MS	E	Sig of E
Main Effects	2.476	2	1.238	1.737	.180
Aggression Group	2.476	2	1.238	1.737	.180
_					

According to these results, the degree to which a man is or is not attracted to sexual aggression does not appear to influence the amount to which a man experiences sexual pleasure.

Attraction to Sexual Aggression and Physical Affection in the Family of Origin

It was also assumed that there would be a relationship between a man's level of attraction to sexual aggression, his perception of physical affection and how it was expressed in his family of origin. There were 2 factor variables which dealt with familial physical affection: one which focused upon the physical affection between parent and child, and one which looked at physical affection between parents. Means for parent child physical affection are in Table 41, and results of the analysis of variance are in Table 42. Means for the parental physical affection in Table 43, and the results are in Table 44.

(N=136)					
Mean	Ν				
4.59	77				
4.63	48				
4.55	11				
	Mean 4.59 4.63				

Table 41 Means: Parent-child Physical Affection by Aggression Group and Order (N=136)

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Analysis of Variance, Parent-child Physical Affection by Aggression Group and Order (N=136)

Source of variation	SS	DF	MS	E	Sig of E
Main Effects	.076	2	.038	.058	.943
Aggression Group	.076	2	.038	.058	.943

Table 43

Means: Parental Affectional System by Aggression Group and Order (N=136)

Aggression Group	Mean	N	
Low	2.56	75	
Mid	2.39	46	
High	2.68	10	

Table 44

Analysis of Variance, Parental Affectional System by Aggression Group and Order (N=136).

Source of variation	SS	DF	MS	E	Sig of E
Main Effects	1.219	2 2	.609	.623	.538
Aggression Group	1.219		.609	.623	.538

There were no significant results for either the parent-child physical affection variable or for the parental physical affection variable. It would appear according to these results, that physical affection in the family of origin does not affect attraction to sexual aggression.

Discriminant Analysis

A series of discriminant analyses were conducted in order to determine how well the physical affection variables discriminated between the three aggression groups. The dependent variables for both discriminant analyses were the three levels of aggression group. The variables predicted to discriminate between the groups were the ten Index of Human Affection factor variables and the three Affectional History factor variables. In the first analysis, the pooled within groups correlations between the hypothesized discriminating variables yielded interesting results. The variables which most discriminated between the groups were Index of Human Affection factors 1, 9, 3, and 10. Factor 1 is violence and sex, and factor 9 is sex and pleasure. Factor 3 includes items about the degree of parental love such as, "My mother does not really care about me" and, "I take drugs more often than I experience orgasm". Factor 10 consists of four items: "Abortion should be punished by society", "I often pray to God for help with my problems", "I personally know a family where the father had sex with his daughter", and "Religion and not science will ultimately solve our problems". In all, 65.44% of the cases were correctly classified according to the two discriminant functions, with the greatest separation occurring between group 3, or the high aggression group, and the other two groups.

The second discriminant analysis between the three levels of aggression groups and the Affectional History factor variables indicated that the Affectional History variables do not discriminate well between the three groups.

Discussion

The purpose of this study was two-fold: first, to assess the usefulness of the construct attraction to sexual aggression and the scale; and second, to investigate the relationship between physical affection variables and attraction to sexual aggression. The following discussion will focus on the results in that order.

Evaluation of the Construct and of the Attraction to Sexual Aggression Scale

The current study resembles many of the studies into media violence and aggressive behavior in a number of important ways. First, the stories which were the stimuli were first used by Abel and his associates (Abel, Blanchard, Barlow & Guild 1977), and later by Malamuth (1989a,1989b) and by Malamuth and Check (1983,1985). Elements of the stories, namely that the victim of the sexual aggression is an acquaintance of the aggressor and that she dresses and talks about sex in a provocative manner, have been shown to differentiate sexual aggressors and non-aggressors. The repeated measures design and the use of pen and paper questionnaires, as opposed to behavioral and/or objective measures of arousal, replicates earlier studies which have proven these methods to be valid. As well, the majority of subjects in all the studies including the current one, are university students.

The Attraction to Sexual Aggression Scale performed much as expected. From a practical standpoint, having a single instrument which contains a number of relevant scales facilitates administration. The different scales such as the Attraction to Conventional Sex Scale provide a substantial amount of data which, when compared with the Attraction to

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Unconventional Sex Scale or with the Attraction to Sexual Aggression Scale, point to the ability of the different scales to distinguish between different groups of subjects. Furthermore, the content validity of each scale was confirmed by the similarity of the results of the common factor analyses conducted by Malamuth (1989a, 1989b) and by me.

The frequency data on the likelihood scales closely resembled those reported by Malamuth (1989a, 1989b). The results show clearly that the Scale differentiated between those subjects who have a certain attraction to sexual aggression, and those who do not, as well as between those subjects who admit a certain likelihood to aggress sexually and those who do not. Furthermore, the Scale differentiated those subjects who are sexually aroused by sexual aggression and those who are not.

The results strongly support the validity of the construct, attraction to sexual aggression, and the reliability of the Attraction to Sexual Aggression Scale. They constitute important findings inasmuch as they represent the first known test of either the construct or the scale to be conducted by a person other than Malamuth and/or a close associate.

As well, these results clearly confirm previous findings that men who have a high level of attraction to sexual aggression do respond differently to exposure to sexually violent material than those who do not have a high level of attraction to sexual aggression. Furthermore, men who are highly attracted to sexual aggression who are first exposed to sexually violent material will maintain high levels of attraction to sexual aggression when exposed to sexually stimulating but not violent material. Men with high attraction to sexual aggression will be more aroused by sexually violent material than by non-violent material. These findings confirm that there is a significant minority of men who are highly attracted to sexual aggression, and for whom the order of exposure and the number of times of exposure to sexually violent material is significant. The data also clearly demonstrate that exposure to sexually violent material does not affect the likelihood to engage in sexually violent behavior.

Attraction to Sexual Aggression and Physical Affection Variables

One of the main reasons for undertaking this study was to explore some of the possible variables underlying attraction to sexual aggression, namely some of the variables related to the experience of physical affection. This part of the research was only partially successful for a number of possible reasons. First, physical affection is a poorly researched variable in particular with regards to adult experience, and consequently there is little mention of it in the literature and no extensive development of dependent variables. This stands in stark contrast to variables related to sexual aggression and exposure to media violence. Second, affection by definition is an affective variable (as opposed to attitudes which are cognitive) and may well not lend itself as conveniently to conventional pen and paper type questionnaires. Third, many of the questions on the inventories used in this study relied upon subjects' ability to recall their past experiences, which may be difficult for a number of reasons.

The lack of clearly significant results for the physical affection variables is disappointing. As the data indicated, the general experience of physical affection between parents, with family members, and with a partner, did not account for any significant between group differences in either the level of attraction to sexual aggression or the likelihood to aggress prior to exposure to sexually explicit materials. However, interesting differences did emerge over time and exposure. Men with low experience of physical affection who received the consenting sex story first had significantly lower attraction to sexual aggression over time. These men differed significantly from men with low physically affectionate experience who received the rape story first, and from the mid affection group.

A slightly different pattern emerges in terms of the relationship between experience of physical affection and the likelihood to sexually aggress. The greatest differences occur after the first exposure to sexually explicit materials between the mid affection group who received the rape story first who reported the highest likelihood to aggress, and the low physical affection group who received the consenting sex story first. Furthermore, the low affection group who received the consenting sex story first reported a higher likelihood to aggress following exposure to the rape story.

These data suggest that men with low experience of physical affection react differently to consenting sexual stimuli than their counterparts with medium or high experience of physical affection. Of particular interest is the finding which concerns men with low experience of physical affection with regard to the likelihood to aggress. It may well be that reading the descriptions of consenting sex first evokes a craving in these men that triggers them to acknowledge a greater likelihood to aggress after they have been exposed to the rape story. This finding provides partial support for the assumption that the lack of physically affectionate experiences affects both attraction to sexual aggression and the self reported likelihood to sexually aggress. 126

The lack of significant effects for physical affection in the family of origin, between parents, or with a partner may be due to a number of reasons. First, subjects may have difficulty remembering how their parents interacted physically when asked to do so in an experimental context. As well, the quality of sexual relationships between university students who probably do not live together must certainly affect their physical interactions in the sense that they may not touch each other or hug and kiss in the same fashion that a co-habitating couple does.

Attitudes Towards Physical Affection and Sex

Given the fact that the attitude scales in general have been most successful in differentiating subjects according to their attitudes towards rape and sexual violence, it is not surprising that the factor variable on the Index of Human Affection which measured attitudes towards rape and violent sex effectively differentiated subjects grouped according to their attraction to sexual aggression. Significant main effects were also found for negative attitudes towards physical affection.

The lack of significant results of analyses on attitudes towards physical punishment and the experience of sexual pleasure may be related to the age of the subjects. Young university males are close to their peak in terms of their sexual prowess, and may well be less inclined to discriminate on a pleasure basis. In other words, sexual pleasure for a young man may have less to do with the pleasureable sensations of physical closeness than it does for an older man. As well, young men may have difficulty remembering what, if any, experiences they may have had with corporal punishment or whether or not they believed in it. Affection and sexual aggression

The results of the discriminant analysis tentatively point to the conclusion that a high attraction to sexual aggression is inconsistent with regarding sex as a physically pleasurable activity. As well, the items which discriminated between the high aggression group and the other two groups e.g., "My mother does not really care about me", "I take drugs more often than I experience orgasm", and "Abortion should be punished by society", indicate a rigidity and a reliance on artificial stimulants and religious belief which may well point to some emotional instability in the high attraction to sexual aggression group.

Contribution to Knowledge

The current study contributes to current knowledge about sexual aggression and physical affection in a number of ways. It is the first known investigation into the experience of physical affection, both past and present, and sexually aggressive responses to sexually violent stimuli. Furthermore, while the construct and the Attraction to Sexual Aggression Scale have been extensively tested by Malamuth (1989a,1989b), they have not been widely used by other researchers. Thus, the current study demonstrates that both the construct and the scale have validity and reliability.

Suggestions For Further Research

There is some degree of evidence to suggest that the experience of physical affection or touching critically affects a person's ability to experience feelings, although to date there have been few attempts to study this relationship in a systematic fashion. One of the first steps to investigating this relationship would be to develop a series of dependent 128

variables, both pencil and paper inventories and behavioral measures. Another area which merits considerable attention is the measurement of affective variables, such as the experience of pleasure and the experience of anger. Underlying these endeavors would be the goal of developing a comprehensive model of physical affection and emotional development from infancy to old age.

While there exists today some understanding of the variables which directly contribute to attraction to sexual aggression, there is still limited understanding of the complex interaction of variables which indirectly contribute to either the self reported attraction to sexual violence, or which variables push a man to actually behave in a sexually aggressive manner. The statistically complex models such as that recently proposed by Malamuth and his associates (1991) need to be tested empirically across a broad group of subjects.

References

- Abel, G.G., Barlow, D.H., Blanchard, E.B., & Guild, D. (1977). The components of rapists' sexual arousal. Archives of General Psychiatry, 34, 395-403; 895-903.
- Attorney general's commission on pornography : Final report (1986). Washington: U.S. Department of Justice.
- Barbaree, H., & Marshall, W. (1991). The role of male sexual arousal in rape: Six models. Journal of Consulting and Clinical Psychology, 59, 621-630.
- Baron, R., & Bell, P. (1977). Sexual arousal and aggression by males: Effects of type of erotic stimuli and prior provocation. Journal of Personality and Social Psychology, 35, 79-87.
- Berkowitz, L. & Donnerstein, E. (1982). External validity is more than skin deep. American Psychologist, 37, 245-257.

Bowlby, J. (1981). Attachment. Harmondsworth: Penguin.

- Brannigan, A. & Goldenberg, S. (1987). Pornography studies: The second wave. A review essay. Law in Context, 5, 56-72.
- Briere, J. & Malamuth, N. (1983). Self-reported likelihood of sexually aggressive behavior: Attitudinal versus sexual explanations. Journal of Research in Personality 17, 315-323.

- Burt, M.R. (1980). Cultural myths and supports for rape. Journal_of Personality and Social Psychology, 38, 217-276.
- Campbell, D. & Stanley, J. (1963). Experimental and quasi-experimental designs for research. Boston: Houghton Mifflin.
- Canada (1985). Special committee on pornography and prostitution. Ottawa: Canadian Government Publishing Centre.
- Check, J. (1985). <u>The hostility toward women scale</u>. Unpublished doctoral dissertation. University of Manitoba, Winnipeg, Canada.
- Check, J. & Malamuth, N. (1983). Sex role stereotyping and reactions to depictions of stranger versus acquaintance rape. Journal of Personality and Social Psychology, 45, 344-356.
- Check, J. & Malamuth, N. (1984). Can participation in pornography experiments have positive effects? <u>Journal of Sex Research</u>, 20, 14-31.
- Commission on Obscenity and Pornography. (1970). The report of the commission on obscenity and pornography. Washington, D.C.: U.S. Government Printing Office.
- Cohen, M., Garofalo, R., Boucher, R. & Seghorn, T. (1977). The psychology of rapists. In D. Chappell, R. Geis, & G. Geis (Eds.), Forcible rape. New York: Columbia University Press.

- Donnerstein, D. (1983). Aggressive pornography: Can it influence aggression against women? In G. Albee, S. Gordon, & H. Leitenberg (Eds.), Promoting sexual responsibility and preventing sexual problems. Hanover, N.H.: University of New England Press.
- Donnerstein, E. (1984). Pornography: its effect on violence against women. In N. Malamuth & E. Donnerstein (Eds.). Pornography and sexual aggression. New York: Academic Press.
- Donnerstein, E. & Berkowitz, L. (1981). Victim reactions in aggressive erotic films as a factor in violence against women. Journal of Personality and Social Psychology, 41, 710-724.
- Donnerstein, E., Donnerstein, M. & Evans, R. (1975). Erotic stimuli and aggression: Facilitation or inhibition. Journal of Personality and Social Psychology, 32, 237-244.
- Donnerstein, E., & Linz, D. (1988). A critical analysis of "A critical analysis of recent research on violent erotica". <u>The Journal of Sex</u> <u>Research</u>, 24, 348-352.
- Donnerstein, E., Linz, D., & Penrod, S. (1987). <u>The question of</u> pornography: <u>Research findings and policy implications</u>. New York: The Free Press.

- Eysenck, H.J. (1984). Sex, violence, and the media: Where do we stand now? In N. Malamuth & E. Donnerstein (Eds.), Pornography and Sexual Aggression (pp. 305-318). Orlando: Academic Press Inc.
- Farkas, G., Sine, L., & Evans, I. (1978). Personality, sexuality, and demographic differences between volunteers and nonvolunteers for a laboratory study of male sexual behavior. <u>Archives of Sexual Behavior</u>, 7, 513-520.
- Farkas, G., Sine, L., & Evans, I. (1979). The effects of distraction, performance demand, stimulus explicitness and personality on objective and subjective measures of male sexual arousal. <u>Behavior Research and</u> <u>Therapy</u>, 17, 25-32.
- Goldstein, M. & Kant, H. (1974). Pornography and sexual deviance. Berkeley: University of California Press.
- Greendlinger, V. & Byrne, D. (1986). Coercive sexual fantasies of college men as predictors of self-reported likelihood to rape and overt sexual aggression. Journal of Sex Research, 23, 1-11.

Groth, N. (1979). Men who rape. New York: Plenum.

Hall, G. & Hirschman, R. (1991). Toward a theory of sexual aggression: A quadripartite model. Journal of Consulting and Clinical Psychology, 59, 662-669.

Harlow, H. (1974). Learning to love. New York: Jason Aronson.

- Jaffe, Y., Malamuth, N., Feingold, J., & Feshbach, S. (1974). Sexual arousal and behavioral aggression. Journal of Personality and Social Psychology 30, 759-764.
- Koop, C.E. (1987). Report of the Surgeon General's workshop on pornography and public health. <u>American Psychologist</u>, 42, 944-945.
- Koss, M. & Leonard, K. (1984). Sexually aggressive men. In N. Malamuth and E. Donnerstein (Eds.), Pornography and sexual aggression (pp. 213-232). Orlando: Academic Press.
- Lederer, L. (Ed.) (1980). <u>Take back the night: Women on pornography</u>. New York: William Morrow.
- LeShan, E. (1982). Virginity clinics. Woman's Day, 52.
- Leiber, L., Plumb, M., Gerstenzang, M., & Holland, J. (1976). The communication of affection between cancer patients and their spouses. <u>Psychosomatic Medicine</u>, 38, 379-389.
- Linz, D. (1989). Exposure to sexually explicit materials and attitudes towards rape: A comparison of study results. <u>Journal of Sex Research</u>, 26, 50-84.

- Malamuth, N. (1981). Rape fantasies as a function of exposure to violent sexual stimuli. Archives of Sexual Behavior, 10, 33-44.
- Malamuth, N. (1984). Aggression against women. In N. Malamuth and E.
 Donnerstein (Eds.), Pornography and sexual aggression (pp.19-52).
 Orlando: Academic Press.
- Malamuth, N. (1986). Predictors of naturalistic sexual aggression. Journal of Personality and Social Psychology, 50, 953-962.
- Malamuth, N. (1988). Predicting laboratory aggression against female and male targets: Implications for sexual aggression. <u>Journal of Research in</u> <u>Personality</u>, 22, 474-495.
- Malamuth, N. (1989a). The attraction to sexual aggression scale: Part 1. Journal of Sex Research, 26, 26-49.
- Malamuth, N. (1989b). The attraction to sexual aggression scale: Part 2. Journal of Sex Research, 26, 324-354.
- Malamuth, N. & Briere, J. (1986). Sexual violence in the media: Indirect effects on aggression against women. Journal of Social Issues, 42, 75-92.
- Malamuth, N. & Check, J. (1980a). Penile tumescence and perceptual responses to rape as a function of the victim's perceived reactions. Journal of Applied Social Psychology, 10, 528-547.

- Malamuth, N.& Check, J. (1980b). Sexual arousal to rape and consenting depictions: The importance of the women's arousal. Journal_of Abnormal_Psychology, 89, 763-766.
- Malamuth, N.& Check, J. (1981). The effects of mass media exposure on acceptance of violence against women: A field experiment. Journal of Research in Personality, 15, 436-446.
- Malamuth, N.& Check, J. (1983). Sexual arousal to rape depictions: Individual differences. Journal of Abnormal Psychology, 92, 55-67.
- Malamuth, N. and Check, J. (1984). Debriefing effectiveness following exposure to pornographic rape depictions. Journal of Sex Research, 20, 1-13.
- Malamuth, N. & Check, J. (1985). The effects of aggressive pornography on beliefs of rape myths: Individual differences. Journal of Research in Personality, 19, 299-320.
- Malamuth, N., Check, J. & Briere, J. (1986). Sexual arousal in response to aggression: Ideological, aggressive and sexual correlates. Journal_of Personality and Social Psychology, 50, 330-340.
- Malamuth, N. & Donnerstein, E. (Eds.) (1984). Pornography and sexual aggression. Orlando: Academic Press.

- Malamuth, N., Haber, S., & Feshbach, S. (1980). Testing hypotheses regarding rape: Exposure to sexual violence, sex differences, and the "normality" of rapists. Journal of Research in Personality, 14. 121-137.
- Malamuth, N., Sockloskie, R., Koss, M., & Tanaka, J. (1991). Characteristics of aggressors against women: Testing a model using a national sample of college students. Journal of Consulting and Clinical Psychology, 59, 670-681.
- Mann J., Sidman, J., & Starr, S. (1973). Evaluating social consequences of erotic films: An experimental approach. <u>Journal of Social Issues</u>, 29, 113-131.
- Masters, W.H. & Johnson, V. E. (1970). <u>Human Sexual Inadequacy</u>. Boston: Little, Brown.
- Montagu, A. (1986). Touching: the human significance of the skin. (2nd ed.). New York: Harper & Row.
- Mould, D. (1988). A critical analysis of recent research on violent erotica. Journal of Sex Research, 24, 326-340.
- Mueller, C. & Donnerstein, E. (1981). Film-facilitated arousal and prosocial behavior. <u>Journal of Experimental Social Psychology</u>, 17, 31-41.

- Olson, Colleen F., & Worobey, John (1984). Perceived mother-daughter relations in a pregnant and nonpregnant adolescent sample. <u>Adolescence</u>, 19, 781-794.
- Padgett, V., Brislin-Slutz, J., & Neal, J. (1989). Pornography, erotica and attitudes toward women: the effects of repeated exposure. <u>Journal of Sex</u> <u>Research</u>, 26, 479-491.
- Pedhazur, E. (1982). Multiple regression in behavioral research. New York: Holt, Rinehart, & Winston.
- Prescott, J. (1975). Body pleasure and the origins of violence. The Euturist, April, pp. 64-74.
- Prescott, J. (1976, October). Phylogenetic and ontogenetic aspects of human affectional development. Paper presented at the meeting of the International Congress of Sexology, Montreal, Canada.
- Prescott, J. (1977). Phylogenetic and ontogenetic aspects of human affectional development. In R. Gemme & C. Wheeler (Eds.) Progress in sexology (pp. 431-457). New York: Plenum.
- Prescott, J., Wallace, D., & Vandervoort, H. (1974, October). Somatosensory index of human affection: A factor analytic study. Paper presented at the meeting of the National Council on Family Relations, St. Louis, Mo.

- Prescott, J., Lafortune, M., Levy, J., Wallace, D. (1978, October). Affectional deprivation in childhood and adolescence in the United States and Quebec, Canada: A cross-cultural study of sexual alienation and violence. Paper presented at the meeting of the Third International Congress of Sexology, Rome, Italy.
- Saunders, D., Fisher, W., Hewitt, E., and Clayton, J. (1985). A method for empirically assessing volunteer selection effects: Recruitment procedures and responses to erotica. Journal of Personality and Social Psychology, 49, 1703-1712.
- Schmidt, G. (1975). Male-female differences in sexual arousal and behavior during and after exposure to sexually explicit stimuli. <u>Archives</u> of <u>Sexual Behavior</u>, 4, 353-364.
- Schmidt, G. & Sigusch, V. (1970). Sex differences in responses to psychosexual stimulation by films and slides. <u>Journal of Sex Research</u>, 6, 268-283.
- Schmidt, G., Sigusch, V., & Schafer, S. (1973). Responses to reading erotic stories: Male-female differences. <u>Archives of Sexual Behavior</u>, 2, 181-199.

Schutz, William C. (1967). Joy. New York: Grove Press Inc.

- Schwartz, M., Money, J. & Robinson, K. (1981). Biosocial perspectives on the development of the proceptive, acceptive, and conceptive phases of eroticism. Journal of Sex and Marital Therapy, 7, 243-255.
- Seay, B., Hansen, E. & Harlow, H. (1962). Mother-infant separation in monkeys. Journal of Child Psychology and Psychiatry, 3, 123-132.
- Smeaton, G. & Byrne, D. (1987). The effects of R-rated violence and erotica, individual differences, and victim characteristics on acquaintance rape proclivity. Journal of Research in Personality, 21, 171-184.
- Wallace, D. (1981). Affectional climate in the family of origin and the experience of subsequent sexual-affectional behaviors. Journal of Sex and Marital Therapy, 7, 296-306.
- Wilson, W. C. & Abelson, H.I. (1972). Experience with and attitudes toward explicit sexual materials. Journal of Social Issues, 29, 41-51.
- Zillmann, D. & Bryant, J. (1982). Pornography, sexual callousness, and the trivialization of rape. Journal of Communication, 32, 10-21.
- Zillmann, D. & Bryant, J. (1984). Effects of massive exposure to pornography. In N. Malamuth and E. Donnerstein (Eds.), Pornography and Sexual Aggression. New York: Academic Press.

Appendix A

C: ID# 1. What percentage of males do you think would find the following activities sexually arousing? Circle response. necking 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% 0% petting 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% oral sex 50% 70% 0% 10% 20% 30% 40% 60% 80% 90% 100% heterosexual intercourse 60% 0% 10% 20% 40% 50% 70% 80% 90% 100% 30% anal intercourse 10% 30% 50% 20% 40% 60% 70% 80% 90% 100% 0% male homosexual acts 0% 10% 50% 20% 30% 40% 60% 70% 80% 90% 100% group sex 0% 10% 20% 30% 50% 60% 70% 80% 90% 100% 40% bondage (without consent) 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% whipping, spanking 0% 10% 20% 30% 50% 60% 40% 70% 80% 90% 100% rape 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% forcing a female to do something sexual she didn't want to do 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% transvestism 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% pedophilia 10% 0% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Appendix A (Cont'd) 2. What percentage of females do you think would find the following activities sexually arousing? Circle response. necking 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% petting 10% 0% 20% 30% 40% 50% 60% 70% 80% 90% 100% oral sex 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% heterosexual intercourse 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% anal intercourse 50% 0% 10% 20% 30% 40% 60 % 70% 80% 90% 100% male homosexual acts 10% 20% 30% 0% 40% 50% 60% 70% 80% 90% 100% group sex 0% 10% 20% 30% 70% 80% 90% 100% 40% 50% 60% bondage (tying up self or partner without consent) 10% 20% 30% 70% 80% 90% 100% 0% 40% 50% 60% whipping, spanking 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% 0% rape 20% 30% 40% 0% 10% 50% 60% 70% 80% 90% 100% forcing a male to do something sexual he didn't want to do 30% 40% 50% 0% 10% 20% 60% 70% 80% 90% 100% transvestism (wearing the clothes of the opposite sex) 40% 50% 60% 0% 10% 20% 30% 70% 80% 90% 100% pedophilia (sex with a child) 80% 90% 0% 10% 50% 60% 20% 30% 40% 70% 100% 142

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Appendix A (Cont'd)

3. How sexually arousing do you think you would find the following sexual activities if you engaged in them (even if you have never engaged in them)? necking 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% petting 0% 10% 20% 30% 40% 50% 60% 80% 70% 90% 100% oral sex 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% heterosexual intercourse 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% anal intercourse 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% male homosexual acts 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% group sex 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% bondage (tying up self or partner without consent) 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% whipping, spanking 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% rape 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% being forced to do something sexual you didn't want to do 0% 10% 20% 30% 40% 50% 60% 70% 90% 80% 100% transvestism (wearing the clothes of the opposite sex) 0% 10% 20% 30% 40% 50% 60% 70% 90% 80% 100% pedophilia (sex with a child) 20% 30% 40% 50% 70% 0% 10% 60% 80% 90% 100%

Appendix A (Cont'd)

4) If you could be assured that no one would know and that you could in no way be punished for engaging in the following acts, how likely, if at all, would you be to commit such acts? Circle reponse.

	not at al	1		Ň	егу
likely anal intercourse	1	2	` 3	4	5
group sex	1	2	3	4	5
homosexuality	1	2	3	4	5
bondage	1	2	3	4	5
whipping, spanking	1	2	3	4	5
rape	1	2	3	4	5
forcing a female to do something she didn't want to do	1	2	3	4	5
transvestism	1	2	3	4	5
pedophilia	1	2	3	4	5



Appendix B

Circle the number which best reflects your feeling about the statement.

1. I have rarely seen my parents hug and kiss each other. Agree 1 2 3 4 5 6 Disagree

2. My mother did not hug and kiss me alot. Agree 1 2 3 4 5 6 Disagree

3. My father did not hug and kiss me alot. Agree 1 2 3 4 5 6 Disagree

4. My mother does not really care about me. Agree 1 2 3 4 5 6 Disagree

5. My father does not really care about me. Agree 1 2 3 4 5 6 Disagree

6. My parents have many unfriendly arguments. Agree 1 2 3 4 5 6 Disagree

7. I do not get enough touching Agree 1 2 3 4 5 6 Disagree

8. I often get "uptight" about being touched. Agree 1 2 3 4 5 6 Disagree

9. Nudity within the family has a harmful influence upon children. Agree 1 2 3 4 5 6 Disagree

 Natural body odors are often offensive.
 Agree 1 2 3 4 5 6 Disagree

11. I can tolerate pain very well. Agree 1 2 3 4 5 6 Disagree

12. I use and experiment with drugs quite often. Agree 1 2 3 4 5 6 Disagree 13. I smoke marijuana quite often. Agree 1 2 3 4 5 6 Disagree

14. I drink alcoholic beverages quite often. Agree 1 2 3 4 5 6 Disagree

15. I get hostile and aggressive when I drink alcohol. Agree 1 2 3 4 5 6 Disagree

16. I would rather drink alcohol than smoke marijuana. Agree 1 2 3 4 5 6 Disagree

17. Alcohol is more satisfying than sex. Agree 1 2 3 4 5 6 Disagree

18. Drugs are more satisfying than sex. Agree 1 2 3 4 5 6 Disagree

19. I take drugs more often than I experience orgasm. Agree 1 2 3 4 5 6 Disagree

20. I drink alcohol more often than I experience orgasm. Agree 1 2 3 4 5 6 Disagree

21. Hard physical punishment is good for children who disobey alot. Agree 1 2 3 4 5 6 Disagree

22. Physical punishment should be allowed in the schools. Agree 1 2 3 4 5 6 Disagree

23. For unmarried persons to have sex with their lovers before marriage is wrong. Agree 1 2 3 4 5 6 Disagree

24. I often do things without thinking about them. Agree 1 2 3 4 5 6 Disagree

25. For married persons to have sex affairs with their lovers is wrong. Agree 1 2 3 4 5 6 Disagree Appendix B (Cont'd) Circle the number which best reflects your feeling about the statement.

26. I enjoy sex films where the sex partner is physically beaten or hurt. Agree 1 2 3 4 5 6 Disagree

27. I do not enjoy sex films where the sex partners give each other pleasure. Agree 1 2 3 4 5 6 Disagree

28. My mother has not adequately discussed sex with me. Agree 1 2 3 4 5 6 Disagree

29. My father has not adequately discussed sex with me. Agree 1 2 3 4 5 6 Disagree

30. Society should interfere with private sexual behavior between adults. Agree 1 2 3 4 5 6 Disagree

31. Abortion should be punished by society. Agree 1 2 3 4 5 6 Disagree

32. Capital punishment should be permitted by society. Agree 1 2 3 4 5 6 Disagree

33. Violence is necessary to really solve our problems. Agree 1 2 3 4 5 6 Disagree

34. I remember when my father physically punished me a lot. Agree 1 2 3 4 5 6 Disagree

35. I remember when my mother physically abused me a lot. Agree 1 2 3 4 5 6 Disagree

36. I often feel like hitting someone. Agree 1 2 3 4 5 6 Disagree

37. Physical punishment and pain help build a strong moral character. Agree 1 2 3 4 5 6 Disagree

38. Sexual pleasures help build a weak moral character. Agree 1 2 3 4 5 6 Disagree

39. Prostitution should be punished by society. Agree 1 2 3 4 5 6 Disagree

40. I often dream of either floating, flying, falling or climbing. Agree 1 2 3 4 5 6 Disagree

41. I tend to be extreme in my political points of view. Agree 1 2 3 4 5 6 Disagree

42. The government should have more control of the people. Agree 1 2 3 4 5 6 Disagree

43. People in government and business do not care about me and my family. Agree 1 2 3 4 5 6 Disagree

44. I remember when I ran away or wanted to run away from home. Agree 1 2 3 4 5 6 Disagree

45. Marijuana is more satisfying than sex. Agree 1 2 3 4 5 6 Disagree

46.1 usually do not get much pleasure from my sexual activity. Agree 1 2 3 4 5 6 Disagree

47. I usually experience orgasm about once a week or less than once a week. Agree 1 2 3 4 5 6 Disagree

48. I have been or need to be treated for a venereal disease. Agree 1 2 3 4 5 6 Disagree

49. I do not enjoy oral-genital sex. Agree 1 2 3 4 5 6 Disagree

50. I sometimes feel like raping someone. Agree 1 2 3 4 5 6 Disagree Appendix B (Cont'd) Circle the number which best reflects your feeling about the statement.

51. I usually enjoy the rape scenes in movies. Agree 1 2 3 4 5 6 Disagree

52. I usually feel more powerful and aggressive when I have sex with someone. Agree 1 2 3 4 5 6 Disagree

53. I get hostile and aggressive when I smoke marijuana. Agree 1 2 3 4 5 6 Disagree

54. I often feel I am sexually taken advantage of. Agree 1 2 3 4 5 6 Disagree

55. I often pray to God for help with my problems. Agree 1 2 3 4 5 6 Disagree

56. I often feel unhappy, sad or depressed. Agree 1 2 3 4 5 6 Disagree

57. I sometimes feel like killing myself. Agree 1 2 3 4 5 6 Disagree

58. I sometimes feel like killing someone else. Agree 1 2 3 4 5 6 Disagree

59. I have been accused of raping someone before. Agree 1 2 3 4 5 6 Disagree

60. I have been "knocked out" (unconscious) at least once in my life. Agree 1 2 3 4 5 6 Disagree

61. I have several scars on my body. Agree 1 2 3 4 5 6 Disagree

62. I prefer homosexual or lesbian sex relationships. Agree 1 2 3 4 5 6 Disagree

63. Some women deserve to be raped. Agree 1 2 3 4 5 6 Disagree 64. Some men deserve to be raped. Agree 1 2 3 4 5 6 Disagree

65. White men should not have sex with black women. Agree 1 2 3 4 5 6 Disagree

66. Black men shouid not have sex with white women. Agree 1 2 3 4 5 6 Disagree

67. I am against marriages between blacks and whites. Agree 1 2 3 4 5 6 Disagree

68. We would be better off if blacks and whites lived in their own neighbourhoods and went to their own schools. Agree 1 2 3 4 5 6 Disagree

69. I often have had sex when I didn't want it. Agree 1 2 3 4 5 6 Disagree

70. Women should not have the same sexual freedoms as men. Agree 1 2 3 4 5 6 Disagree

71. I often have sex just to be held and hugged. Agree 1 2 3 4 5 6 Disagree

72. Bottle-fed infants are just as happy as breast-fed infants. Agree 1 2 3 4 5 6 Disagree

73. I remember when I used to "head-bang" or rock back and forth. Agree 1 2 3 4 5 6 Disagree

74. As a child I rarely, if ever, masturbated. Agree 1 2 3 4 5 6 Disagree

75. As a teenager I rarely, if ever, masturbated. Agree 1 2 3 4 5 6 Disagree

-7

Appendix B (Cont'd) Circle the number which best reflects your feeling about the statement.

76. As a adult I rarely, if ever, masturbated. Agree 1 2 3 4 5 6 Disagree

77. I personally know a family where the father had sex with his daughter. Agree 1 2 3 4 5 6 Disagree

78. I personally know a family where the mother had sex with her son. Agree 1 2 3 4 5 6 Disagree

79. I personally know a family where a brother and sister had sex together. Agree 1 2 3 4 5 6 Disagree

80. Fathers and daughters who agree to have sex together should be severely punished. Agree 1 2 3 4 5 6 Disagree

81. Mothers and sons who agree to have sex together should be severely punished. Agree 1 2 3 4 5 6 Disagree

82. Brothers and sisters who agree to have sex together should be severely punished. Agree 1 2 3 4 5 6 Disagree

83. Rape scenes in the movies give me ideas about raping someone. Agree 1 2 3 4 5 6 Disagree

84. I do not trust men very much. Agree 1 2 3 4 5 6 Disagree

85. I do not trust women very much. Agree 1 2 3 4 5 6 Disagree

86. Some women enjoy being raped. Agree 1 2 3 4 5 6 Disagree

87. Some men enjoy being raped. Agree 1 2 3 4 5 6 Disagree

88. Violence in movies and TV makes me want to be "part of the action".

Agree 1 2 3 4 5 6 Disagree

89. I would rape someone if I knew I wouldn't be caught. Agree 1 2 3 4 5 6 Disagree

90. I like to bite, scratch or hit my sex partner when having sex. Agree 1 2 3 4 5 6 Disagree

91. I remember when my father physically hit my mother. Agree 1 2 3 4 5 6 Disagree

92. "Law and Order" is more important than my own personal "rights". Agree 1 2 3 4 5 6 Disagree

93. Censorship of rape films is not justified even if it helps to prevent the rape of women.Agree 1 2 3 4 5 6 Disagree

94. Religion and not science will ultimately solve our problems. Agree 1 2 3 4 5 6 Disagree

95. I am proud of my country. Agree 1 2 3 4 5 6 Disagree

96. I rarely have multiple orgasms when I have sex experiences. Agree 1 2 3 4 5 6 Disagree

97. Orgasms rarely give me a floating, drifting, flowing feeling. Agree 1 2 3 4 5 6 Disagree

98. Orgasms rarely make my body feel warm all over. Agree 1 2 3 4 5 6 Disagree

99. Orgasms rarely make my entire body react, e.g. waves of sensations. Agree 1 2 3 4 5 6 Disagree

100. Orgasms with my sex partner rarely make me feel that "our bodies are onc". Agree 1 2 3 4 5 6 D:sagree Appendix C

ID # _____

Please indicate your answer by circling the appropriate number.

1. Agree strongly	3. Agree a little	5. Disagree moderately
2. Agree moderately	4. Disagree a little	6. Disagree strongly

1.	Your parents often showed their affection for ea	ich	oth	ıer	by	:	
	telling each other1	2	3	4	5	6	
	embracing/hugging 1	2	3	4	5	6	
	giving each other gifts1	2	3	4	5	6	
	kissing each other1	2	3	4	5	6	
	doing things for each other1	2	3	4	5	6	

2. Your parents showed their affection for you by:

hugging you1	2	3	4	5	6
kissing you1	2	3	4	5	6
doing things for you 1	2	3	4	5	6
telling you1	2	3	4	5	6
giving you presents1	2	3	4	5	6

3. Your immediate family openly expressed affection for each other---------- 1 2 3 4 5 6

4. When your immediate family got together with other relatives and close friends they greeted you by:

shaking your hand1	2	3	4	5	6
kissing you1	2	3	4	5	6
embracing/hugging you1	2	3	4	5	6
talking to you1	2	3	4	5	6

5. You showed affection for your parents by:

-

. . .

telling them1	2	3	4	5	6	
doing things for them1	2	3	4	5	6	
embracing/hugging them1	2	3	4	5	6	
kissing them1	2	3	4	5	6	

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Appendix C (Cont'd)

Please indicate your answer by circling the appropriate number.

	3. Agree a little 4. Disagree a little								
6. At a social gathering your parents would react with disapproval if they saw a married couple:									
	ing	123456							
	pracing/hugging								
	ling hands								
		ch other1 2 3 4 5 6							
	fection among family mer our parents								
were discouraged by y	our parents								
	proved of family member								
friends you greeted									
	king hands								
kiss	ing	1 2 3 4 5 6							
	ing								
eml	pracing/hugging	1 2 3 4 5 6							
	e changes in your body :								
•	le								
	me								
	ht								
	eptance								
anx	iety	1 2 3 4 5 6							
11. You regard your d	lesire to hold your partne	r/spouse as:							
	ural	-							
	asant								
	iblesome								
	ldish								
son	nething to keep secret	1 2 3 4 5 6							

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Appendix C (Cont'd)

ID # _____

Please indicate your answer by circling the appropriate number.

	3. Agree a little 4. Disagree a little	
	you are dissatisfied with	
kissi embr holdi	ve if you saw a couple a ng acing/hugging ng hands ing with arms around eac	1 2 3 4 5 6 1 2 3 4 5 6
tellin doing kissin embr givin	ection for your partner y g him/her g things for him/her ng racing/hugging ng presents ng sexual intercourse	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
15. Your partner dislike	s being held	1 2 3 4 5 6
-	ose friends you tend to n	
	e physically close to yo	
18. You dislike holding	your partner	1 2 3 4 5 6
a fen a ma a a fer	le friend sit very close	123456

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ID #

1. Agree strongly 3. Agree a little 5. Disagree moderately 2. Agree moderately 6. Disagree strongly 4. Disagree a little 20. You find it unpleasant to have: a male friend sit very close-----1 2 3 4 5 6 a female friend sit very close-----1 2 3 4 5 6 a male friend put his hand on your arm while talking to you-----1 2 3 4 5 6 a female friend put her hand on your arm while talking to you-----1 2 3 4 5 6 21. Your partner shows affection for you by: telling you-----1 2 3 4 5 6 giving you presents-----1 2 3 4 5 6 embracing/hugging you-----1 2 3 4 5 6 kissing-----1 2 3 4 5 6 wanting to have sex-----1 2 3 4 5 6 22. Your partner dislikes holding you-----1 2 3 4 5 6 23. Your desire to hold your partner is stronger before having sexual intercourse than after-----1 2 3 4 5 6 24. If you are unable to hold someone or be held when you desire physical closeness you tend to: eat-----1 2 3 4 5 6 become silent-----1 2 3 4 5 6 take a drink-----1 2 3 4 5 6 feel tense, anxious-----1 2 3 4 5 6 become angry-----1 2 3 4 5 6 bite your nails-----1 2 3 4 5 6 masturbate-----1 2 3 4 5 6 engage in physical activity-----1 2 3 4 5 6

Appendix C (Cont'd)

Please indicate your answer by circling the appropriate number.

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ID # _____

Please indicate your answer by circling the appropriate number.

1. Agree strongly	3. Agree a little	5. Disagree moderately
2. Agree moderately	4. Disagree a little	6. Disagree strongly

25. You find it undesirable or objectionable to hold or be held when you are:

depressed1	2	3	4	5	6
anxious1					
angry1	2	3	4	5	6
frightened1	2	3	4	5	6

26. You and your partner enjoy giving each other massage-1 2 3 4 5 6

- 27. You would rather give a massage to your partner than receive one-----1 2 3 4 5 6
- 28. Finding time to engage in sensual, affectionate body pleasuring is not a problem for you------1 2 3 4 5 6

Stories

2. The Acquaintance Rape Story

It's in the evening and you're at your apartment. You're there with Nancy, a girl from your Biology Class. You've been out drinking and dancing with her at Casey's, the local disco. She is obviously high, and as she walks towards the stereo her hips swing freely from side to side, the cheeks of her ass bouncing slightly. You are starting to get a hard on looking at her bending over, her top hanging down exposing most of her two luncious breasts, a few blonde pubic hairs peeking out from below her very short shorts. With your excitement rising you recall the past events of the night. Nancy is one of the most popular girls on campus. Your eyes nearly popped out of your head when you picked her up to go to the disco. She wore a pair of tight red satin shorts that showed off the bottom of her beautiful round ass and a low cut sleeveless T-shirt that read "I'm ready when you are". You recall vividly how her large nipples stood stiffly erect under her top as you walked her to the car. Already you were imagining slipping your hands under her shirt and feeling those fantastic tits. Things couldn't have gone better at the disco. You both drank and talked a lot. At one point the subject had turned to sex, and she told you that she believed in free love, that if she was attracted to a man, it was 0.K. to go to bed with him. From what you had heard from friends, you knew that Nancy was not lying. On slow dances you had pulled her close, her breasts pressed against your chest, and your hand planted on her firm bum. She would rest her head against your shoulder and you could feel the light

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Stories

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touch of her hands on your back. Now, here you are in your apartment, alone with her, her long blonde hair exciting you even more. As she walks back to the couch her breasts bounce lightly, and her T-shirt clings to her small waist. The bulge in your pants is obvious now, and Nancy glances quickly down at it as she sits next to you. This is your chance to make out with one of the most beautiful women on campus. You put an arm around her, lean over and kiss her moist red lips. You feel her relax and the warmth of her body feels really good. She wraps her arms around you, and kisses you back, her wet tongue darting into your mouth. Encouraged, you slip one hand under the front of her T-shirt, sliding along her smooth skin until you feel the soft roundness of her breast and large nipple. As you begin pulling up her top to remove it, she moves away from you and places her hands on yours, saying "Ne, please, don't do that." You are somewhat surprised, but begin kissing her again and you careas softly her skin to arouse her. Slowly, amidst her protests, you lift her top off. You begin licking and sucking her bare breasts, your hands running over her slim waist. Occasionally, they dart beneath the elastic band of her shorts, withdrawing before Nancy can object. At last, one hand slips all the way down past her curly pubic hairs and touches her warm cunt. At this, Nancy protests again, "No, please, I really don't want to do this." Ignoring her protests, you begin removing her pants. You are really hard now, your prick is straining against the crotch of your jeans. You are trying to work her setin shorts down her legs, stroking her with one hand, smothAPPENDIX D

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ering her breasts and thighs with wet kisses. Finally they are off, and you start stroking her cunt. You are thrusting your fingers into her and brushing her clit. She cries out in pain "Stop, no more, please," but you think she doesn't mean it. You are ready for her now, you're hard as a rock. You remove your pants. Nancy is more emphatic now. "No, really I don't want to make love with you. No." You think she is just playing hard to get. You are getting on top of her now and Nancy is screaming "No, no, I don't want to. Don't, please, don't do it." You tell her you don't care, that you want her now and you're going to have her anyways. She starts pounding against your body with her fists, crying out that she doesn't want to. You give her a hard slap and tell her to be quiet. You tell her you're going to screw her and that she might as well give in. She begins sobbing now. You feel her soft pubic hair as you spread her silky smooth thighs wide apart. You just stick your dick right into her. All the way deep into her, and she lets out an involuntary gasp. Her cunt feels so warm and soft. She's screaming now, trying to push you off her but you force her back down and cover her mouth with one hand. "Shut up slut. You said you believe in free love and now you're gonna get it," you hiss into her ear. You are pumping your enganged prick into her. It feels really good, really good. Finally, she realizes that her struggles are useless and she stops struggling as you thrust harder and harder with each stroke, your balls slapping against her thighs. You start to mean like a wounded animal as you feel yourself starting to come. You're coming. You're coming new.

APPENDIX D

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You feel throbs of hot pleasure as you shoot into her. Finally, they subside and you lay on top of her warm body, spent and totally satisfied.

APPENDIX E

Stories

3. The Consenting Sex Story

It's in the evening and you're at your spartment. You're there with Nancy, a girl from your Biology Class. You've been out drinking and dancing with her at Casey's, the local disco. She is obviously high, and as she walks towards the stereo her hips swing freely from side to side, the cheeks of her ass bouncing slightly. You are starting to get a hard on looking at her bending over, her top hanging down exposing most of her two luscious breasts, a few blonde pubic hairs peeking out from below her very short shorts. With your excitement rising you recall the past events of the night. Nancy is one of the most popular girls on campus. Your eyes nearly popped out of your head when you picked her up to go to the disco. She wore a pair of tight red satin shorts that showed off the bottom of her beautiful round ass and a low cut sleeveless T-shirt that read "I'm ready when you are." You recall vividly how her large nipples stood stiffly erect under her top as you walked her to the car. Already you were imagining alipping your hands under her shirt and feeling those fantastic tits. Things couldn't have gone better at the disco. You both drank and talked a lot. At one point the subject had turned to sex, and she told you that she believed in free love, that if she was attracted to a man, it was D.K to go to bed with him. From what you had heard from friends, you knew that Mancy was not lying. On slow dances you had pulled her close, her breasts pressed against your chest, and your hand planted on her firm bum. She would rest her head against your shoulder and you could feel the light

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Stories

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touch of her hands on your back. Now, here you are in your apartment, alone with her, her long blonde hair exciting you even more. As she walks back to the couch her breasts bounce lightly, and her T-shirt clings to her small waist. The bulge in your pants is obvious now, and Nancy glances quickly down at it as she sits next to you. This is you chance to make out with one of the most beautiful women on campus. You put an arm around her, lean over and kiss her moist red lips. You feel her relax and the warmth of her body feels really good. She wraps her arms around you, and kisses you back, her wet tongue darting into your mouth. Encouraged, you slip one hand under the front of her T-shirt, sliding along her smooth skin until you feel the soft roundness of her breast and large nipple. As you begin pulling up her top to remove it, she lifts up her arms, allowing you to pull it up over her head. She is obviously willing. With the top removed you begin kissing her again and you caress softly her skin to arouse her. She tells you she really likes it. You begin licking and sucking her bare breasts, your hands running over her slim waist. Occasionally, they dart beneath the elastic band of her shorts, and Nancy does not object. At last, one hand slips all the way down past her curly pubic hairs and touches her warm cunt. At this, Nancy says "I really like the way you do that." Pleased with her compliment, you begin removing her shorts. You are really hard now, your prick is straining against the crotch of your jeans. You are working her satin shorts down her legs, stroking her with one hand,

smothering her breasts and thighs with wet kisses. Finally they are

APPENDIX E

Stories

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off, and you start stroking her cunt. You are thrusting your fingers into her and brushing her clit. Nancy is saying "Don't stop now," and you know she means it. You are ready for her now, you're hard as a rock. You remove your pants. Nancy is more emphatic now. "Please, I really want to make love with you." You realize that Nancy meant what she said about free love. You are getting on top of her now and Nancy is smiling. "I know you're going to enjoy this as much as I will." You tell her you're sure you will, that you've wanted her all night and now you're going to have her. You're really glad that you took Nancy to the Disco tonight, and you're really pleased that she came up to your apartment. You tell her you're going to screw her and to that she says, "Yes, do it to me." She begins moaning now. You feel her soft pubic hair as you spread her silky smooth thighs wide apart. You just stick your dick right into her. All the way deep into her, and she lets out an involuntary gasp. Her cunt feels so warm and soft. She's panting now, holding you close, pulling you down on top of her, and telling you how much she loves it. "You make me never want to stop," you breathe into her ear. You are pumping your engorged prick into her. It feels really, good, really, good. Her voice filled with desire, she urges you on. She meets your every move as you thrust harder and harder with each stroke, your balls slapping against her thighs. You start to moan like a wounded animal as you feel yourself starting to come. You're coming. You're coming now, and she's coming at the same time. You feel throbs of hot pleasure as you shoot into her. Finally, they subside and you lay on top of her warm body, spent and totally satisfied.

Appendix F

It was a crisp day, the sort that made one fear for the crocuses and jonquils that had already come forth. Still, Martha felt oppressively warm, so warm that she'd removed her hand-loomed shift and sat naked, fanning herself on the edge of the bed.

Such a tall bed it was. Martha's feet hung nearly a foot from the polished wood floor. Martha watched her feet as she swung them back and forth, back and forth, as a young child might. The movement caused a stirring of feeling and she lay back on the bed, pulling the quilt up.

Martha lay back in bed, rubbing the nipple of her left breast. She touched herself wherever she pleased, and laughed at the sight of her breasts bobbing over the quilt. She felt her nipples and her lips and the tiny nub between her legs. They were like buds, buds that were ready to bloom. She stroked her upper thighs, and then squeezed and pulled her nipples.

Desire shot through Martha's body as her nipples sprung to attention. She caressed each breast carefully, no longer buds but round flowers in full bloom. Slowly her hands wandered down her soft body. The wind shifted the curtains in the room, and Martha smelt the sweet breeze.

Martha slowly spread her legs, and she felt the warm, wet mound of hair. Martha moaned and squeezed and caressed the insides of her milky thighs. She rubbed the flesh on either side of her cunt. Her right hand sought out the swollen nob that pulsed between her legs.

Martha rubbed her clitoris and felt the throbs deep inside of her. Her fingers were slipping back and forth, from her clitoris down to the hot hole. The feeling built up. Finally, two fingers slid deep inside and her whole body shook with a massive orgasm. She lay still, spent. Appendix G

ID# _____

How sexually aroused were you by this story?

0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Not at all Moderately								Very		
Sexually Sexually								S	exually	
Aroused Aroused							1	Aroused		

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Appendix H

Debriefing Sheet (to be given to all subjects as they leave after the procedures)

Department of Educational Psychology and Counselling McGill University 3700 McTavish St. Montréal H3A 1Y2

Thank you very much for your participation in this study. The results of this and other studies about human sexuality help further our understanding of human sexual behavior.

While the following is probably obvious to all subjects, we would like to emphasize that the stories you read were COMPLETE FANTASY. Some of you read a story which depicted a rape. These stories were constructed specifically for this experiment. In reality, as you hopefully are aware, rape is a terrible crime, and in Canada is punishable by many years in prison. As well, rape victims suffer severe psychological damage as well as the more obvious physical effects of the assault. Unfortunately, many people still believe a number of falsehoods or myths about rape. For example, one totally unfounded myth is that if a woman does not immediately report the rape, or hesitates to report it, then the act is somehow not considered a real rape. A second falsehood is that if a woman does anything which puts her a greater risk or makes her more vulnerable to being victimized (e.g. going to a man's apartment, wearing enticing clothing, etc.) she somehow brings the rape upon herself. These

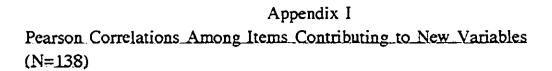
Appendix H (Cont'd)

are in fact just myths and are totally unfounded. Hopefully, you will leave this experiment with a more realistic and accurate view of rape.

Should you have further questions or comments about the study, or should you wish to make any suggestions concerning the procedures, please do not hesitate to write them down and send them to the researcher.

> Thank you. M.E. Benjamin

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	PASAI	PASA2	PASA3	PASA4	PASA14
PASA1	1.00				
PASA2	0.690	1.00			
PASA3	0.174	0.250	1.00		
PASA4	0.167	0.295	0.207	1.00	
PASA14	0.764	0.600	0.150	0.192	1.00
PASA15	0.540	0.719	0.224	0.260	0.650
PASA16	0.172	0.275	0.446	0.249	0.222
PASA17	0.179	0.298	0.154	0.608	0.218
PASA27	0.738	0.542	0.246	0.187	0.666
PASA28	0.528	0.707	0.345	0.279	0.507
PASA29	0.284	0.325	0.567	0.176	0.331
PASA30	0.116	0.197	0.090	0.404	0.126
PCON	0.727	0.780	0.493	0.485	0.735
	PASA15	PASA16	PASA17	PASA27	PASA28
PASA15	1.00				
PASA16	0.401	1.00			
PASA17	0.307	0.423			
PASA27	0.471	0.271	0.153	1.00	
PASA28	0.647	0.227	0.221	0.697	1.00
PASA29	0.318	0.406	0.221	0.383	0.455
PASA30	0.169	0.206	0.470	0.087	0.165
PCON	0.757	0.568	0.529	0.741	0.767

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Appendix I (Cont'd) Pearson Correlations Among Items Contributing to New Variables (N=138)

	PASA29	PASA30	PCON		
PASA29	1.00				
PASA30	0.215	1.00			
PCON	0.608	0.408	1.00		
	PASA5	PASA6	PASA7	PASA18	PASA19
PASA5	1.00				
PASA6	0.268	1.00			
PASA7	0.180	0.363	1.00		
PASA18	0.506	0.241	0.060	1.00	
PASA19	0.202	0.180	0.258	0.215	1.00
PASA20	0.070	0.200	0.507	0.241	0.419
PASA31	0.613	0.223	0.028	0.324	0.060
PASA32	0.169	0.632	0.258	0.116	0.223
PASA33	0.072	0.189	0.618	0.044	0.113
PUNCON	0.629	0.573	0.639	0.508	0.480

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Appendix I (Cont'd)
Pearson Correlations Among Items Contributing to New Variables
(N=138)

	PASA20	PASA31	PASA32	PASA33	PUNCON
PASA20	1.00				
PASA31	-0.027	1.00			
PASA32	0.067	0.322	1.00		
PASA33	0.395	0.134	0.168	1.00	
PUNCON	0.528	0.597	0.536	0.586	1.00
	PASA8	PASA9	PASA10	PASA11	PASA21
PASA8	1.00				
PASA9	0.719	1.00			
PASA10	0.426	0.395	1.00		
PASA11	0.512	0.452	0.777	1.00	
PASA21	0.562	0.504	0.341	0.332	1.00
PASA22	0.457	0.637	0.340	0.304	0.717
PASA23	0.140	0.185	0.364	0.366	0.337
PASA24	0.326	0.274	0.356	0.459	0.347
PASA34	0.466	0.469	0.314	0.330	0.495
PASA35	0.395	0.551	0.365	0.322	0.435
PASA36	0.288	0.358	0.695	0.621	0.265
PASA37	0.375	0.301	0.157	0.297	0.291
PAGG	0.720	0.724 ·	0.681	0.723	0.680

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Appendix I (Cont'd)

(<u>N=13</u> 8)					
	PASA22	PASA23	PASA24	PASA34	PASA35
PASA22	1.00				
PASA23	0.360	1.00			
PASA24	0.323	0.191	1.00		
PASA34	0.386	0.276	0.307	1.00	
PASA35	0.554	0.246	0.273	0.685	1.00
PASA36	0.257	0.475	0.250	0.427	0.441
PASA37	0.226	0.185	0.365	0.567	6.527
PAGG	0.658	0.458	0.577	0.743	0.733
	PASA36	PASA37	PAGG		
PASA36	1.00				
PASA37	0.327	1.00			
PAGG	0.663	0.615	1.00		
				,	
	PASA40	PASA41	PASA42	PLKUNC	
PASA40	1.00				
PASA41	0.298	1.00			
PASA42	0.347	0.214	1.00		
PLKUNC	0.803	0.738	0.605	1.00	

Pearson Correlations Among Items Contributing to New Variables (N=138)

Appendix I (Cont'd)
Pearson Correlations Among Items Contributing to New Variables
(N=138)

PASA43 1.00 0.749 0.317 0.313 0.821	PASA44 1.00 0.353 0.324	PASA45 1.00 0.663	PASA46	PLKAGG
1.00 0.749 0.317 0.313	1.00 0.353	1.00	PASA46	PLKAGG
0.749 0.317 0.313	0.353			
0.317 0.313	0.353			
0.313				
	0.324	0 663		
0.821		0.005	1.00	
	0.828	0.707	0.703	1.00
RASA1	RASA2	RASA3	RASA4	RASA14
1.00				
0.797	1.00			
0.482	0.602	1.00		
0.331	0.498	0.510	1.00	
0.797	0.724	0.480	0.358	1.00
0.701	0.873	0.537	0.481	0.767
0.432	0.502	0.678	0.446	0.418
0.389	0.547	0.483	0.805	0.501
0.887	0.772	0.545	0.352	0.795
0.753	0.932	0.617	0.495	0.703
0.520	0.595	0.891	0.484	0.521
0.396	0.544	0.528	0.768	0.396
	0.888	0.778	0.686	0.793
	RASA1 1.00 0.797 0.482 0.331 0.797 0.701 0.432 0.389 0.887 0.389 0.887 0.753 0.520 0.396	RASA1RASA21.000.7971.000.4820.6020.3310.4980.7970.7240.7010.8730.4320.5020.3890.5470.8870.7720.7530.9320.5200.5950.3960.544	RASA1RASA2RASA31.001.000.7971.000.4820.6021.000.3310.4980.5100.7970.7240.4800.7010.8730.5370.4320.5020.6780.3890.5470.4830.8870.7720.5450.7530.9320.6170.5200.5950.8910.3960.5440.528	RASA1RASA2RASA3RASA41.001.00-0.7971.00-0.4820.6021.000.3310.4980.5101.000.7970.7240.4800.3580.7010.8730.5370.4810.4320.5020.6780.4460.3890.5470.4830.8050.8870.7720.5450.3520.7530.9320.6170.4950.5200.5950.8910.4840.3960.5440.5280.768

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	RASA15	RASA16	RASA17	RASA27	RASA28
RASA15	1.00				
RASA16	0.552	1.00			
RASA17	0.587	0.472	1.00		
RASA27	0.706	0.432	0.376	1.00	
RASA28	0.858	0.495	0.533	0.817	1.00
RASA29	0.549	0.652	0.468	0.575	0.638
RASA30	0.531	0.387	0.784	0.439	0.565
RCON	0.862	0.690	0.730	0.819	0.891

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Appendix I (Cont'd)
Pearson Correlations Among Items Contributing to New Variables
(N=138)

	RASA29	RASA30	RCON
RASA29	1.00		
RASA30	0.540	1.00	
RCON	0.788	0.723	1.00

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Appendix I (Cont'd)
Pearson Correlations Among Items Contributing to New Variables
(N <u>=13</u> 8)

	RASA5	RASA6	RASA7	RASA18	RASA19
RASA5	1.00				
RASA6	0.406	1.00			
RASA7	0.232	0.214	1.00		
RASA18	0.702	0.246	0.194	1.00	
RASA19	0.295	0.339	0.266	0.378	1.00
RASA20	0.224	0.173	0.758	0.293	0.444
RASA31	0.730	0.319	0.203	0.508	0.237
RASA32	0.377	0.786	0.238	0.179	0.312
RASA33	0.111	0.200 '	0.813	0.116	0.228
RUNCON	0.712	0.582	0.692	0.615	0.563
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	RASA20	RASA31	RASA32	RASA33	RUNCON
RASA20	1.00				
RASA31	0.170	1.00			
RASA32	0.210	0.441	1.00		
RASA33	0.707	0.205	0.228	1.00	
RUNCON	0.683	0.694	0.612	0.648	1.00

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(N=138)

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	RASA8	RASA9	RASA10	RASA11	RASA21
RASA8	1.00				
RASA9	0.768	1.00			
RASA10	0.606	0.587	1.00		
RASA11	0.495	0.446	0.690	1.00	
RASA21	0.789	0.674	0.617	0.473	1.00
RASA22	0.664	0.830	0.541	0.403	0.765
RASA23	0.263	0.324	0.566	0.395	0.470
RASA24	0.410	0.337	0.382	0.689	0.483
RASA34	0.715	0.639	0.528	0.455	0.663
RASA35	0.622	0.836	0.507	0.365	0.578
RASA36	0.419	0.421	0.832	0.619	0.528
RASA37	0.624	0.545	0.480	0.589	0.635
RAGG	0.810	0.811	0.795	0.738	0.828

Appendix I (Cont'd) Pearson Correlations Among Items Contributing to New Variables

RLKUNC 0.823

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(N=138)	<u>_</u>				
	RASA22	RASA23	RASA24	RASA34	RASA35
RASA22	1.00				
RASA23	0.499	1.00			
RASA24	0.362	0.257	1.00		
RASA34	0.656	0.289	0.408	1.00	
RASA35	0.84 ¹	0.376	0.305	0.784	1.00
RASA36	0.461	0.628	0.342	0.520	0.439
RASA37	0.580	0.322	0.542	0.740	0.607
RAGG	0.821	0.552	0.617	0.825	0.799
	RASA36	RASA37	RAGG		
RASA36	1.00				
RASA37	0.458	1.00			
RAGG	0.719	0.799	1.00		
	RASA40	RASA41	RASA42	RLKUNC	
RASA40	1.00				
RASA41	0.348	1.00			
RASA42	0.338	0.171	1.00		

0.720

0.613

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Appendix I (Cont'd) Pearson Correlations Among Items Contributing to New Variables (N=138)

Appendix I (Cont'd) Pearson Correlations Among Items Contributing to New Variables (N=138)

	RASA43	RASA44	RASA45	RASA46	RLKAGG
RASA43	1.00				
RASA44	0.789	1.00			
RASA45	0.444	0.370	1.00		
RASA46	0.506	0.363	0.799	1.00	
RLKAGG	0.862	0.802	0.774	0.804	1.00
	CASA1	CASA2	CASA3	CASA4	CASA14
CASA1	1.00				
CASA2	0.797	1.00	٠		
CASA3	0.494	0.576	1.00		
CASA4	0.297	0.407	0.436	1.00	
CASA14	0.816	0.676	0.342	0.140	1.00
CASA15	0.734	0.823	0.499	0.236	0.800
CASA16	0.315	0.352	0.583	0.205	0.291
CASA17	0.331	0.449	0.325	0.534	0.366
CASA27	0.882	0.723	0.460	0.246	0.835
CASA28	0.760	9.867	0.517	0.335	0.706
CASA29	0.487	0.554	0.815	0.321	0.442
CASA30	0.337	0.463	0.284	0.652	0.298
CCON	0.834	0.872	0.718	0.532	0.771

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Appendix I (Cont'd) Pearson Correlations Among Items Contributing to New Variables (N=138)

	CASA15	CASA16	CASA17	CASA27	CASA28
CASA15	1.00				
CASA16	0.479	1.00			
CASA17	0.392	0.388	1.00		
CASA27	0.759	0.386	0.297	1.00	•
CASA28	0.861	0.425	0.344	0.836	1.00
CASA29	0.523	0.553	0.229	0.550	0.588
CASA30	0.288	0.226	0.648	0.353	0.377
CCON	0.845	0.600	0.594	0.841	0.869

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	CASA29	CASA30	CCON
CASA29	1.00		
CASA30	0.307	1.00	
CCON	0.726	0.588	1.00

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(N=138)					
	CASA5	CASA6	CASA7	CASA18	CASA19
CASA5	1.00				
CASA6	0.298	1.00			
CASA7	0.175	0.310	1.00		
CASA18	0.532	0.212	0.163	1.00	
CASA19	0.227	0.469	0.224	0.448	1.00
CASA20	0.173	0.304	0.718	0.314	0.468
CASA31	0.758	0.244	0.183	0.492	0.207
CASA32	0.269	0.666	0.283	0.181	0.371
CASA33	0.054	0.227	0.828	0.082	0.191
CUNCON	0.634	0.577	0.712	0.590	0.565
CASA20	CASA20 1.00	CASA31	CASA32	CASA33	CUNCON
		1.00			
CASA31	0.149	1.00	1.00		
CASA32	0.239	0.353	1.00	1.00	
CASA33		0.098	0.259	1.00	
CUNCON	0.715	0.654	0.588	0.643	1.00

Appendix I (Cont'd) Pearson Correlations Among Items Contributing to New Variables (N=138)

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Appendix I (Cont'd) Pearson Correlations Among Items Contributing to New Variables (N=138)

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	CASA8	CASA9	CASA10	CASA11	CASA21
CASA8	1.00				
CASA9	0.777	1.00			
CASA10	0.617	0.473	1.00		
CASA11	0.560	0.441	0.697	1.00	
CASA21	0.685	0.558	0.461	0.449	1.00
CASA22	0.644	0.775	0.377	0.355	0.742
CASA23	0.238	0.262	0.490	0.447	0.370
CASA24	0.436	0.387	0.346	0.557	0.466
CASA34	0.760	0.593	0.518	0.543	0.656
CASA35	0.573	0.792	0.301	0.347	0.490
CASA36	0.367	0.364	0.667	0.684	0.373
CASA37	0.522	0.416	0.425	0.606	0.551
CAGG	0.822	0.780	0.713	0.767	0.763

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Appendix I (Cont'd)
Pearson Correlations Among Items Contributing to New Variables
(N=138)

		CASA22	CASA23	CASA24	CASA34	CASA35
	CASA22	1.00				
	CASA23	0.369	1.00			
	CASA24	0.444	0.199	1.00		
	CASA34	0.574	0.369	0.424	1.00	
	CASA35	0.721	0.330	0.294	0.663	1.00
	CASA36	û.335	0.604	0.325	0.505	0.375
	CASA37	0.424	0.341	0.522	0.731	0.525
	CAGG	0.758	0.521	0.629	0.846	0.736
		CASA36	CASA37	CAGG		
	CASA36	1.00				
	CASA37	0.474	1.00			
	CAGG	0.682	0.762	1.00		
		CASA40	CASA41	CASA42	CLKUNC	
	CASA40	1.00				with 1
	CASA41	0.291	1.00			
	CASA42	0.355	0.212	1.00		
* -	CLKUNC	0.803	0.720	0.632	1.00	

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Appendix I (Cont'd)
Pearson Correlations Among Items Contributing to New Variables
(N=138)

	CASA43	CASA44	CASA45	CASA46	CLKAGG
CASA43	1.00				
CASA44	0.774	1.00			
CASA45	0.299	0.274	1.00		
CASA46	0.502	0.401	0.653	1.00	
CLKAGG	.0.842	0.799	0.677	0.810	1.00

Appendix J Pearson Correlations Between Aggression and Physical Affection Variables * - Significant .05 ** - Significant .01 (2-Tailed)						
FCTR1	FCTR1 1.00	FCTR2 .2177*	FCTR3 .4726**	FCTR4 .3107**	FCTR5 0321	_

FCTR1	1.00	.2177*	.4726**	.3107**	0321	
FCTR2	.2177*	1.000	.2847**	0617	.0610	
FCTR3	.4726**	.2847**	1.000	.3954**	0270	
FCTR4	.3107**	0617	.3954**	1.000	.0746	
FCTR5	0321	.0610	0270	.0746	1.000	
FCTR6	.0912	0030	0423	.0667	.2097*	
FCTR7	0623	0630	1187	.0610	.2788**	
FCTR8	.0711	0517	.0321	.2893**	.1947*	
FCTR9	.1313	0021	.0576	.0419	.0270	
FCTR10	.1107	0328	0629	.0377	.0489	
AFCTR1	0946	.1087	1048	5489**	.0822	
AFCTR2	0748	.1996*	0336	1835*	0843	
AFCTR3	4011**	0777	2712**	1153	0397	
CAROUS	0529	0440	.0361	.1560	1177	
RAROUS	3778**	0871	1999*	0896	1211	
PCON	.0577	2356**	.1374	.2759**	0883	
PUNCON	2701**	.0996	0556	0310	.1401	
PAGG	4652	0279	1444	0459	.0805	
PLKUNC	3522**	0897	2865**	0615	.1126	
PLKAGG	5510**	2719**	3688**	0069	.1262	

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Appendix J Cont'd

Pearson Correlations Between Aggression and Physical Affection Variables * - Significant .05 ** - Significant .01 (2-Tailed)

	FCTR1	FCTR2	FCTR3	FCTR4	FCTR5
CCON	0037	1728*	0301	.1886*	.0188
CUNCON	2654**	.0574	0390	.0564	.1912*
CAGG	4896**	1862*	1489	0043	.0978
CLKUNC	3719**	0701	2802**	.0016	.2746**
CLKAGG	5254**	1706*	3272**	.0064	.1315
RCON	0054	2024*	.0107	.1937*	0566
RUNCON	3127**	.0619	0183	.9822	.1625
RAGG	5157**	1012	1688*	0321	.0847
RLKUNC	2946**	0471	2116*	.0728	.2333**
RLKAGG	5583**	1203	3297**	0211	.0867
AGGSCR	4795**	1085	1432	.0147	.0757
	FCTR6	FCTR7	FCTR8	FCTR9	FCTR10
FCTR1	.0912	0623	.0711	.1313	.1107
FCTR2	0030	0630	0517	0021	0328
FCTR3	0423	1187	0321	.0576	.0629
FCTR4	.0667	.0610	.2893**	.0419	.0377
FCTR5	.2097*	.2788**	.1947*	0270	.0489
FCTR6	1.000	.0770	.1161	.1493	.1295
FCTR7	.0770	1.000	.1075	.0285	.0675
FCTR8	.1161	.1075	1.000	.0748	.0174
FCTR9	.1493	.0285	.0748	1.000	.0404
FCTR10	.1295	.0675	0174	0404	1.000
AFCTR1	0350	.0063	1692	0665	0101
AFCTR2	.0177	.0545	0255	2647**	0976
AFCTR3	.0723	.0771	.0543	1555	1108
CAROUS	.0608	0397	.1035	.0715	.1295
RAROUS	0723	.0424	0650	.0957	.1422
PCON	0265	.1079	.1766*	.1270	.0368
PUNCON	.1639	.2846**	0097	.0075	.0267

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	Appendix J (Cont'd)
Pearson Correlations	Between Aggression and Physical Affection Variables
* - Significant .05	** - Significant .01 (2-Tailed)

	FCTR6	FCTR7	FCTR8	FCTR9	FCTR10
PAGG	.0503	.1356	.0572	1786*	.0335
PLKUNC	.1575	.3787**	.0291	.0280	.0802
PLKAGG	.0639	.1551	.1027	0866	.0277
CCON	0093	.0498	.1977*	1059	0895
CUNCON	.2332**	.2105*	.0654	0878	.0499
CAGG	.0681	.0812	0409	2648**	.0542
CLKUNC	.2020*	.3348**	.0532	0766	.0726
CLKAGG	.0362	.1395	.0270	1879*	.0553
RCON	.0064	.1236	.1525	0374	0063
RUNCON	.2013*	.2341**	.0850	0770	.0480
RAGG	.0837	.1190	.0201	2471**	.0707
RLKUNC	.1500	.4078**	.0358	0527	.0818
RLKAGG	.0391	.1283	0035	1865*	.0439
AGGSCR	.0370	.1207	.0442	1896*	.0333
	AFCTR1	AFCTR2	AFCTR3	CAROUS	RAROUS
FCTR1	0946	0748	4011**	0529	3778**
FCTR2	.1087	.1996*	0777	0440	0871
FCTR3	1048	0336	2712**	.0361	1999
FCTR4	5489**	1835*	1153	.1560	0896
FCTR5	.0822	0843	0397	1177	1211
FCTR6	0350	.0177	.0723	.0608	0723
FCTR7	.0063	.0545	.0771	0397	.0424
FCTR8	1692	0255	.0543	.1035	0605
FCTR9	0665	2647**	1555	.0715	0957
FCTR10	0101	0976	1108	1295	1422
AFCTR1	1.000	.2647**	.0972	.0182	.0466
AFCTR2	.2647**	1.000	.2612**	0730	0462
AFCTR3				010 0	
AICIN	.0972	.2612**	1.000	.0137	.0734

	Appendix J (Cont'd)
Pearson Correlations	Between Aggression and Physical Affection Variables
* - Significant .05	** - Significant .01 (2-Tailed)

	AFCTR1	AFCTR2	AFCTR3	CAROUS	RAROUS
CAROUS	.0182	0730	.0137	1.000	.3961**
RAROUS	.0466	0462	.0734	.3961**	1.000
PCON	1158	1572	.0462	.2364**	.0799
PUNCON	.1875*	.1189	.1222	.1205	.3291**
PAGG	.0259	.1348	.2582*	.0509	.4414**
PLKUNC	.0820	.0716	.1 <i>5</i> 87	.0944	.2087*
PLKAGG	0500	0449	.2894**	.0507	.2546**
CCON	1557	0420	0455	.2517	.0055
CUNCON	0009	.0912	.0943	.0832	.1292
CAGG	.0006	.0804	.2002*	.0785	.3121**
CLKUNC	.0431	.0801	.0332	.0439	.1204
CLKAGG	0457	0046	.1355	.1187	.2978**
RCON	1687	1505	.0134	.0556	.0415
RUNCON	.0057	.0441	.1534	.0471	.2086*
RAGG	.0079	.0110	.2663**	0244	.4010**
RLKUNC	0187	.0214	.0729	.0016	.1614
RLKAGG	0584	0298	.2394**	.0238	.3571**
AGGSCR	0310	.0808	.2714**	.0167	.3978**
	PCON	PUNCON	PAGG	PLKUNC	PLKAGG
FCTR1	.0577	2701**	4652**	3522**	.5510**
FCTR2	2356**	.0996	0279	0897	2719**
FCTR3	.1374	0556	1444	2865**	3688**
FCTR4	.2759**	0310	0459	0615	0069
FCTR5	0883	.1401	.0805	.1126	.1262
FCTR6	0265	.1639	.0503	.1575	.0639
FCTR7	.1079	.2846**	.1356	.3787**	.1551
FCTR8	.1766*	0097	.0572	.0291	.1027
FCTR9	.1270	.0075	1786*	.0208	0866

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Pearson Correlations Between Aggression and Physical Affection Variables * - Significant .05 ** - Significant .01 (2-Tailed)

<u>-</u> -	PCON	PUNCON	PAGG	PLKUNC	PLKAGG
FCTR10	0368	0267	.0335	.0802	.0277
AFCTRI	1158	.1875*	.0259	.0820	0500
AFCTR2	1572	.1189	.1348	.0716	0449
AFCTR3	.0462	.1222	.2582**	.1587	.2894**
CAROUS	.2364**	.1205	.0509	.0944	.0507
RAROUS	.0799	.3291**	.4414**	.2087*	.2546**
PCON	1.000	.0803	0391	.0325	.0493
PUNCON	.0803	1.000	.5663**	.5452**	.2535**
PAGG	0361	.5663**	1.000	.4123**	.5896**
PLKUNC	.0325	.5452**	.4123**	1.000	.5257**
PLKAGG	.0493	.2535**	.5896**	.5257**	1.000
CCON	.4741**	.0025	0737	.0086	.0198
CUNCON	.0094	.6666**	.4038**	.4948**	.2651**
CAGG	.0548	.3969**	.6813**	.3342**	.5906**
CLKUNC	.0629	.4809**	.3246**	.7420**	.4762**
CLKAGG	.0663	.2418**	.5074**	.4364**	.7154**
RCON	.4728**	.0928	.0249	.1506	.1379
RUNCON	.0947	.6872**	.4453**	. <i>5</i> 395**	.3026**
RAGG	.0277	.4231**	.7222**	.4013**	.6153**
RLKUNC	.0411	.4989**	.3332**	.7990**	.4515**
RLKAGG	.0718	.2982**	5622**	.4965**	.7996**
AGGSCR	.0250	.5165**	.9444**	.3940**	.6819**
	CCON	CUNCON	CAGG	CLKUNC	CLKAGG
FCTR1	0037	2654**	4896**	3719**	5254**
FCTR2	1728*	.0574	1862*	0701	1706
FCTR3	0301	0390	1489	2802**	3272**
FCTR4	.1886*	.0564	0043	.0016	.0064
FCTR5	.0188	.1912*	.0978	.2746**	.1315
FCTR6	0093	.2332**	.0681	.2020*	.0362

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Pearson Co	Pearson Correlations Between Aggression and Physical Affection Variables					
* - Significant .05 ** - Significant .01 (2-Tailed)						
FCTR7	.0498	.2105*	.0812	.3348**	.1395	
FCTR8	.1977*	.0654	0409	.0532	.0270	
FCTR9	1059	0878	2648**	0766	1879*	
FCTR10	0895	.0499	.0542	.0726	.0553	
AFCTR1	1557	0009	.0006	.0431	0457	
AFCTR2	0420	.0912	.0804	.0801	0046	
AFCTR3	0455	.0943	.2002*	.0332	.1355	
CAROUS	.2517**	.0832	.0785	.0439	.1187	
RAROUS	.0055	.1292	.3121**	.1204	.2978**	
PCON	.4741**	.0094	.0548	.0629	.0663	
PUNCON	.0025	.6666**	.3969**	.4809**	.2418**	
PAGG	0737	.4038**	.6813**	.3246**	.5074**	
PLKUNC	.0086	.4948**	.3342**	.7420**	.4364**	
PLKAGG	.0198	.2651**	.5906**	.4762**	.7154**	
CCON	1.000	.4205**	.3462**	.4043**	.3449**	
CUNCON	.4205**	1.000	.6390**	.6987**	.4984**	
CAGG	.3462**	.6390**	1.000	.5184**	.7397**	
CLKUNC	.4043**	.6987**	.5184**	1.000	.6383**	
CLKAGG	.3449**	.4984**	.7397**	.6383**	1.000	
RCON	.6830**	.3394**	.3031**	.2997**	.2827**	
RUNCON	.3449**	.8674**	.6295**	.6426**	.4754**	
RAGG	.1927*	.5648**	.8683**	.4732**	.6687*	
RLKUNC	.2354**	.6113**	.4246**	.8328**	.4912**	
RLKAGG	.2365**	.4494**	.7186**	.5664**	.8474**	
AGGSCR	0415	.3716**	.7175**	.3413**	.5545**	

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Appendix J (Cont'd)

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Appendix J (Cont'd)
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Pearson Correlations Between Aggression and Physical Affection Variables * - Significant .05 ** - Significant .01 (2-Tailed)

<u></u>		<u></u>			
	RCON	RUNCON	RAGG	RLKUNC	RLKAGG
FCTR1	0054	3127**	5157**	2946**	5583**
FCTR2	2024*	.0619	1012	0471	1203
FCTR3	.0107	0183*	1688*	2116*	3297**
FCTR4	.1937*	.0822	0321	.0728	0211
FCTR5	0566	.1625	.0847	.2333**	.0867
FCTR6	.0064	.2013*	.0837	.1500	.0391
FCTR7	.1236	.2341**	.1190	.4078**	.1283
FCTR8	.1525	.0850	.0201	.03 <i>5</i> 8	0035
FCTR9	0374	0770	2471**	0527	1865*
FCTR10	0063	.0480	.0707	.0818	.0439
AFCTR1	1687	.0057	.0079	0187	0584
AFCTR2	1505	.0041	.0110	.0214	0298
AFCTR3	.0134	.1 <i>5</i> 34	.2663**	.0729	.2394**
CAROUS	.0556	.0471	0244	.0016	.0238
RAROUS	.0415	.2086*	.4010**	.1614	.3571**
PCON	.4728**	.0947	.0277	.0411	.0718
PUNCON	.0928	.6872**	.4231**	.4989**	.2982**
PAGG	.0249	.4453**	.7222**	.3332**	.5622**
PLKUNC	.1506	.5395**	.4013**	.7990**	.4965**
PLKAGG	.1379	.3026**	.6153**	.4515**	.7996**
CCON	.6830**	.3449**	.1927*	.2354**	.2356**
CUNCON	.3394**	.8674**	.5648**	.6113**	.4494**
CAGG	.3031**	.6295**	.8683**	.4246**	.7186**
CLKUNC	.2997**	.6426**	.4732**	.8328**	.5664**
CLKAGG	.2827**	.4754**	.6687**	.4912**	.8474**
RCON	1.000	.4853**	.3650**	.4376**	.4009**
RUNCON	.4853**	1.000	.6900**	.6773**	.5378**
RAGG	.3650**	.6900**	1.000	.5036**	.7674**
RLKUNC	.4376**	.6773**	.5036**	1.000	.5976**
RLKAGG	.4009**	.5378**	.7674**	.5976**	1.000

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Appendix J (Cont'd)	
Pearson Correlations Between Aggression and Physical Affection Variables	
* - Significant .05 ** - Significant .01 (2-Tailed)	

	RCON	RUNCON	RAGG	RLKUNC	RLKAGG
AGGSCR	.0561	.4232**	.7406**	.3332**	.6096**
	AGGSCR				
FCTR1	4795**				
FCTR2	1085				
FCTR3	1432				
FCTR4	.0147				
FCTR5	.0757				
FCTR6	.0370				
FCTR7	.1207				
FCTR8	.0442				
FCTR9	1896*				
FCTR10	.0333				
AFCTR1	0310				
AFCTR2	.0808				
AFCTR3	.2714**				
CAROUS	.0167				
RAROUS	.3978**				
PCON	.0250				
PUNCON	.5165**				
PAGG	.9444**				
PLKUNC	.3940**				
PLKAGG	.6819**				
CCON	0415				
CUNCON	.3716**				
CAGG	.7175**				
CLKUNC	.3413**				
CLKAGG	.5545**				
RCON	.0561				
RUNCON	.4232**				

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Appendix J (Cont'd)

Pearson Correlations Between Aggression and Physical Affection Variables * - Significant .05 ** - Significant .01 (2-Tailed)

	AGGSCR
RAGG	.7406**
RLKUNC	.3332**
RLKAGG	.6096**
AGGSCR	1.000