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# CAN THE CONFLUENCE MODEL PREDICT FEMALE SEXUAL AGGRESSION?

by  
Nichole M. Clay-Valorio

A Thesis

Submitted in partial fulfillment of the requirements of the  
Master of Arts in Mental Health Counseling and Applied Psychology Degree  
of  
The Graduate School  
a  
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Approved by \_\_\_\_\_  
Advisor

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## ABSTRACT

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CAN THE CONFLUENCE MODEL PREDICT FEMALE SEXUAL AGGRESSION?

2007/08

Dr. D.J. Angelone

Master of Arts in Mental Health Counseling and Applied Psychology

The purpose of this exploratory investigation was to test the pathways of the Confluence Model of Sexual Aggression (Malamuth, Heavey & Linz, 1996) for prediction of self-reported female sexual aggression utilizing various computerized measures with college aged female participants ( $n = 104$ ). The confluence model states that sexual aggression is the interactive result of two simultaneous pathways: hostile masculinity (and/or hostile femininity) and impersonal sex. It was hypothesized that a combination of either of the hostility pathways (feminine vs. masculine) and the impersonal sex pathway would predict sexual aggression. Modified versions of the Sexual Experiences Scale (SES), Coercive Sexuality Scale (CSS), and the Auburn Differential Masculinity Inventory were used as predictor and criterion variables. A hierarchical regression analysis conducted on the CSS revealed support for the hostile masculinity construct as a predictor of female sexual aggression. However, these analyses did not support the interaction of pathways as predictors for either the SES or CSS. Implications for further research for predictors of female sexual aggression are discussed.

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## TABLE OF CONTENTS

Acknowledgements	ii
List of Tables	iv
CHAPTER	PAGE
I. Introduction and Literature Review	1
Purpose of Study	10
II. Methodology	12
Power Analysis and Participants	12
Procedure	12
Measures	13
III. Results	19
Do women self-report mild and moderate levels of sexually aggressive behaviors?	19
Creation of Variables and Constructs	20
Does the Confluence Model predict female sexual aggression?	21
IV. Summary, Conclusions, and Recommendations	28
References	35

## LIST OF TABLES

TABLE	PAGE
Table 1 Frequencies of Item Endorsement of the SES	22
Table 2 Frequencies of Item Endorsement of the CSS	23
Table 3 Chi Square for the SES and CSS	24
Table 4 Bivariate Correlation Matrix of Constructs and Variables	25
Table 5 Regression Analysis of the CSS and Constructs using the Enter Method	26
Table 6 Regression Analysis of the SES and Constructs using the Enter Method	27

## CHAPTER I

### Introduction and Literature Review

Sexually aggressive behaviors are pervasive problems that our society continually endures. According to the National Crime Victims Survey (NCVS), there were 188, 960 incidents of sex crimes (e.g., attempted or completed sexual assault and rape) reported in 2005. Across different sex crimes men were reported as the typical perpetrators 98% of the time (NCVS, 2005). Although the number of behaviors perpetrated by women is extremely low in this survey, there is evidence suggesting that women can serve as perpetrators of sexual aggression (Anderson et al., 2005; Anderson & Newton, 2004; Anderson & Struckman-Johnson, 1998; Fiebert & Osburn, 1999; Fiebert & Tucci, 1998; Frieze, 2000; Krahé, Waizenhöfer & Möller, 2003; Olsen, 2005; Russell, 2001; Simpson & Senn, 2003; Sorenson & Taylor, 2005; Struckman-Johnson, 1988; Struckman-Johnson, Struckman-Johnson & Anderson, 2003), and that the NCVS data collection and subsequent interpretation obscured the actual percentage.

In fact, the data highlighting only a small percentage of female perpetrators can be interpreted in two ways. First, this small percentage may be consistent with feminist theory that women are less likely to behave in a sexually aggressive manner than men. This is the traditional view that has dominated sexual aggression research and treatment programs. Second, women do behave in a sexually aggressive manner but the aforementioned data represent a more severe set of behaviors (e.g., sexual assault) and do not include less severe behaviors (e.g., harassment or verbal pressure). This second view

has some support in the literature and is the primary interest for this study.

One major issue confounding the appropriate conclusions about female perpetration of sexual aggression against men is a lack of a universal definition of sexual aggression. Without an agreed upon definition of sexual aggression and the behaviors it encompasses, it is difficult to combine research findings for overall agreement and meaning. Also, the general consensus of what sexual aggression means tends to come from the large amount of research concerning men as the primary perpetrators. Finally, not only is a cohesive definition difficult to find for the term sexual aggression, but it is also used interchangeably in research with terms such as sexual assault, sexual abuse, sexual coercion, sexual harassment and sexual pressure. As a result of the large array of behaviors suggested to be part of sexual aggression, the use of a broad definition may better represent female perpetration. Therefore, for purposes of this study, sexual aggression is broadly defined as behaviors or tactics employed by one person to engage in sexual activity with another unwilling person usually under verbal pressure or emotional duress, an intoxicated state or by force (Krahé, Waizenhöfer & Möller, 2003; Oswald & Russell, 2006).

A broad definition of sexual aggression can only be followed by a broad view of the specific behaviors that encompass the definition. Thus, the behaviors suggested to be part of sexual aggression can be best represented on a continuum of severity (Malamuth, Heavey, & Linz, 1996; Nagayama & Hirschman, 1994). At one end of this continuum are the least severe behaviors such as harassment (e.g., inappropriate joke telling, suggestive looks and sexual comments). In college environments, 61% of males and 62% of females reported being victims of sexual harassment (Hill & Silva, 2005) suggesting both sexes



are victims and potentially perpetrators of these behaviors. At the other end of the continuum are the most severe behaviors (e.g., threats of physical force or rape, purposeful intoxication, physical force or assault and rape). As stated, the NCVS (2005) appears to represent the traditional view of perpetration in that significantly more men (98%) than women (2%) that perpetrate these behaviors.

Another confounding issue to understanding sexual aggression comes when the moderate behaviors are taken into consideration. These behaviors can include emotional blackmail, threats to end relationships or cheat, instigated arguments to gain attention and attempted physical arousal by touching or kissing (National Center on Domestic and Sexual Violence, 2008; Malamuth, Heavey & Linz, 1996). These behaviors are often omitted in major research studies and surveys similar to the National Crime Victims Survey (2005). Recent research has supported that women engage in these behaviors and often refer to them as sexually coercive behaviors (Anderson & Newton, 2004; Anderson, Struckman-Johnson, Kontos, & Tanigoshi, 2005; Fiebert & Osburn, 1999; Krahé, Waizenhöfer & Möller, 2003; Oswald & Russell, 2006; O'Sullivan & Byers, 1993; Russell, 2001; Russell & Oswald, 2002; Simpson & Senn, 2003; Struckman-Johnson, 1988; Struckman-Johnson, Struckman-Johnson & Anderson, 2003). Therefore, coupled with the use of a broader definition of sexual aggression inclusion of these behaviors will help potentially increased numbers of female perpetrators.

In addition to the identity of the behaviors that established the continuum model, recently researchers have suggested more insight into the characteristics of the female perpetrators of these behaviors. It appears that women perpetrate more against men they hold at least an acquaintance relationship with (Anderson et al, 2005; Archer, 2000;

Krahé, Waizenhöfer & Möller, 2003; Olson, 2005; Struckman-Johnson, Struckman-Johnson & Anderson, 2003). In fact, participants reported more non-strangers 65.1% than strangers 34.9% (NCVS, 2005) as perpetrators. Thus, if women utilize sexually aggressive tactics towards men they have at least an acquaintance relationship established, it may be possible that as relationships increase in intensity for women, so do the behaviors on the continuum of sexual aggression.

If in fact women are sexually aggressive, and to a larger extent than identified in national surveys, there is still lacks a large research base to support this notion. As a result, proponents of this proposition have established three reasons to explain the smaller amount of research completed for women on men sexual aggression (Anderson & Struckman-Johnson, 1998). First, there is the issue of the general public believing the myth that women do no harm physically compared to men. An example of this is research that suggests that when the very same physical or sexual behaviors are perpetrated by both sexes, men tend to be viewed by participants as more aggressive and less of a victim than women (Anderson & Struckman-Johnson, 1998; Frieze, 2000; Olson, 2005; Oswald & Russell, 2006; Sorenson & Taylor, 2005). Second, there is a double standard in defining sexual aggression for men versus women (Anderson & Struckman-Johnson, 1998). For example, most laws have historically defined rape, sexual assault and sexual harassment as a behavior perpetrated by a man on a woman (Krahé, Waizenhöfer & Möller, 2003). While the historically biased legal wording of sex crimes and the general acceptance of women as only victims of male sexual advances is still a major problem for female sexual aggressive research cohesiveness and expansion, the potential changes that could come from further research that supports such ideas is encouraging.

The third and final explanation for the lack of research on female sexual aggression against men is that there is a lack of researchers, until recently, asking both men and women both about female sexual behaviors (Anderson & Struckman-Johnson, 1998). While many researchers are beginning to ask questions about female sexual aggression, these researchers are asking different questions of men and women. For women, researchers historically asked about experiences as victims of sexual behaviors by another person. More recently, researchers are asking about women's perpetration of sexual behaviors and tactics. Women report a significant amount of verbal coercion or pressure, threats to end relationships, crying and starting an argument with their partners as their main behaviors used when trying to negotiate sexual contact (Anderson & Newton, 2004; Anderson et al, 2005; Krahé, Waizenhöfer & Möller, 2003; Russell, 2001). While reported less often with female perpetrators, there are self-reports of physical force, unwanted touching and purposeful intoxication to gain sexual contact from a man (Frieze, 2000; Struckman-Johnson, 1997). Therefore, to support an increased number of women who sexually aggress against men and a potential for a variety of behaviors on the continuum of aggression that women utilize, asking female participants directly about their sexual behaviors has potential for further support.

On the other hand, men are asked about their own sexual behaviors. In the few studies that do ask about direct experiences as victims, it has been reported that between 16% and 45% of college aged males expressed experiencing female sexual aggression at least once in their college career (Fiebert & Tucci, 1998; Simpson & Senn, 2003; Struckman-Johnson, Struckman-Johnson & Anderson, 2003), and in another study, 20% of the male participants expressed feeling "taken advantage of" by their female

aggressors (Fiebert & Tucci, 1998). In many studies of this type, men are reporting having experienced the same sexual tactics or behaviors women admit to using against men in other studies (Fiebert & Tucci, 1998; Simpson & Senn, 2003; Struckman-Johnson, Struckman-Johnson & Anderson, 2003). Thus, the use of direct questioning of men has shown some support of female sexual aggression against men and perhaps has the potential to change the views that interfere with the progression of female sexual aggression research and male victimization.

Further compounding the problems associated with research on female sexual aggression is a lack of empirically supported models to explain female sexual aggression. Given that most research has concentrated on male perpetrators, there are a variety of models to explain male sexual aggression. One predominant paradigm is Malamuth's Confluence Model (Malamuth, 1986; Malamuth, Addison, & Koss, 2000; Malamuth & Brown, 1994; Malamuth, Heavey & Linz, 1996; Malamuth, Linz, Heavey, Barnes & Acker, 1995). Malamuth and colleagues (2000) describe the Confluence Model as a "cumulative-conditional-probability" model; meaning that the interaction of cumulative life experiences, present situational variables, physiological/biological status and personality conditions of an individual leads to the probability of some level of sexual aggression. Unlike many traditional models of sexual aggression, the authors of the Confluence Model propose that the motives for sexual aggression are a combination of a need for sexual gratification and power over another (Malamuth, Heavey & Lindz, 1996).

Furthermore, Malamuth and colleagues propose that the interaction of two pathways lead to sexually aggressive or coercive behaviors; hostile masculinity and impersonal sex. Hostile masculinity is thought to be a direct result of sex for power over

another person and is defined as the hostile and controlling characteristics that enable a person to overcome their inhibitions to sexually aggress and increase the gratification of using sex to assert power or to vent anger at any opportunity (Malamuth, Heavey & Lindz, 1996). This pathway is believed to be a result of multiple experiences from childhood to young adulthood that come from parental and other adult influences (e.g. abuse, family dynamics as a whole, delinquency, competitiveness, and risk taking). The impersonal sex pathway, also known as the sexual promiscuity path, is thought to be a direct result of sex for gratification and is expressed through relatively high levels of sexual behaviors with partners that a person is not necessarily emotionally committed or attached to at any opportunity. This pathway is believed to develop from experiences such as the accelerated adoption of adult roles by teenagers, actual sex experience, abuse, delinquent tendencies of acting out and acceptance of peer pressure for sexual conquest and competition (Malamuth, Heavey & Lindz, 1996).

In a major test of the Confluence Model using a national sample of men, a relationship was revealed between the two pathways when predicting sexual aggression. For example, Malamuth and colleagues (2000) found 89% of the men that scored highest on both sexual promiscuity and hostile masculinity questions reported higher levels of sexual aggression on such scales as Acceptance of Interpersonal Violence Against Women Scale (Burt 1978), Hostility Towards Women Scale (Check, 1985), Dominance Subscale (Nelson, 1979), Eysenck Personality Questionnaire (Eysneck, 1978), and the Sexual Behavior Inventory (Bentler, 1968). It was suggested that the interrelated factors leading to sexually aggressive behaviors are actually part of a larger problem of relating to women in social relationships, thus creating a pattern throughout their lifetime

(Malamuth, Heavey, & Linz, 1996). Interestingly, the researchers proposed that hostile masculinity can be seen in less overt behaviors, such as giving the silent treatment or the inability to work through disagreements with the women in their everyday lives, and these can lead to more severe examples after much internalization (Malamuth, Heavey & Lindz, 1996). This supports the idea that the Confluence Model taps into the behaviors all across the sexual aggression continuum. Thus, this model could potentially predict the least severe and moderately severe behaviors, such as those more common among female perpetrators of sexual aggression.

Although limited, there are a few studies that support the impersonal sex and hostile pathways of the Confluence Model for understanding sexual aggressiveness as perpetrated by women. In support of the impersonal sex pathway, an uncommitted or impersonal relationship style was a predictor of sexual perpetration tactics by women (Russell, 2001; Russell & Oswald, 2002). In support of the hostile pathway, a high score in a variable that measured Traditional feminine attitudes about relationships and sex was also a significant predictor of women's sexual tactics (Russell, 2001). In addition, overall higher levels of hostility towards the opposite gender were related to sexual assaults (Simpson & Senn, 2003).

To further support the use of this model in regards to female sexual aggression, there are studies that proposed the experiences, or precursor variables, that are believed to lead a woman to act sexually aggressive. In two similar studies, high sexual self esteem, number of sexual partners, early age of calling boys and early other courtship behaviors, age of first intercourse, past sexual abuse and peer expectations accounted for much of the variance in women's sexual aggression with the use of seductive, coercive, and force

tactics (Anderson & Newton, 2004; Anderson et. al, 2005). Moreover, Anderson & Newton (2004) reported that 92.3% of female participants admitted to using seduction tactics. Thus, these variables may suggest a social assumption of promiscuous behaviors in females and a traditional acceptance by women that men are always ready for sexual relations, thus lending support to the impersonal sex pathway for women.

Furthermore, many of the experiences suggested to affect a woman's sexual aggressiveness at a young age are much like the male counterpart (e.g. sexual partners, past sexual abuse, and peer acceptance of sexual behavior norms found in male perpetrators) (Malamuth, Heavey & Lindz, 1996). Sexual abuse as a child or teenager is suggested to be a main predictor variable in research for men using the Confluence Model (Malamuth, Addison & Koss, 2000). Importantly, sexual abuse is also predominant predictor in research surrounding teenage girls who become aggressive in their intimate relationships as adults (Archer, 2000; Frieze, 2000), which leads to further potential support for the hostile pathway in a female model of sexual aggression.

Recently, one research team tested variables that are linked to the pathways of the Confluence Model to explain the sexual aggression of women in Germany (Krahé, Waizenhöfer & Möller, 2003). The variables chosen for this study were sexual abuse, ambiguous communication strategies for resistance and compliance, sexual experience level and peer pressure (Krahé, Waizenhöfer & Möller, 2003). Participants reported most acts of sexual aggression towards a partner or acquaintance and the most frequently used tactic for sexual gain was verbal pressure. The predictor with the strongest relationship to sexually aggressive behaviors was sexual abuse as a child. Overall, sexually aggressive women were reported to have more life time sexual partners with and without intercourse

and they perceived more peer pressure to engage in sexual activity. Also, almost half of the women surveyed admitted to ambiguous communications, meaning sometimes they resist when they really want to engage in sexual activity and comply when they do not want to have sex. To further this point, some women reported that they feel their male counterparts take part in the ambiguous communication behaviors, as well (Krahé, Waizenhöfer & Möller, 2003).

In conclusion, many of the variables that are known to be predictors for male sexual aggression also seem to support the possibility that women are sexually aggressive. While attempts to propose or create a model of sexual aggression for women have been few, there have been some steps in this direction. First, elements of the Confluence Model have been tested for female sexual aggression in at least one research project (Krahé, Waizenhöfer & Möller, 2003) and results supported some of the variables and predictors for the pathways. Second, results from other research on female sexual aggression have supported the pathways of hostility and impersonal sex for women against men without utilizing the Confluence Model directly. Finally, the Confluence Model's basis for understanding aggressive behavior is a continuum of severity and other research has supported the array of behaviors women utilize on this continuum from least severe to moderate-severe

#### Purpose of Study

This study will first investigate where women fall on the continuum of severity for sexual aggression. As previously stated, some women endorse engaging in many sexual behaviors within sexual relationships with men that fall into the mild to moderate area of the continuum. Therefore, the first hypothesis is that a greater percentage of



female participants endorsing sexual behaviors will fall into the mild and moderate areas than the severe area of the continuum of sexual aggression.

Next, previous research has adequately supported the variables from childhood or adolescence, (i.e. sexual abuse, family dynamic and number of sexual partners, etc.), that lead to the pathways of the Confluence Model. The path of hostility will be tested from two different types of hostility that are unique to women in present day. The first type of hostility supposes that some women accept and endorse the traditional view that men are always interested in sex and fantasize that women would be more assertive sexually, so they use that against them to engage in sexual activity with men for their own pleasure. The second type of hostility supposes that some women have taken on a more traditional male role themselves. This means they are demanding of the men in their lives for sexual activity, and they display controlling and hostile characteristics towards men, thus using aggressive tactics to engage in sexual activity with men. Both types of hostility for women could be for sexual gratification and for power motives. The impersonal sex path will be tested for women as it was for men in past research. The impersonal pathway for women supposes they want to engage in sexual activity without a serious commitment with or emotional attachment to the men in their lives for sexual gratification. Therefore, the second hypothesis is that one of the two types of hostility (i.e., hostile masculinity or hostile femininity) will interact with the impersonal sex pathway to predict female sexual aggression.

## CHAPTER II

### Methodology

#### *Power Analysis and Participants*

A power analysis was conducted prior to data collection to determine the optimal number of participants required. The power analysis suggested two hundred and fifty participants for this study. However, due to limited resources only one hundred and four participants completed the study. The average age of these female participants was 19.6 years and ranged from 18-28. About 72.1% identified themselves as Caucasian, 12.5% identified themselves as Hispanic/Latino, 11.5% identified themselves as African American, and another 3.9% reported themselves as “other.” Self-reported academic rank was closely distributed between 36.5% freshman, 29.8% sophomores and 23.1% juniors, with the remaining amount consisting of a small number of 9.6% seniors and 1% non-matriculated graduate level students. Most participants identified themselves as heterosexual at 89.4%, with the remaining 10.6% of the sample self-reporting as bisexual or homosexual. Participants identified their relationships status as 30.8% single/involved in a serious relationship, 28.8% single/not dating, 20.2% single/dating one person, 13.5% single/dating various, 3.8% engaged, 1 person married and 2 people as “other.”

#### *Procedure*

Students were recruited on a volunteer basis via an online system utilized by the college. Participants signed an informed consent, were explained the sexual nature of the

questions with a rehearsed script, were told to answer the questions presented to them on the computer and were given a debriefing paper when they completed the study with the researcher's contact information on it for further questions. Participants were told that if they became uncomfortable; they could stop answering the questionnaires at any time and speak to the researcher privately. Seven scales/inventories were completed by participants in an anonymous manner (e.g. the participants were given a number that would not identify who they were when logged into the computer) at a computer lab with the maximum capacity of 8-10 participants per session for a length of 45 minutes.

### *Measures*

*Demographic questionnaire.* A 12-item self-report questionnaire was administered for each participant to assess such things as college grade level, age, race, relationship status, and sexual preference.

*The Marlowe-Crowne Social Desirability Scale (SDS; Crown & Marlowe, 1960).* This thirty-three item "true or false" questionnaire was used to control for the possibility of participants responding in a socially desirable manner. The SDS has shown adequate psychometric validity in the original study with an  $\alpha=.88$  (Crowne & Marlowe, 1960). The SDS exhibited good reliability with this participant sample with an  $\alpha=.78$ .

*Hostility Toward Men Scale (HTMS; Check, Malamuth, Elias, & Barton, 1985).* The HTMS is a 30-item "true or false" scale that assesses women's potential levels of hostility towards men in general, not specifically sexual. Examples of questions are as follows; "I am sure I get a raw deal from the men in my life", "My motto is 'never trust a man'", "Once in a while I cannot control my urge to harm a man", "If you aren't willing

to fight men will walk all over you” and “I don’t blame women for trying to get everything they can from men nowadays”.

Hostility towards the opposite sex has been regarded as one of the most important variables that predict sexual aggression in research. It is thought to pave the way to hostility expressed in sexual behaviors and this scale will be used in this study to assess hostility towards men as a whole by female participants, helping to support the ground work for either hypothesized type. Because this scale was created for women to answer pertaining to their hostility towards men no changes need to be made to it for the purposes of this study. Reliability of this scale in the current study was .91.

*Sexual Experiences Survey-Perpetration Version* (SES; Koss & Oros, 1982; Thompson, Basile, Hertz, M. F., & Sitterle, 2007). The SES-Perpetration Version is a self report 10 item scale that measures a narrow set of sexually coercive experiences on the sexual aggression continuum from the age of 14 years old. Participants answer the SES in a “yes” or “no” answer format to questions on the less severe end of the sexual aggression continuum such as “Have you engaged in sex play (fondling, kissing, or petting, but not intercourse) when he didn’t want to because you overwhelmed him with continual arguments and pressure?” and questions on the more severe end of the sexual aggression continuum such as “Have you engaged in sex acts (anal or oral intercourse or vaginal penetration )when he didn’t want to because you threatened or used some degree of physical force (twisting his arm, holding him down, etc.) to make him?”.

For purposes of this study, The SES was scored by breaking the scale up into the three areas of the continuum of severity; mild, moderate and severe. This was done so that the measurement coincided with the continuum of severity and so that it could be

compared with results from the Coercive Sexuality Scale (Table 1). In the original study, the SES results presented a test-retest reliability of 93%. Other studies have reported that the SES is psychometrically appropriate for measuring various levels of sexual aggression and perpetration (Gavey, 1991; Koss, Gidycz & Wisniewski, 1987; Koss & Gidycz, 1985; Lisak & Roth, 1988; Ouimette, Shaw, Drozd, & Leader, 2000; Russell, 2001; Simpson & Senn, 2003). All pronouns were switched in this questionnaire from a male to a female perpetrator point of view.

*Coercive Sexuality Scale* (CSS; Rapaport & Burkhart, 1984). The CSS measures sexual experiences viewed as broadly coercive on the continuum of severity. The CSS is self-report 19-item questionnaire with responses ranging between “never” and “often” on a 4-point scale. Some of the items of the CSS are identified as coercive sexual behaviors with questions such as “...have you even held a man’s hand against his will?” and “...had intercourse with a man against his will?” to assess these behaviors. Other items of the CSS are identified as coercive sexual methods with questions such as “...ignored a man’s protests against having sex?” and “...used a weapon to get a man to have sex?” to assess these methods.

In the original study (Rapaport & Burkhart, 1984), the CSS was found to be correlated with other predictive scales, such as a few of the Burt sub-scales (1980), the Endorsement of Force Scale (EFS; Rapaport & Burkhart, 1980) and the pattern of incidence of sexual behaviors on the continuum were similar to the results Koss and Oros (1982) obtained in their original research on the SES. While not used as often as the SES, researchers report the CSS as a psychometrically appropriate tool to measure sexual coercion on a continuum of sexual aggression (Nagayama & Hirschman, 1994; Ouimette,

Shaw, Drozd, & Leader, 2000; Rapaport & Burkhart, 1984). For the same reasons given for the SES, the CSS was scored by breaking items of the scale up into the areas of the continuum of severity; mild, moderate and severe (Table 2). Also, all male and female pronouns were changed to reflect the female point of view.

*The Auburn Differential Masculinity Inventory* (ADMS; Burk, Burkhart & Sikorski, 2004). The ADMI is a self-report 60-item scale that is broken down in to 5 constructs; hyper-masculinity, sexual identity, conservative masculinity, dominance and aggression, and devaluation of emotion. Scores range from 4-points each response of “very much like me” and 0-points for each response of “not at all like me”. Approximately half of all questions on the ADMI have been changed from the male to female point of view and have variations of traditional and non-traditional male and female sex role views to measure women’s level of differential hostile masculinity or femininity and impersonal sex. Examples of these changes are as follows; the level of either type of hostility for women was measured by questions such as “I consider myself smarter than most men”, “I think women who are too independent need to be knocked down a notch”, “I think men that show their emotions frequently are sissies”, “If a man puts up a fight while we are having sex, it makes sex more exciting”, “I am my own master; no one tells me what to do” and “I think it is okay for women to be a little rough during sex.” Impersonal sex was measured with some of the same items, but other questions such as “My attitude regarding casual sex is the more the better”, “I think it is okay to have sex with a man who is drunk”, “I can date many men at the same time without commitment”, “I like to brag about my sexual conquests to my friends” and “I don’t feel guilty when I cheat on my man.” Total score and construct score are generated

by summing the points for all relevant questions. The ADMI has begun standardization and shown adequate reliability at .85-.73 and validity .83 in one study and .85 in another study when the scale is taken as a whole.

*Own Sex Role Satisfaction, Sex Role Stereotyping, Adversarial Sexual Beliefs, Sexual Conservatism, and Acceptance of Interpersonal Violence* (OSRS, SRS, ASB, SCS & AIV; Burt, 1980). The combined scales, referred to as the Burt 5 Scales in this study, yield 45-items. All five inventories are scored on a 7-point scale of responses that range between “strongly agrees” and “strongly disagrees”. Scores from each scale are tabulated separately based on the 7 point scale. As with the ADMI, approximately half of all questions have been changed from the male to female point of view and have variations of traditional and non-traditional male and female sex role views to measure women’s level of hostile masculinity or hostile femininity and impersonal sex.

The OSRS assesses general satisfaction of accepted sex role with questions that ask how satisfied the participant is in the following; “your sympathy and understanding for others” and “your attractiveness to the opposite sex”. The SRS scale assesses typical female and male sex roles and acceptance of seduction tactics with statements such as “It is better for a woman to use her feminine charm to get what she wants rather than ask for it outright” and “It is acceptable for a woman to pay for a date.” The ASB scale assesses those adversarial beliefs that lead to more coercive sexual behaviors according to the Confluence Model with such statements as “Many women are so demanding sexually that a man just can’t satisfy them” and “A women will only respect a man who will lay down the law to her.” The SC scale assesses the range of conservative beliefs about how a man or woman should act within their accepted sex roles with statements such as “A woman

who initiates a sexual encounter will probably have sex with anybody” and “Women have the same needs for a sexual outlet as men.” Finally, the AIV scale assesses general ideals of violence between sexes using statements such as “Sometimes the only way to get a cold man turned on is to use force” and “Being roughed up is sexually stimulating to many men.” The internal consistency and reliability of each scale was reported as good from the original article in a Cronbach’s  $\alpha$  statistic; OSRS at .781, SRS at .800, ASB at .802, SC at .811 and AIV at .586 respectively.



## CHAPTER III

### Results

#### *Do women self-report mild and moderate levels of sexually aggressive behaviors?*

It was hypothesized that a greater percentage of female participants would endorse sexual behaviors that fall in the mild and moderate areas versus the severe area of the continuum of sexual aggression. To begin testing where on the sexual aggression continuum of severity our female participants fall a frequency analyses was conducted for the various scorings of the SES and the CSS. Tables 1 and 2 present the results of the frequency analyses for these measures. Each scale was broken up into mild, moderate and severe behaviors. For the CSS 61.5% of the participants' self-reported "yes" to a behavior on the scale "at least one time" in their life. The most common behaviors were holding a man's hand and kissing a man against his will, and verbal coercion for sexual gain. For the SES 23.1% of participants answered "yes" to at least one question. The most common behaviors most self-reported were verbal pressure for sexual gain.

In order to determine whether women were more likely to endorse mild and moderate versus severe sexually aggressive behaviors, a series of chi-square analyses were conducted on the CSS and SES. Table 3 presents the results of these analyses. Consistent with the first hypothesis, a chi-square goodness of fit test showed that the number of participants who endorsed mild sexually aggressive behaviors ( $n=13$ , 50%), and moderate behaviors ( $n=12$ , 46%) on the SES was significantly greater than those who endorsed severe behaviors ( $n=1$ , 4%),  $\chi^2 (2, n=26) = 10.23, p = .006$ . In addition, a chi-square goodness of fit test showed that the number of participants who endorsed mild

sexually aggressive behaviors (n=20, 31%) and moderate behaviors (n=32, 49%) on the CSS was significantly greater than those who endorsed severe behaviors (n=13, 20%),  $\chi^2$  (2, n=65) = 8.52,  $p = .014$ .

#### *Creation of Variables and Constructs.*

Prior to our primary analyses for the second hypothesis, the modified Auburn Differential Masculinity Inventory was subject to principal component analyses and revealed three components accounting for 34.37% of the variance. Twenty-two items loaded on the first component ( $\alpha = .935$ ) forming a hostile masculinity scale (HM). Eight items loaded on the second component ( $\alpha = .789$ ) forming an impersonal sex scale (IPS). Finally, two items loaded on the third component ( $\alpha = .781$ ) forming a hostile femininity scale (HF). Next, a principal component analysis was performed on the modified Burt Sex Scales and one component was revealed accounting for 17.06% of the variance. However, further analyses revealed poor reliability ( $\alpha = .0327$ ). Thus, this construct was dropped from further analysis.

Table 4 demonstrates bivariate correlations for all variables and constructs. The HM was correlated highly with the Hostility Towards Men scale (.688). This suggests that the HM variable is tapping into the hostility women have toward men. IPS was not highly correlated with any other variable, but had some low to moderate correlations with other variables. HF failed to show correlation at all with any variable. As expected, the CSS, SES and HTM were correlated. Social Desirability correlated with most measures and the two constructs, HM and IPS.

*Does the Confluence Model predict female sexual aggression?*

Hypothesis two concerns the interaction of one of the hostile pathways (i.e. femininity or masculinity) and the impersonal sex pathway to predict female sexual aggression. To test this hypothesis two hierarchical multiple regression analyses using the enter method were conducted to determine whether the Confluence Model could predict female sexual aggression using the CSS and the SES as dependent variables. In step one, Social Desirability was entered to account for its potential affect on the participants answers based on the sexual nature of the study. In step two the three constructs were entered and in step three the two interaction variables were entered into the model to complete the process. For the CSS (Table 5), a significant model emerged:  $F(6, 103) = 5.374, p < .000$ . This model explains 20.3% of the variance (Adjusted  $R^2 = .203$ ). Social Desirability was the significant in each step of the analysis. However, in step two of the hierarchical multiple regression the Hostile Masculinity construct was found to be significant at  $p = .007$  with a mild Standardized Beta of .274 accounting for 20.5% of the variance (Adjusted  $R^2 = .205$ ). Neither interaction variable was significant in this model. The  $R^2$  change produced more change in the power of the model between step 1 and step 2 ( $R^2$  change = .071) than in step 2 to step 3 ( $R^2$  change = .013).

For the SES (Table 6), a significant model emerged:  $F(6, 103) = 4.029, p < .001$ . This model explains 15.0% of the variance (Adjusted  $R^2 = .150$ ). While social desirability was the only significant variable in each step of this model, the interaction variable of IPS and HM approached significance at  $p = .083$ . The  $R^2$  change produced little change in the power of the model between step 1 and step 2 ( $R^2$  change = .007), but did increase in power from step 2 to step 3 ( $R^2$  change = .028).

Table 1

Frequencies of Item Endorsement of the SES (n=104)

	Frequency "yes"	%	Frequency "no"	%
<b>Mild</b>				
1. Engaged in sex play with continual arguments and pressure?	20	19.2%	84	80.8%
2. Engaged in sex play using your position of authority to make him?	2	1.9%	102	98.1%
3. Engaged in sex play with some degree of threats or use of physical force to make him?	1	1%	103	99%
<b>Moderate</b>				
4. Attempted sexual intercourse (but did not occur) with some degree of threats or physical force?	2	1.9%	102	98.1%
5. Attempted sexual intercourse (but did not occur) by giving him alcohol or drugs?	--	--	104	100%
6. Engaged in sexual intercourse with continual arguments and pressure?	8	7.7%	96	92.3%
7. Engaged in sexual intercourse using your position of authority to make him?	--	--	104	100%
<b>Severe</b>				
8. Engaged in sexual intercourse by giving him alcohol or drugs?	--	--	104	100%
9. Engaged in sexual intercourse by some degree of threats or physical force to make him?	--	--	104	100%
10. Engaged in sex acts by some degree of threats or physical force to make him?	1	1%	103	99%

Note: "Sex play" is fondling, kissing and petting. "Sexual intercourse" is penis penetration of the vagina. "Sex acts" are anal or oral sex and vaginal penetration by objects other than a penis.

Table 2

Frequencies of Item Endorsement of the CSS (n=104)

(All questions end with "against his will")	Frequency "at least once"	%	Frequency "never"	%
<b>Mild:</b>				
1. Held a man's hand.	39	37.5%	65	62.5%
2. Kissed a man.	25	21.1%	82	78.8%
3. Placed your hand on a man's knee.	17	16.3%	87	83.7%
4. Placed your hand on a man's chest area.	13	12.5%	91	87.5%
5. Placed your hand on a man's thigh or crotch area.	11	10.6%	93	89.4%
<b>Moderate:</b>				
6. Unfastened a man's outer clothing.	4	3.8%	100	96.2%
7. Removed or disarranged a man's outer clothing.	4	3.8%	100	96.2%
8. Removed or disarranged a man's underclothing.	3	2.9%	101	97.1%
9. Removed own underclothing.	4	3.8%	100	96.2%
10. Touched a man's genital area.	5	4.8%	99	95.2%
11. Had intercourse with a man.	--	--	104	100%
12. Attempted to verbally convince a man to have sex.	36	34.7%	68	65.4%
<b>Severe:</b>				
13. Ignored a man's protest against having sex.	10	9.6%	94	90.4%
14. Used verbal threats to get a man to have sex.	2	2%	102	98.1%
15. Used physical restraint to get a man to have sex.	--	--	104	100%
16. Used threats of physical aggression to get a man to have sex.	2	2%	102	98.1%
17. Used physical aggression to get a man to have sex.	3	2.9%	101	97.1%
18. Threatened to use a weapon to get a man to have sex.	--	--	104	100%
19. Used a weapon to get a man to have sex.	--	--	104	100%

Table 3  
Chi Square for the SES (n=26) and CSS (n=65)

	Observed N	Expected N	Residual	Chi Square	df	Asymp. Sig.
<b>SES</b>				10.23	2	.006*
Mild	13	8.7	4.3			
Moderate	12	8.7	3.3			
Severe	1	8.7	-7.7			
<b>CSS</b>				8.52	2	.014*
Mild	20	21.7	-1.7			
Moderate	32	21.7	10.3			
Severe	13	21.7	-8.7			

\*p= .05

Table 4

Bivariate Correlation Matrix of Constructs and Variables (n=104)

	1	2	3	4	5	6	7
1. HM	--						
2. IPS	.237*	--					
3. HF	.115	-.040	--				
4. HTM	.688**	.182	.091	--			
5. CSS	.393**	.236*	-.087	.371**	--		
6. SES	.230*	.222*	.010	.296**	.578**	--	
7. SDS	-.456**	-.389**	.024	-.370**	-.407**	.406**	--

\*\* p<.01

\* p<.05

Table 5

Regression Analysis of the CSS and Constructs using Enter Method (n=104)

	B	SE B	Beta	R2 Change
<b>Step 1</b>				0.165
1. Social Desirability	-0.044	0.014	-0.339*	
<b>Step 2</b>				0.071
2. Hostile Masculinity (HM)	0.007	0.043	0.274*	
3. Impersonal Sex (IPS)	-0.037	0.094	-0.068	
4. Hostile Femininity (HF)	0.122	0.709	-0.109	
<b>Step 3</b>				0.013
5. IPS & HM Interaction	0.033	0.033	0.348	
6. IPS & HF Interaction	-0.037	0.051	-0.171	

\*  $p < .05$



Table 6

Regression Analysis of the SES and Constructs using the Enter Method (n=104)

	B	SE B	Beta	R2 Change
<b>Step 1</b>				0.165
1. Social Desirability	-0.044	0.014	-0.339*	
<b>Step2</b>				0.007
2. Hostile Masculinity (HM)	-0.015	0.011	0.048	
3. Impersonal Sex (IPS)	-0.026	0.024	0.072	
4. Hostile Femininity (HF)	0.069	0.179	0.016	
<b>Step 3</b>				0.028
5. IPS & HM Interaction	0.001	0.001	0.620**	
6. IPS & HF Interaction	-0.005	0.013	-0.094	

\*  $p < .05$ \*\*  $p = 0.083$

## CHAPTER IV

### Summary, Conclusions, and Recommendations

The present study analyzed female sexual aggression on a continuum of severity and tested the pathways of the Confluence Model that lead to male sexual aggression and coercion for a female college sample. It is one of only two studies known at the time of this research project to attempt an analysis of an empirically validated model of sexual aggression for a female population. Results from the Sexual Experiences Survey (SES) indicated that almost one-third of the sample self-reported sexual aggression towards men at least once in their lives. Results from the Coercive Sexuality Scale (CSS) presented almost two-thirds of the sample self-reported the use of a sexually coercive behaviors or tactics against a male at least once in the past. Furthermore, a greater percentage of female participants endorsed the mild and moderate areas of the continuum of sexual aggression compared to the severe area. These findings are consistent with previous research and provide support for hypothesis one.

Unfortunately, the results from the regression analyses testing the interaction variables of the Confluence Model and our proposed alternate construct of hostile femininity were not found to be significant, thus hypothesis 2 was not supported. The fact that the interaction variable of impersonal sex and hostile masculinity approached significance (.083) and had a strong Beta in step 3 of the regression analysis of the SES is encouraging. However, significance was found in the regression analysis for the CSS for the hostile masculinity construct (.007) on step 2 over and above any interaction variable, other construct and Social Desirability (.018). And the  $R^2$  change corresponds with the

step in each regression with the variable (s) that was found to be most significant, or approaching significance as it were for the SES regression analysis.

A concern and a potential limitation for this study were the questionnaires that were utilized to assess sexual aggression and the pathways. After an extensive literature review the questionnaires that were available were those that pertain to male sexual aggression and perpetration. Overall, changing the pronouns of the SES and the CSS to reflect the female perpetrator point of view was a simple task to undertake. The scoring of the SES and CSS similarly was done so that their results could be compared and use of the levels of sexual aggression could be measured, as well. At first glance of tables 1 and 2, the results for these questionnaires were inconsistent with each other in the overall number of women self-reporting sexually aggressive behaviors at 23.1% for the SES versus 61.5% for the CSS. On one hand, it is possible that these questionnaires, while easy to change to a female point of view in the wording and score alike, were potentially not tapping into the same behaviors of the sexual aggression continuum of severity for females. This may account for some of the inconsistency between the measures.

On the other hand, the SES is a questionnaire that measures the more severe end of the continuum utilizing more clinical terms to describe sexual acts, while the CSS incorporates the broadness of the continuum with more laymen's terms which could account for a higher percentage. Another look at tables 1 and 2 suggest that both the SES and CSS have larger numbers at the beginning of the scales and lessen as the questions become more severe, which is consistent with literature findings. There is also a consistency in the type of tactic most endorsed by women in both questionnaires; verbal pressure or coercion. Also, as seen in Table 3, both the CSS and the SES supported

significance in difference in the mild, moderate and severe levels of sexual aggression that women in this study self-reported, thus supporting hypothesis one together. Therefore, perhaps they are measuring what they are intended for and the inconsistency is simply because of the severity level of one scale over the other. In the end, even if the SES and CSS are measuring some degree of female sexual aggression and coerciveness, there is still a definite need for measures that are created specifically with women in mind.

Two other questionnaires were also problematic in this study. The changes made to the Auburn Differential Masculinity Scale and the Burt 5 Sexually Aggression Scales was time consuming and tedious. Also, it was sometimes difficult to ascertain if the changes made to these scales were truly reflecting the constructs of hostile masculinity (HM), hostile femininity (HF) and impersonal sex (IPS) as defined in this study even with good statistical reliability. In the correlation analysis, hostile femininity was not correlated with any other construct or measure. At the very least hostile masculinity and impersonal sex showed similarities to measures that it was expected they would correlate with. Still, these are constructs that were already operationally defined, understood and tested in literature. Unlike the other two constructs, hostile femininity is a new concept that has its origins in literature concerning seduction tactics and using male stereotypes for female validation of certain sexual behaviors perpetrated against men. However, taking all construct representations into account, neither of the two interaction variables created from these constructs were found to be significant in the final two analyses, only hostile masculinity in the CSS was found to be significant. Once again, appropriate measures need to be created to help continue this type of research endeavor.

Next, the use of self-report questionnaires is always a potential limitation to a study because of the inability to know if the client is answering honestly or being affected by social desirability. In this study, social desirability was correlated with most of the measures. This was expected because of the sexual nature of the questionnaires. On one hand, it may be possible that the results produced by the analyses of these scales are representative exactly what happened with this sample; according to the analyses only hostile masculinity, not either interaction variable, predicts female sexual aggression. Thus, while social desirability was a statistically significant variable in analyses, perhaps it did not interfere more than expected. This suggests that another model is needed for testing female sexual aggression and the construct of hostile masculinity as it pertains to women needs to be further investigated.

On the other hand, it is possible that, as in most research about sexuality and sexual behaviors, answering such intimate and blatant questions concerning one's sexual behaviors puts one ill at ease. Perhaps social desirability did greatly affect this study since it was found to be significant on each step of the hierarchical analyses of the CSS and SES and in the correlation analysis. Therefore, there could be more sexually aggressive women in the sample than the results produced. If this is so, social desirability interfered with the outcomes of analyses for both hypotheses. The protocol for this study took the potential affect of social desirability into account in that the participants were assigned a random number to remain anonymous and were encouraged to be honest in their answers in light of the anonymity. Deception was not utilized when explaining the study purpose to them. Suggestions to potentially decrease the affect of social desirability

in future research are to add the standing questionnaires into a larger study or add filler questionnaires so that the sexual nature of the study is not so blatant to the participants.

Beyond the appropriateness of the measures themselves and of variables, another potential reason for lack of full support for either hypothesis and limitation of the study is the total number of participants in this study ( $n=104$ ). A power analysis was completed prior to collecting data and the suggested optimal number was 250 participants for the needed power in the analyses to be run. Thus, with less than that optimal number in participants per questionnaire, we are lacking the power needed to fully test the behaviors on the sexual aggression continuum of severity and the Confluence Model pathways. In fact, we propose that with more participants and an increase in power, the interaction variables of impersonal sex and hostile masculinity that approached significance in the SES model analysis may find significance, thus potentially supporting hypothesis two for this model. Further collection of data is suggested to further test this interaction model for significance.

Another general concern is the affect of the sample of convenience.

Undergraduate college students are the most utilized sample in most of social and behavioral research. Depending on the location of the college sample, the demographics will be subject to local norms and conditions. This study's sample was just under 20 years of age on average, and mostly Caucasian, heterosexual and single. Thus, the findings can be generalized to a population that fits these specific criteria and are important. However, most research in sexual aggression reports using women and men between the ages of 18-24 and this is the age bracket for undergraduate college students, as well. So, our use of this sample is congruent with previous research. Still, it is

suggested to take this a step further and move into an older age bracket with various ethnicities, relationship statuses and sexual preferences just as partner aggression and interpersonal violence have done in their research.

Finally, the last general concern is the use of getting credits for participation in the study. Receiving research credit hours for participating in a study as a mandatory part of an introductory psychology class is a good way to guarantee a participant pool to some extent. On one hand, it cannot guarantee the participants took the study seriously and really immersed themselves in the participant experience if they just wanted to fill a requirement needed to gain a passing grade in a class. On the other hand, these particular participants had a plethora of studies to choose from to fulfill this requirement, so to some extent they had choice as an element of control when they choose to partake in this study. Still, it is unknown how many participants, if any, simply answered the questions and did not put forth much effort to truly involve themselves in it. From the study log, the average time for completion of the computer questionnaires was 25minutes in a 45 minute study, thus it can be assumed some thought was put forth for the majority of participants. Once again, the suggestion is to move this study away from undergraduate students only and open it up to other age brackets and locales.

In conclusion, the purpose of all the specific definitions of constructs and variables, and the use of the continuum of severity and the Confluence Model was to attempt to give a wide enough range of behaviors for women to report about that this will add to the already growing literature base and help spur further research efforts to support the concept of female sexual aggression. The value in furthering research of women who are sexual aggression perpetrators and men who experience this aggression as victims is

three-fold and moves beyond simply supporting a concept and creating a model to predict behaviors. First, there is a desire to decrease stereotypes and biases that interfere with this research area. Second, as a result of the first value of furthering research in this area, there is the hope of broader awareness that these behaviors exist in our society so that reporting by the male victim is less stigmatized. As with literature for female victims, there are potentially more male victims as the NCVS (2005) statistics only report those who have come forth and only for those behaviors on the severe end of the severity of aggression continuum. Lastly, the need to increase availability of treatment options for both victims and perpetrators is very important. This is valuable as the acceptance and increase in availability of services for female victims and male perpetrators has improved over the last few decades.



## REFERENCES

- Anderson, P. B., Kontos, A. P., Tanigoshi, H. & Struckman-Johnson, C. (2005). An examination of sexual strategies used by urban southern and rural Midwestern women. *The Journal of Sex Research*, 42(4), 335-341.
- Anderson, P. B., & Newton, M. (2004). Predicting the use of sexual initiation tactics in a sample of college women. *Electronic Journal of Human Sexuality*, 7. Retrieved in April 2007 from the website: <http://www.ejhs.org/volume7/Anderson/text.html>.
- Archer, J. (2000). Sex differences in aggression in heterosexual partners: a meta-analytic review. *Psychological Bulletin*, 126(5), 651-680.
- Burk, L. R., Burkhart, B. R., & Sikorski, J. F. (2004). Construction and preliminary validation of Auburn Differential Masculinity Scale. *Psychology of Men and Masculinity*, 5(1), 4-17.
- Burt, M. R. (1980). Cultural myths and supports for rape myth. *Journal of Personality and Social Psychology*, 38(2), 217-230.
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, 24, 349-354.
- Fiebert, M. S., & Osburn, K. (2001). Effect of gender and ethnicity on self reports of mild, moderate and severe sexual coercion. *Sexuality & Culture*, 5(2), 3-10.
- Fiebert, M. S., & Tucci, L. M. (1998). Sexual coercion: men victimized by women. *Journal of Men's Studies*, 6(2), 127-132.
- Frieze, I. H. (2000). Violence in close relationships--development of a research area: comment on Archer (2000). *Psychological Bulletin*, 126(5), 681-684.

- Gavey, N. (1991). Sexual victimization prevalence among New Zealand university students. *Journal of Consulting and Clinical Psychology*, 59(3), 464-466.
- Hill, C., & Silva, E. (2005). Drawing the line. Published by the *American Association of University Women Educational Fund*. Retrieved in July 2007 from the website: <http://www.aauw.org/research/upload/DTLFinal.pdf>.
- Koss, M. P. & Gidycz, C. A. (1985). Sexual experiences survey: reliability and validity. *Journal of Consulting and Clinical Psychology*, 53(3), 422-423.
- Koss, M. P., Gidycz, C. A. & Wisniewski, N. (1987). The scope of rape: incidence and prevalence of sexual aggression and victimization in a national sample of higher education students. *Journal of Consulting and Clinical Psychology* 55(2), 162-170.
- Koss, M. P. & Oros, C.J. (1982). Sexual experiences survey: a research instrument investigating sexual aggression and victimization. *Journal of Consulting and Counseling Psychology*, 50(3), 455-457.
- Krahé, B. Waizenhöfer, E., & Möller, I. (2003) Women's sexual aggression against men: prevalence and predictors. *Sex Roles: A Journal of Research*, 49(5-6), 219-232.
- Lisak, D. & Roth, S. (1988). Motivational factors in non-incarcerated sexually aggressive men. *Journal of Personality and Social Psychology*, 55(5), 795-802.
- Malamuth, N. (1986). Predictors of naturalistic sexual aggression. *Journal of Personality and Social Psychology*, 5, 953-962.
- Malamuth, N., Addison, T., & Koss, M. (2000). Pornography and sexual aggression: are there reliable effects and can we understand them? *Annual Review of Sex Research*, 11, 10-53.

- Malamuth, N., & Brown, L. M. (1994) Sexually aggressive men's perceptions of women's communications: testing three explanations. *Journal of Personality and Social Psychology*, Vol 67(4), 699-712.
- Malamuth, N., Heavey, C., & Linz, D. (1996). The confluence model of sexual aggression: combining hostile masculinity and impersonal sex. *Biological Dysfunction, Intrapsychic Conflict, and Interpersonal Violence*, 13-37.
- Malamuth, N., Linz, D., Heavey, C., Barnes, G., & Acker, M. (1995). Using the confluence model of sexual aggression to predict men's conflict with women: A ten year follow-up study. *Journal of Personality and Social Psychology*, 69, 353-369.
- Malamuth, N., Sockloskie, R., Koss, M., & Tanaka, J. (1991). The characteristics of aggressors against women: Testing a model using a national sample of college students. *Journal of Consulting and Clinical Psychology*, 59, 670-681.
- Nagayama, G. C., & Hirschman, R. (1994). The relationship between men's sexual aggression inside and outside the laboratory. *Journal of Consulting and Clinical Psychology*, 62(2), 375-380.
- National Center on Domestic and Sexual Violence (2008). Continuum of sexual aggression. Retrieved in July 2007 from the website:  
<http://www.ncdsv.org/images/ContinuumofSexualAggression.pdf>
- Olson, L. N., & Lloyd, S. A. (2005). "It depends on what you mean by starting": an exploration of how women define initiation of aggression and their motives for behaving aggressively. *Sex Roles: A Journal of Research*, 53(7-8), 603-617.

- Oswald, D. L., & Russell, B. L. (2006). Perceptions of sexual coercion in heterosexual dating relationships: the role of aggressor gender and tactics. *The Journal of Sex Research, 43*(1), 87-95
- O'Sullivan, L. F., & Byers, E. S. (1993). Eroding stereotypes: college women's attempts to influence reluctant male sexual partners. *The Journal of Sex Research, 30*(3), 270-282.
- Ouimette, P. C., Shaw, J., Drozd, J. F., & Leader, J. (2000). Consistency of reports of rape behaviors among non-incarcerated men. *Psychology of Men & Masculinity, 1*(2), 133-139.
- Rapaport, K. & Burkhart, B. R. (1984). Personality and attitudinal characteristics of sexually coercive college males. *Journal of Abnormal Psychology, 93*(2), 216-221.
- Russell, B. L., & Oswald, D. L. (2001). Strategies and dispositional correlates of sexual coercion perpetrated by women: an exploratory investigation. *Sex Roles: A Journal of Research, 45*(1-2), 103-115.
- Russell, B. L., & Oswald, D. L. (2002). Sexual coercion and victimization of college men. the role of love styles. *The Journal of Interpersonal Violence, 17*(3), 273-285.
- Simpson, A., & Senn, C. Y. (2003). Sexual coercion and sexual assault: are effects on hostility gender specific? *Guidance and Counseling, 18*(3).
- Sorenson, S. B., & Taylor, C. A. (2005). Female aggression towards male intimate partners: an examination of social norms in a community-based sample. *Psychology of Women Quarterly, 29*, 78-96.
- Struckman-Johnson, C. (1988). Forced sex on dates: it happens to men, too. *The Journal of Sex Research, 24*, 234-241.

- Struckman-Johnson, C. (1997). Men's reactions to hypothetical forceful sexual advances from women: the role of sexual standards, relationship availability, and the beauty bias. *Sex Roles: A Journal of Research*, 37(5-6), 319-333.
- Struckman-Johnson, C., Struckman-Johnson, D., & Anderson, P. B. (2003). Tactics of sexual coercion: when men and women won't take no for an answer. *The Journal of Sex Research*, 40(1), 76-86.
- Thompson, M. P., Basile, K. C., Hertz, M. F., & Sitterle, D. (2006). Measuring intimate partner violence victimization and perpetration: a compendium of assessment tools- Sexual Perpetration Scales. *Atlanta (GA): Centers for Disease Control and Prevention, and the National Center for Injury Prevention and Control, 2006.*
- Retrieved in April 2007 from the website:  
<http://www.cdc.gov/ncipc/dvp/Compendium/Section%20F.pdf>
- U.S. Department of Justice (2006). Criminal victimization in the United States, 2005 statistical tables. *National Crime Victimization Survey (NCVS), Bureau of Justice Statistics, December 2006, Document NCJ215244.* Retrieved in April 2007 from the website: <http://www.ojp.usdoj.gov/bjs/pub/pdf/cvus05.pdf>
- Yost, M. R., & Zurbriggen, E. (2006) Gender differences in the enactment of sociosexuality: an examination of implicit social motives, sexual fantasies, coercive sexual attitudes and aggressive sexual behavior. *The Journal of Sex Research*, 43(2), 163-173.