Daily and Longitudinal Associations between Sexual Coercion, Affect, and Relationship Functioning among Women in Heterosexual Dating Relationships

A Thesis Presented for the Masters of the Arts in Psychology

The University of Tennessee Knoxville

Vanessa Tirone

May 2012

Abstract

Sexual coercion, the use of manipulative tactics to have sexual contact with another person against their will, is experienced frequently by women in dating relationships. Cross sectional data suggests this type of experience is associated with deleterious outcomes for women's mental health and relationship satisfaction. To date, no published studies have examined how sexual coercion relates to women's well-being and relationship functioning on a daily basis or their satisfaction with dating relationships over time. The present study measured the frequency of 4 sexual coercion tactics (i.e., arousal, verbal, intoxication and force) and their association with women's wellbeing and relationship functioning using daily diary and longitudinal methods. Data were collected from 137 undergraduate women who were at least 18 years of age and in a dating relationship with a man. At baseline, participants completed in-person surveys assessing demographics, sexual victimization history, sexual coercion by the current partner, and relationship satisfaction. For the next 2 weeks participants responded to daily internet surveys on sexual coercion, affect, and relationship satisfaction. One month after the last daily survey participants completed a follow-up online survey. Sixty-three percent of women reported sexual coercion at some point in their relationship. On days when women reported partner use of verbal and intoxication tactics they reported increased conflict and decreased positive affect, respectively. Arousal and force tactics were unrelated to daily measures. Frequency of verbal, intoxication and force tactics, but not arousal tactics, reported at follow-up were associated with increased relationship conflict. No coercive tactics were related to relationship support or depth over time.

Keywords: Sexual coercion, relationship satisfaction, dating violence.

Table of Contents

Introduction	Page 1
Methods	Page 11
Results	Page 15
Discussion	Page 18
References	Page 24
Appendices	Page 35
Appendix A: Baseline Measures	Page 40
Appendix B: Baseline and Follow-up Measures	Page 41
Appendix C: Daily Measures	Page 44

List of Tables

Table 1. Rates of partner sexual coercion reported by women at baseline, 2 weeks of daily assessment, and one month follow-up. Page 36

Table 2. Women's affect and relationship variables two weeks of daily diary assessment. Page 37

Table 3. Group centered analysis of effects coercive tactic type on women's daily relationship and affect variables. Page 38

Daily and Longitudinal Associations between Sexual Coercion, Affect, and Relationship Functioning among Women in Heterosexual Dating Relationships

At the broadest level, sexual coercion occurs when an individual uses pressure, drugs, or force to have sexual contact with another person against their will (Struckman-Johnson, Struckman-Johnson, & Anderson, 2003). In one of the first landmark studies of verbal and physical coercion among college students, 54% of women reported some type of sexual coercion since age 14 (Koss, Gidycz, & Wisniewski, 1987). Unfortunately, these rates have not changed over the past 20 years (Basile, Chen, Black, & Saltzman, 2007). In general, sexual assault victims are at risk for a wide variety of symptoms including social withdrawal, decreased academic and professional functioning, and Posttraumatic Stress Disorder (O'Sullivan & Byers, 1998). Female victims of sexual coercion in particular suffer from poor relationship satisfaction, low sexual satisfaction, and higher rates of mental health symptoms compared to non-victimized peers (de Visser, Rissel, Richter, & Smith, 2007; Katz & Myhr, 2008; Segal, 2009). Thus, sexual coercion is a wide-spread phenomenon with the potential to impact women's wellbeing.

In general, women are more likely to experience sexual violence in their lifetimes than men (Basile et al., 2007). Unlike some other forms of relationship violence, sexual coercion specifically is consistently found to be more frequently perpetrated by males onto female sexual partners (*see* Slashinski, Coker, & Davis, 2003, *for review*). For instance, when Hines and Saudino (2003) used the Conflict Tactics Scale to ask heterosexual college students about their current romantic relationships 29% of men reported using sexual coercion over the course of their relationship versus 13% of women. This imbalance is not surprising given normative scripts about appropriate sexual behavior for men and women. As Gavey (2005) explains, when both men and women enter into heterosexual interactions their behavior is dictated by sexual

discourse, or gendered guidelines for sexuality. The "male sexual drive" discourse dictates that men have an overwhelming need for sex and will go to great lengths for sexual gratification. On the other hand, women are expected to behave within the limitations of the "have/hold" discourse. According to this script, women are expected to limit their own sexual behavior and the sexual behavior of men, except in cases where it will secure or maintain a committed romantic relationship with a man. Taken together, these discourses imply that men will naturally seek physical intimacy despite resistance and that women are ultimately responsible for, and capable of, controlling sexual behavior. Though sexual discourse does not explain the occurrence of all sexual coercion (Byers, 1995), it does suggest that men's sexual coercion of women may be viewed as normative behavior in relationships when it does occur (Holland, Ramazanoglu, Sharpe, & Thompson, 2004).

In addition to risk for sexual coercion varying by gender, men and women may also respond differently to the experience of sexual coercion. In their study of sexually coercive experiences of 732 undergraduates in the past year Kernsmith and Kernsmith (2009) found that women reported higher rates of negative emotional reactions to coercion compared to male victims. Conversely, males reported higher rates of positive emotional reactions to sexual coercion. Similarly, O'Sullivan et al. (1998) found that compared to men, women were more likely to report feeling emotional upset immediately after sexual coercion occurred. Women were also more likely to report still feeling upset about the incident at the time of the survey. Because women experience high rates of sexual coercion and are likely to suffer deleterious consequences as a result, it is important to focus specifically on women's reports of sexual coercion by male sexual partners.

When women experience male sexual coercion, it is usually perpetrated by someone known to the victim (Abbey BeShears, Clinton-Sherrod, & McAuslan, 2004; Basile et al., 2007). A large body of research suggests that sexual coercion is a frequent occurrence in women's relationships. One of the largest studies to assess this phenomenon in dating relationships, The International Dating Violence Survey, used the CTS-2 to obtain rates of sexual coercion among college students in 21 countries (Chan, Straus, Brownridge, Tiwari, & Leung, 2008). Rates of sexual coercion among women in the past 12 months ranged from 9.2% in the Netherlands to 42.0% in Greece. In the same study, 30.6% of American female students reported coercion from a partner in the past year. In a smaller sample of female college students in ongoing relationships Katz, Kuffel, and Brown (2006) reported that 29% of women endorsed at least one experience of sexual coercion, as measured by the CTS-2, in the past year. In another study of undergraduate females Katz and Myhr (2008) found that in the past year 21% of women engaged in unwanted sex due to verbal pressure, as measured by the Sexual Experiences Survey. Within this sample, there was an average of 3 acts of male verbal coercion in the past 12 months. These findings underscore the need to examine women's experience of coercion specifically within their dating relationships.

Defining Sexual Coercion

Definitions of sexual coercion vary widely across studies (see Koss et al., 2007 for review). With the development and validation of the Sexual Experiences Survey, Koss and colleagues promoted the idea that sexual coercion is a dimensional process (Koss & Oros, 1982). In other words, there are many types of sexual pressure experienced by individuals that, while not reported to authorities as rape, are still types of sexual violation. However, many researchers choose to concentrate exclusively on coercive experiences which closely approximate legal

definitions of rape. Research studies on sexual violation often still focus specifically on experiences where intercourse, commonly defined as oral, anal, or vaginal penetration, occurred as a result of force, threats of force, or the use of substances. According to feminist post-structuralist theory it is important to examine the ways in which knowledge, including that created through psychological research, is socially constructed (Gavey, 1989). According to this perspective, definitions of sexual coercion used to guide research questions are value laden. In other words, they reflect legal and social ideas about what counts as pressured sex (*see* Muehlenhard, Harney, & Jones, 1992, *for review*). For instance, the focus on sexual activity featuring male penetration of a woman may be reflective of the coital imperative that exists in Western cultures which situates penile penetration as an essential element of sexual activity (McPhillips, Braun, & Gavey, 2001).

Defining sexual coercion in such a way is not inclusive of the full range of sexual behaviors that occur in sexual relationships. In fact, when O'Sullivan, Byers, and Finkelman (1998) asked male and female Canadian undergraduates to report the most recent experience of sexual coercion, out of the 22% of students who experienced coercion in the past year, 72% reported it involved vaginal intercourse, 33% reported oral sex, and 6% reported anal sex. However, 71% reported sexually coerced kissing while 46% reported coerced genital fondling. This data suggests that some forms of coerced sexual contact (e.g., fondling), which are not assessed by traditional sexual coercion measures, may occur more frequently than others that are typically assessed (i.e., oral sex). Hence, some measures of sexual coercion may restrict assessment of the impact of sexually coercive tactics by inquiring about a narrow range of sexual outcomes (Lyndon, White, & Kadlec, 2007).

Studying a broad spectrum of sexually coercive tactics is also essential to understanding the impact of sexual violation. According to Roberts and Crown (2007) a wide variety of sexual behaviors, such as using verbal pressure to touch someone's genitals, can be considered coercive when they occur against an individual's will. Stuckman-Johnson et al.'s (2003) measure of sexual coercion, termed post-refusal sexual persistence, corresponds with this broad conceptualization. Participants are asked if their partner has used a variety of tactics to obtain any kind of sexual contact, including kissing, touching, or oral, vaginal, or anal intercourse AFTER they indicated NO to their partner's sexual advances. The measure asks about 5 types of tactics specifically: arousal, verbal/emotional manipulation, authority, intoxication, and force. When this measure was administered to undergraduate students 78% of women reported at least one experience of sexual coercion since the age of 16. The majority of women reported being pressured with arousal tactics (73%), followed by verbal/emotional manipulation or use of authority (71%), intoxication (44%), and force tactics (30%). These results suggest that a large number of women have had at least one experience where their *explicit non-consent* to sexual activity was ignored by a male sexual partner.

Rates of sexual coercion specifically within women's relationships may also be higher when a more inclusive measure of sexual coercion is utilized. When Katz et al. (2010) administered Struckman-Johnson's measure of post-refusal sexual persistence to female undergraduates, 53% had experienced at least one instance of coercion with their current dating partner. Male partners used arousal tactics on at least one occasion (45%), while the use of verbal/emotional manipulation (29%), intoxication (8%) and force (1%) were less common. Drawing attention to subtle forms of coercion may shed light on how coercion occurs as a less visible part of heterosexual sex that still undermines women's sexual autonomy (Gavey, 1992).

These experiences are potentially harmful to women in that they may undermine women's rights to a sense of control over their body and sexual choices (Roberts & Crown, 2007).

Types of Sexual Coercion and Well-being in Women's Relationships

In general, male dating partners tend to use the mildest tactic that will allow them to gain sexual access to an unwilling partner (Abbey et al., 2004; Ramisetty-Mikler, Caetano, & McGrath, 2007). As such, women in relationships tend to report the use of more subtle tactics, like a partner continuing to kiss them or talk them into it, more often than severe tactics, such as the use of force (Struckman-Johnson, et al., 2003). Brown, Testa, and Messman-Moore (2009) used the Sexual Experiences Survey to examine if the type of coercive tactics women experienced produced different sexual assault related outcomes. Women who experienced intoxication or force tactics suffered from more PTSD and negative impact on their social lives compared to women who experienced tactics such as verbal pressure. Additionally, those who experienced force reported worse outcomes than those who experienced intoxication. Similarly, when Kernsmith and Kernsmith (2009) examined college students' emotional reactions to sexual coercion in the past year, women reported experiencing more negative affect in response to the use of force compared to when a partner used emotional manipulation, deceit, verbal insistence, or extortion to obtain sexual contact. Though any act of sexual coercion violates women's sexual autonomy, the impact of these experiences on well-being may increase with greater amounts of pressure. At the same time, subtle tactics appear to be a common part of many women's sexual relationships. Less severe tactics such as continuing to kiss or touch a partner (arousal) may not have a direct effect on marked outcomes of well-being, such as the development of Posttraumatic Stress disorder, which are often the focus of rape research (e.g., Basile, Arias, Desai, &

Thompson, 2004). However, these more mild tactics may impact subtle measures of well-being such as daily affect or relationship satisfaction.

Though, in general, sexual coercion impacts women's functioning and is a common occurrence in their heterosexual dating relationships, surprisingly little research has focused specifically on the association between coercion and relationship functioning. Thus far research in this area has produced inconsistent results. In their cross sectional study of college student Katz, Kuffel, and Brown (2006) found no association between verbal coercion in the past year and women's relationship satisfaction. Among newly married couples, male perpetrated sexual coercion as measured by the CTS-2 predicted women's decreased relationship satisfaction over the course of 1 year, but was unrelated to satisfaction 2 years later (Panuzio & Dilillo, 2010). Only one published study to date has examined the relationship between a broad range of sexual coercion and college women's relationship outcomes over time, though it did not examine relationship satisfaction specifically. Using the measure of PRSP Katz and Tirone (2010) demonstrated that, in heterosexual relationships, frequency of male partners' use of any type of coercive tactics led to women's decreased sexual satisfaction over the course of 6 weeks, particularly among women who also engaged in consensual unwanted sex. No studies published to date have examined the relationship between male dating partners' use of a broad spectrum of sexually coercive tactics and women's relationship satisfaction over time.

Daily Assessment of Sexual Coercion

Thus far, research on sexual coercion has utilized primarily cross sectional methodology to examine both the frequency and impact of male perpetrated sexual coercion. Women are typically asked to report the number of times they have experienced sexual coercion over their lifetime, over the course of a relationship, or over the past year. Cross sectional research on

sexual coercion is incomplete, as retrospective reports of sexual experiences in general are vulnerable to recall bias (Graham, Catania, Brad, Duong, & Canchola, 2003). Such designs limit our knowledge about how often sexual coercion occurs and how it impacts women's daily lives.

Daily diary methods are one technique that could establish more accurate rates of sexual coercion. Internet based daily diaries may be particularly useful toward this end, because researchers can control and monitor when participants complete measures, unlike traditional paper dairies. Though no published studies have examined the daily frequency or impact of sexual coercion specifically, online daily diaries have been successfully utilized to assess sexual behavior among college students in dating relationships. For example, Stachman and Impett (2009) used daily internet surveys to examine sexual activity and condom use among 90 undergraduates over 2 weeks, achieving a response rate of 94 percent. Similar methodology has also been successfully implemented to study sexual behavior and its correlates in other populations (Grov, Golub, Mutanski, & Parsons, 2010; Keine, Barta, Tennen, & Armeli, 2007; Ridley, Ogolsky, Payne, Totenhagen, & Cate, 2008).

Additionally, participants may more easily recall even subtle fluctuations in mood and relationship functioning when these factors are assessed on a daily basis. Daily diary research has demonstrated a relationship between sexual behavior and fluctuations in mood and relationship functioning. For instance, in a 2 week study of male and female undergraduates in dating relationships Impett et al. (2005) found that individuals' motives for sex on any given day predicted their negative affect, positive affect, relationship conflict, and relationship satisfaction the same day. Unfortunately, the study did not report whether or not these daily sexual experiences occurred in the context of partner coercion. Research on the impact of other forms of abuse on women's relationships also provides support for the study of daily experiences of

sexual coercion. In one study of female, first semester freshmen in romantic relationships, those who experienced high levels of psychological maltreatment by their male partner at baseline reported greater negative affect and less positive affect on days during the following week when relationship conflict occurred compared to women who reported low levels of psychological maltreatment (Gallaty & Zimmer-Gembeck, 2008). These findings suggest that relationship conflict, broadly defined, can impact women's emotions from day to day particularly in relationships characterized by psychological abuse. From a broader perspective, women's experiences of sexism in general, may also have a daily impact. Several daily diary studies conducted by Swim, Hyers, Cohen, and Ferguson (2001) illustrated that when women encounter gender stereotyping, derogatory comments about women, and sexual objectification they experience decreases in comfort and self esteem and increases in anger and depression.

Thus, though no daily diary studies have examined the prevalence and correlates of sexual coercion specifically, research suggests that women's sexual activity and experiences of sexism and relationship conflict are related to their emotions. According to Larkin and Popaleni (1994), sexually coercive experiences that women encounter in heterosexual relationships are acts of diminishment, intimidation, and force that wear away at women's confidence, self esteem, and psychological and physical security. Experiences of sexual coercion in relationships are often taken for granted as, "sex as usual," (Gavey, 2005; Hird & Jackson, 2001) however; they may take a toll on women's daily well being.

Present Study

The first goal of the current study was to assess the rates of each type of a broad range of sexually coercive tactics experienced by college women in dating relationships using daily diary methodology. It was expected that women would report partner use of arousal and verbal tactics

more frequently than intoxication or force consistent with theory and research suggesting men use the mildest forms of coercion necessary to obtain sexual contact. The current study also examined the impact of sexual coercion on women's daily relationship and personal wellbeing. Specifically, it was hypothesized that on days when women experienced sexual coercion they would report less relationship satisfaction and positive affect than on days they did not experience sexual coercion. Similarly, women were expected to endorse more negative affect and relationship conflict on days when sexual coercion occurred relative to days when coercion did not occur. Each tactic was examined separately to determine whether women's experiences of some tactics (i.e., force) were more likely to be associated with daily changes in well-being than others (i.e., arousal).

An additional goal of the present research was to examine the effects of sexual coercion tactics on women's relationship quality over time. It was predicted that the more frequently women reported partner use of sexual coercion tactics, the less support and depth they would report in their relationship. It was also expected that coercion frequency would be positively associated with relationship conflict. The association between sexual coercion frequency and relationship quality over time was also examined separately for each tactic.

Methods

Participants

Participants were 142 women recruited from a small public college in the Northeast (n = 101) and a large public university in the Southeast (n = 41). In order to participate, women had to be at least 18 years old and in a current relationship with a male partner that they saw in person at least twice a month. Four participants were excluded from analyses because they indicated that their partner was female. One participant was excluded due to inconsistent data

(i.e., she indicated experiencing high levels of sexual abuse from her current partner on one measure, and in another indicated never experiencing sexual abuse) leaving a final sample of 137. Characteristics of the two recruitment sites at baseline were compared using t-test and chi-squared tests. No differences were found between sites in age, partner age, relationship length, baseline relationship satisfaction, and presence of sexual coercion. Thus, the two samples were combined in all remaining analyses. On average, women were 19.32 years old (*SD* = 1.63) and their partners were 20.15 years old (*SD* = 2.73). Mean relationship length was 20.69 months long (*SD* = 10.27).

Measures

Baseline (see Appendix A)

Demographics were assessed using several items developed for the present study. Participants reported age, relationship length, partner age, sexual orientation, and sex of current partner.

Baseline and Follow-Up (see Appendix B)

Relationship satisfaction was assessed using the 25-item Quality of Relationship Inventory (QRI; Pierce, Sarason, & Sarason, 1991). A representative item is, "How much would you miss him if the two of you could not see or talk with each other for a month?" The QRI assesses three domains of satisfaction support, conflict, and depth (Verhofstadt, Buysse, Russeel, & Peene, 2006). Questions are rated on a 4 point scale (1 = *not at all*, 4 = *very much*); responses are summed such that higher scores reflect higher perceived relationship quality. Reliability in the current sample at baseline was good to adequate (support α =.70, conflict α =.88, depth α =.68), similar to prior research (Katz, Kuffel & Brown, 2006).

Sexual coercion by the current dating partner was examined using the measure of post refusal persistence (PRSP) developed by Struckman-Johnson et al. (2003). Participants were asked to indicate how many times over the course of the relationship their partner used each of 17 coercive tactics, after they indicated, "no," to his sexual advance. Three items measured arousal, for example, "continued to kiss and touch you to arouse you." Six items assessed verbal tactics which included persistent verbal pressure as well as manipulation and lies. A representative item is, "threatened to break up with you." Two assessed use of intoxication such as, "took advantage of the fact that you were already drunk or high." Six items measured the use of physical force or threats of force, i.e., he, "physically harmed you (e.g., hit, slapped, or bit you)." Women were classified as having a history of partner sexual coercion if they provided a non-zero response to any item. The original measure also contains two additional items which assess authority tactics such as, "used his authority or position (e.g., boss, babysitter, teacher)." These items were not utilized in the present study due to their inapplicability to college dating relationships specifically. To date, the psychometric properties of this measure have not been thoroughly evaluated.

Daily Measures (see Appendix C)

For all daily diary measures participants were asked to consider their thoughts, feelings and experiences since they completed the last survey. All relationship and sexual experience questions were asked in reference to the partner they discussed at baseline.

Affect was assessed using the Positive and Negative Affect Scale (PANAS; Watson et al., 1988), which measures each type of mood separately. For each subscale participants are asked how much they currently feel 10 different emotions (1 = very slightly or not at all, 5 = extremely). Positive emotion items included, "interested," "strong," and "inspired." The

reliability was excellent among these items (α = .94). Negative items such as, "guilty," nervous," and "ashamed," also demonstrated good internal consistency (α = .87). Prior daily diary research has also demonstrated excellent internal consistency of the PANAS (Impett et al., 2005)

Relationship satisfaction was assessed using four items adapted from Impett et al. (2005). Participants were asked, ''How close do you feel to your partner today?," How satisfied were you with your relationship today?," "How fun was your relationship today?," and, "How much conflict did you experience in your relationship today?" Each item was rated on a 7-point scale (1 = *none*, 7 = *a lot*). In the current sample the first 3 items were highly correlated (*r* = .78 to .88) and were averaged to make a single relationship satisfaction variable (α = .93).

Sexual Coercion was measured using 4 items adapted from Struckman-Johnson et al. (2003). Participants were asked, "has your partner used any of the following tactics to obtain sexual contact after you indicated no to his sexual advance?" The items were, "continuing to touch you or doing other things to arouse you," "trying to talk you into it by repeatedly asking," "purposefully getting you drunk or high, or taking advantage of you when you were already too drunk or high," and, "using physical restraint to hold you down or sit on you." Each item was rated on a 3 point scale (0 = *not at all*, 1 = *a little*, 2 = a lot). To examine the differential effects of tactic type each item was examined separately. The present study did not evaluate the psychometric properties of these questions.

Procedure

Women were recruited for a 3-part study entitled, "Women's Dating Relationships and Sexual Interactions," through the online Psychology research credit system at each institution. Phase 1 involved having participants complete baseline, in-person surveys assessing

demographics, sexual victimization history, and sexual coercion and relationship satisfaction in their current relationship. During Phase 1 all women also provided written informed consent pertaining to all portions of the study. Surveys were administered by 2 female research assistants to women in groups of no more than 20 students. Phase 2 occurred over the next 14 consecutive days, and involved sending participants one email every day at 12:00am which contained a link to the daily survey. For each daily survey participants were asked questions about their sexual experiences, affect, and relationship satisfaction since they completed the last survey. The link to each daily survey could only be completed until 11:50pm the same day. One month after the last daily survey, participants completed Phase 3 of the study, which involved responding to a follow-up online survey regarding sexual coercion and relationship satisfaction in the past month. At the end of each survey participants were provided with referral information for free counseling at their school and sexual assault support in the community. The online surveys were hosted on the website www.surveymonkey.com. All data collected through this website was protected by encryption and was the sole property of the survey monkey account owners, the research advisors of the author. All procedures were approved by the Institutional Review Board of each institution.

Results

Women's mean relationship satisfaction was 85.45 (*SD* = 8.19) at Phase 1 and 85.18 (*SD* = 7.98) at Phase 3. Rates of partner sexual coercion are listed according to tactic and assessment point in Table 1. As expected, women experienced subtle tactics at a greater frequency then more forceful tactics. During Phases 1 and 2, arousal tactics were reported by the most women followed by verbal, intoxication, and force tactics. The pattern was similar at Phase 3, though more women reported force and reported it more frequently than intoxication. During the Phase

2, 38% of women experienced at least one sexual coercion tactic on at least one day. Among the 52 women who reported sexual coercion during Phase 2, coercion occurred on a mean of 2.02 days (*SD* = 1.39). When data from all 3 assessment points was combined, 63% of women reported experiencing at least one incident of partner sexual coercion. Across assessment points, a majority of women experienced at least one incident of arousal tactics (60%), followed by verbal (38%), intoxication (9%), and force (5%).

Women's average ratings of daily affect and relationship variables during Phase 2 are presented in Table 2. Hierarchical Linear Modeling was used to test the hypotheses concerning daily variables. This method accounts for the relationship between repeated observations from the same individual (Bryk & Raudenbush, 2002). All predictor variables were group centered such that the model compares data from all participants across days.

First, we tested the association between type of coercive tactic and daily relationship and affect variables. Sixteen separate models were run to test if each the occurrence of each tactic on any given day produced effects on relationship satisfaction, conflict, positive affect, or negative affect, regardless of the presence of any other tactics. Each model contained one predictor, a dichotomous variable that indicated the presence or absence of one specific tactic (e.g., force), regressed onto a single daily affect or relationship outcome (e.g., conflict). Results are summarized in Table 3. There was partial support for the hypothesis that coercion on any given day would be associated with increases in conflict and decreases in positive affect. A trend suggested that on days when women experienced arousal tactics they also experienced more conflict. Women were also significantly more likely to report more conflict on days they reported verbal tactics, and less likely to report positive affect on days when intoxication tactics. Contrary to our hypotheses, women's reports that their partner used force tactics were not

associated with any daily relationship or affect variables. Unexpectedly, no forms of coercion were associated with negative affect or relationship satisfaction.

A total of 123 women completed the online follow-up portion of the study. The 14 women who failed to complete Phase 3 did not differ in relationship satisfaction (M = 85.71, SD = 5.30) from those who remained in the study (M = 85.42, SD = 8.47, t (135) = -.13, *ns*). Similarly, they were not more or less likely to report sexual coercion by their partner at Phase 1 (57%) than women who completed the follow-up (55%) (χ^2 (1, n =137) = .04, *ns*). Another 17 women indicated that their relationship with their partner had ended between the Phase 1 and Phase 3. At Phase 1, these women were less satisfied (M = 77.65, SD = 12.91) than women who remained with their partners (M = 86.67, SD = 6.82, t (17.46) = 2.82, p <.05). However, they were not more likely to report baseline sexual coercion (65%) than women who stayed in their relationships (53%) (χ^2 (1, n =123) = .83, *ns*). Three women also provided incomplete data on the latter portions of the Phase 3 survey. All 3 women indicated that they were still dating their partner at the time of the follow-up. Since no participants attempted to contact the study staff with questions, problems, or concerns regarding the final survey, it is unclear why these surveys were not completed. Subsequently, these women were dropped from analysis.

For the remaining 103 women, a series of regression analyses were used to examine the relationship between partner use of coercive tactics and each domain of women's relationship quality at Phase 3. All coercion variables were positively skewed, with the greatest frequency of participants reporting no coercive experiences, and fewer participants reporting high frequencies of coercion. Thus, all coercion variables were log transformed to attenuate for non-normality.

Support

Contrary to our hypotheses, controlling for support at Phase 1, arousal tactics (β= .14 , *SE* = .71, *t* = .20, *ns*) verbal tactics (β= .89 , *SE* = 1.09, *t* = .82, *ns*), intoxication tactics (β= 3.01 , *SE* = 5.08, *t* = .59, *ns*), and force tactics (β= 3.60 , *SE* = 2.63, *t* = 1.37, *ns*) were all unrelated to Phase 3 support.

Conflict

Arousal tactics (β= 2.11, *SE* = 1.16, *t* = 1.81, *ns*), were not associated with relationship conflict over time. Meanwhile, verbal tactics (β= 5.81, *SE* = 1.70, *t* = 3.41, $p < .01$), intoxication tactics (β= 41.21, *SE* = 7.52, *t* = 5.48, $p < .001$), and force tactics (β= 21.28, *SE* = 3.94, *t* =5.40, $p < .01$) were positively associated with Phase 3 conflict.

Depth

Contrary to expectations, relationship depth at Phase 3 was unrelated to frequency of arousal tactics (β= .00, *SE* = .56, *t* = .00, *ns*), verbal tactics (β= .63, *SE* = .86, *t* = .74, *ns*), intoxication tactics (β= 6.94, *SE* = 7.52, *t* = 1.76, *ns*), or force tactics (β= 3.79, *SE* = 2.74, *t* = 1.39, *ns*).

Discussion

One of the primary goals of the present study was to determine the prevalence and frequency at which college women in heterosexual dating relationships experience a broad range of sexually coercive tactics. Similar to prior cross sectional research, at baseline a large number of women (63%) reported at least one sexually coercive experience over the course of their relationship. Furthermore, data revealed that sexual coercion by male partners is common in college women's dating relationships, even during a brief 2 week assessment with 32% of women reporting this type of experience. Also consistent with prior cross sectional research, during each phase women reported their partners used subtle coercive tactics, such as persistent

arousal and verbal pressure, more frequently than intoxication or force to gain non-consensual sexual contact. In the present study it was unclear whether tactics such as intoxication or force were utilized specifically because more subtle tactics were ineffective, as different tactics could have been used during separate sexual encounters within the same day. However, within this sample some tactics appeared to occur more frequently on days when other tactics were also used. For instance, out of the 95 days where women reported some partner use of arousal tactics, other tactics were also used on 34% of days. Meanwhile, the co-occurrence of multiple tactics seemed more common on days when verbal (78%), intoxication (80%), and force (100%) were used. In general, the prevalence and frequency of all four tactics suggest further research utilizing a broad conceptualization of sexual coercion is warranted. In particular, researchers may wish to assess for arousal tactics, given that they were reported by the majority of women and are not included in most commonly used measures of sexual coercion. Future research using daily assessment methods might also attempt to determine whether or not women experience escalating sexual coercion tactics during the same encounter, after more subtle attempts by their partners have failed.

Findings also revealed that male partners' use of some coercive tactics are associated with daily changes in women's well-being and relationship functioning. Results showed that women experienced more conflict, on average, when their partners use verbal sexual coercion. They also experienced less positive affect on days when men used intoxication tactics to obtain sexual contact. A trend suggested arousal tactics may be related to increased conflict on the same day. On the other hand, force tactics were unrelated to any daily relationship functioning or affect variables.

Women who report their male romantic partner uses verbal coercion to have sex are also more likely to report that their partner uses destructive verbal conflict patterns in general (Katz & Myher, 2008). Thus, the association between specifically between verbal coercion and conflict may reflect the fact these women tend to experience more verbal conflict in general. Additionally, results suggest that this type of pressure is related to relationship conflict, however, the type of conflict is unclear. Sexual coercion has also been associated with psychological and physical abuse in relationships (Ramisetty-Mikler, Caetano, & McGrath, 2007). Though we did not assess abuse specifically, these results may suggest that women are more likely to experience some forms of coercion on days when they also experience other forms of abuse. In regard to intoxication tactics, there has been some controversy over including this type of pressure in measures of sexual coercion, as it may be difficult to determine if an individual is too intoxicated to freely consent. However, the fact that the experience of these tactics is associated with decreased positive affect for women suggests that it is an important target of future study in terms of the impact of coercion, regardless of the intent of the perpetrator. Though this data supported the daily association between some types of coercion and relationship and affect variables it should be noted that a causal relationship between sexual coercion and outcome variables cannot be assumed. For instance, it is possible that verbal coercion leads to relationship conflict. Another possibility is that on days when a couple is already experiencing conflict, a male partner may be more likely to ignore a partner's non-consent, by using verbal pressure.

Mixed findings were also obtained regarding the association between sexual coercion frequency and relationship satisfaction at follow-up. The more frequently women reported verbal, intoxication, or force tactics at Phase 3, the more conflict they experienced in their relationships over time, above and beyond the effects of initial conflict levels. These results

extend prior cross sectional research on coercion in college relationships by demonstrating the association between these experiences and deterioration in relationship quality over a brief time period. However, the frequency with which women experienced arousal was unrelated to relationship conflict at follow-up. Similarly, no relation was found between the frequency of any coercive tactics and changes in support or depth over time, controlling for initial levels of these relationship variables.

Several theories may explain our failure to find a more robust association between coercion and women's well-being. Many women may expect sexually coercive acts as part of normal male behavior (Holland et al., 2004). As such, their daily well-being may not be as sensitive to discrete acts of sexual pressure, especially less invasive tactics. In fact, for some women being sexually pleasing to a male partner, even at the expense of their own sexual autonomy, may be an important part of their identity. Discussing women's experiences of sexual coercion, Nicola Gavey writes, "Women involved in heterosexual encounters are [also] engaged in self surveillance and are encouraged to become self policing subjects who comply with the normative heterosexual narrative scripts which demand our consent and participation irrespective of our sexual desire," (328, 2005). Thus, women may view sexual coercion, especially in its more mild forms, as a behavior they are expected to endure as part of being a good romantic partner. This converges with data from O'Sullivan and Allgeier (1998) who found that the two most common outcomes of unwanted sexual activity (not coercion specifically) were partner satisfaction/promotion of relationship intimacy and prevention of relationship discord. Additionally, sexual intercourse in general promotes greater intimacy and satisfaction among couples (Little, McNulty, & Russell, 2010). Thus, general relationship satisfaction on any given day may remain unaffected to the extent that women are able to experience sexual pleasure and

affection in the context of sexual coercion. Alternatively, in the present study none of the types of coerced sexual contact examined were associated with improved daily relationship functioning or affect. In other words, though sexual coercion did not always have a distinct negative impact, women may not be experiencing the same emotional and relational benefits that would be expected with wanted, freely chosen sexual contact with a romantic partner.

Limitations of the present study should be noted. The measure of sexual coercion utilized did not distinguish what type of sexual contact was obtained as a result of each incident of male sexual coercion. Though any sexual contact obtained after a woman says, "no," violates her sexual agency, invasive acts such as unwilling vaginal penetration may have more of an impact on daily well-being compared to other forms of non-consensual contact. In addition, the daily diary assessment period may have been too small to capture the sexual coercion experienced by all women. A longer assessment period might reveal higher prevalence rates of coercion and shed more light on the impact of these experiences on women's everyday lives. The relatively short assessment period also limited the present study to a between-persons design, in which the impact of acts of daily sexual coercion was examined in terms of group differences in affect and relationship variables. A more stringent test of the relationship between these factors would involve the use of a within-persons design. This would control for daily fluctuations in mood and relationship functioning within each participant.

The results of the present study suggest several different directions for future research. For instance, as much research examining the relationship between sexual coercion and mental health outcomes has been cross-sectional in nature, studies are needed which assess the impact of coercion on mental health symptoms, such as depression and posttraumatic stress, on a daily basis and across time. Research is also needed to assess the daily impact of a broad variety of

sexual experiences on women's sexual health specifically. Though research on sexual victimization and its negative consequences is critical, as Kalmuss (2004) explains, sexuality research often focuses on deleterious outcomes including STIs, unwanted pregnancy, sexual violence, and dysfunction. She suggests, however, that a more complete understanding of sexual health involves investigation of, "positive and negative outcomes, which include the ability to experience sexual pleasure, engage in equitable and mutually satisfying sexual relations, make informed choices about one's sexual behavior that promote sexual health for one's self and one's partner, and affirm one's sexual identity." As such, future research should examine the impact of sexual coercion on women's daily experiences of sexual satisfaction. Likewise, studies are needed which examine whether or not behaviors which violate traditional norms by enacting female agency, such as initiating wanted sexual behavior, or clearly expressing sexual desires, increase positive sexual, relational, or affective outcomes for women.

In conclusion, the present study added to a large body of research which demonstrates that sexual coercion is prevalent in college women's heterosexual dating relationships. Some of the coercive behaviors encountered by women the most frequently are not assessed by popular measures of sexual coercion, supporting the use of broad definitions of this phenomenon in psychological research. These findings suggest that women's daily mood and relationship functioning are impacted by experiences of sexual coercion and that the impact of these non-consensual experiences may vary according to coercion type. Sexual coercion also appears to be differentially related to changes in relationship satisfaction over time, depending on the type of tactics used by male partners. Further research is needed that explores coercive experiences in relationship to other sexual behavior and which evaluates women's daily sexual satisfaction and functioning specifically.

List of References

Abbey, A., BeShears, R., Clinton-Sherrod, A. M., & McAuslan, P. (2004). Similarities and differences in women's sexual assault experiences based on tactics used by the perpetrator. *Psychology of Women Quarterly, 28*, 323-332. doi: 10.1111/j.1471-6402.2004.00149.x.

Basile, K. C., Arias, H., Desai, S., & Thompson (2004). The differential association of intimate partner physical, sexual, psychological, and stalking violence and posttraumatic stress symptoms in a nationally representative sample of women. *Journal of Traumatic Stress, 17*, 413-421. doi: 10.1023/B:JOTS.0000048954.50232.d8.

Basile, K. C., Chen, J., Black, M. C., & Saltzman, L. E. (2007). Prevalence and characteristics of sexual violence and victimization among U.S. adults, 2001-2003. *Violence and Victims,22,* 437-448. doi: 10.1891/088667007781553955.

Brown, A. L., Testa, M., Messman-Moore T.L., Psychological consequences of sexual victimization resulting from force, incapacitation, or verbal coercion. *Violence Against Women, 15*, 898-919. doi: 10.1177/1077801209335491.

Bryk, A. S., & Raudenbush, S. W. (2002). *Hierachical linear models: Applications and data analysis methods* (2nd ed.). Thousand Oaks, CA: Sage.

Byers, E. S., & O'Sullivan, L. F. (1995). Sexual coercion in dating relationships. *Journal of Psychology & Human Sexuality, 8*, 7-25. doi: 10.1300/J056v08n01_02.

Cecil, H. & Matson, S. C. (2006). Sexual victimization among African American adolescent females: Examination of the reliability and validity of the Sexual Experiences Survey. *Journal of Interpersonal Violence, 21*, 89-104. doi: 10.1177/0886260505281606.

Chan, K. L., Straus, M. A., Brownridge, D. A., Tiwari, A., & Leung, W. C. (2008). Prevalence of dating partner violence and suicidal ideation among male and female university students worldwide. *Journal of Midwifery and Women's Health, 53,* 529-537.

Crown, L. & Roberts, L. J. (2007). Against their will: Young women's nonagentic sexual experiences. *Journal of Social and Personal Relationships, 24,* 385-405. 10.1177/0265407507077228.

Daigle, L. E., Fisher, B. S., Cullen, F. T. (2008). The violent and sexual victimization of college women: Is repeat victimization a problem? *Journal of Interpersonal Violence, 23,* 1296-1313. doi: 10.1177/0886260508314293.

de Visser, R. O., Rissel, C. E., Richters, J., & Smith, A. M. A. (2007). The impact of sexual coercion on psychological, physical, and sexual well-being in a representative sample of Australian women. *Archives of Sexual Behavior, 36,* 676-686. doi: 10.1007/s10508-006-9129-0.

DiLillo, D., Fortier, M. A., & Hayes, S. A. (2006). Retrospective assessment of childhood sexual and physical abuse: A comparison of scaled and behaviorally specific approaches. *Assessment, 13,* 297-312. doi: 10.1177/1073191106288391.

DiLillo, D., Hayes-Skelton, S., Fortier, M. A., Perry, A. R., Evans, S. E., Messman-Moore, T. L., Walsh, K., Nash, C., & Fauchier, A. (2010). Development and initial psychometric properties of the Computer Assisted Maltreatment Inventory (CAMI): A comprehensive self-report measure of child maltreatment history. *Child Abuse & Neglect, 34,* 305-317. doi: 10.1016/j.chiabu.2009.09.015.

Gallaty, K., & Zimmer-Gembeck, M. (2008). The daily social and emotional worlds of adolescents who are psychologically maltreated by their romantic partners. *Journal of Youth and Adolescence, 37,* 310-323. doi:10.1007/s10964-007-9248-5.

Gavey, N. (1989). Feminist poststructuralism and discourse analysis, contributions to feminist psychology. *Psychology of Women Quarterly, 13,* 459-475. doi: 10.1111/j.1471-6402.1989.tb01014.x.

Gavey, N. (1992). Technologies and Effects of Heterosexual Coercion. *Feminism & Psychology, 2,* 325-351. doi: 10.1177/0959353592023003.

Gavey, N. (2005). Just sex? The cultural scaffolding of rape. New York, NY: Routledge

Grov, C., Golub, S. A., Mustanski, B., & Parsons, J. T. (2010). Sexual compulsivity, state affect, and sexual risk behavior in a daily diary study of gay and bisexual men. *Psychology of Addictive Behaviors, 24,* 487-497. doi: 10.1037/a0020527.

Graham, C. A., Catania, J. A., Brad, R., Duong, T., & Canchola, J. A. (2003). Recalling sexual behavior: A methodological analysis of memory recall bias via interview using the diary as the gold standard. *Journal of Sex Research, 40,* 325-332. doi: 10.1080/00224490209552198.

Hines D. A. & Saudino, K. J. (2003). Gender differences in psychological, physical, and sexual aggression among college students using the revised conflict tactics scales. *Violence & Victims, 18,* 197-217. doi: 10.1891/vivi.2003.18.2.197

Hird, M. J., & Jackson, S. (2001). Where 'angels and 'wusses' fear to tread: sexual coercion in adolescent dating relationships. *Journal of Sociology, 37* (1), 27-43. 10.1177/144078301128756184.

Holland, J., Ramazanoglu, C., Sharpe, S., & Thompson, R. (2004). *The male in the head: Young people, heterosexuality, and power.* London: Tufnell Press. doi: 10.1177/1363460704042160.

Impett, E. A., Peplau, L. A., & Gable, S. L. (2005). Approach and avoidance sexual motives: Implications for personal and interpersonal well-being. *Personal Relationships, 12,* 465-482. 10.1111/j.1475-6811.2005.00126.x.

Kalmuss, D. (2004). Nonvolitional sex and sexual health. *Archives of Sexual Behavior, 33,* 197-209. doi: 0004-0002/04/0600-0197/0.

Kiene, S., Barta, W. D., Tennen, H., & Armeli, S. (2007). Alcohol, helping young adults to have unprotected sex with casual partners: Finding from a daily diary study of alcohol use and sexual behavior. *Journal of Adolescent Health, 44,* 73-80. doi: 10.1016/j.jadohealth.2008.05.008.

Katz, J., Kuffel, S. W. & Brown, F. A. (2007). Leaving a sexually coercive dating partner: A prospective application of the investment model. *Psychology of Women Quarterly, 30,* 267-275. doi: 10.1111/j.1471-6402.2006.00295.x

Katz, J. & Myhr, L. (2008). Perceived conflict patterns and relationship quality associated with verbal sexual coercion by male dating partners. *Journal of Interpersonal Violence, 23,* 798-814. doi: 10.1177/0886260507313949.

Katz, J., Tirone, V., & Infantino, A. (2010). Going along with it: Partner pressure for submission and dating women's compliance with unwanted sex. *Violence Against Women, 16,* 730-742. doi: 10.1177/1077801210374867.

Kernsmith, P. D., & Kernsmith, R. M. (2009). Gender differences in responses to sexual coercion. *Journal of Human Behavior in the Social Environment, 19,* 902-914. doi: 10.1080/10911350903008098.

Koss, M. P. & Oros, C. J. (1982). Sexual Experiences Survey: A research instrument investigating sexual aggression and victimization. *Journal of Cunsulting and Clinical Psychology, 3,* 455-457. doi: 10.1037/0022-006X.50.3.455.

Koss, M. P., Gidycz, C. A., & Wisniewski, N. (1987). The scope of rape: Incidence and prevalence of sexual aggression and victimization in a national sample of higher education students. *Journal of Consulting and Clinical Psychology, 55,* 162-170. doi: 10.1037/0022-006X.55.2.162.

Koss, M.P., Abbey, A., Campbell, R., Cook, S., Norris, J, Testa, M., Ullman, S. et al. (2007). Revising the SES: A collaborative process to improve assessment of sexual aggression and victimization. *Psychology of Women Quarterly, 31,* 357-370. doi: 10.1111/j.1471-6402.2007.00385.x.

Krahe, B., Reimer, T., Scheinberger-Olwig, R. & Fritsche, I. (1999). Measuring sexual aggression: The reliability of the sexual experiences survey in a German sample. *Journal of Interpersonal Violence, 14,* 91-100. doi: 10.1177/088626099014001006.

Larkin, J. & Popaleni, K. (1994). Heterosexual courtship violence and sexual harassment: The private and public control of young women. *Feminism & Psychology, 4,* 213-227. doi: 10.1177/0959353594042002.

Little, K. C., McNulty, J. K., & Russell, V. M. (2010). Sex buffers against the negative implications of attachment insecurity. *Personality and Social Psychology Bulletin, 36,* 484-498. doi: 10.1177/0146167209352494.

Lyndon, A. E., White, J. W., & Kadlec, K, M. (2007). Manipulation and Force as Sexual Coercion Tactics: Conceptual and Empirical Differences. *Aggressive Behavior, 33,* 291-303. doi: 10.1002/ab.20200.

McPhillips, K., Braun, V., & Gavey, N. (2001). Defining (hetero)sex: How imperative is the "coital imperative"? *Women's Studies International Forum, 24,* 229-249. doi: 10.1016/S0277-5395(01)00160-1.

Messman-Moore, T. L., Coates, A. A., Gaffey, K. J., & Johnson, C. F. (2008). Sexuality, substance use, and susceptibility to victimization: Risk for rape and sexual coercion in a prospective study of college women. *Journal of Interpersonal Violence, 23,* 1730-1746. doi: 10.1177/0886260508314336.

Messman-Moore, T. L. & Long, P. J. (2000). Childhood sexual abuse and revictimization in the form of adult sexual abuse, adult physical abuse, and adult psychological mistreatment. *Journal of Interpersonal Violence, 15,* 489-502. doi: 10.1177/088626000015005003.

Muehlenhard, C. L., Harney, P. A. & Jones, J. M. (1992). From "Victim-precipitated Rape" to "Date rape": How far have we come? *Annual Review of Sex Research, 3,* 219-253.

O'Sullivan, L. F., & Allgeier, E. R. (1998). Feigning sexual desire: Consenting to unwanted sexual activity in heterosexual dating relationships. *The Journal of Sex Research, 35,* 234-243. doi: 10.1080/00224499809551938.

O'Sullivan, L. F., Byers, E. S., Finkelman, L. (1998). A comparison of male and female college experiences of sexual coercion. *Psychology of Women Quarterly, 22,* 177-195. doi: 10.1111/j.1471-6402.1998.tb00149.x

Panuzio, J., & Dilillo, D. (2010). Physical, psychological, and sexual intimate partner aggression among newlywed couples: Longitudinal prediction of marital satisfaction. *Journal of Family Violence, 25,* 689-699. doi: 10.1007/s10896-010-9328-2.

Pierce, G. R., Sarason, I. G., Sarason, B. R., Solky-Butzel, J. A., & Nagle, L. C. (1991). Assessing the quality of personal relationships. *Journal of Social and Personal Relationships, 14,* 339-356. doi: 10.1177/0265407597143004

Powell, A. (2008). Amor Fati? Gender habitus and young people's negotiation of (hetero)sexual consent. *Journal of Sociology, 44,* 167-184. doi: 10.1177/1440783308089168.

Ramisetty-Mikler, S., Caetano, R., & McGrath, C. (2007). Sexual aggression among White, Black and Hispanic couples in the U.S.: Alcohol use, physical assault, and psychological aggression as its correlates. *The American Journal of Drug and Alcohol Abuse, 33,* 31-43. doi: 10.1080/00952990601082639.

Roberts, L. J. & Crown, L. (2007). Against their will: Young women's nonagentic sexual experiences. *Journal of Social and Personal Relationships, 24,* 385-405. 10.1177/0265407507077228

Ridley, C., Ogolsky, B., Payne, P., Totenhagen, C., & Cate, R. (2008). Sexual expression: Its emotional context in heterosexual, gay, and lesbian couples. *Journal of Sex Research, 45,*305-314. doi: 10.1080/00224490802204449

Segal, D. L. (2009). Self reported history of sexual coercion and rape negatively impacts resilience to suicide among women students. *Death Studies, 33,* 848-855. doi: 10.1080/07481180903142720.

Slashinski, Coker, & Davis (2003). Physical aggression, forced sex and stalking victimization by a dating partner: An analysis of the national violence against women survey. *Violence and Victims, 18*, 595-617. doi: 10.1891/vivi.2003.18.6.595.

Strachman, A. & Impett, A. E. (2009). Attachment orientations and daily condom use in dating relationships. *Journal of sex research, 46*, 319-329. doi: 10.1080/00224490802691801.

Struckman-Johnson C., Struckman-Johnson D., & Anderson, P. B. (2003). Tactics of sexual coercion: When men and women won't take no for an answer. *The Journal of Sex Research, 40,* 76-86. doi: 10.1080/00224490309552168.

Swim, J. K., Hyers, L. L., Cohen, L. L., & Ferguson, M. J. (2001). Everyday sexism: Evidence for its incidence, nature, and psychological impact from three daily diary studies. *Journal of Social Issues, 57*, 31-53. doi: 10.1111/0022-4537.00200

Testa, M. & Dermen, K. H. (1999). The differential correlates of sexual coercion and rape. *Journal of Interpersonal Violence, 14,* 548-561. doi: 10.1177/088626099014005006.

Testa, M., VanZile-Tamsen, C., Livingston, J. A., & Koss, M. P. (2004). Assessing women's experiences of sexual aggression using the Sexual Experiences Survey: Evidence for validity and implications for research. *Psychology of Women Quarterly, 28,* 256-265. doi: 10.1111/j.1471-6402.2004.00143.x.

Verhofstadt, L. L., Buysse, A., Russeel, Y., & Peene, O. J. (2006). Confirming the three-factor structure of the quality of relationships inventory within couples. *Psychological Assessment, 18,* 15-21. doi: 10.1037/1040-3590.18.1.15.

Watson, D., Clark, L. A., Tellegen, A. (1988). Development and validation of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54,* 1063-1070. doi: 10.1037/0022-3514.54.6.1063.

Zweig, J. M., Barber, B. L., Eccles, J. S. (1997). Sexual coercion and well-being in young adulthood: Comparisons by gender and college status. *Journal of Interpersonal Violence, 12*, 291-308. doi: 10.1177/088626097012002009.

Zweig, J.M., Crocket, L. J., Sayer, A., Vicary, J. R. (1999). A longitudinal examination of the consequences of sexual victimization for rural young adult women. *Journal of Sex Research, 36,* 396-409. doi: 10.1080/00224499909552012.

Appendices

Table 1. Rates of partner sexual coercion reported by women at baseline, 2 weeks of daily assessment, and one month follow-up.

	Baseline				2 week diary				Follow-up			
	n	%	*M* (number of times)	*SD*	*n*	%	*M* (number of days)	*SD*	*n*	%	*M* (number of times)	*SD*
arousal	65	47	14.82	32.73	48	35	1.98	1.36	35	34	6.67	8.23
verbal	39	29	14.23	55.54	23	17	1.61	1.08	20	19	3.75	3.40
intoxication	9	7	2.56	2.13	3	2	1.67	.58	2	2	1.50	.71
force	3	2	2.33	2.31	2	1	1.50	.71	3	3	3.33	2.31

Table 2. Women's affect and relationship variables two weeks of daily diary assessment.

Variable	*M*	*SD*
Positive Affect	25.28	10.07
Negative Affect	13.92	5.36
Relationship Satisfaction	5.05	1.58
Conflict	1.59	1.24

Table 3. Group centered analysis of effects coercive tactic type on women's daily relationship and affect variables.

Outcome	Predictior	β	*SE*	*t*
Relationship Satisfaction	arousal	-.04	.13	-.31
	verbal	.21	.20	1.07
	intoxication	.19	.47	-.41
	force	-.13	.64	-.20
Conflict	arousal	.23	.14	1.68†
	verbal	.53	.20	2.62*
	intoxication	-.05	.53	-.09
	force	.63	.69	.92
Positive Affect	arousal	.11	.93	.12
	verbal	-1.98	1.32	-1.50
	intoxication	-4.83	3.05	-1.58**
	force	1.89	4.16	.46
Negative Affect	arousal	-.12	.58	-.21
	verbal	.98	.83	1.18
	intoxication	-.24	1.96	-.12

Table 3. Continued

Outcome	Predictor	β	*SE*	*t*
	force	-2.07	2.64	-.79

Note. For all models *df*s = 513.

†= $p < .10$, *= $p < .05$.

Appendix A: Baseline Measures

Demographic Information

1. Your age (in years) _____

2. Your dating partner's age (in years) _____

3. How many months have you been dating your current partner? _____

4. What is the sex of your partner? Male Female

5. What is your sexual orientation? Lesbian Heterosexual Bisexual Other

Appendix B: Baseline and Follow-up Measures

QRI

Please use the scale below to answer the following questions regarding your feelings right now about your relationship with your partner.

1	2	3	4
Not at all	A little	Quite a bit	Very much

_____ 1. To what extent could you turn to him for advice about problems?

_____ 2. How often do you need to work hard to avoid conflict with him?

_____ 3. To what extent could you count on him for help with a problem?

_____ 4. How upset does he sometimes make you feel?

_____ 5. To what extent can you count on him to give you honest feedback, even if you might not want to hear it?

_____ 6. How much does he make you feel guilty?

_____ 7. How much do you have to "give in" in this relationship?

_____ 8. To what extent can you count on him to help you if a family member very close to you died?

_____ 9. How much does he want you to change?

_____ 10. How positive a role does he play in your life?

_____ 11. How significant is this relationship in your life?

_____ 12. How close will your relationship be with him in 10 years?

_____ 13. How much would you miss him if the two of you could not see or talk with each other for a month?

_____ 14. How critical of you is he?

_____ 15. If you wanted to go out and do something this evening, how confident are you that he would be willing to do something with you?

_____ 16. How responsible do you feel for his well-being?

_____ 17. How much do you depend on him?

_____ 18. To what extent can you count on your partner to listen to you when you are very angry at someone else?

_____ 19. How much would you like him to change?

_____ 20. How angry does he make you feel?

_____ 21. How much do you argue with him?

_____ 22. To what extent can you really count on him to distract you from your worries when you feel under stress?

_____ 23. How often does he make you feel angry?

_____ 24. How often does he try to control or influence your life?

_____ 25. How much more do you give than you get from this relationship?

PRSP

These items ask about unwanted sexual experiences with your current dating partner. How many times has your partner used any of the following tactics below to have sexual contact (genital touching, oral sex, or either vaginal or anal intercourse) with you after you indicated **no** to your partner's sexual advance? Under the # column, write the **approximate number** of times you have experienced each tactic after you said no. Then please check all of the kinds of contact your partner had with you after he used that specific tactic.

Tactic Used	#	Sexual touching	Oral sex	Intercourse
1. continued to kiss and touch you to arouse you				
2. removed his clothing to arouse you				
3. removed some of your clothing to arouse you				
4. tried to talk you into it by repeatedly asking				
5. told you a lie of some kind (e.g., how much he loved you)				
6. questioned your sexuality (e.g., he said you were gay)				
7. threatened to break up with you				
8. told you he would blackmail you				
9. threatened to harm himself				
10. used his authority or position (e.g., boss, babysitter, teacher)				
11. is an adult at least 5 years older than you				
12. took advantage of the fact that you were already drunk or high				
13. purposefully gave you drugs or alcohol				
14. blocked your retreat (e.g., closed, locked or stood blocking the door)				
15. used physical restraint to hold you down or sit on you				
16. tied you up				
17. threatened to physically harm you				
18. physically harmed you (e.g., hit, slapped, or bit)				
19. threatened you with a weapon				

Appendix C: Daily Measures

PANAS

This scale consists of a number of words that describe different feelings and emotions. Read each item and indicate to what extent you **currently** feel this way. Use the following scale for your answers.

	very slightly or not at all	a little	moderately	quite a bit	extremely
interested	1	2	3	4	5
distressed	1	2	3	4	5
excited	1	2	3	4	5
upset	1	2	3	4	5
strong	1	2	3	4	5
guilty	1	2	3	4	5
scared	1	2	3	4	5
hostile	1	2	3	4	5
enthusiastic	1	2	3	4	5
proud	1	2	3	4	5
irritable	1	2	3	4	5
alert	1	2	3	4	5
ashamed	1	2	3	4	5
inspired	1	2	3	4	5
nervous	1	2	3	4	5
determined	1	2	3	4	5
attentive	1	2	3	4	5
jittery	1	2	3	4	5
active	1	2	3	4	5
afraid	1	2	3	4	5

Relationship Satisfaction

1. How close do you feel to your partner today?

1	2	3	4	5	6	7
Not close at all						Extremely close

2. How satisfied with your relationship are you today?

1	2	3	4	5	6	7
Not at all satisfied						Extremely satisfied

3. How fun was your relationship today?

1	2	3	4	5	6	7
Not at all fun						Extremely fun

4. How much conflict did you experience in your relationship today?

1	2	3	4	5	6	7
No conflict at all						A lot of conflict

Sexual Coercion

Since the last survey, has your partner used any of the following tactics below to have sexual contact (genital touching, oral sex, or either vaginal or anal intercourse) with you after you indicated NO to his sexual advance?

1. Continuing to kiss and touch you or doing other things to arouse you
   not at all *a little* *a lot*

2. Trying to talk you into it by repeatedly asking
   not at all *a little* *a lot*

3. Purposefully getting you drunk or high, or taking advantage of you when you were already drunk or high
   not at all *a little* *a lot*

4. Using physical restraint to hold you down or sit on you
   not at all *a little* *a lot*

Vita

Vanessa Tirone received a Bachelor of the Arts in Psychology from the State University of New York, College at Geneseo in 2007. She began her studies in Clinical Psychology at the University of Tennessee, Knoxville in 2009 under the mentorship of Deborah Rhatigan and Todd Moore. After receiving a Masters of the Arts in Psychology she plans to obtain a Ph.D. from the same program.