


2008

Rape myth acceptance, hypermasculinity, and demographic characteristics as correlates of moral development: Understanding sexually aggressive attitudes in first year college men

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<https://dx.doi.org/doi:10.25774/w4-4203-g198>

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RAPE MYTH ACCEPTANCE, HYPERMASCULINITY, AND DEMOGRAPHIC
CHARACTERISTICS AS CORRELATES OF MORAL DEVELOPMENT:
UNDERSTANDING SEXUALLY AGGRESSIVE ATTITUDES IN
FIRST YEAR COLLEGE MEN

A Dissertation

Presented to

The Faculty of the School of Education

The College of William and Mary

In Partial Fulfillment
Of the Requirements for the Degree
Doctor of Education


by
Jerry Lee Tatum
October 18, 2007

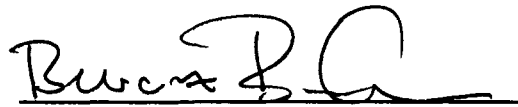
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by

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Approved October 18, 2007 by


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This work is dedicated to the following people. To Carmen, Hannah, and “Baby O,” without your loving support, I would not have ever completed, nor attempted this journey. This degree is as much yours as it is mine! To my mom and dad, thank you! I know it must have been frustrating for all those years to force me to “sit down and finish my homework,” but it did finally pay off. To my brother and sister, I am so thankful to have you both in my life. To Sam, Denise, Mike, and Lindsey, I love you all! To Father Nectarios and Presbyteria Diane, you are both the greatest friends I could ever ask for; I thank God everyday for having you both in my life. Finally, to my grandparents, aunts, uncles, nieces and nephews, thank you all for being such a wonderful family!

***I miss you granddaddy ~ May you always find rest and peace in the Light of
Jesus Christ.***

Granddaddy, this one is for you!

Acknowledgments

There are so many persons deserving of my heartfelt thanks and humble gratitude. A very special thanks is due to my dissertation chair, doctorate advisor, mentor, and most importantly, my friend – Dr. John D. Foubert. Your guidance over the previous few years has taught me more than you will ever know! Your research is inspiring and I am thankful to call you my friend. I look forward to watching you become a dad – you’re going to do great!

A special thanks to my other doctoral committee members, Dr. Bruce Bracken and Dr. Rip McAdams. Dr. Bracken, you have given me the skills to look at data and people in whole new way. I am thankful for your patience and humor as I learned to grapple with statistical concepts. Dr. McAdams, your serving on the committee is truly appreciated. The knowledge you shared and the support you gave was noticed, appreciated, and always welcome. Thank you both for making this the single greatest academic learning experience of my life.

I would also like to thank Dr. David Leslie and Dr. Dot Finnegan. You two, along with John, are what make the higher education program at William and Mary great! David, I know that when you retire you will be greatly missed. Dot, I already miss your enthusiasm for teaching! In addition, a heartfelt “thank you” also goes to my colleagues and friends in the program who will also shortly finish this journey. It if were not for your kind words, support, and caring attitudes, I am convinced I would not have had the confidence to undertake this project.

To my family, I am so thankful for all you have given me. Carmen and Hannah, you both have given up so many vacations, school functions, and time together that I truly am humbled by your patience. Carmen, you gave me the gift of going back to school and soon you will give me another baby. I am eternally grateful for ALL the sacrifices you have made over the last few years and I love you more each day. You are my wife, and most importantly my best friend. I thank God for you always. Baby “O” hurry up and get here, I cannot wait to meet you!

I must also thank the other important woman in my life. Hannah, you are the kindest, smartest, funniest, cleverest, most loving daughter – I pray everyday for God to watch over you. I am so very lucky and thankful to be your dad. Thank you for letting me chase my dreams; now its time for me to help you chase yours! May you always have a life filled with happiness, love, and compassion for your fellow man. May God grant you wisdom, a lifetime love of learning, and a keen sense of curiosity to always seek the Truth. One day you and I will see the great pyramids in Egypt together – I promise. Always know that I love you.

Thank you mom and dad! Who would have thought after all those years of struggling with school that I would be completing a dissertation? Mom, I know what you are thinking as you read this, “I knew you could do it, I always knew....” Well, I didn’t. But I am so very thankful you believed when I (and others) did not. Dad, I appreciate all the sacrifices that you have made for me over the years. It is because of your hard work that I sit typing this today. I love you both!

To my brother Joe and my sister Mary, thank you! Looking back over our lives we have all traveled to places we thought never possible. I am eternally grateful that you both are in my life. It is my hope we all take the time to come back together now that this journey is coming to an end. It seems like yesterday we were joking and playing around as we were waiting for the school bus. I miss those days. I love you both.

To Sam, Denise, Mike, and Lindsey, thank you for becoming my family when I most needed it! I love you all more than you will ever know.

A special thank you is offered to Father Nectarios and Diane. Father Nectarios and Diane, can you believe the road we have traveled together? From the Air Force, to the Army, to the greatest Orthodox Cathedral in the world (Hagia Sophia, *Constantinople*, Turkey), to even praying with Pope Benedict and Ecumenical Patriarch Bartholomew – what a journey it has been! You both have been loyal, steadfast, and most importantly compassionate friends. If the world were filled with more souls like yours, it truly would be a much better place. I love you both and I am so very thankful you are in my life. I am also grateful for all you have done for me. May God grant you both many years!

To *all* my friends, I love each of you. Each one of you has taught me something about life and for that I am grateful. I truly am the luckiest man alive. I wish everyone could have such a wonderful group of friends. I hope and pray we continue to share our lives with each other.

I also would like to thank the Associate Dean of Students, S. Mark Sikes and the Dean of Students, Patricia Volp. Thank you for all your help and support!

Finally, I am also very grateful for the support I received from NASPA, Region III. Without receiving the NASPA Region III research grant, this study would have been much more financially difficult to undertake. Thank you for believing in this project!

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ABSTRACT

Male perpetrated sexual aggression has long been recognized as a serious problem on college campuses. The purpose of this Multiple Regression Correlation research design study was to assess the relationship between levels of moral development (measured by the Defining Issues Test) and the degree to which first year college men ($N = 161$) ascribed to rape supportive attitudes. Rape supportive attitudes, for the purposes of this study, included assessed levels of rape myth endorsements (measured by the Illinois Rape Myth Acceptance Scale [IRMA]) and hypermasculinity (measured by the Hypermasculinity Inventory). Respondents completed three research instruments and a demographic questionnaire prior to the beginning of the fall semester. Analysis of whether there was a significant relationship between (a) levels of rape myth endorsements and moral development, (b) hypermasculinity and moral development, and (c) the extent that rape myths, hypermasculinity, and SAT verbal/quantitative scores predicted moral development levels was conducted. Pearson correlations indicated that there was a significant ($p < .01$) relationship between rape myth acceptance and moral development. There was not a significant ($p = .241$) relationship between hypermasculinity and moral development. Stepwise multiple regression analysis indicated that rape myths and SAT verbal scores accounted for 9% of moral development variance. Additional stepwise analysis suggested that the IRMA subscale, *It wasn't really rape*, in combination with SAT verbal scores, accounted for approximately 10% of moral development variance. Exploratory analysis on demographic characteristics was also conducted. Implications for practitioners and research suggestions are provided.

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CHAPTER ONE

Introduction

Provided in this first chapter are several components of the research. The need for the study, the chosen theoretical framework, study purpose, and research questions are all introduced. In addition, the definitions of terms used throughout the remainder of the dissertation project are presented.

Need for the Study

The number of women who experience unwanted sexual contact is startling. In fact, Rozee and Koss (2001) argue that “rape and other forms of violence against women have been declared by many to be the most pervasive yet least recognized human rights issue in the world today” (p. 296). For example, studies suggest that 48% of women in the Caribbean reported unwanted sexual contact (e.g. groping, fondling) (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002). In addition, others have found that 20% of women in New Zealand and Canada acknowledged previously being raped or having survived attempted rape at least once in their lifetime (Koss, Hiese, & Russo, 1994). Evidence likewise suggests that rape and other forms of sexual aggression are prevalent within the United States. For example, approximately 176,000 women survived rape, attempted rape, and other forms of sexual assault in 2005; a rate that computes to one sexual assault every three minutes (Catalano, 2006).

Researchers have also become increasingly alarmed with the number of college women who have experienced unwanted sexual advances over the past several decades. For example, in what many researchers consider as the benchmark investigation into the

prevalence of sexual assault victimization within college student populations, Koss, Gidycz, and Wisniewski (1987) studied students from 32 higher education institutions nationwide. Results showed that 27% of college women reported surviving rape or attempted rape since turning 14 years of age; 15% reported at least one past act that met the legal definition of rape and an additional 12% reported at least one act of attempted rape. Researchers also discovered that 25% of the male participants admitted to committing at least one past act of sexual aggression, 4% disclosed committing one or more completed rape(s), and 3% at least one past act of attempted rape (Koss et al., 1987).

Researchers have also concluded that high incidences of rape and sexual assault prevalence continued throughout the late 1990s and into the new millennium (Mohler-Kuo, Dowdall, Koss, & Wechsler, 2004). For example, Mohler-Kuo et al. (2004) conducted a nationwide cross-sectional survey of college women at 119 colleges and universities. Research results indicated that approximately one in twenty (4.6%) college-women reported being raped during the previous academic year (Mohler-Kuo, et al., 2004). Likewise, Fisher, Cullen, and Turner (2000) conducted an additional national survey of college women. Results from this study indicated that 2.8% of the participants were raped during the previous seven months.

Evidence also suggests that there are still many unknown variables associated with this phenomenon and the situation could even become worse. According to Koss (2005), since 1989, the publication rate of rape and sexual assault peer reviewed journal articles has severely declined. In addition, there was a 33% decrease in the number of dissertations completed that related to rape and/or sexual aggression (Koss, 2005). Low

completed dissertation numbers potentially signify that there could be a shortage of qualified research scientists to address this problem in the future. In fact, Koss (2005) recently claimed that “without generation of new knowledge, community capacity may suffer from paucity of basic science, including surveillance, etiology, and clear delineation of high risk groups” (p. 106). Equally troubling to the decline in related research is the fact that after more than 50 years of related investigations, most researchers would agree that rape and sexual aggression prevalence rates are still approximately the same (Koss, 2005; Rozee & Koss, 2001). New and improved theoretical frameworks should be used in order to better understand male perpetrated sexual aggression.

Theoretical Rationale

According to several theorists, cognitive development is achieved through a series of hierarchical stages; theorists base this on suppositions that persons use structures to classify and adjust experiences to their respective environments (see Baxter-Magolda, 1995; Perry, 1999). Exposing persons to more complex life experiences facilitates the changing and development of more multifaceted cognitive structures. Integrated within the construct of cognitive theory is how individuals make morally related decisions that affect others and themselves.

Kohlberg (1970) theorized that individuals learned to morally reason through invariant and qualitatively different hierarchical stages. Kohlberg’s *Moral Development Theory* focuses on how individuals’ progress through each stage of development as their interpretations of society’s rules and expectations change. In other words, the theory focuses on how the *individual* comes to make moral judgments in reaction to their view

of the world (Kohlberg, 1970). Persons who score low in moral development, for example the first stage, are concerned only with doing what is right and wrong in order to avoid punishment. Persons in higher stages, however, become less self-centered and begin to consider the wellness, rights, and justice of others. Kohlberg (1970) viewed *justice* as the central component of moral judgment development. In fact, he defined moral justice as “the primary regard for the value and equality of all human beings, and for reciprocity in human relationships, [and] is a basic human standard” (p. 173). In addition, Kohlberg posited that moral justice was universal for all societies and cultures (Rest, Narvaez, Thoma, & Bebeau, 2000).

Kohlberg also theorized that, as individuals are able to take the perspective of others (e.g., empathize with someone) they become cognitively ready for higher moral development stage progression. Higher stage moral development is desirable because individuals can comprehend, respond to, and make use of all the previous stages when confronted with moral dilemmas. Therefore, when subscribing to the Kohlbergian moral development paradigm, higher stage development is usually viewed as better (Rest et al., 2000).

The extent to which moral development and sexually aggressive attitudes in college men are interrelated has not been thoroughly reported in refereed journals. Researchers have previously found that moral development levels are significantly correlated with intergroup relationships (e.g., racial and gender stereotypes) (Killen et al., 2005) and levels of aggression (e.g., hitting and pushing) (Tisak et al. 2005). In addition, researchers discovered that empathy, sympathy, and moral development become more sophisticated as one progresses throughout maturation (Eisenberg et al., 2002). Research

results from Wilson et al. (2002), however, provided the most direct insight into how convicted rapist's levels of moral development and sexually aggressive attitudes were linked. Results from this study indicated that rapists' levels of moral development were significantly lower than non-rapist felons. This research provides much needed insight into this phenomenon. Nevertheless, still unclear is how levels of moral development and sexually aggressive attitudes of college men potentially interrelate.

Purpose of the Study

The purpose of this study was to assess the relationship between levels of moral development and the degree to which first year college men ascribed to rape supportive attitudes. For the purposes of this study, rape supportive attitudes included endorsements of rape myths and assessed levels of hypermasculinity. By beginning to investigate how moral development and rape supportive attitudes were interrelated, researchers and programmers can gain knowledge to help eradicate rape and sexual aggression from our college campuses. We owe today's college students – both men and women – nothing less than the chance to learn in a safe and secure environment. Understanding how moral development and sexually aggressive attitudes are interrelated could move us in that direction.

Research Questions

The following research questions and hypotheses guided the investigation into how levels of moral development and rape supportive attitudes were interrelated. Directional hypotheses are provided for Questions 1 and 2. Questions 3 and 3.a are exploratory in nature; therefore, no hypotheses are assumed.

1. What is the relationship between levels of rape myth endorsements and levels of moral development in first year college men?

Directional Hypothesis: There is a significant relationship between higher levels of rape myth endorsements and lower moral development levels in first year college men.

2. What is the relationship between levels of hypermasculinity and levels of moral development in first year college men?

Directional Hypothesis: There is a significant relationship between higher hypermasculinity levels and lower moral development levels in first year college men.

3. To what extent do assessed levels of rape myth endorsements, levels of hypermasculinity, and quantitative/verbal SAT scores interrelate with levels of moral development in first year college men?

3.a: To what extent does each subscale(s) of IRMA, levels of hypermasculinity, and quantitative/verbal SAT scores interrelate with levels of moral development in first year college men? This question will only be analyzed if the total IRMA score is significantly interrelated within the initial model (see Question 3). For a description of each IRMA subscale see *Instrumentation* section in Chapter 3.

Definition of Terms

Empathy –DeGue and DiLillo’s (2005) definition of empathy includes the three most common components found within the related literature. First, they argued that empathy consists of the ability for one person to adopt another person or character’s

perspective. Second, empathy consists of having the capability within oneself to recognize the “feelings of concern and sympathy for others” (DeGue & DiLillo, 2005, p. 522). The third component is the ability for one individual to recognize when another individual is in distress and then likewise personally feel a certain amount of distress based on this recognition.

Moral Development Theory – This theory describes how persons develop moral reasoning abilities through three distinct levels; in addition, each level has two stages. Levels and stages describe how individuals characterize “both social facts and sociomoral values, our oughts [sic]” when confronted with moral dilemmas (Kohlberg, 1976, p. 33). In other words, each level and stage represents and describes how individuals morally relate to the world around them.

At the *preconventional level* (Level I), people avoid breaking rules due to the consequences and not because they associate right and wrong with how others are impacted. Individuals at this level of development are not concerned with how their actions may/may not influence others. The *Conventional level* (Level II) is a “member of society perspective.” Individuals at level II identify with others and understand societal rules and expectations, especially the expectations of persons holding power and authority; however, individuals’ moral reasoning/decisions are only concerned with persons who are emotionally close to them. Finally, Level III, or *Postconventional* moral reasoning is described as persons disassociating themselves from societal expectations and base actions/choices on personal principles. Level III represents the “prior to society” perspective, meaning that persons separate their decisions from all other influences and thus come to make choices of equitable and fair treatment of others. The major difference

at this level of development from the previous ones is the individual's critical analysis of societal expectations. Individuals discard those societal expectations that are non-congruent with their personal moral development for more favorable universally applied personal decisions (Colby & Kohlberg, 1987; Duska & Whelan, 1975). Persons at this stage or level of moral reasoning will contend that societal principles should dictate that *all* persons deserve equal rights, justice, and other protections.

Rape Myths – Burt (1980) defined rape myths as “prejudicial, stereotyped, or false beliefs about rape, rape victims, and rapists” (p. 217). In an attempt to further clarify the definition, Lonsway and Fitzgerald (1994) described 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).

Rape Supportive Attitudes – For the purposes of this study, rape supportive attitudes were assessed and operationalized with the following two research instruments. Endorsements on the Illinois Rape Myth Acceptance scale (Payne, Lonsway, & Fitzgerald, 1999) and assessed levels on the Hypermasculinity Inventory (Mosher & Sirkin, 1984) are both included within the operationalized definition of rape supportive attitudes.

Sexual Assault* and *Sexual Aggression – For the purposes of this research, the terms sexual aggression and sexual assault are used interchangeably as “umbrella” definitions. In short, sexual aggression and sexual assault refer to any unwanted sexual act, including but not limited to, verbal coercion, deliberate intoxication of a victim to obtain sexual contact, and forced rape.

Summary

Male perpetrated sexual aggression is both a global and local concern. In addition, investigations into this phenomenon have seemingly declined both in the percentage of printed research articles and dissertations – suggesting that there might not be adequate knowledge produced for effective programming in the future (Koss, 2005). Evidence also suggests that there are still many unknown variables associated with male perpetrated sexual aggression and the situation could even become worse. Therefore, moral development theory was used as a new framework to better understand rape supportive attitudes of college men.

The following chapter provides an in depth review of the literature on known sexually aggressive attitudes and behaviors. In addition, moral development theory and related research are discussed. Chapter Three will provide the reader with the methods for this study, including research questions, study context, procedures, participants, ethical considerations, limitations, and delimitations. Reported in Chapter Four are the study results. Finally, in Chapter Five the results are summarized and discussed.

CHAPTER TWO

Introduction

This chapter reviews several variables commonly associated with male perpetrated sexual aggression. Before proceeding further, however, it is first necessary that the reader recognize that researchers often use different operational definitions and methods to investigate this phenomenon. Prevalence rates of both victimization and perpetration, therefore, are not always consistent within the literature. What is most important for the reader to be aware of is the notion that high frequencies of sexual aggression are taking place on college campuses (Koss, 2005; Rozee & Koss, 2001).

In addition, readers should note that the following literature is only one “piece” of the larger problem of male perpetrated sexual aggression. Those variables that seemed most promising and relevant to furthering our understanding were included within this literature review. The reader should also recognize that the author focused this research on college men because men are the ones most often committing rape (Rennison, 2002). In addition, there are situational and behavioral factors discussed that women should also become aware of so that they can become better educated on methods of reducing their own risk of victimization. Although men are primarily the focus of the following discussion, women are not forgotten – it is for them that we are attempting change.

Pervasiveness of Sexual Assault

Rape and sexual assault perpetrated against women is a global concern. In a recent study conducted by the World Health Organization, women reported high numbers of forced first-time sexual experiences (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002).

For example, women in the Caribbean and Peru reported forced sexual experiences at 48% and 40% respectively (Krug, et al., 2002). Other researchers have reported that 20% of the female populations in New Zealand, Canada, and Korea and 19% in England have become the victims of either rape or attempted rape (Koss, Hiese, & Russo, 1994). Likewise, rape and sexual assault perpetrated against women is a serious problem within the United States. For example, approximately 176,000 women survived rape, attempted rape, and other forms of sexual assault in 2005; a rate that computes to one sexual assault every three minutes (Catalano, 2006). In a recent comprehensive review of sexual assault and rape related literature, researchers found that approximately 25% of women have experienced sexual assault, including rape, sometime during adolescence or early adulthood (Abbey, Zawacki, Buck, Clinton, & McAuslan, 2001).

Researchers have become increasingly alarmed with the number of college women who have experienced unwanted sexual advances over the past fifty years. Kirkpatrick and Kanin (1957) conducted one of the first research investigations into the phenomenon of male initiated sexual aggression perpetrated against college women. Prompted by some limited incidences of reporting on male initiated sexual aggression, these researchers investigated the number of times female college student participants experienced five categories of unwanted sexual aggression (unwanted necking, petting above the waist, petting below the waist, sexual intercourse, and attempts at sexual intercourse with violence or threats of violence) over a one year period. Results indicated that aggressive acts were committed against 56% of female research participants. Evidence also indicated that women reported 1,022 total aggressive acts; which indicate some women received multiple sexually aggressive episodes (Kirkpatrick & Kanin,

1957). Research evidence also suggested that as the level of aggression increased (from “necking” to unwanted sexual intercourse) victimized women were less likely to report the incident to authorities – even when the episode met the legal definition of rape (Kirkpatrick & Kanin, 1957). Since Kirkpatrick and Kanin’s (1957) early work, other similarly conducted studies have confirmed the results of this groundbreaking research multiple times and with comparable results.

In what many researchers consider as the benchmark investigation into the prevalence of sexual assault victimization within college student populations, Koss, Gidycz, and Wisniewski (1987) studied the students of 32 higher education institutions nationwide. Both female and male college students agreed to participate ($N = 6,159$). Results from the Sexual Experiences Survey (SES) indicated that 27% of college women reported surviving rape or attempted rape since turning 14 years of age. Of the victimized women, 15% reported at least one past act that met the legal definition of rape and an additional 12% reported at least one act of attempted rape. Researchers also discovered that 4% of male participants disclosed committing one or more completed rape(s), and 3% at least one past act of attempted rape (Koss et al., 1987). These results are similar to additional research findings conducted over the last several years (e.g., Gross, Winslett, Roberts & Gohm, 2006; Abbey, et al., 2001; Baier, Rosenzweig, & Whipple, 1991).

Researchers have also concluded that high incidences of rape and sexual assault prevalence continued throughout the late 1990s and into the new millennium (Mohler-Kuo, Dowdall, Koss, & Wechsler, 2004). For example, Mohler-Kuo et al. (2004) conducted a nationwide cross-sectional survey of “risky” sexual behaviors of college women at 119 colleges and universities over three data collection periods; 1997 ($n =$

8,567), 1999 ($n = 8,425$), and 2001 ($n = 6,788$). Research results indicated that approximately one in twenty (4.6%) college-women reported being raped during the previous academic year (Mohler-Kuo, et al., 2004). Likewise, Fisher, Cullen, and Turner (2000) conducted an additional national survey of ($N = 4,446$) women that attended two and 4-year colleges. However, unlike the previous study, these researchers collected data from participants on self-reported completed rape, attempted rape, sexual coercion, and other behavioral acts of sexual aggression. Results from this study indicated that 2.8% of the participants were raped during the previous 7 months.

Contextual Factors of College Women's Sexual Victimization

Several contextual variables are related to college women's victimization. Results from Fisher et al.'s (2000) national survey suggested that the majority of victims knew the person who sexually victimized them. In fact, about 9 out of 10 victimized women personally knew the perpetrator. The two most likely perpetrators were a classmate (36% completed rape, 44% attempted rape) and a male friend (34 % completed rape, 24% attempted rape). The remaining perpetrators were a boyfriend/ex-boyfriend (24% completed rape, 15% attempted rape) or an acquaintance (3% completed rape, 10% attempted rape). In only a small minority of cases was the perpetrator identified as someone "other" (e.g., stranger) than the women previously knew (4.0% completed rape, 8% attempted rape) (Fisher et al., 2000).

There is also evidence suggesting the time(s) and circumstance(s) that most incidences of sexual aggression take place. For example, most sexual aggression occurs in the evening. Research evidence suggested that the majority (52%) of sexual aggression occurred after midnight; followed in prevalence (37%) by aggression that occurred

between 6 p.m. and midnight. The remaining acts of sexual aggression typically took place between 6 a.m. and 6 p.m. (Fisher et al., 2000). Related to the time(s), are the circumstance(s) in which a sexual assault/rape took place. For example, approximately 13% of completed rape and 35% of attempted rape took place while the victim was on a date (Fisher et al., 2000). Additional research evidence suggested that in 75-80% of cases in which a male rapes a female college student, the female is intoxicated (Lisak & Miller, 2002; Mohler-Kuo, Dowdall, Koss & Wechsler, 2004).

Researchers have also discovered that the physical locations of sexual aggression vary. For example, most acts of sexual aggression have been found to occur off campus, in private living quarters (Banyard, Plante, Cohn, Moorehead, Ward, & Walsh, 2005; Fisher et al., 2000). Of victimizations that occurred on campus, most took place in the victim's residence (60%), or in other living quarters (31%) (e.g., perpetrators residence) (Fisher et al., 2000).

In sum, the contextual factors surrounding college male perpetrated sexual aggression are numerous. Times, locations, and relationship status (e.g. friend, acquaintance) are all known contributors to sexual victimization. In addition, the prevalence rates of male perpetrated sexual aggression are high. In fact, rape is the most common violent crime committed against college women (Fisher et al., 2000). Discussed in the following sections are variables that researchers have previously found interrelated with male perpetrated sexual aggression.

Etiology of Sexually Aggressive Men

Researchers agree that a vast majority of female sexual assault and rape victims personally know their male perpetrator (Catalano, 2006; Brecklin, & Ullman, 2001;

Fisher, et al., 2000). In addition, men commit 99% of all rapes reported in the United States (Rennison, 2002). Among college men surveyed, 9% admit to committing at least one past act that meets the legal definition of rape or attempted rape (Ouitmette & Riggs, 1998). Further, approximately one-third of college men surveyed indicated some likelihood to commit rape – if guaranteed not to be caught and punished (Malamuth, 1981; Briere & Malamuth, 1983; Cook, 1995). These results are not intended to imply that men cannot and do not become victims of sexual assault (e.g., Larimer, Lydum, Anderson, & Turner, 1999) rather only to illustrate the frequency of male on female initiated sexual aggression. Given the pervasiveness of sexual aggression committed against women, it is particularly important to identify specific possible reasons some college men commit acts of sexual aggression.

Of all the individual characteristics regularly linked as contributors to sexual aggression, three seem most prevalent within the related literature: the role of masculine ideology, endorsement of “rape myths,” and the role of alcohol consumption. Discussed below are the individual characteristics commonly associated with sexually aggressive college men, followed by the function that alcohol may play as a contributor to sexual aggression.

Masculine Ideology

According to Burt (1980) and Murnen, Wright, and Kaluzy (2002), in rape prone societies such as the United States, traditional gender roles encourage male sexual violence. Masculine ideologies and the endorsement of “macho personalities” were particularly implicated as problematic in regards to sexual assault (Murnen, et al., 2002, p. 361). In short, negative masculine ideologies are supported by behaviors and beliefs

that facilitate male initiated sexual aggression and violence directed at women (Locke & Mahalik, 2005).

Burt (1980) was one of the first researchers to posit and test a feminist sociocultural model. In this model, she postulated that a patriarchal dominated structured society supports violence against women (Burt, 1980). Exploiting the sociocultural model, and the theoretical framework it provided, she hypothesized that “rape is the logical and psychological extension of a dominant-submissive, competitive, sex-role stereotyped culture” (Burt, 1980, p. 229). The sociocultural model contributed significantly to furthering research on sexual aggression. Utilizing the model as a framework from which to conduct and report other investigations, researchers linked masculine ideology to male perpetrated sexual violence. Researchers discovered that the incidence levels of rape vary along a continuum of the societal structure. For example, Sanday (1981) found that in rape-prone societies genders were more segregated. In these rape-prone societies, women were perceived as less powerful and rates of interpersonal violence committed against women were higher as the degree of gender role stereotyping increased (Sanday, 1981).

Reis (1986) hypothesized two important characteristics that connected masculinity to sexual assault, utilizing the original sociocultural model. First, the endorsement of a “macho personality” (e.g., high risk-taking, accepting physical aggression, casual attitudes about sex) characteristics and, second, the belief that women were inferior to men, were both linked to sexual violence committed against women. This connection is important because it began to change researchers’ attitudes about how to investigate the constructs that facilitate sexual aggression. From the sociocultural model

emerged a theoretical framework that began to remove the idea of societal constructs, to one that described traditional gender roles at the individually constructed level. This theory eventually became known as Traditional Sexual Script.

Researchers utilizing Traditional Sexual Script speculated that gender development was different for both males and females and was one of the main sources of sexual assault (Murnen, et al., 2002). For example, girls learned at an early age that they were supposed to follow a series of submissive prescribed gender roles (e.g., being friendly to others, showing concern for the man's needs, and displaying empathy). Conversely, the socialization of boys taught them to become aggressive, insensitive, and not accept "no" for an answer in sexual situations. Traditional Sexual Script specified males as having power over sexual relations; thus reducing females to unequal sexual participants. Researchers ascribing to Traditional Sexual Script posited that society reinforced certain negative male characteristics (e.g., sexual power, acceptance of physical aggression, and reduced empathy towards others) and these masculinity traits were the standard by which individual men were equated. Having a theoretical construct from which to test masculine ideologies and their relation to sexual assault, researchers then began to create instruments to assess masculinity and its connection to sexual assault.

Another significant theoretical contribution resulted from the "blueprint for manhood," that Brannon (1976) developed. This framework assisted researchers in the design of one of the first modern measures used as an attempt to quantify masculinity. Researchers built upon the construct of masculine ideology described in the "blueprint for manhood" and began to refine and create masculinity norms inventories. After

conducting multiple studies and having analyzed the newly formed multidimensional masculinity norms inventories, Thompson and Pleck (1986) described five categories of men, all of which they placed on a continuum of masculinity. They hypothesized that those men who held “traditional” gender-role expectations had a higher likelihood of violence and were the most likely to perpetrate acts of sexual assault (Thompson & Pleck, 1986). Men at the other end of the continuum, who exhibited a belief in more egalitarian gender-role expectations, were posited as the least likely to commit acts of sexual violence.

Utilizing this, and other theoretical constructs, researchers thus began to classify and categorize violent prone constructs of masculinity. Specifically, hypermasculinity and hostile masculinity were constructs that have often surfaced within the literature. Presented below are these two negative constructs of masculinity, how researchers have generally characterized them, and the instruments used to quantify the particular masculine ideology. Also discussed are how past researchers have used concepts of masculine ideology to investigate the correlates of sexual aggression.

Hypermasculinity. Some men display an extreme adherence to masculine gender roles. One way that researchers have described men who displayed these extreme masculine characteristics was labeling them as portraying hypermasculinity or a macho personality constellation (Mosher & Sirkin, 1984). In short, hypermasculine men were characterized as frequently displaying acts of physical violence, finding danger exciting and portraying sexually calloused attitudes towards women (Mosher & Sirkin, 1984; Mosher & Anderson, 1986).

Researchers eventually developed a scale to evaluate males' adherence to what they termed hypermasculinity, or macho personality constellation. The scale contained 30 forced-choice response items ($\alpha = .89$) that measured participants' agreement with notions that "violence is manly" and "danger is exciting" (Mosher & Sirkin, 1984). Results from initial studies indicated that men displaying higher levels of hypermasculinity also self-reported higher levels of sexual assault perpetrated against women when compared to men displaying lower levels of hypermasculinity (Mosher & Sirkin, 1984; Mosher & Anderson, 1986). According to the model, society, family, and friends, among other influences, taught hypermasculine men to be tough, brave, take risks, and resist all fear. Further, hypermasculine men likewise learned to replace any feminine related emotions with feelings of excitement, anger, and to become disdainful of all cowards (Murnen, et al., 2002).

Researchers have found empirical evidence to support the notion that men with high levels of hypermasculinity self-report more past acts of both physical aggression and higher sexually aggressive attitudinal levels when compared to those men with lower levels of hypermasculinity. For example, Parrot and Zeichner (2003) recently conducted a study with a sample of college men ($N = 59$). Men who scored in the highest (> 13) and lowest (< 5) quartiles on the hypermasculinity scale ($M = 9.40$, $SD = 5.7$) were compared throughout the study. Evidence suggested that 83% percent of the high quartile hypermasculine men reported to have committed at least one previous physical aggressive act on a female. Conversely, 46% of men in the lowest quartile indicated at least one past act of aggression. Utilizing Chi-square analysis, researchers found that a significantly larger proportion of those men in the high masculinity quartile committed

past acts of aggression ($\chi^2(1, 44) = 6.88, p < .01$) when compared to low quartile men. Interestingly, high and low quartile men also differed on sexually aggressive attitudinal scales. The high quartile men ($M = 17.07, SD, 5.50$) were significantly different ($F(1, 57) = 19.63, p < .01$) from the low quartile men ($M = 11.55, SD, 3.83$) on the Acceptance of Interpersonal Violence scale. High quartile men ($M = 39.70, SD = 10.54$) were significantly ($F(1, 57) = 27.00, p < .01$) different on the Adversarial Sexual Beliefs scale, when compared to those men in the low quartile ($M = 25.59, SD = 8.47$). In addition, high quartile men ($M = 13.13, SD = 5.71$) differed on the Hostility Towards Women scale ($F(1, 57) = 24.63, p < .01$) when compared to men in the low quartile ($M = 6.76, SD = 3.97$). Evidence such as this indicate that higher levels of hypermasculinity result in the propensity for some men to both commit acts of physical aggression and adhere to higher levels of sexually aggressive attitudes/beliefs.

Other researchers have concluded that hypermasculinity is a significant predictor of past aggression. For example, Murnen et al. (2002) asserted that after conducting an up-to-date comprehensive meta-analysis on the related research, hypermasculinity, as defined by Mosher and colleagues, accounted for a statistically significant ($p < .05$) moderate effect size ($d = .61$) when correlated with self-reported past acts of sexual aggression. Other researchers have reported similar results when investigating related constructs of negative masculine ideologies.

Hostile Masculinity. Malamuth, Sockloskie, Koss, and Tanaka (1991) described a second construct that they differentiated as hostile masculinity. Hostile masculinity was primarily characterized in the following two ways. First, a man who displayed hostile masculinity exhibited a strong desire to be in control and dominating, particularly in

relation to women. Second, men displaying hostile masculinity also portrayed higher levels of distrustfulness of women (Malamuth, et al., 1991; Malamuth, Linz, Heavey, Barnes & Acker, 1995). Researchers subsequently created their own hostile masculinity scale by combining the following three pre-existing instruments: Acceptance of Interpersonal Violence (AIV), Adversarial Sexual Beliefs (ASB) instruments, and the Burt (1980) Rape Myth Acceptance scale (RMA) (Malamuth et al., 1991).

Evidence from this research suggested two causal paths of sexual assault. First, higher assessed levels of hostile masculinity consisted of attitudes that supported the endorsement of rape myths (false beliefs about rape, rape victims, and rapists), and other adversarial sexual beliefs (Malamuth et al., 1991; Malamuth et. al., 1995). The second causal path of sexual aggression suggested that sexual promiscuity (e.g., more frequent sexual contact), in conjunction with hostile masculinity, produced sexual assault tendencies in some males. The previous notion has been supported numerous times throughout the related literature (Abbey, Parkhill, BeShears, Clinton-Sherrod, & Zawacki, 2006; Malamuth et al., 1995; Wheeler, George, & Dahl, 2002).

In a more recent study, researchers examined how endorsements of rape myths, alcohol use, and self-reported past sexual aggression correlated with a newly created multidimensional construct of masculinity (Locke & Mahalik, 2005). Study participants ($N = 254$ undergraduate males) completed the Rape Myth Acceptance Scale ($M = 64.70$, $SD = 31.60$), Sexual Experiences Survey ($M = 1.00$, $SD = 1.10$), Alcohol Use Disorders Identification Test ($M = 11.22$, $SD = 5.63$), and the Conformity to Masculinity Norms Inventory (CMNI). The CMNI is a newly created instrument that consisted of 94 items answered on a 4-point scale. The CMNI assessed eleven masculine norms, such as having

power over women, acceptance of violence, and risk taking, among others. Research results indicated that alcohol consumption, endorsements of rape myths, and conformity to several masculinity norms (e.g., gratification from controlling or dominating women, and disdain for homosexuals) were statistically significant predictors of self-reported past acts of sexual aggression ($p < .01$) (Locke & Mahalik, 2005). However, results from this study must be interpreted with caution due to the low reported alpha level ($\alpha = .69$) on the CMNI. A low reported alpha level increases the probability of a type-1 research error. Results from this study necessitate verification with future research.

In sum, differently defined constructs of masculine ideologies have aided researchers' ability to understand the link(s) to sexually aggressive attitudes and behaviors. In fact, Murnen et al. (2002) reported in a recent meta-analysis that hypermasculinity ($d = .61, p < .01$) and hostile masculinity ($d = .58, p < .01$) had statistically significant moderate effect sizes when predicting participants self-reporting past acts of sexual assault. Results such as these indicate that masculine ideology might contribute a significant portion of some men's negative attitudes towards committing acts of sexual aggression. The relationship between aggressive sexual behaviors and the connection these attitudes had to some men's endorsement of rape myths were also depicted as linked with masculine ideologies within the literature. Discussed in the next section are rape myth acceptance and correlates with male perpetrated acts of sexual aggression.

Endorsement of "Rape Myths"

The connection between "rape myth" endorsements and other sexually aggressive attitudes and behaviors is one of the most common variables researchers use to

investigate sexual aggression, including rape. In addition, rape myth endorsement has consistently been found associated with sexually aggressive behaviors in community and college student populations (Lonsway & Fitzgerald, 1994). Burt (1980) defined rape myths as “prejudicial, stereotyped, or false beliefs about rape, rape victims, and rapists” (p. 217). In an attempt to further clarify the definition, 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). Specific examples of rape myths include “If a woman doesn't physically fight back, you can't really say that it was rape” and “Many women secretly desire to be raped” (Payne, Lonsway, & Fitzgerald, 1999).

Researchers have discovered that higher levels of rape myth endorsement serve as a significant risk factor for men to engage in sexually aggressive behaviors. Lonsway and Fitzgerald (1994) claimed that the most consistent research finding about rape myths was that significantly more men endorsed rape myths than did women. Past researchers have theorized and discovered that rape myth endorsements might actually aid some men to justify their sexually aggressive behaviors (Briere & Malamuth, 1983; DeGue & DiLillo, 2005; DeGue & DiLillo, 2004; Gerber & Cherneski, 2006; Malamuth et al., 1995). In other words, rape myth endorsement might facilitate the act of rape by providing cognitive rationalization for the behavior with increased tolerant attitudes toward the offender (Burt, 1980; Johnson, Kuck & Schander, 1997) and reduced levels of empathy for the victim (Abbey et al., 2006; Briere & Malamuth, 1983; DeGue & DiLillo, 2004). Typically, men who subscribe to rape myths support the notion that women are somehow responsible for, or contribute to, their own victimization, which in turn decreases the

perceived responsibility of the perpetrator (Johnson et al., 1997; Lonsway & Fitzgerald, 1994).

Researchers have empirically tested the role that rape myth endorsement may contribute to sexual aggression. For example, researchers have investigated the link that rape myth endorsement had with other known negative or hostile attitudes that were believed to contribute to sexual aggression. Specifically, Sawyer, Thompson and Chicorelli (2002) investigated sexually aggressive attitudes of predominately white (71%) male college athletes by having them complete the Burt Rape Myth Acceptance Scale ($M = 41.81$, $SD = 10.78$). Research results from this study indicated that a statistically significant proportion of all the men endorsed the rape myth that “50% of rapes were invented by women or that women lied about rape about half of the time” (Sawyer et al., 2002, p. 23). Evidence such as this clearly depict the function that rape myth endorsements may contribute with respect to reducing, or even eliminating, a male perpetrator’s role and responsibility when committing acts of sexual aggression by redirecting the belief that a large proportion of rapes are actually falsely reported by women.

Another method researchers have previously used has been to investigate the correlation of endorsements of rape myths to participants’ admittance of actual past acts of sexual aggression. DeGue and DiLillo (2004) compared and categorized college male participants ($N = 304$) across several interrelated domains and then classified them into three different groups. Male participants who did not admit to any past act of sexual aggression were classified as non-offending males. Men who admitted to committing past acts of obtaining sexual contact by tactics such as “the use of lies, guilt, false promises,

continual arguments, and threats to end the relationship, or ignoring verbal requests by the victims to stop (without using physical force)” were classified as non-physical aggressors (DeGue & DiLillo, 2004, p. 673). Finally, men who admitted committing past acts of aggression, with the aid of physical force, were classified as physical aggressors.

Research results from this study revealed that 32% of the men acknowledged past sexually coercive behaviors (DeGue & DiLillo, 2004). Of these results, nonphysical sexually aggressive classified men accounted for 27% of the total; physical sexual aggressors consisted of the remainder. Results revealed that coercive men were significantly more likely to view male-female relationships as adversarial ($M = 40.3$, $SD = 9.1$), interpersonal violence as acceptable ($M = 16.1$, $SD = 5.9$), and endorse significantly more rape myths than nonoffending men ($F(1, 195) = 13.0$, $p < .01$). Sexually coercive men ($M = 1.5$, $SD = 1.0$) were also significantly more likely to indicate that they would rape ($F(1, 195) = 7.7$, $p < .01$) if assured of not being caught, when compared to non-offender participants ($M = 1.2$, $SD = .7$). Research findings such as these support similar conclusions reached by Briere and Malamuth (1983) and others (e.g., Locke & Mahalik, 2005).

When compared to non-offending men ($M = 76.0$, $SD = 10.9$), sexually coercive men ($M = 79.4$, $SD = 10.7$) were also more likely to have significantly ($F(1, 195) = 5.7$, $p < .05$) more measured levels of empathy deficits (DeGue & DiLillo, 2004). In fact, the only significant difference between self-reported non-physical and physical sexual aggressors was their reported level of rape myth endorsement; physical aggressors endorsed higher levels of rape myths than did the non-physically aggressive men (DeGue & DiLillo, 2004). Results from this study suggested that rape myth endorsement and self-

reported level of physical aggression used during a sexual assault might in fact be located on a continuum of violence. In other words, as rape myth endorsement increased the likelihood of physical force being used likewise increased.

Rape myth endorsement does not indicate that a man will in fact commit an act of sexual aggression; however, in conjunction with other aggressive attitudes and behaviors, it does seem to indicate an increased propensity for some men to commit sexual aggression. Researchers have discovered that rape myth endorsement might aid in reducing a man's perceived level of responsibility when committing sexual aggression (Briere & Malamuth, 1983; DeGue & DiLillo, 2005; DeGue & DiLillo, 2004; Gerber & Cherneski, 2006). In addition, rape myth endorsement was significantly correlated with some men's desire to commit future acts of sexual aggression if guaranteed to not be caught (Briere & Malamuth, 1983; DeGue & DiLillo, 2004). Rape myth endorsements might even aid in the reinforcement of adversarial male-female relationship beliefs (Burt, 1980; Gerber & Cherneski, 2006) by supporting such notions that half of all rapes are "invented by women" and other negative similar beliefs (Sawyer et al., 2002, p. 23). Finally, the most promising research findings – yet most troubling – for a linkage to actual acts of aggression suggested that rape myth endorsement was significantly correlated with self-reported admittance of past sexual aggression and low levels of victim empathy (DeGue & DiLillo, 2004). Discussed in the following section is how researchers have investigated the construct of empathy and its apparent linkages to sexual aggression.

The Role of Empathy

Past researchers and theorists have defined empathy in numerous ways. For

example, Davis (1996) posited that empathy was a “set of constructs having to do with the responsiveness of one individual to the experiences of another” (p. 12). DeGue and DiLillo (2005) further speculated that although definitions of empathy vary, most included three common components. First, they argued that empathy consisted of the ability for one person to adopt another person or character’s perspective. Second, empathy consisted of having the capability within oneself to recognize the “feelings of concern and sympathy for others” (DeGue & DiLillo, 2005, p. 522). The third component described was the ability for one individual to recognize when another individual was in distress and then likewise personally feel a certain amount of distress based on this recognition. In short, most researchers seem to agree that empathy is the ability for one person to identify with and actively relate to another person’s situation and/or feelings. However, the exact role a deficit of empathy plays is not clearly understood in relation to how it influences some men’s propensity to commit sexual aggression (Wheeler, et al., 2002).

Nature and Construct(s) of Empathy. There has been a large quantity of research conducted on the constructs and nature of empathy; however, some researchers contend the results remain unclear (Carlozzi, Bull, Stein, Ray, & Barnes, 2002; DeGue & DiLillo, 2005; Duan & Hill, 1996). Duan and Hill speculated that the lack of clarity continues within the literature because of how researchers have conceptualized empathy. By having a better understanding of how previous researchers define empathy, one can understand more clearly the impact it may have on rape supportive attitudes and behaviors.

The term “empathy” is most commonly referred to as three different constructs within the literature (Carlozzi et al., 2002; Duan & Hill, 1996). Empathy viewed as a personality trait is the first construct. In this view, researchers posited that the nature of empathy is affective or emotional (DeGue & DiLillo, 2005) and persons are considered “more empathetic than others, either by nature or through development” (Duan & Hill, 1996, p. 262). Assuming this conception of how empathy is constructed is correct, should lead one to recognize potential research and intervention opportunities into how the developmental process influences the construction of empathy.

Situation-specific empathy is the second construct discussed within the related literature. Researchers who ascribe to situation-specific constructs posit that empathy is a cognitive-affective state. A cognitive-affective construct presupposes that individuals will appropriately respond to another person’s condition because the nature of empathy is both affective and cognitive (DeGue & DiLillo, 2005). This construct assumes that empathetic responses are stimulated by situation-specific circumstance and not necessarily personal level of empathy development. In other words, empathetic response varies based on the condition(s) found within each situation. According to Duan and Hill (1996), this construct allows for “studying the effects of situational factors and intraindividual differences in empathy, as well as promoting training or learning” (p. 262). This position assumes that empathetic responses can be manipulated in order to better understand its function.

The third construct depicted a multi-phased or multi-staged process of empathy constructs. Duan and Hill (1996) asserted that multistage empathy theories embody the level of complexity believed by some researchers as associated with true empathy

development. For example, researchers have posited that the nature and construction of empathy involved emotional/affective cognition, identification, and role taking, and the sequences of these experiences are what lead to individual construction of empathic responses (Gladstein, 1983). Although promising, researchers contend that multi-phased or multi-staged empathy theories are difficult to assess; therefore, their practical use to-date has been limited to descriptive rather than explanatory (Duan & Hill, 1996).

In sum, the nature and construct of empathy is complex. Several researchers described empathy as strictly cognitive in nature, while others posited that the nature of empathy was primarily affective (DeGue & DiLillo, 2005). Nevertheless, other researchers posited that the nature is a combination of affective and cognitive conditions and its construction was based on situation-specific factors (DeGue & DiLillo, 2005; Duan & Hill, 1996). Although divergent descriptions of the nature and constructs are present in the research, most researchers agree that the roles empathy plays are important to understand if we are to learn why some men sexually assault women and some men do not.

Empathy Related Research. Empathy is an important variable within the context of sexual assault for a number of reasons. Researchers have found that assessed empathy levels can significantly discriminate convicted rapists from their ability to empathize with victims (Fernandez & Marshall, 2003), differentiate between known adolescent sex offenders and non-offenders (Burke, 2001), and under experimental conditions, distinguish the levels of sexual arousal between sexually aggressive and non-aggressive men (Bernat, Calhoun, & Adams, 1999). In addition, assessed empathy levels

of child molesters were significantly lower when compared to non-molesters (Whittaker, Brown, Beckett, & Gerhold, 2006).

Predictably, college women tend to report higher levels of empathy towards sexual assault victims, when compared to sexually aggressive men. Researchers in two recent studies found significant differences in rape supportive attitudes of male and female college students. For example, women who self-reported previous sexual aggression victimization, or personally knew a victim, also reported significantly higher levels of victim specific empathy when compared to women who have not suffered an act of aggression (Chng & Burke, 1999). In a similar study, when confronted with a hypothetical rape vignette, women reported significantly higher levels of rape victim credibility and empathy and were less accepting of rape myths when compared to male participants (Jimenez & Abreu, 2003). Male perpetrated rape supportive attitudes and behaviors are also reported within studies that used college men as the focus of the research projects.

College Men and Empathy Research. To “measure” empathy, past researchers have predominantly used two forms of instruments, each with a specific purpose. Utilizing inventories, such as the Interpersonal Reactivity Index (IRI), is one method to measure empathy (Davis, 1980). This type of empathy instrument assesses levels of generalized non-specific constructs of empathy. Most often, researchers have participants complete the IRI, along with other instruments that measure dissimilar known high-risk constructs (e.g., hostile masculinity, rape myth acceptance, hypermasculinity). For example, Wheeler et al. (2002) recently used the IRI as an appraisal of general empathy, among other construct measures, in order to determine known sexually aggressive

attitudes and behaviors in a group of college men. Results indicated that generalized empathy significantly ($\beta = 0.187, p < .01$) moderated hostile masculinity and impersonal sex when included within the regression model (Wheeler et al., 2002). Multiple hierarchical regressions demonstrated that general empathy moderated high-risk men (hostile masculinity and high self-reported rates of impersonal sex) such that researchers could significantly improve sexual aggression predictions (Wheeler et al. 2002). Other researchers have discovered that participants who self-reported past acts of sexual violence were also more aggressive, manipulative, impulsive, and less empathic when compared to men who did not report past sexual aggression (Hersh & Bernadette, 1998). Research results such as these support Malamuth et al.'s (1995) prediction that empathy would successfully moderate or reduce coercive sexual behaviors when considered.

The second type of research instrument focuses more on assessing rape specific forms of empathy, such as the ability for an individual to assume the point of view of another person (Deitz, Blackwell, Daley, & Bentley, 1982). An instrument commonly used for this type of research is the Rape Empathy Scale (RES) (Deitz et al., 1982). This research tool solicits empathic responses as they pertain directly to a victim, or perpetrator. From studies utilizing rape specific forms of empathy, researchers discovered that rape myth endorsement correlated negatively with higher empathy levels (Bushman, Bonacci, Dijk, & Baumeister, 2003; Osland, Fitch, & Willis, 1996) and narcissism (Bushman, et al., 2003) within male college student populations. In others words, as empathy levels increase within the college male populations studied, rape myth endorsement and narcissism typically decreased.

The capacity for some aggressive men to empathize with a victim also seems positively correlated with sexual arousal and the length of time (e.g., decision latency) that some participants will allow a sexually explicit analogue to continue. Bernat et al. (1999) recently directed prescreened participants to signal when a male character should stop sexual advances during a series of video and audiotape analogues of consensual sexual intercourse and acquaintance rape. Researchers used the Sexual Experiences Survey (SES) (Koss & Gidycz, 1985) as a prescreening tool to measure past acts of sexual aggression. The researchers also assessed Calloused Sexual Beliefs by utilizing a portion of Mosher and Sirkin's (1984) Hypermasculinity Inventory. Thirty-four self-identified nonaggressive and aggressive college men participated in the study. Researchers obtained a baseline measurement of penile tumescence by having all men watch two 30-second sexually explicit video stimuli. Participants then watched a second presentation of the sexually explicit video. During the second presentation of the video, sexual activity progressed until a depiction of a hypothetical acquaintance rape occurred, or until the participant signaled for the male character to stop sexual contact. Research results indicated sexually aggressive men displayed significantly increased penile tumescence ($t(32) = -2.80, p < .01, \eta^2 = .20$) and longer periods of response latency (e.g., allowing the analogue to continue playing) ($M = 177.8$ seconds, $SD = 58.8$ seconds), when compared to non-aggressive participants ($M = 121.6$ seconds, $SD = 59.8$ seconds) (Bernat et al., 1999). In addition, similar penile tumescence results continued even after the female character clearly indicated her desire for sexual activities to end and the male character's violence had increased.

Although the Bernat et al. (1999) study results depict physiological differences between sexually aggressive and nonaggressive men, the results should be viewed with some caution due to methodological irregularities. The authors posited that the Callused Sexual Beliefs component of the Masculinity Inventory (Mosher & Sirkin, 1984) differentiated sexually aggressive men from the nonaggressive participants by reflecting “a specific lack of empathy for the victims” (p. 671). However, no empirical evidence from their study indicated the Callused Sexual Beliefs component was a validated measure of empathy. In addition, the researchers presented no evidence to support the legitimate utilization of one portion of the Callused Sexual Beliefs scale without the entire instrument. Finally, with a sample size of 34 men, it should lead one to question the generalizability of these particular research results. These research findings are nonetheless important, as results indicated physiological changes and differences between sexually aggressive and nonaggressive men.

Empathy and Future Behaviors. Rape proclivity and victim empathy are strongly linked (Osland et al., 1996). For example, O’Donohue, Yeater, and Fanetti (2003) found that in a study sample of mostly white (77.5%) college men ($N = 102$), participants’ self-reported intent to rape declined as rape empathy increased. The two constructs – intent to rape and rape empathy – were significantly negatively correlated ($r = -.58$). Results such as these have lead researchers to posit that as sexually aggressive men increase in their level of ability to understand the trauma of rape, and capacity to empathize with a victim, the likelihood to commit future rapes declines (O’Donohue et al., 2003; Schewe & O’Donohue, 1993).

Although researchers have varying contentions on the nature and definition of empathy, there is much to learn from this line of research nonetheless. The research cited on empathy indicates that it is an important construct to understand when investigating sexual aggression. Cited studies clearly depict the negative impact of low reported empathy levels and sexual aggression. For example, empathy levels reportedly differentiate adolescent sex offenders from non-offenders (Burke, 2001). Low empathy levels and higher rape myth endorsements were also found to positively correlate (Bushman et al., 2003; Oslan et al., 1996). Researchers used empathy levels to explain heightened sexual arousal in aggressive men who watched a sexually explicit videotape depicting acquaintance rape scenarios; sexual arousal in these men continued even after the female character pleaded for sexual contact to end (Bernat et al., 1999). Empathy also strongly linked aggressive men's intent to commit future acts of rape (O'Donohue et al., 2003; Oslan et al., 1996; Schewe & O'Donohue, 1993). Finally, researchers were successful in their attempt to use generalized measures of empathy, hostile masculinity, and rape myth acceptance, to investigate self-reported past acts of sexual aggression (Wheeler, et al., 2002). Although not fully understood in all its complexities, empathy is an important variable in the fight against male perpetrated sexual aggression (Carlozzi, Bull, Stein, Ray, & Barnes, 2002; DeGue & DiLillo, 2005; Duan & Hill, 1996).

To this point in the paper research results have demonstrated the often bidirectional linkages with some of the known etiological variables of sexual aggression. Masculine ideologies, rape myth endorsements, and the role of empathy have all been empirically linked in one manner or another to male perpetrated acts of sexual aggression. Unfortunately, most incidences of rape committed by college students also

involve the use of alcohol. Alcohol consumption results in further compounding an already complex phenomenon. Discussed in the following sections is how past researchers have posited the confounding affects of alcohol on sexual aggression.

Confounds of Alcohol and Sexual Aggression

Most incidences of rape committed by college students involve the use of alcohol. In fact, 75-80% of cases in which a male rapes a female college student, the female is intoxicated (Lisak & Miller, 2002; Mohler-Kuo, Dowdall, Koss & Wechsler, 2004). In addition, recurrent, heavy episodic drinking increases college women's chances of experiencing rape by eight-fold (Mohler-Kuo et al., 2004). Among male offenders who rape women, 64% were using alcohol and/or drugs prior to the attack (Brecklin & Ullman, 2002) and men who are more sexually coercive drink higher amounts of alcohol, when compared to non-coercive men; this is particularly true during sexual encounters (Abbey, Clinton-Sherrod, McAuslan, Zawacki, & Buck, 2003b; Abbey, McAuslan, Zawacki, Clinton, & Buck, 2001a; Carr & VanDeusen, 2004).

The more alcohol that men consume the more aggressive they are in situations where a sexual assault takes place. The link between alcohol and sexual assault is compounded further by findings that when men are intoxicated, they perceive rape survivors as being less distressed and less disgusted by their attackers than do sober men (Norris, George, Davis, Martel, & Leonesio, 1999). Also of note, the more sexually coercive a man is, the less honest he believes women are about not wanting to have sex on a particular occasion. This negative behavior pattern is especially evident when both parties have consumed alcohol.

Studies examining sexually aggressive men show that they are less inhibited about coercing women who have consumed alcohol. Studies also show that the amount of alcohol a woman consumes has no effect on non-aggressive men's perceptions of how far to push their sexual advances (Bernat, Calhoun, & Stolp, 1998).

Alcohol Related Research Methods

Consistent with methods used to conduct studies of rape myth endorsement, empathy and masculinity, researchers who investigate the affects of alcohol on sexual aggression have primarily utilized survey and experimental research conditions. Undertaking research in this manner is due to the ethical issues of investigating a sensitive phenomenon such as sexual assault. Nevertheless, researchers have used the tools available to them and out of these efforts have emerged primarily two "types" of findings. First, survey-based studies provided researchers with evidence of participants' self-identified behaviors (e.g., admitting to past sexually aggressive acts) and attitudes (e.g., "a women drinking is looking to have sex"). Second, researchers frequently incorporated an alcohol/no alcohol condition and then had participants listen to, or read, a stimulus vignette describing a "typical" dating/sexual experience utilizing an experimental research design. From these experimental studies, researchers gained insight into how participants' alcohol consumption, attitudes, and risky sexual behaviors are interrelated, yet maintained proper research ethical standards. In other words, researchers learned about the attitudes and behaviors of individuals while under the influence of alcohol and did so without placing them in danger of becoming a perpetrator or victim of sexual assault.

Common Alcohol Involved Perpetrator Characteristics

Analysis of alcohol-involved and non alcohol-involved incidents of sexual aggression indicates that there are personality and belief differences between sexually coercive and noncoercive men (Abbey, Zawacki, Buck, Clinton & McAuslan, 2001b; Zawacki, Abbey, Buck, McAuslan & Clinton-Sherrod, 2003; Wilson, Calhoun & McNair, 2002a). Abbey et al. (2001b) reported in a comprehensive literature review that men who have previously committed past acts of sexual aggression were likely to be more aggressive towards women, adhere to adversarial beliefs between relationships of men and women, and display lower levels of empathy when compared to noncoercive men. Sexually aggressive men were also more likely to support traditional gender-role stereotypes, initiate sexual encounters, and justify aggressive behaviors by endorsing rape myths (Abbey et al., 2001b).

Men who adhere to the abovementioned beliefs also share common associations pertaining to the consumption of alcohol. For example, sexually coercive men consume significantly more alcohol – particularly during sexual encounters - when compared to noncoercive men (Abbey et al., 2003b; Abbey et al., 2001b; Carr & VanDeusen, 2004). Coercive men characteristically have higher alcohol expectancies (degree to which alcohol is expected to enhance sexual experiences) and become more physically aggressive as the level of alcohol consumed increases (Ito, Miller & Pollock, 1996). Aggressive men who consume alcohol are also likely to believe that a woman's drinking is a signal of sexual interest and incorrectly judge how willing a female is to continue sexual behaviors during intimate encounters (Zawacki et al., 2003).

Alcohol Usage and Judgment Impairment

Research results indicate that alcohol consumption can negatively influence a perpetrator's response latency and perceptions of female sexual arousal (Marx, Gross & Juergens, 1997; Wilson et al., 2002a; Abbey, Buck, Zawacki & Saenz, 2003a; Stephens & George, 2004). Response latency is the time that elapses from the start of a vignette – typically an audiotape/videotape depiction of a date rape scenario – to when a research participant signals that the female character in the vignette wants the male character to stop sexual advances (Gross, Bennet, Sloan, Marx & Juergens, 2001). In a recent laboratory experiment, Gross et al. (2001) found that college men who consumed alcohol were significantly more likely to permit the continuation of a date rape audio vignette longer (e.g., response latency) than sober men were. In a similarly conducted study, Marx et al. (1999) determined that when compared to men who did not consume alcohol, those who did were also significantly more likely to take longer to signal that the female character in a vignette desired sexual advances to end. Interestingly, men in both studies, who believed they had consumed alcohol, but had in fact consumed an alcohol placebo, were also significantly more likely to take longer to signal for the ending of the vignette when compared to men who did not believe they had consumed any alcohol. Actual alcohol consumption, however, had twice the effect size ($r = .70$) of response latency when compared to participants who had not ($r = .33$) consumed alcohol (Marx et al., 1999). Possible explanations suggest that alcohol may disinhibit the perpetrator's desire or ability to recognize the victim's cues for the man to stop aggressive behaviors (Marx et al., 1999; Marx et al., 1997) and contribute to an aggressor's misperception of the victim's level of sexual arousal (Abbey et al., 2003a; Gross et al., 2001).

Abbey et al. (2003a) found that male participants who consumed alcohol – to a blood alcohol content of 0.08% – and then read a typical college dating scenario, wherein both the male and female character were drinking alcohol, were more likely than those participants who did not consume alcohol to depict the female character as more sexually aroused. In fact, the more frequently participants self-reported drinking alcohol during dates, the higher they rated the female character's sexual arousal (Abbey et al., 2003a). Participants who consumed alcohol and self-reported positive attitudes towards casual sex rated the female character as more sexually aroused, and the male aggressor character's actions as more appropriate, when compared to those men who did not consume alcohol (Abbey et al., 2003a).

Research results also suggest that alcohol may interfere with some men's cognitive ability to properly judge how sexually aroused a woman is and their capacity to differentiate and acknowledge when a woman requests sexual activities to stop (Gross et al., 2001; Marx et al., 1997). Marx et al. (1997) reported that men who had consumed alcohol, and then listened to an audiotape vignette, often overlooked the female character's first three requests to end sexual activities. Similarly, Gross et al. (2001) found that men who consumed alcohol were significantly more likely to rate a female character's sexual arousal higher and fail to recognize her initial desires for the sexual contact to stop, when compared to participants who were not consuming alcohol. These research findings indicate that men under the influence of alcohol “may be inclined to pursue increasing levels of sexual contact until it is conspicuously clear that these advances are undesired” (Marx et al., 1997, p. 295). Compounded by the consumption of alcohol, men might perceive initial declines for sexual contact as “token resistance;” this

in turn could potentially lead to sexually aggressive behaviors, including rape (Marx et al., 1997).

Alcohol's affect on impairing judgment is not limited to men. For example, women's decision-making capacities may also be impaired with the consumption of alcohol, leading them to engage in behaviors that increase the likelihood of becoming victims of sexual assault (Davis, George & Norris, 2004). Utilizing an experimental research design, Davis et al. (2004) investigated the role alcohol had on the increased likelihood that women participants would consent to unwanted sexual activities after reading a stimulus vignette and then describing how they would respond to the male character. Their research findings suggest that female participants who consumed alcohol were significantly more likely to consent to initial sexual contact and use passive responsive actions (e.g., becoming paralyzed) for activities to end, even though they did not want to engage in sexual intercourse, when compared to participants who did not consume alcohol (Davis et al., 2004). In a similar study, results showed that female participants under the influence of alcohol described how they would resist an aggressor after witnessing a vignette. Researchers found that women under the influence of alcohol resisted unwanted sexual advances by expressing fewer mentions of both physical and verbal assertions for sexual contact to end when compared to women who had not consumed alcohol. Interestingly, women in the alcohol condition responded to the vignette more passively by utilizing negotiating and joking techniques as their probable method(s) to end the undesired sexual contact (Masters, Norris, Stoner, & George, 2006). Alcohol-induced actions such as these may unwittingly place women in precarious

situations based on a male partner's misinterpretation of sexual contact as evidence of a woman's desire for sexual intercourse to ensue.

Role of Alcohol and Placing Blame

Research suggests that others may excuse sexually aggressive men under the influence of alcohol for their actions (Cameron & Stritzke, 2003). Research evidence suggests that the consumption of alcohol by the perpetrator, victim, or both before a sexual assault incident occurs influences how others contribute responsibility and blame. The presence or absence of alcohol consumption, perceived level of intoxication, relationship of the offender to the victim, and gender of research participants are all contributing variables to assessing responsibility and blame of sexual assault (Stormo, Lang & Stritzke, 1997; Cameron & Stritzke, 2003; Scronce & Corcoran, 1995; Kahn, Jackson, Kully, Badger & Halvorson, 2003).

Studies utilizing vignettes have shown that when a female character was depicted as consuming alcohol before a sexual assault incident, participants placed more responsibility onto the victim, rather than the perpetrator, if certain alcohol conditions are met (Cameron & Stritzke, 2003; Stormo et al., 1997). For example, Stormo et al. (1997) and Cameron and Stritzke (2003) investigated the role that alcohol dosage may contribute to attributing blame and responsibility in acquaintance rape by having a sample of college students read, then rate, a series of scenarios that depicted varying alcohol intoxication levels. Their research results indicated that intoxicated victim characters were assigned more responsibility by female participants than were sober victim characters. As the perceived intensity of the victim's intoxication level was increased within the vignette – to moderately or highly intoxicated – the level of blame and responsibility that female

research participants placed on the victim also increased (Stormo et al., 1997).

Interestingly, as the male perpetrator was described as being more intoxicated, the level of blame and responsibility attributed to him declined (Stormo et al., 1997; Cameron & Stritzke, 2003).

Evidence also suggests that these results are not limited to laboratory experiments alone. Kahn et al. (2003) surveyed female college students about personal experiences and attitudes related to sexual aggression. Of the women who completed the surveys ($N = 491$), 18 % indicated that they had experienced at least one past act of sexual aggression that met the legal definition of rape. Interestingly, 85% of the victims did not label or describe their sexual assault experience(s) as rape when they themselves, or the perpetrator, had consumed alcohol prior to the incident (Kahn et al., 2003). As with the experimental studies previously discussed, men were somewhat excused by the victims for their behaviors if at least one of them (e.g., victim or perpetrator) had been drinking alcohol prior to committing sexually aggressive acts.

These studies are important to note because they yield new information, understanding, and implications to the presence or absence of alcohol when depicting a sexual assault scenario. Female participants rated victims in the scenarios as more responsible for sexual assault incidents when compared to male participants (Scronce & Corcoran, 1995; Cameron & Stritzke, 2003; Stormo et al., 1997). Conversely, the perpetrator was partially excused from being responsible for his actions, especially when he was described as more intoxicated than the victim (Stormo et al., 1997). These research results depict a double standard between the culpability of the aggressor and the victim when alcohol is involved; equally troubling is the fact that as the level of alcohol

dosage by the perpetrator increases, the amount of aggression committed against the victim also increases.

Role of Alcohol Dosage and Levels of Aggression

Research evidence suggests that the level of alcohol consumed prior to a sexual assault positively correlates with the severity of aggression during the incident (Ullman, 2003; Abbey et al., 2003b; Abbey, Clinton, McAuslan, Zawacki & Buck, 2002).

Offender alcohol use has been associated with more severe sexual assault outcomes such as completed rape and other physical injuries (Ullman, 2003). Abbey et al. (2002) studied the sexual victimization of 132 college women that had experienced at least one past attempted or completed rape since the age of 14. The perpetrator's aggressiveness, victim's sustained injuries, and both perpetrator and victim alcohol consumption prior to the incident were assessed utilizing a series of survey research instruments (Abbey et al., 2002). Results from this study indicated that the level of sexual aggressiveness perpetrated against the victim positively correlated with increased alcohol consumption by the perpetrator. However, as level of alcohol consumption was increased by the victim, the physical injuries sustained decreased. Evidence such as this suggests that alcohol consumption levels might impede the victim's ability to resist unwanted sexual contact; thus, resulting in fewer bodily injuries due to less physical resistance.

Ullman, Karabastos and Koss (1999) and Abbey et al. (2003b) conducted similar studies, however, they used male participants who self-reported committing past acts of sexual aggression. Similar results were found to those findings described above. For example, both studies indicated that the severity of sexual aggression perpetrated against the victim corresponded to the amount of alcohol consumed by both the victim and

perpetrator (Ullman et al., 1999; Abbey et al., 2003b). As men self-reported higher levels of alcohol consumption prior to the assault, the level of aggression also increased (Ullman et al., 1999; Abbey et al., 2003b). In a similar manner as Abbey et al.'s (2002) research findings, resistance and physical injuries declined as the victim's level of alcohol consumption increased (Ullman et al., 1999; Abbey et al., 2003b). Evidence from these studies suggest that as victims become more intoxicated, their ability to resist sexual aggression is decreased and the amount of physical force used by the perpetrator is also decreased, resulting in fewer bodily injuries.

In sum, frequent, episodic drinking is associated with men behaving in a more sexually aggressive manner (Abbey et al., 2003b; Abbey, et al., 2001a; Carr & VanDeusen, 2004). Research also suggests that alcohol negatively affects the judgment of both men and women. Men under the influence of alcohol are more likely to overlook a woman's desire to end sexual contact (Gross et al., 2001; Marx et al., 1999) and incorrectly perceive a female as more sexually aroused when compared to men who have not consumed alcohol (Abbey et al., 2003a). On the other hand, women under the influence of alcohol were found to consent to unwanted initial sexual contact (Davis et al., 2004) and resist male aggressors in a passive manner (Davis et al., 2004; Masters et al., 2006). The effects of alcohol on men's judgment could contribute to their viewing women under the influence as willing sexual participants. Conversely, intoxicated women may be unable to respond to sexual advances in a manner consistent with ending the undesired situation; thus, a rape or sexual assault could ensue.

When a sexual assault occurs in conjunction with alcohol, men and women seem to differ when attributing responsibility and blame (Stormo et al., 1997; Cameron &

Stritzke, 2003; Scronce & Corcoran, 1995; Kahn et al., 2003). Female participants often rate men portrayed in research vignettes who are intoxicated as less responsible and blameworthy as the male character's level of described intoxication increased (Stormo et al., 1997; Cameron & Stritzke, 2003). Interestingly, even women who had actually suffered at least one past sexual assault were less likely to describe the event as rape when alcohol was involved (Kahn et al., 2003). These studies indicate that men under the influence of alcohol are somewhat excused for their behaviors. When alcohol is involved in a sexual assault "...the bottle may grant a pardon to the perpetrator, [but] it tends to hold greater blame for the victim" (Stormo et al., 1997, p. 299).

Although researchers have investigated sexual assault perpetrated against college women for over 50 years, according to Koss (2005), and Rozee and Koss (2001), among additional researchers, there is still much unknown about why some men commit acts of sexual aggression. In addition, researchers claim that the level of male perpetrated sexual aggression has remained approximately the same (Koss, 2005; Rozee & Koss, 2001). Results indicate linkages between alcohol, rape myth endorsement, masculinity, and empathy to sexual aggression; however, there is still much to be learned about why sexual aggression is so prevalent within college student populations. One framework that might provide further insight is the utilization of student development theories. Discussed in the sections below is student development theories and related research.

Developmental Theory Overview

Only a small number of researchers have used developmental theory frameworks to explore the possible linkages of rape supportive attitudes and behaviors of college men (Wilson, Goodwin & Beck, 2002b; Leister, 1999). Cognitive development theory is

briefly introduced in the sections below and then one relevant and specific domain of cognitive development theory is discussed in more detail. This initial portion of the theoretical research is to report the possible connection of sexual assault to developmental theory, not to provide a synopsis of every related research investigation.

Cognitive Development

According to theorists, cognitive development is achieved through a series of stages (also commonly referred to as schemata and positions); theorists base this on suppositions that persons use structures to classify and adjust experiences to their respective environments (Kohlberg, 1976; Perry, 1999). Cognitive theorists “focus on *how* people think, reason, and make meaning of their experiences” (Evans et al., 1998, p. 124). Exposing persons to more complex experiences facilitates the changing and development of more complex cognitive structures (Kohlberg, 1976). Structure change and development occurs through the process of assimilation and accommodation, but only if there is a sufficient level of equilibrium in both. Assimilation is the successful integration of new information and accommodation is the process of changing existing, or creating new, structures or stages to incorporate and use the new information and/or experiences. As persons become accustomed to stimuli, additional more complex and higher structured development takes place and they are then developmentally better equipped to respond to their environment (Lapsley, 2005). Included within this construct of cognitive theory is how individuals make moral related decisions that affect others and themselves.

According to Turiel (2005) and Lapsley (2005), the tradition of cognitive development research on morality is traceable to the early work of Piaget. In fact, these

researchers claim that Piaget “pioneer[ed] the study of moral judgment” (Lapsley, 2005, p. 37). Although he studied moral development only a short time early in his career, important propositions resulted from his work. Piaget claimed that moral development results from two distinct stages in one’s maturation, social interactions and self-realized internal emotional responses (Turiel, 2005). Because of a variety of interactions with peers, adults, and educational institutions, among other influences, Piaget posited that social interactions initially either enhanced or impeded the development of one’s morality. In other words, through continuous involvement with the world around oneself, individuals initially become aware of injustices, inequalities, and the welfare needs of others. It is when these realizations occurred, in conjunction with an internal emotional response, that a higher stage level of moral development takes place.

Turiel (2005) claimed that early moral development researchers, like Piaget, believed humans were “in-born” with emotions of “affection, and sympathy, as well as . . . compassion” (p. 22) and that humans naturally had the ability to form basic moral convictions. However, the type of social interactions one had with others defined the type of development (either or positive or negative) achieved. Once the individual progressed to a more internalized rational level of moral reasoning, autonomy was realized and development moved away from an externally driven phenomenon to an internally motivated one. In other words, Piaget’s model was a constructivist theoretical paradigm. Piaget undoubtedly pioneered the study of moral development, however, “it was Kohlberg’s work that galvanized a whole generation of scholars to pursue moral reasoning” (Lapsley, 2005, p. 37).

Kohlberg's Moral Development Domain

Kohlberg initially used a longitudinal research design to investigate the moral reasoning of adolescent boys over an 18-year period (Duska & Whalen, 1975). Like Piaget before him, Kohlberg posited that individuals learned to reason through invariant and qualitatively different hierarchical stages. However, Piaget favored social influences as explanations for understanding moral development, but Kohlberg focused on how individuals progress in stage development as their interpretations of society's rules and expectations changed. In other words, Kohlberg's theory focused on how the *individual* comes to make moral judgments in reaction to their view of the world (Kohlberg, 1970). Kohlberg learned how research participants made moral judgments by having them describe their reactions to hypothetical moral dilemmas; he would then use data coding techniques to transcribe the interviews, paying particular attention to the reasoning participants gave for deciding a particular course of action when confronted with a moral dilemma (Colby & Kohlberg, 1987).

Kohlberg (1970) viewed justice as the central component of moral judgment development. In addition, Evans et al. (1998) claimed that Kohlberg's work was unique because he defined moral justice as "the primary regard for the value and equality of all human beings, and for reciprocity in human relationships, [and] was a basic human standard" (p. 173). In short, Kohlberg posited that moral justice was universal for all societies and cultures (Rest, Narvaez, Thoma, & Bebeau, 2000).

Kohlberg posited that as an individual is able to take the perspective of others (put oneself in the position of understanding what someone else is thinking, feeling, etc) they become cognitively ready for higher moral development stage progression. Although a

necessary component, perspective taking does not guarantee moral development progression, but rather it appears to arbitrate the process (Colby & Kohlberg, 1987; Rest et al., 2000). Finally, higher stages of moral development are desirable because individuals can comprehend, respond to, and make use of all the previous stages when confronted with moral dilemmas. However, Kohlberg posited that stages are “hard” in that individuals could not, and would not, exhibit tendencies to think at more than one stage higher than their current development levels. Therefore, when subscribing to the Kohlbergian moral development paradigm, higher stage development is usually viewed as better (Colby & Kohlberg, 1987; Rest et al., 2000).

The *Moral Development Theory* describes how persons develop moral reasoning abilities through three distinct levels. Each level describes how individuals define “both social facts and sociomoral values, our oughts [sic]” when confronted with moral dilemmas (Evans et al., 1998, p. 173). In other words, each level represents and describes how individuals morally relate to the world around them. Table 1 provides a reference for a general overview of each level and stage. Also provided in the section below is a more in-depth discussion of each level and stage of Kohlberg’s theory.

Table 1

Moral Development Theory

Level I: Preconventional	Level II: Conventional	Level III: Postconventional
Stage 1: <i>Heteronomous Morality</i> - Avoid breaking rules that are backed by punishment	Stage 3: <i>Interpersonally Normative Morality</i> - Live up to close personal expectations	Sage 5: <i>Human Rights and Social Welfare Morality</i> - Aware that others have their own values and opinions
Stage 2: <i>Individualistic, Instrumental Morality</i> - Follow rules, only when it is in own interest	Stage 4: <i>Special System Morality</i> - Uphold the Law	Sage 6: <i>Morality of Universalizable, Reversible, and Prescriptive General Ethical Principles</i> - Belief in and follow universal moral principles

Note. Information was compiled from Colby and Kohlberg (1987) and Rest et al. (2000) to create the above table.

At level I, *Preconventional*, persons are believed to be at their most simplistic outlook on moral development. Individuals at this level have yet to learn societal rules and obligations and moral reasoning revolves around notions of rewards and/or punishments. Individuals exhibit an internally focused perspective that is concrete and they often portray self-focused attitudes (e.g., “what’s in it for me”) (Colby & Kohlberg, 1987). The preconventional level is comprised of two stages. Stage 1, otherwise known as *Heteronomous Morality*, defined persons as obeying and complying with policies, laws, rules, and other governing mechanisms to avoid punishment because persons of authority have all the perceived power. Individuals in this level of development justify their moral decisions based on the perceived risk level of punishment. In addition,

persons at this development stage do not consider the rights, or concerns of others when making personal decisions and/or choices (Colby & Kohlberg, 1987).

Individuals at stage 2, *Individualistic, Instrumental Morality*, follow rules only if it is in their personal interest. Interestingly, persons at stage 2 recognize that others have rights, needs, and interests; however, “fairness” becomes the defining perspective. Persons at stage 2 still base decisions around assuring personal self-satisfaction, just as those individuals at stage 1. However, the difference from stage 1 to stage 2 is that judgments of rightness and other obligations are accomplished by ensuring social interactions, exchanges, among other self-serving interests, minimize negative outcomes through fair dealings and not necessarily fear of punishment. Persons in stage 2 are no more concerned with others than someone in stage 1 is; rather, stage 2 individuals are pragmatic in that fair social transactions negate negative punishments (Colby & Kohlberg, 1987).

According to Evans et al. (1998), level II, or the *Conventional level*, is the “member of society perspective” (p. 174). Individuals at level II identify with others and understand societal rules and expectations, especially the expectations of persons holding power and authority. At Stage 3, *Interpersonally, Normative Morality*, an individual’s moral decisions revolve around notions of remaining a “good person” by meeting expectations of others whom they are emotionally close with (e.g., husband, wife, father, boyfriend, girlfriend) and then maintaining this approval (Colby & Kohlberg, 1987). Although shared understandings, feelings, and agreements, among other social interactions, now take precedence over personal desires and interests, this perspective

only applies to those persons with whom the individual is emotionally close to and does not translate into a generalized social system of rights and wrongs (Colby & Kohlberg, 1987).

Persons who exhibit stage 4, *Social System Morality*, view the entire societal system as comprised of a set of rules and procedures applied consistently and fairly to all persons. In addition, one's place and obligation in society is to uphold these rules and procedures. Persons exhibiting characteristics of stage 4 will feel a sense of need to carry out any duties and obligations to which they agreed to perform (Colby & Kohlberg, 1987).

Level III, *Postconventional*, is also comprised of two stages. At this level of moral development, persons disassociate themselves from societal expectations and base their actions/choices on personal principles. Level III represents the "prior to society" (Colby & Kohlberg, 1987, p. 19) perspective, meaning that persons separate their decisions from all other influences and thus come to make choices of equitable and fair treatment of others. The major difference at this level of development from the previous ones is the individual's critical analysis of societal expectations. Individuals discard those societal expectations that are non-congruent with their personal moral development for more favorable personal decisions (Colby & Kohlberg, 1987; Duska & Whelan, 1975; Evans, et al., 1998). For example, at stage 5, *Human Rights and Social Welfare Morality*, individuals evaluate the rules and laws of society on basic principles. Persons at this stage-level of moral reasoning will contend that societal principles should dictate that *all* persons deserve equal rights and other protections. In addition, compliance with rules and laws are no longer based on fear of external power and authorities; rather, at this level,

individuals view all of society as a social contract. Relationships and moral obligations now depend on making and keeping ones agreements (Colby & Kohlberg, 1987; Duska & Whelan, 1975).

Stage six, *Morality of Universalizable, Reversible, and Prescriptive General Ethical Principles*, was the last moral development stage defined by Kohlberg. Although Kohlberg never empirically found evidence of this stage, he defined characteristics of individuals at this level of moral reasoning by looking to the writings of a small sample of persons such as Martin Luther King, Jr. and Mahatma Gandhi, among others (Duska & Whelan, 1975; Kohlberg, Levine, & Hewer, 1984). Using philosophical and theoretical suppositions, Kohlberg claimed that persons at stage six would exhibit morality based decisions around notions of universal and generalizable principles that are equally applicable in all situations; for example, basic human rights for all persons. In addition, all morality decisions at this stage of development involve the “equal consideration of the points of view of all individuals in the moral situation” (Evans, et al., 1998, p. 175). At stage 6, individuals assess societal expectations. In other words, when and if societal moral expectations are no longer congruent with the basic moral obligations of an individual, stage 6 persons would likely demonstrate the moral leadership needed to resist the moral expectation (Colby & Kohlberg, 1987).

Challenges to Kohlberg’s Theory of Moral Development. Others have challenged Kohlberg’s Theory of Moral Development in the research literature. According to Rest et al. (2000), three specific challenges are most prevalent, (a) philosophical critiques of morality, (b) gender differences, and (c) the nature of scoring the stage constructs when utilizing Kohlberg’s scoring procedures. Although in-depth

reviews of all critiques are beyond the scope of the present research, those most relevant are discussed where appropriate.

The philosophical debate around Kohlberg's theory primarily concerns the abandonment of the *Foundational Principle* by moral philosophers (Rest et al., 2000). The *Foundational Principle* of morality (e.g. "the greatest good for the greatest number") "would provide the key for solving deductively all moral problems," if it was in fact found true (Rest et al., 2000, p. 383). However, during the decades since Kohlberg's theory was initially developed, moral philosophers have changed their theoretical position. Moral philosophers now posit that morality is not built on a single *Foundational Principle*, but rather, morality is "built up from the specific experiences of the community in dealing with specific cases" (Rest et al., 2000, p. 384); in addition, community constructed morality accounts for more influence over individual judgments. In other words, various moral philosophers now argue that Kohlberg's theory is too individually oriented and does not take into consideration the affect of the community on influencing one's moral decisions or actions.

A second critique of Kohlberg's theory is that there are gender differences in how different people view morality. One researcher in particular, Gilligan (1977), believes women and men make meaning of their world in very different ways. For example, Kohlberg (1970) posited that morality was understood best by focusing on notions of justice and how one understands and reacts to rules. Gilligan (1977), however, theorized that women identified more with different concepts, such as *care* and *relationships* with others. Gilligan (1977) also posited that women proceed through a series of three levels, each with two transitional stage periods. Each level that a woman achieved represented a

more multifaceted affiliation between how the woman viewed herself and others in relationships. In other words, Gilligan (1977) posited that moral choices of women most depended upon how moral choices would influence personal relationships. Care and relationships were the underlying constructs most important in her theoretical assertions.

However, recent researchers dispute that both Kohlberg's and Gilligan's theories need to remain mutually exclusive to issues of gender. In fact, some researchers even posited that Gilligan's theory is an expansion, rather than critique, of Kohlberg's theory (Jorgensen, 2006). Research results obtained by Rest, Narvaez, Bebeau, and Thoma (1999) support this notion. For example, after reviewing the results of several major studies that used the Defining Issues Test, (a standardized moral development instrument), researchers found no statistically significant differences between women and men (Rest et al., 1999).

The nature of scoring the stage constructs is the third concern most often charged against Kohlberg's theory (Evans, et al., 1998; Rest, et al., 2000). Researchers who subscribe to concerns on the nature of scoring the stages do so for a number of reasons. First, stage scoring procedures call for ignoring participants' responses that fail to make up at least 25% of the next higher stage assignment. Lapsley (1996) posited that measuring total moral reasoning is confounded with research methods that exclude up to 25% of a participant's responses. A second criticism is that stage variations often result as a function of the dilemma type. According to Lapsley (1996), "many researchers suggest that any strong reading of the structured whole assumption is not justified" (p. 92) and it would appear that participants use a variety of stage structures based on the presented moral dilemma, among other influences.

In fact, it would seem logical to state that the Moral Judgment Interview scoring procedures potentially cause the homogenizing of interview results by excluding a large portion of the data. When homogenizing does occur, it potentially results in overestimating the internal consistency and underestimating stage heterogeneity; thus, instrument confidence is artificially inflated and participants' total moral reasoning abilities are underreported (Lapsley, 1996; Rest et al., 2000). Nonetheless, potential problems with the scoring of interview data, gender differences, and philosophical differences of morality should not lead one to conclude that Kohlberg's theory is deficient. In reaction to the above-discussed criticisms, researchers have recently begun to shift their efforts to what is presently known as the neo-Kohlbergian model.

Neo-Kohlbergian Model – A Recent Shift in Theory

Starting during the early 1970s a number of researchers began to move away from investigating moral development by solely utilizing Kohlberg's Moral Judgment Interview (MJI) (Rest, et al., 2000). The shift away from the MJI happened for several reasons. For example, the MJI was labor intensive. Conducting interviews, transcribing the interview data, and training researchers, all contributed to the limited amount of research one could logically perform (Rest, Thoma, Narvaez, & Bebeau, 1997); thus, the Defining Issues Test (hereafter referred to as DIT) emerged as a "quick and dirty multiple-choice alternative to Kohlberg's time-consuming and complicated interview procedure" (Rest et al., 1999, p. 4).

The DIT consists of several moral dilemmas. Research participants read, rate, then rank, how important different proposed considerations from the moral dilemmas is to them (Rest, et al., 1997). From the DIT, moral judgment is assessed by calculating an

index score (P score) which ranges in values of 0 to 95 and represent the participant's development. The P score is based on a participant's ranking of items on the DIT that are written to match Kohlberg's stages 5 and 6. In other words, the P score represents the proportion of postconventional moral reasoning that participants utilize when confronted with moral dilemmas presented on the DIT. Because Kohlberg's model assesses development in terms of one stage or another (e.g., either stage 4 or 5, but not both) and the DIT measures the proportional amount of postconventional reasoning of participants, researchers posited that moral reasoning may be more complicated than previously thought. According to Rest et al. (1999), as findings began to accumulate over the decades, DIT researchers began to reconsider some of Kohlberg's theoretical points. From this early work with the DIT emerged the neo-Kohlbergian model of moral development. Discussed below are how neo-Kohlbergian theory is similar to and different from Kohlberg's model.

Like Kohlberg before them, researchers who ascribe to neo-Kohlbergian theory posit that the "best way to understand morality is to focus on its cognitive component" (Thoma, 2005, p. 69). Neo-Kohlbergians claim that focusing on the cognitive component helps them understand how individuals come to comprehend their general social world, which aids in understanding how individuals react to moral issues (Thoma, 2005). Another similarity with Kohlberg's model is neo-Kohlbergian theorists posit that moral development is a gradual process that takes place over an extended period. In addition, like Kohlberg before them, neo-Kohlbergians posit that culture possibly serves as a moderator of moral development, but the individual is the one who constructs his or her view of the social world (Narvaez, in press; Thoma, 2005). Finally, neo-Kohlbergian

theory is similar to Kohlberg's model by postulating that central to development is one's successful transition into a postconventional view of social cooperation (Thoma, 2005).

Neo-Kohlbergian theory also has several differences from Kohlberg's original model. Upon reviewing the neo-Kohlbergian model, the most dramatic shift from Kohlberg's theory is the rejection of hard stages (Thoma, 2005). Instead of defining development as the movement from one discrete stage to the next, the neo-Kohlbergian model posits that development gradually occurs from lower to more complex cognitive structures. In addition, individuals will respond to moral dilemmas differently based on any number of conditions and will not necessarily respond with their highest form of moral reasoning (Thoma, 2005). Neo-Kohlbergians argue that individuals constantly have numerous different moral conceptions available at any one time; thus, any research instrument, or strategy, "must assess not only which conceptions are available, but [also] the most preferred" (Thoma, 2005, p. 69).

Neo-Kohlbergians also posit that the DIT is able to assess the implicit understandings of moral dilemmas whereas the MJI relies on tacit understandings of moral issues. Neo-Kohlbergian researchers believe the implicit moral underpinnings that the DIT assesses are a more realistic representation of decision-making. They posit this because the DIT is believed free of heavy verbal demands and weighty conscious reflection. In other words, the DIT assesses how individuals "make judgments with little evidence of direct or conscious reflection" (Thoma, 2005, p. 70). According to the neo-Kohlbergian model, the DIT taps a level of processing that is thus more realistic in how persons make moral decisions in every life. They make this claim based around the constructs associated with the DIT. For example, the DIT has multiple moral dilemma

stories, followed by partial sentence fragments. When an individual reads the dilemmas, then rates the importance of the sentence fragments, moral schemas are activated. The neo-Kohlbergian model presumes that individuals thus respond with their preferred schema because the partial sentences activated bottom-up processing (e.g., stating just enough of a line argument to activate a schema); in addition, schema activation is limited to the level of the individual's development (Rest et al., 1999).

The final major difference between Kohlberg's theory and the neo-Kohlbergian model is an expanded definition of postconventional moral reasoning. In order to overcome the moral philosophy critiques of Kohlberg's theory, the neo-Kohlbergian model postulates four distinct criteria for postconventional reasoning (Thoma, 2005; Rest et al., 1999). The expanded criteria of postconventional reasoning include the following four components.

(a) The central role of moral criteria in the formulation and understanding of laws and norms, (b) the appeal to an ideal – that is, the system – must convey some idealized view of how the community ought to be ordered. Further, (c) a postconventional system must present a clear sense that moral ideals are open, subject to critique and thus sharable with the larger community. Finally, (d) the system is fully reciprocal, that is, development to address the community as a whole and then uniformly applied (Thoma, 2005, p. 71).

Like Kohlberg before them, neo-Kohlbergian theorists posit that there is a developmental progression towards postconventional reasoning. However, they posit that there is a need for a more expanded definition of postconventional reasoning (Rest et al., 2000).

Although there are apparent similarities and differences, the neo-Kohlbergian theory expands upon, but does not discredit Kohlberg's original model. In fact, the theorists who originally postulated the neo-Kohlbergian model claim that it retains the core assumptions of Kohlberg's theory; consequently, "this is the *Kohlbergian* part of . . . [the] *neo-Kohlbergian approach*" (Rest et al., 2000, p. 383).

The Four Component Model

During the early 1980s, Rest et al. (1999) conducted an analysis of the field of moral development research in an attempt to organize thematically disparate research lines. The creation of the *four component model* resulted from these efforts. The *four component model* rests on the premise that various psychological processes work together to formulate moral functioning (Rest et al., 1999). The four psychological components are (a) moral sensitivity, (b) moral judgments, (c) moral motivation, and (d) moral character (Rest et al., 1999; Thoma, 2005).

Moral sensitivity, component I, includes properly interpreting situations, role taking, and recognizing a presented moral problem (Rest et al., 1999). Components II, moral judgments, include an individual's ability to justify morally any actions undertaken. The third component, moral motivation, is the degree of commitment to which moral courses of action are reasoned and the taking of personal responsibility for one's moral outcomes. Finally, component IV, moral character includes persisting at any moral task (e.g. having courage, overcoming temptation) (Rest et al., 1999).

According to Thoma (2005), one major implication of the *four component model* is that both Kohlberg's theory and the neo-Kohlbergian model are rightly contained within component II (moral judgment). Further, the *four component model*, and the

subsequent analysis that resulted, positioned the DIT as a sufficient measurement of moral judgment (Thoma, 2005). In other words, component II, moral judgment, leads to the output of “what one ought to do” (p. 72); thus, the DIT suitably measures this form of reasoning (Thoma, 2005).

Moral Development Research

Numerous moral development lines of research have surfaced within the literature; nevertheless, a review of them all is beyond the scope of the present work. Included within this section of the present paper are those lines of research that seem connected to moral development and sexual aggression.

Intergroup Relationships and Moral Development. Morality in the context of intergroup relationships is one line of research that could aid in the understanding of male perpetrated sexual aggression. For example, Killen, Margie, and Sinno (2005) conducted a recent comprehensive review of the literature and results suggested that moral developmental research on the universality of fairness, justice, and equality have recently begun to be explored in the context of intergroup relationships. Specifically, developmental research on gender and racial stereotypes and intergroup relationships is appropriate for further understanding. Research has also shown that gender, and to a lesser extent racial stereotyping increases with age. Both gender and racial stereotypes affect how adolescents and adults make interpretations about personal activities and behaviors in relation to concepts of morality (fairness, justice, and equality).

Adolescents and children typically refrain from activities that infringe on moral concepts under certain simple social situations. However, studies indicated that when social situations became more complex, stereotypical expectations, and expected group

functioning, became the basis for legitimizing behaviors at the exclusion of basic moral concepts (Killen et al., 2005). In other words, ambiguity in some situations seemed to indicate that individuals reverted to stereotypical social conventions. Evidence such as this provides a framework for researchers to begin to understand better the unique aspects of moral development and intergroup behaviors and attitudes.

Aggression and Moral Development. Prior to discussing aggression and moral development related research, it is first necessary to consider the “type” of aggression persons commonly utilize. There are primarily two distinct subtypes of aggression – reactive aggression and proactive aggression (Dodge, Lochman, Harnish, Bates, & Pettit, 1997). Reactive aggression is characterized as one's defensive and/or hasty response to a perceived threat (Dodge et al., 1997). Reactive aggression is exhibited in persons when “internalized anger and frustration from past rejections frequently result in excessively emotional and forceful responses to even minor immediate stressors” (McAdams, 2002, p. 91). In other words, aggression is a *reactive* response to some perceived external stimulus. Proactive aggression, however, is premeditated in that individuals use it as a means to obtain a desired goal (e.g., bullying, domination, coercive acts) (Dodge et al., 1997). In short, proactive aggression typically does not result from an external immediate perceived threat, as reactive aggressions does; rather, proactive aggression is employed by individuals as a *deliberate* means to persuade others to conform to some preconceived goal or desire (McAdams, 2002). Researchers have found that proactive aggressive adolescent males were significantly more likely ($F(3, 511) = 4.32, p < .01$) to engage in past physical aggression when compared to male adolescents assessed as reactive aggressors (Brendgen, Vitaro, Tremblay, Lavoie, 2001). In addition, research results

suggest that school officials, and clinical practitioners alike, both reported a significant rise ($t(460) = 14.18, p < .01$) in the number of proactive aggressive incidents during the previous year (McAdams, 2002). Research results, such as those previously discussed, suggest that proactive forms of aggression may become more frequent within younger populations.

Researchers have also investigated the correlates of aggression with moral development. According to Tisak, Tisak, and Goldstein (2005), when conducting investigations on the dimensions of aggression and moral development, there are two important moral constructs to consider. First, one dimension of morality includes positive aspects or actions, such as, sharing, and helping, among other positive attitudes and behaviors (Tisak, et al., 2005). Researchers often refer to the positive dimensions as *prosocial* behaviors. Second, is the negative dimension, which consists of *violations of rights, welfare, hitting, and fairness*, among other constructs of morality. The negative dimension of morality is what most researchers have used to investigate correlates of moral development with aggression.

For example, Berkowitz, Mueller, Schnell and Padberg (1986) studied the negative dimensions of morality utilizing an experimental research design. These researchers examined the role of aggression and moral development stage level of female ($n = 186$) and male ($n = 160$) high school and college students that ranged in age from 14 to 30 years (80% were between 17 and 22 years). Utilizing Kohlberg's MJI, researchers assigned participants into their respective stage levels, (a) stage 2, 51% male (81% high school students), (b) stage 3, 40% male (49% high school students), and finally (c) stage 4, 51% male (14% high school students). The researchers found no students higher than

stage 4 (Berkowitz et al., 1985). Students read, and then rated, the perceived level of aggression in a series of hypothetical aggression vignettes. Interestingly, participants assessed at stage 2, rated the perceived level of aggression significantly lower than both stage 3 and stage 4 participants (Berkowitz et al., 1985). As Kohlberg and others would have predicted, stage 4 participants rated the level of aggression significantly higher than all other participants did. The authors posited that results from this experiment indicated that the stage level of moral reasoning does seem to influence how one views aggressive attitudes and behaviors.

Tisak et al. (2005) conducted a review of the literature and found additional studies that showed negative morality also correlated with “stealing, hitting, and pushing a child” (p. 614). In addition, the type of aggression one describes as acceptable is largely dependent on the relationship status being depicted (e.g. a friend versus an acquaintance). For example, students (sixth and eighth graders) stated that retaliation with physical aggression was acceptable for both a good friend and acquaintance; however, when pressed to respond whether this was the “right” thing to do, participants stated that it was *more* right to first discuss the situation with the friend, rather than retaliate with more aggression (Tisak, et al., 2005). In conclusion, results from a recent meta-analysis suggested that juvenile delinquents had significantly lower levels of moral development when compared to ($d = .76$) nondelinquents; this remained true even after controlling for socioeconomic status, culture, gender, age, and intelligence (Stams, Brugman, Dekovic, Rosmalen, Laan, & Gibbs, 2006).

Empathy, Sympathy and Moral Development. Additional researchers posit that individuals base acceptable forms of retaliation or initiated aggression as being dependent

on a number of other prosocial variables. Discussed below are additional prosocial attitudes and behaviors and the connection(s) to moral development. Specifically examined is the role of empathy, sympathy, and moral development.

Before proceeding further, it is first necessary to discuss the definitions of empathy and sympathy. As previously discussed, most researchers accept that empathy is comprised of (a) the ability for one person to adopt the position of another person, (b) recognize the feelings of someone else, and (c) recognize the distress of another person (DeGue & DiLillo, 2005). Sympathy, on the other hand, is an individual's reaction stemming from an empathetic response and consists of *feeling* sorrow or concerned for someone else (Eisenberg, 2000; Eisenberg, Spinard, & Sadovdky, 2005). According to Eisenberg et al. (2005), researchers often confuse the constructs of empathy and sympathy (and vice versa); however, empathy is the *cognitive* precursor to sympathy, which is *affective*. This is important to note because researchers (e.g. Hoffman, 2000) often subsume the definition of sympathy into and/or part of the definition of empathy (Eisenberg et al., 2005); thus, one must be aware of such definition confusion when reviewing related literature.

According to Lapsley (1996), Eisenberg et al. (2005), and Hoffman (2000), there is considerable evidence to suggest that empathy and sympathy are directly related to prosocial behaviors and moral development. For example, Lapsley (1996) posited that moral action is "motivated by the resonance of empathetic affect" (p. 180). Hoffman (2000) views empathy as a moral motivator in individuals because (a) most moral encounters involve a victim and (b) empathy triggers the motivation (e.g. sympathy) for others to come to a victim's aid. The affective personal distress caused by the empathetic

response likely acts as an instigator for intervention, thus, motivating someone to act for removing, or alleviating, another from potential harm. Although somewhat beyond Kohlberg's initial theoretical model of moral motivation, researchers claim this approach is nonetheless "more Kohlbergian than not" (Lapsley, 1996, p. 180).

Empirical evidence supports the notion that empathy and moral development are associated with maturation. In fact, empathy development seems to begin as early as 12 to 18 months of age and continue to increase at least throughout adolescence (Eisenberg, et al., 2005; Hoffman, 2000). For example, a recent longitudinal study collected data every other year, beginning when participants ($N = 37$) were 4-5 years and continuing until 25 – 26 years of age. Evidence from the study suggested that moral development, empathy, and sympathy were significantly interrelated. Utilizing interviews to assess moral judgment and survey techniques to assess prosocial indices (empathy/sympathy) researchers found that moral judgment significantly correlated with empathy ($r = .39, p < .05$) and sympathy ($r = .43, p < .05$) (Eisenberg, Guthrie, Cumberland, Murphy, Shepard, Zhou, & Carlo, 2002). Assessed moral reasoning abilities also increased as participants aged (Eisenberg et al., 2002). This research evidence supports the notion that cognitive development seems to become more sophisticated with age and prosocial attitudes, such as empathy and sympathy, are positively correlated with one's moral development (Lapsley, 1996).

Sexual Aggression and Moral Development Research. A small number of researchers have used moral development theory to explore the possible link(s) to sexual aggression; nevertheless, some limited research results are available. For example, Wilson et al. (2002b) examined the stage level of moral development and *attitudes* of

rape in 134 Australian men, of whom, 24 were convicted rapists. Research results indicated that the convicted rapists were significantly more likely to display lower levels of moral development and more rape-supportive attitudes when compared to non-rapists (Wilson et al., 2002). The convicted rapists' levels of moral development on the Defining Issues Test ($M = 30.17$, $SD = 12.96$) were negatively correlated with all three rape supportive attitude measures: (a) Attitudes Toward Rape Questionnaire ($r = -.60$, $p < .01$, $M = 58.42$, $SD = 15.65$), (b) Burt's Rape Myth Acceptance Scale ($r = -.52$, $p < .05$, $M = 31.08$, $SD = 12.29$), and (c) the General Attitudes Toward Rape Scale ($r = -.70$, $p < .01$, $M = 83.83$, $SD = 12.19$) (Wilson et al., 2002). In addition, moral development was negatively correlated with a question asking participants if they would rape someone under the condition of being guaranteed not to be caught ($r = -.27$, $p < .01$). Results such as these indicate that higher stages of moral development potentially moderate rape supportive attitudes.

Although promising, this research should be viewed with caution for three particularly important reasons. The researchers' utilization of (a) convicted rapists, (b) the nationality of participants (all Australian men), and (c) the age of participants ($M = 30.7$ years, $SD = 6.48$) (Wilson et al., 2002b). Further, researchers would need to investigate and determine the applicability and comparability of these findings to men of traditional college age (18 – 24 years) within the United States. These findings are promising, however, because they seem to indicate that moral development and rape supportive attitudes are in fact correlated.

Researchers have also investigated the correlation between level(s) of moral development and self-reported sexually aggressive *behaviors* of 292 male college

students (Leister, 1999). Research results from this investigation failed to find statistically significant results. However, there were admittedly several “methodological difficulties” (Leister, 1999, p. iv) that potentially contributed to the failure to reach significant findings. For example, Leister (1999) claimed that of her original 670 distributed survey packages, only 178 were completed and returned (26.5%). To overcome the data collection shortfall she changed collection procedures and sample populations. Leister utilized a second sample of participants from another higher education institution in close geographic proximity and then combined the results from both populations. In addition, when participants in the second sample completed the questionnaires, she remained present within the classroom. Finally, the research findings were limited by few men admitting sexually aggressive behaviors. Asking men to admit past negative sexual behaviors while the female data collector was present in the classroom potentially contributed to the inability to achieve statistical significance.

In sum, the research cited has shown that social scientists have used moral development theory to investigate several lines of research. Research results indicated that moral development was correlated with intergroup relationships (Killen et al., 2005) and aggression (Tisak et al. 2005). Empathy, sympathy, and moral development were also found to become more sophisticated as one progresses throughout maturation (Eisenberg et al., 2002). Finally, research results from Wilson et al. (2002) provided the most direct insight into how convicted rapist’s levels of moral development and sexually aggressive attitudes were linked.

Summary

Research results on sexual assault and moral development theory offer potential insights into reasons why some men commit acts of aggression. Throughout the cited research, several variables were often interrelated. For example, traditional gender roles seemed to contribute to negative masculine ideologies (Burt, 1980; Murnen, et al., 2002; Lock & Mahalik, 2005). Research evidence also suggested that negative masculine ideologies contributed to violence directed at women by reinforcing the notion that women are inferior to men (Burt, 1980). Two specific negative masculine ideologies surfaced as problematic, hypermasculinity (Mosher & Sirkin, 1984; Mosher & Anderson, 1986; Murnen et al., 2002) and hostile masculinity (Malamuth et al., 1991; Malamuth et al., 1995). Both masculine constructs significantly correlated with participants' self-reporting of past acts of sexual aggression (Murnen, et al., 2002) and rape myth endorsements (Malamuth et al., 1991).

Additional cited studies suggested that rape myth endorsement serves as a significant risk factor for male perpetrated acts of sexual aggression. Researchers posited that rape myths help men rationalize rape (Burt, 1980; Johnson et al., 1997) by potentially reducing victim empathy (Abbey et al., 2006; Briere & Malamuth, 1983; DeGue & DiLillo, 2004). Evidence supporting the concept that empathy, rape myth endorsement, and sexual aggression were significantly interrelated was found in both convicted rapists (Fernandez & Marshall, 2003) and college men (Wheeler et al., 2002). In addition, Wheeler et al. (2002) discovered in a sample of college men that empathy effectively moderated hostile masculinity.

Also reported in several studies was that fact that masculine ideology, rape myth endorsements, and empathy were interrelated. Research data also suggested that the victim, perpetrator, or both, frequently consume alcohol prior to a sexual assault incident. In fact, the majority of men who commit sexually aggressive acts reportedly consumed alcohol prior to the occurrence of sexual aggression (Brecklin & Ullman, 2002). Sexually aggressive men under the influence of alcohol often perceive victims as less distressed (Norris et al., 1999) and display lower levels of victim empathy when compared to non aggressive men (Abbey, et al., 2001b). Throughout the literature, research evidence suggested that male perpetrated sexual aggression is a complex phenomenon, often with many interrelated variables contributing.

Still unclear is how male perpetrated sexual aggression and levels of moral development interrelate. Interestingly, however, evidence suggests that similar constructs are found within both sexual aggression and moral development. For example, as previously discussed, Killen et al. (2005) suggested that gender stereotypes and moral development were interrelated. This research suggests that higher levels of moral development results in the lowering of traditional gender role stereotypes to which one ascribes (Killen et al., 2005). If in fact true, this may support Burt's (1980) and Murnen et al.'s (2002) postulates that traditional gender roles act as a contributor to male perpetrated sexual aggression.

Empathy, sympathy, and aggression were also associated with moral development. For example, researchers have successfully correlated empathy levels, among other prosocial attitudes and behaviors, with one's level of moral development (Eisenberg, 2000; Eisenberg et al., 2005; Hoffman, 2000). Assessed empathy levels, self-

reported past acts of sexual aggression (Wheeler et al., 2002), and rape myth endorsements, have all likewise been found significantly interrelated (Bushman et al., 2003). In addition, researchers discovered that when participants read about aggression in vignettes, the participants' levels of moral development were related such that higher levels of moral development increased the ability to identify violent behaviors.

Although diminutive in number, researchers have previously investigated moral development and sexual aggression with mixed results. Utilizing a sample of college men, Leister (1999) investigated moral development levels and self-reported past aggressive sexual behaviors. Unfortunately, this research had several validity issues and it failed to achieve significant results. Wilson et al. (2002), however, found evidence to suggest that moral development and rape myth endorsement were interrelated. Although promising, one should use caution before generalizing these findings to other populations due to the study sample consisting of convicted felons. Future studies would need to verify the study results. Nevertheless, Wilson et al. (2002) did manage to report significant linkages between sexually aggressive attitudes (e.g. rape myth endorsement) and moral development.

Finally, moral development theory could potentially provide researchers with a framework to understand a number of seemingly interrelated constructs of sexually aggressive men. Because researchers have successfully linked sexual aggression to several attitudes and behaviors, moral development theory could now prove useful for furthering the related research literature. Conducting future studies to find out how college men's levels of moral development and sexually aggressive attitudes are interrelated would likely prove fruitful. Specifically, rape myth endorsement and

proclivity to rape are constructs known within the literature as interrelated within some sexually aggressive college men, understanding better how these also correlate with moral development warrants additional research efforts. Studies should also investigate how sexually aggressive attitudes (e.g. endorsement of rape myths, rape proclivity) are interrelated with negative masculine ideologies, empathy, and self-reported past sexual aggressions, are related to levels of moral development. Additionally, because the perpetrator, victim, or both, often consume alcohol prior to a sexual assault, future research studies should investigate how these variables potentially link to moral development. For example, investigating the role of alcohol as a purposeful method to disinhibit a victim's ability to resist and rape myth endorsements as a means to reduce victim empathy, in conjunction with assessing levels of moral development, could potentially provide researchers valuable insights into male perpetrated sexual aggression.

In sum, this literature review discussed several variables that previous researchers have found interrelated. In addition, moral development theory was introduced as a proposed framework in order to better understand male perpetrated aggression. Several previously known attitudes and behaviors of male perpetrated sexual aggression were found interrelated. Empirically testing whether rape supportive attitudes and the moral development levels of college men are interrelated seems warranted. The following chapter identifies specific research questions and the methods to investigate them in an attempt to provide critical insights into how levels of moral development and sexually aggressive attitudes of first year college men are potentially interrelated.

CHAPTER THREE

Introduction

This study used a correlation research design. Multiple Regression and Correlation (MRC) statistical analysis describe how (a) levels of moral development, (b) rape myth endorsements, (c) hypermasculinity are interrelated. The rationale for collecting these particular data and then subjecting them to multiple regression statistical analysis was to gain insight into the interrelationship(s) of each variable so that researchers and rape prevention programmers can obtain a better understanding of male perpetrated sexual aggression. Discussed in the following sections are the research design, study variables, research questions, research context, participants, instrumentation, procedures, limitations, delimitations, and ethical safeguards/considerations.

Research Design

This study used a correlation research design. According to Gall, Gall, and Borg (2003), one rationale for using a correlation research design is to explore potential causal relationships among variables. In addition, correlation research designs are “especially useful for exploratory studies in areas where little is known” (Gall et al., 2003, p. 325). The utility of MRC is its ability to aid “in a better understanding of the nature of a phenomenon by identifying those factors with which it co-occurs” (Licht, 2004, p. 33). In fact, Licht (2004) suggested that correlation research designs are appropriate for two specific types of studies; those that attempt to predict events or behaviors and “those that attempt to *understand* or *explain* the nature of a phenomenon” (p. 21). MRC is

appropriate for this study because it is designed to *understand* and to help further *explain* how rape supportive attitudes and levels of moral development are interrelated.

Study Variables

Level of moral development (measured by the Defining Issues Test) was the dependent variable for this study. There were two main independent variables: (a) Rape Myth Acceptance (measured by the Illinois Rape Myth Acceptance Scale), and (b) Hypermasculinity (measured by the Hypermasculinity Inventory). Demographic variables (e.g., age, race, religious preference, verbal/quantitative SAT scores and highest education level of parent) were used to describe the characteristics of the sample. In addition, three one-way ANOVAs were proposed to compare four categories of demographic variables. Specifically, individual one-way ANOVAs for (a) race, (b) religion, (c) highest level of education obtained by parents were compared to each outcome variable (i.e., means of DIT, IRMA, and Hypermasculinity Inventory and quantitative/verbal SAT score). Finally, in order to test for instrument order effects, three one-way ANOVAs for each survey version (see Table 2) compared mean scores of the DIT (i.e., P Score), IRMA, and Hypermasculinity Inventory.

Research Questions

The following three research questions and hypotheses guided the investigation into how levels of moral development and rape supportive attitudes were interrelated. In addition, directional hypotheses are provided for Questions 1 and 2. Question 3 and Question 3.a are exploratory in nature; therefore, no hypothesis was made.

1. What is the relationship between levels of rape myth endorsements and levels of moral development in first year college men?

Directional Hypothesis: There is a significant relationship between higher levels of rape myth endorsements and lower moral development levels in first year college men.

2. What is the relationship between levels of hypermasculinity and levels of moral development in first year college men?

Directional Hypothesis: There is a significant relationship between higher hypermasculinity levels and lower moral development levels in first year college men.

3. To what extent do assessed levels of rape myth endorsements, levels of hypermasculinity, and quantitative/verbal SAT scores interrelate with levels of moral development in first year college men?

Question 3a: To what extent does each subscale(s) of IRMA, levels of hypermasculinity, and quantitative/verbal SAT scores interrelate with levels of moral development in first year college men? This question will only be analyzed if the total IRMA score is significantly interrelated within the initial model (see Question 3). For a description of each IRMA subscale see *Instrumentation* section below.

Research Context

This study examined rape supportive attitudes and levels of moral development of all first year college men who attend a public higher education institution, located in the Southeastern mid-Atlantic region of the United States. During 2005 - 2006, approximately 5,500 undergraduate students attended the college. In addition, 99% of the total undergraduate population was enrolled fulltime and 76% resided within campus

housing (William and Mary, 2006). According to the Carnegie Foundation for the Advancement of Teaching (2006), this institution is classified as a public, highly residential, highly undergraduate, selective, medium sized four-year, doctoral, STEM (science, technology, engineering and mathematics) and high research activity university.

Participants

All first year college men who are 18 years old or older and who accepted an invitation to attend the higher education institution where the study took place were solicited for participation ($N = 513$). First year men were preferred for this study for two primary reasons. First, these men were desired for study participation to anticipate and control any cognitive development that occurs through maturation and education. Second, the vast majority of non-first year men who attend this institution have participated in a mandated rape prevention program (see *The Men's Program*, Foubert, 2005). This program has been shown to significantly reduce men's rape myth acceptance and self-reported likelihood to commit future rape (Foubert, 2005) and would have constituted a biased sample.

Instrumentation

The researcher designed four versions of a web-based questionnaire by incorporating all items from three previously established research instruments. The three instruments used in this study were: (a) the Defining Issues Test – Short Form (Rest, 1993), (b) the Illinois Rape Myth Acceptance Scale (Payne et al., 1999), and (c) the Hypermasculinity Inventory (Mosher & Sirkin, 1984). In addition, the researcher solicited demographic information (i.e., participant's age, religion, race/ethnicity, SAT scores, and parent's highest level of completed education).

To mitigate order effects, the researcher counter balanced research instruments by creating four versions of the web-based questionnaire. See Table 2 for each specific questionnaire version and the hierarchical ordering of instruments.

Table 2

Counter Balancing of Research Instruments

Version 1	Version 2	Version 3	Version 4
1. DIT	1. DIT	1. Hypermasculinity	1. IRMA
2. Hypermasculinity Inventory	2. IRMA	2. IRMA	2. Hypermasculinity Inventory
3. IRMA	3. Hypermasculinity Inventory	3. DIT	3. DIT
4. Demographic Questions	4. Demographic Questions	4. Demographic Questions	4. Demographic Questions

Integrated within the following section of the chapter is an in depth discussion of each research instrument's technical adequacy.

Defining Issues Test – Short Form. The Defining Issues Test – Short Form (DIT-SF) was used to operationalize moral development as the dependent variable (see Appendix A). The DIT-SF measures moral judgment as defined by Kohlberg (1986). However, the DIT differs from Kohlberg's theoretical framework in that "instead of scoring free-responses to hypothetical moral dilemmas in an interview (as in the Kohlberg procedure), the DIT presents 12 issues" (Rest & Narvaez, 1998, p. 27) that

participants rate and rank in terms of their perceived importance after reading three hypothetical moral dilemmas (i.e., Heinz, Newspaper, and Prisoner dilemmas).

Once the participants completed the DIT, a P score was calculated according to procedures found within the scoring manual (Rest & Narvaez, 1998). The P score represents the proportion or percentage of postconventional moral reasoning that participants used when confronted with each hypothetical moral dilemma.

According to Rest (1993) and Rest and Narvaez (1998), the technical quality of the DIT has been assessed using at least 10 different criteria. Each criterion is discussed below.

- (a) *Face Validity* – Participants are tasked to make judgments about moral dilemmas. In addition, the DIT “does not only ask what line of action the subject favors (i.e., to steal or not steal a drug), but is [also] concerned with a subject’s [moral] reasons behind the choice” (Rest, 1993, p. 25).

- (b) *Reliability* – Several tests have been conducted on the test-retest reliability for the DIT-SF; these results remain consistent even when including participants from various backgrounds, education levels, and age. For example, one study found that 134 participants (16 to 56 years and junior high school through graduate school) had a test-retest reliability of .77 over a two to three month period. Similar test-retest results were found with ninth graders (.65) and college students (.58) over a two to three week period.

- (c) *Internal Consistency* – As a measure of internal consistency, Cronbach Alphas have generally been reported in the high .70s. For example, research results indicated that the DIT-Long Form (consisting of all 6 stories) produced a Cronbach Alpha's of .77 with a sample of 1,080 participants. The short form had a reported Cronbach Alpha of .76 from the same study.
- (d) *Differentiation of education in groups* – Numerous studies have shown that a large portion (30% - 50%) of variance within participants' scores on the DIT is attributable to ones level of education.
- (e) *Longitudinal Gains* – As expected with a measure of a developmental construct, scores on the DIT tend to increase over time. For example, men and women who did and did not attend college were assessed over a 10-year period; participants showed significant ($F = 20.1, p < .001$) score gains over the course of the study. In addition, longitudinal studies on freshman through senior college students ($N > 500$) showed large effect size gains ($d = .80$).
- (f) *Moral Education Intervention Sensitivity* – Researchers have found that after reviewing more than 50 moral dilemma discussion intervention studies, a moderate effect size ($d = .41$) was achieved. Effect size for the comparison group, however, was relatively small ($d = .09$).
- (g) *DIT Scores Linked to Prosocial Behaviors and Desired Professional Decision-Making* – One review of the literature found that correlations between prosocial behaviors, desired professional decision making, and

scores on the DIT were significantly interrelated in 37 of the 47 studies examined.

- (h) *DIT Scores Linked to Political Attitudes*– A review of DIT scores compared to several dozen correlates of political attitudes found that score correlates ranged from $r = .40$ to $r = .65$.
- (i) *DIT-Short Form Significantly Correlates With DIT-Long Form* – Researchers have found that the P score from the short form of the DIT significantly correlated ($r = .93$) with the long form when using a sample of 160 participants. In fact, researchers have also found that the P score from the DIT-SF significantly correlated ($r = .91$) with the long form with a larger sample of 1,060 participants.
- (j) *Normed for Student Populations* – From 1979 to 1986, thousands of participants, from hundreds of studies, were used to norm scores for the DIT (Rest, 1993). DIT indices are available for several categories of men. For example, scores were available for male junior high school adolescents ($n = 528$, $M = 19.1$, $SD = 6.3$), male high school adolescents ($n = 424$, $M = 28.7$, $SD = 11.8$), college enrolled men ($n = 449$, $M = 44.1$, $SD = 12.2$), and male college graduates ($n = 52$, $M = 61$, $SD = 14$).

Illinois Rape Myth Acceptance Scale. Endorsements of rape myths were assessed using the Illinois Rape Myth Acceptance Scale (IRMA) (see Appendix B) (Payne et al., 1999). This instrument contains 45 total items based on a 7-point Likert type scale (1 = Not at All Agree to 7 = Very Much Agree). Forty items are known rape

myths. For example, respondents rate their level of agreement with several of the following types of rape myths: “If the rapist doesn’t have a weapon, you really can’t call it a rape” (Payne et al., 1999, p. 49). Five statements are “filler items to help control response sets” (Payne et al., 1999, p. 50). An example of a filler statement is, “it is preferable that a female police officer conduct the questioning when a woman reports a rape” (Payne et al., 1999, p. 50). Scores on the IRMA range from 40 (Not at all agree with any of the rape myths) to 280 (Very much agree with all the rape myths).

The IRMA also includes the following seven subscales: (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, (g) and Rape is a deviant event. Reported subscale Cronbach Alphas ranged from .74 to .84 and averaged .79. Payne et al. (1999) also reported that correlates of each subscale with total IRMA scale ranged from .54 to .74. Item-to-subscale correlations ranged from .41 to .72. In addition, item-to-total-scale correlations ranged from .31 to .68 (Payne et al., 1999).

Internal consistency was established with a reported Cronbach Alpha of .93 (Payne et al., 1999). In addition, test-retest reliability was indicated. Test-retest reliability for the IRMA was assessed by correlating participant’s responses to a random subset (20%) of the original items ($r = .90, p < .001$).

Construct validity is supported by researchers using numerous instruments and variables that have known theoretical and/or empirical relationships to rape myths (Payne et al., 1999). Specifically, evidence suggested that IRMA correlated significantly ($p < .001$) with the following instruments: Sex-Role Stereotyping scale ($r = .55$); Sexism scale ($r = .63$); Adversarial Sexual Beliefs scale ($r = .74$); Hostility Towards Women scale ($r =$

.57); Acceptance of Interpersonal Violence scale ($r = .71$); and the Attitudes Towards Violence scale ($r = .50$). See Appendix B for a copy of the IRMA.

Hypermasculinity Inventory. Hypermasculinity, otherwise referred to as macho personality constellation, was measured with the Hypermasculinity Inventory (see Appendix C) (Mosher & Sirkin, 1984). This instrument contains 30 forced-choice response items that measure participants' agreement with three different concepts (10 items per concept). The first concept – “violence is manly” – refers to the notion that some men support violence and aggression (both verbal and physical) as an acceptable and/or preferable masculine expression of power and dominance towards others (Mosher & Sirkin, 1984). One example of an item from this component of the inventory is, “He who can fight; he who can't runs away” (Mosher & Sirkin, 1984, p. 155). The second concept measures the idea that “danger is exciting.” This portion of the instrument assesses the attitude that “survival in dangerous situations, including ‘tempting fate,’ is a manly display of power” (Mosher & Sirkin, 1984, p. 152). An example of an item measuring this component is, “When I'm bored I look for excitement” (Mosher & Sirkin, 1984, p. 155). Finally, the third concept measures “calloused sex attitudes.” This concept measures the notion that some men perceive sexual intercourse as a method to establish masculine power over women, achieve female submission, and accomplish this without empathetic concern for the female's experience(s) (Mosher & Sirkin, 1984). An example of an item that assesses the “calloused sex attitudes” concept is, “Prick teasers should be raped” (Mosher & Sirkin, 1984, p. 155).

Mosher and Sirkin (1984) used a multi-stage development process to create the Hypermasculinity Inventory. In addition, they used existing theory, and previous research

findings, to initially create a 221 item pool (70 calloused sex attitudes; 91 violence as manly; 60 danger is exciting) for inventory inclusion. These original 221 items were then administered to college men ($N = 60$). Afterwards, 30 items from each component with the highest item-total correlation were then administered to a subsequent sample of college men ($N = 135$). Finally, 10 items from each subscale that had the highest item-subscale total correlations were selected for the final version of the inventory.

Internal validity analysis revealed that the three subscale Cronbach Alphas, means, and standard deviations were as follows: “violence is manly” ($M = 3.84$, $SD = 2.84$, Cronbach $\alpha = .79$), “danger is exciting” ($M = 3.87$, $SD = 2.44$, Cronbach $\alpha = .71$), and “calloused sex attitudes” ($M = 3.33$, $SD = 2.63$, Cronbach $\alpha = .79$). In addition, “violence is manly” was significantly correlated with “danger is exciting” ($r = .63$, $p < .001$) and “calloused sex attitudes” ($r = .60$, $p < .001$). “Danger is exciting” was also significantly correlated with “calloused sex attitudes” ($r = .58$, $p < .001$). However, principle axes factor analysis revealed that the inventory primarily consisted of “a single, predominant, latent variable that was relatively homogenous and which was named the macho personality pattern” (Mosher & Sirkin, 1984, p. 154). Because the inventory generated a single latent variable, the authors recommend employing it in its entirety and not as separate subscales for predicting variables (Mosher & Sirkin, 1984).

Overall, the completed 30 item Hypermasculinity Inventory revealed a Cronbach alpha of .89 ($M = 11.03$, $SD = 6.79$) (Mosher & Sirkin, 1984). A more recent study suggested similar internal consistency results (Cronbach $\alpha = .91$) (Parrot & Zeichner, 2003).

Evidence suggests that the Hypermasculinity Inventory is externally valid. For example, scores from the inventory significantly correlated with: drug and alcohol use ($r = .26, p < .01$), fighting ($r = .47, p < .01$), aggressive behaviors ($r = .65, p < .01$), dangerous driving after alcohol consumption ($r = .47, p < .001$), delinquent behavior during high school years ($r = .38, p < .01$), and frequent sexual experiences ($r = .36, p < .01$) within a sample of college men (Mosher & Sirkin, 1984).

Researchers provided evidence for construct validity by showing that the Hypermasculinity Inventory significantly correlated with theoretically meaningful scales from the Jackson Personality Inventory. For example, macho constellation (e.g., hypermasculinity) was significantly ($p < .001$) and positively interrelated with dominance ($r = .24$) and impulsivity ($r = .44$). Macho constellation was likewise negatively correlated with nurturance ($r = -.22, p < .05$), understanding ($r = -.47, p < .01$), and harm avoidance ($r = -.36, p < .01$).

Demographic Questions. In order to describe the characteristics of the sample, several demographic questions were asked of all research participants. One question solicited the participant's age. Another asked participants to indicate their race/ethnicity background. A third question asked participants to indicate their religious preferences. In addition, participants were requested to provide their SAT scores (i.e., verbal and quantitative). Finally, as a proxy for assessing socioeconomic status (College Board, 2005), participants were requested to indicate the highest level of education completed by either parent (or primary caregiver). See Appendix D for a complete listing of demographic questions.

Instrumentation Critique. Although each instrument was chosen for this project based on the specific construct measured, and previous results, there are valid critiques nonetheless. For example, the Cronbach Alpha of the DIT-SF was reported at .76 (Rest, 1993). Ideally, the reliability of this instrument would be higher. For example, Gall et al. (2003) posited that, “In general, tests that yield scores with a reliability of .80 or higher are sufficiently reliable for most research purposes” (p. 196). However, Gall et al. (2003) also claim that the minimum “necessary level of test score reliability depends on the particular research study. . . and even a test with low reliability may be sufficient to detect the difference at the level of specified statistical significance” (p. 196) if there is a large sample size. Because this research study used a sample of 513 men, this limitation should be mitigated.

In addition, the DIT-SF, IRMA and Hypermasculinity Inventory are all deserving of a brief discussion. Specifically, each instruments’ reliability was at least partially established by correlating subscale scores with total scale scores. This was potentially problematic because using subscale correlates as a means to establish internal reliability could inflate *r*-values. In other words, lack of score independence could artificially inflate reliability (Gall et al., 2003).

Procedures

Data Collection

Discussed within this section are the data collection procedures. Immediately upon the dissertation committee’s final approval of this proposal, an on-line application for study authorization was sent to the College’s Institutional Review Board (IRB). No data collection began until after receiving IRB approval (see Appendix G). Once IRB

approved the project, a list of all in-coming (academic year 2007 – 2008) first year men's email addresses was requested from the college's Dean of Student's Office. An invitation and two reminders to participate (See Appendix E) in the study was then sent via the acquired email addresses. In addition to the invitation to participate, the email also provided participants with an embedded web-link to the site that hosted the survey. In addition, email procedures were constructed so that once participants opened the survey, they were provided with a research consent statement (see Appendix F), followed by detailed instructions on how to complete the questionnaire. In order to control for instrument order effects, participants were randomly selected to complete one of four versions of the web-based questionnaires (see Table 2).

Students were re-contacted during the collection period only if they (a) failed to initially complete the survey within the preferred time-period, or (b) failed to request removal from receiving any future invitations for study participation. Once a participant opened the survey, their email addresses were automatically removed from any future survey reminders. Men who did not complete the initial survey after five days were sent two additional email reminders (i.e., one reminder every five days).

Finally, as an incentive to participate, participants' names were entered into a random prize drawing. Incentives for participation included one \$100 gift card, three \$50 gift cards, and five \$25 gift cards. Gift cards were prepurchased from a local bank and are useable at any establishment where a major credit card is accepted. A random drawing for the gift cards took place seven days after all data collection was completed and the cards were distributed to the winners.

Data Analysis

This section contains the methods used for data analysis. All statistical analyses were conducted using version 14 of the Statistical Package for the Social Sciences (SPSS) (George & Mallery, 2006).

Descriptive statistics (e.g., mean age, standard deviation, and frequencies of reported demographic variables) illustrate the characteristics of the study sample. Three one-way ANOVAs were initially proposed to compare each category of demographic variables. Specifically, individual one-way ANOVAs for (a) race, (b) religion, and (c) highest level of education obtained by parents were proposed to compare each outcome variable means (i.e., P Score, IRMA, and Hypermasculinity Inventory).

Three one-way ANOVAs were also run to analyze/compare score means from each version (see Table 2) of the web-based questionnaires (i.e., Version 1, Version 2, Version 3, and Version 4) for significant differences. Comparing the mean scores from each version of the questionnaire with outcome variables enabled the investigator to determine whether order effects emerged.

Provided below is each specific research question. In addition, directional hypotheses are provided for Questions 1 and 2. Question 3 and Question 3.a are exploratory in nature; therefore, no hypothesis was made. Following each research question is the statistical analysis used to analyze the data.

Question 1: What is the relationship between levels of rape myth endorsement and levels of moral development in first year college men?

Directional Hypothesis: There is a significant relationship between higher levels of rape myth endorsements and lower moral development levels in first year college men.

Pearson (r) correlations were calculated to depict the direction and degree of relationship between assessed levels of rape myth endorsements and moral development. Coefficient of determinations (r^2) were calculated to indicate the level of any common variance between the two variables. A one-tailed alpha level was set *a priori* to .05.

Question 2: What is the relationship between levels of hypermasculinity and levels of moral development in first year college men?

Directional Hypothesis: There is a significant relationship between higher hypermasculinity levels and lower moral development levels in first year college men.

Pearson (r) correlations were calculated to depict the direction (positive/negative) and degree of relationship between assessed levels of hypermasculinity and moral development. Coefficient of determinations (r^2) were calculated to indicate the level of any common variance between the two variables. A one-tailed alpha level was set *a priori* to .05.

Question 3: To what extent do assessed levels of rape myth endorsements, levels of hypermasculinity, and quantitative/verbal SAT scores interrelate with levels of moral development in first year college men?

Question 3.a: To what extent does assessed levels of subscales of IRMA, levels of hypermasculinity, and quantitative/verbal SAT scores interrelate with levels of moral development in first year college men? This question

will only be analyzed if the total IRMA score is significantly interrelated within the initial model (see Question 3).

According to Licht (2004), it is common to divide multiple regression correlation (MRC) studies into the following two types: (a) those that attempt to *predict* events or behavior for practical decision-making purposes in applied settings and (b) those that attempt to *understand* or *explain* the nature of a phenomenon for the purposes of testing or developing theories” (p. 21). Because the purpose of this project was to understand and explain how multiple variables were interrelated, MRC was the appropriate statistical method to answer this research question.

Specifically, stepwise multiple regressions were carried out using the measure of moral development (as the dependent variable) and the independent variables of (a) rape myth endorsements, (b) hypermasculinity, and (c) SAT scores. In addition, if the total IRMA score is significantly interrelated within the initial model (i.e., Question 3), an additional MRC will be analyzed that includes each subscale of IRMA. All alpha levels for MRC were set *a priori* to .05.

Delimitations

Participation in this study was limited to traditionally aged (18 – 24 years) first year college men who attended a highly selective public institution of higher education, located in the Southeastern mid-Atlantic region of the United States. In addition, because the sample was selected from only one higher education institution the results are not generalizable beyond the institution where the sample was drawn from. In fact, students attending different colleges and universities might have differed in their assessed levels of rape supportive attitudes and levels of moral development.

Ethical Safeguards and Considerations

Conducting this research in an ethical manner was of paramount importance. The following seven items were addressed before beginning, and during, the research process. First, as previously discussed in the *participants* section of this proposal, only first year college men who were 18 years and older ($N = 513$) were accepted for study participation; therefore, all minors were excluded from participation. In addition, because all first year men were invited to participate in the study, participant selection was equitable. Second, all participants were provided detailed instructions that informed them of their rights. This was done to ensure that they understood informed consent. In fact, before participants could begin the on line survey, they were required to read a statement that reinforced the notion of their rights (quitting, privacy protection, etc). Third, the Institutional Review Board (IRB) was solicited for study approval. No data collection was undertaken until final written study approval from the IRB was received. Fourth, in an effort to maintain confidentiality, collected data was not stored, nor linked, in any manner to the identification of participants. Fifth, study participants were given the opportunity to request and receive a copy of the study results. Sixth, participants were given appropriate contact information (IRB, Dissertation Chair, and myself) in the event they had any questions and/or concerns. Finally, before actual data collection began, a small pilot test was conducted to seek improvements and/or clarifications on directions, instruments, and examined the complete process for possible vulnerabilities.

Summary

The purpose of this study was to explore how measures of rape supportive attitudes were interrelated to levels of moral development. Using a sample of traditionally

aged first year college men (18 – 24 years) who attended a highly selective institution located in the Southeastern mid-Atlantic region, the study aided in seeking answers to each provided research question. This chapter outlined the proposed research questions, instruments, study variables, context, procedures, limitation, delimitations, and ethical considerations. The following chapter presents the study results.

CHAPTER FOUR

Results

The purpose of this study was to describe how levels of moral development (as measured by the Defining Issues Test [DIT]), rape myth endorsements (as measured by the Illinois Rape Myth Acceptance [IRMA] scale), and hypermasculinity (as measured by the Hypermasculinity Inventory) were interrelated within a sample of first year college men. The following sections of this chapter include a discussion of the frequencies and percentages for respondents' demographic variables and descriptive statistics for all continuous variables. One-way ANOVAs comparing four groups of men on mean scores from all survey versions (see Table 2) were utilized to test for instrument order effects.

This chapter also addresses the following three research questions: (a) What is the relationship between first year college men's level of rape myth acceptance and their level of moral development?; (b) What is the relationship between levels of hypermasculinity and levels of moral development in first year college men?; and, (c) To what extent do assessed levels of rape myth endorsements, levels of hypermasculinity, and quantitative/verbal SAT scores interrelate with levels of moral development in first year college men? Using the quantitative and verbal scores from the SAT, along with hypermasculinity and rape myth endorsements, facilitated the ability to develop a deeper understanding of how these demographic characteristics were interrelated with moral development. Based on previous research results (see Wilson et al., 2002) directional hypotheses for the first two questions were provided. No hypothesis was provided for the third research question because it was exploratory. Finally, exploratory data analysis was

conducted by using one-way ANOVAs to compare participants' religious preferences, and parents' highest completed education levels to hypermasculinity scores, rape myth endorsement levels, and moral development. For the purposes of this study, all statistical significance levels were set *a priori* to .05.

Research Participant Characteristics

All first year college men, who were 18 years or older, were solicited for participation in this dissertation study. A total of 626 study invitations were sent to all incoming first year college men at a small to mid-sized public university before the start of the fall semester. Of the 626 study invitations sent, it was later determined that 513 men were eligible to participate (i.e., 18 years or older) in the study. In addition, of the original 626 study invitations sent, 256 (41%) first year men logged into the website and answered at least one question on the survey. Instrument protocols from 37 (15%) men were dropped from the study because they responded to less than 85 percent of the questions (George & Mallory, 2006).

Using Rest's (1986) scoring guidelines and pre-existing DIT subject reliability checks resulted in the subsequent removal of additional instrument protocols: 36 (14%) protocols were removed for failing the DIT Meaningless Score (M Score) check; and, 10 (4%) instrument protocols were removed for failing the DIT Consistency Check. Finally, 12 (5%) instrument protocols were removed from any data analysis because the participants indicated they were younger than 18 years old.

The total usable yield of instrument protocols was 161 (63%) of the original 256 respondents. In other words, 31% ($N = 161$) of the *eligible* incoming first year college men ($N = 513$) completed enough questions/statements and passed all necessary DIT

subject reliability checks to be included in the data analysis. Frequencies and percentages for respondents' demographic variables are presented in Table 3.

Table 3

Frequencies and Percentages for Participant Demographic Variables (N = 161)

Variable ^a	Participants	
	<i>f</i>	%
Race/Ethnicity ^b		
African-American/Black	3	1.9
Asian-American/Pacific Islander	19	11.8
White/Caucasian	120	74.5
Hispanic/Latino	10	6.2
Native American	2	1.2
Native Alaskan	1	.6
Undisclosed	6	3.7
Religious Preference		
Protestant	45	28.0
Roman Catholic	40	24.8
Eastern Orthodox Christian	5	3.1
Jewish	5	3.1
Hindu	2	1.2
Muslim	1	.6
None	49	30.4
Undisclosed	14	8.7
Highest Parental Educ. Level		
High School Graduate	19	11.8
Some College (No Degree)	7	4.3
Associate Degree	2	1.2
Bachelor's Degree	34	21.1
Master's Degree	46	28.6
Doctoral Degree	34	21.1
Professional Degree	18	11.2
Undisclosed	1	.6

Note. Percentages do not always sum to 100% due to rounding.

^a Variables described as "Undisclosed" are due to respondents choosing to not provide this information.

^b Given the small numbers of non-White/Caucasian participants, statistical analysis using "Race/Ethnicity" as a variable was not attempted.

Approximately three quarters (74.5%, $n = 120$) of the respondents chose White/Caucasian on the Race/Ethnicity portion of the questionnaire. The remainder of respondents selected Asian-American/Pacific Islander (11.8%, $n = 19$), Hispanic/Latino (6.2%, $n = 10$), African-American/Black (1.9%, $n = 3$), Native American (1.2%, $n = 2$), and Native Alaskan (.6%, $n = 1$). A minority of the respondents (3.7%, $n = 6$) were classified as Undisclosed. Respondents in the Undisclosed category did not provide any response to the Race/Ethnicity portion of the demographic questionnaire.

A direct comparison between respondents' selected categories for Race/Ethnicity and the entire population of all in-coming first year men was not possible for primarily two reasons. First, the college where this study took place did not report the same exact Race/Ethnicity categories as those used within this study. For example, the race and ethnicity categories reported by the college that were different from the present dissertation study were Puerto Rican ($n = 2$), "Other" Hispanic ($n = 1$), Asian ($n = 30$), Other ($n = 8$), and Mexican ($n = 6$). Categories reported by the college that were similar to ones used in this study were, White/Non-Hispanic ($n = 358$), Unknown ($n = 125$), Hispanic ($n = 24$), Asian or Pacific Islander ($n = 38$), and American Indian/Native Alaskan ($n = 4$). The second reason a direct comparison was not possible was because some men selected more than one Race/Ethnicity category within the college's provided data. Because of the lack of variability in the Race/Ethnicity category from the sample no further analysis was attempted on this variable.

Three categories of Religious Preference were selected by participants the most frequently. When asked to choose their Religious Preference, the largest numbers of respondents selected the category, None (30.4%, $n = 49$). Participants chose Protestant

(28%, $n = 45$) and Roman Catholic (24.8%, $n = 40$) as the second and third most selected category of Religious Preference, respectively. The remaining categories selected were Eastern Orthodox Christian (3.1%, $n = 5$), Jewish (3.1%, $n = 5$), Hindu (1.2%, $n = 2$), and Muslim (.6, $n = 1$). Several participants failed to pick a Religious Preference; respondents who did not select a Religious Preference were categorized as Undisclosed (8.7%, $n = 14$).

Most parents of respondents were college educated. In fact, the largest numbers of respondents stated that the “Highest Parental Education Level” attained by either parent was a graduate degree. At the graduate level, over a quarter of respondents stated that at least one parent had completed a Master’s degree (28.6%, $n = 46$), followed by Doctoral degree (21.1%, $n = 34$) and Professional degree (11.2%, $n = 18$), respectively. At the undergraduate level, data analysis revealed that approximately one-fifth of participants claimed at least one parent had completed a Bachelor’s degree (21.1%, $n = 34$). A small number of respondents stated his parent had completed an Associate’ degree (1.2%, $n = 2$), or had completed Some College (4.3%, $n = 7$), but not received a degree. Several respondents also acknowledged that the highest attained education level of either parent was the completion of High School (11.7%, $n = 19$). One participant declined to respond to this portion of the questionnaire; this participant was categorized as Undisclosed (.6%, $n = 1$).

Table 4

Descriptive Statistics for Continuous Variables, by Whole Sample

Variable	Total N = 161				
	Mean	SD	Skewness Statistic	Kurtosis Statistic	Cronbach Alpha
Age (Years)	18.45	.29	.49	.41	
Verbal SAT ^a	692.69	62.48	-.38	.00	
Quantitative SAT	688.18	61.83	-.32	.45	
DIT "P" Score ^b	40.33	17.30	.05	-.73	.76
Hypermasculinity Inventory ^c	7.07	4.87	.77	.50	.83
IRMA Total ^d	105.14	29.19	.19	.13	.93
IRMASA	23.95	8.41	.10	-.70	.81
IRMANR	8.84	3.49	.75	-.26	.65
IRMAMT	18.13	5.87	-.06	-.40	.70
IRMAWI	11.64	5.34	.89	.46	.87
IRMALI	16.84	5.68	.35	.25	.85
IRMATE	9.25	4.05	1.19	1.12	.72
IRMADE	16.49	6.41	.37	-.31	.81

^a Respondents provided their Verbal and Quantitative scores from the SAT college admissions test.

^b The recommended three-story short form of the Defining Issues Test was utilized to measure the respondents' level of post conventional moral reasoning (Rest, 1986).

^c The Hypermasculinity Inventory consists of 30 forced-choice items used to measure macho personality constellation (Mosher & Sirkin, 1984).

^d The Illinois Rape Myth Acceptance scale was used to rate participants' level of agreement with 40 rape myths. Subscales for the IRMA are: IRMASA, She asked for it; IRMANR, It wasn't really rape; IRMAMT, He didn't mean to; IRMAWI, She wanted it; IRMALI, She lied; IRMATE, Rape is a trivial event; IRMADE, Rape is a deviant event (Payne et al., 1999).

Table 4 contains descriptive statistics for all continuous level variables for the whole sample utilized within this study. Included within this table are the means, standard deviations, distribution skewness and kurtosis statistics. Results for the first three variables found within Table 4 were collected utilizing the demographic portion of the questionnaire. On average, respondents for this study were 18.45 years old ($SD = .29$). The age distribution was positively skewed (.49) and leptokurtic (.41).

Results from 2 one-sample t-tests indicated there were significant differences between study respondents and the whole population of first-year men. The average reported Verbal SAT score was 692.69 ($SD = 62.48$) and had a negatively skewed (-.38) distribution with normal kurtosis (.00). A one-sample t-test indicated that on average respondents for this study had significantly higher SAT Verbal scores, $t(160) = 4.201, p < .01$ (two-tailed), when compared to the whole population of first-year men ($M = 672$). Respondents' Quantitative SAT scores averaged 688.18 ($SD = 61.83$) and was significantly higher, $t(160) = 2.814, p < .01$ (two-tailed), than the whole population ($M = 674.47$). The distribution of respondents' Quantitative SAT scores was negatively skewed (-.32) and leptokurtic (.45).

The dependent variable for this study was measured using the calculated P Score from the short version of the Defining Issues Test (DIT) (Rest, 1986). The average P Score for respondents from this sample was 40.33 ($SD = 17.30$). The P Score distribution was slightly positively skewed (.05) and platykurtic (-.73). Internal consistency for the DIT from this study sample was, Cronbach $\alpha = .76$.

The two major independent variables for this dissertation study were measured using the Hypermasculinity Inventory and the Illinois Rape Myth Acceptance (IRMA) scale. The average reported Hypermasculinity score was 7.07 ($SD = 4.87$) and the distribution was positively skewed (.77) and leptokurtic (.50). Internal consistency for the Hypermasculinity Scale from this sample was, Cronbach $\alpha = .83$. See Appendix H for a correlation matrix of all continuous variables.

The average score on the IRMA scale was 105.14 ($SD = 29.19$). The IRMA score distribution was positively skewed (.19) and leptokurtic (.13). Internal consistency for

total IRMA scores from this sample was, Cronbach $\alpha = .93$. IRMA subscale means, standard deviations, skewness/kurtosis statistics, and Cronbach alphas are depicted within Table 4.

Counter-Balanced Research Instrument Results

The researcher designed and utilized four versions of the web-based questionnaire (see Table 2 for specific instrument ordering). Instrument order was counter-balanced to control for order effects. Three one-way ANOVAs were run and analyzed to determine if the following mean scores differed based on the web-based survey version respondents received: (a) P Score, (b) Hypermasculinity Inventory score, and (c) IRMA score. It is important to note that each one-way analysis of variance (see Table 5) indicated there was not a statistically significant difference ($p > .05$) for mean scores based on the received survey version.

Table 5

ANOVA for Version of Survey, P Score, Hypermasculinity Inventory, and IRMA

Source	Variation	SS	df	F	p
P Score	Between Groups	2283.415	3	2.620	.053
	Within Groups	45610.029	157		
	Total	47893.444	160		
Hypermasculinity Inventory	Between Groups	18.510	3	.257	.857
	Within Groups	3775.739	157		
	Total	3794.248	160		
IRMA Score	Between Groups	1551.525	3	.602	.614
	Within Groups	134823.384	157		
	Total	136374.909	160		

$p > .05$

Before proceeding to data analysis for each respective research question, the reader should note important aspects of data analysis conducted thus far. As previously stated, the purpose of this study was to examine and describe how levels of moral development in a sample of first year college men were interrelated with levels of rape myth endorsements and hypermasculinity. Frequencies and percentages of respondents' categorical variables, and descriptive statistics for all continuous variables facilitated the ability to discover a deeper understanding of the characteristics for respondents from our sample as a whole. In addition, analysis from one-way ANOVAs on potential effects of counter-balanced research instruments revealed no significant differences between participants mean scores from the four groups of survey versions. This information is important because it assisted in the ability to rule out whether instrument ordering was the "cause" for any mean differences of scores between groups of participants.

Research Question 1

Research Question 1: What is the relationship between levels of rape myth endorsements and levels of moral development in first year college men?

Directional Hypothesis: There is a significant relationship between higher levels of rape myth endorsements and lower moral development levels in first year college men.

Table 6

Intercorrelations Between IRMA and DIT

Variable	1	2
Respondents ($N = 161$)		
1. IRMA (Total Score)	—	-.231**
2. DIT (P Score)		—

Note. Actual calculated probability value was, $p = .002$ (one-tailed)
 ** $p < .01$

A one-tailed alpha level was set *a priori* to .05. As displayed in Table 6, results from a Pearson correlation indicated a significant negative relationship between mean scores from the IRMA and DIT, $r = -.231$, $p = .002$ (one-tailed). Coefficient of determinations were calculated and indicated that the level of common variance between the two variables was, $r^2 = .05$.

Research Question 2

Research Question 2: What is the relationship between levels of hypermasculinity and levels of moral development in first year college men?

Directional Hypothesis: There is a significant relationship between higher hypermasculinity levels and lower moral development levels in first year college men.

A one-tailed alpha level was set *a priori* to .05. Calculated Pearson correlation results are displayed in Table 7. There was not a significant correlation between scores on the Hypermasculinity Inventory and the DIT scale, $r = -.056$, $p = .241$; thus, no further analysis was warranted.

Table 7

Intercorrelations Between Hypermasculinity Inventory and DIT

Variable	1	2
Respondents ($N = 161$)		
1. Hypermasculinity Inventory	—	-.056
2. DIT (P Score)		—

Note. Actual calculated probability value was, $p = .241$ (one-tailed)
 $p > .05$

Research Question 3

Research Question 3: To what extent do assessed levels of rape myth endorsements, levels of hypermasculinity, and quantitative/verbal SAT scores interrelate with levels of moral development in first year college men?

Licht (2004) posited that multiple regression analysis was appropriately used when attempting to understand and explain how multiple variables were interrelated. Multiple regression analysis, therefore, is suitable for analyzing Research Question 3 and Research Question 3a (see below). To account for the “complexity of intercorrelations, the variance explained by certain variables will change when new variables enter the equation” (George & Mallory, 2006, p. 197); therefore, the researcher chose to utilize the stepwise multiple regression method. By using this method of multiple regression analysis only independent (i.e., predictor) variables that significantly influenced the dependent variable were included within the final model (George & Mallory, 2006).

Prior to conducting the multiple regression analysis, however, independent variables were evaluated for collinearity. Data analysis, as can be located in Table 8,

resulted in two pairs of variables that were significantly intercorrelated: IRMA and Hypermasculinity Inventory, $r = .303, p < .01$; and SAT Verbal and SAT Quantitative, $r = .299, p < .01$.

Using the guidelines suggested by George and Mallory (2006) as indicators of excessive interdependency, none of the correlations were greater than, $r = .5$. Additional analysis revealed there were no tolerance levels lower than .994 and no variance inflation factors (VIF) greater than 1.006 (see Table 9). Tolerance levels lower than .2, and VIF factors greater than 5, would have indicated there was a potential problem with interdependency between independent variables. Therefore, taking into consideration the r values, tolerance levels, and VIFs, linear dependency between the independent variables was not substantially indicated.

Table 8

Correlation Matrix Between IRMA, Hypermasculinity Inventory, and Quantitative/Verbal SAT Scores

Variables ^a	IRMATtl	HyperTtl	SAT Quant	SAT Verbal
IRMATtl	1	.303**	0.088	-0.077
HyperTtl		1	-0.032	0.058
SAT Quant			1	.299**
SAT Verbal				1

Note. $N = 161$.

^a IRMATtl, Illinois Rape Myth Acceptance Scale Total Score; HyperTtl, Hypermasculinity Inventory Total Score; SAT Quant, SAT Quantitative Score; SAT Verbal, SAT Verbal Scores

** $p < .01$ (2-tailed)

Stepwise multiple regression analysis was used to test for the best model for understanding how the selected independent variables influenced the dependent variable (i.e., P Score). The following four independent (i.e., predictor) variables were initially

included within the model: (a) Illinois Rape Myth Acceptance total score (IRMATtl), (b) Hypermasculinity Inventory total score (HyperTtl), (c) SAT Quantitative scores (SAT Quant), and (d) SAT Verbal scores (SAT Verbal).

Table 9 summarizes the individual regression coefficients for the two significant data models. When reporting statistical significance in regression analysis, it is also important to report the magnitude of effects (Keith, 2006). Reporting the magnitude of effects is accomplished by judging the calculated β 's. Keith (2006) suggests the following guidelines for judging the magnitude of effects for β 's: less than .05 is meaningless; .05 to .09 is small but meaningful; .10 to .25 is moderate; and above .25 are considered large. It is important to note that using Keith's (2006) guidelines, all β 's from this multiple regression analysis were considered to have moderate magnitude of effects.

Table 9

Summary of Stepwise Multiple Regression Analysis for Variables Predicting P Score (N = 161)

Variable	B	SE B	β	t	Sig.	VIF
Step 1						
SAT Verbal	.064	.021	.233	3.016	.003	1.000
Step 2						
SAT Verbal	.060	.021	.216	2.856	.005	1.006
IRMATtl	-.127	.045	-.214	-2.828	.005	1.006

Note. Excluded variables were scores from the Hypermasculinity Inventory (HyperTtl) and SAT Quantitative Scores (SAT Quant).

As depicted in Table 10, a linear combination of two, out of the original four, variables resulted in the best model to predict P scores. The best model indicated that there were two significant independent variables; scores from the SAT Verbal and total scores from the Illinois Rape Myth Acceptance Scales (IRMATtl), $R^2 = .10$, $F(2, 158) =$

8.747, $p < .01$. The adjusted R^2 for this model was .088, which indicated the two variables combined to account for 8.8% of the variance in P Scores. In addition, SAT Verbal ($\beta = .216$) and IRMATtl ($\beta = -.214$) had moderate effect sizes. Independent variables excluded from the model were the Hypermasculinity Inventory (HyperTtl) and SAT Quantitative (SAT Quant) Scores.

Table 10

Model Summary for Stepwise Multiple Regression Analysis for Variables Predicting P Scores (N = 161)

Model	R	R ²	Adj. R ²	R ² Δ	F	Sig.
1 ^a	.233	.054	.048	.054	9.094	.003
2 ^b	.316	.10	.088	.046	8.747	.005

^a Predictors: (Constant), SAT Verbal

^b Predictors: (Constant), SAT Verbal, IRMATtl Score

Research Question 3a

Question 3a: To what extent does each subscale(s) of IRMA and verbal SAT scores interrelate with levels of moral development in first year college men?

As a reminder to the reader, it was proposed in Chapter 3 to analyze this sub-question only if the total IRMA score was significantly interrelated within Research Question 3. Therefore, because the total IRMA scores did add significantly to the model with Research Question 3, data for this sub-question was analyzed. Prior to conducting stepwise multiple regression analysis, all independent variables were evaluated for potential collinearity problems by creating a correlation matrix (see Table 11).

Table 11

Correlation Matrix Between IRMA Subscales and SAT Verbal Scores (N = 161)

Variables	SAT Verbal	IRMASA	IRMANR	IRMAMT	IRMAWI	IRMALI	IRMATE	IRMADE
SAT Verbal	1	-.117	-.041	-.066	-.054	.103	.022	-.172*
IRMASA		1	.503**	.522**	.520**	.585**	.525**	.537**
IRMANR			1	.417**	.430**	.510**	.536**	.513**
IRMAMT				1	.424**	.450**	.405**	.362**
IRMAWI					1	.502**	.437**	.310**
IRMALI						1	.514**	.348**
IRMATE							1	.495**
IRMADE								1

Note. $N = 161$

Subscales for the IRMA are: IRMASA, *She asked for It*; IRMANR, *It wasn't really rape*; IRMAMT, *He didn't mean to*; IRMAWI, *She wanted it*; IRMALI, *She lied*; IRMATE, *Rape is a trivial event*; IRMADE, *Rape is a deviant event*.

* $p < .05$ (2-tailed)

** $p < .01$ (2-tailed)

Each individual IRMA subscale significantly correlated with all other IRMA subscales. This finding is not surprising because each subscale from the IRMA instrument was designed to measure a particular component of rape myths, and when combined they were designed to measure the overall general nature of rape myths (Payne et al., 1999). Nevertheless, several pairs of subscales were significantly interrelated above $r = .5$ (see Table 11). Correlates above $r = .5$ suggest an interdependency level that could potentially be problematic (George & Mallory, 2006). Upon completing further data analysis, however, these concerns were alleviated. The lowest tolerance level was .990 and the highest reported VIF was 1.002. Tolerance levels lower than .2, and VIF factors

greater than 5, would have further indicated there was a potential problem with interdependency between independent variables. Although there were r values greater than .5, taking into consideration tolerance levels and VIFs, linear dependency between the independent variables was not indicated as problematic for the multiple regression analysis.

Stepwise multiple regression analysis was used to test for the best model for how specific IRMA subscales and SAT Verbal scores influenced respondents' P Scores. The following eight independent variables were included within the stepwise multiple regression analysis: (a) SAT Verbal scores; (b) IRMASA, *She asked for It*; (c) IRMANR, *It wasn't really rape*; (d) IRMAMT, *He didn't mean to*; (e) IRMAWI, *She wanted it*; (f) IRMALI, *She lied*; (g) IRMATE, *Rape is a trivial event*; and (h) IRMADE, *Rape is a deviant event*. Depicted in Table 12 is the linear combination of two independent variables that resulted in the best model to predict P Scores. In addition, all β 's were considered to have a moderate magnitude of effect (Keith, 2006).

Table 12

Summary of Stepwise Multiple Regression Analysis for Variables Predicting P Scores (N = 161)

Variable	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>	<i>VIF</i>
Step 1						
IRMANR	-1.235	.381	-.249	-3.242	.001	1.00
Step 2						
IRMANR	-1.189	.372	-.240	-3.194	.002	1.002
SAT Verbal	.062	.021	.223	2.966	.003	1.002

Note. Excluded variables were IRMASA, IRMAMT, IRMAWI, IRMALI, IRMATE, and IRMADE.

Two of the original eight independent variables resulted in the best model to predict P Scores (see Table 13). The two variables indicated as significant contributors were the IRMA subscale, *It wasn't really rape* (IRMANR), and SAT Verbal scores, $R^2 = .11$, $F(2, 158) = 9.911$, $p < .01$. Both IRMANR ($\beta = -.240$) and SAT Verbal scores ($\beta = .223$) had moderate effect sizes. The adjusted R^2 for this model was .10, which indicated these two independent variables accounted for 10% of the shared variance in P Scores. This stepwise multiple regression analysis resulted in all other IRMA subscales being excluded from the model.

Table 13

Model Summary for Stepwise Multiple Regression Analysis with IRMA Subscales and SAT Verbal Scores for Predicting P Scores

Model	<i>R</i>	R^2	Adj. R^2	$R^2 \Delta$	<i>F</i>	<i>Sig.</i>
1 ^a	.249	.062	.056	.062	10.508	.001
2 ^b	.334	.111	.100	.049	9.911	.000

^a Predictors: (Constant), IRMANR

^b Predictors: (Constant) IRMANR, SAT Verbal

Exploratory Analysis of Sample Characteristics

Although not presented as initial research questions within this study, sample characteristics were further analyzed in an exploratory manner. Analyzing demographic characteristics was important to accomplish because it afforded the opportunity to learn where differences of respondents might be within portions of the sample.

Analysis of Religious Preference

In order to determine whether mean scores significantly differed for the DIT, Hypermasculinity Inventory, and IRMA, based on respondents' chosen category of Religious Preference, three independent one-way ANOVAs were computed. Not all

participants, however, were included within this portion of analysis. Specifically, the following Religious Preference categories were excluded: Eastern Orthodox Christian ($n = 5$), Jewish ($n = 5$), Hindu ($n = 2$), Muslim ($n = 1$), and Undisclosed ($n = 14$). In other words, only mean scores from the following three Religious Preference categories were included within this portion of the data analysis: (a) None ($n = 49$), (b) Protestant ($n = 45$), and (c) Roman Catholic ($n = 40$).

Table 14

ANOVA for Religious Preference, P Score, Hypermasculinity Inventory, and IRMA

Source	Variation	SS	df	F	p
P Score	Between Groups	2037.160	2	3.558*	.037
	Within Groups	37497.300	131		
	Total	39534.460	133		
Hypermasculinity Inventory	Between Groups	15.883	2	.353	.703
	Within Groups	2943.340	131		
	Total	2959.223	133		
IRMA	Between Groups	8014.630	2	5.481**	.005
	Within Groups	95776.800	131		
	Total	103791.430	133		

Note. Mean scores from respondents who selected Eastern Orthodox Christian, Jewish, Hindu, Muslim, and Undisclosed were excluded from this analysis.

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

Analysis revealed there were significant differences between mean scores from two of the three variables tested (see Table 14). ANOVA results indicated that P Score means were significantly different, $F(2, 133) = 3.558$, $p < .05$, for at least one of the respondents' respective chosen category of Religious Preference. Using Tukey HSD for

post hoc analysis, results indicated that P Score mean differences from the None ($M = 45.24$, $SD = 16.76$) category were significantly ($p < .05$) higher than respondents' in the Roman Catholic ($M = 36.08$, $SD = 16.71$) category of Religious Preference. P Scores from the Protestant ($M = 38.59$, $SD = 17.27$) category were not significantly ($p > .05$) different from those in both Roman Catholic and None categories.

ANOVA results also indicated that IRMA score means were significantly different, $F(2, 131) = 5.481$, $p < .01$, for at least one category of Religious Preference. Tukey HSD post hoc analysis indicated that, on average, men in the None ($M = 94.13$, $SD = 29.59$) category endorsed significantly ($p < .05$) lower levels of rape myths on the IRMA scale when compared to men from both the Protestant ($M = 110.75$, $SD = 27.11$) and Roman Catholic ($M = 109.48$, $SD = 23.43$) Religious Preference categories. There were no additional significant differences for IRMA mean scores.

Finally, there were no significant differences for mean scores on the Hypermasculinity Inventory based on Religious Preference $F(2, 131) = .353$, $p = .703$.

Analysis of Parental Education Completion Level

In order to determine whether participants differed in their mean scores based on the highest level of completed education (see Table 15) by either parent, three one-way ANOVAs were run and analyzed. Due to the low numbers of respondents for several categories of parental education level, data was analyzed utilizing the following approach. Mean scores from respondents that stated neither parent had *completed* a Bachelor's degree were analyzed in a newly created category of "Less than a BA." This new grouping of participants included data from the original High School Graduate, Some College, and Associate's Degree completed categories (see Table 3) of parental

education level. Those respondents that claimed at least one parent had completed a BA were analyzed using the original category (i.e., BA Completed). Finally, a “Graduate Degree Completed” category was created by grouping participants’ scores from the Master’s, Doctoral, and Professional degree categories (see Table 3 for original categories).

One participant failed to indicate his parent’s level of education; therefore, he was coded into an Undisclosed category and was excluded from further analysis for this particular ANOVA. With the exception of the present ANOVA, all respondents were included when analyzing aggregate data.

Table 15

ANOVAs for Parental Level of Education, P Score, Hypermasculinity Inventory, and IRMA

Source	Variation	SS	df	F	p
P Score	Between Groups	574.572	2	.955	.387
	Within Groups	47224.803	157		
	Total	47799.375	159		
Hypermasculinity Inventory	Between Groups	26.337	2	.550	.578
	Within Groups	3758.438	157		
	Total	3784.775	159		
IRMA	Between Groups	8129.475	2	5.042**	.008
	Within Groups	126571.923	157		
	Total	134701.398	159		

** $p < .01$

Mean P Scores for Men with parents from all three levels of education, Less than a BA ($M = 36.42$, $SD = 16.07$), BA Completed ($M = 42.35$, $SD = 16.88$), and Graduate Degree Completed ($M = 40.65$, $SD = 17.83$) did not differ significantly, $F(2, 157) = .955$,

$p = .387$. Likewise, ANOVA results indicated there was not a significant difference, $F(2, 157) = .550, p = .578$, for reported means on the Hypermasculinity Inventory between Less than a BA ($M = 6.50, SD = 4.59$), BA Completed ($M = 6.65, SD = 4.42$), and Graduate Degree Completed ($M = 7.41, SD = 5.12$).

It is important to note, however, that results from one ANOVA indicated there was a significant difference, $F(2, 157) = 5.042, p < .05$, for mean scores from the IRMA based on parental highest level of education. Post hoc analysis, using a Tukey HSD, indicated that men who reported at least one parent with a Graduate Degree Completed ($M = 110.04, SD = 29.11$) endorsed significantly ($p < .05$) higher levels of rape myths on the IRMA than men whose parents had Less than a BA ($M = 90.82, SD = 25.47$). Mean scores for men whose parent had completed a BA ($M = 104.00, SD = 28.87$) did not differ significantly from the Graduate School Completed ($p = .535$) or Less than a BA categories ($p = .167$).

Summary

This chapter described how the dependent variable, moral development, was interrelated with two major independent variables, rape myth endorsements and hypermasculinity, within a sample of first year college men ($N = 161$). Frequencies and percentages of demographic variables, as well as descriptive statistics for all continuous level variables, were provided and discussed. Where appropriate, groups of participants were examined for mean score differences based on several categorical variables found within the sample characteristics. In addition, mean scores were examined in order to learn whether the ordering of research instruments might have influenced scores. Results

from one-way ANOVAs indicated that instrument order effects did not have a significant influence on the results ($p > .05$).

This chapter also presented the statistical analysis needed to address three research questions. The first research question sought to establish whether there was a significant relationship between levels of rape myth endorsements and moral development. A one-tailed Pearson correlation indicated that there was a significant negative correlation between the two variables ($r = -.231, p < .01$). This is important to note because it showed that the relationship between the variables was such that as level of endorsed rape myths increased, level of measured moral development decreased.

The second research question sought to establish whether levels of hypermasculinity and moral development were significantly interrelated. Analysis from this one-tailed Pearson correlation, however, indicated the two variables were not significantly interrelated ($r = -.056, p > .05$).

Research Question 3, and Research Question 3a, were both answered using stepwise multiple regression analysis. For Research Question 3, multiple regression analysis results indicated that SAT Verbal scores and total IRMA scores accounted for 8.8% of the variance found within P Scores. All other independent variables were excluded from the data model. Question 3a sought to establish which subscale(s) of the IRMA instrument, in combination with SAT Verbal scores, would result in the best model. Results from this analysis indicated that the IRMA subscale, *It wasn't really rape* (IRMANR), and SAT Verbal scores accounted for 10% of the shared variance within P Scores. This is also important to note because it established the specific IRMA subscale that significantly contributed to the multiple regression model.

CHAPTER FIVE

Conclusions and Interpretations

The purpose of this study was to describe how levels of moral development, hypermasculinity, and rape myth endorsements, and additional demographic characteristics, were interrelated within a sample of first year college men. In the sections below an overview of the study is provided. Included within the overview section is a reminder to the reader of the study's design, purpose, and sample. Also included within this chapter is a description of respondents' demographic characteristics. A summary and interpretation of the major research findings and a section containing the implications for practice are offered for the reader. Finally, study limitations, recommendations and suggestions for future research studies, and overall conclusions are provided in the concluding sections of this final dissertation chapter.

Overview

Researchers over previous decades have become progressively more concerned about the high numbers of college women who experienced unwanted sexual advances. In what many consider as the benchmark investigation into the prevalence of sexual assault victimization within college student populations, Koss, Gidycz, and Wisniewski (1987) found that 27% of college women reported surviving rape or attempted rape since turning 14 years of age; 15% reported at least one past act that met the legal definition of rape and an additional 12% reported at least one act of attempted rape. These researchers also discovered that 25% of the male participants in this study admitted to committing at least one past act of sexual aggression; 4% disclosed committing one or more acts that

met the legal definition of completed rape(s); and 3% had previously attempted rape (Koss et al., 1987). Research results such as these clearly indicate a need for furthering our understanding of male perpetrated sexual aggression. This study, therefore, sought to further the understanding of college male perpetrated sexual aggression by exploring related variables.

This study used a multiple regression correlation (MRC) research design. The rationale for using this design was to explore potential relationships among the major independent variables (hypermasculinity and rape myth endorsements) and the dependent variable (moral development). In addition to the major independent variables, analysis was also conducted using additional demographic characteristics collected from the study sample. Specifically, quantitative and verbal SAT scores were analyzed in order to explore the possible relationships among the major independent and dependent variables.

Correlation research designs are “especially useful for exploratory studies in areas where little is known” (Gall et al., 2003, p. 325). The utility of MRC for use in this study was in the increased ability to better understand the nature of sexually aggressive attitudes and how these attitudes co-occurred with participants’ level of moral development. The MRC research design was appropriate, therefore, because it furthered our understanding of how rape supportive attitudes and levels of moral development were interrelated.

As previously stated, the purpose of this study was to assess the relationship between levels of moral development and the degree to which first year college men subscribe to rape supportive attitudes. The dependent variable, moral development, was measured using the calculated P Score from the short version of the DIT ($M = 40.33$, SD

= 17.30) (Rest, 1993). The P Score is measured as the percentage of post conventional moral reasoning (Kohlberg, 1970) respondents' use when confronted with moral dilemmas presented on the DIT (Rest, 1993).

For the purposes of this study, rape supportive attitudes included two major independent variables. The first independent variable was participants' assessed level of rape myth endorsements. This variable was measured using the 45-item IRMA scale ($M = 105.14$, $SD = 29.19$) (Payne et al., 1999). The second independent variable included participants' assessed levels of macho personality constellation, also referred to as hypermasculinity. This variable was measured using the 30-item Hypermasculinity Inventory ($M = 7.07$, $SD = 4.87$) (Mosher & Sirkin, 1984). Both the IRMA and Hypermasculinity inventory use Likert-type question formats.

Several demographic variables were measured so that sample characteristics could be thoroughly described. After checking all data reliability measures, useable instrument protocols were collected from 161 (31% of the total 513 eligible men) traditionally aged first year college men ($M = 18.45$ years, $SD = .29$). All men in this study attend the same public higher education institution located in the Southeastern mid-Atlantic region of the United States. In addition, respondents provided their Quantitative ($M = 688.18$, $SD = 61.83$) and Verbal ($M = 692.69$, $SD = 62.48$) SAT scores. Finally, a correlation matrix was created containing all the continuous variables (see Appendix H).

Approximately three quarters of respondents were White/Caucasian (74.5%). The next largest numbers of respondents were Asian-American/Pacific Islander (11.8%) and Hispanic/Latino (6.2%). The remaining proportions of respondents were African-American/Black (1.9%), Native American (1.2%), and Native Alaskan (.6%). A small

number of participants were classified as Undisclosed (6%) because they declined to indicate their Race/Ethnicity. The Race/Ethnicity variable was not further analyzed due to lack of variability.

The vast majority of respondents had parents who earned either an undergraduate or graduate college degree. A number of respondents stated that at least one parent had attained either a Bachelor's degree (21.1%) or an Associates degree (1.2%). The largest numbers of respondents stated that the highest level of education attained by either parent was a Master's degree (28.6%), followed by a doctorate degree (21.1%), and professional (11.2%) degree. A little more than one-tenth of respondents, however, stated their parents' highest education level was the completion of high school (11.7%). One participant did not provide his parents' level of education; thus, his information was classified as Undisclosed (.6%) for this variable.

Participants were also asked to provide their religious preference. The largest numbers of respondents selected None (30.4%) as their religious preference. Protestant (28%) and Roman Catholic (24.8%) were the second and third most selected category, respectively. The remaining respondents chose Eastern Orthodox Christian (3.1%), Jewish (3.1%), Hindu (1.2%) and Muslim (.6%) as their respective religious preference. Several respondents were classified as Undisclosed (8.7%) because they did not select any category of religious preference.

Summary and Interpretation of Major Findings

The purpose of this study was to investigate and describe how levels of moral development, rape myth endorsements, and hypermasculinity were interrelated within a sample of first year college men. In order to address the study's stated purpose, three

major research questions and one sub-question were selected to help guide the research process.

1. What is the relationship between levels of rape myth endorsements and levels of moral development in first year college men?
2. What is the relationship between levels of hypermasculinity and levels of moral development in first year college men?
3. To what extent do assessed levels of rape myth endorsements, levels of hypermasculinity, and quantitative/verbal SAT scores interrelate with levels of moral development in first year college men?
 - 3.a To what extent does each subscale(s) of IRMA, levels of hypermasculinity, and quantitative/verbal SAT scores interrelate with levels of moral development in first year college men?

Research question 3 also consisted of one additional sub-question (i.e., Research Question 3.a). The sub-question was addressed in order to investigate which IRMA subscale(s) would add significantly to the regression model (see Chapter 4 for complete data). In addition to the research questions, exploratory data analysis using demographic characteristics was conducted and data interpretations are provided. Results for each question and exploratory analysis are described below.

Research Question 1

The first research question investigated the relationship between participants' self-reported levels of rape myth endorsements and their levels of moral development. Analysis of the data collected for this research question supports the directional hypothesis and indicates there is a significant ($p < .01$) negative correlation ($r = -.231$)

between rape myth endorsements and moral development. In other words, the data indicates that as respondents' levels of rape myth endorsement increases, assessed levels of moral development decreases.

Interpretation of the calculated coefficient of determination indicates that approximately 5% of the common variance was shared between the two variables ($r^2 = .05$) for this study. With such a low reported shared variance one must consider the possibility that additional variable(s) also co-occur with this phenomenon. Findings for the first research question are, however, consistent with similar studies. For example, Wilson et al. (2002) previously established that levels of moral development and rape myth endorsements were likewise significantly ($p < .05$), and negatively correlated ($r = -.52$), in a sample of Australian men convicted of rape. Thus, evidence from Wilson et al.'s study also indicates that as moral development levels increased, the tendency to endorse rape myths decreased.

The amount of shared variance found within Wilson et al.'s (2002) sample, however, was 27%. In fact, the reported amount of shared variance for Wilson et al.'s study is approximately 22% greater than the variance found within the dissertation sample. One explanation for the difference could be that the mean DIT scores for Wilson et al.'s sample were much lower ($M = 30.17$, $SD = 12.96$) than those in the present study. In addition, Wilson et al. posited that results from their study may have been attenuated by floor effects. Taking into consideration the lower DIT scores, the disclosure of possible floor effects, and the fact that men from the sample were convicted rapists, could help explain the large differences between Wilson et al.'s (2002) study and the present dissertation research results taken from a population of college men. Even though there

are apparent effect size differences between findings from Wilson et al.'s data and the present research findings, results from both studies support the notion that rape myth endorsements and moral development are interrelated.

Findings for the first research question in this dissertation study are important for several reasons. For example, this dissertation research is the first known empirical study to investigate how rape myth endorsements and moral development are interrelated within a sample of college men. The present study, therefore, helps fill a known gap within the related literature.

Another important aspect to emerge from this study is that empirical data has now been significantly linked between the two constructs of moral development and rape myth endorsements. Linking these two constructs has important implications for both researchers and programmers alike. For example, this evidence can now be used to aid in designing future sexual aggression related studies and possibly even improved sexual aggression related training interventions. As discussed later in the chapter, it can reasonably be argued that evidence from this first research question provides researchers and programmers an improved framework for understanding how the phenomenon of rape myth endorsements and moral development are related.

Research Question 2

The second research question investigated the relationship between participants' levels of hypermasculinity and their respective levels of moral development. Contrary to the directional hypothesis, there was no statistically significant relationship present within the sample.

There are several possible reasons why hypermasculinity and moral development were not found to significantly correlate within this study. The most obvious reason for non-significant correlations could be as simple as the two variables are in fact not related; thus, the results for this particular sample are representative of the true nature of the phenomenon.

Another possibility for non-significant results, however, could be that men who participated in this study are typically *less* hypermasculine than college men reported in previous research articles. There is recent evidence in the literature to support this notion. For example, college men from Parrot and Zeichner's (2003) study reported higher mean hypermasculinity scores ($M = 9.40, SD = 5.7$) when compared to college men for this study ($M = 7.07, SD = 4.87$). With evidence such as this, one must consider the possibility that men from the present sample are less hypermasculine on average than other college men.

Although no statistically significant results were found for the second research question, new important information is nonetheless indicated. For example, prior to the present dissertation study, no known empirical studies that previously attempted to investigate how hypermasculinity and moral development were related within a sample of college men. Findings from the present study begin to fill this void within the literature.

Further, because of the findings of this research question, researchers and programmers now have additional evidence to assist their planning efforts. For example, non-significant results from this dissertation sample indicated that hypermasculinity and moral development are in fact not related. The implication of findings for this research

question, therefore, are that unless supported with future evidence showing otherwise, hypermasculinity is not significantly related to college men's level of moral development. Hypermasculinity, therefore, should be excluded as a potential predictor variable of moral development. In short, evidence from this study should enable future researchers and programmers from wasting valuable resources investigating variables that may prove to be non-significantly related to their efforts. Non-significant findings from the present dissertation, therefore, can be used to help direct future efforts to more promising related variables (e.g., rape myth endorsements).

Research Question 3 and Question 3.a

The third research question assessed how levels of rape myth endorsements, hypermasculinity, and scores from both the Quantitative and Verbal sections of the SAT were interrelated with moral development within the sample of college men. The results, which are also presented in detail in Chapter 4, clearly demonstrate that two out of the original four variables combine to significantly ($p < .01$) predict respondents' moral development scores. The two significant variables are rape myth endorsement total scores and scores from the verbal section of the SAT. In addition, when combined, both rape myth endorsements levels and SAT verbal scores account for nearly 9% of the variance in respondents' moral development levels.

The fact that SAT verbal scores were significant predictors in the regression model is not surprising. In fact, numerous studies have previously reported that moral development is also interrelated with intellectual abilities (see Rest, 1993; Sanders, Lubinski, & Benbow, 1995). In addition, large numbers of researchers agree that there is a substantial relationship between SAT scores and general intelligence (see Frey &

Detterman, 2004). Unique to this study, however, is the combination of IRMA scores and SAT verbal scores as significant predictors of moral development. Two non-significant variables, SAT Quantitative scores and scores from the Hypermasculinity Inventory were excluded from any further analysis for Research Question 3 and Research Question 3.a.

Because results for the third research question were statistically significant (i.e., rape myth endorsements and SAT verbal scores), analysis was warranted for sub-question three (i.e., Question 3.a). This sub-question was specifically analyzed to learn to what extent the seven subscales from the IRMA and Verbal SAT scores were interrelated with moral development levels within the study's sample of college men. Interestingly, two variables significantly ($p < .01$) combined to predict respondents' moral development scores. The two significant variables are the IRMA subscale, *It wasn't really rape* (IRMANR), and SAT verbal scores. When combined these two variables accounted for 10% of the variance found within moral development scores from the dissertation sample. All other subscales were non-significant contributors and were thus excluded from any further analysis related to the current model.

As previously discussed above, it is not surprising that the SAT scores significantly contributed to the model. What is most interesting, however, is the specific IRMA subscale that emerged as a significant contributor to the regression model. All items from the, *It wasn't really rape*, subscale present statements that are specifically related to how someone might perceive levels of sexual aggression. For example, one item states, "If a woman doesn't physically resist – even when protesting verbally – it really can't be considered rape" (Payne et al., 1999, p. 50).

There are important implications for the findings that significantly linked the IRMA subscale *It wasn't really rape*, to moral development. In fact, it is reasonable to posit that evidence from the present study suggests there is an immediate and practical implication for both sexual aggression education prevention programmers and additional professionals (i.e., service learning coordinators, student affairs administrators, and other related professions) where this study took place. All first year men who attend the higher education institution where this study took place must take part in a sexual aggression training workshop. Results from the present sample, therefore, could be immediately implemented to help change sexually aggressive attitudes and possibly even negative sexual behaviors by focusing on this category of rape myths. In short, the peer educators and programmers alike that conduct the sexual aggression workshop(s) could use these findings to better address this specific category of rape myths, thus, potentially lowering sexually aggressive attitudes and behaviors.

In fact, there is previous research evidence to suggest that lowering sexually aggressive attitudes could positively impact some men's sexual behaviors. For example, previous studies have found that successfully changing sexually aggressive attitudes (i.e., rape myths and rape jokes) is linked to some college men claiming that they are likely to change their *predicted* future sexual behaviors (see Foubert, Tatum, & Donahue, 2006). More importantly, however, there is evidence to suggest that changing sexually aggressive attitudes in some college men results in also changing their reported *actual* behaviors (see Foubert & Perry, 2007). Results from this study, therefore, could arguably be used to further refine sexual aggression education efforts by directing more intervention efforts on this specific category of rape myths. In particular, education and

intervention efforts should be used to address the category of rape myths contained within the IRMA subscale, *It wasn't really rape*.

Along with sexual assault educators, service learning coordinators, and other student affairs professionals would also benefit from the present findings. For example, there is research evidence to suggest that moral development education interventions are effective at positively influencing moral development levels (see Killen & Smetana, 2006). In fact, connecting social experiences with some student service learning opportunities have been linked to “positive moral action and a decrease in rates of delinquent conduct” (Nucci, 2006, p. 669).

Because this dissertation study successfully linked sexually aggressive attitudes to moral development levels there are important implications for related professionals. For example, sexual aggression educators can use this newfound information to target specific categories of rape myths, as previously discussed above. Service learning coordinators are likewise now better positioned to target specific service learning experiences for their respective students. For example, there is research to suggest that moral development levels in persons are positively influenced by service learning (see Nucci, 2006). Service learning programmers, therefore, could ensure that opportunities for men to participate in programs directly related to sexual aggression are provided on their respective campuses. For example, students could be advised to seek out service learning opportunities within campus and community sexual aggression crises centers, peer education programs, or other related experiences. The benefits of targeting rape related service learning opportunities are arguably twofold: (a) moral development is likely positively impacted, and (b) negative sexually aggressive attitudes reduced.

There is past evidence to help explain the present findings as they relate to the IRMA subscale, *It wasn't really rape*, and levels of moral development. Specifically, two lines of research could assist in the interpretation and explaining of the findings of this study. First, previous research findings suggest that persons assessed with lower moral development will tend to perceive aggressive acts as less violent when compared to persons with higher moral development levels (Berkowitz et al., 1985; Tisak et al., 2005).

Second, research evidence has previously indicated that both gender and racial stereotypes affect how adolescents and adults alike make interpretations about personal activities and behaviors in relation to concepts of morality (Killen et al., 2005). In fact, studies have previously indicated that as social situations become more complex, stereotypes tend to become the basis for legitimizing behaviors, even at the exclusion of certain basic moral concepts (i.e., justice, fairness, wellness of others) (Killen, et al., 2005). In other words, stereotypes are posited to become one driving factor behind some individuals' legitimizing morally related behaviors and beliefs. This action tends to happen if and when a sufficient amount of ambiguity is found within a moral based situation and the situation is beyond ones level of moral development (Killen et al., 2005).

Results from this dissertation study tend to support both that moral development is related to judging aggression levels and stereotypes. Evidence from this study suggests that lower moral development may in fact support a portion of some men's inability to correctly perceive levels of sexual aggression. This is established by the fact that the only IRMA subscale from this study significantly related to moral development in the regression model was, *It wasn't really rape*. Results from this study also seem to suggest

that lower moral development is related to participants choosing a stereotypical response related to aggression levels. All the rape myths from the IRMA instrument are known sexual aggression related stereotypes (Payne et al., 1999); therefore, findings from the present research also support previous research findings suggesting that levels of perceived aggression, using stereotypes to then make subsequent decisions, and moral development, are in fact interrelated.

Exploratory Data Analysis

Exploratory data analysis was also conducted using participants' religious preferences and parental highest education levels to compare mean scores (i.e., P Scores, Hypermasculinity, and IRMA) obtained from respondents. Discussed within this section is a summary of the major findings for each demographic characteristic.

Religious Preference. As previously discussed in chapter 4, participants who selected the categories of (a) None, (b) Protestant, and (c) Roman Catholic were included within this portion of the data analysis. Interestingly, one-way ANOVAs revealed that there were significant differences for two out of three variables tested. In fact, there were significant differences within the religious preference category between scores on the DIT and IRMA. There were no significant differences for mean scores on the hypermasculinity inventory relative to religious preference.

Participants who selected the religious preference category, None, had significantly ($p < .05$) higher assessed levels of moral development than men who chose Roman Catholic. Men who chose Protestant, however, were not significantly ($p > .05$) different from those men that selected Roman Catholic or None. In terms of effect size differences, men in the None category tended to utilize post conventional moral

reasoning about 9% more on the DIT than men who chose Roman Catholic as their religious preference.

There is research evidence to suggest that one's religious preference and moral development are interrelated. For example, Rest (1986) reported that conservative religious groups tend to have significantly lower levels of moral development (i.e., P scores) when compared to religious groups with more liberal theology. In addition, King and Mayhew (2002) recently conducted a comprehensive review of literature related to college student decision making and moral development. Evidence from King and Mayhew's study (2002) indicated that college students who objected to moral dilemmas based on a personal moral code – as opposed to religious convictions – had significantly higher moral development when compared to those who used religion as their criterion for opposing the moral dilemma. This latter evidence may at least partially explain why men from this study who selected the religious preference category of None had significantly higher DIT scores when compared to men who chose Roman Catholic as their religious preference.

Mean scores for men also differed on the IRMA based on their selected religious preference. One-way ANOVAs revealed that men who selected None ($M = 94.13$) as their religious preference endorsed significantly ($p < .05$) lower levels of rape myths when compared to men from both the Protestant ($M = 110.75$) and Roman Catholic ($M = 109.48$) categories. In terms of size differences, scores for men in the None category were approximately 17 points lower than men who selected Protestant, and 15 points lower than men who chose Roman Catholic as their religious preference. There were no additional significant differences between the Roman Catholic and Protestant categories.

Results from other studies reporting on the connections between religion and rape supportive attitudes are mixed. For example, Nagal, Matsou, McIntyre, and Morrison (2005) found no difference in regards to religious preference and rape supportive attitudes in their sample. In theory, however, a number of researchers agree that conservative religious theology supports a patriarchal society (Rozee & Koss, 2001; Burt 1980). A patriarchal society, in turn, reinforces male dominance and other non-egalitarian beliefs towards women. In short, it is believed that this indirectly reinforces rape myth endorsements (Rozee & Koss, 2001). Supporting this notion empirically, however, is not that simple for several reasons.

For example, Berkal, Vandiver, and Bahner (2004) recently attempted to conduct a meta-analysis on whether conservative religious ideology and gender role attitudes were significant predictors of perceived levels of violence used against women. These researchers clearly show in their findings that definitions of religion are often not easily comparable across studies. There are numerous explanations for this. For example, some researchers utilize religious preference only (as in the present study) and do so without taking into consideration the frequency of attending religious services. Other researchers operationalize religion solely in terms of the frequency of attendance at formal religious services (Berkal et al., 2004). Therefore, a direct comparison of the present findings to prior studies is not currently feasible. Nonetheless, the results of the present study add to the understanding of how characteristics of college men are influenced by their religious preferences.

Finally, there is one additional caution to the reader that particularly stands out when interpreting data between religious preference and moral development. It should be

noted that this study operationalized moral development from only one theoretical perspective. This dissertation study used the DIT as its measure of moral development. This instrument (i.e., DIT) focused on the concept of morality based on how Kohlberg (1970) and Rest et al. (2000) viewed moral decision making. Kohlberg (1970) and Rest et al. (2000) posited that moral related decisions were made by individuals based around notions of justice. Other theorists, however, claim that moral development is more complex. For example, other researchers have found evidence to suggest that moral decision making was also connected to notions of care and relationships (Gilligan, 1977; Jorgensen, 2006). Therefore, it is reasonable to assume that the concept of morality is more complex than only the notion of justice. In other words, moral development, and morality in general, is arguably more complex than justice alone. Operationalizing moral development in this study from a different theoretical perspective would have likely led to different findings.

Parental Education Level. As discussed in Chapter 4, participants were also evaluated on three characteristics of parental education level: (a) Less than a BA degree, (b) BA degree Completed, and (c) Graduate degree Completed. One-way ANOVAs were run and analyzed using scores from the defining issues test, hypermasculinity inventory, and IRMA. Results indicate that students did not significantly ($p > .05$) differ in their level of moral development or hypermasculinity based on parental education level. They did, however, differ significantly ($p < .01$) on their total IRMA scores.

Students with parental education levels of Graduate degree Completed endorsed significantly ($p < .05$) higher levels of rape myths when compared to students with parents who had not completed an undergraduate degree (i.e., Less than a BA

Completed). Scores for men whose parental education level was the completion of an undergraduate degree did not differ significantly from either other group. In terms of size differences, men with parental education levels of Graduate degree Completed typically had IRMA total scores 19.22 points higher than men with parents who did not complete an undergraduate college degree.

Typically, higher socioeconomic status (SES) has been associated with lower levels of rape myth endorsements within the literature; this finding has previously remained true even when conducting extensive meta-analysis research (Anderson, Cooper, & Okamura, 1997). It also usually remains true with participants from various ages, income, and educational level backgrounds (Nagal, Matsou, McIntyre, & Morrison, 2005). The results from this dissertation study, however, conflict with those previously mentioned research findings.

Men in this study could be an anomaly when compared to other populations. In other words, men from this study with parents who had completed a graduate degree do in fact endorse higher levels of rape myths, but these findings might not represent other populations of men not included within the present sample. Potential indications as to why these results were found within the present study could only be answered with future research.

In sum, several findings were statistically significant within this study. Data analysis indicated that as rape myth endorsement levels increased, assessed levels of moral development typically decreased. Contrary to the directional hypothesis, however, there was no significant relationship between moral development and hypermasculinity within the study sample. This finding suggests that either (a) men from this study are less

hypermasculine than men reported in other literature, or (b) these two variables are in fact not significantly related.

Interestingly, stepwise multiple regression analysis revealed that SAT verbal scores and the IRMA subscale, *It wasn't really rape*, combined to account for 10% of the variance found within the moral development scores from the dissertation sample. This finding is significant because it managed to isolate the specific category of rape myths associated with predicting ones level of moral development. Researchers and programmers alike can use this information to further refine sexual aggression related interventions.

Finally, exploratory research analysis on demographic variables shed further light on our sample. For example, atypical findings indicated that men with parents who had attained this highest education levels also endorsed the highest levels of rape myths. These findings are not normally associated with this group of men in the literature. Data from this study also indicated religious preference may in fact be interrelated to ones rape myth endorsement levels. Interestingly, evidence from this dissertation shows that those men who did not have a religious preference (i.e. None) were significantly lower in rape myth endorsement levels when compared to men from both the Protestant and Roman Catholic categories.

Implications for Practice

Given the results of this study, it is probable that there are several implications for student affairs practitioners and educators. For example, results from this study indicate that lower moral development typically coincides with an increased level of rape myth endorsements. One immediate implication for practitioners is this study provides

evidence supporting the notion of the need for early moral related education interventions. Numerous studies have indicated the positive impact of both non-formal (i.e., noncredit-bearing workshops/classes) and formal (i.e., higher education credit-bearing classes) moral related education interventions on college students' use of postconventional moral reasoning (see King & Mayhew, 2002). It could be logically argued, therefore, that because moral development levels are positively influenced by both formal and non-formal education interventions, and moral development is significantly interrelated with rape myth endorsements within this study sample, education interventions should be scheduled sooner, rather than later for college men.

More importantly for practitioners, however, is the specific category of rape myth endorsement (*It wasn't really rape*) that was isolated. Knowing this information should, at the very least, entice practitioners and educators alike to address this specific category of rape myths when conducting training interventions. This finding should also persuade practitioners and educators to find ways to reduce each specific rape myth associated with this subscale.

There are five specific rape myth statements associated with the IRMA subscale, *It wasn't really rape* (Payne et al., 1999). The five rape myth statements from the subscale are as follows.

- (a) If a woman doesn't physically fight back, you can't really say that it was rape.
- (b) A rape probably didn't happen if the woman has no bruises or marks.
- (c) If the rapist doesn't have a weapon, you really can't call it rape.
- (d) If a woman doesn't physically resist sex – even when protesting verbally – it really can't be considered rape.

- (e) If a woman claims to have been raped but has no bruises or scrapes, she probably shouldn't be taken too seriously.

Student affairs practitioners, sexual assault educators, and moral development educators, among others, can confront this category of rape myth by addressing each specific associated statement using various techniques. As previously stated above, there is research evidence to suggest that changing rape myth acceptance levels positively influences both predicted and actual behaviors in men. Therefore, addressing each specific rape myth, when conducting education programming, should also provide positive results. For example, the first myth states that unless a woman resists her aggressor (i.e., "...doesn't physically fight back...") it is not considered rape. This myth could be addressed in any number of ways. The most immediate method to address this myth is for programmers to include interventions that demystify the notion that non-resistance by a female equals the willingness for sexual contact to start or continue by the male. For example, this could be accomplished by explaining the confounding effects of alcohol on the inability to resist, discussing research results that suggest some women may "freeze" during sexual encounters, and discussing methods for improved communication skills during sexual related encounters.

Another method to address each rape myth would be to use morality based discussions and interventions during workshops and other related venues. In particular, practitioners should utilize the technique of *moral discourse* to address each specific rape myth (see Nucci, 2006). Interventions using moral discourse would have discussion sessions that highly encourage participation from attendees. Also necessary for this technique is an open, honest, dialogue between both presenter(s) and attendees. For the

purposes of moral discourse, an open dialogue must also include opportunities for speakers and attendees to refute competing positions about interpretations and motives related to the moral issue being discussed (i.e., each rape myth). After attending the workshop, participants would then need some additional time to internalize and process this information during a period of self-reflection. Once participants had time to process the information, however, evidence suggests that significant improvements in moral development occurs (Nucci, 2006). This technique works particularly well for those practitioners working within the Kohlbergian tradition (Nucci, 2006).

As previously mentioned, this study cannot prove one attitude causes the other. It does, however, show where these attitudes are interrelated. Student affairs practitioners, and moral development educators, among others, could potentially use this information to provide targeted sexual aggression interventions (i.e., targeting the rape myth category, *It wasn't really rape*) to help demystify this category of rape myths. The goal of targeting this category of rape myth would be to indirectly reduce sexually aggressive acts committed by men.

Recommendations and Suggestions for Future Research

The results of this study suggest a number of areas deserving of further research efforts. For example, given the lack of diversity in Race/Ethnicity of the current sample, additional studies should be undertaken in order to effectively investigate the impact this variable may/may not have on moral development and sexually aggressive attitudes. Because this study was conducted using men from only one college, it might also prove beneficial for additional studies to be conducted using men from various types/kinds of campuses with different institutional characteristics. For example, investigations into the

impact of institutional characteristics between historically black colleges or universities (HBCUs), community colleges, land-grant institutions, and private colleges/universities could prove useful when trying to learn whether findings from the present study remains true across different populations of students.

A study using qualitative research techniques might also provide beneficial research findings. For example, a mixed-methods research design could prove useful to researchers by using the DIT and IRMA as instruments to help identify unique cases of men. After collecting the quantitative portion of data (DIT and IRMA), unique men could then be invited to participate in a phenomenological study that investigated underlying reasons for this phenomenon. The intent of conducting a phenomenological study of this kind would be to understand how the “lived experiences” of participants supported or reinforced their moral development and endorsements of certain rape myths (Rossman & Rallis, 2003, p. 93). In addition, men with low levels of rape myth endorsements and high moral development could provide insight into how their lived experiences may have influenced their own positive attitudes. Having men participate in a study of this design would provide examples of contrasting attitudes and it might provide valuable insight into the underlying reasons why some men do, and some men do not, ascribe to certain sexually aggressive attitudes and beliefs.

Participants from this study were limited to first-year, traditionally aged college men; therefore, additional studies could potentially prove beneficial. For example, a longitudinal or cross-sectional study that collected moral development and sexually aggressive attitude data from men during each successive academic year would provide insight into three different, but useful areas: (a) whether moral development and sexually

aggressive attitudes were co-influenced by progressive maturation; (b) whether the significant category of rape myths (*It wasn't really rape*) from this study remained significant, even after accounting for maturation; and (c) whether the unique findings using the exploratory characteristics of demographic variables remained or changed over time.

Finally, another important study would be an investigation into additional predictor variables that are interrelated with moral development. For example, evidence from the present dissertation study suggests that rape myth endorsements and SAT Verbal scores account for 10% of the variance found within moral development. That being said, research should be undertaken to learn what additional sexually aggressive attitudes can be attributed to one's level of moral development. For example, a study into how empathy and alcohol consumption are potentially interrelated with moral development should also provide valuable insight into sexually aggressive attitudes of college men.

Limitations of Study

There are limitations associated with this study. For example, correlation research designs cannot establish cause-and-effect relationships among variables (Gall et al., 2003). Correlation research designs can establish the degree to which variables are interrelated, but they cannot *prove* whether one variable truly causes the other. The results of this study, therefore, show the degree to which the dependent and independent variables are interrelated. They do not, however, prove a cause-and-effect relationship. In short, rape myth endorsements and moral development were significantly interrelated, however, this does not prove one causes the other.

A second study limitation is the use of research participants from only one institution. The results of this study, therefore, are not sufficient for generalizing to a larger population beyond this one particular college. In fact, students from this institution may exhibit their own unique patterns of moral development and sexually aggressive attitudes. For example, as previously discussed above (see Research Question 2), Parrot and Zeichner's (2003) recent study indicated that their sample of college men reported higher levels of hypermasculinity than those reported within this dissertation sample. This particular limitation is potentially mitigated by providing a careful description of the sample (Gall et al., 2003).

A third limitation is the reliance on participants' self-reporting of data. This is viewed as a limitation for several reasons. For example, participants could have confounded the study by providing misleading or false information (Gall et al., 2003). Conducting research on rape supportive attitudes, however, could not be conducted without relying on self-reported measures. Using self-reported measures facilitated the ability to learn the participants' attitudes and beliefs, all the while conducting the research in an ethical manner.

A fourth limitation was the overall useable response rate. The overall response rate was greatly influenced by the number of research protocols removed from data analysis. Using the scoring guidelines established by Rest (1986), 36 protocols were removed because they failed the Meaningless Score (M Score) checks and 10 were removed because they failed the DIT consistency check. In addition, 12 protocols were removed because analysis of participants' demographic data indicated some respondents were in fact minors (i.e., younger than the required 18 years). Removing protocols from

any data analysis obviously reduced the statistical power to detect differences. As with all reduction in statistical power, this could be viewed as a limitation of the study. However, conducting the research in an ethical manner could not have been accomplished otherwise – especially when one considers the necessity to remove and destroy all protocols submitted by minors.

Finally, a fifth limitation of this study was a restriction of range with three particular variables. Specifically, Verbal/Quantitative SAT scores and P Scores from the DIT were restricted in the range of scores within this sample. For example, the mean SAT Verbal scores from the present sample were 692.69 ($SD = 62.48$) and the Quantitative SAT scores were 688.18 ($SD = 61.83$). The reported national average for Verbal ($M = 500$, $SD = 100$) and Quantitative ($M = 500$, $SD = 100$) SAT scores are substantially lower (College Board, 2005) than men's scores in the present study.

P Scores from the present sample were also restricted in range. For example, Rest (1986) reported normed scores from senior high school men as much lower ($M = 28.7$, $SD = 11.8$) than men's P Scores from the present sample ($M = 40.33$, $SD = 17.30$). Because the average Verbal/Quantitative SAT scores and P Scores from this sample were noticeably higher than the reported norm, one must consider the possibility that results from this sample are atypical for these variables. In fact, it is reasonable to assert that had there been a broader range of scores within the present dissertation sample there would have been a stronger relationship among the variables. Future researchers should mitigate this limitation by utilizing study samples that contain a larger mix of varying demographic characteristics.

Conclusion

Previous researchers have concluded that approximately one in twenty (4.6%) college-women are raped sometime during the calendar year (Mohler-Kuo, et al., 2004). Similarly, additional results indicate that 2.8% of college females are raped during the previous seven months of an academic year (Fisher et al, 2000).

Unfortunately, evidence also suggests that there are still many unknown variables associated with this phenomenon and the situation could even become worse. For example, related research literature is filled with studies investigating the prevalence of male perpetrated sexual aggression (see Catalano, 2006; Brecklin, & Ullman, 2001; Fisher, et al., 2000; Ouitmette & Riggs, 1998). The purpose of this multiple regression correlation study, therefore, was to assess the relationships between levels of moral development and the degree to which first year college men ascribe to rape supportive attitudes. This was done in an effort to identify new and unique areas related to sexual aggression.

Interestingly, data analysis indicated several unique and significant findings. For example, as rape myth endorsement levels increased within respondents from this study sample, levels of moral development conversely decreased. Multiple regression analysis also revealed that SAT verbal scores and the IRMA subscale, *It wasn't really rape*, combined to account for approximately one-tenth of the variance found within the moral development levels of men within the sample. This finding is particularly important because it furthers the related literature by identifying additional correlates of sexually aggressive attitudes related to moral development. In short, the literature is furthered

because there is now evidence to suggest the specific category of rape myths (i.e., *It wasn't really rape*) associated with predicting levels of moral development.

Further, after more than 50 years of related investigations, most researchers agree that sexual aggression prevalence rates are approximately the same (Koss, 2005; Rozee & Koss, 2001). In fact, Koss (2005) recently claimed that “without generation of new knowledge, community capacity may suffer from paucity of basic science, including surveillance, etiology, and clear delineation of high risk groups” (p. 106). Looking at the connection between sexually aggressive attitudes (i.e., rape myth endorsements and hypermasculinity) and levels of moral development within college men is unique to this study. The present dissertation study is therefore unique in that there is now a somewhat better understanding of the etiology of sexually aggressive attitudes within one sample of college men. In fact, it is reasonable to assert that as a result of this study, a specific category of rape myth endorsements is significantly linked to moral development levels. Conversely, results from this study also indicated that hypermasculinity is not a significant factor in relation to moral development. Using this information, therefore, researchers and programmers alike should capitalize on this study’s findings and subsequently design and carryout future studies by including the most promising variables and excluding those that are not likely to yield new information. The results of the present research allow the field to move somewhat closer towards our ultimate goal – to eventually remove *all* sexual aggression from our college campuses. This dissertation assists in this goal by providing a useful framework for understanding that rape myth endorsements are at least partially responsible for the variance within moral development levels of college men within this study sample.

References

- Abbey, A., Buck, P. O., Zawacki, T., & Saenz, C. (2003a, September). Alcohol's effects on perceptions of a potential date rape. *Journal of Studies on Alcohol, 64*, 669-677.
- Abbey, A., Clinton, A. M., McAuslan, P., Zawacki, T., & Buck, P. (2002). Alcohol-involved rapes: Are they more violent?. *Psychology of Women Quarterly, 26*, 99-109.
- Abbey, A., Clinton-Sherrod, A. M., McAuslan, P., Zawacki, T., & Buck, P. O. (2003b). The relationship between the quantity of alcohol consumed and the severity of sexual assaults committed by college men. *Journal of Interpersonal Violence, 18* (7), 813-833.
- Abbey, A., McAuslan, P., Zawacki, T., Clinton, A. M., & Buck, P. O. (2001a). Attitudinal, experimental, and situational predictors of sexual assault perpetration. *Journal of Interpersonal Violence, 16* (8), 784-807.
- Abbey, A., Parkhill, M. R., BeShears, R., Clinton-Sherrod, A. M., & Zawacki, T. (2006). Cross-sectional predictors of sexual assault perpetration in a community sample of single African American and Caucasian men. *Aggressive Behaviors, 32*, 54-67.
- Abbey, A., Zawacki, T., Buck, P., Clinton, A., M., & McAuslan, P. (2001b). Alcohol and sexual assault. *Alcohol Research and Health, 25*(1), 43-51.
- Adams-Curtis, L. E., & Forbes, G. B. (2004). College women's experiences of sexual coercion: A review of cultural, perpetrator, victim, and situational variables. *Trauma, Violence, & Abuse, 5*(2), 91-122.
- Anderson, K. B., Cooper, H., & Okamura, L. (1997, March). Individual differences and

- attitudes toward rape: A meta-analytic review. *Personality and Social Psychology Bulletin*, 23(3), 295-316.
- Baier, J. L., Rosenzweig, M. G., & Whipple, E. G. (1991). Patterns of sexual behavior, coercion, and victimization of university students. *Journal of College Student Development*, 32, 310-322.
- Banyard, V. L., Plante, E. G., Cohn, E. S., Moorhead, C., Ward, S., & Walsh, W. (2005). Revisiting unwanted sexual experiences on campus: A 12-year follow-up. *Violence Against Women*, 11(4), 426-446.
- Baxter-Magolda, M. B. (1995). The integration of relational and impersonal knowing in young adult's epistemological development. *Journal of College Student Development*, 36, 205-216.
- Berkel, L. A., Vandiver, B. J., & Bahner, A. D. (2004, March/April). Gender attitudes, religion, and spirituality as predictors of domestic violence: Attitudes in white college students. *Journal of College Student Development*, 45(2), 119-133.
- Berkowitz, M. W., Mueller, C. W., Schell, S. V., & Padberg, M. T. (1985). Moral reasoning and judgments of aggression. *Journal of Personality and Social Psychology*, 51(4), 885-891.
- Bernat, J. A., Calhoun, K. S., & Adams, H. E. (1999). Sexually aggressive and nonaggressive men: Sexual arousal and judgments in response to acquaintance rape and consensual analogues. *Journal of Abnormal Psychology*, 108(4), 662-673.

- Bernat, J. A., Calhoun, K. S., & Stolp, S. (1998). Sexually aggressive men's responses to a date rape analogue: Alcohol as a disinhibiting cue. *Journal of Sex Research, 35* (4), 341-348.
- Brannon, R. (1976). The male sex role: Our culture's blueprint of manhood, and what it's done for us lately. In D. David & R. Brannon (Eds.), *The forty-nine percent majority* (pp. 1-45). Reading, MA: Addison-Wesley.
- Brecklin, L., & Ullman, S. (2002, January). The roles of victim and offender alcohol use in sexual assaults: Results from the national violence against women survey. *Journal of Studies on Alcohol, 63*, 57-63.
- Brecklin, L., Ullman, S. (2001, January). The role of offender alcohol use in rape attacks: An analysis on National Crime Victimization Survey data. *Journal of Interpersonal Violence, 16*(1), 3-21.
- Brendgen, M., Vitaro, F., Tremblay, R. E., & Lavoie, F. (2001). Reactive and proactive aggression: Predictions to physical violence in different contexts and moderating effects of parental monitoring and caregiving behavior. *Journal of Abnormal Child Psychology, 29*(4), 293-304.
- Briere, J. & Malamuth, N. (1983). Self-reported likelihood of sexually aggressive behavior: Attitudinal versus sexual explanations. *Journal of Research in Personality, 17*, 315-323.
- Burke, D. M. (2001). Empathy in sexually offending and nonoffending adolescent males. *Journal of Interpersonal Violence, 16*(3), 222-233.
- Burt, M. (1980). Cultural myths and supports for rape. *Journal of Personality and Social Psychology, 38*(2), 217-230.

- Bushman, B. J., Bonacci, A. M., Dijk, M. V. & Baumeister, R. F. (2003). Narcissism, sexual refusal, and aggression: Testing a narcissistic reactance model of sexual coercion. *Journal of Personality and Social Psychology, 84*(5), 1027-1040.
- Cameron, C. A., & Stritzke, W. G. (2003). Alcohol and acquaintance rape in Australia: Testing the presupposition model of attributions about responsibility and blame. *Journal of Applied Social Psychology, 33*(5), 983-1008.
- Carlozzi, A. F., Bull, K. S., Stein, L. B., Ray, K., & Barnes, L. (2002). Empathy theory and practice: A survey of psychologists and counselors. *The Journal of Psychology, 136*(2), 161-170.
- Carnegie Foundation for the Advancement of Teaching. (2006). College of William and Mary: Classification and Category. Retrieved March 20, 2007 from <http://www.carnegiefoundation.org/classifications/sub.asp?key=748&subkey=16511&start=782>
- Carr, J. L. & VanDeusen, K. M. (2004). Risk factors for male sexual aggression on college campuses. *Journal of Family Violence, 19*(5), 279-289.
- Catalano, S. (2006). *Criminal Victimization, 2005* (NJC 214644). Washington DC: Bureau of Justice Statistics, National Crime Victimization Survey.
- Chng, C. L., Burke, S. (1999). An assessment of college students' attitudes and empathy toward rape. *College Student Journal, 33*(4), 573-583.
- Colby, A., & Kohlberg, L. (1987). *The measurement of moral judgment: Volume 1, theoretical foundations and research validation*. New York: Cambridge University Press.

- College Board. (2005). *Education pays update: A supplement to education pays 2004 – The benefits of higher education for individual and society*. Retrieved April 28, 2007 from http://www.collegeboard.com/prod_downloads/press/cost05/education_pays_05.pdf
- Cook, S. (1995). Acceptance and expectation of sexual aggression in college students. *Psychology of Women Quarterly, 19*, 181-194.
- Davis, K. C., George, W. H., Norris, J. (2004). Women's responses to unwanted sexual advances: The role of alcohol and inhibition conflict. *Psychology of Women Quarterly, 28*, 333-343.
- Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. *JSAJ: Catalog of Selected Documents in Psychology, 10*, 85.
- Davis, M. H. (1996). *Empathy: A Social Psychological Approach*. Boulder, CO: Westview.
- DeGue, S. A. & DiLillo, D. (2004, December). Understanding perpetrators of nonphysical sexual coercion: Characteristics of those who cross the line. *Violence and Victims, 19(6)*, 673-688.
- DeGue, S. A. & DiLillo, D. (2005, May/June). "You would if you loved me": Toward an improved conceptual and etiological understanding of nonphysical male sexual coercion. *Aggression and Violent Behavior, 10(4)*, 513-532.
- Deitz, S. R., Blackwell, K. T., Daley, P. C., & Bentley, B. J. (1982). Measurement of empathy toward rape victims and rapists. *Journal of Personality and Social Psychology, 43(2)*, 372-384.

- Duan, C., & Hill, C. E. (1996). The current state of empathy research. *Journal of Counseling Psychology, 43*(3), 261-274.
- Dodge, K. A., Lochman, J. E., Harnish, J. D., Bates, J. E., & Pettit, G. S. (1997). Reactive and proactive aggression in school children and psychiatrically impaired chronically assaultive youth. *Journal of Abnormal Psychology, 106*(1), 37-51.
- Duska, R., & Whelan, M. (1975). *Moral Development: A guide to Piaget and Kohlberg*. New York: Paulist Press.
- Eisenberg, N. (2000). Emotion, regulation, and moral development. *Annual Review of Psychology, 51*, 665-697.
- Eisenberg, N., Guthrie, I. K., Cumberland, A., Murphy, B. C., Shepard, S. A., Zhou, Q., & Carlo, G. (2002). Prosocial development in early adulthood: A longitudinal study. *Journal of Personality and Social Psychology, 82*(6), 993-1006.
- Eisenberg, N., Spinard, T. L., & Sadovsky, A. (2005). Empathy-related responding in children. In M. Killen & J. G. Smetana (Eds.), *Handbook of Moral Development* (pp. 517-549). Mahwah, NJ: Lawrence Erlbaum Associates.
- Evans, N. J., Forney, D. S., & Guido-DiBrito, F. (1998). *Student development in college: Theory, research, and practice*. San Francisco: Jossey-Bass.
- Fernandez, Y. M., & Marshall, W. L. (2003). Victim empathy, social self-esteem, and psychopathy in rapists. *Sex Abuse: A Journal of Research and Treatment, 15*(1), 11-26.
- Fisher, B., Cullen, F., & Turner, M. (2000). *The Sexual victimization of college women* (NJC 182369). Washington DC: U.S. Department of Justice.

- Foubert, J. D. (2005). *The Men's Program: A peer education guide to rape prevention* (3rd ed.). New York: Taylor & Francis.
- Foubert, J.D., & Perry, B. C. (2007). The qualitative impact of an empathy-based rape prevention program. *Violence Against Women, 13*(1), 1-17.
- Foubert, J. D., Tatum, J. L., & Donahue, G. A. (2005). Reactions of first-year men to a rape prevention program: Attitude and predicted behavior changes. *NASPA Journal, 43*(3), 578-598.
- Frey, M. C., & Detterman, D. K. (2004). Scholastic assessment or g?: The relationship between the scholastic assessment test and general cognitive ability. *Psychological Science, 15*(6), 373-378.
- Gall, M. D., Gall, J. P., & Borg, W. R. (2003). *Educational Research: An Introduction* (7th ed.). Boston: Pearson Education Inc.
- George, D., & Mallery, P. (2006). *SPSS for Windows, Step by Step: A Simple Guide and Reference* (6th ed.). Boston: Pearson Education Inc.
- Gerber, G. L. & Cherneski, L. (2006). Sexual aggression toward women: Reducing the prevalence. *Annals of the New York Academy of Science, 35*(46), 35-46.
- Gilligan, C. (1977). In a different voice: Women's conceptions of self and morality. *Harvard Educational Review, 47*, 481-517.
- Gladstein, G. A. (1983). Understanding empathy: Integrating counseling, developmental, and social psychology perspectives. *Journal of Counseling Psychology, 30*, 467-482.
- Gross, A. M., Bennett, T., Sloan, L., Marx, B. P., & Juergens, J. (2001). The impact of alcohol and alcohol expectancies on male perception of female sexual arousal in a

- date rape analog. *Experimental and Clinical Psychopharmacology*, 9(4), 380-388.
- Gross, A. M., Winslett, A., Roberts, M., Gohm, C. L. (2006, March). An examination of sexual violence against college women. *Violence Against Women*, 12(3), 288-300.
- Hersh, K., & Bernadette, G. (1998, August). Psychopathic traits and attitudes associated with self-reported sexual aggression in college men. *Journal of Interpersonal Violence*, 13(4), 456-472.
- Hoffmann, M. (2000). *Empathy and moral development: Implications for caring and justice*. Cambridge, UK: Cambridge University Press.
- Ito, T., Miller, N., Pollock, V. (1996). Alcohol and aggression: A Meta-Analysis on the moderating effects of inhibitory cues, triggering events, and self-focused attention. *Psychological Bulletin*, 120 (1), 60-82.
- Jimenez, J. A., & Abreu, J. M. (2003). Race and sex effects on attitudinal perceptions of acquaintance rape. *Journal of Counseling Psychology*, 50(2), 252-256.
- Johnson, B. E., Kuck, D. L. & Schander, P. R. (1997). Rape myth acceptance and sociodemographic characteristics: A multidimensional analysis. *Sex Roles*, 36(11/12), 693-707.
- Jorgenson, G. (2006, June). Kohlberg and Gilligan: Duet or dual. *Journal of Moral Education*, 35(2), 179-196.
- Kahn, A. S., Jackson, J., Kully, C., Badger, K., & Halvorsen, J. (2003). Calling it rape: differences in experiences of women who do or do not label their sexual assault as rape. *Psychology of Women Quarterly*, 27, 233-242.
- Killen, M., Margie, N. G., & Sinno, S. (2006). Morality in the context of intergroup relationships. In M. Killen & J. G. Smetana (Eds.), *Handbook of Moral*

- Development* (pp. 155-184). Mahwah, NJ: Lawrence Earlbaum Associates.
- King, P. M., & Mayhew, M. J. (2002). Moral judgement development in higher education: insights from the Defining Issues Test. *Journal of Moral Education, 31*(3), 247-270.
- Kirkpatrick, C., & Kanin, E. (1957, February). Male sex aggression on a university campus. *American Sociological Review, 22*(1), 52-58.
- Kohlberg, L. (1970). Education for justice, a modern statement of the Platonic view. In Sizer (Ed.), *Moral Education*, (pp. 57-81). Boston: Harvard University Press.
- Kohlberg, L. (1976). Moral stages and moralization: The cognitive-developmental approach. In T. Lickona (Ed.), *Moral development and behavior: Theory, research, and social issues* (pp. 31-53). New York: Holt, Richard & Winston.
- Kohlberg, L., Levine, C., & Hewer, R. (1984). The current formulation of theory. In L. Kohlberg (Ed.), *Essays on moral development: Vol. II. Psychology of moral development* (pp. 320 -386). San Francisco: Harper & Rowe.
- Koss, M. P. & Gidycz, C. A. (1985). Sexual experiences survey: Reliability and validity. *Journal of Consulting and Clinical Psychology, 53*, 422-423.
- Koss, M. P., Gidycz, C. A., & Wisniewski, N. (1987). The scope of rape: Incidence and prevalence of sexual aggression and victimization in a national sample of higher education students. *Journal of Consulting and Clinical Psychology, 55*, 162-170.
- Koss, M. P., Hiese, L., & Russo, N. F. (1994). The global health burden of rape. *Psychology of Women Quarterly, 18*, 509-537.
- Koss, M. P. (2005). Empirically enhanced reflections on 20 years of rape research. *Journal of Interpersonal Violence, 20*(1), 100-107.

- Krug, E. G., Dahlberg, L. L., Mercy, J. A., Zwi, A. B., Lozano, R. (Eds.). (2002). *World report on violence and health*. Geneva, World Health Organization: Author.
- Lapsley, D. K. (1996). *Moral psychology*. Boulder, CO: Westview Press.
- Lapsley, D. K. (2005). Moral stage theory. In M. Killen & J. G. Smetana (Eds.), *Handbook of Moral Development* (pp. 7-36). Mahwah, NJ: Lawrence Erlbaum Associates.
- Larimer, M. E., Lydum, A. R., Anderson, B. K., & Turner, A. P. (1999). Male and female recipients of unwanted sexual contact in a college student sample: Prevalence rates, alcohol use, and depression symptoms. *Sex Roles, 40*(3/4), 295-308.
- Leister, K. D. (1999). The relationship between sexual aggression and moral development in a sample of college males. *Dissertation Abstracts International* (UMI No. 9934446).
- Licht, M. H. (2004). Multiple regression and correlation. In L. Grimm & P. R. Yarnold (Eds.), *Reading and Understanding Multivariate Statistics* (pp. 19-64). Washington D.C.: American Psychological Association.
- Lisak, D., & Miller, P. (2002). Repeat rape and multiple offending among undetected rapists. *Violence and Victims, 17* (1), 73-84.
- Locke, B. D., Mahalik, J. R. (2005). Examining masculinity norms, problem drinking, and athletic involvement as predictors of sexual aggression in college men. *Journal of Counseling Psychology, 52*(3), 279-283.
- Lonsway, K. A. & Fitzgerald, L. F. (1994). Rape myths. In review. *Psychology of Women Quarterly, 18*, 133-164.

- Malamuth, N. M. (1981). Rape proclivity among males. *Journal of Social Issues, 37*, 138-157.
- Malamuth, N. M., Linz, D., Heavey, C. L., Barnes, G. & Acker, M. (1995). Using the confluence model of sexual aggression to predict men's conflict with women: A 10-year follow-up study. *Journal of Personality and Social Psychology, 69(2)*, 353-369.
- Malamuth, N. M., Sockloskie, R. J., Koss, M. P., & Tanaka, J. S. (1991). Characteristics of aggressors against women: Testing a model using a national sample of college students. *Journal of Consulting and Clinical Psychology, 59(5)*, 670-681.
- Marx, B. P., Gross, A. M., & Adams, H. E. (1999). The effect of alcohol on the responses of sexually coercive and noncoercive men to an experimental rape analogue. *Sexual Abuse: A Journal of Research and Treatment, 11(2)*, 131-145.
- Marx, B. P., Gross, A. M., & Juergens, J., P. (1997). The effects of alcohol consumption and expectancies in an experimental date rape analogue. *Journal of Psychopathology and Behavioral Assessment, 19(4)*, 281-302.
- Masters, N. T., Norris, J., Stoner, S., & George, W. H. (2006). How does it end? Women project the outcome of a sexual assault scenario. *Psychology of Women Quarterly, 30*, 291-302.
- McAdams, C. R., III (2002). Trends in the occurrence of reactive and proactive aggression among children and adolescents: Implication for preparation and practice in child and youth care. *Child & Youth Care Forum, 31(2)*, 89-109.
- Mohler-Kuo, M., Dowdall, G. W., Koss, M. P., & Wechsler, H. (2004, January). Correlates of rape while intoxicated in a national sample of college women.

Journal of Studies on Alcohol, 65(1), 37-45.

Mosher, D. L., & Anderson, R. D. (1986). Macho personality, sexual aggression, and reactions to guided imagery of realistic rape. *Journal of Research in Personality*, 20, 77-94.

Mosher, D. L., & Sirkin, M. (1984). Measuring a macho personality constellation. *Journal of Research in Personality*, 18, 150-163.

Murnen, S., Wright, C., & Kaluzny, G. (2002). If "boys will be boys," then girls will be victims? A Meta-Analytic review of the research that relates masculine ideology to sexual aggression. *Sex Roles*, 46(11/12), 359-375.

Nagal, B., Matsuo, H., McIntyre, K. P., & Morrison, N. (2005, June). Attitudes toward victims of rape: Effects of gender, race, religion, and social class. *Journal of Interpersonal Violence*, 20(6), 725-737.

Narvaez, D. (in press). The neo-Kohlbergian tradition and beyond: Schemas, expertise, and character. In C. Pope-Edwards & G. Carlo (Eds.), *Nebraska Symposium on Motivation, Vol. 51: Moral Motivation Through the Lifespan*. Lincoln, NE: University of Nebraska Press.

Nucci, L. (2006). Educating for moral development. In M. Killen & J. Smetana (Eds.), *Handbook of Moral Development*. Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc.

Norris, J., George, W. H., Davis, K. C., Martel, J., & Leonesio, R. J. (1999). Alcohol and hypermasculinity as determinants of men's empathic responses to violent pornography. *Journal of Interpersonal Violence*, 14 (7), 683-700.

- O'Donohue, W., Yeater, E. A., & Fanetti, M. (2003, May). Rape prevention with college males: The roles of rape myth acceptance, victim empathy, and outcomes expectancies. *Journal of Interpersonal Violence, 18*(5), 513-531.
- Osland, J. A., Fitch, M., & Willis, E. E. (1996). Likelihood to rape in college males. *Sex Roles, 35*(3/4), 171-255.
- Ouitmette, P. C., & Riggs, D. (1998). Testing a mediational model of sexually aggressive behavior in nonincarcerated perpetrators. *Violence and Victims, 13*, 117-130.
- Parrott, D. J., & Zeichner, A. (2003). Effects of hypermasculinity on physical aggression against women. *Psychology of Men and Masculinity, 4*(1), 70-78.
- Payne, D. L., Lonsway, K. A., & Fitzgerald, L. F. (1999). Rape myth acceptance: Exploration of its structure and its measurement using the Illinois Rape Myth Acceptance Scale. *Journal of Research in Personality, 33*, 27-68.
- Perry, W. G. (1999). *Forms of ethical and intellectual development in the college years: A schema*. San Francisco: Jossey-Bass.
- Reis, I., L. (1986). *Journey into sexuality: An exploratory voyage*. Englewood Cliffs, NJ: Prentice Hall.
- Rennison, C. M. (2002). National crime victimization survey, criminal victimization 2001: Changes 2000-2001 with trends 1993-2001 (NCJ 187007). Washington, DC: U.S. Government Printing Office.
- Rest, J. R. (1993). *Guide for the Defining Issues Test*. Minneapolis, MN; Center for the Study of Ethical Development.
- Rest, J. R., & Narvaez, D. (1998). *Supplement to Guide for the DIT-1*. Minneapolis, MN; Center for the Study of Ethical Development.

- Rest, J. R., Narvaez, D., Bebeau, M. J., & Thoma, S. J. (1999). *Post conventional moral thinking: A neo-Kohlbergian approach*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Rest, J. R., Narvaez, D., Thoma, S. J. & Bebeau, M. J. (2000). A Neo-Kohlbergian approach to morality research. *Journal of Moral Education, 29(4)*, 381-395.
- Rest, J. R., Thoma, S. J., Narvaez, D., & Bebeau, M. J. (1997). Alchemy and beyond: Indexing the defining issues test. *Journal of Educational Psychology, 89(3)*, 498-507.
- Rossmann, G. B., & Rallis, S. F. (2003). *Learning in the field: An introduction to qualitative research* (2nd ed.). London: Sage Publications.
- Rozee, P. D., & Koss, M. P. (2001). Rape: A century of resistance. *Psychology of Women Quarterly, 25*, 295-311.
- Sanday, P., R. (1981). The socio-cultural context of rape: A cross-cultural study. *Journal of Social Issues, 37(4)*, 5-27.
- Sanders, C. E., Lubinski, D. & Benbow, C. P. (1995). Does the Defining Issues Test measure psychological phenomena distinct from verbal ability?: An examination of Lykken's query. *Journal of Personality and Social Psychology, 69(3)*, 498-504.
- Sawyer, R. G., Thompson, E. E. & Chicorelli, A., M. (2002). Rape myth acceptance among intercollegiate student athletes: A preliminary examination. *American Journal of Health Studies, 18(1)*, 19-25.

- Schewe, P. A. (2002). Guidelines for developing rape prevention and risk reduction interventions. In P. A. Schewe (Ed.), *Preventing violence in relationships: Interventions across the life span* (pp. 107-136). Washington, DC: American Psychological Association.
- Schewe, P. A., & O'Donohue, W. T. (1993). Rape prevention with males: The role of victim empathy. *Violence and Victims, 8*(4), 339-351.
- Scronce, C. A., & Corcoran, K. J. (1995, September). The influence of the victim's consumption of alcohol on perceptions of stranger and acquaintance rape. *Violence Against Women, 1*(3), 241-253.
- Stams, G. J., Brugman, D., Dekovic, M., Rosmalen, L., Laan, P., & Gibbs, J. C. (2006). The moral judgment of juvenile delinquents: A meta-analysis. *Journal of Abnormal Psychology, 34*, 697-713.
- Stephens, K. A., & George, W. H. (2004). Effects of anti-rape video content on sexually coercive and noncoercive college men's attitudes and alcohol expectancies. *Journal of Applied Social Psychology, 34*(2), 402-416.
- Stormo, K. J., Lang, A. R., & Stritzke, W. G. (1997). Attributions about acquaintance rape: The role of alcohol and individual differences. *Journal of Applied Social Psychology, 27*(4), 279-305.
- Thoma, S. J. (2005) Research on the defining issues test. In M. Killen & J. G. Smetana (Eds.), *Handbook of Moral Development* (pp. 67-91). Mahwah, NJ: Lawrence Erlbaum Associates.
- Thompson, E. H., & Pleck, J. H. (1986). The structure of male role norms. *American Behavioral Scientist, 29*, 531-543.

- Tisak, M. S., Tisak, J., Goldstein, S. E. (2005). Aggression, delinquency, and morality: a social-cognitive perspective. In M. Killen & J. G. Smetana (Eds.), *Handbook of Moral Development* (pp. 7-36). Mahwah, NJ: Lawrence Earlbaum Associates.
- Turiel, E. (2005). Thought, emotions, and social interactional processes in moral development. In M. Killen & J. G. Smetana (Eds.), *Handbook of Moral Development* (pp. 7-36). Mahwah, NJ: Lawrence Earlbaum Associates.
- Ullman, S. (2003). A critical review of field studies on the link of alcohol and adult sexual assault in women. *Aggression and Violent Behavior, 8*, 471-486.
- Ullman, S., Karabastos, G. & Koss, M. (1999). Alcohol and sexual aggression in a national sample of college men. *Psychology of Women Quarterly, 23*, 673-689.
- Wheeler, J. G., George, W. H., & Dahl, B. J. (2002). Sexually aggressive males: Empathy as a moderator in the "Confluence Model" of sexual aggression. *Personality and Individual Differences, 33*, 758-775.
- Whittaker, M. K., Brown, J., Beckett, R., & Gerhold, C. (2006). Sexual knowledge and empathy: A comparison of adolescent child molesters and non-offending adolescents. *Journal of Sexual Aggression, 12*(2), 143-154.
- William and Mary (2006). Office of Institutional Research: Facts at a glance. Retrieved March 20, 2007 from http://www.wm.edu/ir/fast_facts.htm
- Wilson, A. E., Calhoun, K. S., & McNair, L. D. (2002a, November). Alcohol consumption and expectancies among sexually coercive college men. *Journal of Interpersonal Violence, 17*(11), 1145-1159.
- Wilson, C., Goodwin, S., & Beck, K. (2002b). Rape attitude and behavior and their relationship to moral development. *Psychiatry, Psychology, and Law, 9*(1), 85-95.

Zawacki, T., Abbey, A., Buck, P. O., McAuslan, P., & Clinton-Sherrod, A. M. (2003).

Perpetrators of alcohol-involved sexual assaults: How do they differ from other sexual assault perpetrators and nonperpetrators?. *Aggressive Behavior*, 29, 366-380.

Appendix A

Defining Issues Test – Short Form

INSTRUCTIONS: The purpose of this portion of the questionnaire is to help us understand how people think about social problems. Different people have different opinions about questions of right and wrong. **There are no “right” answers to such problems** in the way that math problems have right answers. We would like you to tell us what you think about three problem stories. Please read these instructions carefully. After reading each story, you will be asked to complete the following three steps.

First, to indicate YOUR recommendation for what a person should do. If you tend to favor one action over another (even if you are not completely sure), indicate which one. If you do not favor either action, mark “can’t decide.”

Second, read each of the items numbered 1 to 12. Think of the issue that the item was raising. If that issue is important in making a decision, one way or the other, then select “great.” If that issue is not important or doesn’t make sense to you, select “no.” If the issue is relevant but not critical, select “much,” “some,” or “little” – depending on how much importance that issue has to your opinion. You may select several items as “great” (or any other level of importance) – there is no fixed number of items that must be selected at any one level.

Third, you will be asked to choose the item that is the MOST important consideration out of these provided items. Pick from among the provided items, even if you think that none of them are of “great” importance. Of the items that are presented, pick one as the most important (relative to the ones provided there), then the second most important, third, and finally, the fourth most important.

1. Heinz and the Drug

In Europe a woman was near death from a special kind of cancer. There was one drug that doctors thought might save her. It was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, but the druggist was charging ten times what the drug cost to make. He paid \$200 for the radium and charged \$2,000 for a small dose of the drug. The sick woman’s husband, Heinz, went to everyone he knew to borrow the money, but he could only get together about \$1,000, which is half of what it cost. He told the druggist that his wife was dying, and asked him to sell it cheaper or let him pay later. But the druggist said, “No, I discovered the drug and I’m going to make money from it.” So Heinz got desperate and began to think about breaking into the man’s store to steal the drug for his wife. Should Heinz steal the drug?

2. Escaped Prisoner

A man had been sentenced to prison for 10 years. After one year, however, he escaped from prison, moved to a new area of the country, and took on the name of Thompson. For eight years he worked hard, and gradually he saved enough money to buy his own business. He was fair to his customers, gave his employees top wages, and gave most of his own profits to charity. Then one day, Mrs. Jones, an old neighbor, recognized him as the man who had escaped from prison eight years before, and whom the police had been looking for. Should Mrs. Jones report Mr. Thompson to the police and have him sent back to prison?

First, Select YOUR recommendation:

Should Report Him

Can't Decide

Should Not Report Him

Second, select how important each issue was (**remember, this is your opinion** and you can select the same level of importance more than once).

Great Importance	Much Importance	Some Importance	Little Importance	No Importance	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	1. Hasn't Mr. Thompson been good enough for such a long time to prove he isn't a bad person?
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	2. Every time someone escapes punishment for a crime, doesn't that just encourage more crime?
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	3. Wouldn't we be better off without prisons and the oppression of our legal system?
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	4. Has Mr. Thompson really paid his debt to society?
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	5. Would society be failing what Mr. Thompson should fairly expect?
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	6. What benefits would prisons be apart from society, especially a charitable man?
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	7. How could anyone be so cruel and heartless as to send Mr. Thompson to prison?
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	8. Would it be fair to all the prisoners who had to serve out their full sentences if Mr. Thompson was let off?
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	9. Was Mrs. Jones a good friend of Mr. Thompson?
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	10. Wouldn't it be a citizen's duty to report an escaped criminal, regardless of the circumstances?
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	11. How would the will of the people and the public good best be served?
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	12. Would going to prison do any good for Mr. Thompson or protect anybody?

Third, pick from among the provided items below, even if you think that none of them are of “great” importance. Pick one as the most important (relative to the ones provided here), then the second most important, third, and fourth most important. (Note. The item numbers correspond to the statements above.)

	1	2	3	4	5	6	7	8	9	10	11	12
Most Important Item	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Second Most Important Item	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Third Most Important Item	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fourth Most Important Item	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. Newspaper

Fred, a senior in high school, wanted to publish a mimeographed newspaper for students so that he could express many of his opinions. He wanted to speak out against the use of the military in international disputes and to speak out against some of the school’s rules, like the rule forbidding boys to wear long hair.

When Fred started his newspaper, he asked his principal for permission. The principal said it would be all right if before every publication Fred would turn in all his articles for the principal’s approval. Fred agreed and turned in all his articles for the principal’s approval. The principal approved all of them and Fred published two issues of the paper in the next two weeks.

But the principal had not expected that Fred’s newspaper would receive so much attention. Students were so excited about by the paper that they began to organize protests against the hair regulation and other school rules. Angry parents objected Fred’s opinions. They phoned the principal telling him that the newspaper was unpatriotic and should not be published. As a result of the rising excitement, the principal ordered Fred to stop publishing. He gave as a reason that Fred’s activities were disruptive to the operation of the school. Should the principal stop the newspaper?

First, Select YOUR recommendation:

- Should Stop It
 Can’t Decide
 Should Not Stop It

Second, select how important each issue was (**remember, this is your opinion** and you can select the same level of importance more than once).

Great Importance	Much Importance	Some Importance	Little Importance	No Importance	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	1. Is the principal more responsible to students or the parents?
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	2. Did the principal give his word that the newspaper could be

Appendix B

Illinois Rape Myth Acceptance Scale (IRMA)

Please write the number most clearly matching YOUR opinion using this scale:

Not at All Agree Very Much Agree

1 2 3 4 5 6 7

If a woman is raped while she is drunk, she is at least somewhat responsible for letting things get out of control.

Although most women wouldn't admit it, they generally find being physically forced into sex a real "turn on."

When men rape, it is because of their strong desire for sex.

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.

Women who are caught having an illicit affair sometimes claim that it was rape.

Newspapers should not release the name of a rape victim to the public.

Many so-called rape victims are actually women who had sex and "changed their minds" afterwards.

Many women secretly desire to be raped.

Rape mainly occurs on the "bad" side of town.

Usually, it is only women who do things like hang out in bars and sleep around that are raped.

Most rapists are not caught by the police.

If a woman doesn't physically fight back, you can't really say that it was rape.

—
Men from nice middle-class homes almost never rape.

—
Rape isn't as big a problem as some feminists would like people to think.

—
When women go around wearing low-cut tops or short skirts, they're just asking for trouble.

—
Rape accusations are often used as a way of getting back at men.

—
A rape probably didn't happen if the woman has no bruises or marks.

—
Many women find being forced to have sex very arousing.

—
If a woman goes home with a man she doesn't know, it is her own fault if she is raped.

—
Rapists are usually sexually frustrated individuals.

—
All women should have access to self-defense classes.

—
It is usually only women who dress suggestively that are raped.

—
Some women prefer to have sex forced on them so they don't have to feel guilty about it.

—
If the rapist doesn't have a weapon, you really can't call it a rape.

—
When a woman is a sexual tease, eventually she is going to get into trouble.

—
Being raped isn't as bad as being mugged and beaten.

—
Rape is unlikely to happen in the woman's own familiar neighborhood.

—

In reality, women are almost never raped by their boyfriends.

Women tend to exaggerate how much rape affects them.

When a man is very sexually aroused, he may not even realize that the woman is resisting.

A lot of women lead a man on and then they cry rape.

It is preferable that a female police officer conduct the questioning when a woman reports a rape.

A lot of times, women who claim they were raped just have emotional problems.

If a woman doesn't physically resist sex – even when protesting verbally – it really can't be considered rape.

Rape almost never happens in the woman's own home.

A woman who "teases" men deserves anything that might happen.

When women are raped, it's often because the way they said "no" was ambiguous.

If a woman isn't a virgin, then it shouldn't be a big deal if her date forces her to have sex.

Men don't usually intend to force sex on a woman, but sometimes they get too sexually carried away.

This society should devote more effort to preventing rape.

A woman who dresses in skimpy clothes should not be surprised if a man tries to force her to have sex.

Rape happens when a man's sex drive gets out of control.

A woman who goes to the home or apartment of a man on the first date is implying that she wants to have sex.

Many women actually enjoy sex after the guy uses a little force.

If a woman claims to have been raped but has no bruises or scrapes, she probably shouldn't be taken too seriously.

Appendix C

Hypermasculinity Inventory

Instructions: Select one statement from each of the following items that **BEST** reflects your personal opinion. **REMEMBER, there is no right or wrong answer**, so PLEASE be as honest as possible.

1.
 1. After I've gone through a really dangerous experience my knees feel weak and I shake all over.
 2. After I've been through a really dangerous experience I feel high.
2.
 1. I'd rather gamble than play it safe.
 2. I'd rather play it safe than gamble.
3.
 1. Call me a name and I'll pretend not to hear you.
 2. Call me a name and I'll call you another.
4.
 1. Fair is fair in love and war.
 2. All is fair in love and war.
5.
 1. I like wild uninhibited parties.
 2. I like quiet parties with good conversations.
6.
 1. I hope to forget past unpleasant experiences with male aggression.
 2. I still enjoy remembering my first real fight.
7.
 1. Some people have told me I take foolish risks.
 2. Some people have told me I should take more chances.
8.
 1. So-called effeminate men are more artistic and sensitive.
 2. Effeminate men deserve to be ridiculed.
9.
 1. Get a women drunk, high, or hot and she'll let you do whatever you want.
 2. It's gross and unfair to use alcohol and drugs to convince a woman to have sex.
10.
 1. I like fast cars and fast women.
 2. I like dependable cars and faithful women.
11.
 1. So-called prick teasers should be forgiven.
 2. Prick teasers should be raped.
12.
 1. When I have a few drinks under my belt, I mellow out.
 2. When I have a few drinks under my belt I look for trouble.
13.
 1. Any man who is a man needs to have sex regularly.
 2. Any man who is a man can do without sex.
14.
 1. All women, even women's libbers, are worthy of respect.
 2. The only woman worthy of respect is your own mother.
15.
 1. You have to fuck some women before they know who's the boss.

2. You have to love some women before they know you don't want to be the boss.
16.
 1. When I have a drink or two I feel ready for whatever happens.
 2. When I have a drink or two I like to relax and enjoy myself.
17.
 1. Risk has to weighed against possible maximum loss.
 2. There is no such thing as too big a risk, if the payoff is large enough.
18.
 1. I win by not fighting.
 2. I fight to win.
19.
 1. It's natural for men to get into fights.
 2. Physical violence never solves an issue.
20.
 1. If you're not prepared to fight for what's yours, then be prepared to lose it.
 2. Even if I feel like fighting, I try to think of alternatives.
21.
 1. He who can, fights; he who can't, runs away.
 2. It's just plain dumb to fist fight.
22.
 1. When I'm bored I watch TV or read a book.
 2. When I'm bored I look for excitement.
23.
 1. I like to drive safely avoiding all possible risks.
 2. I like to drive fast, right on the edge of danger.
24.
 1. Pick-ups should expect to put out.
 2. So-called pick-ups should choose their men carefully.
25.
 1. Some women are good for only one thing.
 2. All women deserve the same respect as your own mother.
26.
 1. I only want to have sex with women who are in total agreement.
 2. I never feel bad about my tactics when I have sex.
27.
 1. I would rather be a famous scientist than a famous prizefighter.
 2. I would rather be a famous prizefighter than a famous scientist.
28.
 1. Lesbians have chosen a particular life style and should be respected for it.
 2. The only thing a lesbian needs is a good, stiff cock.
29.
 1. If you are chosen for a fight, there's no choice but to fight.
 2. If you are chosen for a fight, it's time to talk your way out of it.
30.
 1. If you insult me, be prepared to back it up.
 2. If you insult me, I'll try to turn the other cheek.

Appendix D

Demographic Questions

1. Please type in your age? ___ Years and ___ Months (For example: *18 Years and 2 Months*)

2. Please indicate your background (Optional)
 - a. African-American/Black
 - b. Asian-American/Pacific Islander
 - c. White/Caucasian
 - d. Hispanic/Latino
 - e. Native American
 - f. Native Alaskan
 - g. Other (type in the space provided)

3. Please indicate your religious preference. (Optional)
 - a. Protestant
 - b. Roman Catholic
 - c. Eastern Orthodox Christian
 - d. Jewish
 - e. Muslim
 - f. Hindu
 - g. None
 - h. Other (type in the space provided)

4. Please provide your scores on the SAT? (*If you took it more than once, please use the most recent scores*).
 - a. Verbal/Critical Reading ____?
 - b. Math/Quantitative ____?

5. Finally, please select the highest level of education attained by either parent (or, the person you consider as your primary caregiver).
 - a. Not a High School Graduate
 - b. High School Graduate
 - c. Some College, No Degree
 - d. Associate Degree Completed
 - e. Bachelor's Degree Completed
 - f. Master's Degree Completed
 - g. Doctoral Degree Completed
 - h. Professional Degree Completed

Appendix E

Invitation to Participate in Study

July 1, 2007

Dear <Name of School Removed> First Year Student;

Welcome to <Name of School Removed>!

As a new in-coming first year college student, you are being invited to participate in a brief web-based questionnaire. The purpose of this study is to explore the relationship(s) between moral reasoning and sex related attitudes.

I have chosen to send you this invitation to participate before the fall semester begins in the hopes that you will have adequate time to complete the questionnaire. As an incentive to participate, you could win one of several random drawings for prizes after all data collection is completed. One participant will receive a \$100 gift card, three will receive \$50 gift cards, and five will receive \$25 gift cards. Your participation is voluntary and it should only take about 20 minutes.

To complete the survey, please go to <Web Link>. ALL information collected for this study will be kept absolutely private and confidential. In no way will you be associated with nor linked as an individual with any of your responses.

The survey will only allow you to submit responses once; so please plan enough time to complete it in one sitting. In order for your responses to be included in this study, please complete the questionnaire by July 5, 2007.

Should you have any questions and/or concerns please feel free to email me at jltau@wm.edu. Alternatively, you can call me at (757) 270-2160.

Thank you in advance for taking the time to participate! Best of luck at <Name of School Removed> – it truly is a wonderful place!

Respectfully,
Jerry Tatum
Doctorate Candidate
College of William and Mary

THIS PROJECT WAS FOUND TO COMPLY WITH APPROPRIATE ETHICAL STANDARDS AND WAS EXEMPTED FROM THE NEED FOR FORMAL REVIEW BY THE COLLEGE OF WILLIAM AND MARY PROTECTION OF HUMAN SUBJECTS COMMITTEE (Phone 757-221-3966) ON 2007-05-17 AND EXPIRES ON 2008-05-17.

If you would like to be removed from future email reminders, please click here (link).

Participant Reminder - 1

Hello Again First-Year <Name of School Removed>;

Last Sunday evening I sent you an email (see below) asking you to please complete a brief on-line survey as a participant in my doctoral dissertation research. Today's email is a second attempt to ask for your participation. Without students like you taking the time to complete my questionnaire, I will not have data necessary to complete the research project.

As an incentive to participate, please remember that I will be having several prize drawings at the conclusion of my data collection. Several participants will win some great monetary prizes!

Your participation is critical to my study and it will likely take you less than 20 minutes. **Please know that I am VERY appreciative of your taking the time to help me in the completion of my research!** I have included last Sunday's email below for your reference.

THANK YOU!!!! THANK YOU!!!!

Respectfully,

Jerry Tatum
Doctoral Candidate
The College of William and Mary

Participant Reminder - 2

Hello Again First-Year <Name of School Removed> Students;

I wanted to send one final email reminder to those of you who have not yet completed the survey. You can complete the survey by clicking on the following link: <Web Link>

Please remember there are several incentives for participating. In fact, several folks will win some great gift cards. One participant will even win a \$100 gift card! And, the cards will have a major credit card logo.... Therefore, you can spend the money anywhere credit cards are accepted.

Your participation is absolutely critical to my study and it will most likely take you less than 20 minutes. Please consider taking the time to complete the survey. **The link to the survey will remain open until midnight July 15th. I have included below my**

previous email for your reference.

Please click here to take the survey: <Web Link>

Best of luck to each one of you! Thank you!

Respectfully,

Jerry Tatum
Doctoral Candidate
The College of William and Mary

To be removed from any future email reminders click here: <Web Link>

Appendix F

Consent to Research Form

Thank you for your willingness to participate in this study! Before beginning the survey, remember to plan on it taking 20 - 25 minutes. In addition, please take the time to read the following carefully before proceeding.

The general nature of this dissertation research project entitled, "Rape Myth Acceptance, Hypermasculinity, and Verbal/Quantitative SAT Scores as Correlates of Moral Development: A New Direction For Understanding Sexually Aggressive Attitudes In First Year College Men" conducted by Jerry Tatum and Dr. John Foubert has been explained to me. I understand that I will be asked to complete a web-based questionnaire. I further understand that my responses will be confidential and that no reference(s) will be made in any written or oral reports/presentations that would link me individually to the study. I also know that I may refuse to answer any question(s) asked and that I may discontinue participation at any time. I am aware that I may report dissatisfactions with any aspect of this study to the Chair of the Protection of Human Subjects Committee, Dr. Michael Deschenes, 757-221-2778 or mrdesc@wm.edu. I am aware that I must be at least 18 years of age to participate. By clicking on the link provided below, I signify that my participation in this project is voluntary, and that I have received a copy of this consent statement.

[CLICK HERE WHEN READY TO BEGIN!](#)

THIS PROJECT WAS FOUND TO COMPLY WITH APPROPRIATE ETHICAL STANDARDS AND WAS EXEMPTED FROM THE NEED FOR FORMAL REVIEW BY THE COLLEGE OF WILLIAM AND MARY PROTECTION OF HUMAN SUBJECTS COMMITTEE (Phone 757-221-3966) ON 2007-05-17 AND EXPIRES ON 2008-05-17.

Appendix G

IRB Approval Form

Date: Thu 17 May 08:21:01 EDT 2007

From: <compli@wm.edu> Add To Address Book | This is Spam

Subject: Status of protocol EDIRC-2007-05-02-4767-jltatu set to active

To: jdfoub@wm.edu, jltatu@wm.edu, edirc-l@wm.edu

Cc: <jltatu@wm.edu>, <jdfoub@wm.edu>

This is to notify you on behalf of the Education Internal Review Committee (EDIRC) that protocol EDIRC-2007-05-02-4767-jltatu titled Rape Myth Acceptance, Hypermasculinity, and Verbal/Quantitative SAT Scores as Correlates of Moral Development: A New Direction For Understanding Sexually Aggressive Attitudes in First Year College Men has been exempted from formal review because it falls under the following category(ies) defined by DHHS Federal Regulations: 45CFR46.101.b.2.

Work on this protocol may begin on 2007-05-17 and must be discontinued on 2008-05-17. Should there be any changes to this protocol, please submit these changes to the committee for determination of continuing exemption using the Protocol and Compliance Management channel on the Self Service tab within myWM (<http://my.wm.edu/>).

Please add the following statement to the footer of all consent forms, cover letters, etc.:

THIS PROJECT WAS FOUND TO COMPLY WITH APPROPRIATE ETHICAL STANDARDS AND WAS EXEMPTED FROM THE NEED FOR FORMAL REVIEW BY THE COLLEGE OF WILLIAM AND MARY PROTECTION OF HUMAN SUBJECTS COMMITTEE (Phone 757-221-3966) ON 2007-05-17 AND EXPIRES ON 2008-05-17.

You are required to notify Dr. Ward, chair of the EDIRC, at 757-221-2358 (EDIRC-L@wm.edu) and Dr. Deschenes, chair of the PHSC at 757-221-2778 (PHSC-L@wm.edu) if any issues arise during this study.

Good luck with your study.

Intercorrelations Between All Continuous Variables (N = 161)

Variables ^a	Pscore	IRMATtl	IRMASA	IRMANR	IRMAMT	IRMAWI	IRMALI	IRMATE	IRMADE	HyperTtl	SAT Verbal	SAT Quant
Pscore	1	-.231(**)	-.228(**)	-.249(**)	-0.095	-.180(*)	-0.139	-0.148	-.163(*)	-0.056	.233(**)	0.111
IRMATtl		1	.853(**)	.713(**)	.702(**)	.695(**)	.754(**)	.724(**)	.701(**)	.303(**)	-0.077	0.088
IRMASA			1	.503(**)	.522(**)	.520(**)	.585(**)	.525(**)	.537(**)	.196(*)	-0.117	0.041
IRMANR				1	.417(**)	.430(**)	.511(**)	.536(**)	.513(**)	.174(*)	-0.042	0.106
IRMAMT					1	.424(**)	.450(**)	.405(**)	.362(**)	.277(**)	-0.066	0.027
IRMAWI						1	.502(**)	.437(**)	.310(**)	.316(**)	-0.054	0.074
IRMALI							1	.514(**)	.348(**)	.287(**)	0.103	0.130
IRMATE								1	.495(**)	.391(**)	0.022	0.103
IRMADE									1	0.010	-.172(*)	0.021
HyperTtl										1	0.058	-0.032
SAT Verbal											1	.299(**)
SAT Quant												1

Appendix H

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

^a P Score, Defining Issues Test; IRMATtl, Illinois Rape Myth Acceptance Scale Total Score; IRMASA, *She asked for It*; IRMANR, *It wasn't really rape*; IRMAMT, *He didn't mean to*; IRMAWI, *She wanted it*; IRMALI, *She lied*; IRMATE, *Rape is a trivial event*; IRMADE, *Rape is a deviant event*; HyperTtl, Hypermasculinity Inventory Total Score; SATVerbal, SAT Verbal Total Scores; SATQuant, SAT Quantitative Scores.

Vita

Jerry Lee Tatum

Birthdate: February 26, 1973

Birthplace: Jacksonville, Florida

Education: 2005-2007 The College of William and Mary
Williamsburg, Virginia
Doctor of Education

2003-2004 American Intercontinental University
Hoffman Estates, Illinois
Master of Business Administration

1997-1998 Saint Leo University
Saint Leo, Florida
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1994-1997 Saint Leo, University
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Associate of Arts