Understanding the Relationship of Self-Reports of Rape Myth Acceptance, Bystander Behavior,

Bystander Efficacy, and Empathy in the Average College Student: A Follow-Up Study to Inform

Bystander Intervention Efforts for Violence Prevention

Olivia E. Fellows

University of Louisville

Abstract

Bystander intervention has become an important focus of efforts toward violence prevention. Bystander intervention programs and trainings are now being employed to raise awareness about potentially violent situations and empower individuals to intervene when necessary. Previous research has found that trainings can help individuals decrease their acceptance of rape myths and report a higher level of confidence in bystander efficacy. More recent research has begun to address the question of (1) the relation of the emotion of empathy to other measures of rape myth acceptance and bystander behaviors, and (2) its potential utility in helping to identify those best suited as bystander intervention trainers vs. trainees. To further explore these questions, the current study, with the use of questionnaires, seeks to evaluate the relations among empathy, rape myth acceptance, bystander efficacy, and bystander behaviors in a larger sample of average students at the University of Louisville. Descriptive statistics indicated desirable responses from participants. Specifically, self-reports of bystander efficacy were positively correlated with active bystander behaviors. Importantly, self-reports of rape myth acceptance were found to be negatively correlated with both bystander efficacy and empathy. Previous research has suggested sex differences; similarly, our work finds female participants self-reported higher levels of empathy and a lower acceptance of rape myths than male participants. Our work also revealed a marginally significant interaction between sex and high vs. low empathy in terms of their combined effects on rape myth acceptance. These results continue to expand our understanding of the relations of rape myth acceptance, bystander behavior and efficacy, and empathy and also help to identify potential individuals and groups that may benefit most from bystander intervention or violence prevention programs/trainings.

Understanding the Relationship of Self-Reports of Rape Myth Acceptance, Bystander Behavior,
Bystander Efficacy, and Empathy in the Average College Student: A Follow-Up Study to Inform
Bystander Intervention Efforts for Violence Prevention

Power-based personal violence is a form of violence that's main motivator is the assertion of power and/or intimidation in order to harm another. Examples include partner violence, sexual assault, and stalking (Green Dot Strategy, n.d.). A 2007 study found that 20 million out of 120 million women in the United States have been raped during their lifetime. Of these 20 million women, 673,000 currently attending U.S. colleges and universities had experienced rape (Kilpatrick, Resnick, Riggiero, Conoscenti, & McCauley, 2007).

In 2010, the National Center for Injury Prevention and Control and the Center for Disease Control and Prevention conducted The National Intimate Partner and Sexual Violence Survey (Black, Basile, Breiding, Smith, Walters, Merrick, Chen, & Stevens, 2011). Data collection was based on phone interviews which were obtained from 9,086 women and 7,421 men. They found that 1 in 5 women and 1 in 71 men had been raped at some point in their lives. Nearly half of these women (51.1%) reported being raped by an intimate partner and nearly half of women (40.8%) and men (52.4%) self-reported being raped by an acquaintance (Black et al. 2011).

With alarming statistics such as these, the American College Health Association (2007) urged campus communities to develop programs focused on bystander intervention techniques. Bystander intervention techniques are skills that allow the community to be aware of the continuum of violence and empower themselves to intervene and prevent actions or words that perpetuate this continuum. The ultimate goal is to create a culture in which violence will not be tolerated.

At the University of Louisville, Bledsoe and Sar conducted a survey that was given to establish baseline data about campus community perceptions of safety and violence (2001). This survey was completed by 1,310 students and 282 faculty and staff at the University of Louisville. This study reported that students as well as faculty and staff had experienced some form of violence at some point within their lives. Most significantly, 11 % of female students who were surveyed in the spring semester had reported being raped. This report emphasizes need for preventative measures towards sexual violence.

The Bystander Effect

The bystander effect refers to the finding that an individual's likelihood of helping in a high-risk situation diminishes when passive bystanders are nearby (Fischer, Krueger, Greitemeyer, Vogrincic, Kastenmüller, Frey, & Kainbacher, 2011). There are many examples that illustrate this effect such as the well known 1964 case of Kitty Genovese (Rosenthal, 1964). More recently in 2009, Dominik Brunner was murdered at a train station by two 18 year olds after trying to help young children out of a violent situation. There were many bystanders present at the train station but no one intervened (Fischer et al., 2011).

Since the Genovese case in 1964, many scholars have explored the bystander effect and Darley and Latané identified psychological processes that might prevent people from intervening within a high-risk situation. Researchers point to at least five processes that are potentially at work during events where a bystander could otherwise intervene. The first process is *diffusion of responsibility* which is the tendency for a person to disperse responsibility among other bystanders in helping a victim in a situation (Darley & Latané, 1968). The second process Latané and Darley (1970) identified was *evaluation apprehension*, in which an individual fears that they are being judged by others in public. The third process, *pluralistic ignorance*, results when

individuals rely on the reactions of others to define an uncertain situation (Latané & Darley, 1970). The fourth process, *confidence in skills*, occurs when an individual who has had little to no training in regards to bystander intervention are less likely to intervene (Latane & Darley, 1970; Goldman & Harlow, 1993). Other psychological processes such as modeling have been highlighted and developed by other researchers. The fifth process, *modeling*, is the likelihood that individuals who have or who have not had individual or community based positive role models will become prosocial bystanders (Bryan & Test, 1967; Banyard, Plante, & Moynihan, 2005). These are factors of interest to violence prevention (viz., bystander intervention) as this work seeks to eliminate such barriers to helping attitudes and behaviors (viz., diffusion of responsibility, evaluation apprehension, and pluralistic ignorance) and also highlight the importance of improving confidence in skills and positive modeling for potential bystander intervention.

Bystander Intervention Training

Specific violence prevention and intervention programs such as *Green Dot* and *Bringing in the Bystander* are being employed in communities to empower people to have the means necessary to intervene within situations such as the Dominik Brunner case. *Green Dot* is an example of a bystander intervention program used to reduce sexual violence primarily on college campuses (Coker, Cook-Craig, Williams, Fisher, Clear, Garcia, & Hegge, 2011). Banyard, Moynihan, and Crossman (2009) developed *Bringing in the Bystander* as an informative seminar for sexual violence prevention.

Green Dot intervention program is implemented in two phases. The first phase involves a fifty minute persuasive speech to introduce the concept of bystander intervention and arouse campus community interests to sexual violence prevention. The second phase of the program

consists of a formal training that involves an overview of violence against women, concepts of bystander roles, and bystander intervention techniques. Coker et al. (2011) examined the two phases of Green Dot bystander intervention program to determine if participants gained more prosocial attitudes towards sexual violence and increase actual bystander behaviors. Coker et al. (2011) found that students who had had previous knowledge or training over *Green Dot* were more likely to engage in and report active bystander behaviors than those who had no previous knowledge or training. These students who had been previously trained also self-reported significantly lower rape myth acceptance scores than students who had no previous training.

Bringing in the Bystander is a 90-minute single-session workshop for sexual violence prevention. This program's main focus is empowering the bystander to actively intervene in instances of sexual violence. Banyard, Moynihan, and Crossman (2009) examined the effectiveness of the program by using a pretest before training and a posttest after training evaluating the self-reports of measures of bystander efficacy, rape myth acceptance, willingness to help, and level of agreement concerning statements about pros and cons of being an active bystander. Banyard, Moynihan, and Crossman (2009) found a negative correlation between bystander efficacy and rape myth acceptance from pre-test to post-test. This negative correlation suggested that participants who self-reported strong bystander efficacy were less likely to accept rape myths.

Green Dot and Bringing in the Bystander have begun to explore the potentially positive prosocial effects of bystander intervention and violence prevention trainings. Both programs found significant and promising results in regards to the overall effects of these trainings and programs. It is also important to consider that results from the Green Dot training suggested participants who attended the bystander intervention training were more likely to engage in

bystander behaviors as well as have a lower acceptance of rape myths than those who had not been previously trained. The current study, will further examine students who have not had been otherwise informed and/or engaged in bystander intervention and violence prevention programs and trainings in order to add to the current literature regarding the effectiveness of these and similar programs and trainings.

Sex Differences in Bystander Intervention

Many researchers have discovered different attitudes and responses towards bystander intervention based on the participants' sex. Previous research suggests that, overall, women tend to have more positive, prosocial attitudes towards bystander intervention than men. However, certain circumstances seem to lead men to demonstrate and report better bystander attitudes and behavior.

McMahon (2010) examined the acceptance of rape myths and its relation to participants' willingness to intervene as a bystander among a sample of incoming college students. This exploratory study used a survey that was collected before a required rape prevention program on campus. McMahon (2010) found that participants without previous knowledge or education regarding sexual violence indicated a significantly greater acceptance of rape myths than their counterparts. More importantly, the study found significant sex differences for both rape myth acceptance and bystander attitudes. Males self-reported a higher acceptance of rape myths and had less positive attitudes about acting as a bystander than female participants. This was especially true for males who were athletes or pledging for a fraternity. McMahon (2010) noted that gender differences were important in gaining more information on how to design and develop bystander intervention and violence prevention programs/trainings for males and females.

Brown and Messman-Moore (2009) surveyed male college students to gain anonymous responses to personal attitudes supporting sexual aggression and estimating attitudes of their peers. The students were also asked to indicate how willing they were to intervene against a peer who was engaged in an act of sexual aggression. This study found that men who self-reported the support of sexual aggression also self-report that they are less likely to intervene against sexual aggression. They also found that male students were even less likely to intervene against sexual aggression if they were high in personal and peer support for sexual aggression.

Psychological barriers towards bystander intervention have also played a role in males' decisions to intervene within a potentially high risk situation. Carlson (2008) found that men were not likely to intervene if they were to be viewed as potentially weak or not aggressive within a violent situation. She also found that men were likely to intervene when the potentially violent situation suggested extreme forms of physical aggression or violence. Male participants also self-reported that they were likely to intervene if an individual was unresponsive or had bodily injuries. Carlson (2008) also stated that men might not act as bystanders within sexually violent situations towards women because of the fear that other men might perceive him as homosexual or submissive (viz., evaluation apprehension).

Banyard, Moynihan, and Crossman (2009) examined gender differences within their evaluation of *Bringing in the Bystander* program. Self-reports of bystander efficacy, rape myth acceptance, willingness to help, and level of agreement concerning pros and cons of active bystander behavior were collected in this study. These reports indicated that male and female participants differed in their overall scores. Female participants were less likely to accept rape myths than male participants. Banyard, Moynihan, and Crossman (2009) also found that male participants were more likely to self-report a higher level of confidence intervening as a

bystander. These results suggest that gender differences could inform potential researchers in designing trainings according to male and female participants' needs (viz., female participants receive more training on bystander confidence and males receive more training on exposing rape myths).

Empathy and Bystander Intervention

Previous studies have looked to introduce the emotion of empathy in further examining the effectiveness of bystander trainings and programs. Mehrabian and Epstein (1972) found that empathy was significantly correlated with helping behaviors in a sample of college students. This significant relationship between empathy and helping behavior also supported the idea that empathetic persons are responsive to other's emotional needs. Foubert and Newberry (2006) used the measure of empathy in relation to rape myth acceptance among a sample of college males who participated in a bystander intervention program. They found that for the bystander intervention program, men had a significant increase in the emotion of empathy and a significant decrease of rape myth acceptance. They also suggested that the use of the bystander intervention trainings elucidate the emotion of empathy and that further research should be conducted to further examine this relationship. Since the relationship of empathy and bystander intervention has just recently been explored (as discussed in the upcoming section), empathy remains to be an important explorative tool in understanding its relationship to bystander intervention and violence prevention.

Previous Study at the University of Louisville

Silvia Gozzini, an undergraduate student at the University of Louisville, conducted a study to explore the effects of Green Dot Bystander Empowerment Training on the campus of

the University of Louisville (2011). The 8-hour Green Dot Bystander Empowerment Training (GDBET) trained students and faculty at the University of Louisville on how to overcome potential barriers to become an empowered bystander. The purpose of the study, through the use of pre and post training questionnaires, was to examine the relations and individual differences of participants self-reports of empathy, rape myth acceptance, active bystander behaviors, and bystander efficacy both before and after the GDBET. The previous study examined whether:

- Participants' self reports would indicate a significant decrease in rape myth acceptance, and would indicate a significant increase in bystander efficacy.
- 2. Participants' self reports of empathy would be positively correlated with both active bystander behaviors and bystander efficacy, while participants' self-reports of empathy would be negatively correlated with rape myth acceptance, both before and after the Green Dot Bystander Empowerment Training.
- Participants' self reports of empathy, rape myth acceptance, active bystander behaviors, and bystander efficacy would potentially reveal important differences between females and males.

Twenty eight participants attended the full 8-hour Green Dot Bystander Empowerment training and completed both a pre and a post-training packet of questionnaires. All participants were undergraduate and graduate students at U of L with the exception of one faculty member. Of these twenty eight participants, 21 identified as female and 7 identified as male. The participants² ages ranged from 18 to 55. The sample was also largely European American (22) and largely involved in campus activities.

The previous study used pre and post-training questionnaires to evaluate the results of undergoing the GDBET. The previous study was interested in self-reports of acceptance of rape

myths, active bystander behaviors, and bystander efficacy. The measure of empathy was added as an extension to examine the relationship between empathy and other measures. The pretraining questionnaires were administered before the GDBET and post-training questionnaires were administered immediately following the training. The pre-training measures were the Questionnaire Measure of Emotional Empathy (QMEE), the Illinois Rape Myth Acceptance Scale (IRMA), the Active Bystander Behavior Scale (ABB), and the Bystander Efficacy scale along with demographic items. The post-training measures were the QMEE, the IRMA, and the BES. The ABB was not used in post-training measurements because it asked respondents to the number of instances they engaged in bystander behaviors during the current school year.

Gozzini's study (2011) -confirmed two out of three hypotheses. She found a significant negative correlation between bystander efficacy and rape myth acceptance. This indicated that participants' self reports of bystander efficacy increased while self-reports of acceptance of rape myths decreased. A significant negative correlation was found between self-reports of emotional empathy and rape myth acceptance. This signified that participants' who self-reported a higher level of empathy also self-reported a lower acceptance of rape myth. The analysis of the previous study also revealed a significant positive correlation between self-reports of emotional empathy and bystander efficacy as well as a significant positive correlation. This implied that participants' who self-reported reported a higher level of empathy also self-reported a higher level of confidence in performing certain bystander behaviors. Also, participants' who self-reported a higher level of emotional empathy also self-reported a higher number of instances of active bystander behaviors during the current school year. Gozzini (2011) failed to find any significant sex differences across the four measures due to the small sample of participants as well as a small representation of men.

The previous study posed many questions and concerns as a result of the GDBET and also provided future ideas for further research. Gozzini (2011) had concerns about the self-selected population being exposed to volunteer bias. Since participant's volunteered for the 8-hour training, participants were likely and uniquely interested and already engaged in bystander intervention and violence prevention efforts. Previous studies also had found sex differences in bystander intervention. Since the previous study failed to find significant sex differences, would a larger more diverse sample possibly reveal significant sex differences? Since empathy was a novel extension to the previous study and results showed desirable empathy scores among participants, would the addition of the measure of emotional empathy help inform future bystander intervention programs/trainings (viz., identify potential trainers and trainees based on higher or lower empathy scores)?

Effects of Volunteerism

Gozzini (2011) found that the exposure of volunteer bias may have been a potential concern to the examined self-selected population. Since participants volunteered to attend the 8-hour training, it has been suggested that participants were already interested and/or engaged in efforts concerning bystander intervention and violence prevention. Since participants must voluntarily agree to participate in studies, researchers have wondered if recruiting potential respondents leads to an unrepresentative sample of the larger population. Specifically, college student volunteer participants are not necessarily representative of the larger college sample which ultimately leads to potential volunteer bias (Brecher & Brecher, 1986; Wiedermen, 1999). Thus, it is important to determine what identifiable characteristics determine volunteer populations to help alleviate the concern of volunteer bias.

UNDERSTANDING THE RELATIONSHIP OF

Rosenthal and Rosnow (1975) identified characteristics of people who volunteer for research that differentiate them from nonvolunteers. Some examples of characteristics of participants who volunteer were:

- <u>1)1.</u> Volunteers are more social than nonvolunteers.
- <u>2)2.</u> Volunteers tend to be more highly educated than nonvolunteers.
- 3)3. Females are more likely to volunteer than males, except where the research involves physical or emotional stress.

Dollinger and Leong (1993) found that volunteers are more agreeable, extraverted, and open to new experience than nonvolunteers. This suggests that volunteers may already be equipped with potentially more positive emotions and a higher need for interaction among other volunteers and individuals. It seems possible that participants within Gozzini's study may have already had more positive emotions and attitudes towards bystander intervention and violence prevention trainings. Since Gozzini's study had a rather small representation of male participants, it could be suggested that females were more likely to volunteer than males because of the topic of the research. Due to research questions involving attitudes about bystander intervention and sexual violence prevention, it seems possible that males may have felt less inclined to participate in the previous study than females.

Rosenthal and Rosnow (1975) also determined that researchers can have three levels of confidence in how to rate the effect of volunteer bias. *Maximum confidence* concludes that participants who have a large interest in the research topic and also realize the potential of a favorable outcome are likely to volunteer. *Considerable confidence* involves participants' realizing the importance of research and either feeling guilt for not participating or are offered

Formatted: Numbered + Level: 1 +
Numbering Style: 1, 2, 3, ... + Start at: 1 +
Alignment: Left + Aligned at: 0.5" + Indent at: 0.75"

incentives are more likely to volunteer. Finally, *minimum confidence* may be obtained if there is a public commitment or some personal relationship to the recruiter that the participant is more likely to volunteer. These levels of confidence seem to be beneficial in rating what effect volunteer bias may have upon the results in previous studies. It may also be suggested that researchers may have *maximum confidence* in volunteer bias in the previous study at the University of Louisville. A researcher could have had *maximum confidence* that individuals who signed up for this 8-hour training may have been predestined to volunteer based on large interest in violence prevention and/or bystander intervention.

Since participants volunteered for the 8-hour GDBET in advance, it seems that the sample of participants within Gozzini's study may have not been representative of the general campus population. These participants may have already had more prosocial and positive attitudes as well as the need for interaction with other participants in the GDBET. For further examination, it seems that conducting a study involving less introduction to the topic being researched (e.g., such as volunteering for a 15 minute questionnaire) could be more representative of the general population (e.g., general population of students at the University of Louisville).

Objective

The current study, with the use of a series of questionnaires, will seek to evaluate the relations among the emotion of empathy, rape myth acceptance, bystander efficacy, and bystander behaviors in a larger sample of *average* students (e.g., students who have not attended the 8-hour Green Dot Bystander Empowerment Training and/or are not otherwise informed or engaged in a formal bystander intervention or violence prevention programs/trainings) at the University of Louisville. Additional questions involve the relation of demographic variables to

these measures, and focus primarily on gender differences in reported attitudes, efficacy, behaviors, and empathy in those not otherwise trained in bystander efficacy. This work should contribute to our current understanding of individual differences in college students' overall empathy, and their attitudes and behaviors surrounding personal violence. Our expected analyses look to explore:

- 1. The current study will continue to explore individual differences in self-reports of emotional empathy, rape myth acceptance, active bystander behaviors, and bystander efficacy. The current study also will continue to explore the line of questioning regarding negative attitudes, behaviors, and emotion in the form of higher acceptance of rape myths, lower emotional empathy, lower bystander efficacy and lower bystander behavior scores in a sample of average college students.
- The current study will investigate important relations among self-reports of emotional empathy, rape myth acceptance, active bystander behaviors, and bystander efficacy.
- 3. The current study will look to examine sex differences on the measures of emotional empathy, rape myth acceptance, active bystander behaviors, and bystander efficacy. The current study also will look to explore any interactions between sex and empathy in terms of their combined effects on such things as rape myth acceptance

Overall, the major focus of this continued effort is to: (1) assess and evaluate best practices/interventions such as *Green Dot*, (2) identify students or groups at greatest risk for negative attitudes and behaviors who may most benefit from *training*, and (3) identify potential

(student) exemplars who may best serve as role models/educators (viz., *trainers*) in the area of violence prevention and bystander efficacy.

Methods

Participants

Students who were enrolled in any one of seven undergraduate classes from the University of Louisville were invited to participate in the current study (see Table 2). Only consenting students were then asked to complete the survey packet of questionnaires and included as research participants. Of the students invited, 102 female and male undergraduate students agreed to participate and 101 became subjects. One student was eliminated from the study due to a large number of unanswered items on the survey. These participants were invited to take part in this study during their class time.

Of our 101 participants, 67(66.3%) identified as females and 34 (33.7%) identified as males. The participants' ages ranged from 18 years to 35 years with the mean age of 21.2 (see Table 3). Many majors of the participants were self-reported with the largest representation in Psychology (see Table 4). The ethnicity of the participants that was self-identified using seven different ethnic categories. The largest representation was European American with smaller representations among the other ethnicity categories (see Table 5). Almost half of the participants in the study identified as senior class ranking with lower representations among the other classes (see Table 6).

Many participants reported being involved in various aspects of campus life (see Table 7). Only 8 % of participants self-identified as a member of an athletic team while close to half of the participants identified as being involved in an extracurricular activity at University of

Louisville. Approximately 24% of subjects indentified as being a member of a social fraternity or sorority and 36% of participants identified as being a member of a registered student organization on campus. The six questions of the demographic items (see Appendix E) acted to provide more information for researchers on participants' knowledge of types of violence as well as incidents of sexual violence.

The last question of the demographic questions (see Appendix E) acted as potential filter in scoring the results of the participants. Thirteen individuals responded that they had attended bystander intervention training but only one participant actually attended the Green Dot Bystander Empowerment training offered at the University of Louisville. Therefore, only one participant's scores were removed from the four measures of data analyses (not demographic items) and the twelve others were included in analyses.

Measures

The current study is a continuation of an initial project that explored the effect of Green Dot Bystander Empowerment Training (GD BET). This work looks to utilize the same survey measures as that first project (viz., empathy (QMEE), rape myth acceptance (IRMA-R), active bystander behaviors (ABB), and bystander efficacy (BES)). The major difference between this follow-up study (viz., addendum) and the original study is that our focus is on individuals who do *not* have any bystander or violence prevention training and who have *not* been recruited for that purpose.

Questionnaire Measure of Emotional Empathy (QMEE). Mehrabian and Epstein (1972) developed a 33-item scale based on the measurement of emotional empathy. The scale asks respondents to judge their level of agreement with a list of statements (-4 means very

strongly disagree, and up to +4 which means very strongly agree). For example, "I tend to get emotionally involved with a friend's problem", and "people make too much of the feelings and sensitivity of people and animals". These 33 statements make up 7 subscales on this survey, which are: (a) susceptibility to emotional cognition, (b) appreciation of the feelings of unfamiliar and distant others, (c) extreme emotional responsiveness, (d) tendency to be moved by other's emotional experiences, (e) tendency to be moved by other's negative positive emotional experience, (f) sympathetic tendency, and (g) willingness to be in contact of others who have problems. The scale score is calculated by reversing the sign for the negative item responses.

These scores are then summed and the scale score ranges from -132 to 132. Higher scores indicate a higher level emotion of empathy while lower scores indicate a lower level emotion of empathy.

Illinois Rape Myth Acceptance- Reduced (IRMA-R). The acceptance of rape myths is measured by using a small subset of the 45 item Illinois Rape Myth Acceptance Scale (Payne, Lonsway, & Fitzgerald, 1999). This scale has been supported as a reliable and valid measure of rape myth acceptance within sexual violence prevention research (e.g., Banyard et al., 2007; Banyard, 2008; Banyard et al., 2009; McMahon, 2010; Coker et al., 2011). This small subset of 7 items will be modeled after work by Coker et al. (2011). This subset was selected in the interest of participants' time. An example of rape myths on this scale include, "A lot of women lead a man on and then cry rape" and "It is only usually women who dress suggestively that are raped". The scale scores range from 7 to 28, where 7 signifies the lowest acceptance of rape myth and 28 signifies the highest acceptance of rape myths.

Active Bystander Behavior Scale (ABB). Coker et al. (2011) modified Banyard's (2008) Bystander Behavior Scale to create a shorter more concise version to report actual active

bystander behaviors. This scale has been employed within various research projects and has demonstrated reliability and validity (e.g., Banyard, Moynihan & Plante, 2007; Banyard, 2008; Banyard, Moynihan & Crossman, 2009; McMahon, 2010). Respondents' are asked to self-report how frequently they engaged in bystander behaviors within the current school year on a 12 question scale (Fall 2011- Spring 2012). For example, "Talked to a friend who was raped or hit by a partner" and "Discussed the possible danger of drinking too much with friends". The scale responses range from 0-3, where 0= not at all, 1 = 1-2 times, 2 = 3-5 times, and 3 = 6 or more times. The possible range of scores is 0-36, where a score of 0 indicates no reported active bystander behavior and 36 indicates a high frequency of bystander behavior.

Bystander Efficacy Scale (BES). The Bystander Efficacy Scale was developed by Banyard et al. (2007) which was reproduced from LaPlant's (2002) work. This 14-item scale asks respondents to self-report their level of confidence in regards to performing certain bystander behaviors. Items on this scale include, "Ask a friend if they need to be walked home from a party" and "Get help if I hear of an abusive relationship in my dorm or apartment". Participants indicate their rating of bystander confidence on a scale from 0% to 100%, where 0% represents "Can't do", 10% represents "Quite Certain", 50% represents "Most Certain", and 100% represents "Certain". The participants' score can range from 0 to 1400, the higher the score the higher the participants' reported bystander efficacy. This scale has displayed validity and strong internal consistency within several studies conducted by Banyard and fellow researchers. In each of the studies, subjects had a high pretest to posttest correlation (Banyard et al., 2007; Banyard, 2008; Banyard et al., 2009).

Table 1: Study Design

Survey Packet of Questionnaires

Questionnaire Measure of Emotional Empathy (QMEE) (Appendix A)

Illinois Rape Myth Acceptance (IRMA) (Appendix B)

Active Bystander Behavior Scale (ABB) (Appendix C)

Bystander Efficacy Scale (BES) (Appendix D)

Demographic Items (Appendix E)

Procedure

Participants were recruited during one of their undergraduate class meetings where they had been asked to participate and sign a consent form at the beginning of the class. Professors instructing these courses were sent an electronic mail request to allot class time for completion of the surveys. Three classes granted 25 minutes outside of class time to complete the survey. These classes were Humanities 331, Sociology 336, and Sociology 420 (see Table 2). During this class time, students were invited to participate in the study and read an informed consent. Once they signed the consent form, they were given the survey packet.

The four remaining classes that agreed to participate were offered to take their survey voluntarily outside of class time at a separate arranged classroom on campus. These courses included Psychology 201, Psychology 321, Psychology 336, and Psychology 404 (see Table 2). During this period, students were invited to participate and read the informed consent. Once they signed the consent form, they were given a survey packet to complete. Participants were asked to complete a short packet of survey questions (viz., containing measures that have been described

21

above) (See Table 1). The packet also included additional demographic questions in order to explore the relation of these variables to survey (e.g., gender differences in reported bystander attitudes, efficacy, behaviors, and empathy in those not otherwise trained in bystander efficacy).

Results

Composite Scores

The major components of this study were Questionnaire of Emotional Empathy (QMEE), Illinois Rape Myth Acceptance Scale (IRMA), Active Bystander Behavior (ABB), and the Bystander Efficacy Scale (BES) (see Appendices A-D). These were followed by seventeen additional demographic and background questions (see Appendix E). As indicated above, negative response items for the QMEE were reverse coded. Composite scores for each questionnaire were calculated by summing the participants' responses across the questions and dividing by the total number of items on that particular survey. This produced an average/composite score for each survey that could be easily interpreted according to the original question format or scale (e.g., ratings of 1 to 7 on the IRMA indicating the degree of acceptance of rape myths versus responses ranging from 0% to 100% indicating the level of confidence in responses to statements on the BES). The last question of the demographic questions (see Appendix E) was used as a potential filter regarding participants' exposure to bystander training. Thirteen individuals responded that they had attended some form of bystander training but only one participant actually attended the Green Dot Bystander Empowerment Training that was offered at the University of Louisville. Therefore, this one participant's scores were removed from the data analyses.

General Analysis: Descriptive Statistics

Descriptive statistics for all four measures have been reported in Table 8. The Questionnaire Measure of Emotional Empathy (QMEE) was based on a scale of -4 to +4, with -4 indicating very strongly disagree and +4 indicating very strongly agree with the following 33 statements. The self-reported scores on the QMEE ranged from -0.70 to 2.64 and the overall average of these self-reported scores on the QMEE was 1.32.

The Illinois Rape Myth Acceptance (IRMA) scale was based on a 1 to 7 scale, with lower scores indicating a lower acceptance of rape myths (viz., more prosocial/positive attitudes) and higher scores indicating a higher acceptance of rape myths. The participants' self-reports on the IRMA ranged from 1.0 to 4.43. The average self-reported score on the IRMA was 1.69, indicating an overall lower acceptance of rape myths for the sample.

The Active Bystander Behavior Scale (ABB) average scores could range from 0 to 3, with 0 indicating that participant's self-reported no active bystander behaviors and 3 indicating 6 or more active bystander behaviors during the current academic year. The participants' overall scores ranged from 0.17 to 2.0 and the overall average self-report on the ABB was 1.0. This score of 1.0 meant that on average participants' self-reported they engaged in bystander behaviors 1 to 2 times over the current school year.

Finally, individual answers to the items on the Bystander Efficacy Scale (BES) could range from 0% to 100%, with reported percentage indicating the participants' confidence in performing the bystander behaviors in question. The participants' self- reports of bystander efficacy ranged from 35.0-100.0 with an overall average self-report of 76.93. This overall average on the BES suggests participants' are quite confident in their ability to perform as a bystander.

Correlations among Scales

A Pearson product-moment correlation coefficient was calculated across combinations of all four measures (see Table 9). This analysis revealed three significant correlations among these measures. A significant negative correlation was found between self-reports of emotional empathy and rape myth acceptance (r = -0.35, p < 0.005). The analysis also revealed a significant negative correlation between rape myth acceptance and bystander efficacy (r = -0.27, p < 0.01). A negative correlation between the IRMA and the QMEE and between IRMA and the BES is expected and desirable. This signifies that participants who self-reported a higher level of empathy also reported a lower acceptance of rape myth. Further, participants' who self-reported a low acceptance of rape myth also self-reported a higher level of confidence in bystander efficacy.

The analysis also revealed a significant positive correlation between self-reports of active bystander behaviors and self-repots of bystander efficacy (r=0.2, p<.05). This positive correlation indicates that participants who self-reported higher confidence in performing certain bystander behaviors also self-reported more active bystander behaviors during the current school year.

Exploring Gender Differences and Relations to Empathy

Composite scores on each of the major surveys (measuring empathy, rape myth acceptance, active bystander behaviors, and bystander efficacy) for males versus females were compared in independent samples t-tests. Results indicated significantly more desirable responses from females in both the Questionnaire Measure of Emotional Empathy and the Illinois Rape Myth Acceptance Scale (see Table 10). That is, female participants' self-reported higher levels of empathy and lower acceptance of rape myths than male participants. The

analyses failed to find significant sex differences on the measures of active bystander behavior and bystander efficacy.

To examine further interactions between gender and empathy, a median split was used to categorize participants' self-reports of empathy as low or high. Scores of participants that were 1.24 or lower were determined to be low and scores of participants that were 1.30 and higher were determined to be high.

The participant's self-reports on the IRMA were examined using a between-subjects 2×2 factorial analysis of variance (ANOVA) with the factors of sex (male, female) and the median split for the QMEE (low, high) (see Figure 1). As expected based upon the previously reported significant t-test for sex difference in IRMA, this analysis revealed a significant main effect of empathy on the IRMA (IRMA M's = 1.42 vs. 1.93 for those reporting high vs. low empathy, respectively, F(1, 96) = 9.78, p < 0.005). This analysis also revealed a marginally significant interaction between gender and empathy in terms of their combined effects on rape myth acceptance (see Figure 1). This figure suggests that females who self-report a low level of empathy versus females who self-report a high level of empathy do not appear to differ in selfreports of their level of rape myth acceptance. However, male participants who self-report a low level of empathy appear to self-report a higher acceptance of rape myths than male participants who self-report a high level of empathythat females who self-report a low level of empathy versus females who self report a high level of empathy do not appear to differ in self reports of their level of rape myth acceptance. However, male participants who self-report a low level of empathy appear to self-report a higher acceptance of rape myths than male participants who selfreport a high level of empathy. This exploratory analysis further examined sex differences on the measures of emotional empathy and rape myth acceptance. This analysis also explored the interaction of effects of sex and the median split of the QMEE on self-reports of IRMA.

Discussion

The current study proposed three analyses for exploration:

- 1. The current study will continue to explore individual differences in self-reports of emotional empathy, rape myth acceptance, active bystander behaviors, and bystander efficacy. The current study also will continue to explore the line of questioning regarding negative attitudes, behaviors, and emotion in the form of higher acceptance of rape myths, lower emotional empathy, lower bystander efficacy and lower bystander behavior scores in a sample of average college students.
- The current study will investigate important relations among self-reports of emotional empathy, rape myth acceptance, active bystander behaviors, and bystander efficacy.
- 3. The current study will look to examine sex differences on the measures of emotional empathy, rape myth acceptance, active bystander behaviors, and bystander efficacy. The current study also will look to explore any interactions between sex and empathy in terms of their combined effects on such things as rape myth acceptance

Our study found individual differences in self-reports of emotional empathy, rape myth acceptance, active bystander behaviors, and bystander efficacy. Descriptive statistics (e.g., mean, minimum, and maximum) revealed that participants' overall scores on the four used measures were different. On the QMEE, overall scores ranged from -0.07 to 2.64. These scores suggest

Comment [L1]: Let's discuss/review this wording, k?

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: List Paragraph

that although self-reports were not particularly low (-4) or particularly high (+4) on emotional empathy that scores revealed some differing levels of emotion of empathy among participants. Individual differences were also shown in the overall range of self-reports of rape myth acceptance. Though the overall average self-report indicated a lower acceptance of rape myths, many self-reports revealed a higher acceptance of rape myths (e.g., maximum self-report 4.43). Active bystander behavior self-reports showed that participants overall average self-report was 1.0. Overall scores ranged from 0.17 to 2 indicating that individuals differed in self-reports of engaged bystander behaviors during the current school year. Lastly, individual differences were examined in participants' self- reports of confidence in performing certain bystander behaviors. Overall scores ranged from 35 to 100 indicating that individuals felt different levels of confidence. A self-report of 35 indicates a participant feels quite uncertain of their level of confidence in performing the bystander behaviors in question while a self-report of 100 indicates a participant feels very certain of their level of confidence in performing the bystander behaviors in question.

The study also found significant relations between self-reports of empathy and rape myth acceptance; self-reports of rape myth acceptance and bystander efficacy; and self-reports of active bystander behaviors and bystander efficacy. The study found a significant negative correlation between rape myth acceptance and empathy as well as a significant negative correlation between rape myth acceptance and bystander efficacy. The study also found a significant positive correlation between active bystander behaviors and bystander efficacy. These results are similar to findings in the previous studies discussed above. Banyard, Moynihan, and Crossman (2009) found a significant negative correlation between bystander efficacy and rape myth acceptance from pre-test to post-test. Also, Gozzini (2011) found a significant negative

correlation between rape myth acceptance and bystander efficacy as well as a significant negative correlation between the emotional empathy and rape myth acceptance.

The study also found sex differences on the measures of empathy and rape myth acceptance. Female participants' self-reports of empathy and rape myth acceptance were more desirable than male participants. Female participants in comparison to male participants self-reported higher levels of empathy and a lower acceptance of rape myths..

Similar to previous studies, participants' who self-reported a low acceptance of rape myth also self-reported positive prosocial attitudes, such as high confidence in performing certain bystander behaviors (e.g., Banyard, Moynihan,& Crossman, 2009; Coker et al., 2011). As the previous studies stated above, our study also revealed important sex differences. Female participants' self-reports on the measures of empathy and rape myth acceptance was more desirable than males. Specifically, female participants' lower scores on rape myth acceptance than male participants proved to be similar to previous research highlighting sex differences for rape myth acceptance (McMahon 2010; Banyard, Moynihan & Crossman, 2009).

Overall participants' average self-reports of empathy were desirable. The previous study at the University of Louisville discussed the potential use of a larger control group to further explore the role of empathy in regards to bystander intervention and violence prevention. The current study found a significant relationship between rape myth acceptance and the emotion of empathy such that individuals who reported lower empathy also reported greater acceptance of rape myths. Although our study did not reveal a significant correlation with empathy and bystander efficacy, it seems that the relationship between empathy and rape myth acceptance could provide information to help inform future bystander intervention/violence prevention

programs and trainings of empathy's relation to bystander attitudes and behaviors. The high versus low scores of empathy could also help inform these trainings and programs of potential trainers versus trainees (viz., higher empathy scores could lead to potential leaders in training and lower scores of empathy could become potential participants in trainings and programs).

Limitations

The current study had a number of limitations that should be reflected upon when interpreting the results. Due to the sensitive nature of questions on the surveys, social desirability likely played a role in influencing self-reports among the four measures. Questions asking students to report their overall level of empathy, their level of acceptance of rape myths, instances of active bystander behaviors during the current school year and to self-report their level of confidence in performing certain bystander behaviors may have been subject to social desirability.

In addition, the current study did not have an especially diverse sample of college students. The study may have reflected the overall population of campus life at the University of Louisville but was rather homogenous for ethnicity, school year, and campus involvement and affiliation. Also, there were only half as many males as female participants. This relatively smaller sample of males made our analyses challenging in terms of confidence in our findings regarding males, and regarding interactions between gender and other variables. Future studies should look to find a more diverse sample with more equal representation of males and females. Future research could also look at volunteer bias in regards to sex differences in recruitment and representation in bystander intervention and violence prevention programs and trainings. This

could help further the elucidate sex differences in attitudes towards the acceptance of rape myths, empathy, bystander efficacy, and active bystander behaviors.

Lastly, one demographic question proved challenging in acting as a filter to the current study. Question 8 on the demographic portion of the survey asked, "Have you ever attended a Green Dot or bystander empowerment training". This demographic question was used to help determine which participants were considered *average* and were to be included in the data analyses. Thirteen participants responded yes to question 8. After further review, only one participant had attended the 8 hour Green Dot Bystander Empowerment Training at the University of Louisville. Since these students responded yes to the following question, it seems the question was too vague to receive the response desired. In the future, this question should ask if participants attended the intensive 8 hour Green Dot Bystander Empowerment training or any other scheduled formal bystander intervention programs or trainings on campus.

Directions for the Future

The current study aided in the addition of information to the literature on bystander intervention and violence prevention. However, more examinations and evaluations of the effects of violence prevention/bystander intervention training must be continued. Future research should continue to explore a greater variety of effects of these trainings.

Future research could continue to study violence prevention/bystander training efforts to identify (1) **individuals best suited as trainees** versus (2) **individuals best suited as trainers**. Individuals best suited as trainees versus trainers could possibly be identified by examining the participants' scores on measures of empathy, rape myth acceptance, bystander behaviors and efficacy. These scores could potentially reveal that participants high in empathy, bystander

UNDERSTANDING THE RELATIONSHIP OF

behavior and efficacy, and low in rape myth acceptance could act as trainers and participants with lower bystander behavior and efficacy and higher acceptance of rape myths could act as trainees. These future examinations could also look to extend the focus of effects of violence prevention training to the groups of participants known to have greatest "need" of violence prevention/bystander intervention awareness and training (viz., trainees).

Lastly, it seems that future research should examine the duration of the effects of violence prevention/bystander intervention training. Many of these bystander intervention programs such as *Green Dot* and *Bringing in the Bystander* look to equip individuals with the means to become prosocial bystanders. It seems important to see whether the positive effects of trainings and programs have long lasting effects. Future studies should look to assess emotional empathy, rape myth acceptance, bystander behaviors, and bystander efficacy several months after the training.

References

- American College Health Association. (April 2007). Position Statement on Preventing Sexual

 Violence on College and University Campuses. Retrieved September 10, 2011 from

 http://www.acha.org/Publications/docs/Position%20Statement%20on%20Preventing%20

 Sexual%20Violence_Apr2007.pdf
- Banyard, V.L., Plante, E.G., Moynihan, M.M. (2005). Rape Prevention through Bystander Education: Final Report to NIJ for grant 2002-WG-BX-0009.
- Banyard, V.L. (2008). Measurement and Correlates of Pro-social Bystander Behavior: The Case of Interpersonal Violence. *Violence and Victims*, 23, 85-99.
- Banyard, V.L., Moynihan, M.M., Crossman, M.T. (2009). Reducing Sexual Violence on campus: The Role of Student Leaders as Empowered Bystanders. *Journal of College Student Development*, 50 (4), 446-457. Retrieved from Project MUSE database
- Black, M.C., Basile, K.C., Breiding, M.J., Smith, S.G., Walters, M.L., Merrick, M.T., Chen, J., & Stevens, M.R. (2011). The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 Summary Report. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.
- Bledsoe, L.K., and Sar, B. K. (2001). Campus Survey Report: Safety Perception and Experience of Violence. Retrieved from University of Louisville, Prevention Education and Advocacy on Campus and Community Center website:

 https://louisville.edu/peacc/education/2001report.pdf/at_download/file
- Brecher, E.M., & Brecher, J. (1986). Extracting valid sexological findings from severly flawed and biased population samples. *The Journal of Sex Research*, 22, 6-20.

- Brown, A.L. and Messman-Moore, T.L.. (2009). Personal and Perceived Peer Attitudes

 Supporting Sexual Aggression as Predictors of Male College Students' Willingness to

 Intervene Against Sexual Aggression. *Journal of Interpersonal Violence*, 25(3), 503-517.

 Retrieved from SagePub database
- Bryan, J.H. and Test, M.A.. (1967). Models and Helping: Naturalistic Studies in Aiding Behavior. *Journal of Personality and Social Psychology*, 6(4), 400-407. doi: 10.1037/h0024826
- Carlson, M. (2008) I'd Rather Go Along and be Considered a Man: Masculinity and Bystander Intervention. *The Journal of Men's Studies*, *16*(1), 3-17. Retrieved from EBSCO database
- Coker, A. L., Cook-Craig, P. G., Williams, C. M., Fisher, B. S., Clear, E. R., Garcia, L. S., & Hegge, L. M. (2011). Evaluation of Green Dot: An active bystander intervention to reduce sexual violence on college campuses. *Violence Against Women*, 17(6), 777-796. doi:10.1177/1077801211410264
- Darley, J.M., Latane, B. (1968). Bystander Intervention in Emergencies: Diffusion of Responsibility. *Journal of Personality and Social Psychology*, 8 (4), 377-383.
- Dollinger, S.L. (1993). Volunteer bias and the five-factor model. *Journal of Psychology*, *127*(1), 29. Retrieved from Ebsco host.
- Fischer, P., Krueger, J. I., Greitemeyer, T., Vogrincic, C., Kastenmüller, A., Frey, D., & Kainbacher, M. (2011). The bystander-effect: A meta-analytic review on bystander intervention in dangerous and non-dangerous emergencies. *Psychological Bulletin*, 137(4), 517-537. doi:10.1037/a0023304

- Foubert, J.D., & Newberry, J.T. (2006) Effects of Two Versions of an Empathy-Based Rape

 Prevention Program on Fraternity Men's Survivor Empathy, Attitudes, and Behavioral

 Intent to Commit Rape or Sexual Assault. *Journal of College Student Development*,

 47(2), 133-148. Retrieved from Ebsco Host.
- Goldman, J.A. and Harlow, L.L.. (1993). Self-perception variables that mediate AIDS-preventive behavior in college students. *Health Psychology*, *12*(6), 489-498. doi: 10.1037/0278-6133.12.6.489Green Dot Strategy. Retrieved from http://www.uky.edu/StudentAffairs/VIPCenter/greendot.html.
- Gozzini, S. (2011) Green Dot Bystander Intervention Training for Violence Prevention:

 Exploring Connections to Rape Myth Acceptance, Bystander Behavior & Efficacy, and

 Empathy. University of Louisville, Louisville, KY.
- Kilpatrick, D.G., Resnick, H.S., Ruggerio, K.J., Conoscenti, L.M., & McCauley, J. (2007). Drug-facilitated, Incapacitated, and Forcible Rape: A National Study. *National Institute of Justice*, (1)1-72. Retrieved from umn.edu
- Latané, B., & Darley, J.M. (1970). *The unresponsive bystander: Why doesn't he help?* NewYork, NY: Appleton-Century-Croft.
- McMahon, S. (2010). Rape Myth Beliefs and Bystander Attitudes Among Incoming College Students. *Journal of American College Health*, 59 (1), 3-11
- Mehrabian, A., Epstein, N. (1971). A Measurement of Emotional Empathy. *Journal of Personality*, 40, 525-543.

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.

Rosenthal, A.M. (1964). Thirty-eight Witnesses. New York: McGraw-Hill.

Wiederman, M.W. (1999). Volunteer Bias in Sexuality Research Using College Student Participants. *Journal of Sex Research*, *36*(1), 59-66. Retrieved from Ebsco Host.

UNDERSTANDING THE RELATIONSHIP OF

Table 2
Recruitment of participants

Class Title	Number in	Number of	Number	Location
	Attendance	Participants	Enrolled	(U of L)
Humanities 331	29	28	36	Humanities
(Humanities Perspectives on Sex Roles)				Building
Psychology 201	5	5	23	Life Sciences
(Honors: Introduction to Psychology)				
Psychology 321	10	10	75	Life Sciences
(Introduction to Psychology and Learning)				
Psychology 363	7	7	24	Life Sciences
(Honors: Life-Span Developmental Psychology)				
Psychology 404	0	0	12	Life Sciences
(Intergroup Conflict and Conflict Resolution: Northern Ireland)				
Sociology 336	29	28	47	Davidson Hall
(Criminology)				
Sociology 420	30	24	48	Davidson Hall
(Sociology of Sport)				

UNDERSTANDING THE RELATIONSHIP OF

Table 3

Demographics: Age

Zemegrapinesi 12ge			
Age	Percent (%)		
18	1		
19	20		
20	20		
21	20		
22	20		
23	9		
24	2		
25	2		
28	1		
33	1		
35	1		
Total	97		

Table 4

Demographics: Major

Бетодгарись. Мајог	
Major	Percent (%)
Psychology	27
Sociology	12
Sport Administration	12
Sociology and Psychology	2
Art and Psychology	1
Political Science and Psychology	1
Communication and Psychology	1
Pan African Studies and Psychology	1
Biology	5
English	5
Exercise Science	4
History	3
Nursing	2
Chemistry	2
Political Science	2
Social Work	2
Communications	2
Theatre Arts	2
Humanities	1
Business	1
Biochemistry	1

Fine Arts	1
Geography	1
Mathematics	1
Art History	1
Marketing	1
Justice Administration and Paralegal Studies	1
English and Elementary Education	1
Undecided	2
Total	98

Table 5

Demographics: Ethnicity

Ethnicity	Percent (%)
European American	58
Caucasian/White	17
African American	9
Asian American	4
Hispanic	4
Multiracial	2
Native American	1
Total	95

Table 6

Demographics: Year in School

Year in School	Percent (%)
First Year	8
Sophomore	20
Junior	26
Senior	45
Graduate	0
Total	99

Table 7

Demographics: University Affiliation and Involvement Questions

Question	Yes (%)	No (%)	Total (%)
Member of an athletic team?	8	89	98
Member of a fraternity or sorority?	24	74	98
Member of a Registered Student Organization (RSO)?	36	63	99
Involved in extracurricular activities at U of L?	41	57	98

Table 8

Descriptive Statistics

	QMEE	IRMA	ABB	BES
Minimum	-0.70	1.00	0.17	35.00
Maximum	2.64	4.43	2.00	100.00
Standard Deviation	0.72	0.75	0.44	13.28
Mean	1.32	1.69	1.00	76.93
Median	1.30	1.43	1.00	78.57
Mode	1.30*	1.00	1.08	85.00

*Multiple modes exist. Smallest value is shown

Table 9

Correlations across four measures

Average		QMEE	IRMA	ABB	BES
QMEE	Pearson Correlation		-0.35***	0.04	0.13
IRMA	Pearson Correlation			0.06	-0.27***
ABB	Pearson Correlation				0.20*
BES	Pearson Correlation				

^{***}p<.005

^{**} p<.01

^{*} p<.05

Table 10

Evaluation of sex differences in self-reports across four measures

Scale	df	t	M Females	M Males
QMEE	98	3.81***	1.51(<i>SD</i> =0.70) >	0.97(<i>SD</i> =0.63)
(Questionnaire Measure of Emotional Empathy)				
IRMA	98	-2.43*	1.56(<i>SD</i> =0.64) <	1.94(SD=0.89)
(Illinois Rape Myth Acceptance)				
ABB+	53.75	-0.62	0.98(<i>SD</i> =0.40)	1.04(SD=0.52)
(Active Bystander Behavior)				
BES+	47.39	-0.42	76.47(<i>SD</i> =10.95)	77.83(<i>SD</i> =17.08)
(Bystander Efficacy Scale)				

⁺Levene's Test for Equality of Variances indicate unequal variances

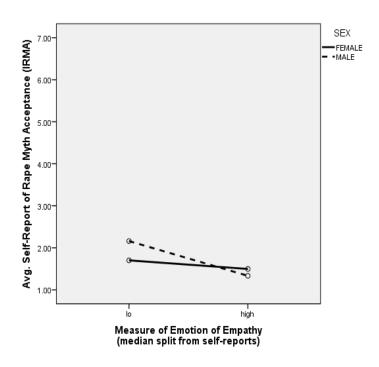
^{***}p<.005

^{**} p<.01

^{*} p<.05

Figure 1

Examining self-reports of IRMA using an ANOVA with factor of sex and median split of QMEE



Appendix A

Questionnaire Measure of Emotional Empathy

Please read the following statements and **check your level of agreement** using the following scale:

[QMEE]

-4	-3	-2	-1	0	+1	+2	+3	+4	
Very stron Disagree	gly						Ver Agre	y strongly ee	
1. It make:	s me sad to	see a lone	ely stranger	in a group).				
-4	-3	-2	-1	0	+1	+2	+3	+4	
2. People	make too n	nuch of the	e feelings a	nd sensitiv	ity of anima	als.			
-4	-3	-2	-1	0	+1	+2	+3	+4	
3. I often f	ind public	displays of	affection a	nnoying.					
-4	-3	-2	-1	0	+1	+2	+3	+4	
4. I am ann	noyed by ur	nhappy peo	ple who ar	re just sorr	y for thems	selves.			
-4	-3	-2	-1	0	+1	+2	+3	+4	
5. I becom	e nervous	if others ar	ound me s	eem to be	nervous.				
-4	-3	-2	-1	0	+1	+2	+3	+4	
6. I find it	silly for peo	pple to cry	out of hap	oiness.					
-4	-3	-2	-1	0	+1	+2	+3	+4	
7. I tend to	o get emoti	onally invo	lved with a	a friend's p	roblems.				
-4	-3	-2	-1	0	+1	+2	+3	+4	
8. Someti	mes the wo	ords of a lo	ve song ca	n move me	deeply.				
-4	-3	-2	-1	0	+1	+2	+3	+4	
9. I tend to	o lose conti	rol when I	am bringing	g bad news	to people.				
-4	-3	-2	-1	0	+1	+2	+3	+4	
10. The pe	10. The people around me have a great influence on my moods.								
-4	-3	-2	-1	0	+1	+2	+3	+4	
11. Most f	oreigners I	have met	seemed co	ol and une	motional.				
-4	-3	-2	-1	0	+1	+2	+3	+4	
12. I would	d rather be	a social w	orker than	work in a j	ob training	center.			

Comment [L2]: See APA

-4	-3	-2	-1	0	+1	+2	+3	+4
13. I don't g	get upset i	ust because	e a friend i	is acting ur	oset.			
-4	-3	-2	-1	0	+1	+2	+3	+4
14. I like to	watch pe	ople open p	resents.					
-4	-3	-2	-1	0	+1	+2	+3	+4
15. Lonely	people are	probably ι	unfriendly.					
-4	-3	-2	-1	0	+1	+2	+3	+4
16. Seeing p	eople cry	upsets me.						
-4	-3	-2	-1	0	+1	+2	+3	+4
17. Some s	ongs make	e me happy						
-4	-3	-2	-1	0	+1	+2	+3	+4
18. I really	get involve	ed with the	feelings o	f the chara	cters in a n	ovel.		
-4	-3	-2	-1	0	+1	+2	+3	+4
19. I get ver	y angry w	hen I see sc	meone be	eing ill-trea	ited.			
-4	-3	-2	-1	0	+1	+2	+3	+4
20. I am abl	e to remai	in calm eve	n though t	hose arou	nd me wor	ry.		
-4	-3	-2	-1	0	+1	+2	+3	+4
21. When a		arts to talk a	about his/l	her proble	ms, I try to	steer the c	onversatio	n to
something 6	eise. -3	-2	-1	0	+1	+2	+3	+4
-4	-3	-2	-1	U	71	TΖ	тэ	⊺4
22. Another	's laughte	r is not cato	ching for m	ne.				
-4	-3	-2	-1	0	+1	+2	+3	+4
23. Sometin	nes at the	movies I ar	n amused	by the am	ount of cry	ing and sni	ffling arour	nd me.
-4	-3	-2	-1	0	+1	+2	+3	+4
24. I am abl	e to make	decisions v	vithout be	ing influen	ced by peo	ple's feelin	ıgs.	
-4	-3	-2	-1	0	+1	+2	+3	+4
25. I canno	t continue	to feel ok i	f people a	round me	are depres	sed.		
-4	-3	-2	-1	0	+1	+2	+3	+4
26. It is har	d for me t	o see how s	some thing	gs upset pe	eople so mu	ıch.		
-4	-3	-2	-1	0	+1	+2	+3	+4
27. I am ve	ry upset w	hen I see a	n animal ii	n pain.				
-4	-3	-2	-1	0	+1	+2	+3	+4
_								

28. Becom	ing involve	ed in books	or movies	is a little s	illy.				
-4	-3	-2	-1	0	+1	+2	+3	+4	
29. It upset	ts me to se	e helpless	old people.						
-4	-3	-2	-1	0	+1	+2	+3	+4	
30. I becor	ne more ir	ritated tha	n sympathe	etic when	l see some	one's tears			
-4	-3	-2	-1	0	+1	+2	+3	+4	
31. I beco	me very in	volved whe	en I watch a	movie.					
-4	-3	-2	-1	0	+1	+2	+3	+4	
32. I often	find that I	can remaii	n cool in spi	ite of the e	excitement	around me	e.		
-4	-3	-2	-1	0	+1	+2	+3	+4	
33. Little c	33. Little children sometimes cry for no apparent reason.								
-4	-3	-2	-1	0	+1	+2	+3	+4	

Appendix B

Illinois Rape Myth Acceptance

Now, please indicate **your level of agreement** with each of the following statements using the scale:

	1	2	3	4	5	6	7			
Ī	Not at all Agree Very much agree									
1.	Rape accusations are often used as a way of getting back at a man.									
	1	2	3	4	5	6	7			
2.	It is usually o	only women v	vho dress sug	gestively tha	t are raped .					
	1	2	3	4	5	6	7			
3.	Women tend	d to exaggera	te how much	rape affects	them.					
	1	2	3	4	5	6	7			
4.	A lot of wor	nen lead a ma	an on and the	n cry rape.						
	1	2	3	4	5	6	7			
5.	A woman w	ho "teases" n	nen deserves	anything tha	t might happ	en.				
	1	2	3	4	5	6	7			
6.	When wom	en are raped,	it's often be	cause the wa	y they said "n	o" was ambi	guous.			
	1	2	3	4	5	6	7			
7.	A woman w to have sex		skimpy cloth	es should no	t be surprised	l if a man trie	es to force her			
	1	2	3	4	5	6	7			

Appendix C

Active Bystander Behavior Scale

Now, please read the each statement and indicate the **frequency with which you have engaged in the following actions in the <u>current school year</u> (from Fall 2011- to Spring 2012) using the following scale:**

[ABB]

	0	1	2	3					
	Not at all	1 to 2 times	3 to 5 times	6 or more times					
1.	Expressed concern to a friend whose partner was acting very jealous and trying to control								
	him or her.								
	0	1	2	3					
2.	Spoke up if someboo	somebody said that someone deserved to be raped or to be hit by their partner.							
	0	1	2	3					
3.	Talked to a friend w	a friend who was raped or hit by their partner.							
	0	1	2	3					
4.	Asked someone that looked very upset if they were okay or needed help.								
	0	1	2	3					
5.	Asked a friend if the	y needed to be walked	or driven home.						
	0	1	2	3					
6.	Spoke up to someor	ne who was bragging or	making excuses for forci	ng someone to have sex					
	with them.								
	0	1	2	3					
7.		I because they had beer	forced to have sex or w	ere hurt by their					
	partner.								
	0	1	2	3					
8.	•	ole danger of drinking to							
	0	1	2	3					
9.	•	vere concerned about th	-						
	0	1	2	3					
10			at risk of being a victim						
	0	1	2	3					
11. Expressed concern when someone was talking about how they got "so wasted".									
0 1 2 3									
12. Made sure someone who got too much to drink got home safely.									
	0	1	2	3					

0

Appendix D

Bystander Efficacy Scale

50

Now, please read each of the following **behaviors**. Indicate in the column Confidence **how confident you are that you could do them**. Rate your **degree of confidence** by recording a number from 0 to 100 using the scale given below:
[BES]

40

	Can't Do	Quite Uncertain	Moderately Certain	Very Certain
1	Evaross m	ay dissamfart if samaan	e makes a joke about a woman's bo	Confidence
1.	Express II	ny disconnort ii someon	e makes a joke about a woman's bo	% %
2.	Express m	ny discomfort if someon	e says that rape victims are to blam	e for being raped.
3.	Call for he	elp (i.e. call 911) if I hear	someone in my dorm yelling "help.	%
4.	Talk to a	friend who I suspect is ir	n an abusive relationship.	%
5.	Get help	and resources for a frien	nd who tells me they have been rape	
6.	Able to as	sk a stranger who looks	very upset at a party if they are ok c	% or need help. %
7.	Ask a frie	nd if they need to be wa	lked home from a party.	%
8.	Ask a stra	anger if they need to be	walked home from a party.	% %
9.	Speak up	in class if a professor is	providing misinformation about sex	
10.		a friend who tells me tha e consent.	t they had sex with someone who v	

	%
	o something to help a very drunk person who is being brought upstairs to a bedroom by roup of people at a party.
	%
	to something if I see a woman surrounded by a group of men at a party who looks very incomfortable.
12 (%
13. G	et help if I hear of an abusive relationship in my dorm or apartment%
14. T	ell an RA or other campus authority about information I have that might help in a sexual
a	ssault case even if pressured by my peers to stay silent.
	%

Appendix E

Demographic Questions

De	mographic In	for	mation					
Ag	e:							
Sex	x :	1.	Male	2.	Female	3. Other		
Ye	ar in School:		 First year Sophomore Junior Senior Graduate S 					
	ijor:				=	4. **		0.11
	Member of an athletic team? 1. Yes Member of social fraternity or sorority? 1. Yes						0. No	
			•	-	ion (PSO)?	1. Yes 1. Yes		0. No 0. No
Member of a Registered Student Organization (RSO)? 1. Yes Involved in other extra curricula activity at UofL? 1. Yes						0. No		
Eth	nnicity:							
	1. African American 5. Native American				ican			
	2. European American 6. Biracial							
	3. Asian	An	nerican		7. Multiracial			
	4. Hispar	nic			8. Other:			
1.	Have any co	urse	es you have tak	en discu	ssed <u>sexual assa</u>	ault or rape?	1. Yes	0. No
	Which or	ne c	or ones?					
					ese courses?			
2.	Have you ever known someone who was the victim of <u>sexual violence</u> ?			sexual violence?	1. Yes	0. No		
3.	Have you ever known someone who was the victim of stalking?			1. Yes	0. No			
4.	Have you ever known someone who was the victim of interpersonal violence			1. Yes	0. No			
5.	Have you ever known someone who was the victim of bias incidents?			1. Yes	0. No			
6.	Have you ever known someone who engaged in <u>unwanted sexual contact</u> with someone					ne who		
	didn't want i	it?					1. Yes	0. No
7.	Have you he	ard	a Green Dot p	ersuasive	speech?		1. Yes	0. No
8.	Have you ev	er a	ttended a Gree	n Dot or	bystander empo	owerment training?	1. Yes	0. No