



# Associations Between Motives for Casual Sex, Depression, Self-Esteem, and Sexual Victimization

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## Abstract

People's motives for casual sex moderate associations between their sexual behavior and the outcomes they experience. Derived from self-determination theory, autonomous motives for casual sex (e.g., I wanted the fun and enjoyment) and non-autonomous motives (e.g., I wanted to please someone else) correlated in previous research differentially with measures of well-being and incidence of casual sex. In a sample of American college students ( $N = 284$ ), we replicated these prior findings and extended them as follows: autonomous and non-autonomous motives for sex were correlated with two measures of casual sex (i.e., the three behavior questions from the Sociosexual Orientation Inventory; the number of partners with whom participants had penetrative sex but did not wish to become emotionally involved); two measures of well-being (i.e., self-esteem, depression), and a measure of overall sexual victimization (i.e., a combined score from the Sexual Experiences Survey). We found that autonomous motives were more strongly associated with casual sexual behavior than were non-autonomous motives in both sexes. Autonomous motives were positively associated with sexual victimization in women but not in men. Compared to autonomous motives, sex for non-autonomous motives was linked to less self-esteem in both sexes, and with more depression and sexual victimization in women. Sex differences in associations between motives and victimization persisted even when the general effects of participant's sex and casual sex were controlled in hierarchical regressions. Our findings further revealed the importance of agency (or lack thereof) in predicting sexual behavior and psychological health.

**Keywords** Casual sex · Motives · Self-esteem · Depression · Sexual victimization

## Introduction

### Casual Sex and Well-Being

One of the greatest challenges of sex research is the tendency for researchers to be sex negative (Arakawa, Flanders, Hatfield, & Heck, 2013; Fortenberry, 2003; Hatfield, Hutchison, Bensman, Young, & Rapson, 2012). Many researchers focus on undesirable correlates of sex such as social (e.g., community censure, teen pregnancy), psychological (e.g., sexual regret, diminished self-esteem), and epidemiological

(e.g., STIs, physical danger) pathologies (Bersamin et al., 2013; Fielder & Carey, 2010; Furman & Collibee, 2014; Grello, Welsh, & Harper, 2006; Johnson, 2013; Paul & Hayes, 2002; Sandberg-Thoma & Kamp Dush, 2014). This research implies that casual sex has deleterious consequences and people should possibly avoid it altogether. An objective assessment of the evidence, however, suggests a more nuanced view; some people can enjoy casual sex without negative consequences, and this ability may be a function of their motives.

When people's motives involved romance or sexual pleasure, their casual sex experiences were associated with more positive outcomes, whereas people reported more adverse psychological effects when motives involved desire for relational intimacy, self-affirmation, or partner approval (Owen, Quirk, & Fincham, 2014). Similarly, participants reported lower self-esteem, higher depression and anxiety, and more physical symptoms when they engaged in casual sex for non-autonomous motives (e.g., they wanted to please someone else, gain a favor, feel better about themselves). In contrast,

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no significant associations appeared between well-being and autonomous motives for casual sex, for example they wanted the fun and enjoyment, to explore their sexuality, to have an important experience (Vrangalova, 2015). Subsequent researchers classified participants with autonomous motives as “sexually uninhibited” and those with neither strong autonomous nor non-autonomous motives as “sexually uninspired” (Uecker, Pearce, & Andercheck, 2015). Women were nearly three times more likely to be uninspired than uninhibited, and uninspired women had fewer sex partners and were less likely to report sexual assault and feeling pressured to have sex; they also had higher self-esteem. In contrast, those classed as uninhibited tended to be men from upper-class backgrounds who had more sex partners and reported fewer sexual regrets. In the current study, we replicated previous research (Uecker et al., 2015; Vrangalova, 2015) from positive psychology to explore associations between motives, incidence of casual sex, and well-being. We extended this work with a more systematic examination of sexual motives and victimization than featured in prior studies. We argue that a more complete understanding of human sexuality requires knowledge of motives because motives may moderate associations between behaviors and outcomes.

Casual sex is an increasingly diverse phenomenon (Jonason & Balzarini, 2016; Schmitt & Jonason, 2015). People may engage in one-night stands, hookups, friends-with-benefits relationships, booty-call relationships (Garcia, Reiber, Massey, & Merriwether, 2012; Jonason, 2013; Jonason, Li, & Cason, 2009), or consensual nonmonogamy (e.g., swinging, polyamory; Jenks, 1998). Sometimes these “casual” (i.e., sex outside the context of monogamous relationships) encounters develop into relationships of a committed/monogamous nature (Garcia & Fisher, 2015), but interest in them is likely a function of people’s sociosexuality, or willingness to engage in and attitudes about casual sex. Individual differences in sociosexuality may appear in attitudes, behaviors, and desires (Penke & Asendorpf, 2008), which relate to well-being and victimization in men and women differently. For example, penetrative hookups were associated in women, but not men, with depressive symptoms and other indices of psychological distress (Fielder & Carey, 2010; Grello et al., 2006). Similarly, only sociosexual behaviors (e.g., number of one-night stands) and not attitudes (e.g., sex without love is OK) were associated with sexual victimization in women (Townsend, Wasserman, & Rosenthal, 2015). Apparently, the nexus of associations between casual sex (however measured) and well-being and victimization may be localized to behaviors, and it also appears that casual sex is multidimensional. Consequently, we included two measures of casual sex: the three behavior questions from the Sociosexual Orientation Inventory (SOI) and a single item that captured the number of partners with whom the participant had regular casual sexual relations.

Autonomous and non-autonomous motives reflect differences in internal/external locus of control; people with autonomous motives engage in behaviors for personal reasons, whereas those with non-autonomous motives are guided by external forces such as rewards or avoiding punishments (Ryan & Connell, 1989; Ryan & Deci, 2008; Vrangalova, 2015). Autonomous reasons for behaviors correlate with greater psychological health and more effective performance, whereas the opposite is true of non-autonomous motives (Ryan & Deci, 2008). In reference to sex, non-autonomous motives reflect personal insecurities and depend upon others’ behavior/reactions instead of one’s own self-determination. Arguably, individuals who endorse these motives would be more likely to exhibit insecurity and low self-esteem regardless of their sexual behavior. Accordingly, we correlated individual differences in motives for casual sex with depression and self-esteem, thereby replicating prior work (Owen et al., 2014; Uecker et al., 2015; Vrangalova, 2015).

Compared to men, women have a higher risk of sexual victimization during casual sexual encounters (Abbey, Zawacki, Buck, Clinton, & McAuslan, 2004; Adams-Curtis & Forbes, 2004; Armstrong, Hamilton, & Sweeney, 2006). Compared to men, women who have sex for non-autonomous motives may find themselves at greater risk of sexual victimization because of their less agentic sexual motives. This may occur because women who lack sexual agency do not stand up for themselves and/or because in their search for approval and affirmation (Owen et al., 2014), they hook up with high-risk partners in environments conducive to sexual coercion (Adams-Curtis & Forbes, 2004; Armstrong et al., 2006). To clarify the role of motives, we examined associations between sexual victimization and autonomous and non-autonomous motives for sex. We analyzed associations in each sex because of the sex differences in regrets after casual sex (Eshbaugh & Gute, 2008; Galperin et al., 2013; Townsend & Wasserman, 2011), willingness to engage in casual sex (Penke & Asendorpf, 2008; Schmitt, 2005), and potential for sexual victimization (Abbey et al., 2004; Adams-Curtis & Forbes, 2004; Armstrong et al., 2006). Finally, it is well-known that participant’s sex and casual sex moderate incidence of victimization. Consequently, to clarify the role of motives in experience of victimization, we performed hierarchical regressions that first controlled for the main effects of participant’s sex and casual sex.

## The Current Study

The current study used a unique combination of measures to analyze associations among the following variables: participants’ sex, casual sexual behavior (i.e., sociosexual behavior or regular casual partners), motives for casual sexual behavior, measures of well-being (i.e., depression, self-esteem), and experience of sexual victimization. The current analysis replicates previous research and extends it by including a

more systematic examination of the associations between motives and sexual victimization than offered in previous studies, two measures of casual sexual behavior—one that assessed casual sexual behavior generally (i.e., sociosexual behavior) and one that captured friends-with-benefit types of relationships, and hierarchical regressions that controlled the main effects of participant's sex and casual sex and thus more effectively isolated associations between motives, well-being, and sexual victimization.

## Method

### Participants and Procedure

Participants were 284 (79 men, 205 women), American, undergraduate psychology students, aged 17–40 years of age ( $M = 19.97$ ,  $SD = 2.37$ ), from private northeastern and southwestern universities. Participants who identified as non-heterosexual were dropped from analysis (4 men, 24 women) because this subsample was too small to justify statistical analysis and because one of our foci was female sexual victimization which occurs predominantly in heterosexual encounters. Approximately, 42% of the participants self-reported their ethnicity as being Latino, 37% Caucasian, 10% African American, 7% Asian, 5% South Asian, and 2% Middle Eastern. The minimum sample size was determined based on power analysis for the average effect size in social and personality psychology ( $r \approx .20$ ; Richard, Bond, & Stokes-Zoota, 2003) and guidelines ( $N \approx 250$ ) set for reducing estimation error in personality psychology (Schönbrodt & Perugini, 2013). A link to complete the survey online was sent to the entire class via an online teaching portal (i.e., Blackboard). Participants were informed about the nature of the study. If they consented via tick box, they first completed a demographics questionnaire and then the measures reported below. After completion, participants received course credit for participating and were thanked for participation. This project was approved by the Institutional Review Boards at the University of Redlands and Syracuse University.

### Measures

#### Motives for Sex

We used the autonomous and non-autonomous sexual motives scales from Uecker et al. (2015) and Vrangalova (2015). Participants were asked to indicate how frequently each reason led them to hook up (1 = none of my hookups; 7 = all of my hookups). Autonomous motives were: they wanted the fun and enjoyment, to explore their sexuality, to have an important experience. Non-autonomous motives included: they wanted to please someone else, gain a favor, feel better

about themselves, or were tricked or coerced into it. Items were averaged to create indices of individual differences in autonomous (Cronbach's  $\alpha = .82$ ;  $M = 3.63$ ,  $SD = 1.75$ ) and non-autonomous ( $\alpha = .75$ ;  $M = 2.10$ ,  $SD = 1.06$ ) motives for sex.

#### Casual Sex Behavior

We measured casual sex behavior in two ways. First, we used the three behavioral items from the revised SOI (Penke & Asendorpf, 2008). Participants reported, for example, how many sex partners they had within the last 12 months. Items were summed to create an index of sociosexual behaviors ( $\alpha = .88$ ;  $M = 7.72$ ,  $SD = 5.19$ ). Prior studies had indicated that penetrative hookups predicted women's depressive symptoms and other indices of psychological distress, whereas for men this association was nonsignificant or reversed (Fielder & Carey, 2010; Grello et al., 2006). Because our focus was on sexual victimization and measures of well-being, we decided to concentrate on penetrative sex acts. Consequently, in the current questionnaire, "having sex" and "sex partner" were defined as: "sexual intercourse, including oral sex." Second, we used two questions to capture friends-with-benefit relationships (without using that terminology to avoid social desirability effects). We asked participants: (1) have you ever continued to have sex on a regular basis with someone you did not want to be emotionally involved with ( $n = 293$ , 36%), and (2) if so, how many partners have you done this with (Townsend et al., 2015). If they said "no" to the first item, their numbers of regular casual partners were set to zero.

#### Psychological Well-Being

We measured two types of well-being. First, we measured depression with Beck's Depression Inventory (Beck, Steer, & Carbin, 1988) which is composed of 21 items (e.g., worthlessness) where participants rated the intensity of various symptoms (1 = I do not feel I am worthless; 3 = I feel utterly worthless). Second, we measured self-esteem with the Rosenberg Self-Esteem Scale (Rosenberg, 1965) which is composed of 10 items (e.g., I certainly feel useless at times). Participants reported their agreement (1 = strongly agree; 4 = strongly disagree). Items for the scales were summed to create indexes of depression ( $\alpha = .90$ ;  $M = 9.65$ ,  $SD = 8.19$ ) and self-esteem ( $\alpha = .91$ ;  $M = 31.84$ ,  $SD = 5.59$ ).

#### Experience of Sexual Victimization

We measured rates of sexual victimization with the updated Sexual Experiences Survey (Koss et al., 2007, 2008). We asked participants to report the frequency (0, 1, 2, or 3 + [coded as 3]) they experienced five tactics of sexual

coercion (i.e., telling lies [scored as 1]; showing displeasure [scored as 2]; taking advantage of incapacitation [scored as 3]; threatening force [scored as 4]; and using force [scored as 5]) in the last year (as opposed to age 14) in relation to experiencing unwelcome sexual contact and oral, anal, and vaginal penetration by a penis or object (Koss et al., 2007; Townsend et al., 2015). Each of the resulting five subscale scores (i.e., unwelcomed sexual contact, attempted coercion, coercion, attempted rape, and rape) was the sum of the five weighted tactics, with each tactic multiplied by its reported frequency prior to summing across tactics (Koss et al., 2008). For each participant, an overall victimization index was obtained by calculating the average of the five individual victimization subscales ( $\alpha = .76$ ;  $M = 0.66$ ,  $SD = 1.64$ ).<sup>1</sup>

## Results

Compared to women, men tended to have more sex partners when measured with sociosexual behavior ( $t(281) = 2.75$ ,  $p < .01$ , Cohen's  $d = 0.41$ ) and number of regular casual sex partners ( $t(281) = 3.36$ ,  $p < .01$ ,  $d = 0.54$ ), consistent with previous research (Penke & Asendorpf, 2008; Schmitt, 2005). Table 1 contains the correlations between motives and our focal variables overall and in men and women. Autonomous motives were correlated with both measures of casual sex more strongly than non-autonomous motives (i.e., Steiger's  $z$  test) with equal correlations in men and women (i.e., Fisher's  $z$  test). Non-autonomous motives for casual sex correlated negatively with self-esteem in both sexes, and with depression in women. Compared to autonomous motives, non-autonomous motives were stronger predictors of depression and low self-esteem in women. Autonomous motives correlated significantly with depression in men but not in women. In the case of victimization, the correlations were again larger for non-autonomous motives in both sexes. However, the correlations for men between non-autonomous motives and victimization did not reach significance, although the difference between autonomous and non-autonomous motives was significant in men. The correlations with victimization were stronger in women than men for both types of motives.

We followed this analysis with further tests of the relationships between our two measures of casual sex and measures of well-being and victimization (Table 2). Again, we made between sex (Fisher's  $z$ ) and between motives (Steiger's  $z$ ) comparisons. We found that victimization was linked to both kinds of casual sex in women more than men and a slight effect that suggested casual sex may be a better predictor of depression in men than in women.

**Table 1** Correlations between motives and sexual behavior and psychological health overall and in men ( $n = 79$ ) and women ( $n = 206$ )

|                                       | Autonomous | Non-Autonomous | Steiger's $z$ |
|---------------------------------------|------------|----------------|---------------|
| <i>Sociosexual behavior</i>           |            |                |               |
| Overall                               | .35**      | .17**          | 3.20**        |
| Men                                   | .36**      | .16            | 1.85*         |
| Women                                 | .34**      | .18**          | 2.41**        |
| Fisher's $z$                          | 0.17       | -0.15          |               |
| <i>No. of regular casual partners</i> |            |                |               |
| Overall                               | .30**      | .14*           | 2.81**        |
| Men                                   | .32**      | .15            | 1.56          |
| Women                                 | .27**      | .13            | 2.07*         |
| Fisher's $z$                          | 0.41       | 0.15           |               |
| <i>Sexual victimization</i>           |            |                |               |
| Overall                               | .16**      | .37**          | -3.75**       |
| Men                                   | -.16       | .15            | -2.75**       |
| Women                                 | .24**      | .43**          | -2.96**       |
| Fisher's $z$                          | -3.02**    | -2.30*         |               |
| <i>Depression</i>                     |            |                |               |
| Overall                               | .11        | .20**          | -1.55         |
| Men                                   | .22*       | .21            | 0.09          |
| Women                                 | .07        | .20**          | -1.90*        |
| Fisher's $z$                          | 1.14       | 0.08           |               |
| <i>Self-esteem</i>                    |            |                |               |
| Overall                               | .04        | -.18**         | 3.76**        |
| Men                                   | -.08       | -.24*          | 1.44          |
| Women                                 | -.03       | -.17*          | 2.03*         |
| Fisher's $z$                          | -0.37      | -0.54          |               |

Steiger's  $z$  (<https://www.psychometrica.de/correlation.html>) compares dependent correlations; Fisher's  $z$  (<http://quantpsy.org/corrtest/corrtest.htm>) compares independent correlations; Autonomous motives were correlated overall (.51) and in men (.51) and women (.51), Fisher's  $z = 0.00$  \* $p < .05$ ; \*\* $p < .01$

Previous research indicated that participant's sex and casual sexual behavior were associated with sexual victimization (Abbey et al., 2004; Armstrong et al., 2006; Townsend et al., 2015). To control for these effects, predictors were entered in regression models in the following sequence: Model 1: participant's sex; Model 2: participant's sex and then sociosexual behavior (or regular casual partners); Model 3: participant's sex, sociosexual behavior (or regular casual partners), and motives (autonomous or non-autonomous); Model 4: participant's sex, sociosexual behavior (or regular casual partners), motives (autonomous or non-autonomous), and participant's sex  $\times$  sociosexual behavior (or regular casual partners); Model 5: participant's sex, sociosexual behavior (or regular casual partners), motives (autonomous or non-autonomous), participant's sex  $\times$  sociosexual behavior (or regular casual partners), and participant's sex  $\times$  motives. The other two-way interaction term (motives  $\times$  sociosexual behavior [or

<sup>1</sup> Subscale analyses/data can be obtained by contacting the first author.

**Table 2** Correlations between sexual behavior and psychological health overall and in men ( $n = 79$ ) and women ( $n = 206$ )

|                             | Sociosexual behavior | No. of regular casual partners | Steiger's $z$ |
|-----------------------------|----------------------|--------------------------------|---------------|
| <i>Sexual victimization</i> |                      |                                |               |
| Overall                     | .05                  | .05                            | 0.00          |
| Men                         | -.10                 | -.14                           | 0.51          |
| Women                       | .16*                 | .14*                           | 0.42          |
| Fisher's $z$                | -1.95*               | -2.10*                         |               |
| <i>Depression</i>           |                      |                                |               |
| Overall                     | -.03                 | .00                            | -0.73         |
| Men                         | .16                  | .11                            | -0.64         |
| Women                       | -.07                 | -.08                           | 0.21          |
| Fisher's $z$                | 1.72*                | 1.42                           |               |
| <i>Self-esteem</i>          |                      |                                |               |
| Overall                     | .09                  | .03                            | 1.46          |
| Men                         | -.06                 | -.03                           | -0.38         |
| Women                       | .06                  | .12                            | -1.24         |
| Fisher's $z$                | -0.89                | -1.12                          |               |

Steiger's  $z$  (<https://www.psychometrica.de/correlation.html>) compares dependent correlations; Fisher's  $z$  (<http://quantpsy.org/corrttest/corrttest.htm>) compares independent correlations; sociosexual behaviors and number of regular casual partners are correlated overall (.76) and in men (.69) and women (.83), Fisher's  $z = -2.53, p < .05$

\* $p < .05$ ; \*\* $p < .01$

regular casual partners]) and the three-way interaction term (participant's sex  $\times$  sociosexual behavior [or regular casual partners]  $\times$  motives) were not significant and are not depicted. The dependent variable was our overall measure of sexual victimization. This procedure also controls for sex differences in participants' mean responses. These results appear in Table 3.

For autonomous motives, the participant's sex  $\times$  motives interactions were significant (Model 5 in Table 3) for both sociosexual behavior and regular casual partners (both  $p$ 's  $< .05$ ). For non-autonomous motives, the participant's sex  $\times$  motives interactions were also significant for sociosexual behavior and regular casual partners (both  $p$ 's  $< .01$ ). These sex-specific effects were consistent with the sex differences in correlations in Table 1. We therefore broke down the regression models by participant's sex. These results appear in Table 4. With the general effects of participant's sex and casual sexual behavior controlled, both autonomous and non-autonomous motives predicted sexual victimization in women but not in men. The associations for non-autonomous motives appear to be stronger than for autonomous motives, which is consistent with the results in Table 1.

**Table 3** Standardized regression estimates of sexual victimization on gender, casual sex behavior, and motives

| Model                    | Autonomous motives   |                                 |                                |                                 | Non-autonomous motives |                                 |                                |                                 |
|--------------------------|----------------------|---------------------------------|--------------------------------|---------------------------------|------------------------|---------------------------------|--------------------------------|---------------------------------|
|                          | Sociosexual behavior |                                 | No. of regular casual partners |                                 | Sociosexual behavior   |                                 | No. of regular casual partners |                                 |
|                          | Betas                | R <sup>2</sup> /ΔR <sup>2</sup> | Betas                          | R <sup>2</sup> /ΔR <sup>2</sup> | Betas                  | R <sup>2</sup> /ΔR <sup>2</sup> | Betas                          | R <sup>2</sup> /ΔR <sup>2</sup> |
| 1. Gender                | .19**                | .03**                           | .19**                          | .30**                           | .19**                  | .03**                           | .19**                          | .03**                           |
| 2. Gender                | .20**                | .04**                           | .20**                          | .04**                           | .20**                  | .04**                           | .20**                          | .04**                           |
| Behavior                 | .08                  | .01                             | .09                            | .01                             | .08                    | .01                             | .09                            | .01                             |
| 3. Gender                | .20**                | .06**                           | .21**                          | .07**                           | .20**                  | .18**                           | .21**                          | .18**                           |
| Behavior                 | .02                  | .02**                           | .04                            | .02**                           | .02                    | .14**                           | .04                            | .14**                           |
| Motives                  | .17**                |                                 | .16**                          |                                 | .38***                 |                                 | .37**                          |                                 |
| 4. Gender                | .05                  | .08**                           | .04                            | .08**                           | .06                    | .19**                           | .05                            | .19**                           |
| Behavior                 | -.10                 | .01 <sup>+</sup>                | -.07                           | .01 <sup>+</sup>                | -.10                   | .01 <sup>+</sup>                | -.08                           | .01*                            |
| Motives                  | .16**                |                                 | .16**                          |                                 | .37**                  |                                 | .37**                          |                                 |
| Gender $\times$ Behavior | .21 <sup>+</sup>     |                                 | .21 <sup>+</sup>               |                                 | .19 <sup>+</sup>       |                                 | .21*                           |                                 |
| 5. Gender                | -.17                 | .09**                           | -.19                           | .10**                           | .24 <sup>+</sup>       | .21**                           | -.26 <sup>+</sup>              | .22**                           |
| Behavior                 | -.04                 | .02*                            | -.02                           | .02*                            | -.07                   | .02**                           | -.04                           | .02**                           |
| Motives                  | -.05                 |                                 | -.06                           |                                 | .09                    |                                 | .08                            |                                 |
| Gender $\times$ Behavior | .11                  |                                 | .14                            |                                 | .14                    |                                 | .17                            |                                 |
| Gender $\times$ Motives  | .37*                 |                                 | .38*                           |                                 | .46**                  |                                 | .47**                          |                                 |

Behavior refers to sociosexual behavior or number of regular casual partners (see Measures)

\* $p < .05$ ; \*\* $p < .01$



**Table 4** Standardized regression estimates of sexual victimization on casual sex behavior and motives, by gender

| Model |          | Autonomous motives   |                                 |                                |                                 | Non-autonomous motives |                                 |                                |                                 |
|-------|----------|----------------------|---------------------------------|--------------------------------|---------------------------------|------------------------|---------------------------------|--------------------------------|---------------------------------|
|       |          | Sociosexual behavior |                                 | No. of regular casual partners |                                 | Sociosexual behavior   |                                 | No. of regular casual partners |                                 |
|       |          | Betas                | R <sup>2</sup> /ΔR <sup>2</sup> | Betas                          | R <sup>2</sup> /ΔR <sup>2</sup> | Betas                  | R <sup>2</sup> /ΔR <sup>2</sup> | Betas                          | R <sup>2</sup> /ΔR <sup>2</sup> |
| Women | Behavior | .13                  | .18                             | .15*                           | .02*                            | .13                    | .18                             | .15*                           | .02*                            |
|       | Behavior | .06                  | .06**                           | .09                            | .07**                           | .06                    | .19**                           | .10                            | .20**                           |
|       | Motives  | .22**                | .04**                           | .21**                          | .04**                           | .42**                  | .17**                           | .42**                          | .17**                           |
| Men   | Behavior | -.15                 | .02                             | -.10                           | .01                             | -.15                   | .02                             | -.10                           | .01                             |
|       | Behavior | -.10                 | .04                             | -.06                           | .03                             | -.18                   | .05                             | -.13                           | .04                             |
|       | Motives  | -.13                 | .01                             | -.14                           | .02                             | .18                    | .03                             | .17                            | .03                             |

Behavior refers to sociosexual behavior or number of regular casual partners (see Measures)

\* $p < .05$ ; \*\* $p < .01$

## Discussion

Using a positive psychology model of sexual behavior, we replicated and extended work on the role of sexual agency in the form of autonomous and non-autonomous motives for engaging in sex (Owen et al., 2014; Uecker et al., 2015; Vrangalova, 2015). We focused on the relationships between these two types of motives and two measures of psychological health, an overall measure of sexual victimization, and two measures of casual sex (Table 1). We also attempted to examine how psychological health and sexual victimization were related to two types of casual sex (Table 2).

For women, associations between non-autonomous motives and negative well-being were significantly stronger than associations between autonomous motives and negative well-being. For men, associations between negative well-being and autonomous and non-autonomous motives were equivalent. This finding suggests that loss of agency in sexual encounters may be more deleterious for women than for men—a discrepancy that could be caused by persistence of differential norms for the sexes (Crawford & Popp, 2003) and/or sex differences in sexual psychology (Buss & Schmitt, 1993).

Both types of motives were linked to sexual victimization in women, but the association for non-autonomous motives was stronger. The reason for this difference arguably lies in the content of the non-autonomous motives—one of which explicitly indicated deceit, unwillingness, coercion and/or lack of sober, explicit consent—which constitute sexual victimization. Neither type of motive was a significant predictor of victimization in men. These sex differences remained significant even when the general effects of participant's sex and casual sexual behavior were controlled.

The fact that both types of motives correlated with victimization in women is consistent with the findings of Uecker et al. (2015). In their study, women who scored low on both autonomous and non-autonomous motives had fewer sex partners and were less likely to report sexual assault and feeling

pressured to have sex. In other words, women who score low on both autonomous and non-autonomous motives seem to be less interested in casual sex and therefore have fewer partners and fewer experiences of victimization. The current findings are consistent with this interpretation.

Autonomous motives correlated with victimization in women but not in men. Autonomous motives correlated with casual sex in both sexes (e.g., sociosexual behavior, Table 1; Uecker et al., 2015; Vrangalova, 2015). Women's casual sex behavior and attitudes (i.e., sociosexuality) correlate with extraversion, lack of constraint, and other measures of social assertiveness and risk taking (Gangestad & Simpson, 1990). Hence, women with autonomous motives and high sociosexuality scores may be more likely to put themselves in risky sexual situations that render them more vulnerable to victimization, and some men exploit this vulnerability (Adams-Curtis & Forbes, 2004; Armstrong et al., 2006).

In men and women, autonomous motives correlated with both sociosexual behavior and the number of regular casual partners. These findings were consistent with previous studies; individuals with autonomous motives are more likely to seek out new sexual experiences (Uecker et al., 2015; Vrangalova, 2015). Compared to two previous studies based on national samples, we found fewer significant correlations between casual sex and negative well-being (Bersamin et al., 2013; Sandberg-Thoma & Kamp Dush, 2014). However, we found non-autonomous motives for casual sex correlated negatively with self-esteem in both sexes, and with depression in women. Interestingly, autonomous motives correlated with depression in men; the correlation with non-autonomous motives was approximately equivalent, that is, the Steiger's  $z$  was not significant. This finding was consistent with two large-sample studies of well-being (Bersamin et al., 2013; Sandberg-Thoma & Kamp Dush, 2014), but not with previous studies of sexual motives (Owen et al., 2014; Uecker et al., 2015; Vrangalova, 2015). An explanation of this discrepancy awaits further research.

Although knowing one's sex partners may offer advantages such as relational intimacy and protection, it apparently has disadvantages as well. Most college-aged women who have been sexually assaulted knew their assailant well (Abbey et al., 2004; Armstrong et al., 2006). Furthermore, in a 5.5-year longitudinal study, women's casual sexual behavior was associated with poor mental health and this was especially true for casual sex with friends and acquaintances (Furman & Collibee, 2014). We did not find similar associations between casual sex and negative well-being, but their results along with ours point to the following conclusion: casual sex with well-known partners can lead to victimization in women and may also lead to less well-being for women (Furman & Collibee, 2014).

Counselors and staff of intervention programs should also be aware of the differences between autonomous and non-autonomous motives. Men and women with autonomous motives, who are comfortable with their decisions that encounters are casual and ensure that their definitions of casual remain consistent with their partners' definitions, might enjoy casual sex without negative consequences. In comparison, if men or women engage in sexual encounters to feel better about themselves, please their partners, or be more popular, they are more likely to suffer from low self-esteem and depression—and women with these non-autonomous motives experience more sexual victimization. Having casual sex with a “regular partner” may seem to be safer and offer greater intimacy, but women should be made aware that those who engage in such relationships are at risk of depression, psychological distress, and sexual victimization.

## Limitations and Conclusions

Although we replicated and extended important work on the role of motives for sex in people's psychological health and sexual victimization, our study was nevertheless limited. First, although the sample was predominantly Latino, the sample largely consisted of WEIRD college students (i.e., Western, educated, industrialized, rich, and democratic; Henrich, Heine, & Norenzayan, 2010). This qualifies our results only if one believes that the sexual psychology of American college students differs fundamentally from people's psychology in other parts of the world. Second, our results were cross-sectional, so the direction of our relationships is a matter of debate. It could be that depressed people engage in more casual sex. We think this hypothesis is unlikely given that internal states are likely to produce external outcomes; that is, motivations, which are internal systems, will drive individuals to engage in behaviors like casual sex which may entail collateral costs and benefits. In addition, given the sex-specific nature of some of our relationships, our interpretation that casual sex affects outcomes seems reasonable. For example, engaging in casual sex was linked to sexual

victimization in women. Engaging in casual sex arguably puts women, more than men, in danger of sexual victimization rather than being victimized leads to casual sex. Third, our measures were all self-report. It is possible that this created an attenuation of effects based on social desirability effects—especially for estimates of victimization. However, we feel somewhat reassured by the fact that our findings on well-being and victimization were consistent with previous studies—some of which featured larger, more representative samples, and our reliance on online and, therefore, anonymous, methods should minimize self-report biases. Fourth, as noted, casual sex is incredibly varied in the modern world (Jonason & Balzarini, 2016). We only captured two aspects of casual sex which may present a limited window into the outcomes—both positive and negative—associated with casual sex, and we did not capture individual differences in specific kinds of sex or acts associated with sex such as kissing (Jonason, Li, & Richardson, 2010). Finally, our comparisons of men and women might be underpowered because we had only about a third as many men as we did women in our sample. While this is common in sex research using undergraduate participants, it weakens our ability to detect relationships (e.g.,  $r = .16$ ) that might otherwise be significant. Our sample-size considerations were based mostly on the overall effects and any moderation effects should be: (1) viewed with caution and (2) treated as exploratory. Nevertheless, given that our results align with the existing literature (e.g., sexual victimization effects were localized to women), we feel reasonably confident in our findings. Despite these limitations and the need for further study with larger and more heterogeneous samples, we have provided new information about associations between motives and casual sexual behavior, well-being, and victimization.

Our two measures of casual sex and two types of motives predicted sexual victimization in women but not men, and men tended to have more casual sex partners than women did. A large body of the literature explains these sex differences in terms of evolutionary theory (Schmitt, 2005; Thornhill & Thornhill, 1992; Townsend et al., 2015). On the other hand, sociocultural factors may also explain the current findings. Norms of acceptable sexual behavior continue to vary by gender—with greater permissiveness toward sexual behavior for men than women (Herold & Mewhinney, 1993). Because of this continued double standard that rewards young men for having more sexual partners (Crawford & Popp, 2003), it is reasonable to expect a correlation for women between casual sex and negative reactions and well-being—particularly for women with non-autonomous motives (Fielder & Carey, 2010; Owen et al., 2014; Owen & Fincham, 2011). This double standard may also influence participants' regret following a sexual encounter (Eshbaugh & Gute, 2008). Similarly, recent research indicates that fear of stigma continues to mediate gender differences in acceptance of actual casual

sex offers: women fear that they will be perceived more negatively than men for accepting a casual sex offer, and their fear is realistic (Conley, Ziegler, & Moors, 2013).

An analysis of the relative merits of these two perspectives is outside the scope of this paper. In any case, trenchant analyses of the strength and weaknesses of these approaches appear elsewhere (Buss, 1995; Crawford & Popp, 2003; Kenrick & Keefe, 1992; Schmitt, 2005; Wood & Eagly, 2002). We do not believe that these perspectives are mutually exclusive. Rather, they are complementary; they simply represent different levels of analysis: ultimate and proximate. Both are required for a complete explanation of human behavior (Buss, 1995; Goetz, Shackelford, & Camilleri, 2008; Schmitt, 2005).

Much sex research reads more like warnings than balanced scholarship (Arakawa et al., 2013; Hatfield et al., 2012; Fortenberry, 2003). This is one reason why positive psychology, third-force psychology, and humanistic psychology developed in response to the mechanistic behaviorism and the pathology-focused psychodynamic psychology. Positive psychology suggests that people's motives for engaging in sex influence their experiences and reactions. When people engage in sex for sexually agentic and autonomous motives, they experience fewer negative effects on well-being than when they engage in sex for less agentic, non-autonomous motives (Uecker et al., 2015; Vrangalova, 2015). In this study, we attempted to elucidate the interactions of motives with self-esteem, depression, casual sex behaviors, and sexual victimization. We have shown that, compared to autonomous motives, sex for non-autonomous motives was linked to less self-esteem in both sexes, and with more depression and sexual victimization in women. These findings suggest that a more complete understanding of human sexuality requires knowledge of motives because motives serve as the psychological links between behaviors and outcomes.

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