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ABSTRACT OF DISSERTATION

Malinda Martin Sudduth Isaacs

The Graduate School
University of Kentucky

2008

EXPLORING A MULTIDIMENSIONAL MODEL OF VICTIMIZATION AND EATING
DISTURBANCES FOR COLLEGE WOMEN

ABSTRACT OF DISSERTATION

A dissertation submitted in partial fulfillment of the
requirements for the degree of Doctor in Philosophy in the
College of Education
at the University of Kentucky

By:
Malinda Martin Sudduth Isaacs

Director: Dr. Pam Remer, Associate Professor of Education and Counseling Psychology

Lexington, Kentucky

2008

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ABSTRACT OF DISSERTATION

EXPLORING A MULTIDIMENSIONAL MODEL OF VICTIMIZATION AND EATING DISTURBANCES FOR COLLEGE WOMEN

Research demonstrates that sexual harassment, sexual assault, and eating disorders are pervasive gender-based social problems on college campuses. These phenomena can cause long-term psychological consequences, and negatively impact women's ability to succeed in both academia and the workplace. Not only have the prevalence and effects of these issues been documented, a significant number of studies have found a relationship between various forms of victimization and eating disorders/symptoms. Research has shown that eating disorders may function as coping strategies for managing the psychological distress that often results from the trauma of sexual harassment and sexual assault. Although, this link has been identified, little research has examined why it might exist among various populations. The purpose of this study was to not only examine the relationships among sexual harassment, rape, and eating disorders, but also the cognitive and psychological processes that may influence this association. The cognitive processes included gender-role attitudes and rape myth acceptance and the psychological processes were depression, anxiety and posttraumatic stress. In addition, the study aimed to explore these phenomena among the traditional female dominated fields of teaching and nursing. Little is known about how these populations are effected by sexual harassment, sexual assault, and eating disorders. Analyses were conducted on self-report measures from 206 students enrolled in an undergraduate nursing and pre-service teaching program at the University of Kentucky. The test of a theoretical model, using a series of multiple regressions, suggests a positive relationship among sexual harassment, rape and eating disturbances for nursing and pre-service teaching college women students. Also, the findings indicated that this relationship is partially mediated by psychological distress. No moderation was found between rape myth acceptance and gender-role attitudes and psychological distress. These results indicate that effective training and prevention programs that address sexual harassment and sexual assault are needed as well as clinical strategies for the assessment and treatment of eating disorders and trauma.

KEYWORDS: Rape, Sexual Harassment,
Eating Disorders, Nursing,
and Teachers

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April 5, 2008

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DISTURBANCES FOR COLLEGE WOMEN

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DISSERTATION

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Chapter One: Introduction

Research has found that sexual harassment, rape and eating disorders are common experiences of women in the U.S (Harned, 2000). It is estimated that more than 50% of women experience sexual harassment in the work or academic setting (Fitzgerald, 1993), 2.2 million U.S. women are raped in a given year (Tjaden & Thoenees, 2000), and approximately 10 million women suffer from eating disorders such as bulimia nervosa and anorexia nervosa (National Eating Disorders Association, 2005). A study that focused specifically on college women found that 89% of college women had experienced sexual harassment and 63% and 44% of college women reported lifetime and current eating disorder symptoms, respectively (Harned, 2000). Another study that examined the prevalence of rape, found that 62.4% of college women had experienced some form of sexual victimization and 38% of these women experienced sexual victimizations that fit the legal definition of rape or attempted rape (Koss, 1985). The data on sexual harassment, rape, and eating disorders confirms that they are serious, pervasive social problems in the U.S. and more specifically, a pervasive problem on college campuses.

Rape and sexual harassment, both forms of gender-based violence, have been linked with many forms of psychological distress. For example, research has found that women who experience sexual harassment suffered from psychological problems such as anxiety, depression, posttraumatic stress disorder, and body image and eating disturbances. (Dansky & Kilpatrick, 1997; Fitzgerald, Drasgow, Hulin, Gelfand, & Magley, 1997; Harned, 2000; Harned & Fitzgerald, 2002). Many victims of rape experience psychological distress for months to years after the assault (Koss, Goodman, et al., 1994). Victims suffer from posttraumatic stress disorder, anxiety, depression, sexual dysfunction, and interpersonal difficulties (Campbell & Wasco, 2005; Koss, Goodman, et al., 1994). A study comparing women who reported being raped to a control group found that the women who were assaulted were more likely to exhibit substance dependence, mood, anxiety and eating disorders (Thompson et al., 2003).

In addition, a significant number of studies have found a relationship between various forms of victimization and eating disorders/symptoms. For example, childhood sexual abuse has been linked to bulimia nervosa (Wonderlich, Brewerton, Zelijko, Dansky, & Abbott, 1997). Other research has found that sexual assault and physical assault during adulthood, and the post-traumatic stress disorder that resulted were associated with bulimia nervosa (Dansky, Brewerton, Kilpatrick, & O'Neil, 1997). Covert (a more subtle form of sexual abuse) and emotional abuses have demonstrated significant relationships to eating and body image disturbances (Mazzeo & Espelage, 2002; Weiner & Thompson, 1997). Similarly, both date rape and dating violence

among adolescents have been linked to disordered eating behaviors such as binge eating, self-induced vomiting, or using laxatives or diet pills (Ackard & Neumark-Sztainer, 2002).

It is hypothesized that trauma from various types of victimization is a non-specific risk factor for eating disorders and the development of eating disorders is part of a posttrauma response (Harned, 2000). Eating disorders may function as coping strategies for managing the psychological distress that often results from trauma. Several studies have attempted to understand the relationship between trauma and eating disorders by examining variables such as posttraumatic stress, anxiety, depression, alexithymia, self-esteem, and self-blame (Dansky et al., 1997; Kent, Waller, & Dagnan, 1999; Harned, 2000; Harned & Fitzgerald, 2002; Hund & Espelage, 2005; Mazzeo & Espelage, 2002). Research has suggested that victimized women may binge eat, purge, or diet to numb negative feelings, alleviate anxiety, induce sleep, or dissociate from intrusive traumatic memories (Dansky et al., 1997; Thompson, 1992). Furthermore, research has found that eating disorders are often used to manage strong affect such as anxiety, depression and posttraumatic stress (Costin, 1996; Harned, 2000; Harned & Fitzgerald, 2002; Hund & Espelage, 2005; Kent et al., 1999).

Even though several studies have examined the role of various variables that might explain the link between trauma and eating disorders, few studies have considered the cognitive schema that might explain this relationship. Harned and Fitzgerald (2002) studied the cognitive process of self-blame to determine its significance to sexual harassment and eating disorder symptoms. The findings of their study demonstrated that self-blame was associated with greater psychological distress and indirectly predicted eating disorder symptoms. The authors suggested that some harassed women might blame their physical appearance for their harassment and change their body size or shape in some way to prevent any future harassment.

Self-blame has also been linked to post-rape adjustment. For example, Meyer and Taylor (1986) examined the specific attributions and coping patterns that followed sexual assault to determine whether they influenced psychological adjustment to the assault. The researchers found a relation among the attributions and coping patterns and the severity of the psychological consequences of the assault. More specifically, the results revealed an association between behavioral and characterological self-blame and poor psychological adjustment. Behavioral self-blame is defined as occurring “when a victim assigns responsibility for her rape to her own modifiable behaviors (e.g., not locking the front door, hitchhiking)” (p. 1227). Characterological self-blame is defined as “attributions to stable aspects of a person (e.g., “I am too trusting, “I am a bad person”); it implies inevitability and a feeling that the attack was deserved” (Meyer &

Taylor, 1986, p. 1227). A third type of blame, societal blame (non-self-blame), was not associated with the severity of negative outcomes after a rape. This indicates that there was no relation between the extent to which a woman blamed society and the severity of her postrape symptoms (Meyer & Taylor, 1986). Despite these significant findings, the self-blame that might be associated with rape has not been included in studies examining the trauma and eating disorders relationship.

Understanding why victims of sexual harassment or rape may engage in self-blame is important since it could affect how they cope and recover after being victimized. One factor that has been linked to self-blame in the literature is acceptance of rape myths. Lonsway and Fitzgerald (1994) described three characteristics of myths. Myths are false or fictional beliefs that are widely believed; they explain some important aspects of a culture; and they function as rationalizations or justifications of the existing cultural arrangements. Lonsway and Fitzgerald (1994) defined rape myths as: “attitudes and beliefs that are generally false but are widely and persistently held, and that serve to deny and justify male sexual aggression against women” (p.134). Myths are similar to stereotypes. As with stereotypes, not all incidents of rape (or sexual harassment) conform to the myths, however, there may be some incidents that happen to fit the myths and these incidents are widely publicized. This also prevents the recognition of the vast majority of rape (or sexual harassment) incidents that actually do not conform to the myth (Lonsway & Fitzgerald, 1994). Also, since the purpose of myths is to justify violence against women, they often focus on the victim and blame the victim for the event (Koss, Goodman, et al., 1994).

Lonsway and Fitzgerald (1994) noted that the association between rape myth acceptance and victim-blame is especially important to research because it has implications for how this victim-blame becomes channeled into self-blame. The authors cite research that has examined the relationship between rape myth acceptance and the degree of responsibility that is attributed to a victim or rapist. This research has used vignettes and film clips to ask individuals to rate the degree of blame they attribute to a man for the rape of a woman. A review of this research indicates that studies conducted with both student and nonstudent samples demonstrated that higher rape myth acceptance is correlated with significantly less blame for the man. Research also indicates that among student samples, rape myth acceptance is associated with a greater likelihood of blaming the victim for her assault. Another study conducted with British community members confirmed this finding (Lonsway & Fitzgerald, 1994).

Further, research has revealed that higher levels of self-blame in rape victims can result in higher levels of psychological distress, lower levels of self-esteem, and a longer recovery (Lonesway & Fitzgerald, 1994). In addition, as noted earlier in this paper, self-blame that is characterological and behavioral is associated with poorer postrape adjustment (Meyer & Taylor, 1986). Thus, since rape myth acceptance and victim-blame are related, and both might be associated with harmful effects on recovery from rape, the inclusion of rape myth acceptance as a variable in the present study could help explain the cognitive processes that contribute to the relationship between rape and eating disorders symptoms.

The literature on the relationships among sexual harassment, rape, and eating disorders also lacks the inclusion of another important cognitive schema, traditional gender-role attitudes. Worell and Remer (2003) defined gender roles as, “patterns of culturally approved behaviors that are regarded as more desirable for either females or males in a particular culture”(p. 15). Both sexual harassment and rape have been linked to the traditional gender-role socialization of women and men in society (Hotelling & Zuber, 1997; Koss, Goodman, et al., 1994; Worell & Remer, 2003). Koss, Goodman, et al. (1994) contended that cultural beliefs that support rape also support sexual harassment, and other types of violence. They stated, “Cultural norms and expectations play critical roles in shaping and promoting male violence against women, minimizing or covering up its harmful effects, and preventing the development of effective policies and programs designed to prevent such violence.” (p.6-7). Koss, Goodman, et al. (1994) indicated that traditional sexual scripts, underlie gendered violence and it is these scripts that designate different roles and behaviors to men and women. The scripts are shaped by a culture’s expectations and norms and direct men and women’s behavior in various situations.

In the U.S., a heterosexual script that emphasizes male dominance as normal and natural is supported. The script supports gender inequality and the cultural expectation is that women will have relationships with men who are bigger and stronger in physical stature, smarter, higher in status, more experienced, more confident, earn higher pay, and are more talented. The scripts also involve a male-centered objectification of women that emphasizes women’s beauty and ability to satisfy men’s desires (Koss, Goodman, et al., 1994). If a script is not followed in heterosexual encounters and males fail to play a dominant role, then the men and women are viewed as lacking desirable masculine and feminine traits and abilities. Traditional gender-role scripts encourage violence when the male is expected to be a sexual stalker and the female is the prey. The female becomes the one who is responsible for how much sexual involvement occurs and yet her right to say “no” is eliminated by the cultural expectation that she act passively in the encounter. These

sexual scripts foster misperceptions and misinterpretation of sexual encounters, which can result in sexual harassment, sexual coercion, rape and battering (Koss, Goodman, et al., 1994).

Gender-role socialization both sets the stage for sexual harassment and rape and perpetuates the incidents once they occur. For example, men are socialized to be the aggressors in all realms of their life, especially sexual realms. Men are taught that they should initiate sex and women are supposed to obey them. Women are socialized to be asexual and sexual interest is associated with promiscuity. Women are also expected to be passive and silent so saying no or being nonresponsive to sexual advances may be more about the gender-role she is playing and less about her actual interest level. Once rape or sexual harassment occurs, women may be reluctant to confront the perpetrator or report the incident since they are taught to avoid conflict and doubt their perceptions (Hotelling & Zuber, 1997). In addition, women learn that their ability to initiate and maintain relationships is a large part of their identity (Gilligan, 1982). Wanting to preserve a relationship and maintain a positive self-concept, women may not disclose the violence that they experienced. Research has indicated that gender-role socialization creates the conditions for sexual harassment and sexual assault to thrive and contribute to the victim incidence rate being higher among females than males (Koss, Goodman, et al., 1994; Welsh, 1999).

Gender-role attitudes have also been linked to the development of eating disorders (Hepp, Spindler, & Milos, 2005). One of the most consistent findings in the eating disorder literature is the greater prevalence of eating disorders in females compared to males. The population-based studies estimate that for both anorexia and bulimia nervosa, the female to male ratio is in the range of 10:1 (Jacobi, De Zwaan, Hayward, Kraemer, & Agras, 2004). One explanation for this gender difference is the influence of traditional gender roles for men and women (Smolak & Murnen, 2001). For example, the female gender role is associated with beauty whereas the male gender role is associated with ability. Thus, beauty will determine social and economic success for women, while for men, this success is determined by how they act and what they accomplish (Seid, 1994). The beauty ideal for women in American culture is a thin body ideal so if women desire social acceptance and success, they will have to attain this ideal. Since the standard ideal body weight for women is extremely thin and the majority of American women do not naturally have this body shape, extreme dieting and weight loss measures often have to be used to attain this ideal female body weight (Seid, 1994).

Research on gender-role attitudes and eating disorders suggests that a relationship exists between these phenomena; however the direction and size of this relationship is not clear. For example, Perlick and Silverstien (1994) suggested that girls and women suffering from eating

disorders are ambivalent about the adult female gender role. Gender ambivalence may develop if girls have a sense that being female is negative. Women who experience distress from trying to achieve in areas traditionally dominated by men and come to feel limited by being female may develop a syndrome, the “forgotten syndrome” (Perlick & Silverstein, 1994, p.80). The term “forgotten syndrome” is used because the modern psychiatric and psychological classification system used in the U.S., the Diagnostic Statistical Manual, fourth edition, does not describe this syndrome. This syndrome may include disordered eating, depression, anxiety, poor body image, menstrual dysfunction, and somatic symptoms. Thus, eating disorders may reflect a syndrome that develops from the self-doubts that result from experiencing gender bias and the inability to succeed intellectually, professionally, or politically because of their gender status (Perlick & Silverstein, 1994).

Other research has suggested that instead of being ambivalent about gender, women with eating disorders adhere to the traditional female gender roles and have more feminine traits, such as high passivity and need for approval. Murnen and Smolak (1998) conducted a meta-analytic review to understand the relationship between gender-role adherence and the presence of eating problems. The researchers found that high femininity is correlated with an increased risk of eating problems and high masculinity was correlated with a decreased risk of eating disorders. These relationships were significant, but small. The researchers indicated that the results of these findings suggest that gender role is related to eating problems. However, more research is needed to understand how feminine traits, such as high passivity and need for approval, are related to eating problems. (Murnen & Smolak, 1998).

Hepp et al., (2005) also found a relationship between gender-role orientation and eating disorder symptomatology. In contrast to Smolak and Murnen’s study, however, the researchers found an overall negative relationship between masculinity and femininity and eating symptomatology. The researchers grouped participants into four types of gender role orientation: masculine (high on masculinity and low on femininity), feminine (high on femininity and low on masculinity), undifferentiated persons (low on both masculinity and femininity), and androgynous (high on femininity and high on masculinity). Researchers found that individuals who scored high on both masculinity and femininity, (androgynous individuals), reported lower levels of eating disorders compared to individuals who scored low on femininity and masculinity (undifferentiated individuals). Also, an examination of associations between subscales on an eating disorders measure revealed that femininity alone was not associated with the core symptomatology of eating disorders, but was associated with levels of unspecific

psychopathological symptoms related to eating disorders, such as “Ineffectiveness” and “Interpersonal Distrust.” Thus, the authors concluded that these results do not support the notion that femininity is a risk factor for disordered eating. The results do support the view; however that higher masculinity alone is associated with lower levels of eating disorder symptoms, therefore masculinity appears to have a stronger protective effect for eating disorders when compared to femininity (Hepp et al., 2005). Considering these findings and the results of the previous studies, research is needed to clarify the relationship between gender-role orientation and eating disorders.

The aim of the proposed study was to integrate aspects of the literature that have not been considered and to examine these elements within populations that has not been studied, college nursing and pre-service teaching students. The study investigated associations among sexual harassment, rape, and eating disorders symptoms. Very few studies have examined both of these forms of victimizations and their relation to eating disorders symptoms. In addition to these associations, it assessed the possible role of two types of cognitive schema, gender-role attitudes and rape myth acceptance. Researchers have not examined how both of these cognitive schemas may impact the psychological distress from the traumatic experiences of sexual harassment and rape. For example, women with traditional gender-role attitudes may hold themselves responsible for their traumatic experiences and engage in more self-blame attributions. Also, women who have adopted rape myths may blame themselves for their victimization and as a result, experience greater psychological distress and develop disordered eating.

With regards to college nursing students, little is known and research is scant on how nurses respond to sexual harassment (Valente & Bullough, 2004) and rape. Yet McPaul and Lipscomb (2004) state, “Workplace violence is one of the most complex and dangerous occupational hazards facing nurses working in today’s health care environment” (p.168). Even though definitions of workplace violence vary, several institutions have defined workplace violence as including physical and psychological violence and threats of such violence, abuse, mobbing or bullying, racial harassment and sexual harassment. This violence may occur while an individual is at work or on duty between co-workers, supervisors, patients, families, visitors, and others. The few studies that have examined one type of workplace violence, sexual harassment, indicated that 69% to 85% of nurses report experiencing some type of sexual harassment. Perhaps, some authorities argue, nursing is the profession with the highest rates of sexual harassment. Harassment in nursing is largely perpetrated by coworkers and supervisors, although patients and families commit some harassment (Valente & Bullough, 2004). Another study on other types of workplace violence found that among 65 nurses, the lifetime prevalence rates of

sustained psychological (89%), physical (65%), and sexual aggression (65%) from patients was high (Little, 1999).

Another female-dominated profession, teaching, has not been extensively studied in relation to sexual harassment and rape. A literature review did not reveal any research studies on how pre-service teaching students respond to sexual harassment and rape. Most research has focused on teachers as perpetrators rather than victims.

Understanding the relationship between victimization and eating disturbances will facilitate the development of counseling interventions for victimized women and the prevention of eating disorder symptoms in women. Sexual harassment, rape and eating disorders are highly prevalent among women, cause long-term psychological consequences, and negatively impact women's ability to succeed in academia and the workplace. Although only a few studies have examined nurses' experiences of sexual harassment and rape, results consistently show these experiences are a serious threat to nurses' job performance and satisfaction and stability in their work environment (Dan, Pinsof, & Riggs, 1995; Little, 1999; McPaul & Lipscomb, 2004; Valente & Bullough, 2004). In addition, since pre-service teaching students are predominately female and there is little literature on how this population may experience sexual harassment and rape, an exploration of these phenomena will provide similar information. By surveying undergraduate nursing and pre-service teaching students, the prevalence of sexual harassment and rape and the ways in they respond, can be examined. This deeper understanding of undergraduate nursing and teaching students' experiences can contribute to universities' responses to these phenomena and improve the well-being of female nursing and teaching students.

Chapter Two: Review of the Literature

Violence against women takes many forms, ranging from rape to stalking, physical assault, wife battering, and sexual harassment (Koss, Goodman, et al., 1994; Tjaden, 2004). Data from a National Violence Against Women Survey (Tjaden & Thoennes, 2000) of 8,000 women and 8,000 men confirm the pervasiveness of violence against women. Of the surveyed women, 2% reported being raped, physically assaulted, or both in the 12 months preceding the survey. Since some rape and physical assault victims experience multiple victimizations each year, 876,000 rapes and 5.9 million physical assaults are committed against U.S. women in a given year. Stalking is also quite prevalent with 8.1% of the surveyed women reporting a stalking incident at some time in their life (Tjaden & Thoennes, 2000). Data on sexual harassment has also been estimated and Gutek (1985) found that about 35% to 50% of women have been sexually harassed at some point in their working lives. This violence against women has devastating consequences for women, families and society (Koss, Goodman, et al., 1994). Thus, it is imperative that research is aimed at understanding and preventing such violence. This study will examine two forms of violence: rape and sexual harassment.

Rape

Koss, Goodman, et al. (1994) documented various common myths about male violence against women, including the forms of rape, battering and harassment. The myths are as follows:

1. They enjoy/want it.
2. They ask for/deserve it.
3. It only happens to certain types of women/in certain kinds of families.
4. They tell lies/exaggerate.
5. Men are justified in their behavior or not responsible for unintentional effects.
6. The acts are not really harmful.
7. The acts are very unusual or deviant. (p.8-9)

These myths shift the blame for the crime to the victim and provide justification for why the violence occurred. It allows the perpetrator to escape taking any responsibility for the crime. This distorts the reality of the violence and protects individuals and society from recognizing the seriousness of the violence (Fitzgerald & Lonsway, 1994; Koss, Goodman, et al., 1994.). Payne et al. (1999) claimed the distortions serve a psychological function in that they allow individuals to reject, ignore, or detach themselves from believing they could be the targets of violence.

Fortunately, research has examined the various forms of rape and challenged many of the rape myths that impact women's lives. To define rape and understand the consequences that may follow, it is first important to accurately capture women's varied experiences. This study will

briefly discuss both the legal and non-legal definitions of rape, prevalence rates, the risk for rape incidents, and possible negative outcomes.

Definitions of Rape

The definitions of rape vary in the literature. The most common legal definition of rape is, "...rape involves sexual intercourse by forcible compulsion with a woman"(Worell & Remer, 2003, p. 211). The current legal definitions of rape no longer limit the crime to vaginal penetration alone, to female victims, and to only forcible situations. The legal definition specifies that sexual penetration is rape if an adolescent or adult does not consent or is incapable of giving consent by virtue of mental illness, mental retardation or intoxication. Also, the legal definition considers physical force and threat of bodily harm and any intrusion, however slight, of any part of a person's body (Koss, Goodman, et al., 1994). Statutory rape involves sexual activity with a person below the age of consent. States vary on what they consider to be the age of consent. Marital rape is the rape of a wife by her husband. In the 17th century marital rape was exempted so rape in marriage was not considered possible or illegal and it was not until the 1980s when marital rape became illegal. There are still some exemptions in some states regarding this new law. Twenty-six states exempt lower degrees of rape such as, rape imposed by force, but without the wife's suffering. Eight states consider the rape of a wife a crime, in other states if the husband and wife are not living together, have legally separated, filed for divorce or have an order of protection, then rape is considered a crime (Russell, 1998).

In addition to the legal definition of rape, the literature has also delineated different types of rape including stranger, acquaintance, and date rape. These different types of rape are not legal definitions, but offer insight into how rape may occur and the impact it may have on the victim. For example, acquaintance rape occurs when the victim knows the perpetrator previous to the rape incident. Date rape happens when the victim and perpetrator are on a date and there may or may not be prior knowledge of each other's identity. Acquaintance and date rape are the most frequent type of assault scenarios, but are the least likely to be reported. Victims are less likely to report these types of rape because victims often trusted the perpetrator in this scenario and fear being blamed for their judgment. Further, the victims may hold themselves responsible for what happened and blame themselves for the rape. Another type of rape, stranger rape, occurs when the victim does not know the perpetrator prior to the rape incident. This type of rape is typically characterized as a surprise attack in which the perpetrator used great physical force or some type of weapon. Stranger rape is the most likely type of rape to be reported and to gain the most attention from the public (Galliano, 2003).

Additional non-legal definitions of rape include the Sexual Victimization of College Women survey's definition, "Unwanted completed penetration by force or the threat of force"(Fisher, Cullen, & Turner, 2000, p.8). The definition includes examples of various kinds of sexual activity, not only penetration of a vagina by a penis. Brownmiller (1975) defines rape as, "If a woman chooses not to have intercourse with a specific man and the man chooses to proceed against her will, that is a criminal act of rape" (p.18). Brownmiller labels this definition as a "female definition of rape"(p.18).

Notably, these legal and non-legal definitions of rape include several common key elements. The definitions typically indicate that rape involves the use of coercive and/or forcible strategies by the perpetrator to gain some form of sexual access. The strategies may differ and range from the use of physical force, to psychological intimidation, and/or to using alcohol or drugs to incapacitate victims. Also, just as the type of strategies may vary, the types of sexual activities perpetrators use to violate victims may differ. Some definitions describe rape, as vaginal penetration alone, while others include other sexual behaviors such as anal and oral sex. Lastly, whether the victim consents or is not able to give consent can define whether the sexual activity is labeled a rape.

The present study chose to use a comprehensive definition of rape that included the full range of such possible coercive strategies and types of penetration. By employing this comprehensive definition, the present study can more fully understand the consequences of rape, and the many negative outcomes it can cause. Thus, rape was defined as the use of five different coercion strategies by the perpetrator. These strategies include: (a) telling the victim lies, false promises about the future, or threats to end a relationship or spread rumors; (b) using strong arguments and continual pressure or showing displeasure (got angry); (c) met the victim after they had been drinking alcohol or using drugs and the victim was conscious, but could not consent;(d) used physical force; (e) held or pinned the victim down (Sexual Experiences Survey, Short Form for Victims). Also, the present study of rape included victimization that is oral, anal and/or vaginal by a variety of body parts and/or objects. The measurement of attempted rape was included in the data collection, but not included in the data analysis.

Lastly, the measurement of rape did not explicitly ask if the respondent consented to the sexual activity, however it is implied in the wording of the questions. The wording of the questions is as follows: "Someone performed oral sex on me or had me perform oral sex on them after:", "Someone put his or her penis, or fingers, or objects (such as a bottle or a candle) into my vagina after:", "Someone put his or her penis, or fingers, or objects (such as a bottle or a candle)

into my anus (butt) after:.” The coercion strategies (a-e) mentioned above follow these questions. Thus, these questions indicate that the person engaged in some form of sexual activity after the perpetrator used some type of coercive strategy. Consequently, the sexual activity is not consensual if the victim is being coerced in some way. This definition of rape may not fit the legal definition of rape. However, since the aim of the present study is to understand the relationship between trauma and eating disorders and being coerced into some type of unwanted sexual activity is one type of traumatic experience, this definition of rape fulfills the purpose of the study.

Prevalence of Rape

Estimates of the prevalence for rape vary depending on the population sampled, the definition of rape used, and research methods used for collecting data. Also, studies that aim to capture the true prevalence of rape must overcome the reluctance of victims to label and disclose their experience of rape. Koss, (1985) conducted a study on a college student population to describe the hidden rape victim and to identify personality, attitudinal, or situational variables that are associated with victimization. Koss first categorized the respondents in the study into an acknowledged rape group (“women reported to having submitted at any time in the past to oral, anal, or vaginal intercourse against their will through the use of force or threat of force and who indicated that they believed they had been raped”) and unacknowledged rape group (“women who reported oral, anal, or vaginal intercourse against consent through force but who did not view themselves as rape victims”) (Koss, 1985, p.196). Women were also labeled by level of sexual victimization: highly sexually victimized (12.7%), (57% were acknowledged rape victims and 43% were unacknowledged) moderately sexually victimized (24% experienced sexual contact or attempted sexual intercourse with the use of force), low sexually victimized (17.9% experienced sexual intercourse after verbal coercion), and not sexually victimized (37.6%). Koss found that among the college women surveyed in the study, 38% reported sexual victimizations that fit the legal definition of rape or attempted rape, however only 4% of these women had reported their assault to the police. Even though the respondent’s sexual experience in the highly sexually victimized group met the legal definition of rape, 43% said that they had not been raped (the unacknowledged group). Koss found that an acquaintance or a romantic intimate had assaulted most of the victims in the unacknowledged rape group. Thus, women often do not label their experiences as rape, even though their experiences meet the legal definition of rape and this is more likely to happen when victims know their perpetrators.

Rape is not rare, is not a stranger-in-the bushes phenomenon (Campbell & Wasco, 2005), and most victims know the person who sexually assaulted them (Fisher et al., 2000; Koss, 1985; Monroe et al., 2005; Tjaden & Thoennes, 2000). It is viewed as gender-based violence since research has documented that the majority of rapes involve a male offender and a female victim and result in physical, sexual, and/or psychological harm or suffering to women (Fisher, et al., 2000; Koss, Heise & Russo, 1994; Tjaden & Thoennes, 2000). The National Violence Against Women Survey (NVAW) found that 17.6% of women and 3.0% of men experienced a completed or attempted rape at some point in their lifetime. Rape is often accompanied by physical assault and the NVAW survey found that 41.4 % of women and 33.9% of men who were raped since age 18 were physically assaulted during their most recent rape (Tjaden & Thoennes, 2000). Also, many American women are raped at an early age. Of the 17.6% of women who experienced a completed or attempted rape, 21.6% were younger than age 12 when they were first raped, and 32.4% were between the ages of 12-17 (Tjaden & Thoennes, 2000).

Sexual Harassment

Definitions of Sexual Harassment

Much of the confusion surrounding the definition of sexual harassment can be attributed to a failure to differentiate sexual harassment as a legal concept from a psychological experience of victimization. Fitzgerald, Swan and Magley (1997) indicated that it is important to separate the two because they are not the same. Fitzgerald, Swan, et al.'s (1997) psychological definition is: "unwanted sex-related behavior at work that is appraised by the recipient as offensive, exceeding her resources, or threatening her well-being" (p.15). The legal definition of sexual harassment was created by the EEOC and this definition not only designates the behavior as sex discrimination, but also distinguishes between two different forms of harassment. The guidelines define sexual harassment as "unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature" (Fitzgerald, Swan, et al., 1997, p.8). The two types of harassment are *Quid pro quo* harassment and hostile environment harassment. "*Quid pro quo* harassment involves sexual threats or bribery that are made a condition of employment or used as the basis for employment decisions" (Welsh, 1999, p.170). Hostile environment harassment encompasses behaviors such as sexual jokes, comments, and touching, that interfere with an individual's ability to perform her/his job or that intimidate and offend an individual in a working environment (Welsh, 1999).

One major difference between the psychological and legal definition of sexual harassment is that the psychological definition is appropriately conceptualized more broadly and

reflects the traumatic and offensive nature of sexual harassment. The legal definition on the other hand is subject to changes in the law and may not consider the most appropriate perspective since it has to take into account many factors. Also, the psychological definition allows victims to label their experience and does not discount their judgment. What constitutes a legal definition of sexual harassment is determined by a legal system that is influenced by the current state of the law, characteristics of a particular jury, and some degree of random chance (Fitzgerald, Swan, et al., 1997).

Fitzgerald, Gelfand and Drasgow (1995) developed a theoretical model of sexual harassment that is consistent with both the legal guidelines and psychological research. The researchers tested this model and then developed an instrument to measure sexual harassment. The model includes three different dimensions of sexual harassment: sexual coercion, unwanted sexual attention, and gender harassment. Gender harassment includes a broad range of verbal and physical acts/gestures that are not intended for sexual cooperation, but that convey insulting, hostile and degrading attitudes about women. Unwanted sexual attention involves verbal and nonverbal behavior that is offensive, unwanted, and unreciprocated. Sexual coercion is the extortion of sexual cooperation in return for job-related considerations. The authors developed this model from several studies of survey data in a variety of settings, such as employed women and college students, and on diverse samples, such as various cultures within the United States and Brazil.

Fitzgerald et al.'s model (1995) can be used to categorize any type of sexually harassing behavior and the categories are comparable to legal constructs. The authors indicate, "The advantage of our model is that it articulates the relation between the legal and psychological constructs without in any sense equating them" (Fitzgerald et al., 1995, p.438). The model's two dimensions of gender harassment and unwanted sexual attention constitute the legal definition of hostile work environment while the dimension of unwanted sexual attention parallels the legal definition of quid pro quo. These dimensions also capture sexual harassment as it has been defined by psychological research and include a broad range of behaviors instead of specific acts. Since Fitzgerald et al.'s model (1995) is consistent with both legal guidelines and psychological research, the current study will utilize their model and a revised version of the instrument that corresponds to the model, the Sexual Experiences Questionnaire (SEQ) (SEQ; Fitzgerald et al., 1988, as cited in Fitzgerald et al., 1995).

Prevalence of Sexual Harassment

The estimated proportions of women and men reporting experiences of sexual harassment varies depending on the sample used, the type of measurement used, and the definition the researchers' use to measure sexual harassment (Ilies, Hauserman, Schwochau, & Stibal, 2003). The U.S. Merit Systems Federal Protection Board (USMSPB) conducted the first comprehensive and informative nationwide study of sexual harassment in 1981. The study surveyed more than 23,000 federal employees and found that 42% of the women and 15% of the men federal employees had experienced at least one of seven forms of sexual harassment. The seven forms included: sexual remarks, suggestive looks, pressure for dates, deliberate touching, pressure for sexual favors, letters and calls and actual or attempted rape or assault.

The USMSPB conducted two additional studies to update the findings of the previous studies to determine if what changes, if any, had occurred. The USMSPB's study in 1988 found a greater sensitivity about what behavior might be considered sexual harassment; however there were no significant changes in the percentage of federal employees who reported sexual harassment. Forty-two percent of women and 14 percent of men reported some type of uninvited and unwanted sexual attention. In 1994, the USMSPB conducted another survey to update 1988's survey. The USMSPB had implemented widespread training and education on sexual harassment, but despite their efforts, there was no decrease in the incidence of unwanted sexual attention. Forty-four percent of women and 19% of men reported that they had experienced some form of unwanted sexual attention. Over 87% of Federal supervisors and 77% of nonsupervisory have been a part of this training.

A study by Harned (2000) examined sexual harassment among undergraduate women and found that 89% of the women had experienced sexual harassment. Harned utilized the revised Sexual Experiences Questionnaire (SEQ-R); which differs from the USMSPB's measurement. The SEQ-R is based on Fitzgerald et al.'s (1995) model of sexual harassment; which includes the categories: sexual coercion, unwanted sexual attention, and gender harassment. Skinner et al. (2000) surveyed female veterans who use Veteran's Administration services and found that 55% of the women had been sexually harassed while in the military. Sexual harassment was measured by a positive response to the following item: "Were you ever subjected to uninvited or unwanted sexual attention (e.g., touching, cornering, pressure for sexual favors, verbal remarks) while you were in the military?" (Skinner et al., 2000, p.295).

Because the prevalence rate of sexual harassment may be calculated using various methods and varies across work settings, Ilies et al. (2003) reviewed studies on the prevalence of

sexual harassment in the U.S. The authors conducted a meta-analysis and examined two different approaches to studying sexual harassment. One approach directly queried respondents about their experience of sexual harassment and used probability-sampling techniques while a second approach examined behavioral experiences of sexual harassment. The researchers found that based on more than 86,000 respondents from 55 samples, on average, 58% of women reported having experienced potentially harassing behaviors (behavioral experiences approach) and 24% experienced sexual harassment in the workplace (direct query approach). The difference between the two calculations is partly a result of differences between researchers' and respondents' definitions of sexual harassment and the respondents' reluctance to label the behaviors as sexual harassment. Women were more likely to indicate they had experienced potentially harassing behaviors versus labeling the experience as harassment. The analyses indicated that directly asking respondents if they had experienced sexual harassment versus using a questionnaire that lists behaviors believed to comprise sexual harassment resulted in significantly lower estimates of sexual harassment incidence.

Ilies et al.'s (2003) analysis also compared incidence rates of sexual harassment across academic, private-sector, government, and military respondents. The researchers found that sexual harassment is most prevalent in the military and a lower percentage of women employed at universities consider themselves to have been sexually harassed. These results were found with the direct query approach. However, when the researchers used the behavioral experiences category, they found that women in the academic setting reported a higher average incidence rate of sexual harassment compared to women in the private sector and government settings. These findings suggest that women employed in the academic setting may experience more sexual harassment, but when they are asked whether they have been sexually harassed, they report fewer incidents. (Ilies et al., 2003).

Risk for Rape and Sexual Harassment

Risk Factors on College Campuses

Research suggests that the risk for rape and other forms of sexual victimization are greater for college women compared to other women who are in this age group or in the general population (Fisher et. al, 2000). They noted that on college campuses, large groups of young women interact with young men in various public and private settings at numerous times. These interactions might provide more opportunities for women to be sexually assaulted. Research has found that participation in routine dating and social activities, such as dates and parties, was related to greater future participation in both risk-taking behaviors and increased risk of sexual

victimization. These risk-taking behaviors might include sexual and social practices as well as alcohol and drug use. A study on the risk of sexual victimization in college women found that women who had been victimized reported that they had more than three times as many average binge-drinking days compared to women who had not been victimized. (Combs-Lane & Smith, 2002).

A study by Wood and Sher (2002) collected data on the prevalence and incidence of sexual assault among college-age students. The researchers found that victims often knew their assailants, were raped in familiar locations, and victims came from all ethnic groups. Eighty-four percent of college women who reported experiencing rape or attempted rape indicated they knew their assailant, and 57% of these incidents occurred on dates. Among college women in a sorority, 83% had experienced some form of sexual victimization during college with the location for the rapes occurring in fraternity houses (41%), apartments (21%) and cars (7%). The rates of sexual assault that occurred on-campus compared to off-campus locales was found to be 1.4 times higher on-campus.

Another large-scale study on the sexual victimization of college women revealed high prevalence rates of rape among college students (Fisher et al., 2000). The researchers conducted a telephone survey of 4, 446 college students who were attending a 2- or 4-year university. The study found that of the 4, 446 students, 2.8% of women had experienced either a completed or attempted rape in the past six to seven months. The survey was conducted in 1997 between late February and early May and respondents had to be enrolled in a college or university at the start of the 1996 fall semester. The victimization rate was 27.7 rapes per 1,000 female students, however some women are victimized more than once increasing the rate to 35.3. This prevalence rate may not seem that high, however if the 2.8 percent is calculated for a typical college career (5 years) then the percentage of completed or attempted rapes might increase to between one-fifth and one-quarter. Furthermore, for every 1,000 women attending college, there may be 35 (using the 35.3 rate per 1,000 women) incidents of rape in a given academic year (Fisher et al., 2000).

In addition to the pervasiveness of rape among college women, research has indicated that sexual harassment is a major problem on college campuses. For example, a study on sexual harassment in academia found that 40% of female undergraduates and 28.7% of male undergraduates had experienced sexual harassment at least once by a professor or instructor during their college years. Most of these incidents involved gender harassment and significantly more women than men reported such incidents. The percentage of women who reported experiencing unwanted sexual attention was 11.1 and for men it was 6.5. In addition, 2.1 percent

of the women and 0.7 percent of the men reported sexual coercion. This study also found that the overwhelming majority of students who had experienced sexual harassment did not label this experience as sexual harassment. The authors suggest that women have been taught to trust authority, limiting their ability to identify professor's behaviors as harassing (Kalof, Eby, Matheson, & Kroska, 2001).

Another study by Cortina, Swan, Fitzgerald, and Waldo (1998) also found that sexual harassment is prevalent on college campuses. The researchers found that 49% of undergraduate and 53% of graduate women experienced at least one sexually harassing behavior at least "once or twice" from an instructor or professor during their academic career at the university (p.426). Further analysis of these incidence rates of sexual harassment revealed that the likelihood a student would experience sexual harassment increased with each year that a student spent at a university. For example, the percentage of first year undergraduate women who were sexually victimized was 39% and by the fifth year this percentage rose to 60%. For graduate women, the percentage for the first year was 44% and by the fifth year it was 71%. The authors suggested that these results may reflect a cumulative effect thus, each year a female student spends in school, the more interactions this student may have with perpetrators of sexual harassment. Also, advanced undergraduate and graduate women tend to take smaller classes and work more closely with professors and this closer association may present more opportunities for sexual harassment. The data also suggested that the sexual harassment had many adverse consequences and negatively impacted the educational experiences of both undergraduate and graduate students. Besides feeling less respected, accepted, and treated less fairly, the students doubted their academic competence and their own self-efficacy.

Other characteristics of college campuses, such as the culture and structure of the educational system, might make female students more vulnerable to sexual harassment. For example, both gender stereotyping and the reinforcement of women's dependency and reliance on authority are infused into this educational system, thus supporting the socialization of women to be submissive (Kalof et al., 2001). This socialization may influence women's responses to sexual harassment and make it less likely that they will confront a professor or instructor who is sexually harassing them. They may also be less likely to report the incident. Furthermore, since institutions of higher education are mostly male dominated, the milieu of these institutions is often one in which women are devalued and treated less seriously than men (Kalof et al., 2001). These beliefs and attitudes may not only encourage sexual harassment, but also affect women's perception of the behavior.

Considering that university faculty has tremendous influence on students' academic and career success, especially at the graduate level, students' educational pursuits may be negatively affected by sexual harassment. Studies on sexual harassment have found that such negative consequences may include the avoidance of a professor, dropping classes, changing advisors, or withdrawing from school (Cortina et al., 1998). Thus, it seems the structure and culture of college campuses create an environment that allows rape and sexual harassment to thrive and contributes to the incidence rate being higher among female students.

Other research has found that graduate students who are studying in male-dominated areas are more likely to experience sexual harassment. For example, Morse's research (1995) revealed that female graduate students in non-traditional programs (majority of students are male) compared to students in traditional programs (majority of students are female) were more likely to be sexually harassed. Morse suggested that this finding is consistent with other research indicating that women often have less power in traditionally male workplaces and are perceived as more threatening to male peers in these male dominated fields. Males in these types of fields may fear losing their positions, thus they use sexual harassment to protect the field from becoming a female dominated field. It is also important to note that Morse found that harassed victims were aware of the power the harassers had, including grading, evaluating and discrediting the graduate student and did not believe the institution or administrators would protect them. If victims did report harassment, it was frequently to a female faculty member.

Risk Factors Among Nursing College Students

Research has confirmed that women in general are more likely to experience sexual harassment and rape and those women within the college setting are at an even greater risk. Males are more often the perpetrators of this violence against women. Research has also examined another group of women, female nurses, to determine if this occupation influences the incidence of harassment and abuse. Since nursing is a predominately female occupation and the nurses often interact with a predominantly male occupation, physicians, both a hierarchy of gender and of professional status are present. Konrad and Gutek (1986) indicate that research has found that sexual harassment is more frequent within male or female dominated workplaces compared to gender-integrated jobs. Also, women in female-dominated jobs who have frequent contact with men are less likely than other women to label sexual behaviors in the workplace as sexual harassment (Konrad & Gutek, 1986). Dan et al. (1995) indicate that sexual harassment may be used as a way to keep female nurses "in their place" as women (p.563).

Several studies have examined the prevalence of sexual harassment among nurses. Grieco (1987) found that 76% of 496 state licensed nurses, including nurses in a university hospital, Veterans Administration hospital, state and private hospitals, and a school of nursing, indicated they had experienced sexual harassment in the workplace. Nurses rated separately whether they had been harassed by patients, doctors, coworkers, supervisors, and others. Significantly more harassment resulted from patients with 87% of the harassed nurses reporting that they had been harassed by patients. Sixty-seven percent of nurses indicated they had been harassed by physicians, 59% were harassed by coworkers, 8% by supervisors, and 28% by others. Respondents who reported this harassment were more likely to be younger and female. A study by Duldt (1982) also found a high prevalence rate of sexual harassment (60%) among their sample of 89 nurses. However, in their study, the typical harassers were physicians and supervisors, instead of patients. Another study by Dan et al. (1995) found that 88.5% out of a total of 52 graduate students and faculty at several nursing schools had experienced one or more incidents of harassment by physicians, followed by 83% of nurses experienced harassment from co-workers, 75% by patients, and 73% by visitors.

There is a paucity of research on the occurrence of rape and/or abuse among nurses. A study by Leiter, Frizzell, Harvie, and Churchill (2001) did examine the relationship between occupation (nursing versus non-nursing) and gender with perceived risk of abuse (sexual harassment and verbal and physical abuse). Perceived risk was measured by asking participants if they felt at risk while at work for physical or verbal abuse. The results of the study indicated that women felt more at risk for abuse than men. Also, the study found that nurses felt more at risk for abuse compared to non-nurses. Further analysis of this perceived risk for abuse indicated that higher levels of perceived risk for sexual harassment and verbal abuse were associated with more exhaustion and cynicism. Perceived risk for physical abuse was related to more exhaustion, decreased cynicism, and reduced professional efficacy. Workplace abuse has been associated with burnout and a reduced sense of community, thus organizational policies and structure for dealing with this abuse is very important to improving the communities at various workplaces.

Considerable research suggests that college women and more specifically, women students who choose nursing as a career, are at risk for both rape and sexual harassment. The prevalence of rape and sexual harassment among these populations appear to be partly due to the culture and structure of college campuses. The culture is one in which routine dating and social activities that often involve alcohol use are common and therefore, present opportunities for women to be exposed to assailants. Also, female students are likely to experience gender

stereotyping and to be socialized to depend and rely upon authority. Thus, college women who are harassed or assaulted may not know how to respond to their victimization. Further, since males tend to occupy high status positions in both institutions of higher education and the medical profession, women may be devalued and treated less seriously in these environments.

Victimization and Negative Outcomes

It is apparent from the literature that rape and sexual harassment are highly prevalent among female college students and the profession of nursing and teaching presents several factors that increase the risk of victimization. These findings have significant implications for students' ability to maintain an academic life and their psychological, physical and social health. Both forms of victimizations can cause various negative psychological and medical consequences. These consequences are experienced by most victims in the immediate aftermath and may last for years after the incident (Koss, Heise, et al., 1994). For example, the mental health effects of rape are devastating and often change a woman's life permanently (Koss, Goodman, et al., 1994). Victims suffer from post-traumatic disorder, anxiety, depression, sexual dysfunction, interpersonal difficulties (Campbell & Wasco, 2005; Koss, Goodman, et al., 1994), alcohol abuse/dependence, drug abuse/dependence, and obsessive-compulsive disorder (Koss, Heise, et al., 1994).

In addition to the mental health effects, rape can result in injuries and somatic effects such as suicide and homicide, chronic illness, and reproductive health consequences. Illnesses that have been associated with rape include chronic pelvic pain, arthritis, gastrointestinal disorders, headaches, and premenstrual symptoms. Reproductive health consequences may include pregnancy, sexually transmitted diseases, including AIDS, and subsequent high-risk sexual behaviors. Rape can also affect how women live their lives. Women may begin to restrict their movements to avoid being raped again and develop a distrust of men, fearing future sexual violation. Thus, rape is a woman's health issue and the long-term consequences can affect women's physical, psychological and social well-being (Koss, Heise, et al., 1994).

Sexual harassment has also been linked to psychological, physical and somatic consequences, as well as job and academic-related consequences (Welsh, 1999). For example, Fitzgerald, Drasgow, et al. (1997) found that women who experienced sexual harassment suffered from psychological problems, higher levels of absenteeism, stronger turnover intentions, and spent a lot of time thinking about leaving their job. Other research has revealed that sexual harassment results in lowered morale, decreased job satisfaction, decreased perception of equal opportunity, damaged interpersonal work-relationships, and possible loss of a job. The negative

psychological and physical health outcomes of sexual harassment may include anxiety, depression, sleep disturbances, nausea, stress, and headaches (Welsh, 1999).

Additional research on sexual harassment found that subtle sexual harassment in a job interview can disrupt women's performance (Woodzicka & LaFrance, 2005). The researchers created an experiment in which women were exposed to verbal and nonverbal sexual harassment in a mock job interview. The findings demonstrated that harassed women had higher rates of speech disfluency and produced lower quality responses to the interviewee's questions.

In academic settings, Benson and Thomson (1982) found that college women who were harassed tried to avoid a harassing instructor and did not report their behavior because they did not want to jeopardize their student standing. When women had an established relationship with an instructor and this instructor harassed them, the women reported a loss of self-confidence in their academic ability and disillusionment with male faculty. These women often became suspicious of male instructors and their interactions with male faculty became constrained due to this distrust. Of particular interest is the authors' conclusion from the results of the study. The authors suggested that sexual harassment experiences in college erode women's commitment to careers in male-dominated areas.

Eating Disorders

One specific psychological and medical outcome from rape and sexual harassment, eating disorder symptoms, has recently received some consideration in the literature. Eating disorders are currently a national epidemic in the U.S. and pose life-threatening consequences for women and men. It is estimated that today, eating disorders affect more than 10 million females and 1 million males (National Eating Disorders Association, 2005). Of any psychological disorder, eating disorders have the highest mortality rate. Five to ten percent of individuals with anorexia nervosa will not survive their condition within 10 years of its development (Costin, 1996). Others may not be diagnosed with an eating disorder, but find their lives complicated by unhealthy weight management behaviors and a negative body image.

Definition of Eating Disorders

The high prevalence rate, as well as the associated health, psychological and social consequences of eating disorders, has led to the classification of three types of eating disorders in the Diagnostic and Statistical Manual, Fourth Edition (DSM-IV) (American Psychiatric Association, 1994). The disorders are classified as Anorexia Nervosa, Bulimia Nervosa, and Binge Eating Disorder (provisional diagnosis). The DSM-IV also defines a large and heterogeneous diagnostic category, Eating Disorder Not Otherwise Specified, for individuals who

have clinically significant eating disordered behaviors but do not meet all of the diagnostic criteria for anorexia nervosa, bulimia nervosa, or a provisional binge eating disorder (Walsh & Garner, 1997). Primarily girls and women experience eating disorders; however, the prevalence of eating disorders among males is gaining more attention (Carlat, Camargo, & Herzog, 1997).

The DSM-IV criteria for anorexia nervosa includes a refusal to sustain a body weight that is 85% of one's normal weight for their age and height, having an extreme fear of gaining weight, focusing on weight for self-evaluation, and denial of the dangers of low body weight and amenorrhea. Two subtypes of anorexia are included to discriminate between individuals who engage in regular binge eating or purging behavior from those who solely restrict food. Binge eating is defined as eating a large amount of food in a short amount of time and feeling out of control over the eating during the binge. Purging is the use of self-induced vomiting, laxatives, diuretics, or enemas as methods to prevent weight gain. Some of the associated features of anorexia include a fear of eating in public, feelings of ineffectiveness, inflexible thinking, limited social spontaneity and a strong desire to control one's environment (American Psychiatric Association, 1994).

Besides the behavioral symptoms of anorexia, severe physical complications such as, decreased metabolism, diminished thyroid function, brittle hair and nails, cold intolerance, constipation, intermittent diarrhea, mild anemia, reduced muscle mass and swelling joints are present (Eating Disorders Newsletter, 1997). Other significant symptoms may include hypotension, hypothermia and dry skin. Some individuals develop a fine downy body hair called lanugo. Most individuals will have bradycardia. Many of these physical symptoms are attributable to starvation. Some anorexics develop peripheral edema, especially if weight restoration occurs or laxative and diuretic abuse is stopped. Individuals who induce vomiting may exhibit dental erosion and/or scars or calluses on the hand from contact with the teeth during induced vomiting (American Psychiatric Association, 1994).

Individuals with anorexia do not lack an appetite, but actually long to eat and often obsess over food. Even when experiencing great hunger pains, an anorexic will deny their body food and will instead cook for others, study menus, and create recipes. Anorexia is not about a loss of appetite, but rather a strong desire to control. Anorexics are quite fearful of what would happen if they relinquished their control and permitted themselves to eat. In the absence of their control, they fear they would not be able to stop eating and become obese. Anorexics define themselves based on whether they abstain from food and being thin translates to being in control.

Even though approximately 50% of anorexics are able to maintain their starvation, approximately 50% are not and often develop bulimia nervosa (Costin, 1996).

The second classified eating disorder in the DSM-IV (1994) is bulimia nervosa. Unlike anorexics, bulimic individuals maintain a body weight at or above a minimally normal level for their age and height. Bulimia is characterized by recurrent episodes of binge eating in a discrete time period and there is a sense of uncontrollable eating during the binge. To avoid weight gain, periodic compensatory behavior such as self-induced vomiting, misuse of laxatives, diuretics, enemas, or other medications are used. Individuals may also use fasting and/or excessive exercise to prevent weight gain. To qualify for a diagnosis of bulimia, the binge eating and compensatory behaviors must occur at least twice a week for three months and cannot transpire solely during episodes of anorexia. Two subtypes of bulimia include a purging type, the person uses self-induced vomiting or the misuse of laxatives, diuretics, or enemas and the nonpurging type, the person uses other types of compensatory behaviors such as fasting or excessive exercise (American Psychiatric Association, 1994).

Because individuals with bulimia typically maintain a weight within a normal range for their age and height, it is often difficult to detect the presence of bulimia. In addition, the bulimic behaviors are often hidden due to feelings of shame, guilt and loss of control. Bulimics have repeatedly attempted to control their weight through food restriction and have failed. Self-induced starvation goes against normal bodily instincts and can rarely be sustained. This is one reason bulimics end up bingeing and purging. Bulimics are often called failed anorexics because they have repeatedly tried to control their weight by restricting food intake, but have been unsuccessful. The compensatory behaviors appear to provide some sense of relief and reduce the guilt and anxiousness associated with food consumption or weight gain. The compensatory behaviors may increase as the eating disorder progresses and an individual begins using the behaviors to eliminate any food. The binges can also increase to where a person may eat up to 50,000 calories in one day (Costin, 1996).

The binge-purge cycle that often develops with bulimia not only becomes a way of regulating weight, but also a system for regulating moods. The bulimic can become addicted to the purging because it can act as a coping strategy. Even though the purging may serve as a coping mechanism, the bulimic is typically extremely distressed by their inability to control their eating and purging. A bulimic frequently describes her disorder as a monster that has taken over her mind and body. The out-of-control and ashamed feelings seem to motivate bulimics to seek

help. They desperately want to stop bingeing, but are hesitant to give up the restrictive dieting that often causes the bingeing (Costin, 1996).

The nutritional deficiencies associated with bulimia can produce medical complications such as menstrual irregularity or amenorrhea (Becker, Grinspoon, Klibanski, & Herzog, 1999). Any type of frequent purging behavior can cause fluid and electrolyte abnormalities and are sometimes so severe that they cause serious medical problems. Individuals who abuse laxatives may develop a dependence on them to stimulate bowel movements. The recurrent vomiting that is common with bulimia can cause loss of dental enamel, ragged and chipped teeth, and calluses or scars on the dorsal surface of the hand. It can also sometimes cause more dental cavities. Some individuals develop enlarged salivary glands, particularly the parotid glands. Several rare, but potentially fatal, complications include gastric rupture, cardiac arrhythmias and esophageal tears (American Psychiatric Association, 1994).

This final provisional eating disorder classified in the DSM-IV is binge-eating disorder (American Psychiatric Association, 1994). A person with binge-eating disorder eats large quantities of food in a discrete period of time and feels distressed over the eating (Hagan, Whitworth, & Moss, 1999). Additional features associated with the binge eating include, eating until feeling painfully full, eating alone to avoid embarrassment, eating when there are no physiological signs of hunger and eating more quickly than usual. Individuals often have disgusted, depressive or guilty feelings associated with the overeating. Individuals with binge eating disorder can sometimes identify triggers to the binges, however others eat throughout the day without the recognition of any triggers. The triggers are often negative feelings such as depressive, anxious, tense, and dissociative feelings (American Psychiatric Association, 1994). Not all people with binge eating disorder are obese and the compulsivity with food is usually associated with psychological issues (Costin, 1996).

It is important to note that the terms, “eating disturbances,” and “disordered eating” opposed to “eating disorders” are frequently used in the literature. For example, a study by Wonderlich et al. (2001) used the term “eating disturbances” and measures such disturbances via a self-report screening instrument that assesses the presence of eating disorder symptomatology on two subscales: weight dissatisfaction and purging/restricting. Ackard and Neumark-Sztainer (2002) used the term “disordered eating behaviors” and their measurement of such behaviors included questions about binge-eating behavior (“During the last 12 months, have you ever eaten so much in a short period of time that you felt out of control (binge-eating)”? and weight control behaviors (“During the last 12 months, have you done any of the following to lose weight or

control your weight: fast or skip meals, Use diet pills or speed, vomit (throw up) on purpose after eating, or use laxatives.” Mazzeo (1999) indicated that disordered eating compared to clinical eating disorders is far more prevalent among college women and described this disordered eating as “subclinical eating disorders.” To measure “disordered eating” the researcher utilized the Eating Attitudes Test (EAT-26) which is a self-report measure designed to assess eating disorder symptomatology.

It appears that the literature is using the terms “disordered eating” and “eating disturbances” to denote eating disorder symptoms characteristic of anorexia nervosa and bulimia nervosa. However, these terms are not indicating the presence of eating disorder symptoms that meet the full diagnostic criteria for anorexia and bulimia in the DSM-IV. Instead, the terms indicate the presence of one or more of the symptoms, but not all of the symptoms required for diagnosis of an eating disorder. If the term “eating disorders” were used, then the measurement of eating disorders would be required to meet the full diagnostic criteria represented in the DSM-IV.

Trauma and Eating Disorders

Numerous studies have been directed at advancing the understanding of the etiology of eating disorders, yet little is still known about the risk factors that contribute to their development. It is crucial that this understanding is improved since eating disorders are one of the most common psychiatric problems faced by young women, are often chronic, can cause serious medical complications, and are associated with comorbid mental disorders such as mood disorders (Stice, 2001). Of common psychiatric disorders, eating disorders have the highest rate of treatment seeking, suicide attempts, and inpatient hospitalizations (Newman et al., 1996). Eating disorders have adverse health consequences, and the self-destructive behaviors associated with eating disorders increase morbidity and risks of mortality (Robert-McComb, 2001). Knowledge of the risk factors that contribute to the development of eating disorders can advance prevention and treatment efforts for this serious mental health condition (Stice, 2001). One type of factor that has been widely researched is traumatic experiences, such as physical, sexual and emotional abuse (Brewerton, 2005).

Considerable research supports the relationship between trauma and eating disorders. For example, Wonderlich et al. (1997) found that childhood sexual abuse is a risk factor for bulimia nervosa. The researchers suggested that the binge eating and purging that are characteristic of bulimia may serve to help the childhood sexual abuse survivor avoid, or escape memories of abuse, fears of recurrence, family tension and attributions about the self and others. A study by Hund and Espelage (2005) tested a conceptual model of associations between child sexual abuse

and disordered eating and the mediating role of general distress. Anxiety and depression were considered under the category of general distress. These constructs were considered because they are types of negative affect that can be overwhelming to survivors of childhood sexual abuse, causing them to use strategies such as disordered eating and alexithymia to cope. Results indicated that there is no direct relationship between childhood sexual abuse and disordered eating. Instead, childhood sexual abuse is positively associated with general distress (anxiety and depression), which is also positively related to alexithymia. The results of the study suggested that individuals may use bulimic behaviors, dieting and body dissatisfaction, and alexithymia as strategies to cope with the general distress associated with childhood sexual abuse (Hund & Espelage, 2005).

Mazzeo and Espelage (2002) also examined childhood physical and emotional abuse and the possible mediating role of depression. The authors added a third variable, alexithymia. This variable, alexithymia, is characterized by the inability to identify and verbalize feelings. Researches have noted that individuals with eating disorders often have difficulty identifying and describing their emotions. Research has also proposed that binge eating allows individuals to escape negative emotions. Thus, individuals who struggle with verbalizing emotions may develop an eating disorder as an attempt to avoid/process negative emotions. The second variable, depression has been significantly associated with disordered eating and alexithymia. The major finding of this study is that associations among family conflict, family cohesion, childhood physical and emotional abuse and neglect, and college women's disordered eating behaviors were mediated by depression and alexithymia (Mazzeo & Espelage, 2002). The findings of Kent et al. (1999) and Mazzeo and Espelage (2002) support the notion that the trauma-eating disorders relationship is likely to be mediated by multiple factors.

Other research has also confirmed the role of mediating variables in the relationship between victimization and eating disorders. Kent et al. (1999) investigated the relationships among physical abuse, sexual abuse, emotional abuse, and neglect and eating psychopathology. This research also measured the possible mediating role of anxiety, depression and dissociation in the abuse-eating relationship. All forms of abuse were related to eating psychopathology, however childhood emotional abuse emerged as the most reliable predictor of eating psychopathology. The relationship between childhood emotional abuse and eating psychopathology was mediated by anxiety and dissociation (Kent et al., 1999). More specifically, higher levels of anxiety and more dissociative experiences mediated the relationship between childhood emotional abuse and eating psychopathology.

Leonard, Steiger and Kao (2003) also found individuals with eating disorders-related symptoms have experienced victimization. The study found that all but one, out of 51 women with bulimia, reported experiencing both childhood and adulthood physical and sexual abuse. Bulimic women reported significantly higher levels of childhood sexual abuse, childhood physical abuse and combined childhood sexual and physical abuse compared to a control group. Analysis of additional psychological variables revealed that all women with bulimia, regardless of their abuse history, displayed significantly higher levels of depression. Dissociation and submissiveness were especially characteristic of the bulimic women who experienced childhood and sexual abuse. Thus, eating disorders and abuse are associated with psychological distress and multiple experiences of abuse are associated with certain personality traits. It is not clear whether the abuse experiences affect personality development or whether individual traits increase the probability of an individual's risk of being abused. This data also demonstrates that multiple episodes of abuse are particularly relevant to the development of eating disordered behaviors and bulimia nervosa.

Ackard and Neumark-Sztainer (2002) suggested a connection between date rape and date violence and disordered eating behaviors and other psychopathology among adolescents. The researchers found that for both boys and girls, who were victims of date rape and date violence, exhibited higher rates of eating-disordered behaviors such as binge eating, self-induced vomiting, or using laxatives or diet pills. Youth who experienced date rape and date violence were also more likely to report suicidal thoughts and attempts and scored lower on measures of self-esteem and emotional well-being (Ackard & Neumark-Sztainer, 2002). Using this same data, Ackard and Neumark-Sztainer (2003) found that youth who reported experiencing multiple forms of sexual abuse (including date rape, sexual abuse by an adult non-family member and sexual abuse by an adult family member) reported the highest rates of disordered eating behaviors, suicidal thoughts and attempts. It is important to note that this study found higher rates of laxative abuse for boys compared to girls. The authors indicate that sexual abuse may be a specific risk factor for disordered eating among boys (Ackard & Neumark-Sztainer, 2003).

Additional research by Dansky et al. (1997) found in a national, representative sample of 3,006 women that over 54% of the women with bulimia nervosa reported experiences of rape, molestation or aggravated assault. Thus, compared to women without bulimia nervosa, women with bulimia had significantly higher rates of both sexual and aggravated assault [post hoc $\chi^2(1) = 9.05, p < .01$]. Another particularly interesting finding was that 37% of these women with bulimia nervosa met the criteria for a lifetime prevalence of posttraumatic stress disorder (PTSD). This

study also found that it is the purging, rather than the bingeing, behaviors of bulimia that are associated with higher rates of victimization. The researchers concluded from these findings that victimization and PTSD clearly are risk factors for bulimia nervosa (Dansky et al., 1997).

Wonderlich et al. (2001) examined women who were either victims of childhood sexual abuse, victims of rape in adulthood, victims of both childhood sexual abuse and rape, and women who did not experience sexual trauma. The authors found that 92.3% of the women who had experienced child abuse in their study indicated that childhood sexual abuse preceded their first eating disorder behaviors or symptoms. Individuals who experienced rape alone, compared to individuals who experienced childhood sexual abuse and rape, did not show rates of such psychopathology. Individuals who reported both childhood sexual abuse and rape in adulthood had higher scores on dietary restraint and weight concerns compared to individuals who had experienced sexual abuse or rape alone. The results of this study indicated that childhood sexual abuse and multiple victimizations increase the risk of eating disorder-related symptoms. The authors noted that early childhood trauma may sensitize an individual's reaction to later sexual trauma (Wonderlich et al., 2001).

In addition to examining sexual assault and physical abuse and eating disorder symptomatology, Harned (2000) examined sexual harassment to understand the relationship between trauma and eating disorders among college women. Sexual harassment was associated with body image and eating disturbances, even after controlling for experiences of sexual abuse/assault and physical abuse. Sexual abuse/assault and physical abuse were identified as nonspecific risk factors for eating disorder symptomatology. Compared to other types of psychological distress, including posttraumatic stress, depression and anxiety, sexual harassment was more closely associated with eating disorder symptomatology. Harned concluded that harassed women may develop body image and eating disturbances as a way to cope with negative emotions associated with harassment. Harned also examined possible intervening variables in the harassment-eating disorders relationship. The results indicated that posttraumatic stress and anxiety moderated the relationship between sexual harassment and disordered eating. Women who were harassed and suffered from high levels of posttraumatic stress or anxiety were most likely to report body image and eating disturbances. This study indicates that another form of victimization, sexual harassment contributes to the development of eating disorder symptomatology and posttraumatic stress and anxiety are significant factors in this relationship (Harned, 2000).

Harned and Fitzgerald (2002) utilized Harned's (2000) general findings on sexual harassment and eating disorders symptoms to further understand the link and whether such a relationship exists in other populations. The researchers examined several additional issues such as self-blame, and self-esteem and restricted the sexual harassment construct to sexual harassment in the workplace. To determine whether the link exists in other populations, the researchers examined samples of military personnel (both men and women) and a sample of women involved in a class action sexual harassment lawsuit. The results of the study support a link between sexual harassment and eating disordered symptoms among women. This relationship was mediated by psychological distress, self-esteem and self-blame. Sexual harassment was associated with decreased self-esteem, which predicted higher levels of eating disorder symptoms. Also, low self-esteem and self-blame following sexual harassment were related to increased psychological distress, which was associated with more severe eating disorder symptoms. No relationship between sexual harassment and eating disordered symptoms was found among men. Thus, the relationship between sexual harassment and eating disorders appeared to be gender specific (Harned & Fitzgerald, 2002).

Another study by Weiner and Thompson (1997) compared a more subtle form of abuse, covert sexual abuse, to overt sexual abuse. Covert sexual abuse may not involve physical contact and may even be nonverbal. Examples of covert sexual abuse include unsolicited staring, verbal harassment or teasing about sexual development, and inappropriate conversations about spousal marital/sexual difficulties between parents and children. Overt abuse was associated to a somewhat higher degree with depression and self-esteem, whereas covert abuse was more highly correlated with body image and eating disturbances. Both forms of abuse were significantly related to negative affect. Weiner and Thompson's (1997) study added to the literature on the existing relationship between various forms of victimization and eating disorders. It also confirms the role of psychological distress in the trauma-eating disorder relationship.

Several conclusions can be made from the literature on eating disorders and trauma survivors. First, it is apparent from the literature that a relationship exists between eating disorders/symptoms and various forms of victimization such as childhood sexual abuse/assault, adult sexual abuse/assault, sexual harassment, and covert sexual abuse. Second, research supports a trauma-based theory for eating disorders, predicting that eating disorders function as coping strategies for trauma. Third, research indicates that variables such as posttraumatic stress, depression, anxiety, low self-esteem, and self-blame might explain this relationship. Knowledge of these variables can guide future treatment strategies for individuals with eating disorders and a

history of trauma (Harned, 2002). Lastly, multiple episodes of abuse appear to increase eating disorder symptoms.

Although the literature provides several models attempting to explain the relationship between trauma and eating disorders, this research has primarily focused on establishing associations between various forms of sexual and physical abuse and disordered eating (Harned & Fitzgerald, 2002). To date, only a few studies have examined a similar link between sexual harassment and eating disorder symptoms (Harned, 2000). Also, the research has consistently indicated that various psychological processes mediate the trauma and eating disorder relationship. The majority of these studies concentrate on affect and not on belief systems. Most studies also focus on childhood and adolescent experiences of sexual and physical abuse rather than a group that is at particular risk for these experiences such as college women.

*Feminist-based Theoretical Underpinnings for Understanding Violence Against Women
and Eating Disorders*

A widely accepted theory, Empowerment Feminist theory, can help us understand the high occurrence of violence against women and the high prevalence of eating disturbances. This theory embraces four basic principles. The first principle, “Personal and Social Identities are Interdependent,” (Worell & Remer, 2003, pp.66) recognizes the many identities individuals use to define themselves (e.g., gender, ethnicity, social class, sexual orientation, age, physical abilities, and characteristics) and the possible intersection of these identities. These identities are socially constructed and some of these identities are seats of privilege (e.g. White, male, heterosexual, physically able) while others are seats of oppression (e.g., *female, Person of Color, lesbian, physically disabled*). The second principal, “The Personal is Political” (Worell & Remer, 2003, pp.68) is an extension of the first principle and includes feminist beliefs about the many forms of oppressions associated with social and personal identities such as gender-role stereotyping and institutionalized sexism. This principal asserts that the external environment is a primary source of individuals’ problems. For example, traditional gender-role socialization of women encourages them to focus on their body, which may in turn cause eating disturbances. The third principal of Empowerment Feminist Theory, is “Relationships Are Egalitarian” (Worell & Remer, 2003, pp.70). Since women in most societies do not have equal status and power with men, and minority groups are subordinate in status to majority groups, this principle stresses the importance of creating societal change toward more egalitarian relationships. The fourth and final principal, “Women’s Perspectives Are Valued” (Worell & Remer, 2003, pp.73) involves the appreciation of women’s perspectives of life and of culturally embedded female values systems by both women

and men. Many traditional female behaviors and traits have been devalued by various cultures. (Worell & Remer, 2003).

These four principles of Empowerment Feminist theory can provide a framework for understanding the high prevalence of sexual harassment, rape and eating disorders among women. For the purposes of this study, the first and second principles are the most relevant to these phenomenon, thus these principles will be discussed more in depth.

First, in accordance with Principle I, “Personal and Social Identities are Interdependent,” individuals’ identification with multiple oppressed groups (e.g., being a woman, a Person of Color, being a lesbian, living in poverty, having a disability, having been traumatized previously) puts them at risk for victimization and/or eating disorders. Research by Tjaden and Thoennes (2000) estimated that 2.1 million U.S. women are raped and/or physically assaulted in a given year. Similarly, Harned (2000) found that 89% of college undergraduate women had experienced another form of victimization, sexual harassment. Thus, women as a group are at risk for victimization. At the same time, women who occupy multiple seats of oppression such as low socioeconomic status are at increased risk (Worell & Remer, 2003). For example, women who have to live in less safe areas and use public transportation or walk are more likely to be in situations in which they do not have the resources to protect themselves. Also, perpetrators have more opportunities to assault these women because they are more accessible for example, a study by Newman, Jackson, and Baker, (2003) found that females who are young, single or divorced and in low-status jobs are the most likely victims of unwanted sexual attention. Perpetrators may target these groups of women because they feel superior and perceive them as lacking authority or credibility.

Since women are part of an oppressed group who is at risk for victimization, the present study chose to examine the prevalence rates of two types of victimization, sexual harassment and rape among women. Women who experience oppression may lack the power and resources to confront and deal with sexual victimization, thus it is important to better understand how women respond and cope with such experiences. For example, women who are raised in a culture to be polite and to trust male acquaintances as protectors and to not be physically aggressive may not recognize a perpetrator as dangerous and their responses to sexual aggression may be constricted by gender-role socialization messages (Worell & Remer, 2003). Principle I of empowerment feminist theory provides an understanding of how women may be influenced by their social identities in that they have learned and internalized the sociocultural values about sexual victimization associated with their gender. It is the present study’s aim to examine how the

learning and internalization of sociocultural values associated with gender may influence women's responses to sexual harassment and rape.

Principle I also offers insights into why there is such a greater prevalence of eating disorders among women compared to men (Jacobi et. al 2004). Numerous cultural factors have been implicated in the development of eating disorders. These factors include gender roles and stereotypes, power inequities between men and women, and cultural beliefs and customs regarding eating, food, and the body (Smolak & Striegel-Moore, 2001). And it is not just gender that may increase risk for eating disorders, but also the intersection between gender and ethnicity. For example, the values and ideals about gender and body weight of European Americans have largely impacted all ethnic groups in American culture. Today, the American ideal body is a fat-free body and obesity is stigmatized, particularly for women (Rothblum, 1994; Seid, 1994). A number of negative social, academic and occupational qualities are attributed to people who are overweight (Rothblum, 1994). Thinness is associated with intelligence, attractiveness, fitness, and health whereas obesity is associated with laziness, stupidity, unattractiveness, poor health, and lack of will power or self-control (Walcott, Pratt, & Patel, 2003). This belief system pervades the American culture and it seems that Americans are obsessed with being thin (Seid, 1994). Research has examined the effects of this belief system and found that a perceived pressure to be thin was a potential factor in increasing dieting and onset of bulimic pathology. Thus, women who are part of a European American culture are more likely to experience cultural pressures to attain a thin, extreme body weight and this pressure increases their risk for developing eating disorders.

Principal II, "The Personal is Political," of Empowerment Feminist Theory further provides an analysis of the social context that contributes to the high prevalence of rape, harassment, and eating disorders. Worell and Remer (2003) stated, "Rape occurs in a social context. Rape cannot be understood apart from that context, and the woman who has been raped cannot be treated effectively without understanding that context" (p.205). Donat and D' Emilio (1998) described the act of rape as a means for enforcing traditional gender roles in a society and sustaining the hierarchy in which men retain control . Rape was further defined by Susan Brownmiller (1975) as "a conscious process of intimidation by which all men keep all women in a state of fear" (p.15). It is the gender-role socialization of women and men that teaches women to be rape victims and men to be sexually aggressive (Brownmiller, 1975). As young girls, women learn that girls get raped and they are defenseless victims. As young boys, men learn that by initiating and having sex, they demonstrate their masculinity and enter manhood. Women also

learn that men will protect them and men learn that women are possessions to be protected. These messages cause women to have a victim mentality and encourage men to be sexually aggressive. Research shows that the very men who are supposed to be the protector are often the rapists. Most rape victims know their offender, which includes boyfriends, ex-boyfriends, classmates, friends, acquaintances, or coworkers (Fisher, et.al. 2000). These offenders also often have a sense of entitlement wherein they feel women owe them sex (Abbey, McAuslan, Zawacki, Clinton, & Buck, 2001; Hill & Fischer, 2001).

Just as rape is not about sex, sexual harassment too, is about the social construction of gender. Welsh (1999) cited Schultz (1998b), who developed the following conclusion after examining U.S. legal decisions regarding sexual harassment:

Of course making a woman the object of sexual attention can also work to undermine her image and self-confidence as a capable worker. Yet, much of the time, harassment assumes a form that has little or nothing to do with sexuality but everything to do with gender. (p.1687)

Sexual harassment occurs in a culture that communicates gender role messages for how men and women should behave and institutionalizes men's power over women. This gender-role socialization creates the conditions for sexual harassment to thrive and contributes to the incidence rate being higher among females. For example, sexual harassment is not about women wanting sexual attention or asking for it by the way they dress, but about men letting women know that they are not welcome in certain workplaces (Welsh, 1999). Sexual harassment is more likely to occur when women are working in a male-dominated occupation (U.S. Merit Systems Protection Board, 1995). Gender harassment is the most widespread form of harassing behavior particularly in the nontraditional, blue-collar workplace (Fitzgerald et al., 1995). The most likely victims of sexual harassment are those who lack status and power with gender acting as the most powerful predictor (Jackson & Newman, 2004; Newman et al., 2003). Fitzgerald, Drasgow, et al. (1997) make the point that it is not just the number of men versus women working in an occupation, but also the presence of traditionally male-oriented tasks that support sexual harassment.

Since both rape and sexual harassment occur in a social context, the present study sought to examine how this context may influence how women respond and cope with these types of victimizations. The present study chose to examine both gender-role attitudes and rape myth acceptance as possible contributing factors to women's responses. Both gender-role attitudes and rape myth acceptance represent the socialization process that teaches women to be victims and

men to be perpetrators, teaches women to expect men to protect them and to take responsibility for men's sexuality. Women who internalize this socialization may respond differently to sexual harassment and rape compared to those who do not.

Principal II, "The Personal is Political," also emphasizes the importance of examining the role of the sociocultural context in the development of eating disorders. Eating disorders are clearly more prevalent among women than men and the sociocultural context in which eating disorders occur can explain this difference. The pursuit of a certain weight and shape appears to be a learned behavior (Smolak & Striegel-Moore, 2001). For example, research indicates that during early childhood, children learn within their sociocultural context what constitutes an attractive body size (Markey, 2004). Throughout history, the preferred body shape has varied. Historically, body fat was considered an indicator of wealth in societies that lacked sufficient nutritional resources and obesity represented economic success, femininity, and sexuality. Today, in the U.S., the preferred ideal body size is slender, thus as children get older they prefer a body shape that is thinner (Markey, 2004; Smolak & Striegel-Moore, 2001). This preferred ideal body size varies across cultures and even across ethnic groups within the United States. Some cultures do not consider a slender physique as attractive and prefer larger body sizes. Latino men and women report that they prefer higher body weights compared to Euro-American men and women (Markey, 2004). Thus, the ideal body shape and weight is determined by a culture and members of this culture not only learn what is ideal, but also the meanings attached to weight and shape.

These messages about the ideal body weight and the importance of having it appears to be stronger for girls than boys (Smolak & Murnen, 2001). The cultural pressures to attain the ideal female body weight may be conveyed through family, peers, and mass media. Girls are told by advertisers that what is most important about them is their bodies and their beauty. They get the message from mass media that they must be flawlessly beautiful and above all, they must be thin. This media message also tells girls that with enough effort and self-sacrifice they can achieve the ideal female body even though this ideal is unattainable for many girls (Kilbourne, 1999).

One form of mass media, women's magazines, contains countless advertisements and articles about food, dieting and body shape (Kilbourne, 1999). Researchers found in a randomized experiment that increased body dissatisfaction, dieting, negative affect, and bulimic symptoms resulted from a 15-month subscription to a fashion magazine. It is important to note that these findings were evident in a group of at-risk girls who had initial body dissatisfaction, pressure to be thin, and deficits in social support (Stice, 2001). Thus, cultural pressures about the

importance of attaining the ideal female body weight are transmitted through media messages and these messages increase the likelihood women will diet and develop eating disorders to attain the ideal.

Besides the powerful media messages, girls receive, family and peers reinforce messages about weight and shape. Research has shown that body dissatisfaction and weight loss attempts of elementary school children are associated with parental remarks about weight (Smolak, Levine, & Schermer, 1999; Streigel-Moore & Kearney-Cook, 1994). This association is even more common for girls (Smolak et. al 1999) since they receive stronger messages from parents, media, and peers. Peer messages may come from boys and girls with girls discussing among each other the importance of being thin and boys making comments about girls' bodies. These comments may create a fear of being fat and dieting, body dissatisfaction, and eating disorders are reactions to this fear (Pipher, 1994). Parental and peer messages appear to be stronger for girls and contribute to the development of body dissatisfaction, dieting and eating disorders.

The Present Study

The present study primarily focused on understanding the factors that might explain the relationship between sexual harassment and rape and eating disturbances. For example, research, to date, has not examined the possible role of belief systems such as gender-role attitudes. Research has found that certain gender-role attitudes may contribute to the development of eating disturbances. Some research suggests that for females, being ambivalent about their gender role and experiencing distress from trying to achieve in areas traditionally dominated by men, may lead to the development of eating disorders (Perlick & Silverstein, 1994). Other research suggested that women who adhere to a traditional female gender role and have more feminine traits, such as high passivity and need for approval, are more likely to develop eating disorders (Murnen & Smolak, 1998). Additional research indicated that women who scored high on a measure of both masculinity and femininity traits (androgynous individuals), reported lower levels of eating disorders compared to individuals who scored low on femininity and masculinity traits (undifferentiated individuals) (Hepp et al., 2005).

Also, how women respond to sexual harassment and rape may be influenced by gender-role attitudes. For example, gender-role attitudes may influence whether women blame themselves when they are victimized. Many women are socialized to be passive and friendly, to preserve relationships, and to be responsible for men's sexuality. Women who adopt these attitudes and experience victimization may be more likely to deny their own victimization and blame themselves for what happened.

The present study attempted to determine whether gender-role attitudes influence the development of eating disturbances as a way to cope with sexual harassment and rape experiences. More specifically, the study's aim was to understand if females with more traditional gender-role orientations would experience more psychological distress from being victimized and develop eating disturbances as a result. Since college students in nursing and teaching fields are predominantly females who have chosen a traditional female occupation, the current study was particularly interested in examining the influence gender-role attitudes may have in the trauma-eating disorders relationships within these populations.

A second belief system, rape myth acceptance, has been examined as a belief about the attribution of responsibility for the rape of a victim. For example, one rape myth measured by the Illinois Rape Myth Acceptance Scale is, "If a woman is raped while she is drunk, she is at least somewhat responsible for letting things get out of control." Rape myth acceptance has been associated with victim-blame (Lonsway & Fitzgerald, 1994). Thus, women who endorse rape myths and who have experienced victimization are more likely to blame themselves. Further, research has indicated that higher self-blame can result in higher psychological distress and poorer postrape adjustment. Based on this research, the present study examined whether women who endorse more rape myths are likely to experience greater psychological distress and as a result, are more likely to develop eating disturbances.

The assessment of gender-role attitudes and rape myth acceptance in the present study can determine if the presence of these belief systems increase the likelihood that victims of rape and sexual harassment experience psychological distress and exhibit eating disturbances. Since rape and sexual harassment have been linked with many forms of psychological distress and negative outcomes such as eating disturbances, it is important to identify why such relationships exist. Feminist researchers have documented how societal values, norms, and institutions create and maintain rape, sexual harassment and eating disorders. Thus, the present study explored how the internalization of such societal influences may impact the experience of psychological distress and the development of eating disturbances.

Since the literature has identified the significant influence of posttraumatic stress, anxiety and depression in understanding the trauma-eating disorder relationship, the present study included all three variables. The term, psychological distress, was used to represent these variables. Further, psychological distress was included as a mediator in contrast to Harned's (2000) study, which examined it as a moderator. As a mediator, psychological distress can act as a significant factor in the relationship between rape and sexual harassment and eating

disturbances. The literature supports such relationships because it indicated that eating disturbances may be a way of coping with emotions such as anxiety, depression, and posttraumatic stress. Since rape and sexual harassment produce such emotions, psychological distress may act as a mediator between rape and eating disturbances.

The present study examined the relationships between both sexual harassment and rape and eating disturbances. Since research has confirmed that both sexual harassment and eating-disordered behaviors are highly prevalent among women, the study chose to examine the joint effect of these two phenomena, rather than examine their individual effect on eating disturbances. Also, by examining the combined effect of sexual harassment and rape, the study can contribute to the research that indicates trauma may be a risk factor for eating disturbances. The study also considered the possibility that psychological distress mediates the relationship between sexual harassment, rape, and eating disturbances. By examining the mediation, the study can identify whether eating disturbances may function as strategies for coping with the psychological distress that is associated with sexual harassment and rape. Lastly, the study examined whether gender-role attitudes and rape myth acceptance would act as moderators for psychological distress and rape and sexual harassment. Instead of testing the moderation with the joint effect of sexual harassment and rape, these relationships were tested separately. This examination could reveal how psychological distress may differ for individuals who internalized societal messages about why rape and sexual harassment occur.

It was hypothesized that students who had experienced more sexual harassment and rape incidents were more likely to experience greater psychological distress, which in turn, resulted in more eating disturbances. In addition, it was hypothesized that students who had more harassment experiences and accepted more rape myths would have greater psychological distress. It was hypothesized that students who had more rape experiences and accepted more rape myths would be more likely to exhibit psychological distress. It was hypothesized that students who had more sexual harassment incidents and exhibited traditional gender-role attitudes would be more likely to experience greater psychological distress. Lastly, students who had more rape incidents and exhibited traditional gender-role attitudes would be more likely to experience greater psychological distress.

Chapter Three: Methods and Procedures

This chapter will outline the sample selection for the study, instruments and operational definitions used in the study, research hypotheses, a description of research procedures, the research questions, the method of data analyses, and the limitations of the study. The primary aim of this study was to test the relationships among sexual harassment, rape, psychological distress, eating disturbances, rape myth acceptance and gender-role attitudes in a sample of college students in a nursing program and in a pre-service teaching program at the University of Kentucky. It was hypothesized that students who had experienced more sexual harassment and rape incidents were more likely to experience greater psychological distress, which in turn, would result in more eating disturbances. In addition, it was hypothesized that students who had more harassment experiences and accepted more rape myths would have greater psychological distress. It was hypothesized that students who had more rape experiences and accepted more rape myths would be more likely to exhibit psychological distress. It was hypothesized that students who had more sexual harassment incidents and exhibited traditional gender-role attitudes would be more likely to experience greater psychological distress. Lastly, students who had more rape incidents and exhibited traditional gender-role attitudes would be more likely to experience greater psychological distress. Multiple regressions and hierarchical regression were used to test these relationships.

Methods

Participants

Data was collected from 234 students enrolled in an undergraduate nursing and pre-service teaching program at the University of Kentucky (UK). Since the present study was focusing on the experiences of women, 28 of these students' responses on the surveys were not included because they were male. Of the 206 female students included in the analysis, 113 were in a nursing program in the College of Nursing and 93 were in a pre-service teaching program in the College of Education. Nursing students are accepted into the program at the sophomore level. Thus this sample of nursing students only includes the following student classifications: sophomore, junior, and senior. The pre-service teacher sample includes all four of the student classifications: freshman, sophomore, junior, and senior. Across the two samples, participants ranged in age from 18 to 42 years ($M=21.2$, $SD= 2.8$) and 3.4% were freshmen, 31.1% were sophomores, 38.8% were juniors, and 26.7% were seniors. Ninety-four percent of the participants self-identified as Caucasian, 1.9% as African American, 1.5% as Hispanic, and 1.9% as Other. Ninety-nine percent of the participants indicated their sexual orientation as Straight/heterosexual

and 1% as bisexual. The mean self-reported current weight of the sample was 140.1 lbs ($SD=28.5$) with a height of 64.9 ($SD=2.8$).

Procedure

Participants were recruited through the cooperation of the UK College of Nursing and Education. The procedures for recruiting the nursing and pre-service teaching students and the type of incentives differed for the two groups. These differences are explained below. The actual administration of the surveys to the groups remained the same.

Recruitment of nursing students. I contacted the nursing faculty, explained the current study and asked their permission to enter nursing courses to recruit participants. The instructors agreed to allow the researcher to visit their classes on a specified day. Before this specified day, the instructor informed students that they could volunteer for a research study if they choose to do so. Before the researcher arrived to conduct the study, the instructors read a script to the students, provided by the researcher, that described the nature and duration of the study (See Appendix A Research Script for Nursing Faculty). On the specified day for the research study with nursing students, the researcher arrived in the classroom and first read a script (see Appendix C Nursing Student Research Script) explaining the purpose, duration, procedure, and potential risks/benefits of the study. Food was provided to all students and told that they could have the food whether they participated in the study or not. The nursing students, who chose to participate in the study stayed in the classroom and those who did not, left the room.

Recruitment of pre-service teaching students. To recruit students from the pre-service teaching program, I met with the teaching assistants (TA's) of two Education courses. I explained the current study verbally and provided the research script (See Appendix D Research Script for Education Students). I also asked the TA's if they would offer extra credit to their students for their participation in this study. The TA's agreed to offer the extra credit and indicated that they would also offer their students other non-research activities for extra credit. I contacted each TA and set up a time to visit their class to read a recruitment script (see Appendix B Recruitment Script for Education Students). I then attended each section of the Education courses to read the recruitment script. All students received a hard copy of this script. I scheduled research sessions twice a week over three weeks in the auditorium of the Taylor Education Building. The times, dates and room for these research sessions were listed on the research script. During the recruitment script, students were told that they could choose which research sessions they would like to attend, if they decided to participate in the study. When the students arrived to the pre-scheduled research sessions, the researcher first read a script (See Appendix D Research Script

for Education Students). The pre-service teaching students then chose whether they wanted to stay for the research session.

Administration of surveys for nursing and pre-service teaching students. For both nursing and pre-service teaching students, the researcher asked participants if they had any questions about the study after reading the scripts. The students also received a hard copy of the scripts. After all questions were answered, the researcher handed out a packet of instruments to each participant with an envelope and a referral list of counseling services (see Appendix E). The researcher told participants to not put any identifying information on the instruments such as their name or social security number. The researcher stated that the participants' responses on the instruments would remain anonymous to the researcher and anyone involved with the research study. The researcher indicated that the research poses minimal personal risk if they choose to participate. However, if their involvement raised questions or concerns or evoked any emotional discomfort, they could contact the researcher or refer to the referral list of counseling services (see Appendix E).

The researcher read all instructions for the instruments to minimize participant error. The packet of instruments was arranged in two different orders and the distribution of these packets was random. These arrangements were designed to minimize the amount of distress participants may experience when completing the instruments. The potentially more distressing instruments were placed after the less distressing instruments. Also, the participants started and ended with a potentially less distressing measure. The first arrangement was as follows: (a) Eating Attitudes Test-26; (b) Illinois Rape Myth Acceptance Scale; (c) Depression Anxiety Stress Scale, Short Form; (d) Sexual Experiences Questionnaire (Form W); (e) Personal Attributes Questionnaire, Short Form; (f) Sexual Experiences Survey; (g) Demographic Data Questionnaire; and (h) Post Traumatic Stress Disorder Checklist. The second arrangement was as follows: (a) Personal Attributes Questionnaire; (b) Sexual Experiences Questionnaire (Form W); (c) Eating Attitudes Test-26; (d) Depression Anxiety Stress Scale, Short Form; (e) Illinois Rape Myth Acceptance Scale; (f) Post Traumatic Stress Disorder Checklist; (g) Sexual Experiences Survey; and (h) Demographic Data Questionnaire.

The participants were asked to place their completed packet of instruments in the envelope they were given and to place this envelope in a box marked "Packets" at the front of the classroom. The pre-service teaching participants were asked to write the last four digits of their social security number on a sheet of paper with their instructors name on it to receive their extra credit. All participants were thanked for participating in the study. The researcher stated that if

participants would like a summary of the results of the research, they could contact the researcher for a copy of these results. The completed packets of instruments were stored in a locked file cabinet in the researcher's home office.

Instrumentation

Eating disturbances. The Eating Attitudes Test-26 (EAT-26), a 26-item measure of symptoms and concerns characteristic of eating disorders, was used to assess for eating disturbances [See Appendix F for the Eating Attitudes Test (EAT-26)]. The EAT-26 is an abbreviated version of the original 40-item EAT (Crowther & Sherwood, 1997). A factor analysis of the EAT-26 resulted in three factors labeled as "dieting (pathological avoidance of fattening foods and shape preoccupations)", "bulimia and food preoccupation (bulimia and a heavier body weight)" and "oral control (self-control about food as well as those which acknowledge social pressure to gain weight)" (Garner, Olmsted, Bohr & Garfinkel, 1982, p.877). Research has suggested that the EAT-26 can be utilized as a continuous measure of eating disturbances in nonclinical samples of women (Mazzeo, 1999; Mazzeo & Espelage, 2000; Tylka & Subich, 2004). A sample item is, "I am terrified about being overweight." Respondents rate whether each item applies to them with the following scale, "always," "usually," "often," "sometimes," "rarely," and "never." A 6-point scale ranging from 1 (never) to 6 (always) was used to rate each item. Scores on the EAT-26 range from 1-156. Higher total scores on the items indicate individuals are experiencing more eating disturbances compared to individuals with lower scores.

The internal consistency reliability for the EAT-26 has been estimated as .91 for a sample of college women (Mazzeo, 1999) and .94 for a sample of eating-disordered and noneating-disordered individuals (Garner, & Garfinkel, 1979). Additional research has found that the EAT-26 is strongly associated with other measures of eating disorder symptomatology, such as the Drive for Thinness and Bulimia subscales of the Eating Disorder Inventory (Brookings & Wilson, 1994). Also, research has found that the EAT-26 accurately identifies and classifies eating disturbances among clinical and nonclinical samples of women, thus concurrent and construct validity are evident for the EAT-26 (Garner et al., 1982).

Rape myth acceptance. Rape Myth Acceptance was assessed via the Illinois Rape Myth Acceptance Scale, short form (IRMA-SF) (Payne et al., 1999) see Appendix G for the IRMA-SF). The IRMA-SF is a 20-item inventory designed to measure general acceptance of rape myths. A sample item is, "If a woman is raped while she is drunk, she is at least somewhat responsible for letting things get out of control." Respondents are asked to indicate on a seven-point scale the degree to which they agree to each item with one representing "not at all agree" and seven

representing “very much agree.” Scores on the IRMA-SF range from 0- 119 and the higher the score, the higher the endorsement of rape myths.

The IRMA-SF is an abbreviated version of the 45-item Illinois Rape Myth Acceptance Scale (IRMA). The IRMA is comprised of seven stable and interpretable components of rape myth acceptance labeled (a) “She asked for it,” (b) “It wasn’t really rape,” (c) “He didn’t mean to,” (d) “She wanted it,” (e) “She lied,” (f) “Rape is a trivial event,” and (g) “Rape is a deviant event” (Payne et al., 1999, p.59) These components exhibited similarities to those in both the Rape Myth Acceptance Scale (Burt, 1980, as cited in Payne et al., 1999) and the Attitudes Toward Rape Scale (Field, 1978, as cited in Payne et al., 1999). The IRMA however, contains important content areas that have not been included in past measures such as the definition for what constitutes rape, presumed victim enjoyment of rape and deviant characteristics of the event. Analyses of the structure of the IRMA have indicated that its structure is highly stable and applies equally well for men and women. It is suggested by Payne et al. (1999) that the structure of the rape myth perceptions can be characterized by two dimensions “Denial versus Justification of Rape and Victim versus perpetrator Focus” (p. 60). In order to minimize the potential for response bias, filler items are included in the measure and these items do not directly contradict any certain rape myths and do not contribute to the total scale value. An example filler item is” “Self-defense classes should be available without charge to women” (Payne et al., 1999, p.34). The IRMA demonstrated both adequate internal consistency and reliability for the scale and subscale scores. The overall scale reliability is $\alpha=.93$ and the subscales ranged from $\alpha=.54$ to $.74$ and averaged $.79$ for undergraduate college students.

The IRMA-SF was constructed to measure only general rape myth acceptance and does not include all of the seven subscales (Payne et al., 1999, p.59). From the 45-item IRMA, 17 rape myth items were chosen, including four items from the subscale “She asked for it”, three items from the subscale “Rape is a deviant event” and two items from the remaining subscales. In addition to the seventeen rape myth items, three filler items are included to control response bias. Payne et al. (1999) report that results from an uncorrected correlation between the IRMA scale and the IRMA-SF indicate that when assessing only general rape myth acceptance, the IRMA-SF is more than a sufficient measure ($r(602) = .97, p < .001$). The IRMA-SF has also demonstrated adequate reliability among undergraduate students, $\alpha = .87$ for the scale and $\alpha = .34$ to $\alpha = .65$ for the subscales. In this study, the IRMA-SF was used to measure rape myth acceptance.

Psychological distress. The measurement of psychological distress includes separate scores for depression, anxiety and posttraumatic stress.

The subscales for depression and anxiety on the Depression Anxiety Stress Scale, 21-item version (DASS-21) (see Appendix H), (Antony, Cox, Enns, Bieling, & Swinson, 1998) were used to measure depression and anxiety (See Appendix I for DASS-21). The DASS-21 is based on the 42-item Depression Anxiety Stress Scale (DASS). The DASS has been reliably grouped into three subscales for both clinical (Brown, Chorpita, Korotitsch, & Barlow, 1997 and nonclinical samples (Lovibond & Lovibond, 1995). These subscales include: a) depression, measures symptoms typically associated with dysphoric mood, b) anxiety, symptoms of arousal, panic attacks, and fear, and c) stress, symptoms such as tension, irritability, and a tendency to overreact to stressful events. Antony et al. (1998) examined the factor structure of the DASS-21 and found that it is similar to the DASS; however, its solution is somewhat more interpretable because of its lower intercorrelations of factors, higher mean loadings, and fewer cross-loading items. The DASS-21 asks respondents to indicate whether a series of statements applies to them over the past month. A sample item is, "I felt that life was meaningless" (DASS-21). Respondents indicate on a four-point scale whether the statement applies to them (1=Did not apply to me, 2=Applied to me to some degree or some of the time, 3=Applied to me a considerable degree, or a good part of the time, 4=Applied to me very much or most of the time). In order to determine the level of psychological distress (depression and anxiety) for each respondent, a total score for the depression and anxiety subscale items were calculated independently. For the purposes of this dissertation, the stress subscale was not used. There are a total of seven items on each subscale (see Appendix I). Total scores on each subscale range from 1-28 and higher scores indicate an individual has endorsed more anxiety or depressive symptoms.

An examination of the psychometric properties of the DASS have indicated that it has excellent internal consistency ($\alpha = .96, .89$ and $.93$ for Depression, Anxiety, and Stress, respectively) and temporal stability in clinical samples (test-retest correlations range of $r_s = .71-.81$) (Brown et al., 1997). The DASS has also demonstrated excellent internal consistency ($\alpha = .97, .92$, and $.95$ for Depression, Anxiety, and Stress, respectively) in nonclinical and clinical samples (Antony et al., 1998). The DASS-21 also has excellent internal consistency with Cronbach's alphas of $.94$ for Depression, $.87$ for Anxiety, and $.91$ for Stress in clinical and nonclinical samples and concurrent validity with the Beck Depression Inventory (BDI) and the State-Trait Anxiety Inventory (STAI-T) in clinical samples (BDI: Stress ($.69$), Depression ($.79$) and Anxiety ($.62$) and STAI-T: Stress ($.68$), Depression ($.71$) and Anxiety ($.55$)) (Antony et al., 1998).

The PTSD (Post Traumatic Stress Disorder) Checklist—Civilian Form (PCL-C; Weathers, Litz, Herman, Huska, & Keane, 1993) was used to assess symptoms of posttraumatic stress disorder occurring during the past month (See Appendix J for PTSD Checklist-Civilian Form). The PCL-C is comprised of 17 items that correspond to the symptoms of PTSD in the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 1994). The items are generic to any type of traumatic event and refer to “stressful life experiences” (PCL-C). The PCL-C is unique in that it includes items measuring symptoms of depression. Most of the major scales of PTSD more closely correspond to the diagnostic criteria of PTSD, thus symptoms of depression are typically not included. Respondents are asked how often they have been bothered by the symptoms on a five point scale (Not at all=1, A little bit=2, Moderately=3, Quite a bit=4, Extremely=5) (PCL-C). A sample item is, “Repeated, disturbing memories, thoughts, or images of a stressful experience from the past” (PCL-C). The PCL is used as a continuous measure of PTSD symptom severity by summing scores across all 17 items (Weathers et al., 1993). Scores on the PCL-C range from 0- 85. Individuals with higher scores on the PCL-C will indicate greater posttraumatic stress disorder symptoms compared to individuals with lower scores.

To gather initial psychometric data, a military version of the PCL (PCL-M) was used in a sample of Vietnam veterans, who exhibited a high prevalence of PTSD. Internal consistency coefficients for the total scale were very high (.97) and for each subscale (.92-.93). The test-retest reliability was .96. The PCL correlates highly with other measures of PTSD: Mississippi Scale for combat Related PTSD (.93), the PK scale of the MMPI-2 (.77), and the Impact of Event Scale (.90) (Norris & Hamblen, 2003). Additional research on the PCL-C has provided data on its psychometric properties. For example, the PCL-C’s psychometric properties have been examined in a sample of college students. This examination revealed that the PCL-C has strong internal consistency and good test-retest reliability. Cronbach’s alpha coefficients were .94 for the PCL total, .85 for the re-experiencing scale, .85 for the avoidance scale, and .87 for the hyperarousal scale. Test-retest correlation coefficients for total scores on the PCL were .92 for immediate retest, .88 for 1-week intervals, and .68 for 2-week retest intervals at $p < .001$. The PCL-C also demonstrates convergent validity ($r > .75$) with two well-established measures for PTSD: the Impact of Event Scale and the Mississippi Scale for PTSD, Civilian version (Ruggiero, Ben, Scotti, & Rabalais, 2003). The PCL-C has also been used as a measure of posttraumatic stress in a study on sexual harassment, body image, and eating disturbances among female undergraduates enrolled in an introductory psychology course at a large Midwestern university (Harned, 2000).

Sexual harassment. Sexual harassment experiences were measured via a revised 20-item version of the Sexual Experiences Questionnaire (SEQ-W) (See Appendix K for Sexual Experiences Questionnaire (Form W) (SEQ-W Manual). The SEQ-W is one of the most recent versions of the Sexual Experiences Questionnaire (SEQ). The SEQ, first developed by Fitzgerald and Shullman (1985), as cited in Fitzgerald et al. (1995), uses behavioral and psychological experiences to measure offensive gender-related behavior (SEQ-W Manual). The 20 items of the SEQ-W form three subscales: gender harassment, unwanted sexual attention, and sexual coercion. The revision of the SEQ and the three subscales were constructed by using three large samples in a series of confirmatory factor analyses of SEQ data. One of these samples was a cross-cultural sample (Gelfand, Fitzgerald & Drasgow, 1995) and the analyses confirmed the three-factor structure originally reported by Fitzgerald and Shullman 1985) (SEQ-W Manual). The original SEQ was designed to reflect Till's (1980) five types of sexually harassing behavior: gender harassment, seductive behavior, sexual bribery, sexual threat, and sexual imposition or assault; however, analyses indicated that the three behavioral subscales, gender harassment, unwanted sexual attention, and sexual coercion, adequately account for the variance in the SEQ. The three subscales parallel the legal concepts of sexual harassment, which includes quid pro quo (sexual coercion) and hostile environment (gender harassment and unwanted sexual attention). The subscales are described below (SEQ-W Manual).

The subscale, gender harassment, (See Appendix K for Sexual Experiences Questionnaire Form W) includes a broad range of verbal and nonverbal behaviors that communicate insulting, hostile, and degrading attitudes about women, but are not intended for sexual cooperation. These behaviors may include sexist or offensive jokes or remarks and/or the display or distribution of sexist or suggestive materials. The subscale, unwanted sexual attention (See Appendix K for Sexual Experiences Questionnaire Form W), includes a wide range of both verbal and nonverbal behavior that is unwanted, offensive, and unreciprocated. These behaviors may include attempts to discuss sexual matters; staring, leering, or ogling; stroking, fondling, or attempts to have sex; and repeated requests for dates, drinks, or dinner. The third subscale, sexual coercion (See Appendix K for Sexual Experiences Questionnaire Form W) involves implicit or explicit demands for sexual cooperation in return for job-related rewards or special treatment. Threats of negative job-related consequences may accompany the sexual demands (Fitzgerald, et al., 1995). The SEQ-W alpha reliability coefficients for the three subscales were computed on a sample of female graduate students as .72 (gender harassment), .67 (unwanted sexual attention), .49 (sexual coercion) (SEQ-W Manual).

The instructions for the SEQ-W state: “For each item, please circle the number that most closely describes your own experience with MALE professors, instructors, teachers, supervisors, teaching assistants or peers SINCE THE AGE OF 14.” The original SEQ-W only include male co-workers and supervisors. This study is adding the other groups so that college nursing students can respond to all possible perpetrators. Respondents answered all 20 items with these instructions and indicated how many times they experienced each type of harassment. A sample item is, “...frequently make sexist remarks (e.g., suggesting that women are too emotional to be scientists or to assume leadership roles)?” Respondents were also asked to rate all items on a 5-point scale (0=Never, 1=Once or Twice, 2=Sometimes, 3=Often, 4=Many Times). In order to determine the frequency of harassing experiences, a total score of all items will be calculated. Scores on the SEQ-W range from 0-80 and higher scores indicate an individual has endorsed more behavioral and psychological experiences of sexual harassment. Respondents were asked to indicate who committed the harassing behavior: male professors, instructors, supervisors, teaching assistants, peers, coworkers, doctors, or patients.

There is a second section on the SEQ-W that asks respondents to pick a situation that had the greatest effect on them and to indicate “Yes” or “No” if a behavior such as “...habitually told suggestive stories or offensive jokes?” happened during this situation. This section will not be used in the dissertation, thus the participants responses will not be computed in the total score of the SEQ-W.

Gender-role attitudes. Gender-Role attitudes were assessed via the Personal Attributes Questionnaire (PAQ), short form (Spence & Helmreich, 1978) (See Appendix L for Personal Attributes Questionnaire, Short Form). The PAQ is a self-report measure that is composed of 24 bipolar items describing socially desirable masculine and feminine characteristics that are more often found in men and/or women. Respondents are asked to rate themselves on each of the bipolar items on a five-point scale, indicating the degree to which each item applies to them. This instrument is divided into three, eight-item scales: Masculinity (M), which assess characteristics socially desirable in both sexes, but believed to occur to a greater degree in males, Femininity (F), which measures characteristics socially desirable in both sexes, but believed to be found more often in women, and Masculinity-Femininity (M-F), measuring characteristics that are more socially desirable for one sex, but not both. An analysis of the content of the items indicated that the items on the M scale are instrumental characteristics and items on the F scale are expressive characteristics. The M-F scale contains items that could be categorized as instrumental, as expressive, or as a combination of both. Respondents may score high on both the M and F scales

since these scales are independent of one another. A total score is calculated for each scale by summing the ratings for all items. Scores on the M scale range from 0-40 and the higher the score, the higher the endorsement of instrumental traits. Scores on the F scale range from zero to 32 and the higher the score, the higher the endorsement of expressive traits.

A total score on the M-F scale was calculated to determine gender-role attitudes. There are eight total items for this scale (see Appendix M). Scores on the M-F scale range from 0-40. Higher scores indicate an individual has endorsed more traits considered socially desirable for males and themselves and lower scores indicate an individual has endorsed more traits considered socially desirable for females and themselves. The M-F scale was selected for the present study because it assesses for both masculinity and femininity characteristics, which is representative of gender-role attitudes. The M and F scales only assess for masculinity alone and femininity alone. The scores on the M and F scales will not be used in this study, however data from these scales will be collected for future research.

The PAQ is similar to the Bem Sex role Inventory (BSRI) in that it contains separate scales for Masculinity (M) and Femininity (F) that have a low correlation with each other and it measures socially desirable traits (Spence, Helmreich & Holahan, 1979). Thus, M and F, as measured by the M and F scales of the PAQ, are each a unidimensional phenomenon (Helmreich, Spence, & Wilhem, 1981). Spence and Helmreich (1978) indicate that significant differences between the means of the two sexes on every item of the PAQ were evident when examining college students, thus "...men scoring higher on the M and M-F items, scored in a masculine direction, and lower on the F items, scored in a feminine direction" (p.20). This finding justified the use of the PAQ as a measure of masculinity and femininity since the stereotypes about personality differences between the sexes was validated for the particular characteristics on the questionnaire. The bipolar conception of masculinity and femininity was also examined on the PAQ. The expectation that scores on the M and M-F scales should have been strongly related in a negative direction to scores on the F scale was not confirmed. Instead, the correlations between the M and F scales were relatively low and positive in both sexes. This finding suggests that there is not a bipolar conception of masculinity and femininity, but a dualistic one. Bem also reported low correlations between masculinity and femininity scales on the BSRI, which is the measure that the PAQ's rationale is based on. An important difference, however between the BSRI and the PAQ is that the M-F scale on the PAQ provided some support of the bipolar model, having a moderately high positive correlation with M and, a lower but still substantial negative correlation

with F. Thus, the PAQ supports both a dualistic and a bipolar model of masculinity and femininity (Spence & Helmreich, 1978).

Another difference between the BSRI and the PAQ worth noting is that the PAQ and the BSRI used different methods to create their scales. For example, in order to obtain the social desirability ratings for the PAQ, individuals in a research study were asked to specify where on each bipolar scale the ideal member of each sex fell. Items assigned to the Bem's scales, however are trait descriptions that had been judged to be more desirable for men than women or vice versa. Also, the PAQ consists of bipolar scales (i.e. independent-dependent) and respondents are asked to specify where on the bipolar scale they fall, whereas the BSRI respondents are given a trait description (i.e. independent and asked to rate how characteristic it is of them. Lastly, a factor analysis of the PAQ reveals that the scales are unidimensional while the BSRI has a greater factorial complexity, reflecting a more heterogeneous content of social desirability and item content. This suggests that "masculinity" and "femininity" are "...multidimensional phenomena whose components are not strongly related to each other and not necessarily related to criterion variables in the same way or to the same degree" (Helmreich et al., 1981, p.1107).

The short form of the PAQ demonstrates adequate correlations with the original 55-item original PAQ. The correlations for the short scales and the original scale among college students were as follows: M, .85; F, .82; and M-F, .78 (Spence & Helmreich, 1978). Reliabilities for the original PAQ range from .65 to .91 for test-retest, and .73 from men and .91 for women for internal consistency (Harmen, 1992). In this study, the short form of the PAQ will be used to measure Masculinity-Femininity.

Rape. To assess rape in the past 12 months and since the age 14, the Sexual Experiences Survey (SES-SFV), short form was used (Koss, Bachar, & the SES Collaboration, 2004) (See Appendix N for SES-SFV). The SES-SFV is an abbreviated form of one of the most recent versions of the Sexual Experiences Questionnaire (SES). The same subscales (sexual contact, sexual coercion, attempted rape, and rape) used in the 1982 and 1987 versions of the SES remain in this most recent version of the SES and in the SES-SFV. The original SES is a dimensional view of sexual aggression/sexual victimization and is capable of measuring hidden cases of such experiences (Koss & Oros, 1982). The original SES has a test-retest reliability of .93 and an internal consistency of .74 (Koss & Gidycz, 1985) and the most recent version of the SES has maintained this good internal consistency (Koss et al., 2004). The SES-SFV has demonstrated internal consistency ($\alpha = .8637$) among a sample of a female university student population (Koss, et al., 2004).

The SES-SFV is gender neutral and both men and women are able to report victimization experiences on the measure (Koss et al., 2004). Respondents are asked how many times in the past 12 months and since the age 14 if someone performed or attempted to perform (and it did not happen) oral sex, and/or penetrated or attempted or tried to penetrate (and it did not happen) their vagina or anus. This study will not use the data for the category of 12 months, but will collect the data for future research.

For each type of victimization or attempted victimization, respondents are asked whether this person used lies and threats, strong arguments and continual pressure, whether this person met them after they had been drinking or used drugs, this person used some degree of physical force, and/or this person held or pinned them down.

Respondents are asked to report how many times they experienced the different types of victimization and under the different type of conditions (0, 1, 2, 3, or more). A total score was calculated for the first three questions of the SES-SFV (0=0, 1=1, 2=2, and 3 or more=3) for a possible total of 45 (Koss et al., 2004). Higher scores on the SES-SFV indicate greater sexual victimization compared to individuals with lower scores.

In this study, the first three questions of the SES-SFV that ask if someone performed oral sex and/or penetrated the respondent's vagina and/or anus were used. The items regarding attempted rape were not be used in the study, however the responses to these items will be collected so that the researcher can use this data for other research explorations.

Demographics survey. The Demographics Survey (See Appendix O for Demographic Survey) is designed to gather information on gender, ethnicity, age, sexual orientation, and classification as a student.

Operational Definitions

For each measure used in the study, a mean score was calculated for all the relevant items. This mean score was utilized in the analyses to account for any missing data.

Eating disturbances. Eating disturbances were defined as a mean score of all 26 items of the EAT-26 with a range from one to six. Respondents with higher scores on the EAT-26 indicate an individual is experiencing more eating disturbances compared to individuals with lower scores.

Rape myth acceptance. Rape myth acceptance was defined as a mean score of all 20 items of the IRMA-SF with a range from one to seven. Higher scores on the IRMA-SF indicate greater rape myth acceptance.

Psychological distress. Separate scores for depression, anxiety and posttraumatic stress were used to measure psychological distress. Depression was defined as a mean score of all seven items of the depression subscale of the DASS-21 with a range from one to four. Anxiety was defined as a mean score of all seven items of the anxiety subscales of the DASS-21 with a range from one to four. Individuals responded to all items for the past month of their lives. Higher scores on the depression and anxiety subscales indicate the presence of more depression and anxiety symptoms.

Posttraumatic Stress Disorder Symptoms were defined as a mean score of all 17 items of the PCL-C with a range from one to five. Individuals responded to all items for the past month of their lives. Higher scores on the PCL-C indicate the presence of more posttraumatic stress disorder symptoms.

Sexual harassment. Sexual Harassment was defined as a mean score of all the SEQ-W items (a-e) with a range from zero to four. Individuals responded to all items since they were the age of 14. Higher scores on the SEQ-W indicate individuals have experienced more sexual harassment.

Gender-role attitudes. Gender-role attitudes were operationally defined as a mean score of all the items on the Masculinity-Femininity scale (MF) of the PAQ with a range of one to five. The lower the M-F score, the more traits an individual considers socially desirable for only women and themselves and the higher the M-F score the more traits an individual considers socially desirable for only men and themselves.

Rape. Rape was defined as a mean score of how many times individuals experienced someone performing oral sex, and/or penetrated their vagina and/or anus since the age of 14 across all types of coercion (a-e) on the SES-SFV with a range of zero to three. Higher scores on the SES-SFV indicate individuals experienced more rape.

Hypotheses

Seventeen hypotheses were developed to predict the relationships between the independent variables and the dependent variables.

Trauma and Mental Health. Hypothesis 1: Sexual harassment will be positively significantly associated with posttraumatic stress. $H_1: \beta_{SH} > 0$, $H_0: \beta_{SH} = 0$. Hypothesis 2: Sexual harassment will be positively significantly associated with anxiety. $H_1: \beta_{SH} > 0$, $H_0: \beta_{SH} = 0$. Hypothesis 3: Sexual harassment will be positively significantly associated with depression. $H_1: \beta_{SH} > 0$, $H_0: \beta_{SH} = 0$. Hypothesis 4: Sexual Harassment will be positively significantly associated with Eating Disturbances. $H_1: \beta_{SH} > 0$, $H_0: \beta_{SH} = 0$. The directionality of hypotheses one, two,

and three are supported by the literature. Research has found that women who have experienced sexual harassment suffered from psychological problems such as posttraumatic stress, depression and anxiety (e.g. Dansky & Kilpatrick, 1997; Fitzgerald, Drasgow et al., 1997; Harned, 2000; Harned & Fitzgerald, 2002; Welsh, 1999). The directionality of hypotheses four is supported by the literature. Research indicates that individuals who have been sexually victimized may develop eating disturbances (e.g. Dansky et al., 1997; Harned, 2000; Harned & Fitzgerald, 2002; Hund & Espelage, 2005; Kent et al., 1999; Leonard et al., 2003; Mazzeo & Espelage, 2002; Thompson, 1992; Weiner & Thompson, 1997).

Hypothesis 5: Rape will be positively significantly associated with posttraumatic stress. $H_1: \beta_{SA} > 0$, $H_0: \beta_{SA} = 0$. Hypothesis 6: Rape will be positively significantly associated with anxiety. $H_1: \beta_{SA} > 0$, $H_0: \beta_{SA} = 0$. Hypothesis 7: Rape will be positively significantly associated with depression. $H_1: \beta_{SA} > 0$, $H_0: \beta_{SA} = 0$. Hypothesis 8: Rape will be positively significantly associated with Eating Disturbances. $H_1: \beta_{SA} > 0$, $H_0: \beta_{SA} = 0$. The directionality of hypotheses five, six and seven are supported by the literature. Research indicates that victims of rape suffer from posttraumatic stress, anxiety and depression (e.g. Campbell & Wasco, 2005; Koss, Goodman, et al., 1994; Thompson et al., 2003). The directionality of hypothesis four is supported by the literature. Research indicates that individuals who have been sexually victimized may develop eating disturbances (e.g. Dansky et al., 1997; Harned, 2000; Harned & Fitzgerald, 2002; Hund & Espelage, 2005; Kent et al., 1999; Leonard et al., 2003; Mazzeo & Espelage, 2002; Thompson, 1992; Weiner & Thompson, 1997).

Hypothesis 9: Posttraumatic stress will be positively significantly associated with Eating Disturbances. $H_1: \beta_{PS} > 0$, $H_0: \beta_{PS} = 0$. Hypothesis 10: Anxiety will be positively significantly associated with Eating Disturbances. $H_1: \beta_A > 0$, $H_0: \beta_A = 0$. Hypothesis 11: Depression will be positively significantly associated with Eating Disturbances. $H_1: \beta_D > 0$, $H_0: \beta_D = 0$. The directionality of these three hypotheses is supported by the literature. Research indicates that individuals who experience posttraumatic stress, anxiety and depression as a result of being sexually victimized may develop eating disturbances (e.g. Dansky et al., 1997; Harned, 2000; Harned & Fitzgerald, 2002; Hund & Espelage, 2005; Kent et al., 1999; Leonard et al., 2003; Mazzeo & Espelage, 2002; Thompson, 1992; Weiner & Thompson, 1997).

Cognitive schema and trauma. Hypothesis 12: Masculinity-Femininity will be inversely significantly associated with Posttraumatic Stress. $H_1: \beta_{PS} < 0$, $H_0: \beta_{PS} < 0$. Hypothesis 13: Masculinity-Femininity will be inversely significantly associated with Anxiety. $H_1: \beta_A < 0$, $H_0: \beta_A < 0$. Hypothesis 14: Masculinity-Femininity will be inversely significantly associated with

Depression. $H_1: \beta_D < 0$, $H_0: \beta_D \neq 0$. Hypothesis 15: Rape Myth Acceptance will be positively significantly associated with Posttraumatic Stress. $H_1: \beta_{RMA} > 0$, $H_0: \beta_{RMA} = 0$. Hypothesis 16: Rape Myth Acceptance will be positively significantly associated with Depression. $H_1: \beta_{RMA} > 0$, $H_0: \beta_{RMA} = 0$. Hypothesis 17: Rape Myth Acceptance will be positively significantly associated with Anxiety. $H_1: \beta_{RMA} > 0$, $H_0: \beta_{RMA} = 0$. The directionality of these hypotheses is supported by the literature. Research has found that higher levels of self-blame in rape victims can result in higher levels of psychological distress (e.g. Lonesway & Fitzgerald, 1994; Meyer & Taylor, 1986).

Regression Tests. Hypothesis 18: It was hypothesized that sexual harassment, rape, psychological distress, rape myth acceptance, and gender-role attitudes would account for a significant amount of variance in eating disturbances. The amounts of variance in eating disturbances will include a mediation and moderation of some of the variables.

The predicted hypothesis for psychological distress as a mediator involves three steps. The variable, psychological distress was used as both an independent and dependent variable. First, it was hypothesized that the relationship between sexual harassment and rape and eating disturbances (anxiety, depression, and posttraumatic stress) would be significant. Second, it was hypothesized that the relationship between sexual harassment and rape and psychological distress would be significant. Then, the relationship between psychological distress and eating disturbances would be significant after controlling for sexual harassment and rape.

Also, it was hypothesized that if the interaction between rape and rape myth acceptance on psychological distress was significant, then rape myth acceptance would moderate the effect of rape on psychological distress. If the interaction between rape and gender-role attitudes on psychological distress was significant, then gender-role attitudes moderate the effect of rape on psychological distress. It was hypothesized that if the interaction between sexual harassment and rape myth acceptance on psychological distress was significant, then rape myth acceptance moderates the effect of sexual harassment on psychological distress. If the interaction between sexual harassment and gender-role attitudes on psychological distress was significant, then gender-role attitudes would moderate the effect of sexual harassment on psychological distress.

First, the demographic analyses were conducted and assumptions were tested for the regressions. Then the following hypotheses were examined using one-tailed, Pearson correlational analyses at the .05 significance level: H1, H2, H3, H4, H5, H6, H7, H8, H9, H10, H11, H12, H13, H14, H15, H16, H17. Hypothesis 18 was examined by using a hierarchical

regression to test the relationship among all variables, a series of multiple regressions to test the mediation, and a hierarchical regression to test the moderation at the .05 significance levels.

To conduct the multiple regression analyses and test for both mediation and moderation, two separate analyses were conducted. To test for the mediation, there are four steps that are performed with three regression equations. The first step is to demonstrate a significant relationship between the predictor and the outcome. Thus, the relationship between sexual harassment and rape (predictors) and eating disturbances (outcome) was first tested in a multiple regression. The second step is to demonstrate that the predictor is related to the mediator. Consequently, the relationship between sexual harassment and rape (predictors) and psychological distress (mediator) was tested in a multiple regression. The third step is to demonstrate that the mediator is related to the outcome variable and the final step is to demonstrate that the strength of the relationship between the predictor and the outcome is significantly reduced when the mediator is added to the model (Frazier, Barron & Tix, 2004). Therefore, to test the relationship between psychological distress (mediator) and eating disturbances (outcome) and to show the reduction with the addition of the mediator, a multiple regression was performed with sexual harassment, rape, and psychological distress (predictors) and eating disturbances (outcome).

To test for moderation, there were several steps involved. First, the continuous predictor and moderator variables were centered, then product terms between the predictor and moderator variables were created, and lastly, a series of hierarchical multiple regressions were performed after structuring an equation. The equation was structured through a series of specified blocks with the first block including the centered predictor and moderator variables and the second block including the product terms of the predictor and moderator variables.

Chapter Four: Results

The following results include descriptive and frequency statistics from a sample of nursing and pre-service teaching students at the University of Kentucky. Based on the proposed relationships, analyses were conducted to examine the relationships among sexual harassment, rape, rape myth acceptance, gender-role attitudes, psychological distress, and eating disturbances. To test the proposed relationships, correlational analyses, multiple regressions, and hierarchical regressions were conducted. The standardized coefficients of the significant regressions were observed to determine whether the relationships were supported. The relationships were examined to determine if a significant amount of the variance of the eating disturbances was accounted for by all the variables.

Sample Characteristics

Before testing the proposed relationships, analyses were conducted to compare the two groups of students: nursing and teaching. Please note that the term “teaching” and “pre-service teaching” students will be used interchangeably to denote the same group of participants. In order to determine whether the students significantly differed by ethnicity, sexual orientation, student classification, or international status, a cross tabulation was performed. A 2 X 4 chi-square test indicated that the relationship between ethnicity and type of student (nursing or teaching) was not significant, $\chi^2(3, N = 205) = 3.93, p = .27$. The breakdown of ethnicity by type of student is represented in Table 4.1.

The analysis of sexual orientation and type of student was conducted in a 2 X 2 cross tabulation and the chi-square test was not significant, $\chi^2(1, N = 206) = .02, p = .89$. The percentage of nursing and teaching students in the sexual orientation categories are in Table 4.2.

Significant results were found in a 2 X 4 cross tabulation of student classification by student group and the results of the chi-square test are as follows, $\chi^2(3, N = 206) = 108.70, p = .00$. The percentages of students in the four different student classifications are depicted in Table 4.3.

Lastly, a 2 X 2 cross tabulation was performed on international status by type of student and the chi-square test revealed no significant differences in international status, $\chi^2(1, N = 206) = .83, p = .36$. The international status of the two groups is represented in Table 4.4.

An independent samples t-test was used to examine whether the two groups differed by height, current weight, highest weight, lowest weight, and age. On the Eating Attitudes Test (EAT-26) and participants were asked to indicate their height, current weight, highest weight, and lowest weight (See Appendix F). Participants were also asked to indicate their age in years on the

demographic questionnaire (See Appendix O). For height, a two-tailed independent groups t test indicated no significant differences between the groups, $t(202) = 1.22, p = .47$. The groups did significantly differ by current weight. The nursing group weighed significantly more than the pre-service teaching students, $t(199.86) = 3.21, p = .002$, highest weight, $t(1965.50) = 2.78, p = .006$, and lowest weight, $t(192.05) = 2.10, p = .04$. The groups also significantly differed by age. The nursing students were older than the pre-service teaching students, $t(189.86) = 4.73, p = .00$. Descriptive statistics of these two groups are represented in Table 4.5.

A MANOVA was conducted to analyze whether the two groups differed in their responses for the total scaled scores on both the independent and dependent variables. The multivariate main effect for type of student was significant, Wilks lambda = .91, $F(8, 190) = 2.24, p = .027$. Also, the univariate effect of type of student on the total scaled score on the Sexual Harassment Questionnaire (SEQ-W) was significant, $F(1, 197) = 7.53, p = .007$. The nursing students had higher total scaled scores compared to teaching students on the SEQ-W (nursing: $M = .75, SD = .59$ and teaching: $M = .54, SD = .53$). The descriptive statistics for the student groups by total scale scores on both the independent and dependent variables are displayed in Table 4.6. Looking at descriptive statistics, the nursing students experienced more harassment from supervisors, teaching assistants, peers, coworkers and patients. Teaching students experienced more harassment from teachers and nursing and teaching students equally experienced harassment from doctors. See Table 4.7 for these results.

Table 4.1

Percentage of Ethnic Groups by Student Group

Type of Student	N	%African-American	N	%Hispanic	N	%Caucasian	N	% Native-American	N	%Other
Nursing	4	3.6%	1	.9%	105	93.8%	0	0%	2	1.8%
Teaching	0	.0%	2	2.2%	89	95.7%	0	0%	2	2.2%
Total	4		3		194		0		4	

Table 4.2

Percentage of Sexual Orientation Categories by Student Group

Type of Student	<i>N</i>	%Straight/Heterosexual	<i>N</i>	%Bisexual	<i>N</i>	%Homosexual
Nursing	112	99.1%	1	.9%	0	0%
Teaching	92	98.9%	1	1.1%	0	0%
Total	204		2		0	

Table 4.3

Percentage of Student Classifications by Student Group

Type of Student	<i>N</i>	%Freshman	<i>N</i>	%Sophomore	<i>N</i>	%Junior	<i>N</i>	%Senior
Nursing	0	0%	4	3.5%	60	53.1%	49	43.4%
Teaching	7	7.5%	60	64.5%	20	21.5%	6	6.5%
Total	7		64		80		55	

Table 4.4

Percentage of International Students by Student Group

Type of Student	<i>N</i>	% "Yes": International Student	<i>N</i>	% "No": International Student
Nursing	1	.9%	112	99.1%
Teaching	0	.0%	93	100.0%
Total	1		205	

Table 4. 5

Height (inches), Weight (lbs), and Age (years) by Type of Student

Variable	Type of Student	<i>N</i>	<i>M</i>	<i>SD</i>	Std. Error <i>M</i>
Height	Nursing	113	65.13	2.58	.24
	Teaching	91	64.65	3.02	.32
Current Weight	Nursing	113	145.54	31.63	2.98
	Teaching	92	133.34	22.63	2.36
Highest Weight	Nursing	109	156.38	35.73	3.42
	Teaching	89	143.83	27.69	2.94
Lowest Weight	Nursing	110	126.17	25.88	2.47
	Teaching	87	119.57	18.00	1.93
Age	Nursing	108	22.00	3.84	.37
	Teaching	90	19.81	2.65	.28

Table 4.6

Type of Student by Eating Disturbances, Rape Myth Acceptance, Sexual Harassment, Sexual Victimization, and Psychological Distress

Variable	Type of Student	<i>N</i>	<i>M</i>	Range	<i>SD</i>
EAT-26	Nursing	109	2.56	(1-6)	.65
	Teaching	90	2.60		.83
IRMA-SF	Nursing	109	1.63	(1-7)	.51
	Teaching	90	1.75		.61
SEQ-W	Nursing	109	.75	(0-4)	.59
	Teaching	90	.54		.53
SES-SF	Nursing	109	.21	(0-3)	.44
	Teaching	90	.20		.38
PCL-C	Nursing	109	1.67	(1-5)	.58
	Teaching	90	1.78		.67
DASS-21-D	Nursing	109	1.48	(1-4)	.50
	Teaching	90	1.46		.44
DASS-21-A	Nursing	109	1.48	(1-4)	.48
	Teaching	90	1.48		.43
PAQ-MF	Nursing	109	3.32	(1-5)	3.90
	Teaching	90	3.40		.47

EAT-26: Eating Disturbances, IRMA-SF: Rape Myth Acceptance, SEQ-W: Sexual Harassment, SES-SF: Rape, PCL-C: Posttraumatic Stress, DASS-21-D, DASS-21-A, and PAQ-MF: Gender-Role Attitudes.

Table 4.7

Type of Student by Perpetrator of Sexual Harassment

Total # of	Nursing	Teaching
	Yes Responses	Yes Responses
Instructors	2	4
Teachers	14	15
Supervisors	24	9
TA's	2	1
Peers	65	60
Coworkers	64	36
Doctors	3	3
Patients	35	0
Total	209	128

Descriptive Statistics for Independent Variables

It is first important to note that the mean item score was used to calculate the total score for all scales. Also, the remaining analyses in the present study were conducted on the combined groups of nursing and pre-service teaching students. Descriptive statistics for the shortened version of the Sexual Experiences Survey (SES-SFV) and all other independent variables are found in Table 4.8. Two-hundred participants completed the SES-SFV. The average score on this instrument was $M = .21$, with a standard deviation of $SD = .41$. The total scaled scores on the SES-SFV ranged from 0 to 2.33 and the internal consistency reliability for the SES-SFV was .90. Of particular interest, although beyond the scope of this study, is the percentage of participants who endorsed the question on the SES-SFV that asks "Have you ever been raped?" Of the 206 participants, 195 participants answered this question and 180 participants circled the response "no" and 15 participants circled the response "yes." Fifty-four percent of the participants' did not endorse any rape experience. The percentages of participants who reported 1-3 or more oral, anal and vaginal rape experiences are represented in Table 4.9

Two-hundred and six participants completed the SEQ-W with an average score of $M = .66$, and a standard deviation of $SD = .56$. The total scaled scores on the SEQ-W ranged from 0 to 2.9. The SEQ-W produced an internal consistency reliability coefficient of .93. Of the 206 participants, 199 participants endorsed being sexually harassed. Thirteen percent of participants' total scaled score on this scale was 0. The percentages of participants who reported gender harassment, unwanted sexual attention, and sexual coercion are reported in Table 4.10.

On the Depression and Anxiety Stress Scale (DASS-21) subscales were completed by 206 participants and produced average scores of $M = 1.49$ and a standard deviation of $SD = .46$ for anxiety and $M = 1.48$ and a standard deviation of $SD = .49$ for depression. Internal consistency on the subscales were .85 for depression and .76 for anxiety.

Two-hundred and five participants completed the Post Traumatic Stress Disorder Checklist—Civilian Form (PCL-C) with an average score of $M = 1.72$ and a standard deviation of $SD = .62$. The PCL-C produced an internal consistency reliability coefficient of .92.

Two-hundred and six participants completed the shortened version of the Illinois Rape Myth Acceptance (IRMA-SF) with an average score of $M = 1.69$, and a standard deviation of $SD = .56$. The total scaled scores on the IRMA-SF ranged from 1 to 3.59. The IRMA-SF produced an internal consistency reliability coefficient of .82.

On the Masculinity-Femininity Personal Attributions Questionnaire (PAQ, M-F) subscale, two-hundred and five participants completed the instrument with an average score of $M = 3.36$ and a standard deviation of $SD = .43$. The total scaled scores on the M-F subscale ranged from 2.25-4.50. The M-F subscale produced an internal consistency reliability coefficient of .43.

Table 4.8

Descriptive Statistics for Independent Variables

Scale	<i>N</i>	<i>M</i>	<i>SD</i>	<i>r</i>
SES-SFV	200	.21	.41	.90
SEQ-W	206	.66	.56	.93
DASS-21 A	206	1.49	.46	.76
DASS-21 D	206	1.48	.49	.85
PCL-C	205	1.72	.62	.92
IRMA-SF	206	1.69	.56	.82
PAQ M-F	205	3.36	.43	.43

SES-SFV: Rape, SEQ-W: Sexual Harassment, DASS-21 A: Anxiety, DASS-21: Depression, PCL-C: Posttraumatic Stress, IRMA-SF: Rape Myth Acceptance, PAQ M-F: Gender-Role Attitudes.

Table 4.9

Percentages of Participants Who Reported Experiencing Oral, Anal, and Vaginal Rape Experiences 1-3 or More Times

Type	<i>N</i>	%	Total <i>N</i>
Oral	73	37%	200
Vaginal	64	32%	199
Anal	15	8%	196

Table 4.10

Percentages of Participants Who Reported Experiencing Gender Harassment, Unwanted Sexual Attention, and Sexual Coercion

Type	N	%	Total
Gender Harassment	175	85%	206
Unwanted Sexual Attention	169	82%	206
Sexual Coercion	46	22%	206

Descriptive Statistics for Dependent Variables

The mean was used to calculate the total score for the EAT-26. Descriptive statistics for the EAT-26 are represented in Table 4.11. Two-hundred and six participants completed the EAT-26. The average score on this instrument was $M = 2.58$, and a standard deviation of $SD = .73$. The total scaled scores on the SES-SFV ranged from 1.27 to 5.04 and the internal consistency reliability for the EAT-26 was .93.

Table 4.11

Descriptive Statistics for the Dependent Variable

Scale	<i>N</i>	<i>M</i>	<i>SD</i>	<i>r</i>
EAT-26	206	2.58	.73	.93

EAT-26: Eating Disturbances

Analyses of the Hypotheses

The relationships among sexual harassment, rape, rape myth acceptance, gender-role attitudes, posttraumatic stress, and eating disturbances were examined by performing both a bivariate Pearson correlational analyses. The correlations between the independent and dependent variables are presented in Table 4.12. As shown in this table, significant positive relationships were found between sexual harassment and posttraumatic stress ($r = .34, p = .00$), sexual harassment and anxiety ($r = .22, p = .00$), sexual harassment and depression ($r = .26, p = .00$), and sexual harassment and eating disturbances ($r = .28, p = .00$). The findings of these significant

relationships provide support for the following hypotheses: (H1) sexual harassment will be positively significantly associated with posttraumatic stress (H2) sexual harassment will be positively significantly associated with anxiety (H3) sexual harassment will be positively significantly associated with depression and (H4) sexual harassment will be positively significantly associated with eating disturbances.

Significant positive relationships were also found between rape and posttraumatic stress ($r = .41, p = .00$), rape and anxiety ($r = .19, p = .004$), rape and depression ($r = .27, p = .00$), and rape and eating disturbances ($r = .31, p = .00$). Thus, there is support for the following hypotheses: (H5) rape will be positively significantly associated with posttraumatic stress, (H6) rape will be positively significantly associated with anxiety, (H7) rape will be positively significantly associated with depression, and (H8) rape will be positively significantly associated with eating disturbances.

Significant positive relationships were found between posttraumatic stress and eating disturbances ($r = .36, p = .00$), depression ($r = .36, p = .00$) and eating disturbances, and anxiety and eating disturbances ($r = .33, p = .00$) The findings of these significant relationships provide support for the following hypotheses: (H9) posttraumatic stress will be positively significantly associated with eating disturbances (H10) anxiety will be positively significantly associated with eating disturbances, and (H11) depression will be positively significantly associated with eating disturbances.

Unexpectedly, the relationships between gender-role attitudes and posttraumatic stress ($r = .28, p = .00$), gender-role attitudes and anxiety ($r = .20, p = .002$), and gender-role attitudes and depression ($r = .14, p = .02$) were not supported because the relationships were in the opposite of the predicted direction. Support was not found for the following hypotheses: (H12) Masculinity-Femininity will be inversely significantly associated with posttraumatic stress (H13) Masculinity-Femininity will be inversely significantly associated with anxiety, and (H14) Masculinity-Femininity will be inversely significantly associated with depression.

No significant relationships were found between rape myth acceptance and depression ($r = .08, p = .13$), and rape myth acceptance and anxiety ($r = .03, p = .32$). These findings did not support the following hypotheses (H15) rape myth acceptance will be positively significantly associated with anxiety, and (H16) rape myth acceptance will be positively significantly associated with depression. A significant relationship was found between rape myth acceptance and posttraumatic stress ($r = .21, p = .001$). This significant relationship supports the hypothesis

(H17) that rape myth acceptance will be positively significantly associated with posttraumatic stress.

Table 4.12

Correlations Between Independent and Dependent Variables

Scale	1	2	3	4	5	6	7	8
1.EAT-26	1.00	.06	.36**	.33**	.28**	.19**	.31**	.36**
2.IRMA-SF	----	1.00	.08	.03	-.08	.01	.08	.21**
3.DASS-21-D	----	----	1.00	.67**	.26**	.14**	.27**	.59**
4.DASS-21-A	----	----	----	1.00	.22**	.20**	.19**	.63**
5.SEQ-W	----	----	----	----	1.00	.19**	.46**	.34**
6.PAQ-SF	----	----	----	----	----	1.00	.18**	.28**
7.SES-SF	----	----	----	----	----	----	1.00	.41**
8.PCL-C	----	----	----	----	----	----	----	1.00

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

EAT-26: Eating Disturbances, IRMA-SF: Rape Myth Acceptance, DASS-21-D: Depression, DASS-21-A: Anxiety, SEQ-W: Sexual Harassment, PAQ-SF: Gender-Role Attitudes, SES-SF: Rape, PCL-C: Posttraumatic Stress.

Assumptions for Multiple Regressions

Assumptions for the multiple regressions were checked by examining the distribution of the residuals. First, the normality distribution of the residuals was investigated by looking at the histogram and the skewness and kurtosis of the residuals. The residuals of the EAT-26 were not normally distributed, skewness was .66 and kurtosis was .44. A log transformation was performed on the scores of the EAT-26 to create a more normal distribution. After the transformation of the EAT-26 the residuals were acceptable and closer to a normal distribution, skewness was .03 and kurtosis was -.15.

It was discovered upon running the correlational analyses that the three scales measuring psychological distress were significantly highly correlated (anxiety and depression, $r = .67$, anxiety and PCL-C, $r = .63$, depression and PCL-C, $r = .59$) at the $p > .01$ level. To avoid

multicollinearity in the regression analysis, the two scales measuring anxiety (DASS-21 A) and depression (DASS-21 D) were excluded from the subsequent multiple regression analyses. Since the measure of posttraumatic stress (PCL-C) includes depression and anxiety items and the present study's aim is to capture the presence of such states along with posttraumatic stress, the PCL-C could capture all three states. Because the term psychological distress represented anxiety, depression, and posttraumatic stress and both measures of anxiety and depression were excluded, the term posttraumatic stress will be used in lieu of psychological distress for the remainder of the study.

The second assumption of homogeneity of the variance of the residuals was checked by examining the scatterplots of the residuals and predicted values. The scatterplots appeared random and not patterned.

Since the reliability of the M-F subscale did not have a high enough reliability for the sample to use as a moderator and this reliability was too low to use as an independent variable in the final regression, the current study excluded it from the multiple and hierarchical regressions. The present study examined the Femininity subscale as a possible measure of gender-role attitudes. The Femininity subscale (F), measures characteristics socially desirable in both sexes, but believed to be found more often in women. Because the present study's aim is to measure traditional gender-role attitudes in women, this subscale could provide a measure of characteristics associated with the female gender-role and viewed as traditional since they are found more often in women. However, when the internal consistency reliability test was conducted, the coefficient of the F subscale was .73. Frazier et al. (2004) recommend that when testing an interaction in the moderation of variables, the reliability of the scale needs to be at least .80. A scale below this will reduce the power of the test thus; the femininity subscale was also excluded from the present study.

The exclusion of gender-role attitudes in the study resulted in the inability to test the moderation of gender-role attitudes on posttraumatic stress. Also, gender-role attitudes were not included in the test of all of the relationships among the variables. Both the inclusion of posttraumatic stress and exclusion of gender-role attitudes altered hypothesis 18. Thus, hypothesis 18 now states that sexual harassment, rape, posttraumatic stress, and rape myth acceptance will account for a significant amount of variance in eating disturbances.

Hierarchical Model

The full proposed model in the current study was partially supported. Sexual harassment, rape, and posttraumatic stress accounted for a significant amount of variance. Rape myth

acceptance did not significantly contribute to the model. Support was not found for the following hypothesis: (H18) It is hypothesized that sexual harassment, rape, posttraumatic stress, and rape myth acceptance will account for a significant amount of variance in eating disturbances. The results of the hierarchical regression used to test the full proposed are represented in Table 4.13.

Table 4.13
Hierarchical Multiple Regression with Eating Disturbances as the Dependent Variable

Testing Steps	<i>B</i>	<i>SE B</i>	β	R ² Change
Step 1				
Sexual Harassment (SH)	.10	.04	.20**	
Rape	.13	.05	.19*	.11
Step 2				
SH	.07	.04	.15*	
Rape	.07	.05	.11	
Posttraumatic Stress (PS)	.12	.03	.26**	.06
Step 3				
SH	.08	.04	.15*	
Rape	.07	.05	.11	
PS	.11	.03	.26**	
Rape Myth Acceptance	.01	.03	.02	.00

*p<.05

**p<.01

Mediation of Posttraumatic Stress

To test for the mediation, there are four steps that are performed with three regression equations. These steps are described in Frazier et al. (2004). The first step is to demonstrate a significant relationship between the predictor and the outcome. Thus, the relationship between sexual harassment and rape (predictors) and eating disturbances (outcome) was first tested in a multiple regression. The second step is to demonstrate that the predictor is related to the mediator. Consequently, the relationship between sexual harassment and rape (predictors) and posttraumatic stress (mediator) was tested in a multiple regression. The third step is to demonstrate that the mediator is related to the outcome variable and the final step is to demonstrate that the strength of the relationship between the predictor and the outcome is significantly reduced when the mediator is added to the model (Frazier, Barron & Tix, 2004). Therefore, to test the relationship between posttraumatic stress (mediator) and eating disturbances (outcome) and to show the reduction with the addition of the mediator, a multiple regression was performed with sexual harassment, rape, and posttraumatic stress (predictors) and eating disturbances (outcome).

The first multiple regression analysis revealed that sexual harassment and rape (predictors) were related to eating disturbances (outcome). The unstandardized regression coefficients for sexual harassment ($B = .10$) and rape ($B = .13$) associated with eating disturbances was significant for sexual harassment ($p = .009$) and rape ($p = .011$). These results are displayed in Table 4.14.

The second multiple regression revealed a relationship for sexual harassment and rape and posttraumatic stress (mediator). The unstandardized regression coefficient for sexual harassment ($B = .20$) and rape ($B = .50$) associated with posttraumatic stress was significant for sexual harassment ($p = .011$) and rape ($p = .000$). See Table 4.14 for results.

In the third multiple regression, a significant relationship was found for eating disturbances and posttraumatic stress and sexual harassment and rape. For this analysis, the study regressed eating disturbances simultaneously on both posttraumatic stress and sexual harassment and rape. The unstandardized regression coefficient for this relationship was ($B = .12, p = .000$). These results are displayed in Table 4.14.

To assess whether posttraumatic stress is a mediator for sexual harassment, rape, and eating disturbances, the relation between sexual harassment and rape and eating disturbances, after controlling for posttraumatic stress was examined. Frazier et al. (2004) indicate that when this path is zero (unstandardized beta coefficient) there is complete mediation. This path was .073 for sexual harassment and .073 for rape, thus the present study concluded posttraumatic stress does not completely mediate the relationship between sexual harassment and rape and eating disturbances. To determine whether posttraumatic stress is a significant partial mediator, the present study calculated the recommended equation by Frazier et al. (2004). This equation is the mediated effect divided by its standard error, which produces a z score of the mediated effect. If this z score is greater than 1.96, then the effect is significant at the .05 level. The z score of the mediated effect for sexual harassment was 2.07 and for rape it was 2.96. These results indicate that the present study can conclude that posttraumatic stress acts as a partial mediator for the relationship between sexual harassment and rape and eating disturbances.

These findings provide support for the following hypothesis: (a) The relationship between sexual harassment and rape and eating disturbances will be significant (b) The relationship between rape and sexual harassment and posttraumatic stress will be significant (c) the relationship between posttraumatic stress and eating disturbances will be significant after controlling for sexual harassment and rape.

Table 4.14
Multiple Regression Results for Mediation of Posttraumatic Stress for Sexual Harassment and Rape on Eating Disturbances

<i>Testing Steps</i>	<i>B</i>	<i>SE B</i>	<i>β</i>
Testing Step 1			
Outcome: Eating Disturbances			
Predictors: Sexual Harassment	.10	.04	.20*
Rape	.13	.05	.19*
Testing Step 2			
Outcome: Posttraumatic Stress			
Predictors: Sexual Harassment	.20	.08	.19*
Rape	.50	.11	.33**
Testing Step 3			
Outcome: Eating Disturbances			
Predictor: Sexual Harassment	.07	.04	.15
Rape	.07	.05	.11
Mediator: Posttraumatic Stress	.12	.03	.26**

*p<.05, **p<.01

Moderation of Rape Myth Acceptance

To test for moderation, the current study followed the steps Frazier, et al. (2004) describe in their article. First, the continuous predictor and moderator variables were centered, then product terms between the predictor and moderator variables were created, and lastly, a series of hierarchical multiple regressions were performed after structuring an equation. The equation was structured through a series of specified blocks in the hierarchical multiple regression with the first block including the centered predictor and moderator variables and the second block including the product terms of the predictor and moderator variables.

In the first step, subtracting their sample means centered sexual harassment, rape and rape myth acceptance. This process reduced any potential problems associated with multicollinearity in the regression equation. Then in the next step, to create product terms, the centered predictor and moderators were multiplied together. The product terms included sexual harassment and rape myth acceptance, and rape and rape myth acceptance. Lastly, two different equations were created and entered into two separate blocks: (a) sexual harassment and rape myth acceptance (block 1) and their interaction (block 2) and (b) rape and rape myth acceptance (block 1) and their interaction (block 2) The dependent variable for all of the blocks was posttraumatic stress.

In the first block of the first hierarchical regression analysis, the unstandardized regression coefficient for sexual harassment was .39 was significant at the .01 level ($p = .000$). The unstandardized regression for rape myth acceptance was .27, which was significant at the .01 level ($p = .000$). The unstandardized regression coefficient for the interaction term was not significant .24 ($p = .074$). See Table 4.15 for these results.

In the first block of the second hierarchical regression analysis, the unstandardized regression coefficient for rape was .60 was significant at the .01 level ($p = .000$). The unstandardized regression for rape myth acceptance was .21 was significant at the .05 level ($p = .004$). The unstandardized regression coefficient for the interaction term was not significant $-.02$ ($p = .91$). See Table 4.16 for these results.

These findings do not support the following hypotheses: (a) if the interaction between rape and rape myth acceptance on posttraumatic stress is significant, then rape myth acceptance moderates the effect of rape on posttraumatic stress, (b) if the interaction between rape and gender-role attitudes on posttraumatic stress is significant, then gender-role attitudes moderate the effect of rape on posttraumatic stress, (c) if the interaction between sexual harassment and rape myth acceptance on posttraumatic stress is significant, then rape myth acceptance moderates the effect of sexual harassment on posttraumatic stress (d) if the interaction between sexual harassment and gender-role attitudes on posttraumatic stress is significant, then gender-role attitudes moderate the effect of sexual harassment on posttraumatic stress.

A summary of the hypotheses and whether they were supported based on the analysis is represented in Table 4.17.

Table 4.15
Hierarchical Multiple Regression for Moderation of Rape Myth Acceptance and Sexual Harassment on Posttraumatic Stress

Testing Steps	<i>B</i>	<i>SE B</i>	β	R ² Change
Step 1				
Sexual Harassment (SH)	.39	.04	.36**	
Rape Myth Acceptance (RMA)	.27	.07	.24**	.17
Step 2				
SH X RMA	.24	.14	.12	.01

** $p < .01$

Table 4.16
 Hierarchical Multiple Regression for Moderation of Rape Myth Acceptance and Rape on
 Posttraumatic Stress

Testing Steps	<i>B</i>	<i>SE B</i>	β	R ² Change
Step 1				
Rape	.60	.96	.40**	
Rape Myth Acceptance	.20	.07	.19**	.21
Step 2				
Rape X Rape Myth Acceptance	-.02	.16	-.01	.00

Table 4.17

Summary of Hypotheses	Outcome
H1) Sexual harassment will be positively associated with posttraumatic stress	Supported
H2) Sexual harassment will be positively associated with anxiety	Supported
H3) Sexual harassment will be positively associated with depression	Supported
H4) Sexual harassment will be positively associated with eating disturbances	Supported
H5) Rape will be positively associated with posttraumatic stress	Supported
H6) Rape will be positively associated with anxiety	Supported
H7) Rape will be positively associated with depression	Supported
H8) Rape will be positively associated with eating disturbances	Supported
H9) Posttraumatic stress will be positively associated with eating disturbances	Supported
H10) Anxiety will be positively associated with eating disturbances	Supported
H11) Depression will be positively associated with eating disturbances	Supported
H12) Masculinity-Femininity will be inversely associated with posttraumatic stress	Not-Tested
H13) Masculinity-Femininity will be inversely associated with anxiety	Not -Tested
H14) Masculinity-Femininity will be inversely associated with depression	Not-Tested
H15) Rape Myth Acceptance will be positively associated with posttraumatic stress	Supported
H16) Rape Myth Acceptance will be positively associated with depression	Not Supported
H17) Rape Myth Acceptance will be positively associated with anxiety	Not Supported
H18-Revised) Sexual harassment, rape, posttraumatic stress, and rape myth acceptance will account for a significant amount of variance in eating disturbances (posttraumatic stress mediates this relationship and rape myth acceptance moderate this relationship)	Partially Supported

Summary

The sampling procedures, instrumentation, operational definitions, research hypotheses, and administration procedures used in this study have been discussed in this chapter. This research methodology was used to study the relationships among Rape, sexual harassment, gender-role attitudes, rape myth acceptance, posttraumatic stress and eating disturbances.

Chapter Five: Discussion

Since the Women's Movement, new approaches to women's psychological health have brought recognition to the separate issues women and men face (Worell & Remer, 2003). We know that today, sexual victimization is highly prevalent among women and contributes to the development of mental health issues. In addition, the feminist construction of gender has helped us understand that women's issues are embedded in a larger social context that supports the oppression of women. This oppressive societal context has contributed to the mislabeling and misevaluation of women's responses to their environment (Worell & Remer, 2003). Because sexual victimization is a pervasive occurrence in women's lives and can cause numerous mental health issues, aptly labeling and evaluating women's responses, as well as preventing secondary mental health issues, is critical.

Research has examined the impact of sexual victimization and found that posttrauma responses include, but are not limited to, posttraumatic stress, anxiety, depression, and eating disorders. Considering these associated mental health issues and the pervasiveness of sexual victimization, identifying not only how women respond to sexual victimization, but also why they might respond in certain ways was of particular interest in the present study. This identification involved the examination of both cognitive and psychological processes that might explain the relationship between sexual victimization and eating disorders. Also, by using a feminist framework, this study sought to avoid victim blaming by examining the social and external forces that may influence how women respond to sexual victimization. These forces included both traditional gender-role attitudes and the acceptance of rape myths. The current study was interested in the relationships among these variables within two specific populations, college students in nursing and teaching fields. These populations are predominantly female who have chosen a traditional female occupation. In order to determine the associations among all variables: experiences of sexual harassment and rape, posttraumatic stress, gender-role attitudes, rape myth acceptance, and eating disturbances in college students in the nursing and teaching fields, the following study was conducted.

Two-hundred and six nursing and pre-service teaching females were included in the study. These participants completed survey packets containing the: (a) Eating Attitudes Test-26; (b) Illinois Rape Myth Acceptance Scale; (c) Depression Anxiety Stress Scale, Short Form; (d) Sexual Experiences Questionnaire (Form W); (e) Personal Attributes Questionnaire, Short Form; (f) Sexual Experiences Survey; (g) Demographic Data Questionnaire; and the (h) Post Traumatic Stress Disorder Checklist. In general, it was hypothesized that women who had experienced more

sexual harassment and/or rape were more likely to experience posttraumatic stress and those women with traditional gender-role attitudes and more acceptance of rape myths would experience greater posttraumatic stress. In turn, women with higher posttraumatic stress would exhibit more eating disturbances. Pearson correlational analyses, multiple regressions, and hierarchical regressions were used to analyze the participant's answers on the instruments. The results supported 12 of the 18 hypotheses. The full proposed hierarchical model was not supported, however the relation between sexual harassment and rape and eating disturbances were supported. Also, the results indicated that posttraumatic stress partially mediates the relation between sexual harassment and rape and eating disturbances. The following discussion addresses the sample characteristics and the supported and unsupported hypotheses.

Discussion of Sample Characteristics

The comparison of the two different groups: nursing students and pre-service teaching students revealed several notable findings. The nursing students tended to be older and their student classification, expectantly, was higher. There were a higher percentage of seniors and juniors in the nursing group and a higher percentage of sophomores in the teaching group. This difference in the age and student classification of the two groups is most likely due to the structure of the two different school programs and the logistics of the data collection. The nursing students are not admitted to the program until they are sophomores, thus this explains the lack of freshman participants in the nursing group. With regards to data collection, the research sessions for the nursing group were scheduled such that the researcher visited the various nursing classes to recruit participants. These nursing classes were organized by student classification: sophomores, juniors, and seniors. In research studies, external factors such as incentives, time of the research session, and perceived importance of the study can affect whether students choose to participate in the study. The researcher learned from several of the students in one of the research sessions for a class that the majority of the students in the class chose not to participate in the study because they had a sorority meeting following the class. This class happened to be comprised of nursing students who were all at the sophomore level. Thus, external factors such as the time of the research session most likely influenced the student classification of the sample in the study.

Another difference between the two groups is that the nursing students reported a higher current, highest, and lowest weight. This difference did not significantly influence the total scaled mean scores on the measure of eating disturbances between the two groups. An analysis of other independent variables did however demonstrate rather significant findings for sexual harassment.

The nursing students reported experiencing more sexual harassment compared to the teaching students and this harassment was more frequently committed by supervisors, teaching assistants, peers, co-workers, and patients. This finding may be the result of the higher age of the nursing students. Since the nursing students have most likely been in school longer, they may have had more opportunities to be exposed to harassment. It also indicates that the female students in this nursing student group, for this sample, may be at increased risk for sexual harassment compared to other student groups.

Discussion of Prevalence Rates of Sexual Harassment, Rape, and Eating Disorders
Prevalence Rates of Eating Disorder Symptoms

The measurement of eating disorders symptoms was used as a continuous measure. Research indicates that when the measure is used as a continuous measure, the higher the score, the more symptomatic the respondent (Mazzeo, 1999). Tylka and Subich (2004) found that for college women enrolled in either psychology classes or members of campus sororities, mean EAT-26 scores increased as group rank along the eating disorder continuum increased (asymptomatic group $M = 2.02$, $SD = 0.39$; symptomatic group: $M = 2.79$, $SD = 0.55$; and eating disorder group; $M = 3.45$, $SD = 0.76$). The mean EAT-26 scores of the nursing and pre-service teaching services is lower than the mean EAT-26 scores of groups that exhibited symptoms of eating disorders and that meet the DSM-IV diagnostic criteria for anorexia and bulimia (Nursing: $M = 2.56$, $SD = .65$; Teaching: $M = 2.60$, $SD = .82$), but is higher than an asymptomatic group in the literature. Thus, for this sample, nursing and pre-service teaching female students may be at higher risk for symptoms of eating disorders.

Prevalence Rates of Sexual Harassment

Eighty-eight percent of participants endorsed experiencing at least one sexually harassing behavior at least “once or twice” since the age of 14. Eighty-five percent had experienced gender harassment, 82% percent reported unwanted sexual attention, and 22% were the victims of sexual coercion at least once since the age of 14. Harned’s (2000) analysis of the SEQ-R among a sample of undergraduate women revealed comparable percentages. Eighty-nine percent of participants indicated that they had experienced at least one type of sexually harassing behavior since junior school. Eighty-eight percent had experienced gender harassment, 74% reported unwanted sexual attention, and 14% were the victims of sexual coercion. Another study by Cortina et al. (1998) examined female undergraduate and graduate students using the short version of the SEQ. Forty-nine percent of undergraduate and 53% of graduate women had experienced at least one sexually harassing behavior at least “once or twice” from an instructor or

professor while at the university. Of the undergraduates, 36% reported gender harassment alone; 2% reported unwanted sexual attention alone; and 1 % reported sexual coercion with both other types (sexual coercion never occurred in isolation). Thus, the overall prevalence of sexual harassment for this sample of female nursing and pre-service teaching students is not higher than other groups of female college students, but may be at greater risk for unwanted sexual attention and sexual coercion.

Prevalence of Rape

The present study found that 18% of respondents fit into the highly sexually victimized category as compared to Koss's (1985) finding that 12.7% of college women fit into this group. Koss defined this category as "women who reported having submitted at any time in the past to oral, anal, or vaginal intercourse against their will through the use of force or threat of force and who indicated that they believed they had been raped" (p.196). This percentage represents victimization experiences since the respondent was 14 by calculating a sum for the following items on the Sexual Experiences Survey: (a) answered one to three or more times to items: 1d,1e; 2d,2e; 3d,3e. Thus, this sample of female nursing and pre-service teaching college students appear to be at greater risk for this type of sexual victimization.

Discussion of Supported Hypotheses

The first three hypotheses supported in this study indicate that in this sample of female college students in the nursing and pre-service teaching fields, who reported more sexual harassment experiences, were more likely to endorse posttraumatic stress, anxiety, and depression. These findings are not surprising given that harassed women may fear losing their job or academic standing if the harassment occurs in the work or school settings. Women have also been socialized to be submissive, thus reporting or confronting a harasser may conflict with their beliefs. Having to continue to endure the harassment without any recourse would most likely create posttraumatic stress, anxiety and depression for the victim. Also, the nature of sexual harassment experiences such as sexist remarks and/or offensive comments about one's physical appearance, pornographic pictures, and/or having one's body violated are a potential explanation for the relationships between sexual harassment and posttraumatic stress, anxiety, and depression. There is extensive support for these findings in the literature. For example, in the aforementioned work of Dansky et al. (1997) and Fitzgerald, Drasgow et al. (1997), women who had experienced sexual harassment suffered from psychological problems such as anxiety, depression, and posttraumatic stress disorder. Fitzgerald, Drasgow et al. (1997) found that the women often missed work and contemplated leaving their jobs. Studies on sexual harassment in the academic

setting have found that negative consequences may include the avoidance of a professor, dropping classes, changing advisors, or withdrawing from school (Cortina, et al., 1998).

Hypotheses five, six, and seven were also supported, demonstrating that in this study's sample of female college students in the nursing and pre-service teaching fields who reported more rape experiences were more likely to endorse posttraumatic stress, anxiety, and depression. Research has shown that the effects of rape are grave and often last for years after the incident. It impacts many areas of the victims' lives including the physical, social, and psychological. Women often fear being assaulted again and may make changes in their lives to try to prevent it from happening over again (Koss, Heise, et al., 1994). The results in the present study are extensively confirmed in the literature (Campbell & Wasco, 2005; Koss, Goodman, et al., 1994; Thompson et al., 2003).

Also supported in these results were hypotheses four and eight, signifying that in this study's sample of female college students in the nursing and pre-service teaching fields who reported more rape and sexual harassment experiences were more likely to report higher eating disturbances. Many other research studies have also shown a relationship between sexual victimization and eating disturbances (Dansky et al., 1997; Harned, 2000; Harned & Fitzgerald, 2002; Hund & Espelage, 2005; Kent et al., 1999; Leonard et al., 2003; Mazzeo & Espelage, 2002; Thompson, 1992; Weiner & Thompson, 1997). In Harned's (2000) research, it is suggested that eating disturbances are part of a posttrauma response to sexual harassment and sexual assault. These forms of victimization are acts directed towards or on the body, thus women might come to associate aspects of their body with their victimization. Harned found that sexual harassment has a stronger relationship to eating disturbances compared to sexual assault. The author hypothesizes that since harassment can specifically involve offensive comments about one's body, it may influence women's feelings about their bodies.

Support for hypotheses nine, ten and eleven was shown in the analyses indicating that for this sample, female college students in the nursing and pre-service teaching fields who experience higher posttraumatic stress, anxiety, and depression are more likely to experience higher eating disturbances. This finding is consistent with the literature, which has demonstrated that eating disorders are often used to express and defend against negative feelings. The eating disorder operates as a coping strategy and allows them to soothe, distract, sedate and possibly numb themselves. (Costin, 1996; Harned, 2000; Harned & Fitzgerald, 2002; Hund & Espelage, 2005; Kent et al., 1999).

Hypothesis 15 was supported in the study demonstrating that for this sample, female college students in nursing and pre-service teaching programs who exhibited higher rape myth acceptance are more likely to experience more posttraumatic stress. Support for this finding has been established in the literature. Rape myths are beliefs about why the rape occurred and these beliefs place the blame on the victim. Individuals who hold such beliefs may be more likely to take responsibility for the rape, which has been linked to greater psychological distress (Lonesway & Fitzgerald, 1994; Meyer & Taylor, 1986).

After conducting the correlational analyses to test 17 of the 18 hypotheses, the multiple regression was performed to examine posttraumatic stress as a mediator. The test showed support for the partial mediation of posttraumatic stress. For this sample posttraumatic stress partially mediated the relation between sexual harassment and rape and eating disturbances among female college women in nursing and pre-service teaching programs. These findings are supported in the literature. It is suggested that eating disorder behaviors such as binge eating, purging and dieting are used to numb negative feelings and alleviate anxiety from intrusive traumatic memories. Both Harned's (2000) study and Harned's and Fitzgerald (2002) studies also found that psychological distress (posttraumatic stress, anxiety and depression) plays a key role in the relationship between sexual victimization and eating disturbances. In Harned's (2000) study harassed women who had high levels of posttraumatic stress and anxiety had the highest levels of eating disturbances. Rather than a mediating relationship however, the Harned study found a moderating relationship of anxiety and posttraumatic stress between sexual harassment and eating disturbances. The present study on the other hand, found that for this sample, posttraumatic stress may partially have a relationship with sexual harassment and rape and eating disturbances rather than indicating that this relationship is dependent upon posttraumatic stress. Harned and Fitzgerald (2002) study's confirm the existence of a mediated link for psychological distress between sexual harassment and eating disorder symptoms among military women and individuals who were pursuing a class action suit for sexual harassment. It is important to note that the total effect of sexual harassment on eating disorder symptoms among this sample of women in the workplace was smaller compared to Harned's (2000) study of college women.

Additional research has studied other forms of sexual victimization and identified anxiety and depression as significant variables in the prediction of higher levels of eating disorder symptoms. For example, Mazzeo and Espelage (2002) found college women's disordered eating behaviors were mediated by depression and alexithymia. Hund and Espelage (2005) did not identify a mediating relationship but did find a significant relationship between childhood sexual

abuse and anxiety and depression. The depression and anxiety were also related to bulimic and dieting behaviors.

Unsupported Hypotheses

The lack of support for the hypotheses 16 and 17 indicate that rape myth acceptance for female college students in nursing and pre-service teaching programs are not positively associated with depression and anxiety. Since research has examined the psychological effects of self-blame following rape and found that the higher the self-blame, the higher the level of psychological distress, the results in the present study were unexpected (Lonesway & Fitzgerald, 1994; Meyer & Taylor, 1986). Harned and Fitzgerald (2002) did study the cognitive process of self-blame to determine its significance to sexual harassment and eating disorder symptoms. The findings of their study demonstrated that self-blame was associated with greater psychological distress and indirectly predicted eating disorder symptoms. Because rape myth acceptance is positively associated with posttraumatic stress and not depression or anxiety, it seems the psychological effects of rape myth acceptance for this sample of female students in the nursing and pre-service teaching program are specific to posttraumatic stress.

According to the results in this study rape myth acceptance was not associated with eating disturbances nor did it moderate posttraumatic stress. These findings may indicate that for this sample of nursing and pre-service teaching students, eating disturbances may not be used as a way of coping with self-blame. Another important consideration is the low power of hierarchical multiple regression for examining moderation. Frazier et al. (2004) suggest significant moderator effects may not be detected not only because the theory used to create them were wrong, but also because the test of the interaction lacked sufficient power. The authors also note that it is not always possible to adjust for this phenomenon.

Limitations

The first important limitation to consider in the present study is the use of field research for the study. Field research does not allow for the same type of experimental control that can be constructed in a laboratory setting, thus internal validity is decreased. One advantage to field research however, is that external validity and the ability to generalize the findings is increased. The second limitation to the present study is the retrospective nature of the study. The study is retrospective since it asked participants about sexual harassment and sexual victimization experiences that have occurred in their past. Both types of events may have taken place some time ago and the recollection of them may have become distorted or lost over time. In addition, because the outcome measures are very removed in time from the independent variables, there are

limitations to the conclusions that can be made about the outcome measures. It is important to note that since the present research involves field and retrospective research, there are many possible intervening and confounding events that could affect the outcomes. The relationships between the predictor and outcome variables ought to be interpreted with caution since it is not possible to control all possible intervening and confounding events.

Several additional limitations in the present study involve the sampling procedures, methodology and research design of the study. In regards to the sampling procedures, all participants were self-selected from a nursing and pre-service teaching program at the University of Kentucky and this sample may represent a biased sample. Individuals who choose not to participate in the study are not represented, thus their experiences of sexual harassment and rape were included in the present study. In addition, this sample consisted of mostly well-educated, Caucasian women who are under the age of 25 and pursuing a degree in nursing or teaching. Due to the use of this homogenous sample, the results of the study may not apply to other groups such as males, minorities, and women not in college or pursuing a nursing or teaching degree.

In regards to the methodology of the study, it is important to consider that the participants provided self-report experiences and this may have affected the validity of the results. Participants may exaggerate and/or minimize their experiences and/or symptoms. Another limitation regarding methodology is instrumentation. For the DASS-21 and the PCL-C, participants are not asked to respond to the items for a specific event such as sexual harassment or sexual victimization. The scores on PCL-C may reflect symptoms for other traumatic events such as loss of a loved one or a break-up with a significant other. Since the PCL-C includes items measuring symptoms of depression, the assessment of posttraumatic stress in the present study may be more representative of depressive symptoms compared to anxiety and other types of posttraumatic stress symptoms. Also, it is important to note that the low internal consistency reliability of the Masculinity-Femininity Personal Attributions Questionnaire (PAQ-M-F) impacted the testing of gender-role attitudes. This measure does not appear to be reliable for the sample in the current study.

The final limitation of the present study relates to the research design of the study. The research design is cross-sectional and uses a series of multiple regressions to analyze the data, thus definitive statements about causality cannot be made. For example, it cannot be concluded from this research study that sexual harassment and sexual victimization cause or do not cause eating disturbances. In order to make such conclusions, longitudinal data is needed. Other factors besides sexual harassment and sexual victimization may contribute to the development of eating

disturbances and these factors were not controlled for in the present study. The present study utilized multiple regressions and hierarchical regressions to determine whether certain variables are causing other variables. This type of analysis uses causal inferences from correlational data and the degree of confidence in the validity of causal inference from correlational data is usually much weaker than inference drawn from data in a well-designed experimental study (Mertler & Vannatta, 2005).

Theoretical Implications

The results of the study provide evidence that a relationship does exist between victimization and eating disturbances for this sample of female college students in nursing and pre-service teaching programs. Therefore, clinicians working with college women with eating disturbances should assess for the presence of victimization and whether women with victimization experiences are also struggling with eating disturbances. Also, practitioners using counseling interventions with these populations should consider incorporating a feminist theory. These theories eschew victim blaming and address the gender-based nature of eating disturbances and the possible relation between such disturbances and violence against women (Harned, 2000). Women who suffer from eating disturbances and/or have experienced victimization may benefit from understanding the social and external forces that contribute to eating disturbances and violence against women. Instead of blaming themselves for what happened, women may begin the healing process through combating negative gender-role messages and attitudes. Also, if eating disturbances are conceptualized as a coping strategy, then women can begin to identify and develop more effective strategies.

The present results also indicate that posttraumatic stress partially mediates the relationship among sexual harassment, rape and eating disturbances for this sample of female college women in nursing and teaching programs. Thus, when clinicians are inquiring about experiences of sexual harassment and/or rape, they should ascertain whether the women have developed posttraumatic stress in response to the harassment and/or assault since the present results reveal the significance of these factors in eating disturbances. Based on these findings it seems that female college students in nursing and pre-service teaching programs who experience victimization may benefit from interventions that address adaptive ways to cope. These programs should introduce the numerous reactions and responses that commonly follow such experiences such as fear of retaliation, anxiety, depression, posttraumatic stress, sexual dysfunction, and interpersonal difficulties. In addition, offering resources such as counseling services could provide opportunities for women to process these feelings.

The examination of rape myth acceptance was investigated as a possible cognitive construct and did not generate significant findings in the regression model. These results suggest that for students in this sample of pre-service teaching and nursing programs, this factor does not influence the posttraumatic stress associated with victimization and eating disturbances. It is important to note however that rape myth acceptance was positively correlated with posttraumatic stress. Because rape myths shift blame from the perpetrator to the victim, a higher acceptance of such myths could lead victims of rape to believe it was something about them that caused the rape. Taking this type of responsibility for such an event may generate posttraumatic stress because the victims believe they are at fault and could have controlled what happened to them. Helping victims of rape identify how the culturally transmitted heterosexual scripts that encourage males to be a sexual stalker and females act as prey deny females the right to say “no” to sexual advances and blame females to the extent of sexual involvement that occurs (Koss et al., 1994) can help them stop blaming themselves for being raped and heal from the trauma of being victimized.

Lastly, it is important to note that for nursing students, compared to pre-service teaching students in this sample, it is important to raise awareness about the possible prevalence of sexual harassment in the nursing field. Given the present study’s findings, students may benefit from information and discussions about sexual harassment. These programs may include information on labeling and reporting sexual harassment, coping strategies, and resources for counseling services.

Future Research

Future research should include more diverse samples of younger and older college students in the nursing and pre-service teaching fields. Considering the strong impact of sociocultural factors in the development of eating disorders and occurrence of rape, it is important that studies collect data in ethnically diverse samples. Also, including women who have graduated from college and are spending more time in the nursing and teaching setting may provide more information about how women respond to sexual harassment and rape experiences. Studies should also include factors important to the relationship between sexual harassment and rape and eating disturbances such as age at onset of the eating disturbances and whether the harassment and/or assault preceded the eating disturbances. Including attempted rape in the research may provide a broader look at traumatic experiences. To answer the question of causality, longitudinal data may be collected.

Future research is also needed to identify the cognitive processes by which harassment and assault are associated with eating disturbances. Studies may utilize an instrument other than the Personal Attributions Questionnaire to measure gender-role attitudes in view of the current study's findings of the low reliability of the PAQ with the current sample. Further, since Harned and Fitzgerald's (2002) study found self-blame to be a significant variable in the trauma and eating disturbances relationship, a measure that more directly measures self-blame may offer more information. In addition, to identify the cognitive processes, qualitative data collected from focus groups or interviews may help.

Lastly, the clinical measures used in the study focused on pathology and did not identify strengths that may be present for women. By including measures that value women's strengths and honors their lived experiences (Worell & Remer, 2003), we can empower and affirm women. Worell and Remer (2003) identified ten hypothesized outcomes for a healthy woman in a healthy environment. These outcomes include having positive self-evaluation and self-esteem; a favorable comfort-distress balance (more positive than negative affect); gender-role and cultural identity awareness; a sense of personal control and self-efficacy; self-nurturance and self-care; effective problem-solving skills; competent use of assertiveness skills; effective access to facilitative social, economic, and community resources; gender and cultural flexibility in behavior; and socially constructive activism. Thus, measures that can assess for these outcomes would provide more research on women's experiences and empowerment. Also, by conceptualizing symptoms of personal distress as adaptive strategies in the context of an oppressive environment, women can be empowered to cope with both internal and external difficulties in their lives (Worell & Remer, 2003).

Strengths of the Current Study

The data on sexual harassment, rape, and eating disorders confirms that they are serious, pervasive social problems in the U.S. and more specifically, a pervasive problem on college campuses. This study makes a valuable contribution to the literature in the area of trauma and eating disturbances, which has focused on certain types of abuse in particular populations. Research has repeatedly demonstrated that trauma can be a risk factor for eating disturbances, thus it is important to clarify why it is and which populations may be at greater risk. Considering the associated mental health issues and the pervasiveness of sexual victimization, identifying not only how women respond to sexual victimization, but also why they might respond in certain ways was of particular interest in the present study. The current study identified a key psychological process, posttraumatic stress, involved in the trauma-eating disturbances

relationship and identified both nursing and pre-service teaching women as at-risk populations. The findings have implications for the prevention and treatment of eating disturbances and trauma. More specifically, students may benefit from information and discussions about labeling and reporting sexual harassment, coping strategies, and resources for counseling services. In addition, clinicians working with college women with eating disturbances should assess for the presence of victimization and whether women with victimization experiences are also struggling with eating disturbances.

Appendix A

Research Script for Nursing Faculty

Mindy Issacs, a Doctoral Student in the department of Educational Psychology at the University of Kentucky will be coming to class on __ (the professor will insert the date and time of the research session to invite you to participate in a research study about sexual harassment, sexual assault and eating disturbances. Also, there may be other people on the research team assisting at different times during the study. This study involves the completion of 7 pencil and paper surveys that contain a series of questions about sexual harassment, sexual assault, and eating disturbances. I am providing some class time for you to participate in this study if you choose to do so. The total estimated time to participate in this study is 40 minutes. I want to emphasize that your participation in this study is strictly voluntarily and will not affect your grade in this course. Mindy will first describe the study to you and what it will involve and you can choose whether or not you want to participate.

Appendix B

Recruitment Script for Education Students

I would like to invite you to participate in a study about sexual harassment, sexual assault and eating disturbances. The research is being conducted by Mindy Issacs, Doctoral Candidate in the department of Educational Psychology at the University of Kentucky. Dr. Pam Remer, Associate Professor and licensed counseling psychologist, at the University of Kentucky is the immediate supervisor who will be guiding Mindy in her research. If you choose to participate in this study, your professor has agreed to offer extra credit. If you choose not to participate in this study, your professor will provide you with several other extra credit opportunities. There may be other people on the research team assisting at different times during the study.

Research indicates that sexual harassment, assault and eating disturbances are highly prevalent among college students. In addition, research has found that sexual harassment is more frequent within male or female dominated workplaces compared to gender-integrated jobs. In order to understand these phenomena, we need participants with a range of experiences. You don't need to have any sexual experiences or eating disturbances to participate however; you must be at least 18. You are being invited to participate only because you are an undergraduate student. The purpose of this study is to examine the relationships among experiences of harassment, assault and eating disturbances. Understanding the associations among these variables will facilitate the development of counseling interventions for victimized individuals and the prevention of eating disorder symptoms. By participating in this study, you are contributing to research that can improve universities' responses to sexual harassment and assault as well as the well-being of college students.

This study will be conducted in a classroom in the education building. If you prefer to take the questionnaires alone please call me at 266-1813 to arrange a time. The total amount of time it will take you to participate in this study is about 40 minutes.

If you decide to volunteer for this study, let me tell you what it will involve. When you arrive in the classroom, you will be provided a research script that reminds you of the purpose, duration and risks and benefits of the study, as well as your right to withdraw from the study at any point. By attending the research session and completing all the questionnaires that you will be given in the research session, you are indicating that you have been informed about the nature of the study and you still agree to participate. You will then be given instructions for completing a packet of questionnaires. All information collected on these questionnaires will be completely anonymous. You will not write your name or any other identifying information on any of the questionnaires in the packet. Thus, your answers to the questionnaires will be completely anonymous. Before leaving the study, you will record the last six digits of your social security number to a separate sheet of paper that will be given directly to your professor to receive your extra credit. Your professor, regardless of whether you complete all questionnaires, will award you the extra credit. You may leave the study at any time and you will still receive extra credit.

We have made every effort to minimize your discomfort; however, there is a small possibility that participating in this study may evoke some feelings of emotional discomfort. Your willingness to volunteer will help improve our understanding of sexual harassment and assault and may help prevent eating disorders. Do you have any questions? If you desire an individual time to complete the questionnaires please call us at 266-1813 and leave a message for Mindy Isaacs.

Research Sessions: ***All Research Sessions will be held in the auditorium of Taylor Education***

Building.

Tuesday, February, 20th

11:00-11:40

12:20-1:00

1:00-1:40

Wednesday, February 21st

10:00-10:40

11:00-11:40

12:00-12:40

Tuesday, February 27th

2:00-2:40

5:30-6:30

Friday, March 2nd

10:00-10:40

11:00-11:40

12:00-12:40

Tuesday, March 6th
6:45-7:35

Thursday, March 8th
5:30-6:10
6:15-5:55

Appendix C

Nursing Student Research Script

First, I would like to tell you to please help yourself to the refreshments I have brought whether or not you decide to participate in the study. You are being invited to participate in a research study about sexual harassment, sexual assault and eating disturbances. The research is being conducted by Mindy Issacs, Doctoral Candidate, in the department of Educational Psychology at the University of Kentucky. Dr. Pam Remer, Associate Professor and licensed counseling psychologist, at the University of Kentucky is the immediate supervisor who will be guiding Mindy in her research. There may be other people on the research team assisting at different times during the study.

Research indicates that sexual harassment, assault and eating disturbances are highly prevalent among college students. In addition, research has found that sexual harassment is more frequent within male or female dominated workplaces compared to gender-integrated jobs. In order to understand these phenomena, we need participants with a range of experiences. You don't need to have any sexual experiences or eating disturbances to participate. You are being invited to participate simply because you are a nursing student. You must be at least 18 to participate. The purpose of this study is to examine the relationships among experiences of harassment, assault and eating disturbances. Understanding the associations among these variables will facilitate the development of counseling interventions for victimized individuals and the prevention of eating disorder symptoms. By participating in this study, you are contributing to research that can improve universities' responses to sexual harassment and assault as well as the well-being of college students.

If you decide to volunteer for this study, let me tell you what it will involve. I have provided you a hard copy of everything that I am about to tell you and it is attached to your packet of questionnaires. Each of you will need to sit at least every other seat or create space

between the person sitting next to you. After I finish reading this script we will make these arrangements. If you cannot sit at least every other seat then I will provide you with a clipboard so that you can sit back from the table or move to a different location in the room. By attending this research session and completing all the questionnaires that you have been given, you are indicating that you have been informed about the nature of the study and you still agree to participate. I will read all instructions for each questionnaire that you will be completing. All information collected on these questionnaires will be completely anonymous. You will not write your name or any other identifying information on any of the questionnaires in the packet. Thus, your answers to the questionnaires will be completely anonymous. When the researcher writes about the results of this study to share with other researchers, the researcher will write about this combined information.

If you decide to take part in the study, it should be because you really want to volunteer. You will not lose any benefits or rights you would normally have if you choose not to volunteer. You can stop at any time during the study and still keep the benefits and rights you had before volunteering. We have made every effort to minimize your discomfort; however, there is a small possibility that participating in this study may evoke some feelings of emotional discomfort. If you experience any distressing feelings during this study, speak with the researcher and/or you can review the list of counseling services and hotlines that has been provided for you in your packet.

Your willingness to volunteer will help improve our understanding of sexual harassment and assault and may help prevent eating disorders. The total amount of time it will take you to participate in this study is about 40 minutes. If you have questions about your rights as a research participant, please contact: The Office of Research Integrity at 859-257-9428 or toll free at 1-866-400-9428.

Do you have any questions?. If you desire an individual time to complete the questionnaires, you can leave now and please call me at 266-1813 and leave a message for Mindy Isaacs.

Now we will make arrangements so that you can create space between you and the person sitting next to you.

Appendix D

Research Script for Education Students

As Students enter the Room and Before the Distribution of Materials:

Instruct students to sit at least every other seat or to create space between the person sitting next to them. If they cannot sit at least every other seat then provide them with a clipboard so that they can sit back from the table or move to a different location in the room. **When instructing them to create space say:**

We would like for you to sit at least every other seat or to use a clipboard and create space between you and the other people in the room. You can use the clipboard and move back from the table or sit in a different location in the room.

After Arrival of Students and Before Distribution of Materials, say:

I want to remind you that this is a study about sexual harassment, sexual assault and eating disturbances. Research indicates that sexual harassment, assault and eating disturbances are highly prevalent among college students. The purpose of this study is to examine the relationships among experiences of harassment, assault and eating disturbances. Understanding the associations among these variables will facilitate the development of counseling interventions for victimized individuals and the prevention of eating disorder symptoms. By participating in this study, you are contributing to research that can improve universities' responses to sexual harassment and assault as well as the well-being of college students.

Distribute Research Script and say:

If you're under 18, you cannot participate. However, you can leave now and sign up to still receive your extra credit. I am going to pass out a handout that includes everything I'm about to tell you. This handout is for you to keep.

First, I want to remind you that your name or any identifying information will not appear on any of the questionnaires you will be completing today. Your answers to the questionnaires will be completely anonymous. When the researcher writes about the results of this study to share with other researchers, the researcher will write about this combined information.

Distribute the Packet of Questionnaires, say:

When you turn in your packets, you will record the last 6 digits of your social security number to a separate sheet of paper to be considered for the extra credit. Regardless of whether you complete all questionnaires, you will be considered for the extra credit. You may leave the study at any time and you will still receive the extra credit. We have made every effort to minimize your discomfort; however, there is a small possibility that participating in this study may evoke some feelings of emotional discomfort. If you experience any distressing feelings during this study, speak with the researcher and/or you can review the list of counseling services and hotlines that has been provided for you in your packet. Your willingness to volunteer will help improve our understanding of sexual harassment and assault and may help prevent eating disorders.

By completing all the questionnaires that you will be given in the research session, you are indicating that you have been informed about the nature of the study and you still agree to participate.

If you have questions about your rights as a research participant, please contact: The Office of Research Integrity at 859-257-9428 or toll free at 1-866-400-9428.

Do you have any questions?

Appendix E

Referral List

Researcher's Number

Mindy Isaacs 266-1813

Hotlines

Crisis Intervention** 233-0444 or 800-928-8000

Rape Crisis Line** 253-2511 or 800-656-HOPE

Spouse Abuse Crisis Line** 255-9808 or 800-544-2022

Counseling Centers & Support Centers on UK Campus

UK Counseling & Testing Center 257-8701

Bluegrass Rape Crisis Center 253-2511

Jesse Harris Psychological Services Center 257-6853

Comprehensive Care Center 233-0444

Substance Abuse

Alcoholics Anonymous 225-1212

Drug Abuse 24 Hour Addiction Services 1-800-222-0828

Narcotics Anonymous 253-4673

General Resources

Lexington Health Department 252-2371

**Indicates 24-hour crisis lines

Appendix F

Eating Attitudes Test (EAT-26)

Height _____ Current Weight _____ Highest Weight (excluding pregnancy) _____		Lowest Weight _____					
Please circle a response for each of the following questions. Since the age of 14:		Always	Usually	Often	Sometimes	Rarely	Never
1	Am terrified about being overweight.	6	5	4	3	2	1
2	Avoid eating when I am hungry.	6	5	4	3	2	1
3	Find myself preoccupied with food.	6	5	4	3	2	1
4	Have gone on eating binges where I feel that I may not be able to stop.	6	5	4	3	2	1
5	Cut my food into small pieces.	6	5	4	3	2	1
6	Aware of the calorie content of foods that I eat.	6	5	4	3	2	1
7	Particularly avoid food with a high carbohydrate content (ie, bread, rice, potatoes, etc.)	6	5	4	3	2	1
8	Feel that others would prefer if I ate more.	6	5	4	3	2	1
9	Vomit after I have eaten.	6	5	4	3	2	1
10	Feel extremely guilty after eating.	6	5	4	3	2	1
11	Am preoccupied with a desire to be thinner.	6	5	4	3	2	1
12	Think about burning up calories when I exercise.	6	5	4	3	2	1
13	Other people think that I am too thin.	6	5	4	3	2	1

		Always	Usually	Often	Sometimes	Rarely	Never
14	Am preoccupied with the thought of having fat on my body.	6	5	4	3	2	1
15	Take longer than others to eat my meals.	6	5	4	3	2	1
16	Avoid foods with sugar in them.	6	5	4	3	2	1
17	Eat diet foods.	6	5	4	3	2	1
18	Feel that food controls my life.	6	5	4	3	2	1
19	Display self-control around food.	6	5	4	3	2	1
20	Feel that others pressure me to eat.	6	5	4	3	2	1
21	Give too much time and thought to food.	6	5	4	3	2	1
22	Feel uncomfortable after eating sweets.	6	5	4	3	2	1
23	Engage in dieting behavior.	6	5	4	3	2	1
24	Like my stomach to be empty.	6	5	4	3	2	1
25	Enjoy trying new rich foods.	6	5	4	3	2	1
26	Have the impulse to vomit after meals.	6	5	4	3	2	1
	Adapted from Garner, Olmsted, Bohr, and Garfinkel (1982, p.875) and Garner and Garfinkel (1979, p.278).						

Appendix G

IRMA-SF

Please rate the statements below along the following scale:

(not at all agree) _____ (very much agree)
 1 2 3 4 5 6 7

1.	If a woman is raped while she is drunk, she is at least responsible for letting things get out of control.	1	2	3	4	5	6	7
2.	Although most women wouldn't admit it, they generally find being physically forced into sex a real "turn-on."	1	2	3	4	5	6	7
3.	If a woman is willing to "make out" with a guy, then it's no big deal if he goes a little further and has sex.	1	2	3	4	5	6	7
4.	Many women secretly desire to be raped.	1	2	3	4	5	6	7
5.	Most rapists are not caught by the police. <i>(FILLER ITEM)</i>	1	2	3	4	5	6	7
6.	If a woman doesn't physically fight back, you can't really say that it was rape.	1	2	3	4	5	6	7
7.	Men from nice middle-class homes almost never rape.	1	2	3	4	5	6	7
8.	Rape accusations are often used as a way of getting back at men.	1	2	3	4	5	6	7
9.	All women should have access to self-defense classes. <i>(FILLER ITEM)</i>	1	2	3	4	5	6	7
10.	It is usually only women who dress suggestively that are raped.	1	2	3	4	5	6	7
11.	If the rapist doesn't have a weapon, you really can't call it a rape.	1	2	3	4	5	6	7
12.	Rape is unlikely to happen in the woman's own familiar neighborhood.	1	2	3	4	5	6	7
13.	Women tend to exaggerate how much rape affects them	1	2	3	4	5	6	7
14.	A lot of women lead a man on and then cry rape.	1	2	3	4	5	6	7
15.	It is preferable that a female police officer conduct the questioning when a woman reports a rape. <i>(FILLER ITEM)</i>	1	2	3	4	5	6	7
16.	A woman who "teases" men deserves anything that might happen.	1	2	3	4	5	6	7
17.	When women are raped, it's often because the way they said "no" was ambiguous.	1	2	3	4	5	6	7
18.	Men don't usually intend to force sex on a woman, but sometimes they get too sexually carried away.	1	2	3	4	5	6	7
19.	A woman who dresses in skimpy clothes should not be surprised if a man tries to force her to have sex.	1	2	3	4	5	6	7
20.	Rape happens when a man's sex drive gets out of control.	1	2	3	4	5	6	7

Appendix H

DASS-21

For each of the statements below, please write the number in the blank which best indicates how much the statement applied to you IN THE PAST MONTH. There are no right or wrong answers. Do not spend too much time on any one statement.

1	2	3	4
Did not apply to me	Applied to me to some degree or some of the time	Applied to me a considerable degree, or a good part of the time	Applied to me very much or most of the time

- _____ 1. I was aware of dryness of my mouth.
- _____ 2. I couldn't seem to experience any positive feeling at all.
- _____ 3. I tended to over-react to situations.
- _____ 4. I found it difficult to relax.
- _____ 5. I felt that I had nothing to look forward to.
- _____ 6. I felt that I was using a lot of nervous energy.
- _____ 7. I felt I wasn't much worth as a person.
- _____ 8. I felt that I was rather touchy.
- _____ 9. I felt scared without any good reason.
- _____ 10. I found it hard to wind down.
- _____ 11. I was aware of the action of my heart in the absence of physical exertion (e.g. sense of heart rate increase, heart missing a beat).
- _____ 12. I felt downhearted and blue.
- _____ 13. I felt I was close to panic.
- _____ 14. I was unable to become enthusiastic about anything.
- _____ 15. I was intolerant of anything that kept me from getting on with what I was doing.
- _____ 16. I felt that life was meaningless.
- _____ 17. I found myself getting agitated.
- _____ 18. I was worried about situations in which I might panic and make a fool of myself.
- _____ 19. I experienced trembling (e.g. in the hands).
- _____ 20. I found it difficult to work up the initiative to do things.
- _____ 21. I experienced breathing difficulty (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion).

Appendix I
Items for the Depression and Anxiety Subscales

DASS-21 Depression Scale

- 2. I couldn't seem to experience any positive feeling at all.
 - 5. I felt that I had nothing to look forward to.
 - 7. I felt I wasn't much worth as a person.
 - 12. I felt downhearted and blue.
 - 14. I was unable to become enthusiastic about anything.
 - 16. I felt that life was meaningless.
 - 20. I found it difficult to work up the initiative to do things.
-

DASS-21 Anxiety Scale

- 1. I was aware of dryness of my mouth.
 - 9. I felt scared without any good reason.
 - 11. I was aware of the action of my heartbeat in the absence of physical exertion (e.g. sense of heart rate increase, heart missing a beat).
 - 13. I felt I was close to panic.
 - 18. I was worried about situations in which I might panic and make a fool of myself.
 - 19. I experience trembling (e.g. in the hands).
 - 21. I experienced breathing difficulty (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion).
-

Note. From Antony et al. (1998).

Appendix J

PTSD Checklist—Civilian Form

PCL-C						
<p>INSTRUCTIONS: Below is a list of problems and complaints that people sometimes have in response to stressful life experiences. Please read each one carefully, then circle one of the numbers to the right to indicate how much you have been bothered by that problem in the past month.</p>						
		Not at all	A little bit	Moderately	Quite a bit	Extremely
1	Repeated, disturbing memories, thoughts, or images or a stressful experience from the past?	1	2	3	4	5
2	Repeated, disturbing dreams of a stressful experience from the past?	1	2	3	4	5
3	Suddenly acting or feeling as if a stressful experience were happening again (as if you were reliving it)?	1	2	3	4	5
4	Feeling very upset when something reminded you of a stressful experience from the past?	1	2	3	4	5
5	Having physical reactions (e.g., heart pounding, trouble breathing, sweating) when something reminded you of a stressful experience from the past?	1	2	3	4	5
6	Avoiding thinking about or talking about a stressful experience from the past or avoiding having feelings related to it?	1	2	3	4	5
7	Avoiding activities or situations because they reminded you of a stressful experience from the past?	1	2	3	4	5
8	Trouble remembering important parts of a stressful experience from the past?	1	2	3	4	5
9	Loss of interest in activities that you used to enjoy?	1	2	3	4	5

10	Feeling <i>distant</i> or <i>cut off</i> from other people?	1	2	3	4	5
11	Feeling <i>emotionally numb</i> or being unable to have loving feelings for those close to you?	1	2	3	4	5
12	Feeling as if your <i>future</i> will somehow be <i>cut short</i> ?	1	2	3	4	5
13	Trouble <i>falling</i> or <i>staying asleep</i> ?	1	2	3	4	5
14	Feeling <i>irritable</i> or having angry <i>outbursts</i> ?	1	2	3	4	5
15	Having <i>difficulty concentrating</i> ?	1	2	3	4	5
16	Being " <i>super-alert</i> " or watchful or on guard?	1	2	3	4	5
17	Feeling <i>jumpy</i> or easily startled?	1	2	3	4	5

PCL-C for DSM-IV, Weathers, Litz, Huska, & Keane. National Center for PTSD- Behavioral Science Division

Please list the experiences you were considering when answering this

survey _____

Appendix K

Sexual Experiences Questionnaire (Form W)

In this part of the questionnaire, we would like to know about your experiences at work, school, and social settings. **For each item, please circle the number that most closely describes your own experience with MALE professors, instructors, teachers, supervisors, teaching assistants, peers, coworkers, doctors or patients SINCE THE AGE OF 14.** Please answer as frankly and completely as you can; remember that YOUR ANSWERS ARE COMPLETELY CONFIDENTIAL.

	Never	Once or Twice	Some-times	Often	Many Times
a) ...habitually told suggestive stories or offensive jokes?	0	1	2	3	4
b) ...made unwanted attempts to draw you into a discussion of personal or sexual matters (e.g., attempted to discuss or comment on your sex life)?	0	1	2	3	4
c) ...made crude and offensive sexual remarks, either publicly (for example, in the office), or to you privately?	0	1	2	3	4
d) ...made offensive remarks about your appearance, body, or sexual activities?	0	1	2	3	4
e) ...gave you unwanted sexual attention?	0	1	2	3	4
f) ...was staring, leering, or ogling you in a way that made you feel uncomfortable?	0	1	2	3	4
g) ...attempted to establish a romantic or sexual relationship despite your efforts to discourage him?	0	1	2	3	4
h) ...displayed, used, or distributed sexist or suggestive materials (e.g., pictures, stories, or pornography)?	0	1	2	3	4
i) ...frequently make sexist remarks (e.g., suggesting that women are too emotional to be scientists or to assume leadership roles)?	0	1	2	3	4
j) ...has continued to ask you for dates, drinks, dinner, etc., even though you have said "no"?	0	1	2	3	4

	Never	Once or Twice	Some- times	Often	Many Times
k) ...made you feel like you were being subtly bribed with some sort of reward or special treatment to engage in sexual behavior?	0	1	2	3	4
l) ...made you feel subtly threatened with some sort of retaliation for not being sexually cooperative (e.g., the mention of an upcoming evaluation, review, etc.)?	0	1	2	3	4
m) ...touched you (e.g., laid a hand on your bare arm, put an arm around your shoulders) in a way that made you feel uncomfortable?	0	1	2	3	4
n) ...made unwanted attempts to stroke or fondle you (e.g., stroking your leg or neck, touching your breast, etc)?	0	1	2	3	4
o) ...made unwanted attempts to have sex with you that resulted in you pleading, or physically struggling?	0	1	2	3	4
p) ...implied faster promotions or better treatment if you were sexually cooperative?	0	1	2	3	4
q) ...made it necessary for you to respond positively to sexual or social invitations in order to be well treated on the job?	0	1	2	3	4
r) ...made you afraid that you would be treated poorly if you didn't cooperate sexually?	0	1	2	3	4
s) ...treated you badly for refusing to have sex with a coworker or supervisor?	0	1	2	3	4
t) ...have you ever been sexually harassed?	0	1	2	3	4

Who committed this behavior? Check all that apply.

MALE:

professors____ instructors____ teachers____ supervisors____
teaching assistants____ peers____ coworkers____ doctors____
patients____

Have you ever been sexually harassed? Please circle your response. Yes No

Did you circle “0” (Never) for every item?

- () Yes → Stop
- () No → Continue below

Think about the situation(s) you experienced during the past 12 months that involved the behaviors you marked above.

- Now pick the situation that had the greatest effect on you.
- What happened during this situation? In the list below, circle “1” for *YES* if the behavior happened during this situation and “2” for *NO* if this behavior did not happen during this situation.

	Yes	No
a) ...habitually told suggestive stories or offensive jokes?	1	2
b) ...made unwanted attempts to draw you into a discussion of personal or sexual matters (e.g., attempted to discuss or comment on your sex life)?	1	2
c) ...made crude and offensive sexual remarks, either publicly (for example, in the office), or to you privately?	1	2
d) ...made offensive remarks about your appearance, body, or sexual activities?	1	2
e) ...gave you unwanted sexual attention?	1	2
f) ...was staring, leering, or ogling you in a way that made you feel uncomfortable?	1	2
g) ...attempted to establish a romantic or sexual relationship despite your efforts to discourage him?	1	2
h) ...displayed, used, or distributed sexist or suggestive materials (e.g., pictures, stories, or pornography)?	1	2
i) ...frequently make sexist remarks (e.g., suggesting that women are too emotional to be scientists or to assume leadership roles)?	1	2

j) ...has continued to ask you for dates, drinks, dinner, etc., even though you have said "no"?	Yes	No
	1	2
k) ...made you feel like you were being subtly bribed with some sort of reward or special treatment to engage in sexual behavior?	1	2
l) ...made you feel subtly threatened with some sort of retaliation for not being sexually cooperative (e.g., the mention of an upcoming evaluation, review, etc.)?	1	2
m) ...touched you (e.g., laid a hand on your bare arm, put an arm around your shoulders) in a way that made you feel uncomfortable?	1	2
n) ...made unwanted attempts to stroke or fondle you (e.g., stroking your leg or neck, touching your breast, etc.)?	1	2
o) ...made unwanted attempts to have sex with you that resulted in you pleading, or physically struggling?	1	2
p) ...implied faster promotions or better treatment if you were sexually cooperative?	1	2
q) ...made it necessary for you to respond positively to sexual or social invitations in order to be well treated on the job?	1	2
r) ...made you afraid that you would be treated poorly if you didn't cooperate sexually?	1	2
s) ...treated you badly for refusing to have sex with a coworker or supervisor?	1	2

Appendix L

Personal Attributions Questionnaire (PAQ) (Short Form)

The items below inquire about what kind of a person you think you are. Each item consists of a pair of characteristics, with the numbers 1-5 in between. For example:

Not at all artistic 1...2...3...4...5... Very artistic

Each pair describes contradictory characteristics—that is, you cannot be both at the same time, such as very artistic and not at all artistic.

The numbers form a scale between the two extremes. You are to choose a number which describes where you fall on the scale. For example, if you think you have no artistic ability, you would choose 1. If you think you are pretty good, you might choose 5. If you are only medium, you might choose 3, and so forth.

- | | | | |
|-----|---|-------------------|--|
| 1. | Not at all aggressive | 1...2...3...4...5 | Very aggressive |
| 2. | Not at all independent | 1...2...3...4...5 | Very independent |
| 3. | Not at all emotional | 1...2...3...4...5 | Very emotional |
| 4. | Very submissive | 1...2...3...4...5 | Very dominant |
| 5. | Not at all excitable in a major crisis | 1...2...3...4...5 | Very excitable in a major crisis |
| 6. | Very passive | 1...2...3...4...5 | Very active |
| 7. | Not at all able to devote self completely to others | 1...2...3...4...5 | Able to devote self completely to others |
| 8. | Very rough | 1...2...3...4...5 | Very gentle |
| 9. | Not at all helpful to others | 1...2...3...4...5 | Very helpful to others |
| 10. | Not at all competitive | 1...2...3...4...5 | Very competitive |
| 11. | Very home oriented | 1...2...3...4...5 | Very worldly |
| 12. | Not at all kind | 1...2...3...4...5 | Very kind |
| 13. | Indifferent to others' approval | 1...2...3...4...5 | Highly needful of others' approval |
| 14. | Feelings not easily hurt | 1...2...3...4...5 | Feelings easily hurt |
| 15. | Not at all aware of feelings of others | 1...2...3...4...5 | Very aware of feelings of others |

16.	Can make decisions easily	1...2...3...4...5	Has difficulty making decisions
17.	Gives up very easily	1...2...3...4...5	Never gives up very easily
18.	Never cries	1...2...3...4...5	Cries very easily
19.	Not at all self-confident	1...2...3...4...5	Very self-confident
20.	Feels very inferior	1...2...3...4...5	Feels very superior
21.	Not at all understanding of others	1...2...3...4...5	Very understanding of others
22.	Very cold in relations with others	1...2...3...4...5	Very warm in relations with others
23.	Very little need for security	1...2...3...4...5	Very strong need for security
24.	Goes to pieces under pressure	1...2...3...4...5	Stands up well under pressure

Appendix M

	PAQ M-F Scale	
1. Not at all aggressive	1...2...3...4...5	Very aggressive
4. Very submissive	1...2...3...4...5	Very dominant
5. Not at all excitable in a major crisis	1...2...3...4...5	Very excitable in a major crisis
11. Very home oriented	1...2...3...4...5	Very worldly
13. Indifferent to others' approval	1...2...3...4...5	Highly needful of others' approval
14. Feelings not easily hurt	1...2...3...4...5	Feelings easily hurt
18. Never cries	1...2...3...4...5	Cries very easily
23. Very little need for security	1...2...3...4...5	Very strong need for security

Note: Spence and Helmreich (1978).

Appendix N

SES-SFV

The following questions concern sexual experiences that you may have had. We know that these are personal questions, so we do not ask your name or other identifying information. Your answers are completely confidential. We hope that this helps you to feel comfortable answering each question honestly.

(Please circle 1) I am Female Male Age

	<i>Sexual Experiences</i>	How many times in the past 12 months	How many times since age 14
1.	<p>Someone performed oral sex on me or had me perform oral sex on them after: <i>Oral sex means contact between the mouth and either the penis or the female genital area.</i></p> <p>a. This person told lies, made promises about the future he or she knew were untrue, threatened to end the relationship or spread rumors.</p> <p>b. This person used strong arguments and continual pressure or showed displeasure (<i>got angry</i>).</p> <p>c. This person met me after I had been drinking alcohol or using drugs and was conscious <i>but too drunk or out of it</i> to consent or stop what was happening.</p> <p>d. This person threatened to use some degree of physical force on me.</p> <p>e. This person used some degree of physical force such as holding me down with his or her body weight or pinning my arms</p>		
2.	<p>Someone put his or her penis, or fingers, or objects (such as a bottle or a candle) into my vagina after: <i>Even if the penetration was very slight and he did not ejaculate (cum)</i></p> <p>a. This person told lies, made promises about the future he or she knew were untrue, threatened to end the relationship or spread rumors.</p> <p>b. This person used strong arguments and continual pressure or showed displeasure (<i>got angry</i>).</p> <p>c. This person met me after I had been drinking alcohol or using drugs and was conscious <i>but too drunk or out of it</i> to consent or stop what was happening.</p> <p>d. This person threatened to use some degree of physical force on me.</p> <p>e. This person used some degree of physical force such as holding me down with his or her body weight or pinning my arms</p>		

		How many times in the past 12 months	How many times since age 14
3.	Someone put his or her penis, or fingers, or objects (such as a bottle or a candle) into my anus (butt) after: <i>Even if the penetration was very slight and he did not ejaculate (cum)</i>		
a.	This person told lies, made promises about the future he or she knew were untrue, threatened to end the relationship or spread rumors.	0 1 2 3 or more	0 1 2 3 or more
b.	This person used strong arguments and continual pressure or showed displeasure (<i>got angry</i>).	0 1 2 3 or more	0 1 2 3 or more
c.	This person met me after I had been drinking alcohol or using drugs and was conscious <i>but too drunk or out of it</i> to consent or stop what was happening.	0 1 2 3 or more	0 1 2 3 or more
d.	This person threatened to use some degree of physical force on me.	0 1 2 3 or more	0 1 2 3 or more
e.	This person used some degree of physical force such as holding me down with his or her body weight or pinning my arms	0 1 2 3 or more	0 1 2 3 or more
4.	Someone attempted to have oral sex with me, or attempted to make me have oral sex with them <u>but it did not happen</u> after:		
a.	This person told lies, made promises about the future he or she knew were untrue, threatened to end the relationship or spread rumors.	0 1 2 3 or more	0 1 2 3 or more
b.	This person used strong arguments and continual pressure or showed displeasure (<i>got angry</i>).	0 1 2 3 or more	0 1 2 3 or more
c.	This person met me after I had been drinking or using drugs and was conscious <i>but too drunk or out of it</i> to consent or stop what was happening.	0 1 2 3 or more	0 1 2 3 or more
d.	This person threatened to use some degree of physical force on me.	0 1 2 3 or more	0 1 2 3 or more
e.	This person used some degree of physical force such as holding me down with his or her body weight or pinning my arms	0 1 2 3 or more	0 1 2 3 or more

		How many times in the past 12 months	How many times since age 14
5.	Someone tried to put his or her penis, or fingers, or objects (such as a bottle or a candle) into my vagina <u>but it did not happen</u> after:		
a.	This person told lies, made promises about the future he or she knew were untrue, threatened to end the relationship or spread rumors.	0 1 2 3 or more	0 1 2 3 or more
b.	This person used strong arguments and continual pressure or showed displeasure (<i>got angry</i>).	0 1 2 3 or more	0 1 2 3 or more
c.	This person met me after I had been drinking alcohol or using drugs and was conscious <i>but too drunk or out of it</i> to consent or stop what was happening.	0 1 2 3 or more	0 1 2 3 or more
d.	This person threatened to use some degree of physical force on me.	0 1 2 3 or more	0 1 2 3 or more
e.	This person used some degree of physical force such as holding me down with his or her body weight or pinning my arms	0 1 2 3 or more	0 1 2 3 or more
6.	Someone tried to put his or her penis, or fingers, or objects (such as a bottle or a candle) into my anus (butt) <u>but it did not happen</u> after:		
a.	This person told lies, made promises about the future he or she knew were untrue, threatened to end the relationship or spread rumors.	0 1 2 3 or more	0 1 2 3 or more
b.	This person used strong arguments and continual pressure or showed displeasure (<i>got angry</i>).	0 1 2 3 or more	0 1 2 3 or more
c.	This person met me after I had been drinking alcohol or using drugs and was conscious <i>but too drunk or out of it</i> to consent or stop what was happening.	0 1 2 3 or more	0 1 2 3 or more
d.	This person threatened to use some degree of physical force on me.	0 1 2 3 or more	0 1 2 3 or more
e.	This person used some degree of physical force such as holding me down with his or her body weight or pinning my arms	0 1 2 3 or more	0 1 2 3 or more

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7. If you reported one or more experiences described in items 1-6, please indicate whether the person (or persons) who did it were:

_____ Women Only _____ Both Men and Women _____ Men Only

8. Have you ever been raped? Please circle your response. Yes No

Appendix O
Demographic Survey

Gender: M / F

Age in years:

Ethnicity: Please circle the response that most closely represents your ethnicity.

1. African American
2. Asian American
3. Hispanic
4. Native American
5. Caucasian
6. Other

Sexual Orientation (Circle one)

1. Straight/Heterosexual
2. Gay/Lesbian/Homosexual
3. Bisexual

Classification: Please circle the response that most closely represents your classification.

1. Sophomore
2. Junior
3. Senior

Are you an International Student? Please circle a response.

1. Yes 2. No

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