Published in final edited form as:

Sex Addict Compulsivity. 2017 ; 24(3): 203–216. doi:10.1080/10720162.2017.1343700.

(S)He's Gotta Have It: Emotion Regulation, Emotional Expression, and Sexual Risk Behavior in Emerging Adult Couples

Asha Rizer¹, Tamora Callands¹, Alethea Desrosiers², Trace Kershaw²

¹Department of Health Promotion and Behavior, College of Public Health, University of Georgia, Athens, GA

²Yale School of Public Health, New Haven, CT

Abstract

Emotion regulation and emotional expression may be important factors which contribute to sexual risk behavior among emerging adults, yet research exploring their relation is limited. Further, the influence of a romantic partner is unclear. The current study aims to a) investigate association between emotional difficulties and sexual risk behavior (e.g. sexual compulsivity and sensation-seeking) and b) explore the influence of a romantic partner on individual sexual risk. Participants were 49 couples (n=98) participating in a randomized control pilot intervention. Results demonstrated that individual and partner emotional difficulties were associated with sexual risk behavior. Results did not vary by gender.

Keywords

emerging adults; sexual risk behavior; emotion regulation; emotional expression; couples

Introduction

Despite increasing prevention efforts, the Centers for Disease Control (CDC) estimates that emerging adults aged 15–24 are nearly twice as likely to acquire an STI, experience the highest rates of unintended or mistimed pregnancy, and represent 40% of new HIV diagnoses in the United States (CDC, 2015; Mosher, Jones, & Abma, 2012). Often, emerging adults demonstrate knowledge of health-promoting behaviors and mastery of the skills required for safe sexual encounters (e.g., correct condom usage, scripted partner communication), yet fail to implement these behaviors in sexual practice (Hallfors, Iritani, Miler, & Bauer, 2007). This phenomenon represents a significant gap in our understanding of sexual risk-taking, thus underscoring the need to better understand factors associated with sexual risk-taking in this population. One often-overlooked factor is the capacity to

Correspondence may be addressed to: Tamora A. Callands, Ph.D., Health Promotion and Behavior, Wright Hall, Room 321D, 100 Foster Road, Athens, GA 30606. tamcall@uga.edu.

Conflict of Interest Statement

The authors have no conflicts of interest to disclose.

effectively regulate emotions and express them to others (Gross, 2014; Hadley, Houck, Barker, & Senocak, 2015; Lightfoot, 2012).

Emotion regulation, a construct increasingly utilized in health promotion efforts, is conceptualized as the intrinsic and extrinsic processes of evaluating and modulating emotional responses to accomplish goals (Campbell-Sills & Barlow, 2007; Cole, Martin, & Dennis, 2004; Thompson, 1994). Emotion regulation has been linked to negative health behaviors such as overeating, substance abuse, and interpersonal violence (Gardner, Moore, & Dettore, 2014; Vaillancourt-Morel et al., 2015; Wong et al., 2013). Evidence also suggests that poor emotion regulation may be a significant predictor of sexual risk behavior in emerging adults (Ritchwood, Penn, DiClemente, Rose, & Sales, 2014). This evidence is predicated on the notion that emerging adults are still in the process of developing emotion regulation skills (Cole et al., 2004), and thus prone to the increased impulsivity, sensation-seeking, and risk-taking that characterize sexual risk behavior (Giugliano, 2008).

Emotional expression, a skill associated with emotion regulation, is the ability to communicate emotions through outward verbal or behavioral display (Savage, Becker, & Lipp, 2016). Though the method of expressing emotions may vary by individual preference, age and situational context, the communication of emotions remains an integral component of emotion regulation and healthy coping (Bloch, Haase & Levenson, 2014). Because the transition to adulthood can be a period in which emotional experience is heightened (Arnett, 2014), emerging adults who have poor emotion expression skills may resort to less healthy strategies for coping with intense emotions and psychological distress (Hessler & Katz, 2010; Raffaelli & Crockett, 2003). Engaging in risk sexual behavior, including sexual compulsivity and sexual sensation-seeking, may be one way that emerging adults with deficits in emotional expression skills cope with negative affect and distress (Gross, 2014).

Sexual compulsivity, characterized by the inability to control intrusive or unwanted sexual thoughts or urges (Giugliano, 2008), can disrupt daily functioning and is associated with sexual risk-taking (Parsons, Kelly, Bimbi, Muench, & Morgenstern, 2007). One facet of sexual risk-taking is sexual sensation-seeking, the frequent pursuit of new sexual acts or encounters (Pachankis et al., 2015) which may result in unsafe sexual practices such as partner concurrency, transactional sex or unprotected penetrative sex (Tull, Weiss, Adams, & Gratz, 2012). Emerging adults, then—whom research suggests are less risk-averse (CDC, 2016)—may be more prone to engage in sexual risk behavior, particularly in the absence of effective emotion regulation and emotional expression skills (Hadley et al., 2015).

For emerging adults in romantic relationships, the emotional skills of a partner may influence engagement in sexual risk behaviors such as sexual compulsivity or sexual sensation-seeking (Hessler & Katz, 2010). Research demonstrates that emerging adults are influenced by the behaviors and expectations of peers, particularly those modeled by close friends or role models (Isasi, Ostrovsky, & Wills, 2013). The emotional and behavioral practices of emerging adults may thus be significantly impacted by the emotion regulation and emotional expression skills of a romantic partner (Parsons et al., 2007; Giugliano, 2008; Yoo, Bartle-Haring, Day, & Gangamma, 2014). To date, little research has explored the role of a partner's emotion regulation and expression on the sexual risk behavior of emerging

adults, and to our knowledge, no studies have examined the influence of partner emotion regulation and expression through partner reports of their own behavior (rather than perceptions of their behavior). For this reason, exploring the reciprocal influence of romantic partners' emotional skills on the sexual behaviors of emerging adults may advance our understanding of sexual risk in this population.

Though literature has linked poor emotion regulation and/or expression to sexual risk behavior in emerging adults (Hessler & Katz, 2010; Raffaelli & Crockett, 2003), the dyadic associations between emotion regulation, emotional expression, sexual compulsivity, and sexual sensation-seeking among emerging adult couples are not well understood. Given the disproportional risk of unintended or mistimed pregnancy and STI diagnosis among emerging adults (Mosher et al., 2012), examining factors associated with risk-taking, particularly partner influence, may prove useful in efforts to prevent sexual risk behavior. We aim to address this significant gap in literature by examining the influence of emotion regulation and emotional expression on sexual compulsivity and sexual sensation-seeking among emerging adult couples.

First, we aim to determine the impact of individual emotion regulation and emotional expression on sexual compulsivity and sexual sensation-seeking. Next, we will explore the effect of a romantic partner's emotion regulation and expression on individual sexual compulsivity and sexual sensation-seeking. We hypothesize that individual emotion regulation and emotional expression will be negatively associated with sexual compulsivity and sexual sensation-seeking. Further, we hypothesize that among couples, a romantic partner's difficulties in emotion regulation and emotional expression skills will be positively associated with individual sexual compulsivity and sexual sensation-seeking.

Methods

Study Procedures and Participants

Data come from a randomized clinical trial (RCT) of young low-income, minority couples between 2012 and 2014. In collaboration with Children's Community Program (CCP), 49 couples ($n = 98$) were recruited through community organizations, clinics, and local sites in Connecticut into the Partners in Life (PiL) study. Inclusion criteria required that: (1) women are between 14 and 25 years of age and men are age 14 or older; (2) the couple has a biological child that is 0–5 years old; (3) both partners name the other as their main partner or themselves as a romantic couple; (4) neither partner is known to be HIV positive; and (5) both partners are English-speaking. Once identified as eligible, research staff explained the study details and contact information and written consent were obtained for interested couples. Twenty-five couples were assigned to the intervention group and 24 couples to the active control through the use of a computer-generated randomization sequence.

The intervention took place in three stages, with couples assessed separately at baseline and four months. Assessments were conducted using audio computer assisted self-interviewing (A-CASI) at various locations, including the project research office, participant homes or partnering community centers. All procedures were approved by the Yale University Human Investigation Committee and Institutional Review Board. Participants received \$25 for the

baseline assessment, and \$35 for the four-month assessment. At the four-month assessment, the intervention group had a 100% retention rate and the control group had a 96% retention rate. For this study, we used data from the baseline assessment.

Demographics.—Participants were asked questions to gather information on demographic characteristics. These questions included, but were not limited to: family and personal income, race/ethnicity, years of education, and current educational, relationship and employment status. Each item was scored using nominal scales.

Difficulties in Emotion Regulation were measured through the Difficulties in Emotion Regulation Scale (DERS; Tull et al., 2012), a 35-item scale assessing the extent to which people are able to recognize, understand and regulate their emotions (e.g., ‘When I’m upset, I become out of control’, ‘When I’m upset, I have difficulty controlling my behaviors’). Participants rate how much each statement applies to them on a five-point Likert scale ranging from 1 (almost never) to 5 (almost always). All items were summed to create a total score for difficulties in emotion regulation. A higher score indicated greater levels of difficulty in emotion regulation. Cronbach’s alpha coefficient was $\alpha = .94$.

Emotional expression was measured with the Emotional Expressivity Scale (EES; Kring, Smith, & Neale, 1994), a 17-item scale assessing the extent to which people outwardly display their emotions (e.g., ‘I don’t express my emotions to other people’, ‘I hold my feelings in’, ‘other people believe me to be very emotional’). Participants rate how much each statement applies to them on a 6-point Likert scale ranging from 1 (never true) to 6 (always true). Items were summed to create a total emotional expressivity score. A higher score indicated greater levels of emotional expressivity. Cronbach’s alpha coefficient was $\alpha = .88$.

Sexual compulsivity was measured with the Sexual Compulsivity Scale (Kalichman et al., 1994). The SCS is comprised of ten items assessing participants’ preoccupations with sexual acts and encounters and the degree to which these thoughts disrupt their life (e.g., ‘my desires to have sex have disrupted my daily life’, ‘I have to struggle to control my sexual thoughts and behavior’). Responses are rated on a four-point Likert scale ranging from 1 (not at all like me) to 4 (very much like me). A mean sexual compulsivity score was calculated for each participant. A higher score indicated greater levels of sexual compulsivity. Cronbach’s alpha coefficient was $\alpha = .96$.

Sexual Sensation-Seeking was measured with the Sexual Sensation-Seeking Scale (Kalichman et al., 1994), which is comprised of 11 items assessing need for new experiences and sensations related to sexual acts and activities (e.g., ‘I am interested in trying out new sexual experiences,’ ‘I feel like exploring my sensuality’). Participants are asked to rate how much each statement about new sexual experiences and sensations applies to them on a four-point Likert scale ranging from 1 (not at all like me) to 4 (very much like me). A mean sexual sensation-seeking score was calculated for each participant. A higher score indicated greater levels of sexual compulsivity. Cronbach’s alpha coefficient was $\alpha = .90$.

Data Analysis

First, we computed descriptive statistics to describe the demographic characteristics of the sample. We then computed bivariate correlations between our study predictors, difficulties in emotion regulation and emotional expression, and our outcomes, sexual compulsivity and sexual sensation-seeking. To explore gender differences in the association between difficulties in emotion regulation, emotional expression, sexual compulsivity, and sexual sensation-seeking, we computed paired t-tests.

To account for the correlated nature of the data, we used multi-level modeling to examine the relationship between difficulties in emotion regulation, emotional expression, sexual compulsivity, and sexual sensation-seeking. As this data is taken from a couples' intervention, it is likely that each member of the couple influences the other's emotion regulation, emotional expression, sexual compulsivity, and sexual sensation-seeking. To assess the influence of both the personal (actor) and partner (partner) effects, the Actor-Partner Interdependence Model (APIM) was used, which treats the members of a dyad as nested scores within the same group (Herzberg, 2013). Actor effects refer to whether an individual's score on a predictor variable influences the individual's outcome (e.g., a woman's emotional expression relates to her own sexual compulsivity). Partner effects refer to whether a partner's score on a predictor variable influences their romantic partner's score on the outcome (e.g., a woman's emotional expression influences the man's sexual compulsivity).

Multi-level modeling, or hierarchical linear modeling, estimates the APIM. A detailed description on how to conduct APIM analyses using multi-level modeling programs has been previously outlined (Garcia, Kenny, & Ledermann, 2015) and served as a foundation for our analyses. A complete case analysis was conducted due to the small number of missing data. PASW Statistics 20 was used for all analyses.

Results

Demographics

Demographic characteristics of the sample, mean sexual compulsivity, and mean sexual sensation-seeking scores are displayed in Table 1. Additionally, bivariate correlations between demographic variables and difficulties in emotion regulation, emotional expression, sexual compulsivity, and sexual sensation-seeking are displayed in Table 2.

T- Tests

We conducted a paired-samples t-test to compare difficulties in emotion regulation, emotional expression, sexual compulsivity, and sexual sensation-seeking by gender. There were no significant differences in mean scores for difficulties in emotion regulation between men ($M = 72.84$, $SD = 25.73$) and women ($M = 74.22$, $SD = 24.15$); $t(48) = .30$, $p = .77$; nor were there differences in mean scores for emotional expression between men ($M = 44.51$, $SD = 24.36$) and women ($M = 41.27$, $SD = 20.18$); $t(48) = -1.07$, $p = .29$. There were no significant differences in mean scores for sexual compulsivity between men ($M = 20.15$, $SD = 9.49$) and women ($M = 18.30$, $SD = 10.34$); $t(45) = -1.05$, $p = .30$; nor were there

differences in mean scores for sexual sensation-seeking between men ($M = 22.69$, $SD = 9.34$) and women ($M = 22.72$, $SD = 8.73$); $t(45) = .01$, $p = .99$.

Effects of Difficulties in Emotion Regulation on Sexual Compulsivity and Sexual Sensation-Seeking

In the multi-level regression models used to examine the relationship between difficulties in emotion regulation and sexual risk behavior, we adjusted for gender, age, race/ethnicity, income, employment, and education (Table 3; Models 1–2). Results revealed a significant relationship between an actor's difficulties in emotion regulation and sexual compulsivity, with difficulties in emotion regulation positively associated with sexually compulsive behavior ($B = .13$, $SE = .04$, $t = 3.24$, $p < .001$). Actor and partner difficulties in emotion regulation were positively associated with sexual sensation-seeking ($B = .12$, $SE = .03$, $t = 3.61$, $p < .001$ and $B = .06$, $SE = .03$, $t = 1.95$, $p < .05$, respectively).

The intraclass correlation coefficient (ICC) was used to assess the correlation between actor and partner sexual compulsivity and sexual sensation-seeking in our models. Adding actor and partner difficulties in emotion regulation to the covariate model substantially increased the adjusted intraclass correlation ($ICC = .28$, $p < .07$ for the covariate-only model; $ICC = .34$, $p < .05$ for model with emotion regulation and covariates). A similar pattern was revealed between difficulties in emotion regulation and sexual sensation-seeking. Specifically, adding actor and partner difficulties in emotion regulation to the covariate model substantially increased the adjusted intraclass correlation ($ICC = .38$, $p < .01$ for model with only covariates; $ICC = .47$, $p < .01$ for model with difficulty with emotion regulation and covariates).

Effects of Emotional Expression on Sexual Compulsivity and Sexual Sensation-Seeking

Adjusted multi-level modeling revealed a similar relationship between emotional expression and sexual risk behavior (Tables 3; Models 3–4). There were no significant actor effects. However, greater partner emotional expression was inversely related to sexual compulsivity ($B = -.11$, $SE = .06$, $t = -2.00$, $p < .05$). Greater partner emotional expression was also inversely related to sexual sensation-seeking ($B = -.11$, $SE = .04$, $t = -2.76$, $p < .01$).

The ICC were used to assess the correlations between actor and partner sexual compulsivity and actor and partner sexual sensation-seeking in our models. Adding actor and partner emotional expression to the covariate model of sexual compulsivity increased the adjusted intraclass correlation ($ICC = .33$, $p < .05$ for model with only covariates; $ICC = .34$, $p < .05$ for model with emotion regulation and covariates). Adding actor and partner emotional expression to the sensation-seeking covariate model substantially reduced the adjusted intraclass correlation ($ICC = .53$, $p < .01$ for model with only covariates; $ICC = .47$, $p < .01$ for model with emotional expression and covariates).

Discussion

The current study builds upon existing research by examining the interplay of emotion regulation, emotional expression, and sexual risk behavior among emerging adults and exploring the influence of a romantic partner on these associations. Results demonstrated

that for emerging adults, both difficulties in emotion regulation and emotional expression were associated with greater sexual risk behavior as measured by sexual compulsivity and sexual sensation-seeking.

Our findings support previous research highlighting the role of difficulties in emotion regulation in sexual risk behavior (Hessler & Katz, 2010; Tull et al., 2012). This may be particularly relevant for emerging adults because of the heightened emotional experience and risk-taking behavior which are often associated with the transition to adulthood. During this transition, coping mechanisms and impulse control are still developing— leading to the potential use of sexual risk behavior as an outlet for dysregulated or intense emotional experience. While studies have shown that monogamous sexual exploration can improve relationship functioning and effectively reduce stress (Resch & Alderson, 2014; Yoo et al., 2014), emerging adults are more likely to engage in risk-taking and are more prone to impulsive behavior (CDC, 2016), thus increasing the likelihood that difficulty controlling emotional responses may trigger engagement in sexual risk behavior, including sexual compulsivity and sensation-seeking.

Results also showed that emotional expression was negatively associated with sexual compulsivity and sexual sensation-seeking. Our findings may be explained in part by research on emotion management. Though prior studies suggest that expressing emotions may assist in the management of negative emotion and alleviation of stress (Mollborn & Jacobs, 2015), not all emerging adult relationships offer space for emotional expression. For example, effective communication skills may be necessary to engage in conversations about emotional experience or to express emotions adaptively, and emotion regulation skills may in turn be required to manage emotions experienced in response to a partner. If emerging adults lack adaptive strategies to express and manage negative emotions, they may seek to mitigate distress through more immediate, short-term strategies for tension reduction, such as substance abuse or sexual behavior (Flanagan, Jaquier, Overstreet, Swan, & Sullivan, 2014; Tice, Bratslavsky, & Baumeister, 2001).

Romantic partners' difficulties in emotion regulation and emotional expression were associated with greater actor sexual compulsivity and sensation-seeking. Consistent with previous research (Lilleston et al., 2015; Teitelman, Ratcliffe, Morales-Aleman, & Sullivan, 2008; Yoo et al., 2014), our results underscore the influence of one's romantic partner on sexual risk behavior during emerging adulthood. Positive emotion regulation and emotional expression within a relationship have been shown to increase relationship satisfaction and enhance psychological well-being (Bloch et al., 2013). Conversely, emotion regulation difficulties in a partner have been associated with frequent conflict and significant emotional distress (Waldrop & Resick, 2004; Weiss, Duke, & Sullivan, 2014). In this context, emerging adults who have not yet developed coping skills may use avoidance strategies, including sexual risk behavior to mitigate negative emotion (Weiss, Peasant, & Sullivan, 2016).

Although previous studies found gender differences in emotional expression skills and sexual risk behavior (Rich, Mullan, Sainsbury, & Kuczmierczyk, 2014; Wise, Goggin, Gerkovich, Metcalf, & Kennedy, 2006), our findings did not differ by gender. Gendered socialization and role identity have been shown to impact perceived sexual risk and

engagement in risk behavior (Bowie et al., 2013), but emotional skills and coping mechanisms are often reflective of larger social norms. As study participants were emerging adults from a single city, their emotional practices likely reflect community norms, regardless of gender. Cultural and environmental context may also have contributed to our findings, as many of our study participants were African-American or Latino living in the urban Northeast. Research suggests that across cultures, young men often ground their masculinity in status, toughness or avoidance of the emotional displays associated with women (Courtenay, 2000; Gordon et al., 2013). Urban young women of color face a different dilemma. The economic and environmental challenges they navigate often call for the toughness and stoicism associated with masculinity (Abrams, Javier, Maxwell, Belgrave, & Nguyen, 2016; Hill Collins, 2004), perhaps reducing gender differences in our study.

Findings from the current study also have implications for development of prevention programs in emerging adults. Future programs for reducing sexual risk behaviors among emerging adults may target development of adaptive strategies for regulating and expressing emotions. Interventions may utilize couples-based practices, which offer the unique opportunity to improve interpersonal communication, emotion regulation, and conflict resolution skills. Such programs should be culturally tailored to participants; addressing the community, systemic, and environmental factors which likely influence their emotional and sexual practices.

Limitations

Although our research represents a significant addition to extant emotional and sexual research, it is not without limitations. Perhaps the most significant limitations are the cross-sectional nature of the study and small sample size (n=49 couples, 98 individuals) of urban, heterosexual emerging adult couples who are first-time new parents, the majority low-SES African-Americans and Latinos. Unique situational context and social norms likely significantly impacted the emotional and sexual behaviors of our participants, limiting generalizability to the larger population. Future research might seek to better identify causal factors related to sexual risk behavior among emerging adults through longitudinal study design.

An additional study limitation pertains to the scope of questions asked. Though participants were asked questions about their individual emotional and sexual behaviors, no questions probed gendered expectations and role identity, childhood upbringing, or relationship norms, factors which likely affect the regulation and expression of emotions. Further, no questions surrounding sexual compulsivity and sensation-seeking explored extradyadic sexual involvement or partner concurrency, circumstances which significantly increase sexual risk. Instead, questions examined general attitudes and thoughts about sex. Conflation of compulsive sexual thoughts or interest in sexual sensations with engagement in sexual risk behavior may have led to the overestimation of sexual compulsivity and sensation-seeking.

Conclusion

Study findings begin to fill important gaps in current research by shedding light on how emotion regulation and emotion expression are related to two relatively understudied sexual risk behaviors: sexual compulsivity and sexual sensation seeking among emerging adult couples. Consistent with prior research suggesting that emerging adults may engage in impulsive behavior, including sexual risk behavior, to cope with negative emotion (Shrier, Shih, Hacker, & de Moor, 2007), study findings support improvement of emotion regulation and expression skills as important targets for sexual risk prevention interventions among emerging adult couples.

Acknowledgments

Funding

National Institute of Mental Health (NIMH 5R25MH087217-03). Fogarty International Center (K01TW009660).

References

- Abrams JA, Javier SJ, Maxwell ML, Belgrave FZ, & Nguyen BA (2016). Distant but relative: Similarities and differences in gender role beliefs among african-american and vietnamese-american women. *Cultural Diversity and Ethnic Minority Psychology*, 22(2), 256–267. doi:10.1037/cdp0000124 [PubMed: 25938180]
- Arnett J (2014). *Emerging adulthood: The winding road from the late teens through the twenties* (2nd ed.). New York, NY: Oxford University Press. doi:10.1093/oxfordhb/9780199795574.013.9
- Bandura A (1994). Social cognitive theory and exercise of control over HIV infection. In DiClemente RJ & Peterson JL (Eds.), *Preventing AIDS: Theories and methods of behavioral interventions* (pp. 25–29). New York, NY: Plenum Press.
- Bloch L, Haase C, & Levenson R (2013). Emotion regulation predicts marital satisfaction: More than a wives' tale. *Emotion*, 14(1), 130–144. doi: 10.1037/a0034272 [PubMed: 24188061]
- Bowie BH, Carrère S, Cooke C, Valdivia G, McAllister B, & Doohan E (2013). The role of culture in parents' socialization of children's emotional development. *Western Journal Of Nursing Research*, 35(4), 514–533. doi:10.1177/0193945911411494 [PubMed: 21670158]
- Burns E, Jackson J, & Harding H (2010). Child maltreatment, emotion regulation, and posttraumatic stress: The impact of emotional abuse. *Journal Of Aggression, Maltreatment & Trauma*, 19(8), 801–819. doi:10.1080/10926771.2010.522947
- Campbell-Sills L, Barlow D (2007). Incorporating emotion regulation into conceptualizations and treatments of anxiety and mood disorders. In Gross J (Ed.), *Handbook of Emotion Regulation* (pp. 542–559). New York, NY: Guilford Press.
- Cole P, Martin S, Dennis T (2004). Emotion regulation as a scientific construct: Methodological challenges and directions for child development research. *Child Development*, 75(2), 317–333. [PubMed: 15056186]
- Centers for Disease Control and Prevention. (2015). Sexually transmitted disease surveillance 2014 Retrieved from <http://www.cdc.gov/std/stats14/surv-2014-print.pdf>.
- Centers for Disease Control and Prevention (2016). Youth risk behavior surveillance 2015 Retrieved from http://www.cdc.gov/healthyyouth/data/yrbs/pdf/2015/ss6506_updated.pdf.
- Colby S & Ortman J (2015). Projections of the size and composition of the U.S. population: 2014 to 2060 Retrieved from <http://www.census.gov/content/dam/Census/library/publications/2015/demo/p25-1143.pdf>
- Conroy K, Engelhart T, Martins Y, Huntington N, Snyder A, Coletti K, & Cox J (2016). The enigma of rapid repeat pregnancy: A qualitative study of teen mothers. *Journal Of Pediatric And Adolescent Gynecology*, 29(3), 312–317. doi:10.1016/j.jpag.2015.12.003 [PubMed: 26703479]

- Flanagan J, Jaquier V, Overstreet N, Swan S, & Sullivan T (2014). The mediating role of avoidance coping between intimate partner violence (IPV) victimization, mental health, and substance abuse among women experiencing bidirectional IPV. *Psychiatry Research*, 220(1–2), 391–396. doi: 10.1016/j.psychres.2014.07.065 [PubMed: 25174851]
- Garcia R, Kenny D, & Ledermann T (2015). Moderation in the actor-partner interdependence model. *Personal Relationships*, 22(1), 8–29. doi:10.1111/pere.12060
- Gardner F, Moore Z, & Dettore M (2014). The relationship between anger, childhood maltreatment, and emotion regulation difficulties in intimate partner and non-intimate partner violent offenders. *Behavior Modification*, 38(6), 779–800. doi: 10.1177/0145445514539346 [PubMed: 24944299]
- Giugliano J (2008). Sexual impulsivity, compulsivity, or dependence: An investigative inquiry. *Sexual Addiction & Compulsivity*, 15(2), 139–157. doi: 10.1080/10720160802035600
- Gordon D, Hawes S, Reid A, Callands T, Magriples U, Divney A, & ... Kershaw T (2013). The Many Faces of Manhood: Examining Masculine Norms and Health Behaviors of Young Fathers Across Race. *American Journal Of Mens Health*, 7(5), 394–401. doi: 10.1177/1557988313476540
- Gross J (2014). *Handbook of emotion regulation* New York, NY: The Guilford Press.
- Hadley W, Houck CD, Barker D, & Senocak N (2015). Relationships of parental monitoring and emotion regulation with early adolescents' sexual behaviors. *Journal of Developmental and Behavioral Pediatrics*, 36(5), 381–388. doi: 10.1097/DBP.0000000000000160 [PubMed: 25915779]
- Hallfors DD, Iritani BJ, Miller WC, & Bauer DJ (2007). Sexual and drug behavior patterns and HIV and STD racial disparities: The need for new directions. *Minority Health Archive*
- Herzberg PY (2013). Coping in relationships: The interplay between individual and dyadic coping and their effects on relationship satisfaction. *Anxiety, Stress & Coping*, 26(2), 136–153. doi: 10.1080/10615806.2012.655726
- Hessler DM, & Katz LF (2010). Brief report: Associations between emotional competence and adolescent risky behavior. *Journal Of Adolescence*, 33(1), 241–246. doi:10.1016/j.adolescence.2009.04.007 [PubMed: 19481247]
- Hill Collins P (2004). *Black sexual politics: African-americans, gender, and the new racism* New York, NY: Routledge, 2004.
- Houck C, Swenson R, Donenberg G, Papino A, Emerson E, & Brown LK (2014). Adolescents' emotions prior to sexual activity and associations with sexual risk factors. *AIDS and Behavior*, 18(8), 1615–1623. doi:10.1007/s10461-014-0716-0 [PubMed: 24558097]
- Isasi CR, Ostrovsky NW, & Wills TA (2013). The association of emotion regulation with lifestyle behaviors in inner-city adolescents. *Eating Behaviors*, 14(4), 518–521. doi: 10.1016/j.eatbeh.2013.07.009 [PubMed: 24183148]
- Kalichman S, Johnson J, Adair V, Rompa D, Multhauf K, & Kelly J (1994). Sexual sensation seeking: Scale development and predicting AIDS-risk behavior among homosexually active men. *Journal Of Personality Assessment*, 62(3), 385. [PubMed: 8027907]
- Kring AM, Smith DA, Neale JM (1994). Emotional expressivity scale. *Journal Of Personality And Social Psychology*, 66(5), 934–949. [PubMed: 8014836]
- Lightfoot M (2012). HIV prevention for adolescents: Where do we go from here?. *American Psychologist*, 67(8), 661–671. doi: 10.1037/a0029831 [PubMed: 23163452]
- Lilleston P, Hebert L, Jennings J, Holtgrave D, Ellen J, & Sherman S (2015). Attitudes towards power in relationships and sexual concurrency within heterosexual youth partnerships in Baltimore, MD. *AIDS and Behavior*, 19(12), 2280–2290. doi:10.1007/s10461-015-1105-z [PubMed: 26054391]
- Logsdon MC, Hipwell AE, & Monk C (2016). Perinatal experiences of adolescent mothers. In Wenzel A (Ed.), *The Oxford Handbook of Perinatal Psychology* (pp. 575–601). New York, NY: Oxford University Press.
- Mollborn S, & Jacobs J (2015). 'I'll be there for you': Teen parents' coparenting relationships. *Journal Of Marriage And Family*, 77(2), 373–387. doi:10.1111/jomf.12175 [PubMed: 28620246]
- Mosher WD, Jones J, & Abma JC (2012). Intended and unintended births in the united states: 1982–2010. *National Health Statistics Report* (55), 1–28.

- Pachankis JE, Rendina HJ, Restar A, Ventuneac A, Grov C, & Parsons JT (2015). A minority stress-emotion regulation model of sexual compulsivity among highly sexually active gay and bisexual men. *Health Psychology*, 34(8), 829–840. doi: 10.1037/hea0000180 [PubMed: 25528179]
- Parsons JT, Kelly BC, Bimbi DS, Muench F, & Morgenstern J (2007). Accounting for the social triggers of sexual compulsivity. *Journal of Addictive Diseases*, 26(3), 5–16. doi:10.1300/J069v26n03_02
- Raffaelli M, & Crockett LJ (2003). Sexual risk taking in adolescence: The role of self-regulation and attraction to risk. *Developmental Psychology*, 39(6), 1036–1046. doi: 10.1037/0012-1649.39.6.1036 [PubMed: 14584983]
- Resch MN, & Alderson KG (2014). Female partners of men who use pornography: Are honesty and mutual use associated with relationship satisfaction?. *Journal of Sex & Marital Therapy*, 40(5), 410–424. doi:10.1080/0092623X.2012.751077 [PubMed: 23898992]
- Rich A, Mullan BA, Sainsbury K, & Kuczmierczyk AR (2014). The role of gender and sexual experience in predicting adolescent condom use intentions using the theory of planned behaviour. *European Journal of Contraception & Reproductive Health Care*, 19(4), 295–306. doi: 10.3109/13625187.2014.917624 [PubMed: 24901603]
- Ritchwood TD, Penn DC, DiClemente RJ, Rose ES, & Sales JM (2014). Influence of sexual sensation-seeking on factors associated with risky sexual behaviour among african-american female adolescents. *Sexual Health*, 11(6), 540–546. doi: 10.1071/SH14075 [PubMed: 25355174]
- Savage RA, Becker SI, & Lipp OV (2016). Visual search for emotional expressions: effect of stimulus set on anger and happiness superiority. *Cognition And Emotion*, 30(4), 713–730. doi: 10.1080/02699931.2015.1027663 [PubMed: 25861807]
- Shrier LA, Shih M, Hacker L, & de Moor C (2007). A momentary sampling study of the affective experience following coital events in adolescents. *Journal Of Adolescent Health*, 40(4), e1–e8. doi: 10.1016/j.jadohealth.2006.10.014
- Substance Abuse and Mental Health Services Administration. (2009). Results from the 2008 national survey on drug use and health: National findings Rockville, MD: Office of Applied Studies.
- Teitelman AM, Ratcliffe SJ, Morales-Aleman MM, & Sullivan CM (2008). Sexual relationship power, intimate partner violence, and condom use among minority urban girls. *Journal Of Interpersonal Violence*, 23(12), 1694–1712. doi: 10.1177/0886260508314331 [PubMed: 18349344]
- Tice DM, Bratslavsky E, & Baumeister RF (2001). Emotional distress regulation takes precedence over impulse control: If you feel bad, do it!. *Journal of Personality and Social Psychology*, 80(1), 53–67. doi: 10.1037//0022-3514.80.1.53 [PubMed: 11195891]
- Thompson RA (1994). Emotion regulation: A theme in search of definition. *Monographs of the Society for Research in Child Development*, 59(2/3), 25–52. [PubMed: 7984164]
- Tull M, Weiss N, Adams C, & Gratz K (2012). The contribution of emotion regulation difficulties to risky sexual behavior within a sample of patients in residential substance abuse treatment. *Addictive Behaviors*, 37(10), 1084–1092. doi:10.1016/j.addbeh.2012.05.001 [PubMed: 22658304]
- Vaillancourt-Morel MP, Dugal C, Stewart RP, Godbout N, Sabourin S, Lussier Y, & Briere J (2015). Extradyadic sexual involvement and sexual compulsivity in male and female sexual abuse survivors. *Journal of Sex Research*, 53(4/5), 614–625. doi:10.1080/00224499.2015.1061633 [PubMed: 26421749]
- Vingerhoets AM, Nyklík I, & Denollet J (2008). *Emotion regulation: Conceptual and clinical issues*. New York, NY: Springer.
- Waldrop AE, & Resick PA (2004). Coping among adult female victims of domestic violence. *Journal of Family Violence*, 19(5), 291–302.
- Weiss NH, Peasant C, & Sullivan TP (2016). Intimate partner violence and HIV-risk behaviors: Evaluating avoidant coping as a moderator. *AIDS and Behavior* doi:10.1007/s10461-016-1588-2.
- Weiss NH, Duke AA, & Sullivan TP (2014). Evidence for a curvilinear dose-response relationship between avoidance coping and drug use problems among women who experience intimate partner violence. *Anxiety, Stress & Coping*, 27(6), 722–732. doi:10.1080/10615806.2014.899586
- Wise D, Goggin K, Gerkovich M, Metcalf K, & Kennedy S (2006). Predicting intentions to use condoms using gender, sexual experience, and the theory of planned behavior. *American Journal of Health Education*, 37(4), 210–218. doi:10.1007/s10461-016-1588-2

- Wong CF, Silva K, Kecojevic A, Schrager SM, Bloom JJ, Iverson E, & Lankenau SE (2013). Coping and emotion regulation profiles as predictors of nonmedical prescription drug and illicit drug use among high-risk young adults. *Drug & Alcohol Dependence*, 132(1/2), 165–171. doi:10.1016/j.drugalcdep.2013.01.024 [PubMed: 23453258]
- Yoo H, Bartle-Haring S, Day RD, & Gangamma R (2014). Couple communication, emotional and sexual intimacy, and relationship satisfaction. *Journal of Sex & Marital Therapy*, 40(4), 275–293. doi:10.1080/0092623X.2012.751072 [PubMed: 24111536]

Table 1.

Demographic Characteristics

	Men (n = 49)	Women (n = 49)	P-value ^a
	n (%)	n (%)	
Race/Ethnicity			
African American	31 (63.3)	29 (59.2)	.33
Latino	15 (30.6)	17 (34.7)	
White/Other	3 (14.3)	3 (6.1)	
Employment			.63
Unemployed	20 (40.8)	33 (67.3)	
Part-Time	14 (28.6)	10 (20.4)	
Full-Time	15 (30.6)	6 (12.2)	
Living with Partner	29 (59.2)	30 (61.2)	—
	Mean (SD)	Mean (SD)	
Age	22.90 (5.30)	20.84 (2.58)	< .01 **
Annual Household Income	\$16,428 (15,774)	11,944 (15,149)	< .00 **
Years of Education	11.86 (1.35)	11.76 (1.5)	.96
Difficulties in Emotion Regulation	72.84 (25.73)	74.22 (24.15)	.77
Emotional Expression	44.51 (24.36)	41.27 (20.18)	.29
Sexual Compulsivity	20.15 (9.49)	18.30 (10.34)	.30
Sexual Sensation-Seeking	22.69 (9.34)	22.72 (8.73)	.99

Note: P-values derived from paired t-test for continuous variables and McNemar test for categorical variables to determine the difference between genders;

*
p < .05

**
p < .01.

Table 2.

Bivariate Correlations between Study Predictors and Outcomes

	Difficulties in Emotion Regulation			Emotional Expression	Sexual Compulsivity	Sexual Sensation-Seeking
Gender ^a	0.03			-0.07	-0.11	-0.06
Race/ethnicity ^a						
African American	0.00			0.06	-0.01	-0.13
Latino	0.09			0.04	0.01	0.04
White/Other	-0.03			-0.14	-0.03	0.12
Employment Status ^a	-0.18			-0.02	-0.18	0.00
Education Status ^a	0.90			0.26 [*]	0.02	0.00
	<i>r</i>			<i>r</i>	<i>r</i>	<i>r</i>
Age	-0.23 [*]			-0.21 [*]	-0.03	0.01
Annual Household Income	-0.21			-0.09	-0.28 ^{**}	-0.14
Difficulties in Emotion Regulation	—			0.27 ^{**}	—	—
Emotional Expression	—			—	—	—
Sexual Compulsivity	0.37 ^{**}			-0.08	—	—
Sexual Sensation-Seeking	0.33 ^{**}			-0.07	0.75 ^{**}	—

^{*} Note: $p < .05$ ^{**} $p < .01$.

Multi-level Models Examining the Impact of Difficulties in Emotion Regulation and Emotional Expression on Sexual Compulsivity and Sexual Sensation-Seeking

Table 3.

	B (SE) Model 1	B (SE) Model 2	B (SE) Model 3	B (SE) Model 4
Difficulties in Emotion Regulation (Actor)	0.13 (0.04)**	0.12 (0.03)**	—	—
Difficulties in Emotion Regulation (Partner)	0.04 (0.04)	0.06 (0.03)*	—	—
Emotional Expression (Actor)	—	—	0.02 (0.05)	0.03 (0.04)
Emotional Expression (Partner)	—	—	-0.11 (0.06)*	-0.11 (0.04)
Male	-2.35 (1.95)*	-0.15 (1.47)	-3.20 (1.98)	-1.08 (1.45)
Age	0.08 (0.29)	0.20 (0.24)	-0.05 (0.31)	0.11 (0.26)
Race				
Black	-3.24 (2.99)	-5.31 (2.41)	-2.49 (3.21)	-3.86 (2.54)
Latino	-2.22 (2.91)	-4.03 (2.32)	0.29 (3.09)	-1.54 (2.38)
White				
Household Income	-1.21 (0.57)*	-0.69 (0.46)*	-1.59 (0.59)**	-0.68 (0.45)
Currently Employed	0.13 (1.39)	1.04 (1.10)	-0.74 (1.47)	-0.27 (1.13)
Currently in School	1.35 (2.41)	1.69 (1.87)	1.56 (2.55)	2.12 (1.91)

Note: SE = Standard error, Model 1 examines the association of actor and partner difficulties in emotion regulation with sexual compulsivity; Model 2 examines the association of actor and partner difficulties in emotion regulation and sexual sensation-seeking; Model 3 examines the association of actor and partner emotional expression with sexual compulsivity; Model 4 examines the association of actor and partner emotional expression and sexual sensation-seeking;

*
p < .05

**
p < .01.