Abstract
Sexual harassment has traditionally been studied as men's harassment of women. This has led to a lack of knowledge about same sex harassment, and women harassing peers. This has also downplayed the inherent sexual nature of sexual harassment acts. While keeping in mind that sexual harassment is undesirable and causes distress, one needs to consider that many acts that are perceived as unwanted may not primarily be motivated by a wish to derogate but rather by an interest in soliciting short-term sex. In the current study we examined both perpetrators as well as victims of harassment, and specified both sex of perpetrator and target (a total of eight sex constellations). We reproduced the previously found association between unrestricted sociosexuality and sexual harassment in a representative sample of 1326 high school students (57% women). In all regression models sociosexuality outcompeted traditional measures such as porn exposure, rape stereotypes and hostile sexism. Based on the original work we divided the harassment acts into two groups of tactics: sexual solicitation and competitor derogation. Men were particularly subject to derogatory tactics from other men, while women were particularly subject to solicitation from opposite sex peers. Sexual harassment may be understood better from a human sexual strategies perspective, including competitor derogation and mate solicitation. As such, sociosexual orientation predicts both same sex derogation and opposite sex solicitation. The current results highlight the importance of considering the sex of both perpetrator and target. This advanced understanding of the inherently sexual nature of sexual harassment needs to inform future prevention studies. Unrestricted sociosexuality predicts sexual harassment in all constellations better than traditional social science models.

Keywords
sexual harassment; solicitation; derogation; sociosexuality; peers; same-sex; opposite-sex; adolescence; sexual strategies; tactics
Dear Editor,

Please receive our final revision of our article Manuscript ID EHB-15-253R1 entitled "Advances in the Understanding of Same Sex and Opposite Sex Sexual Harassment" submitted to Evolution & Human Behavior.

Thank you very much for your close copy edit of the manuscript. We have followed almost all of your recommendations.
1. Introduction

Sexual harassment has traditionally been studied and understood within the social sciences as a phenomenon with men as perpetrators and women as victims (Kennair & Bendixen, 2012). Mainstream social science theories – strongly alluding to feminist perspectives – have explained harassment as driven by male power, paternalism and the motive to dominate women (Begany & Milburn, 2002; Conroy, 2013; Fiske & Glick, 1995). In contrast, scholars working within the evolutionary perspective have suggested an alternative explanation, one located in sex differences in the desire for sex (Buss, 1996; Kennair & Bendixen, 2012; Vandermassen, 2011).

Previously, we examined these two explanations by studying both same-sex and opposite-sex sexual harassment in a community sample of high school students (Kennair & Bendixen, 2012). Consistent with explanations related to differences in the desire for short-term sex, we found that a non-restrictive sociosexual orientation toward uncommitted sex (i.e., one-night stands) predicted being harassed as well as harassing others, and did so better than measures reflecting attitudes condoning forced sex or classical sexism.

When studying unwanted sexual attention between opposite-sex emerging adults, one should not ignore the possibility that the advancing party might be sexually interested. This possibility was underscored by the empirical association between harassment behavior and unrestricted sociosexuality (Kennair & Bendixen, 2012). This conclusion is further supported by the association between sociosexuality and being the target of harassment, given that signals of sexual unrestrictedness can be detected by others (Sakaguchi & Hasegawa, 2006), and that perpetrators will target victims with greater harassability traits (Buss & Duntley, 2008; Sakaguchi & Hasegawa, 2007). Unrestricted sociosexuality is characterized by an openness to
uncommitted sexual relationships reflecting promiscuity and a preference for one-night stands, high acceptance for uncommitted sex, and frequent sexual arousal and activation of sexual fantasies when meeting people of the opposite-sex (Penke & Asendorpf, 2008; Simpson & Gangestad, 1991). In short, those more interested in short-term sex engage in more harassment of those who are similarly more interested in short-term sex than their peers.

Sexual attention is, obviously, not always desired, and such attention will be unwelcome or aversive. While harassment is defined in the literature as subjectively experienced aversive sexual attention from the position of the victim, the perpetrator might not have intended the behavior to be aversive to the victim. Differences between perceived and intended behavior might therefore shed light on harasser’s motives.

We suggested that opposite-sex harassment from the perspective of the perpetrator are primarily intended as signals of sexual interest, and so we suggested calling these acts sexual solicitation. Further, we considered same-sex harassment to be a form of competitor derogation (Kennair & Bendixen, 2012), intended to reduce the perceived mate value of same-sex competitors (Bendixen & Kennair, 2015; Bleske-Rechek & Buss, 2006; Schmitt & Buss, 1996). This view is supported by recent developmental research on sexual harassment proposing different motives for same-sex and opposite-sex behaviors (McMaster, Connolly, Pepler, & Craig, 2002; Pepler et al., 2006; Schnoll, Connolly, Josephson, Pepler, & Simkins-Strong, 2015). From this developmental perspective, sexual harassment in middle school years is considered a sexualized form of bullying. Drawing on evolutionary perspectives, Schnoll et al. (2015) suggested that through derogating same-sex peers, the
perpetrators' status as a desirable partner for mates could be strengthened. In contrast, opposite-sex harassment could reflect a desire to communicate sexual attraction or romantic interest. However, due to adolescents' immature communication skills in opposite-sex interactions, they unintentionally sexually harass their peers in attempts to "draw attention to themselves as potential romantic partners" (Schnoll et al., 2015, p. 187). We concur. Sexual competiveness and dominance are important motives for same-sex harassment. For opposite-sex harassment we do not think the motivation is to attract romantic partners in general, but specifically to solicit short-term sexual encounters (one-night stands) as our prior findings on sociosexuality suggest (Kennair & Bendixen, 2012).

A recent study of Swedish adolescents also showed that having had intercourse as well as one-night stands increased the risk of being subject to sexual harassment (Skoog & Özdemir, 2015). Adolescents' immature communication skills might not in fact be an important factor in opposite-sex sexual harassment. The prevalence of sexual harassment is not lower in samples of high school students compared to students in secondary school despite the latter being more sexually experienced and mature. However, age is obviously a relevant modifier of motives. For the early adolescents, the sexual aspect unsurprisingly seems less relevant (Schnoll et al., 2015) compared to a sexually mature cohort.

There is a lack, though, of explicit and acceptable social scripts for sexual contact and solicitation. Even among older adolescents and adults, norms surrounding acceptable contact and solicitation are ambiguous. Flirtation and seduction includes stealth, covertsness, misdirection or misrepresentation (Bendixen & Kennair, 2015; Schmitt & Buss, 1996), misperception or disregard of sexual signals (Bendixen, 2014; Haselton, 2003; Perilloux & Kurzban, 2014), and probably imperfect insight into
one’s own motives (Wilson, 2002). As a result, miscommunication and unwanted attention are likely.

Heterosexual same-sex harassment also occurs. Sexual strategies theory (Buss, 1998; Buss & Schmitt, 1993; Kennair, Schmitt, Fjeldavli, & Harlem, 2009) suggests that same-sex derogation is a form of social competition for the best possible sexual partners (Bendixen & Kennair, 2015; Bleske-Rechek & Buss, 2006; Schmitt, 2002; Schmitt & Buss, 1996). From an observer's point of view, the efficacy of different derogation tactics varies contingent upon sex and mating context (Bendixen & Kennair, 2015; Schmitt & Buss, 1996). While derogation is less efficient and used less often than self-promotion (Fisher, Cox, & Gordon, 2009; Schmitt, 2002), judgments of derogatory comments for example on physical appearance suggest stronger efficiency when used in short-term relative to long-term mating context (Bendixen & Kennair, 2015; Schmitt & Buss, 1996). These findings mirror the stronger preference for good looks in short-term over long-term mating contexts (Buss & Schmitt, 1993; Gangestad & Scheyd, 2005; Okami & Shackelford, 2001). Hence, this derogatory behavior will be motivated by interest in short-term mating rather than a long-term, commitment and love oriented approach to sex (Bendixen & Kennair, 2015; Schmitt, 2002).

1.1. This Study

By studying same-sex and opposite-sex harassment separately one discovers that although men generally report sexual harassment to the same degree as women, they typically report harassment by other men more than by women (Bendixen & Kennair, 2014; Conroy, 2013; Petersen & Hyde, 2009; Schnoll et al., 2015). This is a pattern also found in studies of aggressive behavior (Archer, 2004) reflecting stronger
competiveness and the use of aggressive means among men, and in a study of sexual
harassment victimization in middle school (Schnoll et al., 2015).

Further, by studying women as perpetrators one discovers that not only do
they sexually harass men, albeit to a lesser degree than men harass women, they also
harass other women (Kennair & Bendixen, 2012). Traditional social science and
feminist perspectives have not focused on competition among women (Fisher, 2014).

Considering all constellations of perpetrators and victims of harassment provides the
possibility to consider whether there are sex specific patterns of sexual harassment
and differences in motivations and perceptions.

Using a highly comparable sample of high school students to the original
study, we expanded on the original study using more refined measures of sexual
harassment that for all acts better distinguish same-sex from opposite-sex harassment
by peers (victimization) and harassment of peers (perpetration). Additionally, we
apply the full three components of sociosexuality (SOI-R, Penke & Asendorpf, 2008),
and more comprehensive and updated measures of Porn Exposure, Rape Stereotypes
(McMahon & Farmer, 2011), and Hostile Sexism toward women and men (Glick &
Fiske, 1996, 1999) to predict same-sex or opposite-sex harassment victimization and
perpetration.

The following hypothesis and predictions are tested:

Hypothesis 1: Sociosexuality will be the best predictor of being sexually harassed by
and harassing peers of same-sex and opposite-sex, and the effect of sociosexuality on
sexual harassment will not be accounted for by other factors such as porn exposure,
rape stereotypes and hostile sexism (Kennair & Bendixen, 2012).
Based on previous work (Kennair & Bendixen, 2012; Schnoll et al., 2015) we wanted to examine if diverse harassment acts may reflect partly different tactics; derogation and sexual solicitation. Grouping sexual harassment acts accordingly could shed light on the underlying motivational processes. In order to do this we examined the diverse acts of sexual harassment (ranging from verbal derogatory comments, comments on looks, displays of sexual objects/pictures, spreading sexual rumors, receiving electronically sexual pictures or sexual requests) with regard to same-sex versus opposite-sex prevalence rates. By grouping acts theoretically, according to content, into sexual solicitation tactics and competitor derogation tactics we predicted:

Prediction 1: Participants would show higher prevalence for same-sex competitor derogation tactics and higher prevalence for opposite-sex solicitation tactics.

Prediction 2: Reporting victimization will be more prevalent than reporting perpetration of derogation or solicitation. Because derogation is intended to be harassing while solicitation is not, greater victim-perpetrator differences are expected to be found for the latter, particularly for opposite-sex encounters.

Prediction 3: Because sociosexuality measures individual differences in the propensity to pursue short-term (casual) sex, we expect this propensity to be more strongly associated with forms of sexual harassment that primarily reflect opposite-sex sexual solicitation tactics on the one hand and same-sex competitor derogation tactics on the other (Kennair & Bendixen, 2012). We predict that associations between sociosexuality and (a) sexual harassment that reflect opposite-sex derogation
would be accounted for by same-sex derogation tactics, and (b) sexual harassment that reflect same-sex solicitation tactics would be accounted for by opposite-sex solicitation tactics.

2. Methods

2.1. Design and Subjects

A cross-sectional study that covered students enrolled in 17 (out of 22) high schools was carried out in Central Norway. In total, 1713 students responded to a web-based questionnaire consisting of 365 questions. Of these, 1658 responded to questions on sexual harassment, and 1523 to questions on sociosexuality. Participants with highly inconsistent, monotonous and extreme responses were excluded from the analyses. The final sample eligible for analyses consisted of 1326 heterosexual students (43% men, 57% women) aged between 16 and 24 (Mean age = 17.8, SD = 1.1, both sexes).¹

2.2. Procedure

In agreement with each of the 17 schools, the 'Health, Sexual Harassment and Experiences Study' was carried out as a survey using a web-based questionnaire. The schools participated on one of three separate occasions: May/June 2013, November/December 2013, or May/June 2014. The students, their parents and the school staff received written information about the study, stating the purpose and content of the project. The school administered the written information- and informed consent form, and students received a login code in exchange for returning the

¹ Sex and age distributions were not affected by the removal of participants. A means substitution procedure was performed for the 9.6% missing scores on the variable Rape Stereotypes.
consent form. Convenience sampling procedures were applied within schools. The number of students who were invited to participate was not recorded, but the identical procedure applied in an earlier study produced a response rate close to 50% (Kennair & Bendixen, 2012). Students could respond to the questionnaire on their designated computer at home or in the classroom. Arrangements for group administration at school ensured anonymity and confidentiality. Throughout the weeks that the survey took place each school's public health nurse was available for contact. The Regional Committee for Medical and Health Research Ethics approved the procedure.

2.3. Measurements

2.3.1. Independent variables (predictors)

2.3.1.1. Sociosexuality. Participants completed the revised Sociosexuality Orientation inventory (SOI-R, Penke & Asendorpf, 2008). Internal consistency was good for the 9-item measure ($\alpha = .85$) and excellent for each of the three components: SOI-Behavior ($\alpha = .90$), SOI-Attitudes ($\alpha = .88$), and SOI-Desire ($\alpha = .89$). Scaling and scoring were identical to Penke & Asendorpf (2008).

2.3.1.2. Porn Exposure. Participants responded to questions regarding their exposure to erotica and pornographic media (Kennair & Bendixen, 2012). They responded "No" or "Yes" to the use of the following types in the past academic year: erotica, X-rated/soft core porn, XXX-rated/hard core porn, and violent porn). In constructing the index for porn exposure, type of porn use was coded first ($0 = no exposure or erotica only, 1 = soft core porn, 2 = hard core porn, and 3 = violent porn$). Each participant's porn type score was then multiplied with his or her report of frequency of porn exposure ($0 = never, 1 = rarely, 2 = monthly, 3 = weekly, 4 = daily$) producing a
porn exposure index. High scores reflect a combination of frequent and hard
core/violent porn use.

2.3.1.3. Rape Stereotypes. Participants responded to the modified version of the
Illinois Rape Myth Acceptance Scale (McMahon & Farmer, 2011; Payne, Lonsway,
& Fitzgerald, 1999). The modified version was developed to capture the more subtle
and covert forms of stereotypical beliefs (often referred to as 'myths') towards rape
and the attitude objects was changed from 'women' to 'girls' and 'men' to 'boys' for use
with student populations. The updated version is a 22-item measure that measures
beliefs that (1) men should be held accountable for raping women, (2) women lie
about being raped, (3) whether rape actually took place given the circumstances, and
(4) women ask for it by the way they act. Participants responded to each item using a
five-point Likert-type scale (ranging from 1 = strongly disagree to 5 = strongly agree).
Item scores were summed and averaged. High scores reflect stronger stereotypical
beliefs about rapes of women. Internal consistency was excellent, \( \alpha = .93 \).

2.3.1.4. Hostile Sexism Toward Women and Men. Ten items measuring hostile sexism
were sampled from The Ambivalent Sexism Inventories (Glick & Fiske, 1996, 1999).
Five of the items measured justification of objectification, power over women, and
acceptance of traditional gender roles. Validity of the full scale (11 items) has been
found to be good showing strong correlations with other sexism measures towards
The remaining five items measured resentment of male power and acceptance of
negative stereotypes about men (hostile, arrogant and domineering). Internal
consistencies for the reduced five-item scales used in this study were comparable to
those reported for the original full scales, Towards Women: \( \alpha = .83 \), Towards Men: \( \alpha = .79 \). The item scores were summed and averaged.
2.3.2. Outcome variables: Same – and opposite peer sex sexual harassment. Being sexually harassed by peers and harassing peers was measured applying a refined version of Kennair and Bendixen (2012) sexual harassment scale. The scale includes nine items on nonphysical sexual harassment behaviors (verbal, non-verbal and digital forms, see Appendix A for details). Instructions explicitly stated that only acts that were offensive, unwanted or that created discomfort should be reported. For each of the nine harassed items, participants indicated if they had been subject to the behavior in question (yes or no) during the last academic year from a same-sex peer and/or from an opposite-sex peer. Being harassed showed good internal consistency (Kuder-Richardson, KR = .78 and KR = .75 for opposite-sex peers or same-sex peers respectively). Items scores were summed and averaged, reflecting the variety of harassment acts within the scale). Following questions regarding being harassed, participants responded to an equivalent list of harassing their same-sex and/or opposite-sex peers. Internal consistencies for harassing peers were good (opposite-sex: KR = .76, same-sex: KR = .77). Any acts involving the use of physical force were omitted from the scales. To avoid conceptual conflation, we advise that these sexually coercive acts (forced sexual squeezing, genital/intimate touching, kissing, and intercourse/oral sex) be treated as separate measures (Kennair & Bendixen, 2012).

All analyses were performed using Stata/IC 14.1 for Mac (StataCorp, 2015)

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2 The exception was the item measuring 'spreading pictures electronically'. For this item, we did not ask for the sex of the receiver as this would be inapplicable.
3. Results

We present the results in two main sections: First, the results from the reproducibility analyses of Kennair & Bendixen (2012) emphasizing the prediction of sexual harassment for same-sex and opposite-sex encounters (Hypothesis 1). Second, in the advances section, we present the novel results from the more refined measures of peer sexual harassment (Predictions 1 through 3).

3.1 Reproducing Kennair & Bendixen (2012)

3.1.1. Descriptives and Sex Differences

Compared to women, men reported overall less restricted sociosexuality (Table 1). This was particularly evident for the attitudes and the desire components of SOI reflecting large sex effects (d-values above .80). Men also reported being involved in slightly more short-term sexual behavior than women. Men reported being far more exposed to porn than women. This sex difference was particularly strong (d = 1.74) and reflects both men's higher consumption of more hardcore and violent pornography and at a much higher frequency (typically 'every month' or 'every week' for men, and 'rarely' or 'never' for women).

Sex differences were found in stereotypical beliefs about rape. Men were slightly less disapproving of these stereotypical beliefs than were women (d = .40). Men also reported moderately higher levels of hostile attitudes toward women (d = .46), while women reported slightly more hostile attitudes toward men (d = -.17).
Men reported being slightly more sexually harassed by both sexes than women. Compared to women, men also reported sexually harassing peers more, particularly other men. Although the strongest sex difference was for same-sex harassment of peers, the sex differences were small to moderate. In summary, these sex differences were highly comparable to the findings reported by Kennair & Bendixen (2012) with respect to sociosexuality, porn exposure, sexism, and sexual harassment. For the new rape stereotype measure, however, the sex difference was smaller than the equivalent measure reported in Kennair & Bendixen (2012).

3.1.2. Predictors of Being Sexually Harassed by Same-sex and Opposite-sex Peers

Multiple regressions were performed on being sexually harassed by same-sex or by opposite-sex for women and men separately. Stata's 'r' option was applied throughout as it implements robust standard errors offering more 'honest' standard errors in the face of heteroscedasticity. We first entered all six predictors in the same model for comparison with our prior findings (Kennair & Bendixen, 2012). We then performed hierarchical multiple regressions to examine the relative contribution of the predictors. In Block 1 we entered either the three components of SOI or Rape Stereotypes and Hostile Sexism (toward women or men). Porn Exposure was always entered in Block 2. When SOI, Rape Stereotypes and Sexism were not entered in Block 1 they were entered in Block 3. The variable Hostile Sexism always matched the sex of the sender or the target (Toward Women for students being harassed by / harassing women, Toward Men for students being harassed by / harassing men).

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3 Age showed no association with any of the predictors, nor with any of the outcome variables, hence age was omitted from the regression analyzes.
As seen from Table 2 the behavior component of SOI turned out to be a consistent predictor for same-sex and opposite-sex harassment in both sexes. This was partly true also for the desire component, but less so for the attitudes component. Porn Exposure predicted women being harassed by other women. Rape Stereotypes failed to predict being harassed, but Hostile Sexism predicted being subject of same-sex harassment in both sexes and for women being harassed by men. The variances accounted for by the six predictors across the four regressions were: same-sex women: $R^2 = .078$, same-sex men: $R^2 = .105$, opposite-sex women: $R^2 = .120$, and opposite-sex men: $R^2 = .145$.

The relative contributions of the predictors for being harassed by peers are shown in the note for Table 2. In summary, the hierarchical regression analysis for women and men being harassed by same-sex peers showed that rape stereotypes and hostility toward women accounted for less than 2% of the variance over and above that of SOI and porn exposure. For women and men being harassed by opposite-sex peers, rape stereotypes and hostility toward women accounted for 3.0% and 1.6% respectively of the variance over and above that of SOI and porn exposure. In comparison, the additional variance for the three SOI-components over and above that of rape stereotypes, hostile sexism and porn exposure was markedly larger. The unique contribution of porn exposure was generally lower when entered after the SOI components than after rape stereotypes and hostile sexism. Evidently, through the application of more refined measures of peer sexual harassment, sexism, and rape stereotypes we were to a large extent able to reproduce
the findings from Kennair & Bendixen (2012). The major disparity was the lower net


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3.1.3. Predictors of Sexually Harassing Same-sex and Opposite-sex Peers


In the original study we were not able to perform separate predictions of same-


sex and opposite-sex harassment of peers due to lack of refinement in the harassment


measure. Therefore, these analyses are new and complementary to the analyses of


being harassed in the above section. As seen from Table 3, when all six predictors


entered in the model the behavior component of SOI predicted opposite-sex


harassment of peers for women and men, and same-sex harassment for women. The


attitudes component predicted harassment of peers for men only, and the desire


component predicted harassment of peers for women only.


Insert Table 3 about here


Porn exposure predicted harassment of peers for women but only same-sex


harassment for men. For men, rape stereotypes predicted harassment of peers of both


sexes. For women, hostile sexism toward men predicted harassment of men while


hostile sexism toward women predicted harassment of other women. The variances


accounted for by all six predictors were: women same-sex: $R^2 = .086$, men same-sex:


$R^2 = .110$, women opposite-sex: $R^2 = .110$, and men opposite-sex: $R^2 = .115$.


The relative contributions of the predictors for harassing peers are shown in


the note for Table 4. In summary, the hierarchical regression analysis for women and


men harassing same-sex peers showed that rape stereotypes and hostility accounted


for less than 2% of the variance over and above that of SOI and porn exposure. For
women and men harassing opposite-sex peers, rape stereotypes and hostility toward men accounted for 0.9% and 3.4% respectively of the variance over and above that of SOI and porn exposure. In comparison, when the SOI-components were entered in the final block (Block 3), the additional variance for sociosexuality over and above that of rape stereotypes, hostile sexism, and porn exposure was noticeably larger. As for being harassed, the unique contribution of porn exposure on harassing peers was generally lower when entered after the SOI-components than after rape stereotypes and hostile sexism.

3.2. Advances

3.2.1. Derogation and Solicitation as Distinct Types of Harassment Tactics

Theoretically, harassment behavior characterized by deprecating sexual remarks (objectification), comments on sexual behavior and sexual orientation along with sexual rumors would clearly be considered derogatory. Prototypical derogatory behavior would probably be degrading comments about private parts. On the other hand, harassment behavior characterized by sexual requests, showing sexual pictures and objects (and digital distribution of these), as well as dirty talk or sexual remarks about physical appearance reflect tactics of sexual solicitation. Prototypical solicitation behavior would be sexual requests. For further analyses, we grouped the items theoretically reflecting derogation tactics one the one hand (four items) and solicitation tactics on the other (four items) for victimization and perpetration experiences separately.4

4 Due to low prevalence the item on digital spreading of nude pictures was omitted. The prevalence on each harassment item for same-sex and opposite-sex and for women and men are found in Appendixes B and C.
3.2.2. Derogation and Solicitation Victimization

For testing the victimization part of Prediction 1 we performed two separate two-way (2 x 2) mixed design ANOVAs for derogation and solicitation tactics respectively, with sex composition (same-sex versus opposite-sex) as within subject factor and sex of participant (women versus men) as the between subjects factor. As shown in the left panel of Table 4 and in Figure 1, overall same-sex derogation victimization was more common than opposite-sex victimization (d = .58). However, this effect was qualified by a sex composition by participant sex interaction, suggesting that relative to women, men reported being derogated more by same-sex than by opposite-sex peers. The most typical sex composition for derogatory harassment tactics was men being harassed by same-sex peers.

3.2.3. Derogation and Solicitation Perpetration

For solicitation victimization same-sex encounters were less common than opposite-sex encounters (d = .49). This overall effect was qualified by a sex composition by participant sex interaction, suggesting that relative to men, women reported being far more solicited by opposite-sex than same-sex peers.

3.2.3. Derogation and Solicitation Perpetration

We re-ran the above two-way (2 x 2) mixed design ANOVAs for testing the harassment perpetration part of Prediction 1. Overall, same-sex derogation was far more common than opposite-sex derogation (d = .70). As seen from Table 5 and

Insert Table 4 about here
Insert Figure 1 about here
Figure 1, this effect was qualified by a sex composition by participant sex interaction, suggesting that relative to women, men particularly derogated same-sex peers.

Insert Table 5 about here

For solicitation perpetration we found no mean difference for same-sex and opposite-sex encounters. The analysis showed, however, that men slightly more than women reported soliciting others and that this effect was moderated by sex composition. The interaction effect, albeit small in magnitude, suggest that men, more than women solicited same-sex peers more.

3.2.4. Victimization versus Perpetration

For testing Prediction 2, we ran two separate three-way ($2 \times 2 \times 2$) mixed design ANOVAs for derogation and solicitation respectively with sex composition (same-sex versus opposite-sex) and role (victim versus perpetrator) as within subject factors and sex of participant (women versus men) as the between subjects factor. For derogation tactics (same-sex and opposite-sex combined) we found that victimization was moderately more common than perpetration, $F(1,1306) = 91.84, p < .001, \eta^2_p = .066$, $d = 0.53$. This effect was qualified by a small sex of participant interaction effect, $F(1,1306) = 10.62, p < .001, \eta^2_p = .008, d = 0.18$ suggesting that relative to men, derogation victimization was more common than perpetration in women. The more complex three-way interaction (sex of participant by sex of composition by role: victim versus perpetrator) was not significant, $F(1,1306) = 0.43$, ns, suggesting that the patterns of same-sex versus opposite-sex victimization versus perpetration were similar for men and women.
For solicitation tactics, we found that victimization was far more common than perpetration, $F(1,1309) = 285.68$, $p < .001$, $\eta^2_p = .179$, $d = 0.93$. This effect was qualified by a small sex of participant interaction effect, $F(1,1309) = 21.07$, $p < .001$, $\eta^2_p = .016$, $d = 0.26$ suggesting that relative to men, women reported significantly more victimization than perpetration. The more complex three-way interaction (sex of participant by sex of composition by role (victim versus perpetrator) was moderately strong, $F(1,1309) = 118.04$, $p < .001$, $\eta^2_p = .083$, $d = 0.60$. The patterns suggest that relative to men, women report higher levels of opposite-sex victimization over opposite-sex perpetration (women: $M_{\text{vict}} = 0.21$, $SD = 0.30$: $M_{\text{perp}} = 0.04$, $SD = 0.12$; men: $M_{\text{vict}} = 0.12$, $SD = 0.21$: $M_{\text{perp}} = 0.07$, $SD = 0.17$).

3.2.5. Mediation: Associations Between Sociosexuality and Opposite and Same-sex Derogation and Solicitation

To test Prediction 3, that associations between sociosexuality and (a) sexual harassment that reflect opposite-sex derogation would be accounted for by same-sex derogation tactics, and (b) sexual harassment that reflect same-sex solicitation tactics would be accounted for by opposite-sex solicitation tactics we ran four mediation analyses for each sex applying the traditional Baron & Kenny approach (Iacobucci, Saldanha, & Deng, 2007) along with more recent developments of testing mediation using Monte Carlo simulations (Zhao, Lynch, & Chen, 2010). The two approaches produced the same results. As seen from the upper panel of Table 6, the effect of sociosexuality (SOI-R) on being derogated by the opposite-sex was fully mediated by same-sex derogation for women (non significant p-value for c') and partially mediated for men. As seen in the column furthest to the right, the indirect effect of same-sex was comparably stronger than the direct effect of opposite-sex derogation. The effect
of SOI-R on derogating members of the opposite-sex was fully mediated by same-sex
derogation for men and partially mediated by same-sex derogation for women. Again,
the indirect effect of same-sex was markedly stronger than the direct effect of
opposite-sex derogatory tactics.

The corresponding mediation analyses for solicitation tactics are found in the
lower panel of Table 6. The effect of SOI-R on being solicited by the same-sex was
completely mediated by opposite-sex solicitation for women, and partially so for men.
The effect of SOI-R on soliciting members of the same-sex was fully mediated by
opposite-sex soliciting tactics for women and men. In summary, the patterns of
findings were consistently supportive of Prediction 3 for (a) women being derogated
and men derogating, and for (b) women being solicited and men soliciting. Patterns
were only partially supportive of the prediction for harassed (derogated and solicited)
men and for harassing women.

4. Discussion

In support of Hypothesis 1, and closely reproducing Kennair & Bendixen
(2012), we found that sociosexuality was the best predictor of both being harassed as
well as harassing others. This was true for all analyses of the different constellations
of women and men as perpetrators and targets of harassment. Compared to measures
of rape stereotypes and hostile sexism, the three components of sociosexuality
accounted for more than twice the variance when entered first in the regression
model. The only exception was men harassing women, where sociosexuality was only
marginally better. Exposure to porn did not predict harassment in men over and above the effect of sociosexuality. While we theoretically assume that harassment is causally linked to unrestricted sociosexuality, we underline that based on the cross-sectional nature of the present data we cannot make strong inferences about causality or directionality of the relationship between harassment and sociosexuality.

In support of Prediction 1, we found that same-sex derogation was more common than opposite-sex derogation victimization and that opposite-sex solicitation was more common than same-sex solicitation victimization. Men were particularly subject to derogation tactics from other men while women were particularly subject to solicitation tactics from men. For perpetration tactics, same-sex derogation was far more common than opposite-sex derogation, and particularly so for men. For solicitation tactics, men reported doing this slightly more than women, but not primarily due to solicitation of women. The latter finding does not support Prediction 1.

In support of Prediction 2, we found that victimization was more common than perpetration and particularly so for solicitation tactics that involved opposite-sex encounters. In support of Prediction 3, the mediation analysis showed that same-sex derogatory tactics largely accounted for the association between sociosexuality and opposite-sex derogation, and that opposite-sex solicitation tactics accounted for the association between sociosexuality and same-sex solicitation tactics. Hence, unrestricted sociosexuality seems to guide people toward strategies of same-sex competitor derogation and opposite-sex sexual solicitation. We consider these patterns as supporting the view that the underlying motive of most (but not all) sexual harassment acts is an interest in sex, especially short-term sexual relations.
We have thus reproduced the findings from the original paper with respect to sociosexuality as a major predictor of sexual harassment among high school students (Kennair & Bendixen, 2012). This dispositional trait is related not only to being subject to peer sexual harassment but also to harassing same-sex and opposite-sex peers in high school. Sociosexuality may be considered part of the structure of personality. It is positively associated with the personality traits extroversion and sensation seeking, and negatively with shyness, emotional stability and conscientiousness (Banai & Pavela, 2015; Penke & Asendorpf, 2008), shows heritability comparable to other personality traits (Bailey, Kirk, Zhu, Dunne, & Martin, 2000; Westerlund et al., 2010), and it is subject to very little change over the life course (Bailey et al., 2000). The effects of sociosexuality on sexual harassment remained substantial when we applied the revised SOI instrument (Penke & Asendorpf, 2008) rather than the original (Simpson & Gangestad, 1991). Of the individual components, SOI-Behavior predicted sexual harassment (victimization and perpetration) for both sexes in seven out of eight regression analysis, SOI-Attitudes in three and SOI-Desire in five.

Across the four regression analyses on harassing peers we found that the updated measure on subtle rape stereotypes did contribute to the prediction of men harassing women (and men harassing other men to a lesser extent). Rape involves some form of physical force or exploitation. Hence, stereotypical beliefs toward rape should only vaguely be associated with any measure of harassment that excludes any form of physical force. While non-physical sexual harassment and sexual coercion are conceptually distinct the two are likely share considerable variance, and that the effect of rape stereotypes on men's sexual harassment of women is due to this covariance or to other unmeasured factors linked to acceptance of sexual force.
Both harassment victimization and perpetration showed positive zero-order associations with hostile sexism. However, hostile sexism did not predict either same- or opposite-sex harassment perpetration in men when the effects of other variables (including sociosexuality and porn exposure) were accounted for. If sexual harassment of peers reflects hostile sexism, we would expect a positive association. Furthermore, the effect of hostile sexism was stronger in the victimization models than in the perpetration models, and equally strong for same-sex than for opposite-sex harassment in both men and women. Our interpretation of the findings regarding harassment perpetration is in line with Self-perception theory (Bem, 1972). Hostile attitudes toward the victim's sex follows harassment behavior towards that sex because the behavior is not easily attributable to external incentives or constraints. Alluding to Lerner's concept of "just world" beliefs, it is also possible that when performing behavior that is negatively socially sanctioned, one makes assumptions regarding the target of this behavior that results in blaming the victim (Lerner & Montada, 1998). Regarding being victimized by peers, while neither causality nor direction can be safely inferred from our cross-sectional data, we believe that negative attitudes toward the perpetrator's sex may be activated by these encounters. Taken together, these findings undermine any model that posits that sexist attitudes cause harassment behavior (Fiske & Glick, 1995). Rather, we suggest that harassment behavior towards members of one sex may result in less favorable attitudes towards that sex.

Conceptually, sexual harassment covers a variety of sexual but socially undesirable acts that do not involve any sexual coercion (i.e., physical force). Sexual harassment acts occur both in same-sex and opposite-sex constellations. Both sexes
are targets of and perpetrators of same-sex and opposite-sex harassment acts. To a large degree the opposite-sex sexual harassment acts in our study overlap with what we have defined as solicitation tactics, and same-sex sexual harassment acts overlap with what we call derogation tactics. The overlap is not perfect, though, and we would still recommend keeping the two types of tactics separate from the same-sex and opposite-sex level of analysis.

Studying whether one is the perpetrator or the target provides important insights into the intentions behind solicitation tactics. As men regularly take more initiative to both short- and long-term sexual relations (Grøntvedt, Kennair, & Mehmetoglu, 2015) and because men's motives for sex are more characterized by an approach toward short-term sexual encounters (Kennair, Grøntvedt, Mehmetoglu, Perilloux, & Buss, 2015; Meltzer, McNulty, & Maner, 2015; Meston & Buss, 2007; Schmitt, 2005), it would follow that women, more than men, will perceive opposite-sex solicitation behavior more undesirable. In many cases the intention may not be to harass. Rather the solicitation is reported as uncomfortable by the target because it is undesirable. When the solicitation comes from a desirable perpetrator the same type of behavior might not even be experienced as harassment (Browne, 2006). Still, we define any continuation of solicitation behavior beyond feedback of undesirability to be harassment. Prior to such feedback, researchers need to consider the possibility that it maybe was not intended as anything else than an attempt to communicate sexual interest. We believe both should be subject to scientific measurement.

4.1. Limitations and Future Directions

Despite having a large and comprehensive dataset of high school students, we cannot make strong inferences of causality or directionality of effects due to the cross-
sectional nature of the study. However, the multivariate analyzes permit inferences on
the relative contribution of predictors to different types of sexual harassment for men
and women and for same-sex and opposite-sex encounters.

We did not start out the current work with a specific instrument for identifying
the two types of non-physical harassment; sexual solicitation and derogation. Rather,
we were originally interested in investigating the different acts involved in sexual
harassment. Future work to design such an instrument would provide a better
specification of the items. This is especially relevant for the items about sending
sexually laden pictures, comments on looks, and the spreading of sexual rumors. We
believe the wording of some of the items should specify the picture contents, type of
comments on looks and content of rumors to improve the differentiation of
solicitation acts from derogation acts.

We also advise researchers to define sexual harassment explicitly and include
acts that are offensive, unwanted or that create discomfort only. Researchers are also
advised to construct instruments that disentangle behavior that is sexualized (e.g.,
sexual attention) from continuation of sexual behavior that has been communicated
clearly (verbally or in other ways) from the target as being offensive or in other ways
undesirable. The above refinements of measures of non-physical types of sexual
harassment may also be valuable when studying predictors of sexual coercion.

Being sexually harassed is associated with several adverse health outcomes
(E.g., Bendixen, Daveronis, & Kennair, submitted; Duffy, Wareham, & Walsh, 2004;
Landstedt & Gillander Gädin, 2011; Lichty & Campbell, 2012; Skoog, Özdemir, &
Stattin, 2015; Slaatten, Anderssen, & Hetland, 2015). However, interventions to
prevent sexual harassment in student populations have so far been unsuccessful
(Connolly et al., 2015) or have never been subject to scientific evaluation (Pina,
Identifying individual characteristics and mechanisms related to sexual harassment perpetration and victimization would be an important step toward designing intervention (Pina et al., 2009). Further, a better understanding of the complex multifaceted nature of sexual harassment is decisive for effective intervention. Our findings suggest that any aims at reducing same-sex and opposite-sex derogation tactics would profit from a mate competition framework.

### 4.2. Conclusion

This study has advanced the understanding of adolescent peer sexual harassment by specifying sex of actor, sex of target and differentiating between two tactics of sexual harassment. By differentiating between solicitation and derogation tactics, this study provides more insight into why men and women harass same-sex and opposite-sex peers. This study has also shed light on how there are differences between what one perceives as harassment compared to whether the same acts were intended as harassing or derogatory. Indeed, our data show that solicitation acts that victims perceive as harassment are not always intended as harassment.

We reproduced the prior finding that sociosexuality predicts both being harassed and harassing peers (Kennair & Bendixen, 2012), and does so to a greater degree than other important predictors. This pattern of results suggests a greater role for unrestricted sexual interactions in the explanation of non-physical sexual harassment. This has consequences for the future study of sexual harassment and the development of prevention programs. We therefore suggest that sexual harassment may be fruitfully understood from a sexual strategies perspective.
Acknowledgments

Thanks to Sør-Trøndelag County Authority for supporting this research, and to the students and staff of 17 participating high schools. Preliminary analyses the data reported in this paper were presented at HBES, May 27-30, 2015, Missouri.

5. References


Bendixen, M., Daveronis, J., & Kennair, L. E. O. (submitted). "... but words will never harm me": The effects of sexual harassment on high school students' psychological well-being.


doi:10.1016/j.evolhumbehav.2012.01.001


StataCorp. (2015). Stata statistical software: Release 14. College Station, TX: StataCorp LP.


Figure 1. Mean scale scores (x100) for victims and perpetrators of derogation and solicitation. SS = same-sex, OS = opposite-sex
Table 1. Mean Variable and Scale Scores and Standard Deviations (SD) for Women (n=694-759) and Men (n=521-567).

<table>
<thead>
<tr>
<th>Scales</th>
<th>Women</th>
<th>Men</th>
<th>$t^a$</th>
<th>$ES^a$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>1. SOI-R (Total 9 items)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Behavior [1-9]</td>
<td>2.98</td>
<td>1.31</td>
<td>4.26</td>
<td>1.59</td>
</tr>
<tr>
<td>b. Attitudes [1-9]</td>
<td>4.38</td>
<td>2.28</td>
<td>6.24</td>
<td>2.27</td>
</tr>
<tr>
<td>c. Desire [1-9]</td>
<td>2.60</td>
<td>1.68</td>
<td>4.34</td>
<td>2.25</td>
</tr>
<tr>
<td>2. Porn Exposure [0-12]</td>
<td>0.69</td>
<td>1.62</td>
<td>5.27</td>
<td>3.55</td>
</tr>
<tr>
<td>3. Rape Stereotypes [1-5]</td>
<td>2.28</td>
<td>0.58</td>
<td>2.52</td>
<td>0.64</td>
</tr>
<tr>
<td>4. Hostile Sexism</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Toward Women [1-5]</td>
<td>2.55</td>
<td>0.73</td>
<td>2.92</td>
<td>0.89</td>
</tr>
<tr>
<td>b. Toward Men [1-5]</td>
<td>2.49</td>
<td>0.72</td>
<td>2.37</td>
<td>0.77</td>
</tr>
<tr>
<td>5. Being Sexually Harassed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. By Women [0-1]</td>
<td>0.10</td>
<td>0.15</td>
<td>0.11</td>
<td>0.19</td>
</tr>
<tr>
<td>b. By Men [0-1]</td>
<td>0.16</td>
<td>0.22</td>
<td>0.18</td>
<td>0.22</td>
</tr>
<tr>
<td>6. Sexually Harassing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Women [0-1]</td>
<td>0.05</td>
<td>0.12</td>
<td>0.08</td>
<td>0.18</td>
</tr>
<tr>
<td>b. Men [0-1]</td>
<td>0.06</td>
<td>0.13</td>
<td>0.15</td>
<td>0.22</td>
</tr>
</tbody>
</table>

Note. *$p<.05$, **$p<.01$, ***$p<.001$. Numbers in brackets are range of continuous scores. $^a$Unequal variances assumed. $ES=\text{Cohen’s } d$. 
Table 2. Predictors of Being Sexually Harassed by Same-Sex and Opposite-Sex Peers

<table>
<thead>
<tr>
<th></th>
<th>Same sex</th>
<th></th>
<th>Opposite sex</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\beta$</td>
<td>$t$</td>
<td>$\beta$</td>
<td>$t$</td>
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<tr>
<td>Women (n=624)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOI-Behavior</td>
<td>.128</td>
<td>2.48*</td>
<td>.166</td>
<td>3.43**</td>
</tr>
<tr>
<td>SOI-Attitudes</td>
<td>-.010</td>
<td>-0.20</td>
<td>-.019</td>
<td>-0.40</td>
</tr>
<tr>
<td>SOI-Desire</td>
<td>.052</td>
<td>1.02</td>
<td>.163</td>
<td>3.46**</td>
</tr>
<tr>
<td>Porn Exposure</td>
<td>.166</td>
<td>2.62**</td>
<td>.092</td>
<td>1.61</td>
</tr>
<tr>
<td>Rape Stereotypes</td>
<td>-.033</td>
<td>-0.72</td>
<td>-.029</td>
<td>-0.63</td>
</tr>
<tr>
<td>Hostile Sexism</td>
<td>.112</td>
<td>2.52*</td>
<td>.184</td>
<td>4.83***</td>
</tr>
<tr>
<td>Men (n=471)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOI-Behavior</td>
<td>.123</td>
<td>2.16*</td>
<td>.260</td>
<td>4.14**</td>
</tr>
<tr>
<td>SOI-Attitudes</td>
<td>.109</td>
<td>2.12*</td>
<td>.046</td>
<td>0.92</td>
</tr>
<tr>
<td>SOI-Desire</td>
<td>.094</td>
<td>1.75†</td>
<td>.098</td>
<td>1.77†</td>
</tr>
<tr>
<td>Porn Exposure</td>
<td>.059</td>
<td>1.13</td>
<td>.025</td>
<td>0.45</td>
</tr>
<tr>
<td>Rape Stereotypes</td>
<td>-.008</td>
<td>-0.16</td>
<td>.071</td>
<td>1.42</td>
</tr>
<tr>
<td>Hostile Sexism</td>
<td>.144</td>
<td>3.02**</td>
<td>.086</td>
<td>1.48</td>
</tr>
</tbody>
</table>

Note. †p < .10, *p < .05, **p < .01.

A. SOI-components in Block 1. Same-sex women: $R^2 = .037$, Porn Exposure $\Delta R^2 = .030$, Rape Stereotypes and Hostile Sexism Toward Women $\Delta R^2 = .011$. Same-sex men: $R^2 = .081$, Porn Exposure $\Delta R^2 = .005$, Rape Stereotypes and Hostile Sexism Toward Men $\Delta R^2 = .019$. Opposite-sex women: $R^2 = .078$, Porn Exposure $\Delta R^2 = .011$, Rape Stereotypes and Hostile Sexism Toward Men $\Delta R^2 = .030$. Opposite-sex men: $R^2 = .127$, Porn Exposure $\Delta R^2 = .001$, Rape Stereotypes and Hostile Sexism Toward Women $\Delta R^2 = .016$.

B. Rape Stereotypes and Hostile Sexism in Block 1. Same-sex women: $R^2 = .020$, Porn Exposure $\Delta R^2 = .039$, SOI $\Delta R^2 = .019$. Same-sex men: $R^2 = .037$, Porn Exposure $\Delta R^2 = .016$, SOI $\Delta R^2 = .052$. Opposite-sex women: $R^2 = .041$, Porn Exposure $\Delta R^2 = .026$, SOI $\Delta R^2 = .054$. Opposite-sex men: $R^2 = .043$, Porn Exposure $\Delta R^2 = .007$, SOI $\Delta R^2 = .095$. 
Table 3. Predictors of Sexually Harassing Same-Sex and Opposite-Sex Peers

<table>
<thead>
<tr>
<th></th>
<th>Same sex</th>
<th>Opposite sex</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\beta$</td>
<td>$t$</td>
</tr>
<tr>
<td>Women (n=625)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOI-Behavior</td>
<td>.114</td>
<td>2.20*</td>
</tr>
<tr>
<td>SOI-Attitudes</td>
<td>.020</td>
<td>0.37</td>
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<tr>
<td>SOI-Desire</td>
<td>.117</td>
<td>2.15*</td>
</tr>
<tr>
<td>Porn Exposure</td>
<td>.110</td>
<td>1.82†</td>
</tr>
<tr>
<td>Rape Stereotypes</td>
<td>-.074</td>
<td>-1.50</td>
</tr>
<tr>
<td>Hostile Sexism</td>
<td>.137</td>
<td>2.74**</td>
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<tr>
<td>Men (n=474)</td>
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<td>SOI-Behavior</td>
<td>.048</td>
<td>0.85</td>
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<tr>
<td>SOI-Attitudes</td>
<td>.182</td>
<td>3.86**</td>
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<tr>
<td>SOI-Desire</td>
<td>.051</td>
<td>1.01</td>
</tr>
<tr>
<td>Porn Exposure</td>
<td>.100</td>
<td>1.92†</td>
</tr>
<tr>
<td>Rape Stereotypes</td>
<td>.097</td>
<td>1.86†</td>
</tr>
<tr>
<td>Hostile Sexism</td>
<td>.065</td>
<td>1.28</td>
</tr>
</tbody>
</table>

Note. †$p<.10$, *$p<.05$, **$p<.01$.

A. SOI-components in Block 1. Same-sex women: $R^2 = .053$, Porn Exposure $\Delta R^2 = .015$, Rape Stereotypes and Hostile Sexism Toward Women $\Delta R^2 = .017$. Same-sex men: $R^2 = .083$, Porn Exposure $\Delta R^2 = .001$, Rape Stereotypes and Hostile Sexism Toward Men $\Delta R^2 = .018$. Opposite-sex women: $R^2 = .079$, Porn Exposure $\Delta R^2 = .022$, Rape Stereotypes and Hostile Sexism Toward Men $\Delta R^2 = .009$. Opposite-sex men: $R^2 = .073$, Porn Exposure $\Delta R^2 = .008$, Rape Stereotypes and Hostile Sexism Toward Women $\Delta R^2 = .034$.

B. Rape Stereotypes and Hostile Sexism in Block 1. Same-sex women: $R^2 = .028$, Porn Exposure $\Delta R^2 = .026$, SOI $\Delta R^2 = .032$. Same-sex men: $R^2 = .034$, Porn Exposure $\Delta R^2 = .027$, SOI $\Delta R^2 = .048$. Opposite-sex women: $R^2 = .017$, Porn Exposure $\Delta R^2 = .045$, SOI $\Delta R^2 = .049$. Opposite-sex men: $R^2 = .061$, Porn Exposure $\Delta R^2 = .017$, SOI $\Delta R^2 = .038$. 
Table 4. Mixed Design ANOVA's for Derogation (df = 1.319) and Solicitation (df = 1.318) Victimization

<table>
<thead>
<tr>
<th></th>
<th>Derogation</th>
<th></th>
<th></th>
<th>Solicitation</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$F$</td>
<td>$\eta_p^2$</td>
<td>$d$</td>
<td>$F$</td>
<td>$\eta_p^2$</td>
<td>$d$</td>
</tr>
<tr>
<td>SS vs. OS (Within)</td>
<td>111.81</td>
<td>0.078</td>
<td>0.58</td>
<td>79.95</td>
<td>0.057</td>
<td>0.49</td>
</tr>
<tr>
<td>Sex (Between)</td>
<td>9.72</td>
<td>0.007</td>
<td>0.17</td>
<td>0.15</td>
<td>0.000</td>
<td>0.00</td>
</tr>
<tr>
<td>Interaction</td>
<td>85.67</td>
<td>0.061</td>
<td>0.51</td>
<td>180.18</td>
<td>0.120</td>
<td>0.74</td>
</tr>
</tbody>
</table>

*Note. SS = Same-Sex, OS = Opposite-Sex*
<table>
<thead>
<tr>
<th></th>
<th>Derogation</th>
<th></th>
<th></th>
<th>Solicitation</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>$\eta_p^2$</td>
<td>$d$</td>
<td>$F$</td>
<td>$\eta_p^2$</td>
<td>$d$</td>
</tr>
<tr>
<td>SS vs. OS (Within)</td>
<td>161.69</td>
<td>0.110</td>
<td>0.70</td>
<td>1.95</td>
<td>0.001</td>
<td>0.06</td>
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<tr>
<td>Sex (Between)</td>
<td>40.82</td>
<td>0.030</td>
<td>0.35</td>
<td>32.01</td>
<td>0.024</td>
<td>0.32</td>
</tr>
<tr>
<td>Interaction</td>
<td>134.95</td>
<td>0.094</td>
<td>0.64</td>
<td>23.18</td>
<td>0.017</td>
<td>0.26</td>
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</table>

*Note. SS = Same-Sex, OS = Opposite-Sex*
<table>
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<th></th>
<th>Mediation analysis</th>
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<th></th>
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<tr>
<td></td>
<td>a</td>
<td>c</td>
<td>b</td>
<td>c'</td>
<td>p</td>
</tr>
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<td><strong>Derogation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women harassed</td>
<td>.19</td>
<td>.15</td>
<td>.62</td>
<td>.03</td>
<td>0.263</td>
</tr>
<tr>
<td>Men Harassed</td>
<td>.25</td>
<td>.25</td>
<td>.63</td>
<td>.09</td>
<td>0.006</td>
</tr>
<tr>
<td>Women harassing</td>
<td>.20</td>
<td>.20</td>
<td>.72</td>
<td>.06</td>
<td>0.025</td>
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<tr>
<td>Men harassing</td>
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<td>.21</td>
<td>.59</td>
<td>.06</td>
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<td>Women harassed</td>
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<td>.42</td>
<td>.00</td>
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<td>.25</td>
<td>.48</td>
<td>.10</td>
<td>0.012</td>
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<td>Women harassing</td>
<td>.18</td>
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<td>.40</td>
<td>.04</td>
<td>0.280</td>
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<td>.23</td>
<td>.65</td>
<td>.06</td>
<td>0.066</td>
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</tbody>
</table>

**Note.**  For Derogation the mediator is SS, \(a = r(SOI-R \times SS)\), \(c = r(SOI-R \times OS)\). For Solicitation the mediator is OS, \(a = r(SOI-R \times OS)\), \(c = r(SOI-R \times SS)\). \(b = r(SS \times OS)\) for both harassment types.
Appendix A

Harassment acts

1. Denigrating comments such as "whore", "manwhore", "slut", "manslut", "loose", etc.

2. Denigrating comments such as "gay", "lesbo", "fag", "dyke", etc.

3. Denigrating comments such "cunt", "prick", "asshole", "bitch", etc.

4. Dirty/debasing talk or denigrating comments on body or looks

5. Showed sexually laden pictures or objects

6. Spreading of sexual rumors

7. Having had pictures of you distributed online when undressed*

8. Receiving/sending sexual content through electronic media (mobile or internet)

9. Sexual requests (asking for or requiring sexual service)

Note: *only the victimization item asked about sex of distributor (sender)
Appendix B.

Prevalence rates for the nine acts of being sexually harassed by peers.
SS = same-sex, OS = opposite-sex

![Bar chart showing prevalence rates for different acts of sexual harassment by peers for women and men, in same-sex and opposite-sex contexts.](chart.png)
Appendix C.

Prevalence rates for the eight acts of sexually harassing peers.
SS = same-sex, OS = opposite-sex
Advances in the Understanding of Same-Sex and Opposite-Sex Sexual Harassment

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