



RECOGNIZING WARNING SIGNS OF DATING VIOLENCE:  
THE CONTRIBUTIONS OF GENDER ROLE ORIENTATION AND  
HYPERGENDER CONSTRUCTS

By

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## Chapter 1: Introduction

Dating violence, i.e., the use or threat of physical force, coercion into sexual activities, verbal denigration, and social isolation within a relationship, continues to be a concern for young adults (Aosved & Long, 2005). Approximately 45% to 78% of young adults in the United States have been physically victimized by their intimate partner (Linder & Collins, 2005; Smith, White, & Holland, 2003). Dating violence occurs often on college campuses as between 16% and 50% of college women report experiences of dating violence prior to graduation (Murray & Kardatzke, 2007). Additionally, studies have shown that approximately 30% of college students at more than 30 universities admitted to assaulting a dating partner (Chan, Straus, Brownridge, Tiwari, & Leung, 2008; Straus, 2004). These high rates of dating violence are of great concern due to the detrimental effects of dating violence on the mental and physical health of victims (e.g., anxiety, depression, drug abuse, and eating disorders; Campbell, 2002; Coker et al., 2002; Wekerle & Tanaka, 2010; Wolitzky-Taylor et al., 2008).

The majority of research on preventing dating violence focuses on identifying and changing maladaptive attitudes toward using violence within relationships (Vézina & Hébert, 2007). This is important, as acceptance of dating violence may contribute to the perpetuation of violence within intimate relationships. However, one study has shown that attitudes are correlated weakly with behaviors (Kane, Staiger, & Ricciardelli, 2000). Therefore, it is important to have an additional approach for addressing dating violence. Risk recognition, or the ability to detect personal danger, has been linked positively to behavior change (e.g., readiness to change health

behaviors; Brewer et al., 2007). To date, the concept of risk recognition has not been extended to dating violence. Thus, the purpose of this study was to advance knowledge regarding dating violence by examining factors related to both commonly studied attitudes towards dating violence as well as the less investigated ability to recognize early warning signs of dating violence using a sample of college women and men.

### **Gender Schema Theory**

Gender schema theory offers insight into the acceptance of violence within intimate relationships (Bem, 1981). Schemata are networks of information that help guide perceptions, interpretations, representations and interactions with others by interpreting new information in light of already acquired knowledge. These networks of information become lenses through which people experience their environments (Bem, 1983). Schemata differ based on individual experience and developmental contexts (Mouradian, 2001).

Which schemata are created is dependent on what society deems as fundamentally important. For example, gender is seen as an organizing principle throughout various cultures. While societies will differ on what tasks and concepts are designated as feminine or masculine as well as their attachment to binary gender identification, nearly all societies tend to socialize their children based on gender. To navigate through society successfully, people create different schemata for femininity and masculinity by sorting attributes into culturally defined feminine and masculine categories, also known as expressivity and instrumentality (Bem, 1981). These

schemata help people process information surrounding femininity and masculinity efficiently.

As children become socialized to live successfully in society, they begin to integrate themselves into their created schemata for femininity or masculinity. For some children fitting into binary categorizations is difficult, while for others femininity or masculinity can become an important part of their identity. However, over identification with feminine or masculine norms has been associated with negative consequences in intimate relationships, e.g., extreme and rigid traditional beliefs of feminine and masculine gender roles have been correlated with acceptance of violence within intimate relationships (Truman, Tokar, & Fischer, 1996).

### **Gender Role Orientation**

Within gender schema theory, gender role orientation is defined as a person's endorsement of feminine and masculine personality characteristics (Bem, 1974). Feminine personality traits, such as being gentle and affectionate are grouped under the term expressivity, while masculine personality traits such as being assertive and forceful are grouped under the term instrumentality (Bem, 1974). A connection between gender role orientation and experiencing intimate partner violence has been noted, as one study found that regardless of gender, an instrumental gender role orientation predicted the use of physical dating violence (Thompson, 1991). Additionally, another study determined that expressivity was a predictor of less perpetration of psychological intimate partner violence in comparison to instrumentality (Próspero, 2008). Furthermore, extreme manifestations of traditional

expressive and instrumental gender roles have been linked to increased risk of dating violence (Hong, 2000).

### **Hypergender Constructs**

Strong conformity to feminine or masculine norms is often referred to as hyperfemininity or hypermasculinity. Hyperfemininity, or a woman's stringent adherence to traditional feminine norms, is proposed to be the result of societal gender socialization, specifically, the idea that a woman's worth is tied to her ability to obtain and maintain a relationship with a man (Murnen & Byrne, 1991). In the same respects, hypermasculinity, or a man's strong adherence to traditional masculine attributes, is proposed to be the result of gender socialization, particularly from the use of humiliation and contempt as punishment for failing to conform to what culture considers masculine, and the use of praise when exhibiting extreme masculine behavior (Mosher & Sirkin, 1984).

### **Attitudes Towards Dating Violence**

In the current study, we focused our work on attitudes that are accepting of violence within a dating relationship (Price, Byers, & the Dating Violence Research Team, 1999). Because prior research has found a relationship between accepting attitudes toward dating violence and prevalence of dating violence, it is important to consider how gender role orientation and hypergender constructs might predict acceptance of dating violence.

Given the established connection between gender role orientation and experiencing dating violence, there is reason to believe that gender role orientation may predict a person's attitudes about dating violence. Rigid gender role orientation

can manifest as traditional roles within a romantic relationship. Traditional romantic roles often coincide with the use of violence within dating relationships, as the man is placed in a position of control over his female partner (Lichter & McCloskey, 2004). This dynamic has been demonstrated by several studies which found that strictly gender typed men were more sexually aggressive and more likely to commit sexual assault than other men (Koss, Leonard, Beezley, & Oros, 1985; Malamuth, Sockloskie, Koss, & Tanaka, 1991; Mosher & Anderson, 1986). Extending this dynamic to dating violence, rigid gender role orientation may correspond with the use of violence within a dating relationship.

Additionally, hypergender constructs may predict accepting attitudes toward dating violence. Extreme observance of traditional beliefs of feminine and masculine gender roles often are accompanied by acceptance of violence within intimate relationships (Truman et al., 1996). Acceptance of dating violence often is rooted in the traditional belief of females being submissive and males being in control (Lichter & McCloskey, 2004). This relationship expectation is particularly dangerous, as it has been linked to increased risk for experiencing dating violence (Schwartz & DeKeseredy, 1997).

For example, hyperfeminine women and hypermasculine men prefer similar partners with regard to hypertraditionality (Smith, Byrne, & Fielding, 1995). This is likely due to the shared values and agreement to engage in traditional feminine and masculine roles within the relationship. However, research has shown that if even one partner scores high on a hypergender construct, there is an increased risk for that couple to experience psychological violence within their relationship when compared

to couples who score low on hypergender constructs (Ray & Gold, 1996). Extreme adherence and beliefs to traditional feminine and masculine norms may act as foundation for hyperfeminine women and hypermasculine men to accept the use of violence within intimate relationships.

While recognizing that studying accepting attitudes towards dating violence has been the primary tool for identifying and changing maladaptive beliefs regarding intimate partner violence, research has indicated that attitudes are weakly correlated with behavior change (Kane et al., 2000). Therefore, an additional approach for preventing violence within dating relationships, namely risk recognition, will be explored in addition to attitudes.

### **Risk Recognition**

The concept of risk recognition has been explored in health psychology as a means to increase healthy behaviors. For example, a meta-analysis found that the ability to recognize personal risk for disease increased vaccination behaviors (Brewer et al., 2007). Additionally, another study found that higher perceived risk for developing breast cancer led to increased use of mammograms (Oram, Kiviniemi, Shavers, Ross, & Underwood, 2013).

Risk recognition also has been explored and established as important in the sexual assault literature. In one study, 95 undergraduate women were sampled to explore the difference in risk recognition between acknowledged sexual assault victims, unacknowledged sexual assault victims, and non-victims (Marx & Soler-Baillo, 2005). Sexual assault victims took longer to recognize risk in an audiotaped vignette than non-victims. However, this concept has not received the same attention

in relation to dating violence despite that fact that dating violence occurs often and recognizing risk may enable young people to remove themselves from potentially violent relationships.

Given the association between gender role orientation and experiencing violence in relationships, gender role orientation may play a role in a person's ability to detect personal danger in a romantic relationship. According to Bem (1983), people who adhere strictly to traditional gender roles are motivated to keep their behaviors consistent with their traditional views of femininity or masculinity as their self-esteem is tied to their ability to do so. In western society, traditional femininity is associated with compassion while traditional masculinity is associated with characteristics such as dominance and control (Bem, 1974). Therefore, warning signs of abuse such as monitoring a partner's whereabouts or making decisions on the behalf of one's partner may be seen as acceptable within a relationship because such behaviors are in line with traditional feminine and masculine norms.

Moreover, hypergender constructs also may play a role in a person's ability to recognize warning signs of dating violence. Traditional gender roles are rooted in the idea that men are encouraged to be dominant and in control in society while women are supposed to be agreeable and submissive (Lichter & McCloskey, 2004). The use of violence within a relationship can reflect an extreme form or manifestation of traditional gender roles. For example, the use of physical force within a dating relationship mirrors traditional gender role beliefs of men being aggressive. Therefore, a person who identifies as hyperfeminine or hypermasculine may not see the act of using physical force on an intimate partner as abusive or violent.

## **Current Study**

The purpose of this study was to examine the degree to which gender role orientation and hypergender constructs were associated with college students' accepting attitudes toward dating violence and ability to recognize signs of dating abuse. For more detailed information regarding the prior research in this area, please refer to the literature review in Appendix A. Dating occurs at high rates on college campuses, and dating violence has been shown to be prevalent on college campuses (Knowledge Networks, 2011). Therefore, college students were the focus of the current study. Specifically, this study aimed to explore the contributions of expressivity and instrumentality as well as hyperfemininity and hypermasculinity to the prediction of college students' attitudes toward dating violence and ability to recognize risk of dating abuse when controlling for prior education about and experience with dating violence.

It was hypothesized that gender role orientation and hypergender constructs would predict attitudes toward dating violence for college students when controlling for prior education about and experience with dating violence. Specifically, we expected that for women, high expressivity and high hyperfemininity scores would be associated with more acceptance of dating violence, and high instrumentality scores would be associated with a lack of acceptance of dating violence. For women, we believed that high expressivity and hyperfemininity scores may express values related to having and maintaining relationships, perhaps even in the context of violence, while high instrumentality scores may reflect assertiveness and independence. For men, we expected that high expressivity scores would be associated with lack of

acceptance of dating violence and both high instrumentality and high hypermasculinity scores would be associated with acceptance of dating violence. We believed that men high in expressivity may identify with and value being gentle, caring, and compassionate in intimate relationships, while both a strong instrumental gender role orientation and hypermasculinity have previously been linked to perpetration of dating violence (Próspero, 2008; Ray & Gold, 1996; Thompson, 1991) and therefore also may be linked to more acceptance of dating violence.

Similarly, it was hypothesized that gender role orientation and hypergender constructs would predict college students' ability to recognize warning signs of dating violence when controlling for prior education about and experience with dating violence. Specifically for women, it was expected that high expressivity and high hyperfemininity scores would be associated with low risk recognition of dating violence whereas high instrumentality scores would be associated with high risk recognition of dating violence for reasons similar to those stated previously. For men, high expressivity, high instrumentality, and high hypermasculinity scores were expected to be associated with low risk recognition of dating violence because aspects of dating violence, such as control and dominance, often are intertwined with masculine gender roles.

## Chapter 2: Method

### **Design**

The purpose of this descriptive, cross-sectional design was to examine the contributions of gender role orientation and hypergender constructs to the prediction of two criterion variables. First, the study sought to determine if expressivity, instrumentality, as well as hyperfemininity and hypermasculinity could predict college students' attitudes toward dating violence. Additionally, this study aimed to determine the degree to which expressivity, instrumentality, as well as hyperfemininity and hypermasculinity could predict college students' abilities to recognize warning signs of dating violence.

### **Procedure**

An *a priori* statistical power analysis, using the G\*POWER v3 software (Faul, Erdfelder, Lang, & Buchner, 2007), was used to calculate the total number of participants needed to achieve statistical power of 0.90, a medium effect size ( $f^2 = 0.15$ ), with an overall  $\alpha = 0.05$ . The results suggested a sample size of 73 participants. Due to the utilization of multiple statistical analyses, a sample size of 200 participants, composed of 100 women and 100 men, was the targeted recruitment number.

Several recruitment methods were used to recruit undergraduate participants who were between the ages of 18 and 22 years old and heterosexual. First, participants were recruited from Introduction to Psychology courses and offered course credit or extra credit for completing an online survey. The online survey was posted on an online database for research studies being conducted at the university,

where a pool of interested participants could easily access the survey. At the end of the survey, participants were prompted to click on a link that took them to another survey where they were asked to provide their name identification number to receive course or extra credit. No identifiable information was collected on the main survey.

Second, participants also were recruited using fliers, emails, personal contacts, and invitations presented in undergraduate courses and to student groups on campus. The researcher or research assistants provided the link to the online survey.

All individuals who accessed the link to the survey were asked to answer inclusion criteria questions about age, sexual orientation, and marriage status. Participants who did not meet the inclusion requirements received a message informing them that they did not meet the criteria to participate. Participants who were unmarried undergraduate students between the ages of 18 and 22 years old and identified as female or male were provided with an informed consent form. Participants must have identified as heterosexual as the Recognition of Warning Signs of Dating Violence Scale did not assess warning signs unique to dating violence in lesbian, gay, and bisexual relationships (e.g., threatening to out one's dating partner).

After indicating consent, participants were provided with the measures in this study in a counterbalanced manner with the exception of the Recognition of Warning Signs Scale (presented first) and the demographics questionnaire (presented last). At the conclusion of the study, participants were provided with contact information for the researchers and resources related to dating violence, including Internet resources that provided examples of warning signs of dating violence.

## **Participants**

Four hundred and thirty-three heterosexual, unmarried, undergraduate women between ages of 18 and 22 years old participated in this study. The average age was about 20 years old ( $M= 19.6$   $SD= 1.23$ ). Additionally, 25% were in their first year of their undergraduate education, 25% were sophomores, 25% were juniors, and 25% were senior students. Moreover, 61% identified as White, 14% as Asian, 13% as Black/African American, 7% as Hispanic/Latino, and 5% as Biracial/Multiracial. The majority of participants were single (54%), or in a relationship (46%), with fewer than 1% being engaged. In addition, the majority of participants reported no relationship violence in their home growing up (77%), with 19% reporting some relationship violence in their home, 3% reporting quite a bit, and 1% reporting an extreme amount of relationship violence in their home.

One hundred and eight heterosexual, undergraduate men between the ages of 18 and 22 participated in this study. The average age was about 20 years old ( $M=19.6$   $SD= 1.27$ ). Additionally, 28% were in their first year of their undergraduate education, 25% were sophomores, 30% were juniors, and 17% were senior students. Moreover, 63% identified as White, 20% as Asian, 8% as Black/African American, 7% as Hispanic/Latino, and 2% as Biracial/Multiracial. The majority of participants were single (64%), or in a relationship (35%), with fewer than 1% being engaged. In addition, the majority of participants reported no relationship violence in their home growing up (81%), with 14% reporting some relationship violence in their home, 3% reporting quite a bit, and 2% reporting an extreme amount of relationship violence in their home.

## Measures

**Gender Role Orientation.** The Bem Sex Role Inventory-Short Form (BSRI) is a 30-item self report measure developed by Bem (1981) to measure gender role orientation (see Appendix B). Participants responded to items on a 7-point Likert scale ranging from 1 (*never or almost never true*) to 7 (*always or almost always true*). The BSRI assesses two dimensions of gender role orientation: expressivity and instrumentality. The Expressivity subscale consists of 10 traits traditionally deemed desirable for women (e.g., compassionate, sympathetic, and sensitive). The Instrumentality subscale consists of 10 traits traditionally viewed as desirable for men (e.g., independent, dominant, and aggressive). The remaining items are neutral (neither feminine nor masculine traits) filler items. High scores on the subscales indicated conformity to feminine gender roles and masculine gender roles respectively.

A study using the BSRI to measure feminine personality style indicated adequate reliability for the Expressivity subscale ( $\alpha = .89$ ) and the Instrumentality subscale ( $\alpha = .88$ ; Krause & Roth, 2011). Another study found support for divergent validity as the items in the Expressivity subscale of the BSRI were not correlated with any of the subscales of a measure assessing a woman's gender schema. Moreover, three subscales from the measure assessing a woman's gender schema were correlated negatively with the Instrumentality subscale of the BSRI (O'Kelly, 2011). Both the Expressivity subscale and Instrumentality subscale showed adequate reliability in this study for the women ( $\alpha = .89$ ,  $\alpha = .82$ ) and men ( $\alpha = .89$ ,  $\alpha = .81$ ) respectively.

**Hyperfemininity.** The Conformity to Feminine Norms Inventory-45 (CFNI-45) is a 45-item self report measure developed by Parent and Moradi (2010) to measure women's conformity to feminine norms that are widely endorsed by American culture (see Appendix C). The CFNI-45 is short form of the original 84-item CFNI (Mahalik et al., 2005). Participants responded on a 4-point Likert scale ranging from 0 (*strongly disagree*) to 3 (*strongly agree*). The CFNI-45 has nine subscales: Thinness, Domestic, Invest in Appearance, Modesty, Relational, Involvement with Children, Sexual Fidelity, Romantic Relationship, and Sweet and Nice. A sample item includes: "Having a romantic relationship is essential in life." High scores represented high levels of conformity to feminine norms. Parent and Moradi (2010) reported adequate reliability ( $\alpha = .79$ ) and provided support for convergent validity as the subscales were correlated positively with the corresponding scales of the original CFNI. Moreover, the original CFNI was correlated positively with a scale measuring passive acceptance, and correlated negatively with the Instrumentality subscale of the BSRI (Mahalik et al., 2005). For this study, all nine subscales showed adequate reliability, ranging from  $\alpha = .70$  to  $\alpha = .89$ .

**Hypermasculinity.** The Conformity to Masculine Norms Inventory-46 (CMNI-46) is a 46-item self report measure developed by Parent and Moradi (2009) to measure men's conformity to masculine norms that are endorsed widely by American culture (see Appendix D). The CMNI-46 is short form of the original 94-item CMNI (Mahalik et al., 2003). Participants responded on a 4-point Likert scale ranging from 0 (*strongly disagree*) to 3 (*strongly agree*). The CMNI-46 has nine subscales: Winning, Emotional Control, Risk Taking, Violence, Power Over Women,

Playboy, Self Reliance, Primacy of Work, and Heterosexual Self Presentation. A sample item includes: “Women should be subservient to men.” High scores represented high levels of conformity to masculine norms. Parent and Moradi (2009) reported adequate reliability ( $\alpha = .88$ ) and provided support for convergent validity as the subscale factors were correlated positively with the corresponding scales of the original CMNI. Additionally, one study found that the CMNI-46 correlated positively with a measure assessing men’s endorsement of traditional masculine ideology (Levant, Rankin, Williams, Hasan, & Smalley, 2010). For this study, all nine subscales demonstrated adequate reliability, ranging from  $\alpha = .77$  to  $\alpha = .93$ .

**Dating Violence Acceptance.** The Attitudes Towards Dating Violence Scale is a 76-item self report measure developed by Price et al. (1999) to measure attitudes toward heterosexual dating violence (see Appendix E). Participants responded on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The Attitudes Towards Dating Scales consists of two dimensions: a 39 item Attitudes Towards Male Dating Violence Scale (AMDV) and a 37 item Attitudes Towards Female Dating Violence Scale (AFDV). Each dimension consists of three subscales: psychological dating violence, physical dating violence, and sexual dating violence. A sample item is: “A girl should ask her boyfriend first before going out with her friends.” High scores on the subscales indicated acceptance of violent behavior in dating relationships. Price et al. (1999) indicated adequate reliability with the alphas of each subscale ranging from .75 to .87, and provided support for construct validity, as boys and girls with more traditional attitudes towards gender roles were more accepting of violent dating behaviors. For this study, the total scales of Attitudes

Towards Male Dating Violence and Attitudes Towards Female Dating Violence showed adequate reliability for both women ( $\alpha = .92$ ,  $\alpha = .92$ ) and men ( $\alpha = .93$ ,  $\alpha = .94$ ) respectively.

**Recognition of Warning Signs.** The Recognition of Warning Signs measure originated as a 64-item measure developed by the researcher and her advisor to assess the ability to recognize warning signs of dating violence (see Appendix F).

Previously, recognition of warning signs has been measured using audio or video vignettes to assess ability to recognize danger in sexual assault scenarios (Loh, Orchowski, Gidycz, & Elizaga, 2007; Marx & Soler-Baillo, 2005; Wilson, Calhoun, & Bernat, 1999). Through this method, ability to detect danger was determined by response latencies from when the vignette began until when participants indicated the scenarios had gone too far. While this method was successful at determining when participants felt the interaction escalated enough that danger was imminent, it did not detect how well people are able to recognize subtle danger signals that often are present at the beginning of dating relationships. A valid and reliable measure to detect risk recognition abilities within a dating relationship does not exist and thus needed to be developed for this study.

To generate items for the measure, the primary researcher compiled a list of warning signs of dating violence from Internet sources such as the National Center of Domestic and Sexual Violence, [breakthecycle.org](http://breakthecycle.org), and [stoprelationshipabuse.org](http://stoprelationshipabuse.org). The list was presented to a research team consisting of the primary researcher, her advisor (a licensed psychologist), seven graduate students, and five undergraduate students to generate items overlooked by the sources. Subsequently, the researcher and her

advisor collaborated to develop 11 domains for the measure based on the generated items. The domains included Isolate, Monitor, Control, Demean, Physical Aggression, Jealous, Anger, Minimize, Intimidate, Relationship Characteristics, and Other. Based on the generated domains, the researcher, her advisor, an additional psychologist, and a graduate student familiar with the field of intimate partner violence independently sorted the items into their respective domains and reviewed items to make sure they were clear and representative of the domains.

The researcher and her advisor reviewed the items sorted by the reviewers. Items that three or more reviewers sorted into the same category were grouped into the domain with the most votes. Items that three or more reviewers did not categorize under the same domain were removed from the measure.

Based on the reviewers' suggestions, the domains were revised. The "Other" domain was eliminated from the measure and the domain "Partner History" was added. A "Healthy Relationship" domain was created to include items on the scale that were not related to dating violence to prevent participants from answering all items in the same way. Ten items were created for this domain from a compiled list of healthy relationship characteristics derived from Internet sources such as Findyouthinfo.gov, University of Washington Sexual Assault & Relationship Violence (SARIS), and Loveisrespect.org. The 10 items selected for the domain were cited most frequently across seven Internet sources. The items were checked for reading level and revised accordingly. Using readability-score.com, the measure was given a Flesch-Kinicaid Grade Level of 3.6, meaning the items were written on 3<sup>rd</sup> grade reading level.

Fifteen experts in the field of violence against women rated whether the remaining 59 items were warning signs of dating violence. Based on the experts' review, 9 items were removed from the measure. The final measure consisted of 50 items. The measure was scored by removing the items in the "Healthy Relationship" domain and summing the remaining items for a total score. Higher scores on the measure indicated stronger risk recognition abilities. The final measure demonstrated adequate reliability for women ( $\alpha = .94$ ) and men ( $\alpha = .93$ ) for this study.

**Experiences of Intimate Partner Violence.** The Revised Conflict Tactics Scale – Short Form (CTS2S) is a 20-item self report measure developed by Straus and Douglas (2004) to measure tactics used during conflict in dating, cohabiting, or marital couples (see Appendix G). Participants responded to each tactic on an 8-point scale based on how often the tactic was used, ranging from 1 (*once in the past year*) to 8 (*this has never happened*). The CTS2S has five subscales: Assault, Injury, Psychological Aggression, Sexual Coercion, and Negotiation. Each subscale, excluding negotiation, consists of four items, with two items measuring severe aggression and two items measuring moderate forms of aggression. High scores on the subscales indicated frequent experiences with intimate partner violence in prior romantic relationships. The negotiation subscale consists of two items measuring cognitive aggression and two items measuring emotional aggression. An example item is: "My partner used force (like hitting, holding down, or using a weapon) to make me have sex." The CTS2 has been shown to yield reliable scores, with alphas from each subscale ranging from .79 to .95 (Straus, Hamby, Boney-McCoy, & Sugarman, 1996). The CTS2S had adequate construct validity, as it was correlated

with the full version of the CTS2. Additionally, the CTS2 was correlated positively with another measure assessing intimate partner abuse (Beck, Menke, & Figueredo, 2013). For this study, all five subscales of the CTS2S demonstrated adequate reliability, ranging from  $\alpha = .65$  to  $\alpha = .97$  for women and  $\alpha = .74$  to  $\alpha = .94$  for men.

**Violence education.** Participants responded to 7 items regarding previous experience with education about dating violence and domestic violence (see Appendix H). Participants responded on a 4-point Likert scale, ranging from 1 (*not at all*) to 4 (*very much*). A sample item includes: “To degree were you involved in any of the following” including course(s), course lecture(s), training experience(s), and education through family members who have experienced intimate partner violence. For this study, the total scale demonstrated adequate reliability for both women and men ( $\alpha = .82$ ,  $\alpha = .85$ ) respectively.

**Demographic questionnaire.** Participants provided their age, race, undergraduate year classification, gender, major, current relationship status, and experiences with family violence (see Appendix I).

### **Data Analysis**

The means, standard deviations, and reliabilities of the measures were calculated. Correlations were computed among scores on all measures. Six hierarchical multiple regressions were calculated to examine the total and unique contributions of gender role orientation and hypergender constructs on the prediction of acceptance of dating violence and risk recognition of warning signs of dating violence for undergraduate women and men.

Three hierarchical multiple regressions were calculated for the women. For each analysis, the variables were entered in three steps. For the first hierarchical multiple regression analysis for female participants predicting attitudes towards male perpetrated dating violence, prior education about violence and prior experience with dating violence were entered in the first step to control for the effects of these variables. In step two, expressivity and instrumentality were entered and in step three, hyperfemininity was entered. For the second hierarchical multiple regression analysis for female participants predicting attitudes towards female perpetrated dating violence, prior education about violence and prior experience with dating violence were entered in the first step to control for the effects of these variables. In step two, expressivity and instrumentality were entered and in step three, hyperfemininity was entered. For the third hierarchical multiple regression analysis predicting risk recognition of warning signs of dating violence, prior education about violence and prior experience with dating violence were entered in the first step to control for the effects of these variables. Expressivity and instrumentality were entered in step two of the regression equation and hyperfemininity was entered into step three.

Three hierarchical multiple regressions also were conducted for male participants. For each analysis, the variables were entered in three steps. For the first analysis predicting attitudes towards male perpetrated dating violence, prior education about violence and prior experience with dating violence were entered in the first step to control for the effects of these variables. Expressivity and instrumentality were entered in the second step, and hypermasculinity was entered in step three of the regression equation. For the second analysis predicting attitudes towards female

perpetrated dating violence, prior education about violence and prior experience with dating violence were entered in the first step to control for the effects of these variables. Expressivity and instrumentality were entered in the second step, and hypermasculinity was entered in step three of the regression equation. For the third hierarchical multiple regression equation for men predicting risk recognition of warning signs of dating violence, prior education about violence and prior experience with dating violence were entered in the first step to control for the effects of these variables. In step two, expressivity and instrumentality were entered. In step three, hypermasculinity was entered into the regression equation.

## Chapter 3: Results

### Descriptive Statistics

Demographic characteristics as well as descriptive statistics were calculated separately for women and men for all variables and subscales (see Tables 1 and 2).

**Women.** The women in the sample tended to have strong expressive and instrumental gender role orientations and varied on aspects of hyperfemininity. On average, participants reported that expressive traits were often or usually true of themselves ( $M = 5.7$ ,  $SD = .83$ , range 1–7), while instrumental traits were occasionally or often true of themselves ( $M = 4.5$ ,  $SD = .84$ , range 1–7). Additionally, women appeared to report higher hyperfemininity on the Domestic ( $M = 10.6$ ,  $SD = 2.9$ , range 0–15), Involvement with Children ( $M = 11.2$ ,  $SD = 3.0$ , range 0–15) and Sweet and Nice ( $M = 11.4$ ,  $SD = 2.2$ , range 0–15) subscales than the Thinness ( $M = 8.7$ ,  $SD = 3.4$ , range 0–15), Invest in Appearance ( $M = 7.9$ ,  $SD = 3.2$ , range 0–15), Modesty ( $M = 6.4$ ,  $SD = 2.2$ , range 0–15), Relational ( $M = 9.4$ ,  $SD = 2.4$ , range 0–15), Sexual Fidelity ( $M = 7.6$ ,  $SD = 3.9$ , range 0–15), and Romantic Relationship ( $M = 8.2$ ,  $SD = 2.9$ , range 0–15) subscales.

On average, female participants reported few accepting attitudes toward dating violence and above average risk recognition abilities. Regarding attitudes toward male perpetrated dating violence ( $M = 56.7$ ,  $SD = 14.1$ , range 39–195), women tended to disagree with the scale items, indicating less acceptance of dating violence. Similarly, women tended to disagree with the scale items regarding attitudes toward female perpetrated dating violence ( $M = 57.9$ ,  $SD = 16.8$ , range 37–185). Moreover, women tended to rate items on the Recognition of Warning Signs of Dating Violence

Scale as quite a bit or very much a warning sign ( $M= 130.6$ ,  $SD= 16.5$ , range 40–160).

On average, women in the sample had very few experiences of dating violence and had some education about dating and domestic violence. Women reported having experienced little Assault ( $M= .3$ ,  $SD= .8$  range 0–4), Injury ( $M= .2$ ,  $SD= .6$ , range 0–4), and Sexual Coercion ( $M= .3$ ,  $SD= .7$ , range 0–4). However, women reported experiencing some Psychological Aggression ( $M= 1.8$   $SD= 1.1$ , range 0–4). Positively, participants reported experiencing a great deal of Negotiation ( $M= 3.7$ ,  $SD= 1.0$ , range 0–4) in dating relationships and had some education regarding dating and domestic violence ( $M= 13.8$ ,  $SD= 4.4$ , range 7–28).

**Men.** The men in the sample tended to have strong expressive and instrumental gender role orientations and varied on aspects of hypermasculinity. Participants rated expressive items as often or usually true of themselves ( $M= 5.4$ ,  $SD= .9$ , range 1-7) and instrumental traits as occasionally and often true of them ( $M= 4.5$ ,  $SD= .8$ , range 1-7). Additionally, men appeared to report more hypermasculinity on the Winning ( $M= 9.8$ ,  $SD= 2.9$ , range 0-18), Violence ( $M= 8.8$ ,  $SD= 3.4$ , range 0–18), Heterosexual Self Presentation ( $M= 8.5$ ,  $SD= 4.0$ , range 0–18), and Emotional Control ( $M= 8.1$ ,  $SD= 3.9$ , range 0–18) subscales. Participants appeared to report less hypermasculinity on the Self-Reliance ( $M= 6.9$ ,  $SD= 2.2$ , range 0–15), Risk Taking ( $M= 6.8$ ,  $SD= 2.5$ , range 0–15), Primacy of Work ( $M= 6.3$   $SD= 2.4$ , range 0–12), Playboy ( $M= 4.8$ ,  $SD= 2.8$ , range 0–12), and Power Over Women ( $M= 2.9$ ,  $SD= 2.2$ , range 0–12) subscales.

On average, men reported little acceptance of dating violence and poor ability to recognize warning signs of dating violence. Regarding attitudes toward male perpetrated dating violence ( $M= 67.7$ ,  $SD = 17.8$ , range 39-195), men tended to disagree with the scale items. Similarly, men tended to disagree with the scale items regarding attitudes toward female perpetrated dating violence ( $M= 71.7$ ,  $SD= 20.6$ , range 37-185). Moreover, men tended to rate items on the Recognition of Warning Signs of Dating Violence Scale as not at all or slightly a warning sign ( $M= 118.4$ ,  $SD=16.1$ , range 40–160).

Men in the sample reported little experience with dating violence and some education about dating and domestic violence. Men reported having experienced little Assault ( $M = .3$ ,  $SD= .8$  range 0–4), Injury ( $M = .2$ ,  $SD= .8$ , range 0–4), and Sexual Coercion ( $M= .4$ ,  $SD= .9$ , range 0–4). However, men reported experiencing more Psychological Aggression ( $M= 1.2$   $SD= 1.2$ , range 0–4). Positively, participants reported experiencing a great deal of Negotiation ( $M= 3.6$ ,  $SD= 1.2$ , range 0–4) in dating relationships and had some education regarding dating and domestic violence ( $M = 13.5$ ,  $SD= 4.7$ , range 7–28).

### **Hierarchical Multiple Regressions**

**Women.** To examine the contributions of gender role orientation and hyperfemininity on college women’s attitudes towards dating violence and abilities to recognize warning signs of dating violence, three hierarchical multiple regressions were conducted. Before conducting the statistical tests, assumptions of regression were assessed. Findings indicated that the assumptions were met and the regressions could be calculated.

In the first step of all three regressions, all five subscales of the CTS2S (Assault, Injury, Psychological Aggression, Sexual Coercion, and Negotiation) were entered to represent experiences of dating violence, as well as the education about dating and domestic violence scale. Both subscales of the BSRI (Expressivity and Instrumentality) were entered into the second step to represent gender role orientation. In the third step, all nine subscales of the CFNI-45 (Thinness, Domestic, Invest in Appearance, Modesty, Relational, Involvement with Children, Sexual Fidelity, Romantic Relationship, and Sweet and Nice) were entered to represent hyperfemininity.

In the regression predicting attitudes toward male perpetrated dating violence (see Table 5), the variables collectively accounted for 22% of the variance, with 7% of the variance being attributed to experience with dating violence and education about dating violence, 9% attributed to gender role orientation, and 6% attributed to hyperfemininity. When all the variables were entered into the equation, only psychological aggression, expressivity, and hyperfemininity (relational subscale) explained variance in the prediction of attitudes toward male perpetrated dating violence.

Several variables predicted attitudes toward male perpetrated dating violence in both expected and unexpected directions. Psychological aggression predicted attitudes toward male perpetrated dating violence in the positive direction, such that more experience with psychological aggression was associated with more accepting attitudes ( $\beta = .25, p = .00$ ). However, expressivity predicted attitudes toward male perpetrated dating violence in the unexpected direction, such that having a more

expressive gender role orientation was associated with less accepting attitudes ( $\beta = -.15, p = .01$ ). The relational subscale of the hyperfemininity measure also predicted attitudes toward male perpetrated dating violence in the unexpected direction, such that being more hyperfeminine on the relational subscale, i.e., valuing and maintaining friendships, was associated with less accepting attitudes (Relational:  $\beta = -.12, p = .01$ )

In the regression predicting attitudes towards female perpetrated dating violence (see Table 6), the variables accounted for 19% of the variance, with 5% of the variance being associated with experience with dating violence and education about dating violence, and 10% with gender role orientation. Hyperfemininity was not significant. When all the variables were entered into the equation, negotiation, psychological aggression, and expressivity contributed uniquely to the prediction of attitudes toward female perpetrated dating violence.

Again, these variables predicted attitudes towards female perpetrated dating violence in both expected and unexpected directions. Negotiation predicted less acceptance of dating violence ( $\beta = -.12, p = .01$ ), while more experiences of psychological aggression were associated with more accepting attitudes ( $\beta = .19, p = .00$ ). Expressivity predicted attitudes toward female perpetrated dating violence in an unexpected direction, such that having a more expressive gender role orientation was associated with less acceptance of female perpetrated dating violence ( $\beta = -.19, p = .00$ )

In the final regression predicting college women's abilities to recognize warning signs of dating violence (see Table 7), 15% of the variance in the outcome

variable was explained when all variables were entered into the equation. However, only the first two steps explained variance in women's ability to recognize warning signs. Specifically, 4% of the variance was attributed to experience and education about dating violence accounting and 7% was associated with gender role orientation. When all the variables were entered into the equation, psychological aggression and instrumentality accounted for unique variance.

Psychological aggression and instrumentality predicted abilities to recognize warning signs of dating violence in the expected directions. More experience with psychological aggression was associated with less ability to recognize warning signs of dating violence ( $\beta = -.18, p = .00$ ). Additionally, a more instrumental gender role orientation was associated with more ability to recognize warning signs of dating violence ( $\beta = .17, p = .00$ ).

**Men.** To examine the contributions of gender role orientation and hypermasculinity on college men's attitudes towards dating violence and abilities to recognize warning signs of dating violence, three hierarchical multiple regressions were conducted. Before conducting the statistical tests, assumptions of regression were assessed. Findings indicated that the assumptions were met and the regressions could be calculated.

For the first regression predicting attitudes toward male perpetrated dating violence (see Table 8), the variables accounted for 59% of the variance, with the hypermasculinity subscales accounting for most of the variance (32%). Experiences with dating violence and education about dating and domestic violence accounted for 16% of the variance and gender role orientation accounted for 11% of the variance.

When all the variables were entered into the equation, assault, expressivity, and the power over women and violence subscales of hypermasculinity were predictors.

The variables predicted attitudes toward male perpetrated dating violence in the expected directions. More experience with assault ( $\beta = .46, p = .00$ ) and being more hypermasculine, such that believing that men should be in a position of authority over women (Power Over Women:  $\beta = .47, p = .00$ ) and that violence is justifiable (Violence:  $\beta = .27, p = .00$ ) were associated with more accepting attitudes. Having a more expressive gender role orientation was associated with less accepting attitudes ( $\beta = -.30, p = .00$ ).

For the regression predicting attitudes toward female perpetrated dating violence (see Table 9), all of the variables collectively accounted for 43% of the variance. However, only the final step in which the hypermasculinity variables were entered accounted for variance (31%). When all of the variables were entered into the equation, the power over women subscale of hypermasculinity was the only unique predictor.

Believing that men should be in a position of authority over women was associated with more accepting attitudes. Power over women ( $\beta = .44, p = .00$ ) predicted attitudes toward female perpetrated dating violence in the expected direction, such that more endorsement of this aspect of masculinity was associated with more accepting attitudes.

In the final regression predicting college men's abilities to recognize warning signs of dating violence (see Table 10), collectively, the independent variables accounted for 33% of the variance. The variables entered in the first two steps did not

account for significant variance, however the hypermasculinity subscales entered in the third step accounted for 23% of unique variance. When all the variables were entered into the equation, the violence subscale of hypermasculinity predicted the ability to recognize warning signs in the expected direction, such that more endorsement of violence as justifiable was associated with less ability to recognize warning signs of dating violence ( $\beta = -.34, p = .00$ ).

### **Post Hoc Analyses**

To examine if there were differences on the control variables, the gender role orientation, and the outcome variables between the female and male participants, three MANOVAs were calculated. No differences emerged in the first MANOVA examining differences between women and men on experiences with dating violence and education with dating violence. In the second MANOVA examining the differences between women and men on expressivity and instrumentality, a difference emerged on expressivity  $F(1, 539) = 10.11, p = .00, \eta^2 = .02$ , with women reporting more expressive gender role orientation ( $M = 5.67, SD = .83$ ) than men ( $M = 5.38, SD = .89$ ). There was no difference between women and men on instrumentality. In the final MANOVA, differences were found between women and men on attitudes toward male perpetrated dating violence  $F(1, 539) = 46.57, p = .00, \eta^2 = .08$ , attitudes toward female perpetrated dating violence  $F(1, 539) = 52.80, p = .00, \eta^2 = .09$ , and recognition of warning signs of dating violence  $F(1, 539) = 47.86, p = .00, \eta^2 = .08$ . Men reported more acceptance of male perpetrated ( $M = 67.66, SD = 17.82$ ) dating violence than women ( $M = 56.69, SD = 14.14$ ), more acceptance of female perpetrated dating violence ( $M = 71.69, SD = 20.60$ ) than women ( $M = 57.92, SD = 16.81$ ), and less

ability to recognize warning signs of dating violence ( $M= 118.40$ ,  $SD= 16.14$ ) than women ( $M= 130.61$ ,  $SD= 16.48$ ).

## Chapter 4: Discussion

Previous research explored how gender role orientation, hyperfemininity, and hypermasculinity were related to perpetration and victimization of dating violence; this study advanced knowledge by investigating how these factors related to college students' attitudes towards dating violence and their ability to recognize warning signs of dating violence (after controlling for experiences with dating violence and education about dating and domestic violence). In this study, expressive gender role orientation related to less acceptance of dating violence for both men and women, while instrumental gender role orientation related positively to college women's abilities to recognize warning signs of dating violence. Moreover, adhering strictly to prescribed gender norms functioned differently for women and men. For women, hyperfemininity (relational dimension) was related to less acceptance of dating violence. For men, hypermasculinity was related to more acceptance of dating violence (power over women and violence dimensions) and less ability to recognize warning signs of dating violence (violence dimension).

There were notable differences between the men and women in the sample. While the groups did not differ on prior experience with dating violence or education about dating violence, they varied on gender role orientation, acceptance of dating violence, and ability to recognize warning signs of dating violence. Women in the sample were more expressive, but did not differ from men on instrumentality, suggesting that the women in the sample identified with traditionally masculine traits

as strongly as the men. It is not surprising that women are more traditionally feminine than men and equally identify with traditionally masculine traits. Expectations for women today have morphed to include both feminine and masculine traits in order to be successful within society. Moreover, traditionally masculine traits tend to be more valued than expressive traits by both women and men. This is exemplified by the recent success of “Lean In,” a movement that encourages women to adopt traditionally masculine traits, such as assertiveness and risk taking, to become successful in the workplace. Therefore, it is possible that the women in the sample responded to instrumental traits in a way that they believed would make them look more favorable. Additionally, men reported more acceptance of both male and female perpetrated dating violence and less ability to recognize warning signs of dating violence. This may be the case because aspects of masculine identity, such as maintaining power and control, also are the underlying mechanisms that drive violence within intimate relationships (Pence & Paymar, 1993). Men are more likely to be socialized to accept violence and may even view violence as a way of being strong and fulfilling the gender role expectations placed on men. Moreover, it is not surprising that men have more difficulty recognizing warning signs of dating violence. Interestingly, the women and the men in the sample were equally educated about dating and domestic violence and prior education was not a predictor of recognizing warning signs. Since amount of education does not explain the gender difference, it is possible that men have more difficulty detecting risk within relationships because, unlike women, men are not socialized to believe they are at risk for serious danger within romantic relationships.

## **Acceptance Attitudes Regarding Dating Violence - Women**

To test our hypotheses, we examined the contributions of gender role orientation and hyperfemininity on college women's attitudes toward male and female perpetrated dating violence while controlling for experiences with dating violence and education about dating and domestic violence. When predicting both attitudes towards male perpetrated dating violence and attitudes toward female perpetrated dating violence, prior experience with dating violence, expressivity, and hyperfemininity collectively accounted for variance in the dependent variables, indicating that our control and predictor variables were important with regard to attitudes about and recognition of dating violence. However, a salient predictor of both attitudes toward male and female perpetrated violence, when all variables were considered, was expressivity.

It was expected that high expressive gender role orientation would be related to more acceptance of dating violence, as expressivity has previously been linked to victimization of dating violence (Hong, 2000). However, our results indicated that women high in expressivity were not accepting of dating violence, regardless of whether it was male or female perpetrated. Benevolent sexism may explain this finding. Perhaps young women who exhibit more traditionally feminine characteristics expect women to be placed on pedestals, respected, and treated well and thus do not accept abuse in dating relationships. It is important to note that the strength of the relationship between expressivity and attitudes toward male and female perpetrated dating violence was small. Women may not have accurately reported their true attitudes towards dating violence in an attempt to be viewed

favorably. This could explain our lack of variability in responses, which in turn could have produced the relationship in the unexpected direction.

In addition, we had expected that high hyperfemininity would be related to more acceptance of dating violence as it has also been linked to victimization of dating violence (Schwartz & DeKeseredy, 1997). However, the relational dimension of hyperfemininity was related to less acceptance of male perpetrated dating violence and was not related to attitudes of female perpetrated dating violence. Bearing in mind that the relational dimension of hyperfemininity measures how much a woman values maintaining friendships, it is possible that the women who are high on the relational dimension view friendships as more central to their identity than romantic relationships. Therefore, they would be less accepting of male perpetrated dating violence, as they do not feel the need to maintain romantic relationships in the presence of violence because having an intimate dating relationship is not as valued as their friendships. It is important to note that the strength of the relationship between the relational dimension of hyperfemininity and attitudes toward male perpetrated dating violence was small; there was little variance explained by the relational dimension of hyperfemininity. Again, this could be related to the range restriction on the attitudes towards dating violence measure. Because we did not collect data from women who were accepting of dating violence, we were unable to adequately test our hypotheses.

Out of the nine dimension of hyperfemininity (Thinness, Domestic, Invest in Appearance, Modesty, Relational, Involvement with Children, Sexual Fidelity, Romantic Relationship, and Sweet and Nice), it was surprising that relational was the

only dimension that emerge as a predictor. One may have predicted that the romantic relationship dimension, assessing how central having a romantic relationship is to a woman's identity, would have also predicted attitudes towards dating violence. However, the women in the sample tended to report moderately valuing romantic relationships, with little range on the dimension. Therefore, the relationship may exist, but went undetected due to the range restriction on the dimension.

Interestingly, some of the control variables accounted for unique variance when all variables were placed in the regression equations predicting attitudes toward male and female perpetrated violence. Specifically, participants who had experienced psychological aggression were more accepting of both male and female perpetrated violence. This makes sense because women and men who experienced psychological abuse within previous relationships may not identify psychological aggression as dangerous or violent behavior; they may be more likely to accept this type of behavior as "normal" within romantic relationships. In addition, women who experienced more negotiation within their relationships, or healthy communication during conflict, were less accepting of female perpetrated dating violence. This is not surprising as women who value healthy communication during difficulties within relationships are less likely to value or accept violent tactics of resolving conflicts.

### **Acceptance Attitudes Regarding Dating Violence - Men**

Similarly, the control variables of prior experience and education about dating violence, gender role orientation and hypermasculinity collectively explained variance in college men's attitudes toward both male and female perpetrated dating violence. When predicting attitudes toward male perpetrated dating violence, the most

salient variables were prior experience with physical assault, expressivity and hypermasculinity, specifically endorsing violence and men holding positions of power over women. Interestingly, endorsement of men having power over women was the single predictor of acceptance of female perpetrated violence when all variables were entered in the equation.

As expected, expressivity was associated with less acceptance of male perpetrated dating violence. This was not surprising, as expressive gender role orientation has been associated with less perpetration of dating violence in prior literature (Próspero, 2008). Moreover, the strength of this relationship was moderate, indicating that being more fluid in conformity to gender norms can serve as a protective factor against acceptance of the use of violence within intimate dating relationships. This variable was not predictive, however, of acceptance of female perpetrated violence. This was particularly surprising as expressivity was a predictor for college men's attitudes towards male perpetrated dating violence. Perhaps the lack of relationship is indicative of the socialization of men. In general, men are not socialized to believe they are at serious risk for danger within heterosexual romantic relationships. It is possible that this influenced the responses of the men in the sample, making a relationship between expressivity and attitudes towards female perpetrated dating violence undetectable.

Moreover, support was found for the hypotheses regarding hypermasculinity being predictive of college men's attitudes towards dating violence. Specifically, endorsing men's right to having power over women was related to more acceptance of both male and female perpetrated dating violence. This finding, although

disturbing, was expected as acceptance of dating violence often is rooted in the traditional belief of females being submissive and males being in control (Lichter & McCloskey, 2004). The core underlying motivator of dating and domestic violence is a desire for power and control over one's partner. Therefore, men who endorse that women should be in submissive positions in relation to men understandably would be more accepting of dating violence.

An additional component of hypermasculinity, endorsement of violence, was found to be predictive of male perpetrated dating violence (but not female perpetrated dating violence). Hypermasculinity has been linked to increased risk of perpetrating physical violence against women (Koss, Leonard, Beezley, & Oros, 1985; Malamuth, Sockloskie, Koss, & Tanaka, 1991; Mosher & Anderson, 1986). Additionally, this finding may suggest a general acceptance of violence. Thus, it is reasonable to believe that the endorsement of violence would also be related to more acceptance of dating violence. However it is surprising that endorsement of violence was not a predictor for attitudes towards female perpetrated dating violence. This may be the case because college men often do not view female perpetrated dating violence as harmful. For example, the media frequently portrays female perpetrated dating violence in heterosexual relationships as laughable, and it usually does not have an impact on the male dating partner's behavior. Therefore, believing that violence is a useful method to get what one desires does not necessarily impact college men's attitudes towards female perpetrated dating violence, as they may believe women are not using violence as a means to gain control or power. Considering the nine dimensions of hypermasculinity (Winning, Emotional Control, Risk Taking,

Violence, Power Over Women, Playboy, Self Reliance, Primacy of Work, and Heterosexual Self Presentation), it is not surprising that power over women and violence emerged as the predictors, as the basis of dating violence is using violence as a tool to gain power and control over one's partner.

Surprisingly, instrumentality was not a predictor of attitudes toward male or female perpetrated dating violence for men or women, which indicated that instrumental gender role orientation had little bearing on attitudes towards dating violence. This was somewhat surprising, as instrumentality has been linked to experiences of dating violence (Koss, Leonard, Beezley, & Oros, 1985; Malamuth, Sockloskie, Koss, & Tanaka, 1991; Mosher & Anderson, 1986). One possible explanation for this finding may be that the participants in this study did not vary much on instrumentality or attitudes towards dating violence. In general, the women and men in this study tended to identify somewhat strongly with instrumental characteristics. Additionally, the women reported less acceptance of dating violence. It is possible that there may be a relationship between these variables that went undetected due to not having a more diverse sample of women and men that varied on degrees of identification with instrumental traits. Additionally, it is plausible that women did not vary much on attitudes toward dating violence due to social desirability, which could have impacted our results. However, it is a possibility that these are the true findings, and no relationship exists between instrumentality and attitudes towards dating violence. If there is no relationship, it is probable that other factors not measured in this study such as perceptions of peer attitudes towards dating violence may be more predictive of acceptance of dating violence.

One of the control variables, prior experiences of having been assaulted or having assaulted a dating partner in the past, was predictive of attitudes toward male perpetrated dating violence for college men. This makes sense, as someone who has assaulted a dating partner in the past may not view violence as wrong and may be more accepting of violence within dating relationships. Additionally, someone who has been assaulted in past relationships may view physical aggression within a relationship as normal or inevitable, and therefore may be more accepting of dating violence as well.

Also interesting to note, one of the control variables, education about dating and domestic violence did not account for variance in attitudes towards male and female perpetrated dating violence for women or men. This also may be attributed to the range restriction on the attitudes towards dating violence measure. Additionally, neither the men nor the women in the sample on average had a great deal of education about dating and domestic violence. Therefore, we cannot say with confidence that education about dating and domestic violence is not related to attitudes towards male and female perpetrated dating violence.

However, it is possible that this is a true finding. If this is the case, it is possible that education about dating and domestic violence has little impact on changing acceptance of dating violence within intimate dating relationships. It is possible that education about dating violence may not dismantle the social learning that has taken place up until attitudes about dating violence have been formed. If this were the case, it would be important to determine how to address problematic attitudes toward dating violence beyond education so intervention programs can

reduce accepting attitudes toward violence within intimate relationships. For example, perhaps it would be beneficial to educate parents, schoolteachers, and school counselors on dating and domestic violence as well as social learning and how problematic attitudes can be taught and learned through social interactions. Because children spend the majority of their time in school or with their parents, it would be important to begin the dismantling of sexism and patriarchy within their home and school systems.

### **Recognition of Warning Signs - Women**

Collectively, the control variables of experiences with dating violence and education about dating and domestic violence, gender role orientation and hyperfemininity were predictive of college women's ability to recognize warning signs of dating violence. Instrumentality was the only hypothesized predictor to account for unique variance (one control variable also emerged as significant); those high in instrumentality were more likely to recognize warning signs of dating violence for college women. It may be that high instrumentality scores reflect values of assertiveness and independence within a relationship (Bem, 1974), making controlling behavior from one's partner easier to recognize. Again, the strength of this relationship was small. Given the weak relationship between instrumental gender role orientation and risk recognition regarding warning signs of dating violence, it is possible that there are other variables not accounted for in the study that would better predict risk recognition ability. For example, risk tolerance, or how much risk one is willing to endure in potentially dangerous situations, may better determine risk recognition abilities for college women.

Surprisingly, expressive gender role orientation was not a predictor of risk recognition regarding warning signs of dating violence for college women. It was expected that high expressivity would be related to poor risk recognition, as expressivity has been linked to increased risk of victimization of dating violence (Hong, 2000), leading us to believe that women who conform to traditionally expressive traits may value maintaining romantic relationships, perhaps even in the presence of violence. However, the women in the sample did not vary much on the expressive dimension of gender role orientation. Therefore, it is possible that women high in expressivity may have low risk recognition abilities, but the relationship was not detectable due to lack of variability, specifically the lack of women who did not identify with expressive traits in this sample.

Additionally, it was surprising that hyperfemininity did not predict college women's ability to recognize warning signs of dating violence. It was expected that high hyperfemininity would be related to less risk recognition ability for college women as hyperfemininity has been linked to increased risk of dating violence victimization (Schwartz & DeKeseredy, 1997). It is possible that no relationship between hyperfemininity and risk recognition exists. If this is the case, other factors, such as risk tolerance or substance use, may better explain college women's ability to recognize warning signs of dating violence. More specifically, women who endorse the use of substances or report high risk tolerance may be less risk recognition abilities in regards to warning signs of dating violence.

One control variable, experience with psychological aggression within a dating relationship, was predictive of risk recognition for college women such that

more experience with psychological aggression was related to poorer risk recognition ability. Women who have experienced psychological abuse, either a victim or perpetrator, may have difficulty viewing some of the warning signs of dating violence that involve the use as psychological aggression as harmful.

### **Recognition of Warning Signs - Men**

Finally, we examined the contributions of gender role orientation and hypermasculinity on college men's ability to recognize warning signs of dating violence. Collectively, these predictors (and the control variables) accounted for variance in recognition of warning signs. However, it is important to note that the most salient predictor, accounting for a robust amount of variance, was one component of hypermasculinity.

Specifically, the endorsement of violence, was associated with less ability to recognize warning signs of dating violence. In other words, men who believe that violence is justifiable and an appropriate means to get what one wants had difficulty recognizing warning signs of dating violence. Again, hypermasculinity has been linked to increased risk of perpetrating physical violence against women (Koss, Leonard, Beezley, & Oros, 1985; Malamuth, Sockloskie, Koss, & Tanaka, 1991; Mosher & Anderson, 1986). Consequently, it is reasonable to believe that hypermasculine men who endorse the use of violence would also not see warning signs of dating violence as problematic or potentially harmful.

Unexpectedly, neither expressivity nor instrumentality were predictors of college men's risk recognition abilities regarding warning signs of dating violence. It was expected that high expressivity and high instrumentality would be associated

with low risk recognition. It is possible that aspects of dating violence, such as maintaining power and being dominant, are so intertwined with masculine gender roles, that gender role orientation was not a significant variable for men, and therefore no relationship was detected.

To summarize, there is danger in strict conformation to specific masculine norms for men. More specifically, the results indicate that endorsement of violence as justifiable and believing that men should be in positions of authority over women puts college men at risk to accept the use of violence within romantic relationships and not be able to easily recognize that they are indeed at risk in the presence of warning signs of dating violence. However, strict conformity to gender norm acts differently for women and is associated with less acceptance of dating violence. However, the relationship strength of the relationship was weak, suggesting that additional factors may influence college women's acceptance of dating violence.

### **Strengths**

While attitudes about dating violence have been previously studied, they have not been studied in relation to gender role orientation, hyperfemininity and hypermasculinity. Additionally, there was a need for another component to expand our knowledge regarding reasons why dating violence continues to exist, as research has shown that attitudes are weakly correlated with behaviors (Kane, Staiger, & Ricciardelli, 2000). Thus this study adds to our knowledge of dating violence by exploring how gender role orientation and hypergender constructs relate to acceptance of dating violence and exploring how these factors also relate to college students' ability to detect danger within intimate dating relationships.

According to the Office of Institutional Research, Planning and Assessment (2014), the women and men who participated in this study were representative with regard to the race/ethnicity of the students attending the mid-atlantic university where the study took place. Additionally, the sample was diverse in undergraduate year classification and constituted a fairly even split between single participants and those in a relationship, suggesting data were collected from a rather heterogeneous group.

This study used empirically validated measures (with one exception). Moreover, the studied variables were theoretically grounded in social learning theory and previously thought to be important to understanding dating violence.

### **Limitations**

However, there were limitations to the study. The study used a correlational, cross sectional design that limits our ability to make inferences about causality. Additionally, because the sample was representative of the university where the data were collected, we cannot generalize the results to campuses with college students of differing degrees of racial and ethnic representation.

An additional limitation of the study was the use of a measure that was created and under development at the time the study was taking place. While the Recognition of Warning Signs Scale was determined to have adequate reliability, the factor structure of the scale is unknown, and no information regarding concurrent and discriminant validity is available.

Finally, the lack of variability reported on gender role orientation and attitudes toward dating violence for the college women sample was a concern. This lack of variability makes it difficult to place confidence in unexpected results because it is

not possible to know if the relationships detected (or lack there of) were impacted by the range restriction.

### **Future Directions**

Future research is needed to further explore the roles of other variables on college women's attitudes toward dating violence and ability to recognize warning signs of dating violence. For the women, the predictor variables did not explain much variance for any outcome. Additionally, the strength of the relationships between the predictor variables and the outcome variables was weak. This suggests that there are other possible factors that may better explain acceptance of dating violence and risk recognition regarding warning signs of dating violence for college women that need to be discovered and explored. Perhaps women's willingness to compromise for their partner is related to their attitudes towards dating violence. To elaborate, women who are more willing to compromise for their partners may be more invested in maintaining intimate relationships, perhaps even in the presence of violence. Another possible variable that may predict college women's attitudes toward dating violence is or perceptions of peer group attitudes towards dating violence. Perhaps women base their attitudes based on what they believe their peer group thinks about the use of various types of violence within dating relationships. Finally, a future direction may be to explore the contribution of internalized sexism on college women's attitudes towards male and female perpetrated dating violence. Perhaps women who have internalized sexist beliefs would be more likely to view violence as acceptable within intimate dating relationships.

Moreover, it would be important for future research to take social desirability into account when measuring attitudes toward dating violence. This can be done in a number of ways. For one, researchers can continue to use more overt and obvious ways of measuring dating violence while also controlling for social desirability. However, researchers also can develop more implicit ways to measure attitudes. A possible future direction for dating violence research would be to develop an implicit associations test that measures true attitudes towards dating violence in a less obvious, more truthful way than a self-report measure. Another method that may capture true attitudes towards dating violence would be to provide participants with scenarios that vary in type of dating violence and context in which the dating violence occurs. This nuanced approach would allow for researchers to determine under what circumstances participants deem dating violence as acceptable and unacceptable.

Additionally, future research can determine which subgroups of men and women are especially at risk for low risk recognition abilities. While it was determined that hypermasculinity (violence dimension) was related to less risk recognition abilities, perhaps there are other variables that may help explain more variance in risk recognition for college men and women. For example, risk taking and risk tolerance may be related to college women and men's ability to recognize warning signs of dating violence. It is possible that college students with high risk tolerance may be less likely to endorse warning signs of dating violence as being potentially dangerous. Additionally, alcohol and drug use have previously been linked to increased risk of victimization and perpetration of dating violence (Howard & Wang, 2003; Shorey, Brasfield, Zapor, Febres, & Sturt, 2015). Perhaps substance

use impairs judgment and reducing ability to recognize warning signs of dating violence.

Finally, more research is needed to better understand the outcomes for women. While prior research led us to believe that expressivity and hyperfemininity could be problematic for women, predicting more acceptance of dating violence and less risk recognition, this was not found in this study. However, the hypothesis was not truly tested due to restricted range in both expressivity and attitudes toward dating violence.

### **Counseling Implications**

This study sheds light on the importance of strict conformity to two masculine gender norms, specifically endorsing violence as justifiable and believing that women should be in subservient positions to men, and their relationship with acceptance of dating violence and risk recognition. Dating violence prevention and intervention programs working with college age men may want to assess conformity to masculine norms and tailor their curriculum to dismantle hypermasculinity. More specifically, prevention programs may find it beneficial to challenge men on the use of violence as a viable tool to obtain what one desires as well as the belief that women are somehow, or should be, lesser than men.

Additionally, the intervention program will want to include an educational component. This study demonstrated that hypermasculine men were less likely to have adequate risk recognition abilities. Therefore, it would be important to educate them on the warning signs of dating violence to build their awareness. This could potentially allow them to stop their own violent behaviors they did not see as

problematic in the past, or lead them to leave relationships earlier in which a number of the warning signs are present.

However, it is important to note that in general, men in this study tended to endorse warning signs of dating violence as not being a warning sign or slightly being a warning sign. This suggests that men in general may have difficulty recognizing potentially dangerous behaviors within dating relationships, possibly making them more susceptible to perpetrate dating violence and fall victim to potentially abusive behaviors from romantic partners. Therefore, it would be beneficial to direct dating violence education and prevention programming towards working with men to teach them about various warnings signs of dating violence and how they may manifest in intimate relationships. One way of reaching college men would be to focus interventions on changing the culture of masculinity with fraternities and male residence halls on college campuses. To ensure a substantial amount of men are reached, this intervention could be held continuously for new fraternity members and first year students on college campuses.

Research with a more diverse sample of women is needed. If our findings were replicated, it would be important to encourage both expressive and instrumental characteristics for women participating in a prevention or intervention program addressing dating violence. While expressivity as well as placing value on maintaining friendships was associated with less acceptance of dating violence, instrumentality was associated with stronger risk recognition abilities. Therefore it would be important to encourage women to embrace both traditionally feminine and traditionally masculine traits as they were associated with positive outcomes for them.

## **Conclusion**

To conclude, this study advanced knowledge regarding dating violence by exploring the relationships among gender role orientation, hypergender constructs, attitudes toward dating violence, and ability to recognize warning signs of dating violence for college women and men. It is evident from this study that hypermasculinity, specifically the endorsement of violence and men having power over women, may lead to negative outcomes, including acceptance of perpetration and victimization of dating violence and less ability to detect danger within a romantic dating relationship. Further research is necessary to understand the connection between hyperfemininity, attitudes, and risk recognition, as our findings were unexpected and not indicative of prior research. We hope these findings will illuminate the attitudes towards dating violence and risk recognition ability of college women and men and guide intervention and prevention programs to end dating violence on college campuses.

# **Appendix A**

## **Review of Literature**

The literature review is divided into four subsections. The first section addresses dating violence as a serious public health concern. The second section provides a brief overview of gender schema theory. The third section addresses the independent variables of interest: gender role orientation and hypergender constructs. Within this section, gender role orientation is divided into two constructs: expressivity and instrumentality, while hypergender constructs encompass both hyperfemininity and hypermasculinity. The final section addresses the outcome variables: attitudes towards dating violence and risk recognition of dating violence.

## **Dating Violence**

Dating violence, i.e., the use or threat of physical force, coercion into sexual activities, verbal denigration, and social isolation within a relationship, continues to be a concern for young adults (Aosved & Long, 2005). It is estimated that 45-78% of young adults in the United States have been physically victimized by their intimate partner (Linder & Collins, 2005; Smith et al., 2003). This is particularly troubling, as dating violence can yield harmful mental and physical effects for victims, including anxiety, depression, drug abuse, and eating disorders (Campbell, 2002; Coker et al., 2002; Wekerle & Tanaka, 2010; Wolitzky-Taylor et al., 2008).

Incidences of dating violence occur at high rates on college campuses. For example, high incidences of dating violence were reported in one study regarding the rates of dating violence across 31 universities in 16 countries (Straus, 2004). Five of

the universities resided in Asia or the Middle East, two in New Zealand, six in Europe, two in Latin America, and 16 in the United States. The number of participants from each site ranged from 132 to 742 ( $M = 279$ ), with a total of 8,666 participants. Approximately two-thirds of the sample identified as female, with a mean age of 21.9 (no standard deviation was reported). Students in the sample had been in a relationship for an average of 14 months. The results showed that rates of dating violence ranged from 17% to 45% with rates of severe assault ranging from 4% to over 20%. Finally, rates of physically injury to a dating partner in the previous 12 months ranged from 1.5% to 20%.

Another study reported similar findings. The goal of the study was to determine the prevalence of physical assault, sexual coercion, and suicidal ideation among university students. The sample consisted of 15,927 students from 22 universities across 21 countries (Chan et al., 2008). The sample was comprised of 70% females and 30% males. The average age of participants was between 20 and 25 years old for all countries except Sweden ( $M = 28$ ), Israel ( $M = 30$ ), and Switzerland ( $M = 34$ ; no standard deviations were reported). The average length of the dating relationship ranged from 8.6 to 19.3 months. Results indicated that rates of physically assaulting a dating partner within the prior 12 months ranged from 14 to 44%. Similarly, 26% of students reported being a victim of physical violence. Additionally, the rates of sexual coercion within the prior 12 months ranged from 8% to 34% (median = 20%). Rates of victimization of sexual coercion ranged from 9% to 46% (median = 24%), with United States and Canada reporting higher rates than the median.

## **Gender Schema Theory**

Gender Schema Theory offers insight into the acceptance of violence within intimate relationships (Bem, 1981). Schemata are conceptual neural networks that organize a person's perceptions. These cognitive structures allow people to process information quickly, as they provide a framework into which new information can be assimilated. Thus, individuals can organize new information into schema-relevant categories.

Gender is an example of an organizing principle seen throughout various different cultures. While societies will differ on what tasks and concepts are designated as feminine or masculine, nearly all societies tend to socialize their children based on gender. As children begin the process of socialization, they begin to make associations using the schemata society helps them create for gender (Bem, 1981). A child's identity and self-concept then becomes incorporated into his or her gender schema. Beyond this, children also learn which personality attributes should be associated with women and men as determined by society's definition of femininity and masculinity. For example, in western society children learn that nurturance should be associated with femininity while dominance should be associated with masculinity.

These associations are reinforced and become stronger for a child by receiving praise and punishment surrounding gender role norms throughout her or his life (Bem, 1981). For example, young girls are often praised for being caring. In the same respects, young boys are often punished for crying which is thought to be a sign of weakness, because weakness is not readily or easily assimilated into the masculinity

schema. While these associations are being reinforced, children are learning to evaluate themselves based on their gender schema. They begin to compare their personality characteristics to those stored into their schemas for femininity and masculinity. Their self-esteem becomes tied to their ability to uphold cultural or societal norms of traditional femininity or masculinity. Thus, they become motivated to conform to society's concept of femaleness and maleness when forming their gender role orientation.

## **Independent Variables**

### **Gender Role Orientation**

Gender role orientation is a psychological construct defined as an individual's endorsement of expressive (i.e., feminine) and instrumental (i.e., masculine) personality characteristics (Bem, 1974). Bem (1974) was the first researcher to explore how gender role orientation influences the way people categorize incoming information. In a study designed to collect normative data for the Bem Sex Role Inventory (BSRI), 561 male and 356 female (N= 917) students from Stanford University and Foothill Junior College completed the BSRI, which required students to indicate how well expressive, instrumental, and neutral characteristics described themselves. Results indicated that women scored higher ( $M = 5.01, SD = .52$ ;  $M = 5.08, SD = .58$ ) on the Expressive scale than men ( $M = 4.44, SD = .55$ ;  $M = 4.62, SD = .64$ ) for both samples. In the same respects, men scored higher ( $M = 4.97, SD = .67$ ;  $M = 4.96, SD = .71$ ) on the Instrumental measure than women ( $M = 4.57, SD = .69$ ;  $M = 4.55, SD = .75$ ) for both samples. Findings suggested that women and men in western society tend to conform to gender role expectations.

Bem (1981) continued to explore how gender schema influences how people process and organize incoming information unrelated to themselves. The aim of one study was to explore if sex-typed individuals, or women who identify clearly with traditionally feminine traits and men who identify with traditionally masculine traits, would cluster incoming information based on gender more than cross-sex typed, androgynous, and undifferentiated participants. Forty-eight male and 48 female undergraduate students ( $N = 96$ ) at Stanford University, chosen based on their BSRI score, were shown a sequence of 61 words in a random order. Of the 61 words, one-third were rated as masculine by an undergraduate research team, one-third were rated as feminine, and one-third were rated neutral. The sequence of words consisted of 16 proper names, 15 animal names, 15 verbs, and 15 articles of clothing. The words were presented on slides at 3-second intervals. Participants were asked to recall as many words as possible in 8 minutes following the presentation of the last word in the sequence. Findings showed that sex-typed participants clustered the words based on gender during recall more than the other three groups ( $t(88) = 2.01, p < .025$ ), signifying that sex-typed individuals are more prone to process information through the lens of gender role expectations than others.

Another study explored how gender schemas influenced how people process how well information relates to them in terms of their gender role orientation (Bem, 1981). Forty-eight male and 48 female ( $N = 96$ ) undergraduate students at Stanford University, preselected based on their BSRI score, were shown 60 attributes from the BSRI one at a time on a projection screen. Participants were instructed to push one of two buttons reading “me” or “not me” to indicate whether or not the projected

attribute was self-descriptive. Participants' response latencies were recorded for each judgment to determine whether or not sex-typed individuals would process schema relevant words more quickly than neutral and schema inconsistent words. Data analyses revealed that sex-typed people were faster at processing schema-consistent judgments about themselves ( $t(88) = 5.31, p < .001$ ) than cross-sex typed, androgynous, and undifferentiated participants. Sex-typed participants also were slower than the other three groups when making schema inconsistent judgments ( $t(83) = 2.97, p < .005$ ).

Researchers have explored the connection between gender role orientation, intimate partner violence, and attitudes towards intimate partner violence. In one study, 336 students from three different colleges and universities were recruited to examine how gender and gender orientation play a role in physical aggression in romantic relationships (Thompson, 1991). The sample was comprised of 49.7% men and 50.3% women, mostly self-identified White (93%) individuals, between the ages of 17 to 24 years old ( $M = 19.7$ ). While reports of intimate partner violence were not different between women ( $\chi^2 = .03, p > .05$ ) and men ( $\chi^2 = .58, p > .05$ ) in the sample, gender orientation acted as a predictor for who inflicted physical aggression within her or his romantic relationship. Specifically, instrumental gender role orientation predicted involvement in dating violence for both men and women. In essence, subscribing to a masculine gender role is predictor of physical regression, regardless of gender.

Another study extended these findings by examining the role of expressivity as well as instrumentality and gender on three types of intimate partner violence:

physical, psychological, and sexual violence (Próspero, 2008). The sample was comprised of 167 undergraduate students from a southern U.S. university. The sample was mostly female (68%), 40% Hispanic, 26% African American, 23% White, 7% Asian, and 4% classified as other. Participants were asked to complete surveys that assessed people's use of physical, sexual, and psychological violence on an intimate partner, attitudes towards the use of violence, and gender role orientation. Results revealed that participants were more likely to report perpetration of psychological violence if they scored high on instrumentality ( $t = 4.009, p = 0.000$ ) and were female ( $t = -4.534, p = 0.000$ ). Additionally, those who scored high on expressivity were less likely to report perpetration of psychological intimate partner violence ( $t = -1.927, p = 0.050$ ). However, expressivity and instrumentality were not predictors of physical or sexual intimate partner violence.

Lichter and McCloskey (2004) further explored the relationship between exposure to marital violence, adolescent gender-typed beliefs, acceptance of dating violence, and experiences with dating violence. Mother-child dyads ( $N = 208$ ) from violent and non-violent homes were recruited from low-income areas in a southwestern city and were asked to complete interviews and questionnaires. The adolescent sample ranged in age from 13 to 21 ( $M = 16.7, SD = 1.95$ ). The ethnic composition of the mothers in the sample was 53.3% White, 36.0% Hispanic, 4.7% African American, 5.2% Native American, and .5% other. Regardless of exposure to marital violence, holding traditional attitudes towards male-female relationships was associated with higher levels of dating violence perpetration.

### **Hypergender Constructs**

Strong conformity to traditional gender roles, also known as hypergender constructs, have been linked to increased risk of experiencing dating violence (Hong, 2000). Hypergender constructs is a psychological term encompassing two constructs: hyperfemininity and hypermasculinity. Hyperfemininity is defined as a women's stringent conformity to traditional feminine norms (Mahalik et al., 2005) and is proposed to be the result of societal gender socialization, specifically, the idea that a woman's worth is tied to her ability to obtain and maintain a relationship with a man (Murnen & Byrne, 1991).

Murnen and Byrne (1991) were the first researchers to explore the concept of hyperfemininity. In one study, 78 undergraduate women enrolled at the University of Albany were asked to read a scenario of a heterosexual couple in a dating situation in which sexual coercion was used. Participants were asked to comment on what the woman in the scenario should do after being coerced. Responses ranged from "do nothing" to "report the incident to the authorities and end the relationship." Additionally, participants were asked to rate how responsible they believed the man in scenario was, how responsible they believed the woman in the scenario was, how coercive they perceived the man to be, and how likely they thought the couple would be to date again. It was hypothesized that women who scored high on the hyperfemininity scale would indicate holding traditional attitudes and beliefs on the rights and roles of women that would influence perceptions of the romantic relationship. Results supported the hypothesis as hyperfemininity was correlated negatively to perceptions of how the woman should react ( $r = -.24, p < .05$ ). In other words, the women who scored high on the hyperfemininity scale were more likely to

advocate for a less harsh reaction from the woman in the scenario. Additionally, hyperfeminine women were more likely to believe the woman was responsible for the incident ( $r = .20, p < .05$ ).

Hypermasculinity, i.e., stringent conformity to traditional masculine norms (Mahalik et al., 2003), is proposed to be the result of gender socialization, particularly from the use of humiliation and contempt as punishment for failing to conform to what culture considered masculine, and the use of praise when exhibiting extreme masculine behavior (Mosher & Sirkin, 1984). Mosher and Sirkin (1984) were the first to study the psychological construct of hypermasculinity by developing the Hypermasculinity Inventory, a scale consisting of the following three components: calloused sex attitudes toward women, violence perceived as manly, and danger perceived as exciting, based on a sample of 135 middle class, mostly Catholic, college men.

Prior literature as established a relationship between hyperfemininity, hypermasculinity, and acceptance, perpetration, and victimization of intimate partner violence. For example, a study seeking to examine the relationship between hypertraditionality and attraction sampled 130 undergraduate men and 147 undergraduate women ( $N = 277$ ) to determine if hyperfeminine women and hypermasculine men would be attracted to each other while men low in hypermasculinity and women low in hyperfemininity would be attracted to each other (Smith et al., 1995). The majority of the sample was White (81%), with the remainder of the sample being comprised of 9% Black, 6% Hispanic, 3% Asian, and 1% identifying as other. Participants were asked to complete questionnaires assessing

social desirability, hypermasculinity or hyperfemininity, and interpersonal judgment. Moreover, participants were asked to rate a similar or dissimilar stranger of the same or opposite sex. Results indicated that men rated men similar to them on hypermasculinity more positively than those who were dissimilar ( $F(1,39) = 17.19, p < .001$ ). Similarly, women rated women similar on hyperfemininity more positively than those who were dissimilar ( $F(1,34) = 6.33, p < .05$ ). Additionally, men low on hypermasculinity rated women who were similar to them as more attractive than those who were dissimilar. Both hyperfeminine women and women low on hyperfemininity rated those similar to themselves on hypertraditionality as more attractive than those who were dissimilar.

Another study set out to examine the relationship between hypermasculinity and hyperfemininity, psychological, verbal, and physical abuse, and alcohol consumption (Ray & Gold, 1996). The sample was comprised of 56 undergraduate couples from a midwestern university. The mean age for men was 19.6 (SD = 1.64) and the mean age for women was 18.9 (SD= 1.25). The majority of the couples (53%) reported that they had been dating for over more than a year. Results revealed that couples with even one partner scoring high on a hypergender construct were more likely to report psychological abuse than couples that score low on hypergender constructs. More specifically, men in couples with at least one partner scoring high on a hypergender construct reported more verbal abuse while women who scored high on hyperfemininity reported more attacks to their self-esteem. Hyperfeminine women also reported more use of emotional control and jealousy tactics from their partners.

Additionally, men reported the most alcohol consumption when they were apart of a couple in which both partners scored high on hypergender constructs.

The relationship between hypergender constructs and intimate partner violence has been extended to sexual violence as well (Truman et al., 2006). Participants were asked to complete questionnaires assessing demographic information, masculine ideology, attitudes towards feminism, homophobia, attitudes toward date rape, rape myth acceptance, attitudes towards violence against women, previous sexual aggression, and likelihood of committing date rape. Participants included 106 undergraduate male students ranging in age from 17 to 48 years old ( $M = 21.09$ ,  $SD = 4.34$ ). The majority of the sample identified as White (83%), with representation from Blacks (11%), Asians (3%), and 1% who identified as other. Results indicated that men who endorsed traditional gender roles also held more date rape beliefs (i.e., adversarial sexual beliefs ( $F(6,99) = 16.82$ ), acceptance of interpersonal violence ( $F(6, 99) = 5.09$ ,  $p < .0001$ ), and date rape myth acceptance ( $F(6, 99) = 5.45$ ,  $p < .0001$ ).

A more recent study reproduced the above findings within a different context. Fifty-five men were recruited from an urban community in which they were receiving family services to examine hypermasculine characteristics in relation to intimate partner violence, specifically, sexual, physical, and verbal aggression (Guerrero, 2009). Participants ranged in age from 22 to 59 years old. The majority of the sample identified as White, non-Hispanic (70.9%) with the remainder of the sample being comprised of 12.7% Black, 7.3 % Native American, and 9.1% multiracial. There was a relationship between sexual aggression and hypermasculinity ( $r = .54$ ,  $p < .001$ ) and

reported violence and hypermasculinity ( $r = .531, p < .05$ ). Additionally, high scores on the hypermasculinity inventory were predictive of scores on the Conflict Tactics Scale ( $F(6,44) = 10.24, \beta = .98, p = .00$ ), such that high scores on the hypermasculinity inventory predicted more perpetration of violence.

## **Outcome Variables**

### **Attitudes Towards Violence**

Attitudes towards violence, defined as the acceptance of the use of violence within a dating relationship (Price et al., 1999), may be predicted by gender role orientation and hypergender constructs as the values rooted in traditional gender roles that are learned as a child may act as a catalyst for accepting dating violence later in life. One study explored the contributions of gender role stress and adult attachment on attitudes towards intimate partner violence in college men (McDermott & Lopez, 2013). Roughly 420 undergraduate heterosexual men were sampled, with the racial composition consisting of 28.9 % White, 28.4% Pacific Islander, 11.9% Black, 14.5% Hispanic, 11% Indian, 1% Multicultural, and 1% Native American. Gender role stress partially mediated the relationship between adult attachment security and attitudes regarding intimate partner violence, suggesting that there is a relationship between adhering strictly to masculine norms to avoid psychological and physical distress and accepting the use of violence within relationships.

While understanding and changing attitudes has been seen as fundamental to preventing dating violence (Vézina & Hébert, 2007), research has indicated that attitudes are weakly correlated with behaviors (Kane et al., 2000). One study examined whether men who use violence toward their romantic partner were more

accepting of intimate partner violence and would report higher levels of aggression and interpersonal dependency than comparison groups (Kane et al., 2000). The sample consisted of 23 men recruited from a community service organization where they were participating in a family support program due to using violence against their partner. Comparison groups consisted of 30 football players and 30 community volunteers. Overall, there were differences among the three groups on aggression level ( $F(2, 76) = 24.07, p < .001$ ) and interdependency ( $F(2, 76) = 5.21, p < .01$ ). More specifically, men who used violence against their intimate partner scored higher on aggression level ( $F(2, 76) = 45.66, p < .001$ ) and higher on interdependency ( $F(2, 76) = 10.36, p < .001$ ). However, the three groups of men did not differ on their attitudes towards using violence against women. All three groups generally opposed the use of violence against women, suggesting that attitudes against intimate partner violence do not translate to behaviors that support those beliefs.

The results of this study suggest a disconnect between attitudes and actions. While society in general verbalizes non-acceptance of violence in romantic relationships, intimate partner violence continues to be prevalent. This may occur because people have a difficult time identifying that they have been the victim or perpetrator of abusive behavior (Miller, 2011). In Miller's study, the sample consisted of 1,530 undergraduate students (56.1% female and 43.9% male) who identified as heterosexual and were between the ages of 18 and 25. The racial composition of the sample was 89% White, 7% Black, 1% Asian, 1% Hispanic, and 1% who identified as other. One-fourth of the participants reported being the victim or perpetrators of at least two abuse incidences within their relationship. However, over 85% of the

participants did not self-identify as a recipient or perpetrators of those abuse behaviors. Therefore, targeting attitudes that support violence within relationships as a means to prevent dating violence may not be the most effective approach. Instead, what may be more effective is identifying and bringing awareness to what qualifies as a warning sign of dating violence as a means of changing behaviors.

### **Risk Recognition**

Risk recognition, or the ability to detect personal danger (Witte & Kendra, 2009), has been shown as an important factor to changing behaviors within the field of health psychology (Brewer et. al, 2007). A meta-analysis of 34 studies assessing the bivariate association between risk perception and vaccination behaviors looked at three dimensions of risk perception: perceived illness likelihood, perceived illness susceptibility, and perceived illness severity (Brewer et. al, 2007). A stronger association between risk perception and health behaviors was found than had been seen in previous meta-analyses: perceived risk likelihood ( $r = .26$ ), severity ( $r = .24$ ), and susceptibility ( $r = .16$ ).

Another study related to risk perception within health psychology assessed cultural differences in perceived risk of being diagnosed with breast cancer, the association between perceived risk and utilizing mammograms services, and risk perception leading two or more mammograms within a four year period (Orom et al., 2013). Data were obtained using the 2003 HINTs, a probability based survey conducted by the National Cancer Institute. The study consisted of 3,361 participants in the overall sample. Blacks and Hispanics were oversampled and the total sample was weighted to be more nationally represented. Results found that while Black race/

ethnicity ( $n = 453$ ) was associated with lower perceived absolute risk of developing breast cancer ( $B = -0.17$ , 95 % CI  $-0.33, -0.01$ ), for the overall sample ( $N = 3,361$ ) perceived absolute risk was associated positively with the receiving a mammogram (OR = 1.27, 95 % CI 1.09, 1.48).

Moreover, the concept of risk recognition has been explored and deemed as important in relation to sexual assault. Wilson et al., (1999) were the first to extend the concept of risk recognition to sexual assault. The purpose of the study was to investigate the relationship between different levels of sexual assault victimization (i.e., single incident victims, multiple incidents victims, and non-victims) on women's perception of risk of sexual assault within a dating interaction. Participants were asked to listen to an audiotape of a dating encounter. The vignette simulated a sexual assault starting with verbal coercion and ending in rape. Participants were instructed to press a button when they felt the man in the audiotape had "gone too far." Participants were instructed to continue listening to the audiotape after they pressed the button. Upon completion of the audiotape, participants completed a survey comprised of various self-report measures to assess previous sexual abuse history and symptoms of posttraumatic stress disorder. Women with a history of multiple sexual assault victimizations took longer to indicate the interaction in the vignette had gone too far (i.e., poorer perception of risk) than single assault victims ( $t(117) = -2.70, p < .01, d = .55$ ) and non-victims ( $t(230) = -3.20, p < .002, d = .43$ ).

A follow up study was conducted with acknowledged victims of sexual assault, unacknowledged victims of sexual assault, and non-victims of sexual assault to explore the differences in risk recognition ability between the three groups (Marx

& Soler-Baillo, 2005). The sample was comprised of 95 undergraduate women, with a mean age of 19.55 (SD = 2.76), and the following racial breakdown: White (52.6%), Black (24.7%), Hispanic (11.3%), Asian (3.1%), and those with mixed ethnicities (8.2%). Analyses revealed that unacknowledged victims of sexual assault (M = 167.74, SD = 59.19) took longer to determine that the interaction had “gone too far” (i.e., poorer risk recognition) than both acknowledged victims of sexual assault (M = 140.62, SD = 73.04) and non-victims (M = 127.21, SD = 43.55).

Additionally, another study’s objective was to assess participants’ ability to identify inappropriate dating behavior, self-identification with sexually aggressive behavior, and ability to recognize non-consent in videotaped interactions of coercive and non-coercive dating scenarios (Loh et al., 2007). The researchers hypothesized that men with a history of sexual aggression would self-identify more with the perpetrator in the sexual assault video, label fewer of the perpetrator’s behaviors inappropriate, and recognize fewer cues indicating non-consent from the victim in the scenario than men without a history of sexual assault. The sample (N = 277) consisted of heterosexual, mostly White (92.2%) single men who had never been married (97.8%). Sixty-seven percent of the sample had engaged in sexual intercourse before their participation in the study. About 14% of the men had some history of sexual aggression, including rapes or attempted rapes. Men with a history of sexual aggression did not differ in their abilities to identify inappropriate dating behaviors, identification with the perpetrator, and their recognition of signals of non-consent than men without a history of sexual aggression. Additionally, men with a history of

sexual aggression were more likely to identify with the men in both the date rape and nonaggressive dating scenarios than men without a history of sexual aggression.

Despite its prevalence, risk recognition has not been given the same attention in relation to intimate partner violence. However, initial steps have been taken in applying the concept of risk recognition specifically to intimate partner violence in a study of whether female victims of intimate partner violence would display deficits in risk recognition when observing a physically violence dating encounter relative to women who had no history of intimate partner violence (Witte & Kendra, 2009). Participants were instructed to watch the video vignette, throughout which had four designated breaks. During the breaks, participants were instructed to pause the video and answer questions pertaining to the segment they had just seen. After each segment, participants were instructed to rate the following sentence: “I think this interaction as gone too far.” A total of 182 undergraduate women from a small southeastern liberal arts college participated in this study. The sample was mostly White (87%) and within their first year of college (54%). The mean age of the sample was 19.26 ( $SD = 1.16$ ), with approximately half of the sample reporting that they were currently in a dating relationship. Participants with a history of intimate partner violence were less likely to think the interaction had gone too far throughout the entire vignette when compared to non-victims of intimate partner violence ( $F(1,165) = 8.47, p < .01, \eta^2 = .05$ ). Victims of intimate partner violence demonstrated low risk recognition for both subtle and overt forms of abuse.

Even though rates of dating violence are high, risk recognition has not been extended to dating violence. Additionally, risk recognition has not been explored

outside of the context of prior experience with sexual or physically violent relationships. All studies to date measuring risk recognition have used participants' response latencies to video or audio recordings that depict violent sexual or physical dating encounter. While this strategy for measuring risk perception worked well for the purpose of those studies, determining when a vignette as gone too far did not inform the researchers when the participants began noticing more subtle danger signals regarding the relationship's potential to become violent. Therefore, a measure assessing risk recognition abilities in relation to early warning signs of dating violence needs to be developed.

To summarize, current research has established a clear relationship between gender role orientation, hypergender constructs, and the perpetration of intimate partner violence. The research to date suggests that instrumental gender role orientation, hypermasculinity, and hyperfemininity all act as predictors for perpetration and victimization (Próspero, 2008; Ray & Gold, 1996; Thompson, 1991). Additionally, the precedence when studying dating violence has been to explore, identify and change maladaptive attitudes towards accepting or using violence within romantic relationships (Vézina & Hébert, 2007). Yet, the connection between gender role orientation, hypermasculinity, and hyperfemininity and attitudes regarding dating violence remains to be explored.

Moreover, while studying attitudes regarding dating violence has been the norm, there may be additional ways to address and change behaviors regarding dating violence. Thus, the purpose of this study was to examine the degree to which gender role orientation and hypergender constructs are associated with college students'

attitudes towards dating violence and their ability to recognize warning signs of dating violence. Specifically, this study aimed to explore the contributions of expressivity and instrumentality as well as hyperfemininity and hypermasculinity to the prediction of college students' attitudes towards dating violence and ability to recognize the risk of dating violence when controlling for the contributions of prior education about and experience with dating violence.

### **Research Hypotheses**

The hypotheses were as follows:

1. Gender role orientation and hypergender constructs would predict attitudes toward dating violence for college students when controlling for the contributions of prior education about or experience with dating violence.

i. For women:

1. High expressivity scores would be associated with acceptance of dating violence.
2. High instrumentality scores would be associated with lack of acceptance of dating violence.
3. High hyperfemininity scores would be associated with acceptance of dating violence.

ii. For men:

1. High expressivity scores would be associated with lack of acceptance of dating violence.
  2. High instrumentality scores would be associated with acceptance of dating violence.
  3. High hypermasculinity score would be associated with acceptance of dating violence.
2. Gender role orientation and hypergender constructs would predict college students' ability to recognize warning signs of dating violence when controlling for the contributions of prior education about and experience with dating violence.
- i. For women:
    1. High expressivity scores would be associated with low risk recognition of dating violence.
    2. High instrumentality scores would be associated with high risk recognition of dating violence.
    3. High hyperfemininity scores would be associated with low risk recognition of dating violence.

ii. For men

1. High expressivity scores would be associated with low risk recognition of dating violence.
2. High instrumentality scores would be associated with low risk recognition of dating violence.
3. High hypermasculinity scores would be associated with low risk recognition of dating violence.



[www.mindgarden.com](http://www.mindgarden.com)

To whom it may concern,

This letter is to grant permission for the above named person to use the following copyright material:

Instrument: *Bem Sex Role Inventory*

Author: *Sandra Lipsitz Bem*

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for his/her thesis research.

Five sample items from this instrument may be reproduced for inclusion in a proposal, thesis, or dissertation.

The entire instrument may not be included or reproduced at any time in any other published material.

Sincerely,

Robert Most  
Mind Garden, Inc.  
[www.mindgarden.com](http://www.mindgarden.com)

## Appendix B

### Bem Sex Role Inventory-Short Form (Bem, 1981)

Instructions: Listed below are a number of personality characteristics. We would like you to use those characteristics to describe yourself, that is, we would like you to indicate, on a scale from 1 to 7, how true of you each of these characteristics is. Please do not leave any characteristic unmarked. The scale is as follows:

- 1= Never or almost never true
- 2= Usually not true
- 3= Sometimes but infrequently true
- 4=Occasionally true
- 5=Often true
- 6=Usually True
- 7=Always or almost always true

1. Defend my own beliefs	
2. Affectionate	
3. Conscientious	
4. Independent	
5. Sympathetic	

## Appendix C

### Conformity to Feminine Norms Inventory-45 (Parent & Moradi, 2010)

Instructions: The following pages contain a series of statements about how women might think, feel or behave. The statements are designed to measure attitudes, beliefs, and behaviors associated with both traditional and non-traditional feminine gender roles. Thinking about your own actions, feelings and beliefs, please indicate how much you personally agree or disagree with each statement by circling 0 for "Strongly Disagree", 1 for "Disagree", 2 for "Agree," or 3 for "Strongly agree" to the left of the statement. There are no right or wrong responses to the statements. You should give the responses that most accurately describe your personal actions, feelings and beliefs. It is best if you respond with your first impression when answering.

0 = Strongly Disagree  
 1 = Disagree  
 2 = Agree  
 3 = Strongly Agree

1. I would be happier if I was thinner	0 1 2 3
2. It is important to keep your living space clean	0 1 2 3
3. I spend more than 30 minutes a day doing my hair and makeup	0 1 2 3
4. I tell everyone about my accomplishments	0 1 2 3
5. I clean my home on a regular basis	0 1 2 3
6. I feel attractive without makeup	0 1 2 3
7. I believe that my friendships should be maintained at all costs	0 1 2 3
8. I find children annoying	0 1 2 3
9. I would feel guilty if I had a one night stand	0 1 2 3
10. When I succeed, I tell my friends about it	0 1 2 3
11. Having a romantic relationship is essential in life	0 1 2 3
12. I enjoy spending time making my living space look nice	0 1 2 3
13. Being nice to others is extremely important	0 1 2 3

14. I regularly wear makeup	0 1 2 3
15. I don't go out of my way to keep in touch with friends	0 1 2 3
16. Most people enjoy children more than I do	0 1 2 3
17. I would like to lose a few pounds	0 1 2 3
18. It is not necessary to be in a committed relationship to have sex	0 1 2 3
19. I hate telling people about my accomplishments	0 1 2 3
20. I get ready in the morning without looking in the mirror very much	0 1 2 3
21. I would feel burdened if I had to maintain a lot of friendships	0 1 2 3
22. I would feel comfortable having casual sex	0 1 2 3
23. I make it a point to get together with my friends regularly	0 1 2 3
24. I always downplay my achievements	0 1 2 3
25. Being in a romantic relationship is important	0 1 2 3
26. I don't care if my living space looks messy	0 1 2 3
27. I never wear makeup	0 1 2 3
28. I always try to make people feel special	0 1 2 3
29. I am not afraid to tell people about my achievements	0 1 2 3
30. My life plans do not rely on my having a romantic relationship	0 1 2 3
31. I am always trying to lose weight	0 1 2 3
32. I would only have sex with the person I love	0 1 2 3
33. When I have a romantic relationship, I enjoy focusing my energies on it	0 1 2 3
34. There is no point to cleaning because things will get dirty again	0 1 2 3

35. I am not afraid to hurt people's feelings to get what I want	0 1 2 3
36. Taking care of children is extremely fulfilling	0 1 2 3
37. I would be perfectly happy with myself even if I gained weight	0 1 2 3
38. If I were single, my life would be complete without a partner	0 1 2 3
39. I rarely go out of my way to act nice	0 1 2 3
40. I actively avoid children	0 1 2 3
41. I am terrified of gaining weight	0 1 2 3
42. I would only have sex if I was in a committed relationship like marriage	0 1 2 3
43. I like being around children	0 1 2 3
44. I don't feel guilty if I lose contact with a friend	0 1 2 3
45. I would be ashamed if someone thought I was mean	0 1 2 3

## Appendix D

### Conformity to Masculine Norms Inventory-46 (Parent & Moradi, 2009)

Instructions: The following pages contain a series of statements about how men might think, feel or behave. The statements are designed to measure attitudes, beliefs, and behaviors associated with both traditional and non-traditional masculine gender roles. Thinking about your own actions, feelings and beliefs, please indicate how much you personally agree or disagree with each statement by circling 0 for "Strongly Disagree", 1 for "Disagree", 2 for "Agree," or 3 for "Strongly agree" to the left of the statement. There are no right or wrong responses to the statements. You should give the responses that most accurately describe your personal actions, feelings and beliefs. It is best if you respond with your first impression when answering.

0 = Strongly Disagree  
 1 = Disagree  
 2 = Agree  
 3 = Strongly Agree

1. In general, I will do anything to win	0 1 2 3
2. If I could, I would frequently change sexual partners	0 1 2 3
3. I hate asking for help	0 1 2 3
4. I believe that violence is never justified	0 1 2 3
5. Being thought of as gay is not a bad thing	0 1 2 3
6. In general, I do not like risky situations	0 1 2 3
7. Winning is not my first priority	0 1 2 3
8. I enjoy taking risks	0 1 2 3
9. I am disgusted by any type of violence	0 1 2 3
10. I ask for help when I need it	0 1 2 3
11. My work is the most important part of my life	0 1 2 3
12. I would only have sex if I was in a committed relationship	0 1 2 3
13. I bring up my feelings when talking to others	0 1 2 3

14. I would be furious if someone thought I was gay	0 1 2 3
15. I don't mind losing	0 1 2 3
16. I take risks	0 1 2 3
17. It would not bother me at all if someone thought I was gay	0 1 2 3
18. I never share my feelings	0 1 2 3
19. Sometimes violent action is necessary	0 1 2 3
20. In general, I control the women in my life	0 1 2 3
21. I would feel good if I had many sexual partners	0 1 2 3
22. It is important for me to win	0 1 2 3
23. I don't like giving all my attention to my work	0 1 2 3
24. It would be awful if people thought I was gay	0 1 2 3
25. I like to talk about my feelings	0 1 2 3
26. I never ask for help	0 1 2 3
27. More often than not, losing does not bother me	0 1 2 3
28. I frequently put myself in risky situations	0 1 2 3
29. Women should be subservient to men	0 1 2 3
30. I am willing to get into a physical fight if necessary	0 1 2 3
31. I feel good when my work is my first priority	0 1 2 3
32. I tend to keep my feelings to myself	0 1 2 3
33. Winning is not important to me	0 1 2 3
34. Violence is almost never justified	0 1 2 3
35. I am happiest when I'm risking danger	0 1 2 3
36. It would be enjoyable to date more than one person at a time	0 1 2 3

37. I would feel uncomfortable if someone thought I was gay	0 1 2 3
38. I am not ashamed to ask for help	0 1 2 3
39. Work comes first	0 1 2 3
40. I tend to share my feelings	0 1 2 3
41. No matter what the situation I would never act violently	0 1 2 3
42. Things tend to be better when men are in charge	0 1 2 3
43. It bothers me when I have to ask for help	0 1 2 3
44. I love it when men are in charge of women	0 1 2 3
45. I hate it when people ask me to talk about my feelings	0 1 2 3
46. I try to avoid being perceived as gay	0 1 2 3

## Appendix E

### The Attitudes Toward Dating Violence Scales Price, Byers, & the Dating Violence Research Team (1999)

Instructions: The following are six different questionnaires. The statements on the questionnaires describe attitudes toward a variety of behaviors in dating relationships which different people have. There are no right or wrong answers, only opinions. Therefore, it is very important that you answer each question honestly. Please express your feelings about each statement by indicating whether you:

- 1 = Strongly Disagree  
2 = Disagree  
3 = Neither Agree nor Disagree  
4 = Agree  
5 = Strongly Agree

#### Attitudes Toward Male Psychological Dating Violence Scale

1. A guy should not insult his girlfriend.	1 2 3 4 5
2. A guy should not tell his girlfriend what to do.	1 2 3 4 5
3. A girl should ask her boyfriend first before going out with her friends.	1 2 3 4 5
4. Relationships always work best when girls please their boyfriends.	1 2 3 4 5
5. There is never a reason for a guy to threaten his girlfriend.	1 2 3 4 5
6. Sometimes guys just can't help but swear at their girlfriends.	1 2 3 4 5
7. A girl should always change her ways to please her boyfriend.	1 2 3 4 5
8. A girl should always do what her boyfriend tells her to do.	1 2 3 4 5
9. A guy does not need to know his girlfriend's every move.	1 2 3 4 5
10. There is never a good enough reason for a guy to swear at his girlfriend.	1 2 3 4 5
11. It is understandable when a guy gets so angry that he yells at his girlfriend.	1 2 3 4 5

12. It is O.K. for a guy to bad mouth his girlfriend.	1 2 3 4 5
13. There is never a reason for a guy to yell and scream at his girlfriend.	1 2 3 4 5
14. A girls should not see her friends if it bothers her boyfriend.	1 2 3 4 5
15. It is important for a girl to always dress the way her boyfriend wants.	1 2 3 4 5

**Attitudes Towards Male Physical Dating Violence Scale**

1. A girl should break up with a guy if he hits her.	1 2 3 4 5
2. Some girls deserve to be slapped by their boyfriends.	1 2 3 4 5
3. It is never O.K. for a guy to hit his girlfriend.	1 2 3 4 5
4. Sometimes guys just cannot stop themselves from punching girlfriends.	1 2 3 4 5
5. There is no good reason for a guy to push his girlfriend.	1 2 3 4 5
6. Sometimes a guy cannot help hitting his girlfriend when she makes him angry.	1 2 3 4 5
7. There is no good reason for a guy to slap his girlfriend.	1 2 3 4 5
8. Sometimes jealousy makes a guy so crazy that he must slap his girlfriend.	1 2 3 4 5
9. Girls who cheat on their boyfriends should be slapped.	1 2 3 4 5
10. Sometimes love makes a guy so crazy that he hits his girlfriend.	1 2 3 4 5
11. A guy usually does not slap his girlfriend unless she deserves it.	1 2 3 4 5
12. It is O.K. for a guy to slap his girlfriend if she deserves it.	1 2 3 4 5

**Attitudes Towards Male Sexual Dating Violence Scale**

1. When a guy pays on a date, it is O.K. for him to pressure his girlfriend for sex.	1 2 3 4 5
2. Guys do not own their girlfriends' bodies.	1 2 3 4 5
3. When guys get really sexually excited, they cannot stop themselves from having sex.	1 2 3 4 5
4. Guys should never get their girlfriends drunk to get them to have sex.	1 2 3 4 5
5. A guy should not touch his girlfriend unless she wants to be touched.	1 2 3 4 5
6. It is alright for a guy to force his girlfriend to kiss him.	1 2 3 4 5
7. Often guys have to be rough with their girlfriends to turn them on.	1 2 3 4 5
8. To prove her love, it is important for a girl to have sex with her boyfriend.	1 2 3 4 5
9. A girl who goes into a guy's bedroom is agreeing to sex.	1 2 3 4 5
10. It is no big deal to pressure a girl into having sex.	1 2 3 4 5
11. It is alright to pressure a girl to have sex if she has had sex in the past.	1 2 3 4 5
12. After a couple is going steady, the guy should not force his girlfriend to have sex.	1 2 3 4 5

**Attitudes Towards Female Psychological Dating Violence Scale**

1. There is no excuse for a girl to threaten her boyfriend.	1 2 3 4 5
2. There is never a good enough reason for a girl to swear at her boyfriend.	1 2 3 4 5
3. Girls have a right to tell their boyfriends how to dress.	1 2 3 4 5
4. A guy should always do what his girlfriend tells him to do.	1 2 3 4 5
5. If a girl yells and screams at her boyfriend it does not really hurt him seriously.	1 2 3 4 5
6. Girls have a right to tell their boyfriends what to do	1 2 3 4 5
7. It is important for a guy to always dress the way his girlfriend wants.	1 2 3 4 5

8. Sometimes girls just can't help but swear at their boyfriends.	1 2 3 4 5
9. A guy should always ask his girlfriend first before going out with his friends.	1 2 3 4 5
10. It is O.K. for a girl to bad mouth her boyfriend.	1 2 3 4 5
11. It is understandable when a girl gets so angry that she yells at her boyfriend.	1 2 3 4 5
12. Sometimes girls have to threaten their boyfriends so that they will listen.	1 2 3 4 5
13. A girl should not control what her boyfriend wears.	1 2 3 4 5

**Attitudes Towards Female Physical Dating Violence Scale**

1. It is O.K. for a girl to slap her boyfriend if he deserves it.	1 2 3 4 5
2. It is no big deal if a girl shoves her boyfriend.	1 2 3 4 5
3. Sometimes girls just cannot stop themselves from punching their boyfriends.	1 2 3 4 5
4. Some guys deserve to be slapped by their girlfriends	1 2 3 4 5
5. Sometimes a girl must hit her boyfriend so that he will respect her.	1 2 3 4 5
6. A girl usually does not slap her boyfriend unless he deserves it.	1 2 3 4 5
7. A girl should not hit her boyfriend regardless of what he has done.	1 2 3 4 5
8. There is never a reason for a guy to get slapped by his girlfriend.	1 2 3 4 5
9. Pulling hair is a good way for a girl to get back at her boyfriend.	1 2 3 4 5
10. It is never O.K. for a girl to slap her boyfriend.	1 2 3 4 5
11. Some girls have to pound their boyfriends to make them listen.	1 2 3 4 5
12. A guy should break-up with a girl when she slaps him.	1 2 3 4 5

**Attitudes Towards Female Sexual Dating Violence Scale**

1. A girl should not touch her boyfriend unless he wants to be touched.	1 2 3 4 5
2. There is nothing wrong with a guy changing his mind about having sex.	1 2 3 4 5
3. A guy should breakup with his girlfriend if she has forced him to have sex.	1 2 3 4 5
4. A girl should only touch her boyfriend where he wants to be touched.	1 2 3 4 5
5. A guy who goes into a girl's bedroom is agreeing to sex.	1 2 3 4 5
6. It is alright for a girl to force her boyfriend to kiss her.	1 2 3 4 5
7. Girls should never get their boyfriends drunk to get them to have sex.	1 2 3 4 5
8. If a guy says "yes" to sex while drinking, he is still allowed to change his mind.	1 2 3 4 5
9. After a couple is going steady, the girl should not force her boyfriend to have sex.	1 2 3 4 5
10. Girls should never lie to their boyfriends to get them to have sex.	1 2 3 4 5
11. To prove his love, it is important for a guy to have sex with his girlfriend.	1 2 3 4 5
12. It is O.K. for a girl to say she loves a guy to get him to have sex.	1 2 3 4 5

## Appendix F

### Recognition of Warning Signs of Dating Violence

Indicate whether each of the following is a warning sign of an abusive dating relationship using the following scale:

- 1= Not at all a warning sign
- 2= Slightly a warning sign
- 3= Quite a bit a warning sign
- 4= Very much a warning sign

#### Isolate

1. Tells dating partner not to hang out with friends	1 2 3 4
2. Tells dating partner not to spend time with family	1 2 3 4
3. Wants dating partner to spend time only with her/him	1 2 3 4

#### Monitor

4. Constantly checks up on dating partner	1 2 3 4
5. Checks dating partner's email without permission	1 2 3 4
6. Checks dating partner's cell phone without permission	1 2 3 4
7. Often uses the internet to check where dating partner is	1 2 3 4
8. Checks dating partner's social media contacts	1 2 3 4
9. Calls multiple times a day to see what dating partner is doing	1 2 3 4

#### Control

10. Tries to control dating partner	1 2 3 4
11. Makes decisions for dating partner	1 2 3 4
12. Tells dating partner how to dress	1 2 3 4
13. Threatens to harm herself/himself if dating partner wants to break up	1 2 3 4
14. Interferes with dating partner's ability to work	1 2 3 4

15. Interferes with dating partner's ability to study	1 2 3 4
---	---------

**DemEAN**

16. Constantly insults dating partner	1 2 3 4
17. Embarrasses dating partner	1 2 3 4
18. Calls dating partner names	1 2 3 4
19. Makes negative comments about dating partner's body	1 2 3 4

**Physical Aggression**

20. Grabs dating partner during an argument	1 2 3 4
21. Will not allow dating partner to leave during an argument	1 2 3 4
22. Throws things during an argument	1 2 3 4
23. Cruel to animals	1 2 3 4
24. Pressures dating partner into sexual activities	1 2 3 4

**Jealous**

25. Accuses dating partner of flirting with other people	1 2 3 4
26. Extremely jealous	1 2 3 4
27. Accuses dating partner of cheating	1 2 3 4
28. Possessive	1 2 3 4
29. Accuses dating partner of not loving her/him	1 2 3 4

**Anger**

30. Has an explosive temper	1 2 3 4
31. Gets angry about small things	1 2 3 4
32. Yells at dating partner	1 2 3 4

**Minimize**

33. Pretends like nothing is wrong after an argument	1 2 3 4
34. Never admits mistakes	1 2 3 4

**Intimidate**

35. Threatens to harm dating partner's property	1 2 3 4
36. Threatens to share embarrassing photo of dating partner	1 2 3 4
37. Threatens to spread rumors about dating partner	1 2 3 4
38. Can make dating partner afraid with looks	1 2 3 4

**Relationship Characteristics**

39. Gets serious about the relationship quickly	1 2 3 4
40. Buys dating partner gifts after an argument	1 2 3 4
41. Charming at the beginning of the relationship and then changes	1 2 3 4
42. Tells dating partner she/he cannot do anything right	1 2 3 4
43. Wants dating partner to apologize all the time	1 2 3 4
44. Blames dating partner unfairly	1 2 3 4
45. Apologizes for actions but continues to repeat them	1 2 3 4
46. Cheats on dating partner	1 2 3 4

**Partner History**

47. Abuses alcohol	1 2 3 4
48. Abuses drugs	1 2 3 4
49. Witnessed abuse as a child	1 2 3 4

**Healthy Relationship**

50. Encourages dating partner to spend time with friends	1 2 3 4
51. Communicates thoughts well	1 2 3 4
52. Communicates feelings well	1 2 3 4
53. Encourages dating partner to ask for what she/he wants	1 2 3 4
54. Encourages dating partner to follow her/his dreams	1 2 3 4
55. Respects dating partner's choices	1 2 3 4

56. Trusts dating partner	1 2 3 4
57. Values dating partner being her/his own person	1 2 3 4
58. Encourages dating partner's personal growth	1 2 3 4
59. Is honest with dating partner	1 2 3 4

## Appendix G

### The Revised Conflict Tactics Scale – Short Form (Straus & Douglas, 2004)

Instructions: No matter how well a couple gets along, there are times when they disagree, get annoyed with the other person, want different things from each other, or just have spats or fights because they are in a bad mood, are tired or for some other reason. Couples also have many different ways of trying to settle their differences. This is a list of things that might happen when you have differences. Please mark how many times you did each of these things in the past year, and how many times your partner did them in the past year. If you or your partner did not do one of these things in the past year, but it happened before that, mark a "7" for that question. If it never happened, mark an "8."

- 1 = Once in the past year
- 2 = Twice in the past year
- 3 = 3-5 times in the past year
- 4 = 6-10 times in the past year
- 5 = 11-20 times in the past year
- 6 = More than 20 times in the past year
- 7 = Not in the past year, but it did happen before
- 8 = This has never happened

1. I explained my side or suggested a compromise for a disagreement with my partner.	1 2 3 4
2. My partner explained his or her side or suggested a compromise for a disagreement with me.	1 2 3 4
3. I insulted or swore or shouted or yelled at my partner.	1 2 3 4
4. My partner insulted or swore or shouted or yelled at me.	1 2 3 4
5. I had a sprain, bruise, or small cut, or felt pain the next day because of a fight with my partner.	1 2 3 4
6. My partner had a sprain, bruise, or small cut or felt pain the next day because of a fight with me.	1 2 3 4
7. I showed respect for, or showed that I cared about my partner's feelings about an issue we disagreed on.	1 2 3 4
8. My partner showed respect for, or showed that he or she cared about my feeling about an issue we disagreed on.	1 2 3 4

9. I pushed, shoved, or slapped my partner.	1 2 3 4
10. My partner pushed, shoved, or slapped me.	1 2 3 4
11. I punched or kicked or beat-up my partner.	1 2 3 4
12. My partner punched or kicked or beat-me-up.	1 2 3 4
13. I destroyed something belonging to my partner or threatened to hit my partner.	1 2 3 4
14. My partner destroyed something belonging to me or threatened to hit me.	1 2 3 4
15. I went see a doctor (M.D.) or needed to see a doctor because of a fight with my partner.	1 2 3 4
16. My partner went to see a doctor (M.D.) or needed to see a doctor because of a fight with me.	1 2 3 4
17. I used force (like hitting, holding down, or using a weapon) to make my partner have sex.	1 2 3 4
18. My partner used force (like hitting, holding down, or using a weapon) to make me have sex.	1 2 3 4
19. I insisted on sex when my partner did not want to or insisted on sex without a condom (but did not use physical force).	1 2 3 4
20. My partner insisted on sex when I did not want to or insisted on sex without a condom (but did not use physical force).	1 2 3 4

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## Appendix H

### Education about Dating Violence

Instructions: The following is a series of statements related education about dating violence and domestic violence. Please indicate the extent to which you were or are involved in each of the following using the following scale:

- 1= Not at all
- 2= Some
- 3=Quite a Bit
- 4= Very much

1. To what degree did you learn about dating violence in a course(s) focused on violence?	1 2 3 4
2. To what degree did you learn about domestic violence in a course(s) focused on violence?	1 2 3 4
3. To what extent did you learn about dating violence in a course lecture(s) about violence?	1 2 3 4
4. To what extent did you learn about domestic violence in a course lecture(s) about violence?	1 2 3 4
5. To what degree have you participated in a training experience related to dating violence?	1 2 3 4
6. To what degree have you participated in a training experience related to domestic violence?	1 2 3 4
7. To what degree have you been exposed to relationship violence through a family member(s) who has experienced abuse in their relationship?	1 2 3 4

# Appendix I

## Demographic Questionnaire

1. Age: \_\_\_\_\_

2. Gender:

Female

Male

3. Race/Ethnicity:

Black/African American

Hispanic/Latino

White

Asian

Biracial/ Multicultural

Other

4. Undergraduate Year Classification

First year

Sophomore

Junior

Senior

5. Undergraduate Major(s):

\_\_\_\_\_

6. Relationship Status:

Single

In a Relationship

Engaged

Married

7. If in a relationship, how long have you been romantically involved with your current partner? \_\_\_\_\_ Months

8. To what degree was there relationship violence in your home while you were growing up?

Not at all

Some

Quite a bit

An extreme amount

Table 1: *Demographic characteristics of female sample, N= 433*

Variable	Total	
	%	(N)
<b>Race/Ethnicity</b>		
White	61.4	(266)
Black/African American	12.9	(56)
Asian	14.1	(61)
Hispanic/Latino	6.9	(30)
Biracial/Multiracial	4.6	(20)
Other	0	(0)
<b>Age</b>		
18	23.1	(100)
19	25.2	(109)
20	23.8	(103)
21	21.2	(92)
22	6.7	(29)
<b>Undergraduate Year Classification</b>		
First year	25.6	(111)
Sophomore	25.2	(109)
Junior	24.7	(107)
Senior	24.5	(106)
<b>Relationship Status</b>		
Single	53.6	(232)
In a relationship	45.7	(198)
Engaged	.7	(3)
<b>To what degree was there relationship violence in your home while you were growing up?</b>		
Not at all	77.1	(334)
Some	18.9	(82)
Quite a bit	2.5	(11)
An extreme amount	1.4	(6)

Table 2: *Demographic characteristics of male sample, N= 108*

Variable	Total	
	%	(N)
<b>Race/Ethnicity</b>		
White	63.0	(68)
Black/African American	8.3	(9)
Asian	19.4	(21)
Hispanic/Latino	7.4	(8)
Biracial/Multiracial	1.9	(2)
Other	0	(0)
<b>Age</b>		
18	25.0	(27)
19	24.1	(26)
20	25.0	(27)
21	17.6	(19)
22	8.3	(9)
<b>Undergraduate Year Classification</b>		
First year	27.8	(30)
Sophomore	25.0	(27)
Junior	30.6	(33)
Senior	16.7	(18)
<b>Relationship Status</b>		
Single	63.9	(69)
In a relationship	35.2	(38)
Engaged	.9	(1)
<b>To what degree was there relationship violence in your home while you were growing up?</b>		
Not at all	81.5	(88)
Some	13.9	(15)
Quite a bit	2.8	(3)
An extreme amount	1.9	(2)

Table 3: Female Sample Correlations

Measures	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Experience with DV																				
1. Assault	1																			
2. Injury	.76*	1																		
3. Psychological Aggression	.48*	.41*	1																	
4. Sexual Coercion	.53*	.60*	.39*	1																
5. Negotiation	.10	.07	.29*	.13*	1															
6. Education about DV	.09	.09	.13*	.02	.07	1														
Gender Role Orientation																				
7. Expressivity	-.11	-.14*	-.09	-.12	.06	.08	1													
8. Instrumentality	.05	-.04	.10	-.04	.01	.07	.08	1												
Hyperfemininity																				
9. Thinness	.01	.05	.11	.07	-.04	-.11	-.02	-.03	1											
10. Domestic	.02	.00	.02	-.05	.05	-.04	.18*	-.00	.08	1										
11. Invest in Appearance	.00	.01	.06	.04	.09	-.08	.06	-.07	.20*	.12	1									
12. Modesty	.06	.01	.05	.03	-.10	.02	-.12*	-.11	.02	-.02	-.07	1								
13. Relational	-.04	-.04	-.01	-.07	.05	.11	.24*	.08	.06	.12*	.15*	-.24*	1							
14. Involvement with Children	-.09	-.04	-.05	-.08	-.01	.09	.48*	-.05	.01	.18*	.04	-.08	.20*	1						
15. Sexual Fidelity	-.04	-.03	-.07	-.17*	-.06	-.08	.14*	-.09	.01	.19*	-.05	.04	-.06	.12	1					
16. Romantic Relationship	.03	.04	.08	-.02	.14*	.00	.16*	-.12	.20*	.19*	.17*	-.02	-.03	.15*	.20*	1				
17. Sweet and Nice	-.09	-.06	-.15*	-.07	.04	.03	.53*	-.22*	.11	.19*	.08	-.10	.31*	.38*	.17*	.04	1			
Attitudes Towards DV																				
18. Attitudes Towards Male DV	.07	.07	.23*	.07	-.04	.01	-.31*	-.04	.10	-.15*	-.04	.10	-.22*	-.23*	-.13*	-.09	-.29	1		
19. Attitudes Towards Female DV	.02	.02	.15*	.00	-.09	.00	-.32*	-.02	.10	-.11	-.03	.10	-.14*	-.22*	.05	.02	-.30	.76*	1	
Risk Recognition																				
20. Warning Signs of DV	.00	.01	-.11	-.01	.03	.13*	.26*	.13*	-.06	.10	.01	.06	.16*	.14*	.10	.08	.20*	-.47*	-.39*	1
Mean	.30	.16	1.28	.33	3.71	13.7	5.67	4.49	8.67	10.62	7.91	6.38	9.40	11.15	7.56	8.18	11.44	56.69	57.92	130.61
Standard Deviation	.80	.63	1.10	.75	1.00	4.39	.83	.84	3.42	2.87	3.20	2.18	2.40	2.98	3.87	2.89	2.23	14.14	16.81	16.48
Range	0-4	0-4	0-4	0-4	0-4	7-26	3.10-7	1.80-7	0-15	0-15	0-15	0-14	0-15	0-15	0-15	1-15	4-15	39-119	37-120	67-160
Possible Range	0-4	0-4	0-4	0-4	0-4	7-28	1-7	1-7	0-15	0-15	0-15	0-15	0-15	0-15	0-15	0-15	0-15	39-195	37-185	40-160
Alpha	.77	.82	.68	.65	.97	.82	.89	.82	.85	.86	.81	.77	.72	.89	.88	.76	.70	.91	.92	.94

Note. \* $p < .0$

Table 4: Male Sample Correlations

Measures	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Experience with DV																				
1. Assault	1																			
2. Injury	.84*	1																		
3. Psychological Aggression	.53*	.49*	1																	
4. Sexual Coercion	.70*	.77*	.46*	1																
5. Negotiation	.13	.09	.33*	.15	1															
6. Education about DV	.26*	.28*	.15	.23	.17	1														
Gender Role Orientation																				
7. Expressivity	.00	-.03	.05	.10	.23	.25*	1													
8. Instrumentality	.10	.07	.13	.07	.08	-.05	.32*	1												
Hypermasculinity																				
9. Winning	-.06	-.09	.19	-.10	.07	-.05	.00	.33*	1											
10. Emotional Control	-.02	-.11	-.12	-.12	.02	.07	-.40*	-.02	.25*	1										
11. Risk Taking	-.04	-.01	.11	.01	-.01	-.10	.14	.40*	.31*	-.11	1									
12. Violence	-.13	-.15	.17	-.05	.16	-.01	-.05	.06	.25	.18	.15	1								
13. Power Over Women	.20	.15	.22	.20	.12	.24	-.02	.17	.14	.15	.30*	.25*	1							
14. Playboy	-.03	-.07	.08	.18	.05	.01	.01	.16	.15	-.10	.29	.24	.32*	1						
15. Self Reliance	.14	.07	.25*	-.03	.19	-.02	-.03	-.07	.31*	.37*	.02	.21	.18	-.05	1					
16. Primacy of Work	-.11	-.03	-.06	.03	-.05	-.01	.01	.15	.17	-.09	.00	-.16	-.07	-.02	-.10	1				
17. Heterosexual Self Presentation	.02	-.04	.12	.07	.12	.03	.07	.15	.33*	.26*	.18	.19	.54*	.08	.19	.05	1			
Attitudes Towards DV																				
18. Attitudes Towards Male DV	.39*	.318	.27*	.29*	.07	.07	-.30*	.05	.13	.15	.16	.32*	.57*	.28*	.05	-.04	.24	1		
19. Attitudes Towards Female DV	.23	.19	.24	.22	.12	.06	-.16	.00	.05	.01	.15	.25*	.52*	.23	-.05	.04	.29	.84*	1	
Risk Recognition																				
20. Warning Signs of DV	-.08	-.12	-.11	-.07	-.07	.07	.24	.05	-.19	-.09	-.18	-.39*	-.21	-.19	-.04	.19	-.09	-.43*	-.36	1
Mean	.27	.24	1.18	.36	3.56	13.5	5.38	4.49	9.83	8.19	6.94	8.82	2.86	4.78	6.80	6.25	8.53	67.66	71.69	118.40
Standard Deviation	.82	.83	1.18	.92	1.16	4.73	.89	.81	2.88	3.90	2.22	3.43	2.17	2.80	2.49	2.36	3.99	17.82	20.60	16.14
Range	0-4	0-4	0-4	0-4	0-4	7-25	1.80-7	2.90-	4-18	0-18	0-12	1-16	0-9	0-11	0-13	0-12	0-18	40-133	37-132	86-154
Possible Range	0-4	0-4	0-4	0-4	0-4	7-28	1-7	1-7	0-18	0-18	0-15	0-18	0-12	0-12	0-15	0-12	0-18	39-195	37-185	40-160
Alpha	.84	.89	.74	.83	.94	.85	.89	.81	.84	.93	.77	.85	.85	.83	.87	.82	.88	.93	.94	.93

Note. \* $p < .01$

Table 5: Summary of hierarchical regression analysis of expressivity, instrumentality, and hyperfemininity as predictors of attitudes toward male perpetrated dating violence for women (N=433)

Variable	B	SE B	$\beta$	t	df	R	R2	F	$\Delta$ R2	$\Delta$ F
Step 1					426	.26	.07	5.13*	.07	5.13*
CTS2_Assault	-.64	1.31	-.04	-.49						
CTS2_Injury	-.62	1.73	-.03	-.36						
CTS2_PsychAggression	3.72	.73	.29	5.16*						
CTS2_Sexual Coercion	.10	1.14	.01	.08						
CTS2_Negotiation	-1.69	.70	-.12	-2.40						
Education_DV	-.05	1.52	-.02	-.32						
Step 2					424	.39	.15	9.50*	.09	21.13*
CTS2_Assault	-.463	1.26	-.03	-3.7						
CTS2_Injury	-1.41	1.67	-.06	-.85						
CTS2_PsychAggression	3.57	.70	.28	5.11*						
CTS2_Sexual Coercion	-.27	1.09	-.01	-.24						
CTS2_Negotiation	-1.34	.67	-.09	-1.98						
Education_DV	.05	.15	.01	.31						
BEM_Expressivity	-4.92	.78	-.29	-6.35*						
BEM_Instrumentality	-.80	.77	-.05	-1.04						
Step 3					415	.47	.22	6.74*	.06	3.80*
CTS2_Assault	-.55	1.24	-.03	-.45						
CTS2_Injury	-.72	1.64	-.03	-.44						
CTS2_PsychAggression	3.24	.70	.25	4.66*						
CTS2_Sexual Coercion	-.96	1.09	-.05	-.88						
CTS2_Negotiation	-1.32	.67	-.09	-1.96						
Education_DV	.08	.15	.03	.56						
BEM_Expressivity	-2.53	.99	-.15	-2.56*						
BEM_Instrumentality	-1.20	.81	-.07	-1.48						
CFNI_Thin	.34	.19	.08	1.76						
CFNI_Domestic	-.34	.23	-.07	-1.51						
CFNI_Appearance	-.13	.21	-.03	-.65						
CFNI_Modest	.05	.30	.01	.16						
CFNI_Relational	-.71	.29	-.12	-2.47*						
CFNI_Children	-.39	.24	-.08	-1.62						
CFNI_Fidelity	-.35	.17	-.10	-2.05						
CFNI_RomanticRelation	.45	.24	.09	1.90						
CFNI_SweetNice	-.69	.37	-.11	-1.87						

Note. \* $p < .01$

Table 6: Summary of hierarchical regression analysis of expressivity, instrumentality, and hyperfemininity as predictors of attitudes toward female perpetrated dating violence for women (N=433)

Variable	B	SE B	$\beta$	t	df	R	R2	F	$\Delta$ R2	$\Delta$ F
Step 1					426	.23	.05	3.84*	.05	3.84*
CTS2_Assault	-.20	1.57	-.01	-.13						
CTS2_Injury	-1.90	2.08	-.07	-.91						
CTS2_PsychAggression	3.71	.87	.24	4.26*						
CTS2_Sexual Coercion	-.61	1.37	-.03	-.27						
CTS2_Negotiation	-2.58	.84	-.15	-3.07*						
Education_DV	-.05	.18	-.01	-.27						
Step 2					424	.38	.15	9.08*	.10	23.59*
CTS2_Assault	-.06	1.50	-.00	-.04						
CTS2_Injury	-2.79	1.99	-.10	-1.41						
CTS2_PsychAggression	3.43	.83	.23	4.12*						
CTS2_Sexual Coercion	-1.03	1.30	-.05	-.79						
CTS2_Negotiation	-2.13	.80	-.13	-2.65*						
Education_DV	.07	.18	.02	.37						
BEM_Expressivity	-6.30	.93	-.31	-6.79*						
BEM_Instrumentality	-.48	.92	-.02	-.53						
Step 3					415	.19	.19	5.53*	.04	2.17
CTS2_Assault	-.12	1.50	-.01	-.08						
CTS2_Injury	-2.22	1.98	-.08	-1.12						
CTS2_PsychAggression	2.92	.84	.19	3.46*						
CTS2_Sexual Coercion	-1.42	1.32	-.06	-1.07						
CTS2_Negotiation	-2.02	.81	-.12	-2.48*						
Education_DV	.10	.18	.03	.59						
BEM_Expressivity	-3.81	1.20	-.19	-3.17*						
BEM_Instrumentality	-1.11	.98	-.06	-1.13						
CFNI_Thin	.43	.23	.09	1.85						
CFNI_Domestic	-.25	.28	-.04	-.92						
CFNI_Appearance	-.11	.25	-.02	-.46						
CFNI_Modest	.21	.36	.03	.60						
CFNI_Relational	-.17	.35	-.02	-.49						
CFNI_Children	-.38	.30	-.07	-1.27						
CFNI_Fidelity	-.20	.21	-.05	-.96						
CFNI_RomanticRelation	.40	.29	.07	1.40						
CFNI_SweetNice	-1.09	.45	-.15	-2.44						

Note. \* $p < .01$

Table 7: Summary of hierarchical regression analysis of expressivity, instrumentality, and hyperfemininity as predictors of recognition of warning signs of dating violence for women (N=433)

Variable	B	SE B	$\beta$	t	df	R	R2	F	$\Delta R2$	$\Delta F$
Step 1					426	.21	.04	3.21*	.04	3.21*
CTS2_Assault	.65	1.55	.03	.42						
CTS2_Injury	1.33	2.04	.05	.65						
CTS2_PsychAggression	-2.8	.86	-.19	-3.27*						
CTS2_Sexual Coercion	.04	1.35	.00	.03						
CTS2_Negotiation	1.17	.83	.07	1.41						
Education_DV	.55	.18	.15	3.07*						
Step 2					424	.34	.12	7.02*	.07	17.68*
CTS2_Assault	.21	1.50	.01	.14						
CTS2_Injury	2.46	1.98	.09	1.24						
CTS2_PsychAggression	-2.81	.83	-.19	-3.38*						
CTS2_Sexual Coercion	.51	1.30	.02	.39						
CTS2_Negotiation	.88	.80	.05	1.10						
Education_DV	.45	.17	.12	2.56*						
BEM_Expressivity	4.67	.93	.24	5.04*						
BEM_Instrumentality	2.54	.91	.13	2.78*						
Step 3					415	.38	.15	4.15*	.03	1.53
CTS2_Assault	.12	1.51	.01	.07						
CTS2_Injury	1.85	1.99	.07	.93						
CTS2_PsychAggression	-2.65	.85	-.18	-3.14*						
CTS2_Sexual Coercion	1.30	1.33	.06	.98						
CTS2_Negotiation	.60	.82	.04	.73						
Education_DV	.43	.18	.11	2.42						
BEM_Expressivity	2.72	1.21	.14	2.26						
BEM_Instrumentality	3.31	.98	.17	3.37*						
CFNI_Thin	-.28	.24	-.06	-1.20						
CFNI_Domestic	.15	.28	.03	.53						
CFNI_Appearance	.04	.25	.01	.16						
CFNI_Modest	.11	.36	.01	.29						
CFNI_Relational	.58	.35	.08	1.66						
CFNI_Children	-.04	.30	-.01	-.13						
CFNI_Fidelity	.32	.21	.08	1.52						
CFNI_RomanticRelation	.43	.29	.08	1.50						
CFNI_SweetNice	.76	.45	.10	1.70						

Note. \* $p < .01$

Table 8: Summary of hierarchical regression analysis of expressivity, instrumentality, and hyperfemininity as predictors of attitudes toward male perpetrated dating violence for men (N=108)

Variable	B	SE B	$\beta$	t	df	R	R2	F	$\Delta R2$	$\Delta F$
Step 1					101	.40	.16	3.24*	.16	3.24*
CTS2_Assault	8.48	3.85	.39	2.20						
CTS2_Injury	-1.85	4.11	-.09	-.45						
CTS2_PsychAggression	1.36	1.73	.09	.79						
CTS2_Sexual Coercion	.99	2.80	.05	.35						
CTS2_Negotiation	-.04	1.51	.00	-.03						
Education_DV	-.13	.36	-.03	-.35						
Step 2					99	.52	.27	4.59*	.11	7.40*
CTS2_Assault	8.65	3.64	.40	2.38						
CTS2_Injury	-2.97	3.89	-.14	-.76						
CTS2_PsychAggression	1.20	1.63	.08	.74						
CTS2_Sexual Coercion	1.20	2.64	.06	.46						
CTS2_Negotiation	1.01	1.45	.07	.70						
Education_DV	.09	.36	.02	.26						
BEM_Expressivity	-7.26	1.89	-.36	-3.84*						
BEM_Instrumentality	2.50	2.05	.11	1.22						
Step 3					90	.77	.59	7.56*	.32	7.71*
CTS2_Assault	10.05	3.04	.46	3.30*						
CTS2_Injury	.00	3.34	.00	.00						
CTS2_PsychAggression	-.63	1.44	-.04	-.44						
CTS2_Sexual Coercion	-2.31	2.37	-.12	-.98						
CTS2_Negotiation	.51	1.17	.03	.44						
Education_DV	.32	.31	.09	1.04						
BEM_Expressivity	-5.94	1.76	-.30	-3.38*						
BEM_Instrumentality	-1.63	1.91	-.07	-.86						
CMNI_Win	.59	.56	.10	1.06						
CMNI_EmoControl	-.15	.43	-.03	-.35						
CMNI_Risk	.22	.66	.03	.34						
CMNI_Violence	1.42	.41	.27	3.45*						
CMNI_PowerOverWomen	3.84	.79	.47	4.88*						
CMNI_Playboy	.37	.57	.06	.65						
CMNI_SelfRel	-1.21	.60	-.17	-2.02						
CMNI_Work	.53	.56	.07	.95						
CMNI_HeteroPresentation	-.16	.41	-.04	-.38						

Note. \* $p < .01$

Table 9: Summary of hierarchical regression analysis of expressivity, instrumentality, and hyperfemininity as predictors of attitudes toward female perpetrated dating violence for men (N=108)

Variable	B	SE B	$\beta$	t	df	R	R2	F	$\Delta R2$	$\Delta F$
Step 1					101	.28	.08	1.47	.08	1.47
CTS2_Assault	4.37	4.66	.17	.94						
CTS2_Injury	-2.83	4.97	-.11	-.57						
CTS2_PsychAggression	2.44	2.9	.14	1.17						
CTS2_Sexual Coercion	2.53	3.39	.11	.75						
CTS2_Negotiation	.60	1.82	.03	.33						
Education_DV	-.02	.44	-.01	-.05						
Step 2					99	.34	.12	1.60	.03	1.92
CTS2_Assault	4.59	4.63	.18	.99						
CTS2_Injury	-3.70	4.95	-.15	-.75						
CTS2_PsychAggression	2.43	2.08	.14	1.17						
CTS2_Sexual Coercion	2.67	3.36	.12	.79						
CTS2_Negotiation	1.27	1.84	.07	.69						
Education_DV	.17	.45	.04	.38						
BEM_Expressivity	-4.61	2.40	-.20	-1.92						
BEM_Instrumentality	.36	2.60	.01	.14						
Step 3					90	.65	.43	3.95*	.31	5.46*
CTS2_Assault	7.06	4.15	.28	1.70						
CTS2_Injury	-1.29	4.55	-.05	-.28						
CTS2_PsychAggression	1.08	1.96	.06	.55						
CTS2_Sexual Coercion	-2.21	3.22	-.10	-.68						
CTS2_Negotiation	1.13	1.60	.06	.71						
Education_DV	.48	.42	.11	1.13						
BEM_Expressivity	-4.33	2.40	-.19	-1.81						
BEM_Instrumentality	-4.10	2.60	-.16	-1.58						
CMNI_Win	.04	.76	.01	.06						
CMNI_EmoControl	-.47	.59	-.09	-.80						
CMNI_Risk	.45	.90	.05	.50						
CMNI_Violence	1.26	.56	.21	2.26						
CMNI_PowerOverWomen	4.20	1.07	.44	3.92*						
CMNI_Playboy	.11	.78	.02	.14						
CMNI_SelfRel	-1.91	.82	-.23	-2.33						
CMNI_Work	1.19	.76	.14	1.56						
CMNI_HeteroPresentation	.43	.55	.08	.77						

Note. \* $p < .01$

Table 10: Summary of hierarchical regression analysis of expressivity, instrumentality, and hyperfemininity as predictors of recognition of warning signs of dating violence for men (N=108)

Variable	B	SE B	$\beta$	t	df	R	R2	F	$\Delta R2$	$\Delta F$
Step 1					101	.20	.04	.70	.04	.70
CTS2_Assault	2.15	3.74	.11	.58						
CTS2_Injury	-4.89	3.98	-.25	-1.23						
CTS2_PsychAggression	-1.03	1.67	-.08	-.61						
CTS2_Sexual Coercion	1.12	2.72	.06	.41						
CTS2_Negotiation	-.95	1.46	-.07	-.65						
Education_DV	.42	.35	.12	1.20						
Step 2					99	.31	.09	1.28	.05	2.94
CTS2_Assault	1.96	3.67	.10	.53						
CTS2_Injury	-4.06	3.94	-.21	-1.03						
CTS2_PsychAggression	-1.00	1.65	-.07	-.61						
CTS2_Sexual Coercion	.98	2.67	.06	.37						
CTS2_Negotiation	-1.61	1.46	-.12	-1.10						
Education_DV	.24	.36	.07	.67						
BEM_Expressivity	4.55	1.91	.25	2.39						
BEM_Instrumentality	-.52	2.07	-.03	-.25						
Step 3					90	.57	.33	2.57*	.23	3.47*
CTS2_Assault	.14	3.52	.01	.04						
CTS2_Injury	-7.08	3.87	-.36	-1.83						
CTS2_PsychAggression	1.33	1.66	.10	.80						
CTS2_Sexual Coercion	2.60	2.74	.15	.95						
CTS2_Negotiation	-1.39	1.36	-.10	-1.03						
Education_DV	.18	.36	.05	.51						
BEM_Expressivity	3.87	2.04	.21	1.90						
BEM_Instrumentality	2.44	2.21	.12	1.11						
CMNI_Win	-1.07	.65	-.19	-1.66						
CMNI_EmoControl	.22	.50	.05	.43						
CMNI_Risk	-.88	.76	-.12	-1.15						
CMNI_Violence	-1.59	.48	-.34	-3.36*						
CMNI_PowerOverWomen	-.32	.91	-.04	-.35						
CMNI_Playboy	-.55	.66	-.09	-.82						
CMNI_SelfRel	.84	.70	.13	1.21						
CMNI_Work	1.08	.65	.16	1.66						
CMNI_HeteroPresentation	-.06	.47	-.02	-.14						

Note. \* $p < .01$

Table 11: Summary of predictors for hierarchical multiple regression analyses for women and men (N=541)

Variable	Attitudes Towards Male DV-Women	Attitudes Towards Female DV-Women	Recognition of Warning Signs- Women	Attitudes Towards Male DV-Men	Attitudes Towards Female DV-Men	Recognition of Warning Signs- Men
Step 1						
CTS2_Assault						
CTS2_Injury						
CTS2_PsychAggression	X	X	X			
CTS2_Sexual Coercion						
CTS2_Negotiation		X				
Education_DV			X			
Step 2						
CTS2_Assault						
CTS2_Injury						
CTS2_PsychAggression	X	X	X			
CTS2_Sexual Coercion						
CTS2_Negotiation		X				
Education_DV			X			
BEM_Expressivity	X	X		X		
BEM_Instrumentality			X			
Step 3						
CTS2_Assault				X		
CTS2_Injury						
CTS2_PsychAggression	X	X	X			
CTS2_Sexual Coercion						
CTS2_Negotiation		X				
Education_DV						
BEM_Expressivity	X	X		X		
BEM_Instrumentality			X			
CFNI_Thin				-	-	-
CFNI_Domestic				-	-	-
CFNI_Appearance				-	-	-
CFNI_Modest				-	-	-
CFNI_Relational	X			-	-	-
CFNI_Children				-	-	-
CFNI_Fidelity				-	-	-
CFNI_RomanticRelation				-	-	-
CFNI_SweetNice				-	-	-
CMNI_Win	-	-	-			
CMNI_EmoControl	-	-	-			

CMNI_Risk	-	-	-			
CMNI_Violence	-	-	-	X		X
CMNI_PowerOverWomen	-	-	-	X	X	
CMNI_Playboy	-	-	-			
CMNI_SelfRel	-	-	-			
CMNI_Work	-	-	-			
CMNI_HeteroPresentation	-	-	-			

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Note: - Indicates measure was not taken by participants

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