

Young Adults' Emotional Reactions After Hooking Up Encounters

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Abstract Hooking up or a sexual encounter ranging from kissing to intercourse that occurs on one occasion and where the partners do not necessarily expect future physical encounters or a committed relationship has become common place among college students. This study ($N = 500$) examined gender differences in emotional reactions after hooking up and explored the relationship between specific processes in the hooking up encounter and reactions to hooking up. Compared to women, men reported more positive and fewer negative emotional reactions; however, both men and women reported that the experience was largely more positive than negative. Coital hook ups were associated with fewer negative emotional responses for men as compared to women who engaged in coital and non-coital hook ups and to men who engaged in non-coital hook ups. For those who engaged in coital hook ups, women reported that condom use was associated with fewer positive and more negative emotional reactions whereas condom use was related to fewer negative emotion reactions for men. Negative emotional reactions were also related to reports of depressive symptoms and feelings of loneliness; however, feelings of loneliness were not related to negative emotional reactions after accounting for young adults' positive emotional reactions. Positive emotional reactions were related to hope for and discussion of a committed relationship. Implications for relationship education and future research are outlined.

Keywords Casual sex · Hooking up · Romantic relationships · Psychological distress

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Introduction

Hooking up—a common experience for many young adults with prevalence rates ranging from 50 to 75%—refers to a sexual encounter ranging from kissing to intercourse that occurs on one occasion and where the partners do not necessarily expect future physical encounters or a committed relationship (Glenn & Marquardt, 2001; Owen, Rhoades, Stanley, & Fincham, 2010; Paul, McManus, & Hayes, 2000). Hooking up is similar to other ambiguous relationships, such as “friends with benefits,” where there is a preexisting and on-going friendship accompanied by physical intimacy (see Bisson & Levine, 2009). In comparison to sexual behavior in previous generations, hooking up is most consistent with “one-night stands,” which typically denoted sexual intercourse on one occasion (e.g., Desiderato & Crawford, 1995; Leigh & Schafer, 1993). Today, young adults use the term hooking up since it is generally more reflective of the ambiguity in the boundaries of encounters and the variety of physical intimacies involved (Glenn & Marquardt, 2001; Sanders & Reinisch, 1999). Most research has examined psychosocial factors that predict hooking up encounters. For instance, young adults who hook up are more likely to report higher alcohol use, lower psychological well-being, and more favorable attitudes about it (e.g., Fielder & Carey, 2009; Gentzler & Kerns, 2004; Grello, Welsh, & Harper, 2006; Manning, Longmore, & Giordano, 2005; Owen et al., 2010; Paul et al., 2000). However, less is known about young adults' reactions after hooking up and what personal and situational factors may lead to positive or negative reactions. This study, therefore, investigated young adults' reactions after hooking up.

Reactions After Hooking Up

Young adults have reported a variety of positive and negative emotional reactions after hooking up (Glenn & Marquardt, 2001; Grello et al., 2006; Owen et al., 2010; Paul & Hayes, 2002; Paul

et al., 2000; Peterson & Muehlenhard, 2007). Gender role socialization is an important factor in understanding young adults' emotional reactions after hooking up (Paul et al., 2000). Men, generally, are socialized to view sex as a physical encounter with limited relational intimacy or attachment (Levant, 1997; Mahalik, Good, & Englar-Carlson, 2003) whereas women are more likely to prioritize emotional investment and hope for relational commitment (Grello et al., 2006; Hill, 2002; Impett & Peplau, 2003). Glenn and Marquardt (2001) found college women's top two emotional reactions after hooking up (using a yes–no dichotomous response) were feeling “awkward” (64%) and “desirable” (62%), suggesting that hooking up is related to a range of emotional reactions. Building on this framework, Owen et al. (2010) examined young adults' reactions after hooking up based on their endorsement (or not) of nine positive and negative adjectives (e.g., pleased, excited; empty, confused). This categorical system showed that 26.4% of women reported positive emotions after the hooking up experience, 48.7% reported negative emotions, and 24.9% reported a mix of positive and negative emotions. In contrast, 50.4% of men reported that hooking up encounters were associated with positive emotions, 26.0% reported negative emotions, and 23.6% reported a mix of positive and negative emotions. These findings suggest that hooking up may not be a positive experience for many young adults, especially women. However, an important limitation of the Glenn and Marquardt (2001) and Owen et al. (2010) studies was the use of a categorical system to capture reactions after hooking up. Young adults may experience both positive and negative emotional reactions to varying extents and the positive (or negative) reactions may be more pronounced. Accordingly, we investigated whether men's and women's emotional reactions after hooking up were, on average, more positive or negative.

Although it is normative for young adults to explore and experiment with sexual intimacy (Manning et al., 2005), it is unclear whether their positive and negative emotional reactions after hooking up are related to specific processes associated with the encounter. Sexual intimacy can be pleasurable, but the relationship between emotional reactions and hooking up may vary based on the type of physical intimacy and gender. First, not all hook ups are equal in terms of physical intimacy as they range from non-coital hook ups (e.g., kissing, petting) to coital hook ups (e.g., oral sex, sexual intercourse). Coital hook ups place young adults at greater risk for contracting STIs or getting pregnant as compared to non-coital hook ups. Further, men are more likely to engage in coital hook ups as compared to women (Paul et al., 2000). However, it has been suggested that women may feel pressure to engage in hook ups based on pressure to please men, but subsequently feel guilt or confusion after engaging in hook ups due to noncompliance with stereotypic gender socialization norms (i.e., “women don't hook up”; Edgar & Fitzpatrick, 1993; Paul et al., 2000). Thus, the meaning of hooking up may differ based on gender. As women are more likely to connect sexual encounters with relational intimacy as compared to men (Peplau & Gordon,

1985) and because there tends to be a general lack of relational connection after hook ups (e.g., Bisson & Levine, 2009; Paul et al., 2000), we anticipated that men who engage in coital hook ups would have more positive and less negative emotional reactions after hooking up as compared to women.

Further, young adults who do not consistently use condoms during coital-hook ups may worry about contracting STIs or pregnancy and thereby experience more negative reactions. Misovich, Fisher, and Fisher (1997) asserted that individuals' motivation for engaging in safe-sex practices is based on their impression of their partners' characteristics, their awareness of preventive methods, and their personal needs for relational and physical connection. Although condom use during casual sex is more common than in committed relationships (Misovich et al., 1997), the meaning of wearing condoms may vary for men and women. Since women, on average, desire more relational connection, condom use may indicate a lack of intimacy or increase the perceived likelihood of being rejected and disappointing the partner (Kline, Kline, & Oken, 1992; Misovich et al., 1997). For men, wearing condoms may increase their confidence that they were protected from unwanted pregnancies, thus limiting their connection to their hook up partner and reducing their negative emotional reactions. However, it is not known whether these sex differences in condom use and emotional reactions occur.

In addition, young adults who engage in hook ups may experience negative emotional reactions due to other factors, such as alcohol use during hooking up or expectations about the hooking up encounter. For instance, research has repeatedly shown that alcohol use is associated with engaging in hooking up encounters (e.g., Fielder & Carey, 2009; Owen et al., 2010; Paul et al., 2000). However, Owen et al. did not find an association between general alcohol use and emotional reactions to hooking up, suggesting that alcohol use may have more to do with lowering inhibitions to engage in hooking up behaviors and less to do with how young adults' interpret the experience afterwards (e.g., excuse making; see Paul et al., 2000). But this study did not assess alcohol use during the hooking up encounters and it is likely that young adults' reactions may be more clearly linked to their behavior during the actual experience.

Given the ambiguity in relationship development, some young adults may see hooking up as a viable way to develop a committed relationship (Glenn & Marquardt, 2001). Thus, young adults who are more hopeful that their hooking up experience will lead to a committed relationship may be more likely to report positive emotional reactions as their hopes are reinforced. Alternatively, it could be that those who hope for a committed relationship may be disappointed given that the majority (approximately 90%) of casual sex relationships seldom progress into a committed relationship (e.g., Bisson & Levine, 2009; Paul et al., 2000). The relationship between hope for a committed relationship and emotional reactions may also vary based on gender. For instance, women are more likely to hope that the hooking up encounter leads to a committed relationship as compared to men (Grello et al., 2006).

Lastly, the impact of hooking up on young adults' psychological well-being has been a focal point of interest. For instance, Grello, Welsh, Harper, and Dickson (2003) found young adults who were more psychologically distressed were more likely to hook up; however, Fielder and Carey (2009) did not fully replicate this finding. The relationship between hooking up encounters and psychological distress can also be determined by linking young adults' reactions after hooking up to their psychological functioning. Owen et al. (2010) found that young adults who reported negative emotional reactions after hooking up also reported more psychological distress as compared to those who reported positive emotional reactions. Moreover, Grello et al. (2006) found that young adults who regretted their hooking up experience were more likely to report depressive symptoms. These studies suggest that both directions of effect are possible, that is, young adults who were more distressed were more likely to report negative emotional reactions to hooking up and the interpretation of the hooking up experience led to more distress. Yet, these previous studies have not addressed adequately the fact that young adults can experience both positive and negative emotional reactions after hooking up. On the one hand, young adults' positive reactions after hooking up could outweigh their psychological distress in the prediction of negative emotional reactions. In other words, even though psychological distress may relate to engaging in hooking up encounters, the degree to which hooking up is related to distress is based on young adults' gestalt of positive and negative emotional reactions.

Similarly, young adults' positive and negative reactions after hooking up may vary based on their social connectedness or perceived loneliness. Loneliness may influence the decision to engage in hooking up encounters, as many young adults' decisions to engage in sexual activity have been related to a desire to be relationally connected to others (O'Sullivan & Gaines, 1998). As women are more likely to express a desire for relational connection within hooking up encounters, the degree to which emotional reactions vary in relation to loneliness may be more pronounced for women. However, it is important to gauge the relationship between negative emotional reactions and loneliness within the context of experiencing positive emotional reactions after hooking up.

The Current Study

The purpose of the current study was to investigate young adults' reactions after hooking up. We posited that, compared to women, men would report more positive emotional reactions and less negative emotional reactions. Additionally, men would report more positive than negative emotional reactions after hooking up whereas women would report more negative emotional reactions compared to positive ones (Hypothesis 1). Next, we expected that engaging in coital hook ups as compared to non-coital hook ups would be related to more negative and fewer positive emotional reactions for women as compared to men (Hypothesis 2). For those young adults who engaged in

coital hook ups, we anticipated that more condom use would be associated with more positive and less negative emotional reactions for men as compared to women (Hypothesis 3). Additionally, we anticipated that more alcohol use during the hooking up encounter would be related to more negative and fewer positive emotional reactions for both men and women (Hypothesis 4). We also expected that young adults who hoped for and had a discussion about a committed relationship would have more positive and fewer negative emotional reactions (Hypothesis 5a) and that these relationships will be more pronounced for women (Hypothesis 5b). Lastly, we expected that young adults' negative emotional reactions would be related to more psychological distress and feelings of loneliness (Hypothesis 6a) and that these relationships would be more pronounced for women as compared to men (Hypothesis 6b). However, we expected that these relationships would no longer be significant after controlling for positive emotional reactions (Hypothesis 6c).

Method

Participants

A total 1,082 students from a large U.S. Southeastern university were initially recruited. We excluded 297 participants who indicated that they were in an exclusive relationship for 12 months or longer, 16 participants who were over 25 years old (since the study was focused on young adults), and 10 participants who did not respond to the question about hooking up encounters in the past year or did not indicate their gender. Additionally, for purposes of the current study, we only analyzed data from participants who reported engaging in a hooking up encounter ($N = 500$) as we were interested in reactions after hooking up. Participants were provided with a broad definition of hooking up: "Some people say that a hook up is when two people get together for a physical encounter and don't necessarily expect anything further (e.g., no plan or intention to do it again). Based on this definition, how many people have you hooked up with in the past 12 months?" Participants who indicated one or more hook ups over the past 12 months were included. Women reported fewer hook ups over the past 12 months as compared to men; median number of hook ups was 1 and 3, respectively. The percentage of men who indicated that they hooked up over the past 12 months was higher than women, 76.1 and 60.1%, respectively, $\chi^2(1, N = 759) = 18.01, p < .01$.

Of the final sample, 172 were men and 328 were women, with a median age of 19 years (range, 17–25). The majority of the participants identified as Caucasian (70.5%), 14.6% as African American, 11.8% as Latino/a, 2.7% as Asian American, and .3% as Native American. Ninety-eight percent of the participants identified as heterosexual.

Procedure

Participants were recruited through an introductory course on families across the lifespan that fulfills a social studies requirement and therefore attracts students from across the university. Students were offered multiple options to obtain extra credit for the class, one of which comprised the survey used in this study. Over 95% of the class decided to participate in the study. They completed informed consent and were told how to access the on-line survey. They were given a 5 day window in which to complete the survey. All procedures were approved by the university IRB. Other data from this sample are presented in Owen and Fincham (in press).

Measures

Emotional Reactions After Hooking Up

We adapted the emotional reaction after hooking up measure used by Owen et al. (2010) for the current study. Participants were asked to identify how they felt a day or so after their hooking up encounter. They were provided five positive (happy, desirable, adventuresome, pleased, and excited) and five negative emotions (empty, confused, used, awkward, and disappointed) and they rated their reactions on a five-point Likert scale ranging from 1 (*Not at all*) to 5 (*Very Much*). Higher scores indicate more positive and negative emotional reactions, respectively. In contrast to Owen et al. (2010), who utilized a dichotomous scoring system and subsequent categorical grouping of young adults, the current study used a Likert scale for each emotional reaction, which resulted in two scale scores, one for positive and one for negative emotional reactions. Because positive and negative emotion tend to be distinct systems, each with its own neural processes, they cannot simply be viewed as a bipolar dimension with endpoints defined as positive and negative (see Feldman Barrett, & Russell, 1999). For positive and negative reactions to hooking up, the Cronbach alphas in this study were .88 and .82, respectively.

Alcohol Consumption and Condom Use During Hooking Up

We asked participants to rate the frequency of alcohol and condom use during physical intimacy on a five-point scale ranging from 1 (*Never*) to 5 (*Always*). The mean score for alcohol use during the hooking up encounter was 3.09 ($SD = 1.28$), which corresponds with the rating of “About half of the time.” For young adults who engaged in coital hook ups, their mean score for condom use was 3.84 ($SD = 1.48$), which was between “About half of the time” and “Most times” on the rating scale.

Hope for and Discussion of a Committed Relationship

We developed two questions to assess hope for and discussion of a committed relationship. The questions were: “Thinking

about your hooking up encounter: Did you ever hope that it would progress into a committed relationship?” and “Did you and your partner ever discuss progressing into a committed relationship?” Participants were provided with the response options of “Yes” or “No” for each question.

Type of Physical Intimacy

Participants endorsed the types of physical intimacy involved in their hook ups. The response options were: “kissing,” “petting,” “oral sex,” and “intercourse (vaginal, anal).” Participants were able to endorse more than one type of physical intimacy. Based on their responses, we coded coital hook ups (HU-coital) if the participants indicated “oral sex” or “intercourse” ($n = 275$) and non-coital hook ups (HU-non-coital) if the participants indicated “kissing” and/or “petting” only ($n = 201$). There were 24 participants who did not indicate the type of sexual behaviors during their hook up encounter.

Loneliness

The UCLA Loneliness scale is a commonly used measure to assess individuals’ perceptions of how lonely they feel (Russell, 1996). The eight item version used required participants to make ratings on a four-point scale, with the anchors 1 (*Never*) to 4 (*Often*). UCLA Loneliness scale has demonstrated adequate reliability across samples and is commonly related to numerous indicators of psychological distress (e.g., depression, low self-esteem; see Vassar & Crosby, 2008). The Cronbach alpha in this study was .84.

Depressive Symptoms

We utilized the Center for Epidemiologic Studies-Depression scale (CES-D; Radloff, 1977) to assess psychological distress. The CES-D has 10 items that are rated on a four-point scale, with higher scores indicating more distress. The CES-D is a commonly used measure of depressive symptoms and has demonstrated adequate reliability and validity estimates in numerous studies (see Cole, Rabin, Smith, & Kaufman, 2004). The Cronbach alpha in this study was .78.

Results

Table 1 shows the means, *SDs*, and effect sizes for men’s and women’s positive and negative emotional reactions to hooking up. Our first hypothesis was that men would report more positive and less negative emotional reactions after hooking up than women and that men would report that hooking up was associated with more positive and less negative emotional reactions whereas women would report that hooking up was associated with more negative and less positive emotional reactions. We

Table 1 Men's and women's emotional reactions to hooking up

	Men <i>M</i> (<i>SD</i>)	Women <i>M</i> (<i>SD</i>)	<i>d</i> -between sex
Positive	3.75 (.83)	3.32 (1.00)	.45
Negative	2.14 (.92)	2.46 (.96)	-.34
<i>d</i> -within sex	1.84	.88	

Note: The absolute range for positive and negative emotional reactions was 1–5. *d*-between sex describes the effect size for the differences between men and women for positive and negative emotional reactions, respectively. *d*-within sex describes the effect size for the difference between positive and negative emotional reactions for men and women, respectively. Effect sizes of .2 are considered small, .5 are medium, and .8 are large (Cohen, 1992)

tested this hypothesis with a 2 (Gender) × 2 (Emotional Reactions) ANOVA. The Gender × Emotional Reactions interaction was statistically significant, $F(1, 480) = 22.23, p < .001$. Both men and women reported that their emotional reactions were more positive than negative, d 's = 1.84, .88, respectively. Men had more positive and less negative emotional reactions as compared to women (both $ps < .05$), d 's = .45, -.34, respectively. These findings partially support Hypothesis 1.

For descriptive purposes, we also examined gender differences for the other variables investigated. Women (64.9%) were more likely to hope that their hooking up encounter would become a committed relationship as compared to men (45.2%), $\chi^2(1, N = 483) = 16.97, p < .001$. Approximately half of women (50.8%) and 41.9% of men reported that they discussed the possibility of starting a committed relationship with their hooking up partner, $\chi^2(1, N = 482) = 3.28, p = .07$. Additionally, women (47.7%) were less likely to report engaging in coital behaviors during the hooking up encounter as compared to men (79.9%), $\chi^2(1, N = 476) = 43.39, p < .001$. There were no significant gender differences for alcohol use, condom use, depressive symptoms, or loneliness.

We tested our second hypothesis, that men would report more positive and less negative emotional reactions as compared to women when they engaged in coital hook ups (versus non-coital hook ups) with a 2 (Gender) × 2 (Hook Up Sex Type: Coital vs. Non-coital) × 2 Emotional Reactions ANOVA. There was no significant three-way interaction effect, $F(1, 471) = 2.27, p = .13$. The interaction effects between Hook Up Type × Emotional Reactions and Gender × Emotional Reactions were significant, $F(1, 471) = 3.76, p < .05$ and $F(1, 471) = 8.22, p < .01$. In addition, the interaction effect between Gender and HU-sex type approached significance, $F(1, 471) = 3.45, p = .06$. The simple effects for gender × HU-sex type were statistically significant for negative emotional reactions, $F(1, 471) = 5.19, p = .02$, but not positive emotional reactions, $F(1, 471) < 1$ (see Table 2). Men who engaged in coital hook ups had less negative emotional reactions as compared to men who engaged in non-coital hook ups ($d = .62$), women who engaged in coital hook ups ($d = .41$), and women who engaged in non-coital hook ups

Table 2 Emotional reactions to hooking up by gender and hook up type

	Men		Women	
	Coital <i>M</i> (<i>SD</i>)	Non-coital <i>M</i> (<i>SD</i>)	Coital <i>M</i> (<i>SD</i>)	Non-coital <i>M</i> (<i>SD</i>)
Positive ^a	3.77 (.80)	3.68 (.99)	3.34 (1.10)	3.31 (.91)
Negative ^a	2.03 (.92)	2.59 (.87)	2.42 (.99)	2.48 (.94)
<i>N</i>	118	30	156	171

^a Absolute range, 1–5

($d = .49$) ($ps < .05$). However, the difference in negative emotional reactions between men and women who engaged in non-coital hook ups was not significant ($d = .12$). Further, the difference between women who engaged in coital and non-coital hook ups was not significant ($d = .06$). These results partially support Hypothesis 2.

Next, for those young adults who engaged in coital hook ups, we tested whether condom use was related to their positive and negative emotional reactions. Results from bivariate correlations showed that women who reported more condom use reported fewer positive emotional reactions ($r = -.20, df = 155, p < .01$) and more negative emotional reactions ($r = .18, df = 155, p < .05$). For men, condom use was not significantly associated with positive emotional reactions ($r = .11, df = 117$), but was associated with fewer negative emotional reactions ($r = -.22, df = 117, p < .01$). To examine these associations in a multivariate context and to provide a test of gender differences, we conducted two linear regression models predicting positive and negative emotional reactions, respectively. We controlled for alcohol use, hope for and discussion of a committed relationship, depressive symptoms, and loneliness. The results from the full model were significant for positive emotional reactions $F(8, 259) = 8.00, p < .001, R^2 = .17$, and negative emotional reactions, $F(8, 259) = 5.34, p < .001, R^2 = .14$. As seen in Table 3, after controlling for the variance in the other variables, condom use was associated with fewer positive emotional reactions and more negative emotional reactions; however, there were also significant gender interactions for condom use. That is, women who reported more condom use had less positive emotional reactions as compared to men. Men who reported more condom use had less negative emotional reactions as compared to women.

With the full sample, we tested whether more alcohol use was associated with less positive and more negative emotional reactions, and whether hope for and discussion of a committed relationship was associated with more positive and less negative emotional reactions. Additionally, we predicted that depressive symptoms and loneliness would be associated with more negative emotional reactions. The bivariate correlations are shown in Table 4. Positive emotional reactions were negatively associated with alcohol use (supporting Hypothesis 4) and positively related

Table 3 Linear regression predicting positive and negative emotional reactions to hooking up for young adults who engaged in coital hook ups ($N = 268$)

	Positive emotion reactions		Negative emotion reactions	
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
Gender	.54***	.13	-.31*	.13
Condom use	-.23**	.09	.20*	.09
Depressive	.11	.07	.12	.07
Loneliness	-.14*	.07	.12	.07
Alcohol use	-.16**	.06	.15*	.06
Hope	.42**	.14	.11	.14
Discussion	.32*	.13	-.11	.14
Gender \times Condom use	.34*	.14	-.46***	.14

Note: Hope = Hope for committed relationship (1 = Yes, 0 = No). Discussion = Discussion of a committed relationship (1 = Yes, 0 = No). Gender was coded 1 = Men, 0 = Women. All variables were standardized prior to analysis

*** $p < .001$, ** $p < .01$, * $p < .05$

to hope for and discussion of a committed relationship (supporting Hypothesis 5a). That is, young adults who hoped for and had a discussion of a committed relationship had more positive emotional reactions (M 's = 3.80, 3.85, SD 's = .89, .84, respectively) than those who did not (M 's = 3.33, 3.32 SD 's = .99, 1.00, respectively). However, young adults who hoped for and had a discussion of a committed relationship did not have different negative emotional reactions (M 's = 2.17, 2.09 SD 's = .93, .88) compared to those who did not (M 's = 2.08, 2.16 SD 's = .97, 1.01). Negative emotional reactions were positively associated with alcohol use (supporting Hypothesis 4), more depressive symptoms, and greater feelings of loneliness (supporting Hypothesis 6a).

To determine whether the above reported associations remained significant in a multivariate context, we conducted two regression analyses predicting positive and negative emotional reactions, respectively. That is, we predicted positive and negative emotional reactions from alcohol use, hope for

Table 5 Linear regression predicting positive and negative emotional reactions to hooking up

	Positive		Negative	
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
Gender	.56***	.09	-.33***	.10
Depressive	.02	.05	.12**	.05
Loneliness	-.09	.05	.12**	.05
Alcohol use	-.18***	.04	.17***	.04
Hope	.47***	.10	.10	.10
Discussion	.27**	.09	-.19	.10

Note: Hope = Hope for committed relationship (1 = Yes, 0 = No). Discussion = Discussion of a committed relationship (1 = Yes, 0 = No). Gender was coded 1 = Men, 0 = Women

** $p < .001$, * $p < .01$

and discussion of a committed relationship, depressive symptoms, loneliness, and used gender as a control variable. The results predicting positive emotional reactions were statistically significant, $F(6, 473) = 15.85$, $p < .001$, adjusted $R^2 = .16$. As shown in Table 5, alcohol use and hope for and discussion of a committed relationship were significant predictors when controlling for the variance in the other variables. The regression predicting negative emotional reactions was also statistically significant, $F(6, 473) = 9.29$, $p < .001$, adjusted $R^2 = .10$. Of the predictor variables, depressive symptoms, loneliness, alcohol use, and discussion of a committed relationship were significantly related to negative emotional reactions. There were no significant gender interactions in either model for any of the predictor variables. The lack of statistically significant gender differences in the models for hope of and discussion of a committed relationship, distress, and loneliness did not support Hypothesis 5b and 6b.

Lastly, we tested whether young adults' negative emotional reactions were related to their psychological distress and feelings of loneliness after controlling for positive emotional reactions. We replicated our linear regression predicting negative emotional reactions from above but added a second step to the

Table 4 Bivariate correlations for emotional reactions to hooking up

	1	2	3	4	5	6	7
1. Positive reactions	–	-.46**	-.21**	.27**	.24**	-.06	-.09
2. Negative reactions	-.36**	–	.20**	.004	-.14	.19**	.16**
3. Alcohol use	-.08	.11	–	-.03	-.08	.02	-.06
4. Hope	.30**	.02	.16	–	.37**	-.06	.03
5. Discussion	.24**	-.03	-.04	.41**	–	-.05	-.07
6. Depressive symptoms	.001	.18	-.04	-.05	-.01	–	.53**
7. Loneliness	-.10	.21**	-.01	.05	.03	.39**	–

Note: Men's correlations are below the diagonal and Women's correlations are above. Hope = Hope for committed relationship (1 = Yes, 0 = No). Discussion = Discussion of a committed relationship (1 = Yes, 0 = No). Due to missing data for some variables the N 's ranged from 480 to 495

** $p < .001$

model where positive emotional reactions were included. The addition of positive emotional reactions in Step 2 was statistically significant, $F(7, 473) = 23.49, p < .001$, change in $R^2 = .15$. As expected, young adults' positive emotional reactions were significantly associated with their negative emotional reactions, $B = -.43, SE = .04, p < .001$. Young adults' depressive symptoms were still significantly related to negative emotional reactions, $B = .25, SE = .09, p = .005$; however, feelings of loneliness were no longer significantly associated with negative emotional reactions after controlling for positive emotional reactions, $B = .14, SE = .08, p = .08$. Thus, there was partial support for Hypothesis 6c.

Discussion

The purpose of the current study was to investigate young adults' emotional reactions after hooking up. In particular, we examined gender differences in young adults' emotional reactions after hooking up and explored whether specific processes in the hooking up encounter were related to reactions to the experience. Lastly, we tested whether young adults' emotional reactions after hooking up were related to their psychological functioning. The present study assessed both positive and negative emotional reactions with the assumption that young adults can simultaneously experience these emotions. This assumption was consistent with advances made in the study of marital relationships (see Fincham & Linfield, 1997; Mattson, Paldino, & Johnson, 2007) and provides a more complete understanding of how young adults experience and interpret hooking up encounters.

Similar to previous research (Owen et al., 2010) and consistent with gender role theories (e.g., Mahalik et al., 2003), we found that men were more likely to report that hooking up encounters were associated with more positive and less negative emotional reactions than women. However, the differences found between men and women for negative and positive emotional reactions were small to medium size effects (d 's = $-.34$ and $.45$, respectively), suggesting that the experience of hooking up encounters is likely more positive for men, but the negative emotional reactions tend to be more similar. More importantly, both men and women reported that their emotional reactions after hooking up were largely more positive than negative (d 's = 1.84 and $.88$, respectively). In fact, men's and women's negative emotional reactions were, on average, below the midpoint of the scale. In contrast to Owen et al. (2010), who found that the majority of women reported that hooking up was associated with negative emotional reactions, our study painted a different picture. Given the positive emotional reactions after hooking up, it is likely that this is one reason why young adults find these encounters attractive. However, participants in the current study were asked how they felt "a day or so" after the encounter. Given that women were more likely to hope for their hooking up encounter to lead to a com-

mitted a relationship, there may be other emotional reactions that transpire after this initial reaction that may be important to understand (e.g., if the hooking up encounter developed into a committed relationship) or the difference between how they felt during the interaction as compared to afterwards.

The degree of physical intimacy also influenced young adults' emotional reactions. Consistent with gender role theory, men who engaged in coital hook ups had less negative emotional reactions as compared to men who engaged in non-coital hook ups. This pattern was not found for women. Moreover, women who engaged in coital and non-coital hook ups had more negative emotional reactions compared to men who engaged in coital hook ups. Collectively, men's engagement in coital hook ups likely meets their physical intimacy expectations, leaving them less disappointed. Moreover, women's negative emotional reactions did not vary greatly based on the type of physical intimacy involved, suggesting that their emotional reactions were likely associated with other factors, such as perceptions of feeling connected or intimacy with their partner (Paul et al., 2000; Peplau & Gordon, 1985).

The decision to use condoms in casual sex is a complex process involving motivation/comfort in negotiating condom use, awareness of risk factors, and concerns about their casual sex partner's perception of condom use (Carter, McNair, Corbin, & Williams, 1999; Impett & Peplau, 2003; Misovich et al., 1997; Wingood & DiClemente, 2000). We found that women who engaged in coital hook ups reported that more condom use was associated with *less* positive and *more* negative emotional reactions. In contrast, men who reported condom use reported fewer negative emotional reactions. Although the size of the effects for these findings was small, they suggest that men and women view the use of condoms during a hooking up encounter differently. Men may be less worried about contracting STIs or impregnating their partner when they use condoms, thus reducing their negative emotional reactions. However, for women, condom use may signify a less serious relational connection with a partner or that they may not feel comfortable. Consistent with this view, women are less likely to use condoms when they trust their partner or be in a longer committed relationship (Impett & Peplau, 2003; Wendt & Solomon, 1995; Wingood & DiClemente, 2000). Thus, condom use may serve as a proxy for other relational factors for women. Additionally, women may have utilized alternative contraception to reduce the risk of pregnancy (Wendt & Solomon, 1995) and may have made decisions about the suitability and risk of their hooking up partner prior to becoming intimate (Misovich et al., 1997). Nonetheless, the inconsistent use of condoms increases the risk for young adults to become pregnant and acquire STIs.

Positive emotional reactions were related to young adults' hope for and discussion of a committed relationship, suggesting that young adults' expectations for the hooking up encounter are paramount when understanding their reactions. Simply, young adults may perceive that hooking up is a viable

option for starting a committed relationship, which may lead to more positive appraisals of the encounter. Alternatively, it is possible that the discussion of a committed relationship may provide more clarity about the intentions of the other partner. Future research should clarify the outcomes of these discussions (e.g., suggestions that a committed relationship may be possible in the future, but not now) and when they occurred (e.g., prior to or after physical intimacy).

Previous research has typically examined general alcohol use as a predictor of hooking up behavior and emotional reactions (e.g., Paul et al., 2000). However, alcohol use may relate to how young adults interpret the experience afterwards. For instance, in the current study, we found young adults' alcohol use during the hooking up encounter was related to fewer positive and more negative emotional reactions, which is in contrast to Owen et al. (2010) who found no relationship between young adults' general alcohol use and reactions to hooking up. Thus, our results suggest that more specificity in the assessment of alcohol use may be pertinent in understanding young adults' reactions to hooking up. It could be that young adults' alcohol use during the encounter impacted their decision to hook up and ultimately affected their appraisal of the encounter when sober.

Lastly, we found that young adults' negative emotional reactions were associated with their report of depressive symptoms and feelings of loneliness. Although we cannot disentangle the direction of the relationship, our results suggest that young adults' interpretations of their hooking up encounters are linked to their psychological functioning. Consistent with this view, previous studies have shown that young adults' interpretations (e.g., regret and negative emotional reactions) of the hooking up encounter are associated with psychological distress (Grello et al., 2006; Owen et al., 2010). In longitudinal studies, there is conflicting evidence as to whether psychological distress predicts hooking up behaviors (e.g., Fielder & Carey, 2009; Grello et al., 2003). Thus, as the field continues to disentangle the directionality of the hooking up-psychological distress relationship, it is important to understand how emotional reactions may relate to psychological functioning. In doing so, it is important to gauge the relationship between negative emotional reactions and psychological distress, after considering other factors—in particular positive emotional reactions. We found that the association between young adults' negative emotional reactions and depressive symptoms were not better accounted for by their positive emotional reactions. Further, positive emotional reactions were not related to their depressive symptoms. In other words, while young adults reported more positive than negative emotional reactions, it was their negative emotional reactions that were connected to their depressive symptoms, even after considering their positive reactions to hooking up. However, loneliness was no longer associated with negative emotional reactions after considering positive emotional reactions. On the one hand, young adults' negative emotional reac-

tions, such as feeling used or empty, may have led them to feel lonelier after the hooking up encounter, but this association was no longer present after considering the positive aspects of the encounter. On the other hand, young adults who were more lonely, and hooked up, reported more negative emotional reactions, but again their negative emotional reactions had more to do with the encounter (i.e., their positive emotional reactions) than their general feelings of loneliness. Future research is needed to better understand the directionality in these findings.

Limitations

The findings of the current study should be interpreted in the context of its methodological limitations. First, the correlational design limits our ability to draw conclusions about direction of effects. For instance, it is unclear whether young adults' who reported more depressive symptoms were predisposed to have more negative emotional reactions after hooking up. Longitudinal research is needed to disentangle the direction of these effects. In fact, there are very few longitudinal studies in this area of research (see Fielder & Carey, 2009; Grello et al., 2003 for notable exceptions). Second, while our sample was large, all participants were drawn from a university course on families, which may introduce a selection bias. For instance, there were nearly twice as many women than men in our sample. The use of university students limits our ability to generalize the findings to other young adults who do not attend college. Third, all of the measures were self-reports, which may introduce common method bias. Lastly, some of the participants in this study also reported on their perceptions of friends with benefits (FWB) relationships (see Owen & Fincham, in press). However, the questions for the two studies differed, as we provided different definitions for hooking up as compared to FWB and participants reported on their emotional reactions to hooking up separately from their FWB relationships.

Implications

Notwithstanding the limitations noted, the current study emphasizes the need for research and educational programs that recognize the fact that hooking up encounters are associated with both positive and negative emotional reactions. In fact, our study suggests that most young men and women find that hooking up is largely more positive than negative. Consequently, it is not sufficient for educational programs to assume that hooking up will likely be perceived as a generally negative experience. Such an assumption may provide an inherent disconnect between young adults' understandings and educational information, and may allow them to discount new information. However, it is disconcerting that the risk factors (i.e., frequency of condom and alcohol use) associated with hooking up appears to be weakly connected to young adults' appraisal of the encounters. For instance, women who reported using condoms less often reported the

encounter was more positive and less negative. Thus, the emotional reactions appear less connected to the risk involved.

Accordingly, we first suggest that educators recognize and initiate discussions with young adults about the positive aspects of hooking up. Although the immediate gratification of sexual interaction and lack of commitment in these relationships are likely to be reported (see Bisson & Levine, 2009; Paul & Hayes, 2002), it is important to help participants in educational programs balance these desires with a realistic understanding of the risk involved. For instance, it is likely that some young adults feel regret about their hooking up decision made under the influence of alcohol. In addition, young adults should gain an appreciation of how condom use (or the lack thereof) and the type of sexual activity may impact their lives. That is, it is important for participants to appreciate that enjoyment should not trump risk regardless of potential costs.

Further, it is clear that many young adults may actually desire a committed relationship, but still engage in hooking up behaviors. Thus, relationship education programs may help young adults to be more conscious about the steps in starting a romantic relationship. It is still unclear if hooking up is a viable way to start a committed relationship; however, few hook ups lead to a committed relationship (Paul et al., 2000). It appears that young adults who hope to start a committed relationship via hooking up may be placing physical intimacy as the foundation of the relationship as compared to first gaining an understanding of their partner and determining his or her suitability as a partner in a romantic relationship.

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