

Mental Health and Hooking Up: A Self-Discrepancy Perspective

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One hundred seventy-two undergraduates took part in a study to evaluate how self-concept discrepancies and casual sexual involvement, both as independent and additive factors, predict negative and positive affect. Hierarchical regression analyses demonstrated that actual-ideal (AI) and actual-ought (AO) discrepancy were negatively associated with positive affect after engaging in hookups, defined as casual sexual encounters. However, the degree to which self-discrepancy predicted positive and negative affect varied by gender. Females with high AI discrepancy, who typically engaged in petting during hookups, reported increased negative affect, $\beta = -.24$, $p < .001$, while their male peers reported increased positive affect, $\beta = .63$, $p < .01$. Overall, self-discrepancy appeared to have a distinct and strong association with the sexual practices of young adults in this study and their subsequent positive and negative affect associated with these sexual practices.

Keywords: casual sex, hookups, sexual regret, college-aged women

With roughly 75% of students engaging in at least one hookup during their college careers, hooking up has become a major focus of young adult research (England, Shafer, & Fogarty, 2007). Casual sexual encounters, known as hookups among contemporary college students, can refer to a wide variety of sexual behaviors ranging from kissing to vaginal sex (Paul McManus, & Hayes, 2000). They usually occur between two people who are either strangers or brief acquaintances, typically last only one night, and occur between partners who are not in a committed relationship (Flack et al., 2007). In addition, Bogle (2008), as well as England, Shafer, and Fogarty (2007) also reported that hookups typically involve significant alcohol consumption and most college students report not believing their hookup will lead to a future committed relationship.

Recent studies have examined the associations between mental health and casual sexual encounters in college populations (Grello, Welsh, Harper, & Dickson, 2003; Grello, Welsh & Harper, 2006; Paul, McManus, & Hayes, 2000). Grello et al. (2006) and Paul et al. (2000) found that casual sexual encounters during college were associated with greater psychological distress, such as heightened anxiety and depression symptoms. Contrary to previous research findings, a recent study conducted by Eisenberg, Ackard, Resnick, & Neumark-Sztainer (2009) found that young adults who engage in hookups do not appear to be at greater risk for harmful psychological outcomes than sexually active young adults in committed relationships. One explanation for this difference may be a cultural change in which hookups are less stigmatized, allowing students to have casual sexual encounters with less negative affect. However, Eisenberg, Ackard, Resnick, and Neumark-Sztainer (2009), like Grello et al. (2006), measured psychological distress in general, not specifically asking subjects to what extent their feelings were connected to their casual sexual encounters.

A variety of theories attempt to explain why young adults choose to engage or refrain from engaging in casual sexual behaviors. Some researchers have found that normative sexual

standards on campus may compel students to conform to personal and social expectations to engage in casual sex (DeLamater & MacCorquodale, 1979). Young adults may also anticipate gaining a more positive social status and/or increases in self-esteem and self-confidence as a result of engaging in the hookup culture (Levinson, Jaccard, & Beamer, 1995).

Psychological Consequences of Hooking Up: Gender Differences

Some previous studies suggest that the psychological risks of engagement in hookups are higher for women than for men. Paul and Hayes (2002) used open-ended and semi-structured interviews with women to find that while they may enjoy a hookup while it is occurring, they later report higher levels of shame and regret compared to their male counterparts (Paul & Hayes, 2002). Other women were left feeling awkward and disappointed (Glenn & Marquardt, 2001). Herold and Mewhinney (1993) used a Likert scale to evaluate guilty feelings associated with casual sex. They found that college women who engaged in casual sex reported higher levels of guilt than male participants. It has been hypothesized that these feelings stem from the notion that women are straying from the "proper code of feminine conduct," in which women are expected to never act on their desires, especially outside of a committed relationship (Gilmartin, 2006, p. 430). In contrast, men are told to focus on obtaining sex, not committed romantic relationships (Herold & Mewhinney, 1993). This gender standard may result in men engaging in casual sexual activities even when they do not want to, succumbing to the pressure to be sexually active and emotionally detached (Bird, 1996). MacDonald, Ebert, and Mason (1987) found that self-esteem may be a protective factor for men, as men with high levels of self-esteem reported less rejection during hookup encounters and less negative affect associated with hooking up.

Oswalt, Cameron, and Koob (2005) reported that 72% of college women felt regret regarding at least one hookup. Regret was defined as "a negative emotion that one feels when remembering

the past and imagining that the present would be different if one had behaved differently,” (Zeelenberg, 1999, p. 326). However, it is possible that gender differences in negative affect experienced after a hookup, especially guilt and regret, may be mediated by the degree of sexual involvement. For instance, in a study of college women by Eshbaugh and Gute (2008), two specific sexual behaviors predicted regret: engaging in sexual intercourse with someone known for less than 24 hours and engaging in sexual intercourse with one person only one time.

Increased regret and decreased self-esteem are two potential outcomes of hooking up that could lead to depression. Hallfors, Waller, Bauer, Ford, and Halpern (2005) found sexually active young adults reported more depressed feelings than their abstinent counterparts. They found that participants who abstained from drug use and sexual intercourse had equally low (about 4%) rates of depression, while those who engaged in less normative and more risky patterns (e.g. less condom use, higher number of partners) of sex and drug behaviors were at a higher risk for depression and suicide. Although risk behavior was associated with elevated depression symptoms for both genders, the likelihood of depression was higher for girls, Odds Ratio = 1.8 (Hallfors et al., 2005). However, it is important to note that while the Hallfors et al. (2005) study provides valuable information concerning negative affect associated with engaging in casual sexual behaviors, they used a sample of adolescents in grades 7 – 12 (approximately ages 12 to 18 in the United States), while this study will use a sample of college-aged students (approximately ages 18 to 22 in the United States). Because there are many developmental differences between these two age groups, not the least of which is typically living apart from parents, it may not be appropriate to generalize findings from a 12- to 18-year-old sample to individuals a few years older. For that reason, this study investigates this question anew with college-aged students.

Despite the fact that several studies show gender differences in affect associated with hooking up, Herold and Mewhinney (1993) found no statistical differences in male and female sexual attitudes and activities. Furthermore, Simpson and Gangestad (1992) found greater variance within, than between, the sexes. For example, they found women who indicated positive attitudes toward casual sex also reported having more sexual partners than their male counterparts.

Self-Discrepancy Theory and the Hookup Culture

Little research has focused on why some young adults choose to engage in casual sexual activity while others strive for monogamous romantic relationships and/or abstinence until marriage. It is possible that an individual’s level of development or identity stability may offer some explanations for these differences.

Self-discrepancy theory (SDT; Higgins, 1987) is concerned with the relationship between different types of self-beliefs or self-state representations and potential discrepancies in self-perceptions that may heighten emotional vulnerabilities (e.g. anxiety, stress, anger). Higgins (1987) outlined three types of self-domains: (1) *the actual self* (AS), or one’s representation of the attributes that are believed to be true of one’s current self (2) *the ideal self* (IS), or one’s representation of the attributes that one would like to possess; and (3) *the ought self* (OS), or the attributes

that one believes one should possess. According to Higgins, when discrepancies involve the domains of the self and perspectives on the self, emotional vulnerabilities can be heightened (e.g. anxiety, stress, anger). For example, if a person describes his or her AS as “shy,” but then lists “outgoing” as an IS attribute, he or she may feel elevated levels of depression-related feelings. Furthermore, a person who uses “promiscuous” as an AS attribute, but then lists “chaste” as an OS attribute may experience symptoms of anxiety. Discrepancies between the AS and the OS may indicate the presence of negative outcomes (Boldero & Francis, 2000). For instance, *actual-ideal* discrepancy is hypothesized to lead to feelings of depression or loss of self-worth, while *actual-ought* discrepancy is hypothesized to lead to feelings of anxiety or preoccupation with moral behavior. In addition, Higgins reported that *actual-ideal* discrepancies predicted participants’ global self-esteem (Higgins, 1989) such that greater *actual-ideal* discrepancy predicted lower levels of self-esteem.

Discrepancies between self-states can vary between individuals. Some people do not have a large discrepancy between AS and IS. These individuals are presumed to have greater self-esteem compared to those with high *actual-ideal* discrepancies (Strauman, 1989). For example, in researching self-discrepancies as predictors of chronic emotional distress, participants characterized by a large *actual-ideal* discrepancy reported considerable depressive symptoms, but fewer anxiety or paranoid symptoms (Strauman, 1989).

Aims of Current Research

Victor (2011) found in a sample of undergraduate students a significant positive relationship between AS/IS discrepancy and hookup participation across genders, such that undergraduates reporting higher AS/IS discrepancy were more likely to engage in casual sexual behaviors and with more partners. Based on Victor’s (2011) findings and previous research concerning the association between self-discrepancy theory and negative and positive affect with regard to mental health outcomes, the goal of this study was to assess the connection between hooking up and *actual-ideal* (AI) versus *actual-ought* (AO) self-discrepancy, both between and within genders in a sample of college-aged students. It was hypothesized that the interaction between hookup participation and self-discrepancy level (difference between AI and AO) would predict an overall increased negative affect and decreased positive affect.

Method

Participants

Male and female undergraduate students attending a mid-sized private university in the southeastern United States were recruited through an advertisement on the school’s psychology department listserv and through on-campus fliers. The study did not include freshman undergraduate students because the researchers wanted to ensure the hookup experiences reported were not a phenomenon of recently being away from home and/or due to new and recent social pressures associated with coming to college. Since the study was administered in early August, 2008, most freshmen would have only been college students for a few weeks. Junior undergraduates were not recruited for the study because a disproportionate number

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of juniors at the university study abroad during the fall semester (over 50% of the class) and therefore juniors on campus at that time may not have been representative of the typical class. The study sample included 172 students, ages 18-24 ($M = 19.65$, $SD = 1.82$) who volunteered to participate in the study by taking an anonymous online survey. The study included a smaller number of seniors due to the increased recruitment through the undergraduate psychology listserv, which targets students enrolled in introductory psychology courses, many of whom are freshmen and sophomores. Of the total participants, 70% were female ($n = 119$), 34% were juniors ($n = 59$), and 66% were sophomores ($n = 113$). In terms of self-reported race, participants were 65% Caucasian ($n = 112$), 19% Asian American, ($n = 32$), 8% African American ($n = 14$), and 8% "other" racial backgrounds ($n = 14$).

Measures

Demographic variables. All demographic variables were assessed using single items, which allowed participants to choose from a variety of response options. Variables assessed included age, racial background, gender, and year in college.

Higgins' Modified Selves Questionnaire. (MSQ; Higgins, Bond, Klein, & Strauman, 1986). This measure was designed to assess an individual's self-discrepancy scores between AI and AO self attributes. Although Higgins' outlined two standpoints of the self: the individual standpoint and the standpoint of a significant other (e.g. mother, father, close friend), this study only examined the individual's standpoint, as the study goal was to better understand how the AI and AO selves interact with the hookup culture. A well-utilized technique for learning about a participant's most highly accessible self-state attributes (or how participants feel, think, and describe themselves) is to use the free-response listing technique used in the MSQ (Strauman & Higgins, 1988). The measure instructs participants to write ten attributes describing the type of person they actually are, ten attributes describing the type of person they ideally would like to be, and ten attributes describing the type of person they believe they should or ought to be.

Computing self-discrepancy score.

The MSQ discrepancy score was obtained by having the author and a research assistant compare each participant's listed attributes between their three "selves" (i.e. AS, IS, and OS). A Merriam-Webster thesaurus was used to determine whether certain words were synonyms (matches) or antonyms (mismatches) between the AS attributes and the IS and OS attributes. Matches or mismatches were determined if the word in the *ideal* or *ought* category was listed in the thesaurus as a synonym or antonym to the word in the *actual* category. Synonyms received a -1 while antonyms received a +2. First, the AS total score was determined by identifying any synonyms or antonyms in the list of 10 words. If a synonym or antonym was found, the first word was kept, but the antonym or synonym of the word was crossed out. Therefore, a participant could have an AS total score of 1 to 10, depending on how many synonyms or antonyms were determined. The same process was completed for the IS and OS lists to obtain a total score for each list. Next, the words from the AS list were compared to the words from the IS list. Then the words from the OS list were compared with the remaining words from the AS/IS list. For instance, if a participant wrote "lazy" as an AS attribute and then

wrote "diligent" as an IS attribute, the participant would be given a score of +2. However, if a participant wrote "hardworking" in the AS/OS list and listed "diligent" in the OS list, he/she would receive a -1 score. Each "match" or "mismatch" was given a score and then all the points were tallied at the end to produce an AS/IS and AS/OS discrepancy score. If a word was found in the AS to be neither a synonym nor an antonym, the word received no points and the coder continued to the next word.

Degree of mismatch, like match/mismatch codes, was determined by the author and a research assistant. Participants received points based on the "degree" of match or mismatch for each word they listed (using a 1-5 point Likert scale where 1 = *slightly describes an attribute I possess* and 5 = *extremely describes an attribute I possess*). For example, if a word in the AS list was synonymous with an IS attribute, but differed in extent by more than one point (e.g. the participant gave the AS word a 1 score, while the IS word was given a 3 score), it would be scored as a mismatch of degree, giving the participant a +1 score. If the two words were not mismatched by at least 2 points, no points were awarded. Each AS/OS and AS/IS discrepancy score was then calculated by summing the weights for all matches and mismatches for each pair of self-states (Scott & O'Hara, 1993; Strauman & Higgins, 1988). Therefore, each individual received two final discrepancy scores: an AS/IS discrepancy score and an AS/OS discrepancy score. The possible range of scores for each discrepancy was -10 to +20. The more negative a final score, the "healthier" the person was rated. The more positive a final score, the more "discrepant" a person was, with possible implications for increased anxiety and depression levels.

For this study, the range for the AS/IS discrepancy was -8 to +8 and the AS/OS discrepancy scores ranged from -8 to +6. Based on these scores, participants were placed into three levels of self-discrepancy: low (≤ -4), medium (≥ -3 and ≤ 0), and high (≥ 1). These levels of self-discrepancy reflect similar "cut-offs" from previous studies using the MSQ. Interrater reliability coefficients for the Selves Questionnaire have ranged from .80 (Higgins, Bond, Klein, & Strauman, 1986) to .87 (Strauman & Higgins, 1988). Interrater reliability for this study was .87. For this study, both the author of the article and an undergraduate volunteer followed the process described above for the 172 participants. The final AS/IS and AS/OS discrepancy scores for each participant were compared and when a discrepancy was found between raters a third undergraduate volunteer determined which rater's score was most accurate and would be used in the final analyses.

Hookup questionnaire. This measure, designed for the purpose of the study, assessed hookup participation, degree of sexual engagement, level of involvement, alcohol/drug use before and during hookups, and number of previous committed relationships. The questionnaire assessed alcohol and drug use before and during hookups to determine to what extent alcohol may serve to increase self-discrepancies, in so much that if a person was drunk he or she may feel that their behavior was not reflective of their AS. The questionnaire assessed participants' opinions concerning what constitutes a hookup, whether or not the participant engages in hookups, and the participant's frequency of hooking up and extent of sexual involvement in an individual's sexual history. An example of a question from this section is the

following: *Please use the following scale to show the “furthest” you have been with someone (you were not in romantic relationship with), scale response 1-5, where 1 = kissing and 5 = vaginal/anal sex.*

Affective reactions to and social consequences of hooking up. Since there is currently no standardized measure to obtain mental health outcome effects of hookup participation, we asked 50 undergraduate students at a private university in the United States to list the 10 most common affective adjectives they felt after engaging in a hookup. We then selected the six adjectives most commonly reported, which included *guilt, shame, regret, distress, confidence, and isolated*. The adjective *safe* was included as a seventh variable because many undergraduates indicated feeling *pressured* or *coerced* after engaging in a hookup. Therefore, the authors included the word *safe* to attempt to understand how social pressure or coercion may have been involved in a hookup encounter. Since only the top six adjectives most commonly reported from the piloting sample were used, the author realizes that there is a disproportionate number of negative versus positive adjective choices for participants, possibly affecting participant responses. Future studies might include a more balanced affective word list to compare response rates.

After obtaining seven affective states, the author conducted exploratory factor analysis using principle axis factoring with oblique rotation. This analysis yielded two factors with eigenvalues greater than 1.0 ($\lambda = 3.56$, 50.99% variance explained, and $\lambda = 1.16$, 16.55% variance explained) cumulatively accounting for 67.44% of the variance (see Table 1). The two factors were described as positive affect and negative affect. Positive affect included the words *confident* and *safe*. Negative affect included the adjectives *guilt, shame, regret, distress, and isolated*. The coefficient alphas for positive affect and negative affect were .69 and .84, respectively.

For the online survey, participants indicated the extent to which they experienced seven emotions (*distress, regret, guilt, shame, isolated, safe, and confidence*) after engaging in sexual behavior, using a Likert scale from 1-5, where 1 = *not at all* and 5 = *all the time*. The author created this measure to assess directly

the relationship between emotions and sexual behavior.

Procedure

Individuals wishing to participate in the study were given a web address to enter an anonymous online survey. Eligible participants (female and male sophomore and senior undergraduates) could either earn a one-hour class credit by accessing the survey through the psychology subject pool website or could access the survey from website information provided on campus fliers. At the end of the survey, 117 students were entered into a drawing for six \$50 cash prizes and 55 students were given one hour of credit for an introductory psychology course. The university’s institutional review board approved all research procedures.

Results

Descriptive Statistics

Hookup participation. This study surveyed 172 sophomore ($n = 113$) and senior ($n = 59$) undergraduates. Each participant reported his or her own definition of a hookup and therefore their personal hookup experiences, or lack thereof, were dependent on their predefined concept of the term. The data analysis used subjects’ yes/no responses to determine hookup participation, regardless of the sexual level the subject believed constituted a hookup. The average number of hookup partners was 4.85 and a mode of two partners for all individuals who stated they took part in at least one hookup. When defining a hookup, 12% ($n = 21$) of students reported kissing was the minimal level of required involvement, while 65% ($n = 112$) reported “making out” as the minimal level. Thirteen percent ($n = 23$) of the students reported petting, 9% ($n = 15$) oral sex, and .6% ($n = 1$) vaginal/anal sex as the minimal level of casual sexual engagement to constitute a hookup. “Making out” is a colloquial American expression that is synonymous with French kissing, defined as open-mouth kissing that involves both partner’s tongues (Weber, 2002). “Petting” is a colloquial American expression that often involves engaging in amorous embracing, caressing, and kissing, usually involving stimulation of the breast or genital areas (Petting, Merriam-Webster Online Dictionary, 2010). More than half the participants ($n =$

Table 1

Rotated (Oblimin) Factor Loading for 7 Items from the Hookup Questionnaire (N = 168)

Item	Factor Loading	
	Negative Affect	Positive Affect
Distress	.75	-.34
Confident	-.28	.90
Regret	.89	-.26
Guilt	.90	-.30
Shame	.87	-.36
Safe	-.41	.84
Isolated	.49	-.34
<i>Coefficient Alpha</i>	.84	.69

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Table 2
Participant Characteristics

<i>Factor</i>	<i>n</i>	<i>%</i>	<i>SD</i>	<i>M</i>	<i>Possible range</i>
Hookup Participation (N = 172)					
YES	98	57%			
Typical level of involvement	171		.99	3.95	1-5
Furthest level of involvement	170		1.24	4.59	1-5
Number of sexual partners	109		8.67	6.69	0-50
Alcohol consumption frequency	128				1-5
YES	81	63%	.99	3.47	2-5
NO	47	37%			
Blackout frequency	81		.76	1.42	2-5
Drug use frequency	130		.76	1.29	1-5
NO	74	43%			

Notes. Possible range is based on a likert scale from 1 to 5. For typical and furthest level of involvement, 1 = *kissing* and 5 = *vaginal/anal intercourse*. For alcohol consumption frequency, blackout frequency, and drug use frequency, 1 = *never* and 5 = *all the time/constantly*. For the category “blackout frequency,” only participants who indicated that they have used alcohol at least once before or during a hookup were included.

98, 57%) participated in the hookup culture (See Table 2). Using these definitions, typical level of intimacy was categorized into three groups based on level of sexual involvement (high intimacy, or engagement in oral and/or vaginal sex; medium intimacy, or petting; and low intimacy, or kissing and/or “making out”). Of those participating in hookups, 48% reported typically making out during a hookup and 38% reported having anal or vaginal sex at least once during a hookup (see Table 1 for descriptive statistics of the entire sample). Sixty three percent ($n = 81$) of participants reported alcohol use at least once during or before a hookup.

Preliminary Analyses

Table 3 displays zero-order correlations among the study variables. Negative affect was positively related to typical and furthest level of intimacy during hookups (.27 and .20, respectively, $p < .01$) and negatively related to engagement in hookups (yes/no) and AS/IS discrepancy ($-.17$, $p < .05$).

Due to expected mean differences between men and women, independent sample t -tests were conducted to assess whether any gender differences reached statistical significance ($p < .05$). Group differences were examined on the following variables: AS/OS discrepancy score, AS/IS discrepancy score, hookup participation (yes/no), definition of a hookup, typical level of involvement in a hookup, furthest level of involvement in a hookup, number of hookup partners while at college, negative affect, and positive affect. Gender differences were observed for furthest level of involvement in a hookup, $t(171) = -2.13$, $p < .05$, with males reporting a greater level of sexual involvement in hookups ($M = 4.92$) than females ($M = 4.45$) (level of involvement scale is from 1-5, with 1 = *kissing* and 5 = *vaginal/anal sex*).

Regression Analyses

Hierarchical regression analyses were conducted separately for each gender to ascertain whether the relationship between type

and degree of self-discrepancy and negative and positive affect were different within groups. To control for its variance, hookup participation (yes/no), a well-established predictor, was entered as Step 1 in the regression analysis. Type of discrepancy (either AS/OS or AS/IS) was entered as Step 2 and hookup participation x self-discrepancy entered in Step 1 (either AS/OS or AS/IS) was entered as Step 3. If the interaction significantly ($p < .05$) predicted variance in the dependent variable at the third step, the interaction was examined to determine the nature (i.e. direction and magnitude) of the self-discrepancy differences. This analysis was conducted for both negative and positive affect, as well as for AS/IS and AS/OS discrepancy (see Table 4).

Hookup participation significantly accounted for variance in predicting negative affect above and beyond AI and AO discrepancy (see Table 4). AI discrepancy, $\beta = -.21$, $p < .01$, and AO discrepancy, $\beta = -.18$, $p < .01$, also significantly account for variance in predicting positive affect after hookup participation. No interaction effect (between discrepancy and hookup participation) was observed.

As shown in Tables 5 and 6, the relation between hookup participation and self-discrepancy score significantly differed for men and women. Within the male regression model, hookup participation, $\beta = .30$, $p < .01$, and AO discrepancy, $\beta = -.30$, $p < .01$, had predictive utility for negative affect. In addition, the interaction between hookup participation and AI discrepancy was positively associated with reported positive affect after engaging in hookups, $\beta = .63$, $p < .01$. In other words, males who had high AI discrepancy and engaged in hookups reported increased positive affect.

Within the female regression model, hookup participation, $\beta = .45$, $p < .001$, and AI discrepancy, $\beta = .23$, $p < .001$, were significantly positively associated with negative affect and significantly negatively associated with positive affect, $\beta = -.28$, $p < .001$; $\beta = -.24$, $p < .001$; respectively. AO discrepancy was

Table 3
Zero-Order Correlations Among Study Variables

Var.	1	2	3	4	5	6	7	8	9	10
NA	1	-.41**	-.17*	-.16*	-.15	-.06	.27**	.20**	.06	-.11
PA	-.41**	1	.41**	-.01	-.04	.15	-.42**	-.28**	-.12	.11
HU	-.17*	.41**	1	-.21**	-.12	.20*	-.70**	-.48**	-.04	.06
AI	-.16*	-.01	-.21**	1	.56**	.11	.07	.09	.01	-.05
AO	-.15	-.04	-.12	.56**	1	.07	.12	.02	.11	-.12
NP	-.06	.15	.20*	.11	.07	1	-.10	.30**	-.09	.22*
TypI	.27**	-.42**	-.70**	.07	.12	-.10	1	.69**	.13	-.02
FurI	.20**	-.28**	-.48**	.09	.02	.30**	.69**	1	.15	.00
Gen	.06	-.01	-.04	.01	.11	-.09	.13	.15	1	-.01
Age	-.11	.11	.06	-.05	-.12	.22*	-.02	.00	-.01	1

Var = variable name, NA = negative affect, PA = positive affect, HU = hookups, AI = actual-ideal discrepancy, AO = actual-ought discrepancy, NP = number of partners, TypI = typical level of intimacy, FurI = furthest level of intimacy, Gen= gender.
*p < .05. **p < .01.

also significantly negatively associated with positive affect after hookups, $\beta = -.20, p < .01$. In other words, females who had high AO discrepancy and engaged in hookups reported decreased positive affect.

Typical Level of Hookup Intimacy Regression Analysis.

Since hooking up can include one or many sexual behaviors, from kissing to intercourse, the author further assessed how typical level of hookup intimacy predicted positive and negative affect. In addition, the interaction between typical level of hookup intimacy and type of self-discrepancy level were assessed to determine whether predicted negative or positive affect resulted above and beyond the type of sexual involvement in typical hookups alone. To assess typical level of intimacy in hookups, three levels of intimacy were created from the original five behavior choices participants were presented with—low level (kissing and making out), medium level (petting), and high level (oral and vaginal/anal intercourse).

A second set of hierarchical regressions was performed separately for each gender, type of self-discrepancy level, and level of sexual intimacy in typical hookups (high, medium, and low). Result found that medium hookup involvement and the interaction between self-discrepancy and medium hookup involvement were both associated with positive and negative affect outcomes (see Table 7). Interestingly, discrepancy level helped to explain both the strength and direction of the relation between medium level of involvement in hookups and negative and positive affect. Results indicated that women who were high in AO discrepancy and typically engaged in petting during hookups reported significantly greater negative affect compared to women with lower AO discrepancy who typically engaged in kissing, making out, or vaginal sex during hookups, $\beta = .27, p < .05$. One hypothesis for

why negative affect increased with petting behaviors for females is that there may be an internal conflict that females experience when engaging in petting behaviors as they are not engaging in a completely intimate experience (e.g. “going all the way”) with their partner, but they are also engaging in a behavior that is significantly more intimate than kissing and making out. In this way, the females may feel conflicted as to why they went so far physically without actually having oral or vaginal/anal intercourse (Tolman, 2002). Also, males who were high in AI discrepancy and typically engaged in petting during hookups, reported significantly less positive affect, $\beta = -.21, p < .05$ than males who engaged in petting that were not high in AI discrepancy. Thus, it appears for this sample that within genders, type and degree of self-discrepancy significantly predicted both negative and positive affect associated with hookups.

Discussion

Tolman’s (2002) idea of the young woman’s “sexual self,” or the idea that a young woman is faced with an unusual predicament in which she is supposed to be sexy, but not overtly pursuing her own sexual desires may help to explain some of the findings of this study. Currently youth culture in the United States, and especially among college undergraduates, has been described by some researchers, such as Gilmartin (2006), as an environment where women are no longer able to strive for a committed relationship, but instead must adjust to college life, where their acceptance is contingent on learning how to hide hooking-up fears and appear to enjoy these experiences. Males, on the other hand, are faced with a different challenge. They are supposed to be overtly sexual and to desire casual sexual relationships, instead of committed ones (Herold & Mewhinney, 1993). As reported by previous studies,

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Table 4

Summary of Hierarchical Regression Analysis for Variables Predicting Affect (N = 155)

	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>ΔR2</i>	<i>F for ΔR2</i>
Negative Affect					
Step 1: Hookup Participation (HC) ¹	.66	.12	.41***	.17***	31.18
Step 2: AI Discrepancy	.02	.02	.09	.01	1.33
Step 3: HC*AI	.00	.04	.00	.00	.00
Negative Affect					
Step 1: Hookup Participation (HC) ¹	.65	.12	.40***	.16***	29.60
Step 2: AO Discrepancy	.00	.03	.01	.00	.01
Step 3: HC*AO	.03	.05	.05	.00	.23
Positive Affect					
Step 1: Hookup Participation (HC) ¹	-.41	.16	-.20**	.04**	6.80
Step 2: AI Discrepancy	-.07	.03	-.21**	.04**	7.10
Step 3: HC*AI	.07	.05	.16	.01	1.80
Positive Affect					
Step 1: Hookup Participation (HC) ¹	-.41	.16	-.20**	.04**	6.31
Step 2: AO Discrepancy	-.08	.04	-.18**	.03**	5.11
Step 3: HC*AO	.09	.07	.20	.01	1.74

HC = Hookup Participation, AI = Actual-Ideal Self-Discrepancy Score, AO = Actual-Ought Self-Discrepancy Score.

¹Coded as 0 = never hooking up, 1 = hooking up

p* < .05. *p* < .01. ****p* < .001.

hookup participation (Paul et al., 2000; Grello et al., 2003; Grello et al., 2006) and AS/IS and AS/OS discrepancy (McDaniel & Grice, 2008; Scott & O'Hara, 1993; Strauman & Higgins, 1988) have been associated with negative and positive affect in a variety of studies. However, no study has examined the interaction of hookup participation with AS/IS and AS/OS discrepancy levels to predict positive and negative affect. Victor (2011) found a positive relationship between AS/IS discrepancy and hookup participation, but no gender differences were observed.

This study further examined how self-discrepancy and hookup participation interact in predicting positive and negative affect, both between and within genders. As predicted, females were more likely to feel both increased negative affect and decreased positive affect after engaging in hookups. Furthermore, they were more likely to feel decreased positive affect when high in AS/IS or AS/OS discrepancy. For males, no interaction effect between self-discrepancy and hookup participation on negative or positive affect was found. On the contrary, a significant interaction effect between AS/IS discrepancy level and hookup participation on positive affect was found for males.

The implication of this finding suggests that although high AS/IS discrepancy for males may be a risk factor for engaging in hookup participation, high AS/IS discrepancy appears to be a

protective factor for males' self-esteem. For instance, males who participated in the hookup culture and had high AI discrepancy levels, reported increased positive affect. Positive affect in this study was defined by confidence and feelings of safety and security, which likely contribute to one's level of self-esteem (Boldero & Francis, 2000).

Males lower in AS/IS discrepancy appeared to function more like their female peers, both reporting less positive affect and more negative affect. Overall, it appears that male hookup behavior was more strongly associated with feelings of confidence and safety, while female hookup behavior was associated more strongly with feelings of guilt, shame, regret, and distress.

The role of "level of sexual intimacy during hookups" was also examined. Contrary to the author's hypothesis that further level of involvement would predict greater discrepancy, petting was the only level of intimacy statistically significant in predicting negative and positive affect. For females, petting was predictive of increased negative affect for females high in AS/OS discrepancy. For males, petting was predictive of positive affect for males high in AS/IS and AS/OS discrepancy levels. One might hypothesize that petting is less emotionally or physically satisfying than kissing, making out, or vaginal sex for females. Furthermore, gender norms about sexuality may impact the men's

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Table 5

Summary of Hierarchical Regression Analysis for Variables Predicting Affect- Males only (N = 47)

	<i>B</i>	<i>SE B</i>	<i>B</i>	ΔR^2	<i>F for ΔR^2</i>
Negative Affect					
Step 1: Hookup Participation (HC) ¹	.47	.22	.30**	.09**	4.73
Step 2: AI Discrepancy	-.07	.04	-.26	.07	3.58
Step 3: HC*AI	-.03	.09	-.11	.00	.13
Negative Affect					
Step 1: Hookup Participation (HC) ¹	.46	.22	.30**	.09**	4.30
Step 2: AO Discrepancy	-.12	.06	-.30**	.09**	4.81
Step 3: HC*AO	-.01	.12	-.01	.00	.00
Positive Affect					
Step 1: Hookup Participation (HC) ¹					
Step 2: AI Discrepancy	-.04	.27	-.02	.00	.02
Step 3: HC*AI	-.04	.05	-.12	.01	.60
	.22	.11	.63**	.09**	4.50
Positive Affect					
Step 1: Hookup Participation (HC) ¹	-.02	.28	-.01	.00	.00
Step 2: AO Discrepancy	-.70	.07	-.14	.02	.86
Step 3: HC*AO	.14	.16	.24	.02	.80

HC= Hookup Participation, AI= Actual-Ideal Self-Discrepancy Score, AO= Actual-Ought Self-Discrepancy Score.

¹Coded as 0 = never hooking up, 1 = hooking up

*p < .05. **p < .01. ***p < .001.

appraisal of their sexual behaviors, knowing that it is more socially acceptable for men to engage in certain hookup behaviors than it is for women. Future research should continue to investigate how type and/or degree of sexual intimacy during hookups impacts mental health outcomes.

Limitations and Future Directions

The sample was comprised of 172 heterosexual, college-aged young adults, who were limited to one university located in the southeastern region of the United States. Due to restrictions in age, racial background, sexual orientation, and geographic location, there are likely to be limitations when generalizing to young adults at large. Also, the self-discrepancy and gender affect differences may partly be due to the unequal ratio of men to women (69% women). Future studies should address the limitations of this study by including a broader sample of male and female participants who are assessed at various time points. Furthermore, although students were given complete anonymity, selective self-monitoring of positive aspects (Stretcher, DeVellis, Becker, & Rosenstock, 1986) and temporal distance from the experience may impact recall (Downey, Ryan, Roffman, & Kulich, 1995).

Since the university students involved in this particular study attended a college with a small and intimate social network, it is

possible that these school characteristics could have differentially affected the results as these hookups may not hold the same meaning and emotional or physical consequences compared to hookups that occur on larger and more diverse campuses. Future studies should compare smaller schools with a smaller and more intimate hookup culture to a hookup culture in a more diverse and larger university that may provide an opportunity for students to engage in hookups with other students who are truly strangers or people they are not likely to see again on campus after a single physical encounter. In addition, future studies might consider the role of personal beliefs or value systems concerning sexual behavior. For instance, those who view sex as trivial may view their experiences differently from those students who believe sex should only occur between two people in committed and loving relationships.

In addition, the results of this study were based on a cross-sectional correlational design. Future studies should utilize longitudinal research designs to examine long-term effects resulting from engagement or nonengagement in the hookup culture. As per Higgins' (1989) original objective in administering the MSQ, future studies should incorporate the perspective of "others," which would add value and increased understanding of the role that peers and family play in their evaluations of one's

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Table 6

Summary of Hierarchical Regression Analysis for Variables Predicting Affect- Females only (N = 108)

	<i>B</i>	<i>SE B</i>	<i>B</i>	ΔR^2	<i>F</i> for ΔR^2
Negative Affect					
Step 1: Hookup Participation (HC) ¹	.74	.14	.45***	.21***	27.76
Step 2: AI Discrepancy	.06	.02	.23***	.05***	7.51
Step 3: HC*AI	.06	.05	.15	.01	1.41
Negative Affect					
Step 1: Hookup Participation (HC) ¹	.73	.14	.45***	.20***	26.60
Step 2: AO Discrepancy	.04	.03	.11	.01	1.70
Step 3: HC*AO	.08	.06	.18	.02	1.97
Positive Affect					
Step 1: Hookup Participation (HC) ¹	-.58	.19	-.28***	.08***	9.00
Step 2: AI Discrepancy	-.09	.03	-.24***	.06***	7.05
Step 3: HC*AI	.01	.07	.02	.00	.03
Positive Affect					
Step 1: Hookup Participation (HC) ¹	-.57	.19	-.27**	.07**	8.60
Step 2: AO Discrepancy	-.09	.04	-.20**	.04**	4.50
Step 3: HC*AO	.07	.08	.11	.01	.65

HC = Hookup Participation, AI = Actual-Ideal Self-Discrepancy Score, AO = Actual-Ought Self-Discrepancy Score.

¹Coded as 0 = never hooking up, 1 = hooking up

*p < .05. **p < .01. ***p < .001.

actual, ideal, and ought self evaluations. For instance, if peers are able to evaluate a participant's AS, then researchers may be provided with unique perspectives of social pressure. In addition, future studies should use a revised MSQ that would assess specific attributes involving casual sexual decision making. For instance, participants should be asked to indicate their actual, ideal, and ought attributes that relate specifically to casual and committed romantic relationships. In addition, the negative and positive affect measure included more negative terms than positive. This may have influenced the outcome of the statistical analysis reported in this study. Future studies should include an equal number of positive and negative affect descriptors or account for these differences in the data analysis. Furthermore, since alcohol is a known predictor for hookup engagement (Paul & Hayes, 2002), future studies should control for this variable to strengthen the relationship between self-discrepancy theory and hookup encounters.

Conclusions

Several conclusions can be drawn from the results of this study. First, self-discrepancy (both AS/IS and AS/OS) contributed significant variance in the relationship between hookup participation and affect after hookup engagement. This implies self-discrepancy may be involved in young adult sexual decision-making and

behavior distinct from other well-established predictors, such as alcohol use. Second, type of self-discrepancy impacted negative and positive affect differently by gender. Although AS/OS discrepancy was negatively associated with negative affect for males, AS/IS discrepancy was positively associated with negative affect for females. Furthermore, the interaction of high AS/IS discrepancy and hookup engagement was associated with increased positive affect for males. For females, AS/IS and AS/OS discrepancy were negatively associated with positive affect, and neither AS/IS, nor AS/OS, interacted with hookup participation to predict affect.

Lastly, level of sexual involvement predicted affect. Specifically, females with high AS/OS discrepancy who engaged in "medium intimacy" (or petting) during hookups reported increased negative affect, while males with both AS/IS and AS/OS discrepancies who engaged in petting reported less positive affect. These gender differences, previously unreported, are significant and worthy of further study.

Although there may be some limitations to the proposed study, it makes a significant contribution by integrating self-discrepancy theory into the understanding of romantic relationship development for late adolescents. If Higgins' theory can be used to better explain why some adolescents choose to engage in casual sexual behavior and also predict subsequent emotional states after

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Table 7

Between Genders: Regression of Typical Level of Involvement in Hookups, Self-Discrepancy, and Affect

	Men (n = 47)		Women (n = 108)	
	B	p	B	p
Negative Affect				
Step 1: Medium Involvement ¹	.09	.81	.43	.16
Step 2: MedInvolvement x AO	.01	.95	.27*	.02
Negative Affect				
Step 1: Medium Involvement ¹	-.01	.99	.41	.21
Step 2: MedInvolvement x AI	-.05	.64	.23	.08
Positive Affect				
Step 1: Medium Involvement ¹	-.74*	.01	-.27	.42
Step 2: MedInvolvement x AO	-.50***	.00	-.11	.40
Positive Affect				
Step 1: Medium Involvement ¹	-.41	.16	-.36	.30
Step 2: MedInvolvement x AI	-.21*	.03	-.17	.24

Medium Involvement= typically engaging in petting during hookups, AI= Actual-Ideal Self-Discrepancy Score, AO= Actual-Ought Self-Discrepancy Score.

¹Coded as 0 = never hooking up, 1 = hooking up

The unstandardized betas and p values (two-tailed) presented are those from the second step of hierarchical regression analyses with all variables entered in the model.

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

decisions are made, psychologists, as well as parents and school teachers/advisors, could begin to make crucial changes to prevent anxiety and depression symptoms from developing. For instance, programs that cater to certain types of “discrepant” adolescents could be started to teach adolescents other venues for developing romantic relationships that foster healthy and safe sexual behavior. However, just an understanding of why casual decisions are typically made during adolescence would be beneficial for an array of research topics, such as motivation, social relationships, anxiety, depression, and self-concept.

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