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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
Corresponding Author	Mons Bendixen
Corresponding Author's Institution	NTNU
Order of Authors	Mons Bendixen, Leif Edward Ottesen Kennair
Suggested reviewers	Robert Kurzban

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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.

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2
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4 **1. Introduction**

5
6 Sexual harassment has traditionally been studied and understood within the
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8 social sciences as a phenomenon with men as perpetrators and women as victims
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10 (Kennair & Bendixen, 2012). Mainstream social science theories – strongly alluding
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12 to feminist perspectives – have explained harassment as driven by male power,
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14 paternalism and the motive to dominate women (Begany & Milburn, 2002; Conroy,
15
16 2013; Fiske & Glick, 1995). In contrast, scholars working within the evolutionary
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18 perspective have suggested an alternative explanation, one located in sex differences
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20 in the desire for sex (Buss, 1996; Kennair & Bendixen, 2012; Vandermassen, 2011).
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22
23 Previously, we examined these two explanations by studying both same-sex
24
25 and opposite-sex sexual harassment in a community sample of high school
26
27 students(Kennair & Bendixen, 2012). Consistent with explanations related to
28
29 differences in the desire for short-term sex, we found that a non-restrictive
30
31 sociosexual orientation toward uncommitted sex (i.e., one-night stands) predicted
32
33 being harassed as well as harassing others, and did so better than measures reflecting
34
35 attitudes condoning forced sex or classical sexism.
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37
38 When studying unwanted sexual attention between opposite-sex emerging
39
40 adults, one should not ignore the possibility that the advancing party might be
41
42 sexually interested. This possibility was underscored by the empirical association
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44 between harassment behavior and unrestricted sociosexuality (Kennair & Bendixen,
45
46 2012). This conclusion is further supported by the association between sociosexuality
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48 and being the target of harassment, given that signals of sexual unrestrictedness can
49
50 be detected by others (Sakaguchi & Hasegawa, 2006), and that perpetrators will target
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52 victims with greater harassability traits (Buss & Duntley, 2008; Sakaguchi &
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54 Hasegawa, 2007). Unrestricted sociosexuality is characterized by an openness to
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63 26 uncommitted sexual relationships reflecting promiscuity and a preference for one-
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65 27 night stands, high acceptance for uncommitted sex, and frequent sexual arousal and
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67 28 activation of sexual fantasies when meeting people of the opposite-sex (Penke &
68
69 29 Asendorpf, 2008; Simpson & Gangestad, 1991). In short, those more interested in
70
71 30 short-term sex engage in more harassment of those who are similarly more interested
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73
74 31 in short-term sex than their peers.
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76 32
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78 33 Sexual attention is, obviously, not always desired, and such attention will be
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80 34 unwelcome or aversive. While harassment is defined in the literature as subjectively
81
82 35 experienced aversive sexual attention from the position of the victim, the perpetrator
83
84 36 might not have intended the behavior to be aversive to the victim. Differences
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86 37 between perceived and intended behavior might therefore shed light on harasser's
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88 38 motives.
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90
91 39 We suggested that opposite-sex harassment from the perspective of the
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93 40 perpetrator are primarily intended as signals of sexual interest, and so we suggested
94
95 41 calling these acts sexual solicitation. Further, we considered same-sex harassment to
96
97 42 be a form of competitor derogation (Kennair & Bendixen, 2012), intended to reduce
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99 43 the perceived mate value of same-sex competitors (Bendixen & Kennair, 2015;
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101 44 Bleske-Rechek & Buss, 2006; Schmitt & Buss, 1996). This view is supported by
102
103 45 recent developmental research on sexual harassment proposing different motives for
104
105 46 same-sex and opposite-sex behaviors (McMaster, Connolly, Pepler, & Craig, 2002;
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107 47 Pepler et al., 2006; Schnoll, Connolly, Josephson, Pepler, & Simkins-Strong, 2015).
108
109 48 From this developmental perspective, sexual harassment in middle school years is
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111 49 considered a sexualized form of bullying. Drawing on evolutionary perspectives,
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113 50 Schnoll et al. (2015) suggested that through derogating same-sex peers, the
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123 51 perpetrators' status as a desirable partner for mates could be strengthened. In contrast,
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125 52 opposite-sex harassment could reflect a desire to communicate sexual attraction or
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127 53 romantic interest. However, due to adolescents' immature communication skills in
128
129 54 opposite-sex interactions, they unintentionally sexually harass their peers in attempts
130
131 55 to "draw attention to themselves as potential romantic partners" (Schnoll et al., 2015,
132
133 56 p. 187). We concur. Sexual competitiveness and dominance are important motives for
134
135 57 same-sex harassment. For opposite-sex harassment we do not think the motivation is
136
137 58 to attract romantic partners in general, but specifically to solicit short-term sexual
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139 59 encounters (one-night stands) as our prior findings on sociosexuality suggest (Kennair
140
141 60 & Bendixen, 2012).

144
145 61 A recent study of Swedish adolescents also showed that having had
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147 62 intercourse as well as one-night stands increased the risk of being subject to sexual
148
149 63 harassment (Skoog & Özdemir, 2015). Adolescents' immature communication skills
150
151 64 might not in fact be an important factor in opposite-sex sexual harassment. The
152
153 65 prevalence of sexual harassment is not lower in samples of high school students
154
155 66 compared to students in secondary school despite the latter being more sexually
156
157 67 experienced and mature. However, age is obviously a relevant modifier of motives.
158
159 68 For the early adolescents, the sexual aspect unsurprisingly seems less relevant
160
161 69 (Schnoll et al., 2015) compared to a sexually mature cohort.

163
164 70 There is a lack, though, of explicit and acceptable social scripts for sexual
165
166 71 contact and solicitation. Even among older adolescents and adults, norms surrounding
167
168 72 acceptable contact and solicitation are ambiguous. Flirtation and seduction includes
169
170 73 stealth, covertness, misdirection or misrepresentation (Bendixen & Kennair, 2015;
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172 74 Schmitt & Buss, 1996), misperception or disregard of sexual signals (Bendixen, 2014;
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174 75 Haselton, 2003; Perilloux & Kurzban, 2014), and probably imperfect insight into
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183 76 one's own motives (Wilson, 2002). As a result, miscommunication and unwanted
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185 77 attention are likely.
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188 78 Heterosexual same-sex harassment also occurs. Sexual strategies theory (Buss,
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190 79 1998; Buss & Schmitt, 1993; Kennair, Schmitt, Fjeldavli, & Harlem, 2009) suggests
191
192 80 that same-sex derogation is a form of social competition for the best possible sexual
193
194 81 partners (Bendixen & Kennair, 2015; Bleske-Rechek & Buss, 2006; Schmitt, 2002;
195
196 82 Schmitt & Buss, 1996). From an observer's point of view, the efficacy of different
197
198 83 derogation tactics varies contingent upon sex and mating context (Bendixen &
199
200 84 Kennair, 2015; Schmitt & Buss, 1996). While derogation is less efficient and used
201
202 85 less often than self-promotion (Fisher, Cox, & Gordon, 2009; Schmitt, 2002),
203
204 86 judgments of derogatory comments for example on physical appearance suggest
205
206 87 stronger efficiency when used in short-term relative to long-term mating context
207
208 88 (Bendixen & Kennair, 2015; Schmitt & Buss, 1996). These findings mirror the
209
210 89 stronger preference for good looks in short-term over long-term mating contexts
211
212 90 (Buss & Schmitt, 1993; Gangestad & Scheyd, 2005; Okami & Shackelford, 2001).
213
214 91 Hence, this derogatory behavior will be motivated by interest in short-term mating
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216 92 rather than a long-term, commitment and love oriented approach to sex (Bendixen &
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218 93 Kennair, 2015; Schmitt, 2002).
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225 226 95 *1.1. This Study*

227
228 96 By studying same-sex and opposite-sex harassment separately one discovers
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230 97 that although men generally report sexual harassment to the same degree as women,
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232 98 they typically report harassment by other men more than by women (Bendixen &
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234 99 Kennair, 2014; Conroy, 2013; Petersen & Hyde, 2009; Schnoll et al., 2015). This is a
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236 100 pattern also found in studies of aggressive behavior (Archer, 2004) reflecting stronger
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243 101 competitiveness and the use of aggressive means among men, and in a study of sexual
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245 102 harassment victimization in middle school (Schnoll et al., 2015).

247 103 Further, by studying women as perpetrators one discovers that not only do
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249 104 they sexually harass men, albeit to a lesser degree than men harass women, they also
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251 105 harass other women (Kennair & Bendixen, 2012). Traditional social science and
252
253 106 feminist perspectives have not focused on competition among women (Fisher, 2014) .
254
255 107 Considering all constellations of perpetrators and victims of harassment provides the
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257 108 possibility to consider whether there are sex specific patterns of sexual harassment
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259 109 and differences in motivations and perceptions.

262 110 Using a highly comparable sample of high school students to the original
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264 111 study, we expanded on the original study using more refined measures of sexual
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266 112 harassment that for all acts better distinguish same-sex from opposite-sex harassment
267
268 113 by peers (victimization) and harassment of peers (perpetration). Additionally, we
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270 114 apply the full three components of sociosexuality (SOI-R, Penke & Asendorpf, 2008),
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272 115 and more comprehensive and updated measures of Porn Exposure, Rape Stereotypes
273
274 116 (McMahon & Farmer, 2011), and Hostile Sexism toward women and men (Glick &
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276 117 Fiske, 1996, 1999) to predict same-sex or opposite-sex harassment victimization and
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278 118 perpetration.

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284 120 The following hypothesis and predictions are tested:

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286 121 Hypothesis 1: Sociosexuality will be the best predictor of being sexually harassed by
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288 122 and harassing peers of same-sex and opposite-sex, and the effect of sociosexuality on
289
290 123 sexual harassment will not be accounted for by other factors such as porn exposure,
291
292 124 rape stereotypes and hostile sexism (Kennair & Bendixen, 2012).

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303 126 Based on previous work (Kennair & Bendixen, 2012; Schnoll et al., 2015) we
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305 127 wanted to examine if diverse harassment acts may reflect partly different tactics;
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307 128 *derogation and sexual solicitation*. Grouping sexual harassment acts accordingly
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309 129 could shed light on the underlying motivational processes. In order to do this we
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311 130 examined the diverse acts of sexual harassment (ranging from verbal derogatory
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313 131 comments, comments on looks, displays of sexual objects/pictures, spreading sexual
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315 132 rumors, receiving electronically sexual pictures or sexual requests) with regard to
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317 133 same-sex versus opposite-sex prevalence rates. By grouping acts theoretically,
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319 134 according to content, into *sexual solicitation* tactics and *competitor derogation* tactics
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321 135 we predicted:
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326 137 Prediction 1: Participants would show higher prevalence for same-sex competitor
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328 138 derogation tactics and higher prevalence for opposite-sex solicitation tactics.
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333 140 Prediction 2: Reporting victimization will be more prevalent than reporting
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335 141 perpetration of derogation or solicitation. Because derogation is intended to be
336
337 142 harassing while solicitation is not, greater victim-perpetrator differences are expected
338
339 143 to be found for the latter, particularly for *opposite-sex* encounters.
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341 144
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343 145 Prediction 3: Because sociosexuality measures individual differences in the
344
345 146 propensity to pursue short-term (casual) sex, we expect this propensity to be more
346
347 147 strongly associated with forms of sexual harassment that primarily reflect *opposite-*
348
349 148 *sex sexual solicitation* tactics on the one hand and *same-sex competitor derogation*
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351 149 tactics on the other (Kennair & Bendixen, 2012). We predict that associations
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353 150 between sociosexuality and (a) sexual harassment that reflect *opposite-sex derogation*
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363 151 would be accounted for by same-sex derogation tactics, and (b) sexual harassment
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365 152 that reflect *same-sex solicitation* tactics would be accounted for by opposite-sex
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368 153 solicitation tactics.

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371 155 **2. Methods**

372 156 *2.1. Design and Subjects*

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376 157 A cross-sectional study that covered students enrolled in 17 (out of 22) high
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378 158 schools was carried out in Central Norway. In total, 1713 students responded to a
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380 159 web-based questionnaire consisting of 365 questions. Of these, 1658 responded to
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382 160 questions on sexual harassment, and 1523 to questions on sociosexuality. Participants
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384 161 with highly inconsistent, monotonous and extreme responses were excluded from the
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386 162 analyses. The final sample eligible for analyses consisted of 1326 heterosexual
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388 163 students (43% men, 57% women) aged between 16 and 24 (Mean age = 17.8, *SD* =
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390 164 1.1, both sexes).¹

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393 166 *2.2. Procedure*

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397 167 In agreement with each of the 17 schools, the 'Health, Sexual Harassment and
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399 168 Experiences Study' was carried out as a survey using a web-based questionnaire. The
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401 169 schools participated on one of three separate occasions: May/June 2013,
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403 170 November/December 2013, or May/June 2014. The students, their parents and the
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405 171 school staff received written information about the study, stating the purpose and
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407 172 content of the project. The school administered the written information- and informed
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409 173 consent form, and students received a login code in exchange for returning the

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415 ¹ Sex and age distributions were not affected by the removal of participants. A means
416 substitution procedure was performed for the 9.6% missing scores on the variable Rape
417 Stereotypes.
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423 174 consent form. Convenience sampling procedures were applied within schools. The
424
425 175 number of students who were invited to participate was not recorded, but the identical
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427 176 procedure applied in an earlier study produced a response rate close to 50% (Kennair
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429 177 & Bendixen, 2012). Students could respond to the questionnaire on their designated
430
431 178 computer at home or in the classroom. Arrangements for group administration at
432
433 179 school ensured anonymity and confidentiality. Throughout the weeks that the survey
434
435 180 took place each school's public health nurse was available for contact. The Regional
436
437 181 Committee for Medical and Health Research Ethics approved the procedure.
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441 183 *2.3. Measurements*

442 184 *2.3.1. Independent variables (predictors)*

443 185 *2.3.1.1. Sociosexuality.* Participants completed the revised *Sociosexuality Orientation*
444
445 186 *inventory* (SOI-R, Penke & Asendorpf, 2008). Internal consistency was good for the
446
447 187 9-item measure ($\alpha = .85$) and excellent for each of the three components: SOI-
448
449 188 Behavior ($\alpha = .90$), SOI-Attitudes ($\alpha = .88$), and SOI-Desire ($\alpha = .89$). Scaling and
450
451 189 scoring were identical to Penke & Asendorpf (2008).

452
453 190 *2.3.1.2. Porn Exposure.* Participants responded to questions regarding their exposure
454
455 191 to erotica and pornographic media (Kennair & Bendixen, 2012). They responded
456
457 192 "No" or "Yes" to the use of the following types in the past academic year: erotica, X-
458
459 193 rated/soft core porn, XXX-rated/hard core porn, and violent porn). In constructing the
460
461 194 index for porn exposure, type of porn use was coded first ($0 = no\ exposure\ or\ erotica$
462
463 195 *only, 1 = soft core porn, 2 = hard core porn, and 3 = violent porn*). Each participant's
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465 196 porn type score was then multiplied with his or her report of frequency of porn
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467 197 exposure ($0 = never, 1 = rarely, 2 = monthly, 3 = weekly, 4 = daily$) producing a
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483 198 porn exposure index. High scores reflect a combination of frequent and hard
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485 199 core/violent porn use.
486
487 200 *2.3.1.3. Rape Stereotypes.* Participants responded to the modified version of the
488
489 201 Illinois Rape Myth Acceptance Scale (McMahon & Farmer, 2011; Payne, Lonsway,
490
491 202 & Fitzgerald, 1999). The modified version was developed to capture the more subtle
492
493 203 and covert forms of stereotypical beliefs (often referred to as 'myths') towards rape
494
495 204 and the attitude objects was changed from 'women' to 'girls' and 'men' to 'boys' for use
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497 205 with student populations. The updated version is a 22-item measure that measures
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499 206 beliefs that (1) men should be held accountable for raping women, (2) women lie
500
501 207 about being raped, (3) whether rape actually took place given the circumstances, and
502
503 208 (4) women ask for it by the way they act. Participants responded to each item using a
504
505 209 five-point Likert-type scale (ranging from 1 = strongly disagree to 5 = strongly agree).
506
507 210 Item scores were summed and averaged. High scores reflect stronger stereotypical
508
509 211 beliefs about rapes of women. Internal consistency was excellent, $\alpha = .93$.
510
511 212 *2.3.1.4. Hostile Sexism Toward Women and Men.* Ten items measuring hostile sexism
512
513 213 were sampled from The Ambivalent Sexism Inventories (Glick & Fiske, 1996, 1999).
514
515 214 Five of the items measured justification of objectification, power over women, and
516
517 215 acceptance of traditional gender roles. Validity of the full scale (11 items) has been
518
519 216 found to be good showing strong correlations with other sexism measures towards
520
521 217 women and measures of rape myth acceptance (Glick & Fiske, 1996, 1999, 2011).
522
523 218 The remaining five items measured resentment of male power and acceptance of
524
525 219 negative stereotypes about men (hostile, arrogant and domineering). Internal
526
527 220 consistencies for the reduced five-item scales used in this study were comparable to
528
529 221 those reported for the original full scales, Towards Women: $\alpha = .83$, Towards Men: α
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531 222 = .79. The item scores were summed and averaged.
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545 224 *2.3.2. Outcome variables: Same – and opposite peer sex sexual harassment.* Being
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547 sexually harassed by peers and harassing peers was measured applying a refined
548 225
549 version of Kennair and Bendixen (2012) sexual harassment scale. The scale includes
550 226
551 nine items on nonphysical sexual harassment behaviors (verbal, non-verbal and digital
552 227
553 forms, see Appendix A for details). Instructions explicitly stated that only acts that
554 228
555 were offensive, unwanted or that created discomfort should be reported. For each of
556 229
557 the nine harassed items, participants indicated if they had been subject to the behavior
558 230
559 in question (*yes* or *no*) during the last academic year from a same-sex peer and/or
560 231
561 from an opposite-sex peer.² Being harassed showed good internal consistency (Kuder-
562 232
563 Richardson, $KR = .78$ and $KR = .75$ for opposite-sex peers or same-sex peers
564 233
565 respectively). Items scores were summed and averaged, reflecting the variety of
566 234
567 harassment acts within the scale). Following questions regarding being harassed,
568 235
569 participants responded to an equivalent list of harassing their same-sex and/or
570 236
571 opposite-sex peers. Internal consistencies for harassing peers were good (opposite-
572 237
573 sex: $KR = .76$, same-sex: $KR = .77$). Any acts involving the use of physical force were
574 238
575 omitted from the scales. To avoid conceptual conflation, we advise that these sexually
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577 coercive acts (forced sexual squeezing, genital/intimate touching, kissing, and
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579 intercourse/oral sex) be treated as separate measures (Kennair & Bendixen, 2012).
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586 243 All analyses were performed using Stata/IC 14.1 for Mac (StataCorp, 2015)
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595 ² The exception was the item measuring 'spreading pictures electronically'. For this item, we
596 did not ask for the sex of the receiver as this would be inapplicable.
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603 **246 3. Results**

604 247
605 248 We present the results in two main sections: First, the results from the reproducibility
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607 249 analyses of Kennair & Bendixen (2012) emphasizing the prediction of sexual
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609 250 harassment for same-sex and opposite-sex encounters (Hypothesis 1). Second, in the
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611 251 advances section, we present the novel results from the more refined measures of peer
612
613 252 sexual harassment (Predictions 1 through 3).
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618 254 *3.1 Reproducing Kennair & Bendixen (2012)*

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620 255 *3.1.1. Descriptives and Sex Differences*

621
622 256 Compared to women, men reported overall less restricted sociosexuality
623
624 257 (Table 1). This was particularly evident for the attitudes and the desire components of
625
626 258 SOI reflecting large sex effects (d -values above .80). Men also reported being
627
628 259 involved in slightly more short-term sexual behavior than women. Men reported
629
630 260 being far more exposed to porn than women. This sex difference was particularly
631
632 261 strong ($d = 1.74$) and reflects both men's higher consumption of more hardcore and
633
634 262 violent pornography and at a much higher frequency (typically '*every month*' or '*every*
635
636 263 '*week*' for men, and '*rarely*' or '*never*' for women).
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641 265 Insert Table 1 about here
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646 267 Sex differences were found in stereotypical beliefs about rape. Men were
647
648 268 slightly less disapproving of these stereotypical beliefs than were women ($d = .40$).
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650 269 Men also reported moderately higher levels of hostile attitudes toward women ($d =$
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652 270 $.46$), while women reported slightly more hostile attitudes toward men ($d = -.17$).
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663 271 Men reported being slightly more sexually harassed by both sexes than
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665 272 women. Compared to women, men also reported sexually harassing peers more,
666
667 273 particularly other men. Although the strongest sex difference was for same-sex
668
669 274 harassment of peers, the sex differences were small to moderate. In summary, these
670
671 275 sex differences were highly comparable to the findings reported by Kennair &
672
673 276 Bendixen (2012) with respect to sociosexuality, porn exposure, sexism, and sexual
674
675 277 harassment. For the new rape stereotype measure, however, the sex difference was
676
677 278 smaller than the equivalent measure reported in Kennair & Bendixen (2012).
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682 280 *3.1.2. Predictors of Being Sexually Harassed by Same-sex and Opposite-sex Peers*
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684
685 281 Multiple regressions were performed on being sexually harassed by same-sex
686
687 282 or by opposite-sex for women and men separately. Stata's 'r' option was applied
688
689 283 throughout as it implements robust standard errors offering more 'honest' standard
690
691 284 errors in the face of heteroscedasticity. We first entered all six predictors in the same
692
693 285 model for comparison with our prior findings (Kennair & Bendixen, 2012).³ We then
694
695 286 performed hierarchical multiple regressions to examine the relative contribution of the
696
697 287 predictors. In Block 1 we entered either the three components of SOI or Rape
698
699 288 Stereotypes and Hostile Sexism (toward women or men). Porn Exposure was always
700
701 289 entered in Block 2. When SOI, Rape Stereotypes and Sexism were not entered in
702
703 290 Block 1 they were entered in Block 3. The variable Hostile Sexism always matched
704
705 291 the sex of the sender or the target (Toward Women for students being harassed by /
706
707 292 harassing women, Toward Men for students being harassed by / harassing men).
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715 ³ Age showed no association with any of the predictors, nor with any of the outcome
716 variables, hence age was omitted from the regression analyzes.
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723 293 As seen from Table 2 the behavior component of SOI turned out to be a
724
725 294 consistent predictor for same-sex and opposite-sex harassment in both sexes. This was
726
727
728 295 partly true also for the desire component, but less so for the attitudes component. Porn
729
730 296 Exposure predicted women being harassed by other women. Rape Stereotypes failed
731
732 297 to predict being harassed, but Hostile Sexism predicted being subject of same-sex
733
734 298 harassment in both sexes and for women being harassed by men. The variances
735
736 299 accounted for by the six predictors across the four regressions were: same-sex
737
738 300 women: $R^2 = .078$, same-sex men: $R^2 = .105$, opposite-sex women: $R^2 = .120$, and
739
740 301 opposite-sex men: $R^2 = .145$.

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742 302
743
744
745 303 Insert Table 2 about here
746

747 304
748
749 305 The relative contributions of the predictors for being harassed by peers are
750
751 306 shown in the note for Table 2. In summary, the hierarchical regression analysis for
752
753 307 women and men being harassed by same-sex peers showed that rape stereotypes and
754
755 308 hostility toward women accounted for less than 2% of the variance over and above
756
757 309 that of SOI and porn exposure. For women and men being harassed by opposite-sex
758
759 310 peers, rape stereotypes and hostility toward women accounted for 3.0% and 1.6%
760
761 311 respectively of the variance over and above that of SOI and porn exposure. In
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763 312 comparison, the additional variance for the three SOI-components over and above that
764
765 313 of rape stereotypes, hostile sexism and porn exposure was markedly larger. The
766
767 314 unique contribution of porn exposure was generally lower when entered after the SOI
768
769 315 components than after rape stereotypes and hostile sexism.

770
771 316 Evidently, through the application of more refined measures of peer sexual
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773 317 harassment, sexism, and rape stereotypes we were to a large extent able to reproduce
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782
783 318 the findings from Kennair & Bendixen (2012). The major disparity was the lower net
784
785 319 effect of porn exposure in the current study.
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790 321 *3.1.3. Predictors of Sexually Harassing Same-sex and Opposite-sex Peers*
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792 322 In the original study we were not able to perform separate predictions of same-
793
794 323 sex and opposite-sex harassment of peers due to lack of refinement in the harassment
795
796 324 measure. Therefore, these analyses are new and complementary to the analyses of
797
798 325 being harassed in the above section. As seen from Table 3, when all six predictors
799
800 326 entered in the model the behavior component of SOI predicted opposite-sex
801
802 327 harassment of peers for women and men, and same-sex harassment for women. The
803
804 328 attitudes component predicted harassment of peers for men only, and the desire
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806 329 component predicted harassment of peers for women only.
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810
811 331 Insert Table 3 about here
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813 332
814
815 333 Porn exposure predicted harassment of peers for women but only same-sex
816
817 334 harassment for men. For men, rape stereotypes predicted harassment of peers of both
818
819 335 sexes. For women, hostile sexism toward men predicted harassment of men while
820
821 336 hostile sexism toward women predicted harassment of other women. The variances
822
823 337 accounted for by all six predictors were: women same-sex: $R^2 = .086$, men same-sex:
824
825 338 $R^2 = .110$, women opposite-sex: $R^2 = .110$, and men opposite-sex: $R^2 = .115$.
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827

828 339 The relative contributions of the predictors for harassing peers are shown in
829
830 340 the note for Table 4. In summary, the hierarchical regression analysis for women and
831
832 341 men harassing same-sex peers showed that rape stereotypes and hostility accounted
833
834 342 for less than 2% of the variance over and above that of SOI and porn exposure. For
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843 343 women and men harassing opposite-sex peers, rape stereotypes and hostility toward
844
845 344 men accounted for 0.9% and 3.4% respectively of the variance over and above that of
846
847 345 SOI and porn exposure. In comparison, when the SOI-components were entered in the
848
849 346 final block (Block 3), the additional variance for sociosexuality over and above that of
850
851 347 rape stereotypes, hostile sexism, and porn exposure was noticeably larger. As for
852
853 348 being harassed, the unique contribution of porn exposure on harassing peers was
854
855 349 generally lower when entered after the SOI-components than after rape stereotypes
856
857 350 and hostile sexism.
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859 351

860 351 861 862 352 *3.2. Advances*

863 353 *3.2.1. Derogation and Solicitation as Distinct Types of Harassment Tactics*

864 354 Theoretically, harassment behavior characterized by deprecating sexual
865
866 355 remarks (objectification), comments on sexual behavior and sexual orientation along
867
868 356 with sexual rumors would clearly be considered derogatory. Prototypical derogatory
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870 357 behavior would probably be degrading comments about private parts. On the other
871
872 358 hand, harassment behavior characterized by sexual requests, showing sexual pictures
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874 359 and objects (and digital distribution of these), as well as dirty talk or sexual remarks
875
876 360 about physical appearance reflect tactics of sexual solicitation. Prototypical
877
878 361 solicitation behavior would be sexual requests. For further analyses, we grouped the
879
880 362 items theoretically reflecting derogation tactics one the one hand (four items) and
881
882 363 solicitation tactics on the other (four items) for victimization and perpetration
883
884 364 experiences separately.⁴
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886 365

894 ⁴ Due to low prevalence the item on digital spreading of nude pictures was omitted. The
895 prevalence on each harassment item for same-sex and opposite-sex and for women and men
896 are found in Appendixes B and C.
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902
903 366 3.2.2. *Derogation and Solicitation Victimization*
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905 367 For testing the victimization part of Prediction 1 we performed two separate two-way
906
907 368 (2×2) mixed design ANOVAs for derogation and solicitation tactics respectively,
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909 369 with sex composition (same-sex versus opposite-sex) as within subject factor and sex
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911 370 of participant (women versus men) as the between subjects factor. As shown in the
912
913 371 left panel of Table 4 and in Figure 1, overall same-sex derogation victimization was
914
915 372 more common than opposite-sex victimization ($d = .58$). However, this effect was
916
917 373 qualified by a sex composition by participant sex interaction, suggesting that relative
918
919 374 to women, men reported being derogated more by same-sex than by opposite-sex
920
921 375 peers. The most typical sex composition for derogatory harassment tactics was men
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923 376 being harassed by same-sex peers.
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925
926 377

928
929 378 Insert Table 4 about here

930
931 379 Insert Figure 1 about here

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935 381 For *solicitation* victimization same-sex encounters were less common than opposite-
936
937 382 sex encounters ($d = .49$). This overall effect was qualified by a sex composition by
938
939 383 participant sex interaction, suggesting that relative to men, women reported being far
940
941 384 more solicited by opposite-sex than same-sex peers.
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943 385

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945
946 386 3.2.3. *Derogation and Solicitation Perpetration*
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948 387 We re-ran the above two-way (2×2) mixed design ANOVAs for testing the
949
950 388 harassment perpetration part of Prediction 1. Overall, same-sex derogation was far
951
952 389 more common than opposite-sex derogation ($d = .70$). As seen from Table 5 and
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962
963 390 Figure 1, this effect was qualified by a sex composition by participant sex interaction,
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965 391 suggesting that relative to women, men particularly derogated same-sex peers.
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967
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969
970 393 Insert Table 5 about here

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973
974 395 For solicitation perpetration we found no mean difference for same-sex and
975
976 396 opposite-sex encounters. The analysis showed, however, that men slightly more than
977
978 397 women reported soliciting others and that this effect was moderated by sex
979
980 398 composition. The interaction effect, albeit small in magnitude, suggest that men, more
981
982 399 than women solicited same-sex peers more.
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985 400

986 987 401 3.2.4. *Victimization versus Perpetration*

988
989 402 For testing Prediction 2, we ran two separate three-way ($2 \times 2 \times 2$) mixed
990
991 403 design ANOVAs for derogation and solicitation respectively with sex composition
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993 404 (same-sex versus opposite-sex) and role (victim versus perpetrator) as within subject
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995 405 factors and sex of participant (women versus men) as the between subjects factor. For
996
997 406 *derogation* tactics (same-sex and opposite-sex combined) we found that victimization
998
999 407 was moderately more common than perpetration, $F(1,1306) = 91.84, p < .001, \eta_p^2 =$
1000
1001 408 $.066, d = 0.53$. This effect was qualified by a small sex of participant interaction
1002
1003 409 effect, $F(1,1306) = 10.62, p < .001, \eta_p^2 = .008, d = 0.18$ suggesting that relative to
1004
1005 410 men, derogation victimization was more common than perpetration in women. The
1006
1007 411 more complex three-way interaction (sex of participant by sex of composition by role:
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1009 412 victim versus perpetrator) was not significant, $F(1,1306) = 0.43, ns$, suggesting that
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1011 413 the patterns of same-sex versus opposite-sex victimization versus perpetration were
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1013 414 similar for men and women.
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1023 415 For *solicitation* tactics, we found that victimization was far more common
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1025 416 than perpetration, $F(1,1309) = 285.68, p < .001, \eta_p^2 = .179, d = 0.93$. This effect was
1026
1027 417 qualified by a small sex of participant interaction effect, $F(1,1309) = 21.07, p < .001,$
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1029 418 $\eta_p^2 = .016, d = 0.26$ suggesting that relative to men, women reported significantly
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1031 419 more victimization than perpetration. The more complex three-way interaction (sex of
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1033 420 participant by sex of composition by role (victim versus perpetrator) was moderately
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1035 421 strong, $F(1,1309) = 118.04, p < .001, \eta_p^2 = .083, d = 0.60$. The patterns suggest that
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1037 422 relative to men, women report higher levels of opposite-sex victimization over
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1039 423 opposite-sex perpetration (women: $M_{\text{vict}} = 0.21, SD = 0.30; M_{\text{perp}} = 0.04, SD = 0.12;$
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1041 424 men: $M_{\text{vict}} = 0.12, SD = 0.21; M_{\text{perp}} = 0.07, SD = 0.17$).
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1045 425

1046 426 *3.2.5. Mediation: Associations Between Sociosexuality and Opposite and Same-sex*
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1048 427 *Derogation and Solicitation*

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1051 428 To test Prediction 3, that associations between sociosexuality and (a) sexual
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1053 429 harassment that reflect *opposite-sex derogation* would be accounted for by same-sex
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1055 430 derogation tactics, and (b) sexual harassment that reflect *same-sex solicitation* tactics
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1057 431 would be accounted for by opposite-sex solicitation tactics we ran four mediation
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1059 432 analyses for each sex applying the traditional Baron & Kenny approach (Iacobucci,
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1061 433 Saldanha, & Deng, 2007) along with more recent developments of testing mediation
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1063 434 using Monte Carlo simulations (Zhao, Lynch, & Chen, 2010). The two approaches
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1065 435 produced the same results. As seen from the upper panel of Table 6, the effect of
1066
1067 436 sociosexuality (SOI-R) on being derogated by the opposite-sex was fully mediated by
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1069 437 same-sex derogation for women (non significant p-value for c') and partially mediated
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1071 438 for men. As seen in the column furthest to the right, the indirect effect of same-sex
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1073 439 was comparably stronger than the direct effect of opposite-sex derogation. The effect
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1083 440 of SOI-R on derogating members of the opposite-sex was fully mediated by same-sex
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1085 441 derogation for men and partially mediated by same-sex derogation for women. Again,
1086
1087 442 the indirect effect of same-sex was markedly stronger than the direct effect of
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1089 443 opposite-sex derogatory tactics.

1092 444

1094 445 **Insert Table 6 about here**

1096 446

1098 447 The corresponding mediation analyses for solicitation tactics are found in the
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1100 448 lower panel of Table 6. The effect of SOI-R on being solicited by the same-sex was
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1102 449 completely mediated by opposite-sex solicitation for women, and partially so for men.
1103
1104 450 The effect of SOI-R on soliciting members of the same-sex was fully mediated by
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1106 451 opposite-sex soliciting tactics for women and men. In summary, the patterns of
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1108 452 findings were consistently supportive of Prediction 3 for (a) women being derogated
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1110 453 and men derogating, and for (b) women being solicited and men soliciting. Patterns
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1112 454 were only partially supportive of the prediction for harassed (derogated and solicited)
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1114 455 men and for harassing women.

1117 456

1119 457 **4. Discussion**

1120
1121 458 In support of Hypothesis 1, and closely reproducing Kennair & Bendixen
1122
1123 459 (2012), we found that sociosexuality was the best predictor of both being harassed as
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1125 460 well as harassing others. This was true for all analyses of the different constellations
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1127 461 of women and men as perpetrators and targets of harassment. Compared to measures
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1129 462 of rape stereotypes and hostile sexism, the three components of sociosexuality
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1131 463 accounted for more than twice the variance when entered first in the regression
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1133 464 model. The only exception was men harassing women, where sociosexuality was only

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1142
1143 465 marginally better. Exposure to porn did not predict harassment in men over and above
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1145 466 the effect of sociosexuality. While we theoretically assume that harassment is causally
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1147 467 linked to unrestricted sociosexuality, we underline that based on the cross-sectional
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1149 468 nature of the present data we cannot make strong inferences about causality or
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1151 469 directionality of the relationship between harassment and sociosexuality.

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1153
1154 470 In support of Prediction 1, we found that same-sex derogation was more
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1156 471 common than opposite-sex derogation victimization and that opposite-sex solicitation
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1158 472 was more common than same-sex solicitation victimization. Men were particularly
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1160 473 subject to *derogation* tactics from other men while women were particularly subject
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1162 474 to *solicitation* tactics from men. For perpetration tactics, same-sex derogation was far
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1164 475 more common than opposite-sex derogation, and particularly so for men. For
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1166 476 solicitation tactics, men reported doing this slightly more than women, but not
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1168 477 primarily due to solicitation of women. The latter finding does not support Prediction
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1170 478 1.

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1173 479 In support of Prediction 2, we found that victimization was more common
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1175 480 than perpetration and particularly so for solicitation tactics that involved opposite-sex
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1177 481 encounters. In support of Prediction 3, the mediation analysis showed that same-sex
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1179 482 derogatory tactics largely accounted for the association between sociosexuality and
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1181 483 opposite-sex derogation, and that opposite-sex solicitation tactics accounted for the
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1183 484 association between sociosexuality and same-sex solicitation tactics. Hence,
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1185 485 unrestricted sociosexuality seems to guide people toward strategies of same-sex
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1187 486 competitor derogation and opposite-sex sexual solicitation. We consider these
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1189 487 patterns as supporting the view that the underlying motive of most (but not all) sexual
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1191 488 harassment acts is an interest in sex, especially short-term sexual relations.
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1203 489 We have thus reproduced the findings from the original paper with respect to
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1205 490 sociosexuality as a major predictor of sexual harassment among high school students
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1207 491 (Kennair & Bendixen, 2012). This dispositional trait is related not only to being
1208
1209 492 subject to peer sexual harassment but also to harassing same-sex and opposite-sex
1210
1211 493 peers in high school. Sociosexuality may be considered part of the structure of
1212
1213 494 personality. It is positively associated with the personality traits extroversion and
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1215 495 sensation seeking, and negatively with shyness, emotional stability and
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1217 496 conscientiousness (Banai & Pavela, 2015; Penke & Asendorpf, 2008), shows
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1219 497 heritability comparable to other personality traits (Bailey, Kirk, Zhu, Dunne, &
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1221 498 Martin, 2000; Westerlund et al., 2010), and it is subject to very little change over the
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1223 499 life course (Bailey et al., 2000). The effects of sociosexuality on sexual harassment
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1225 500 remained substantial when we applied the revised SOI instrument (Penke &
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1227 501 Asendorpf, 2008) rather than the original (Simpson & Gangestad, 1991). Of the
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1229 502 individual components, SOI-Behavior predicted sexual harassment (victimization and
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1231 503 perpetration) for both sexes in seven out of eight regression analysis, SOI-Attitudes in
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1233 504 three and SOI-Desire in five.

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1236 505 Across the four regression analyses on harassing peers we found that the
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1238 506 updated measure on subtle rape stereotypes did contribute to the prediction of men
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1240 507 harassing women (and men harassing other men to a lesser extent). Rape involves
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1242 508 some form of physical force or exploitation. Hence, stereotypical beliefs toward rape
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1244 509 should only vaguely be associated with any measure of harassment that excludes any
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1246 510 form of physical force. While non-physical sexual harassment and sexual coercion are
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1248 511 conceptually distinct the two are likely share considerable variance, and that the effect
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1250 512 of rape stereotypes on men's sexual harassment of women is due to this covariance or
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1252 513 to other unmeasured factors linked to acceptance of sexual force.
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1263 514 Both harassment victimization and perpetration showed positive zero-order
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1265 515 associations with hostile sexism. However, hostile sexism did not predict either same-
1266
1267 516 or opposite-sex harassment perpetration in men when the effects of other variables
1268
1269 517 (including sociosexuality and porn exposure) were accounted for. If sexual
1270
1271 518 harassment of peers reflects hostile sexism, we would expect a positive association.
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1273 519 Furthermore, the effect of hostile sexism was stronger in the *victimization* models
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1275 520 than in the *perpetration* models, and equally strong for same-sex than for opposite-sex
1276
1277 521 harassment in both men and women. Our interpretation of the findings regarding
1278
1279 522 harassment perpetration is in line with Self-perception theory (Bem, 1972). Hostile
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1281 523 attitudes toward the victim's sex follows harassment behavior towards that sex
1282
1283 524 because the behavior is not easily attributable to external incentives or constraints.
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1285 525 Alluding to Lerner's concept of "just world" beliefs, it is also possible that when
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1287 526 performing behavior that is negatively socially sanctioned, one makes assumptions
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1289 527 regarding the target of this behavior that results in blaming the victim (Lerner &
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1291 528 Montada, 1998). Regarding being victimized by peers, while neither causality nor
1292
1293 529 direction can be safely inferred from our cross-sectional data, we believe that negative
1294
1295 530 attitudes toward the perpetrator's sex may be activated by these encounters. Taken
1296
1297 531 together, these findings undermine any model that posits that sexist attitudes cause
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1299 532 harassment behavior (Fiske & Glick, 1995). Rather, we suggest that harassment
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1301 533 behavior towards members of one sex may result in less favorable attitudes towards
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1303 534 that sex.
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1310 536 Conceptually, sexual harassment covers a variety of sexual but socially
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1312 537 undesirable acts that do not involve any sexual coercion (i.e., physical force). Sexual
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1314 538 harassment acts occur both in same-sex and opposite-sex constellations. Both sexes
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1323 539 are targets of and perpetrators of same-sex and opposite-sex harassment acts. To a
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1325 540 large degree the opposite-sex sexual harassment acts in our study overlap with what
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1327 541 we have defined as solicitation tactics, and same-sex sexual harassment acts overlap
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1329 542 with what we call derogation tactics. The overlap is not perfect, though, and we would
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1331 543 still recommend keeping the two types of tactics separate from the same-sex and
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1333 544 opposite-sex level of analysis.

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1336 545 Studying whether one is the perpetrator or the target provides important
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1338 546 insights into the intentions behind solicitation tactics. As men regularly take more
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1340 547 initiative to both short- and long-term sexual relations (Grøntvedt, Kennair, &
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1342 548 Mehmetoglu, 2015) and because men's motives for sex are more characterized by an
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1344 549 approach toward short-term sexual encounters (Kennair, Grøntvedt, Mehmetoglu,
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1346 550 Perilloux, & Buss, 2015; Meltzer, McNulty, & Maner, 2015; Meston & Buss, 2007;
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1348 551 Schmitt, 2005), it would follow that women, more than men, will perceive opposite-
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1350 552 sex solicitation behavior more undesirable. In many cases the intention may not be to
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1352 553 harass. Rather the solicitation is reported as uncomfortable by the target because it is
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1354 554 undesirable. When the solicitation comes from a desirable perpetrator the same type
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1356 555 of behavior might not even be experienced as harassment (Browne, 2006). Still, we
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1358 556 define any continuation of solicitation behavior beyond feedback of undesirability to
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1360 557 be harassment. Prior to such feedback, researchers need to consider the possibility
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1362 558 that it maybe was not intended as anything else than an attempt to communicate
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1364 559 sexual interest. We believe both should be subject to scientific measurement.
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1367 1368 1369 561 *4.1. Limitations and Future Directions*

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1371
1372 562 Despite having a large and comprehensive dataset of high school students, we
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1374 563 cannot make strong inferences of causality or directionality of effects due to the cross-
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1383 564 sectional nature of the study. However, the multivariate analyzes permit inferences on
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1385 565 the relative contribution of predictors to different types of sexual harassment for men
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1388 566 and women and for same-sex and opposite-sex encounters.

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1390 567 We did not start out the current work with a specific instrument for identifying
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1392 568 the two types of non-physical harassment; sexual solicitation and derogation. Rather,
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1394 569 we were originally interested in investigating the different acts involved in sexual
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1396 570 harassment. Future work to design such an instrument would provide a better
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1398 571 specification of the items. This is especially relevant for the items about sending
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1400 572 sexually laden pictures, comments on looks, and the spreading of sexual rumors. We
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1402 573 believe the wording of some of the items should specify the picture contents, type of
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1404 574 comments on looks and content of rumors to improve the differentiation of
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1406
1407 575 solicitation acts from derogation acts.

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1409 576 We also advise researchers to define sexual harassment explicitly and include
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1411 577 acts that are offensive, unwanted or that create discomfort only. Researchers are also
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1413 578 advised to construct instruments that disentangle behavior that is sexualized (e.g.,
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1415 579 sexual attention) from continuation of sexual behavior that has been communicated
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1417 580 clearly (verbally or in other ways) from the target as being offensive or in other ways
1418
1419 581 undesirable. The above refinements of measures of non-physical types of sexual
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1421 582 harassment may also be valuable when studying predictors of sexual coercion.

1422
1423 583 Being sexually harassed is associated with several adverse health outcomes
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1425 584 (E.g., Bendixen, Daveronis, & Kennair, submitted; Duffy, Wareham, & Walsh, 2004;
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1427 585 Landstedt & Gillander Gådin, 2011; Lichty & Campbell, 2012; Skoog, Özdemir, &
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1429 586 Stattin, 2015; Slaatten, Anderssen, & Hetland, 2015). However, interventions to
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1431 587 prevent sexual harassment in student populations have so far been unsuccessful
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1434 588 (Connolly et al., 2015) or have never been subject to scientific evaluation (Pina,
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1443 589 Gannon, & Saunders, 2009). Identifying individual characteristics and mechanisms
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1445 590 related to sexual harassment perpetration and victimization would be an important
1446
1447 591 step toward designing intervention (Pina et al., 2009). Further, a better understanding
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1449 592 of the complex multifaceted nature of sexual harassment is decisive for effective
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1451 593 intervention. Our findings suggest that any aims at reducing same-sex and opposite-
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1453 594 sex derogation tactics would profit from a mate competition framework.
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1456 595

1458 596 *4.2. Conclusion*

1460 597 This study has advanced the understanding of adolescent peer sexual
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1462 598 harassment by specifying sex of actor, sex of target and differentiating between two
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1464 599 tactics of sexual harassment. By differentiating between solicitation and derogation
1465
1466 600 tactics, this study provides more insight into why men and women harass same-sex
1467
1468 601 and opposite-sex peers. This study has also shed light on how there are differences
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1470 602 between what one perceives as harassment compared to whether the same acts were
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1472 603 intended as harassing or derogatory. Indeed, our data show that solicitation acts that
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1474 604 victims perceive as harassment are not always intended as harassment.
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1477 605 We reproduced the prior finding that sociosexuality predicts both being
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1479 606 harassed and harassing peers (Kennair & Bendixen, 2012), and does so to a greater
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1481 607 degree than other important predictors. This pattern of results suggests a greater role
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1483 608 for unrestricted sexual interactions in the explanation of non-physical sexual
1484
1485 609 harassment. This has consequences for the future study of sexual harassment and the
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1487 610 development of prevention programs. We therefore suggest that sexual harassment
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1489 611 may be fruitfully understood from a sexual strategies perspective.
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1503 614 *Acknowledgments*
1504

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1506
1507 616 students and staff of 17 participating high schools. Preliminary analyses the data
1508
1509 617 reported in this paper were presented at HBES, May 27-30, 2015, Missouri.
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1514 619 **5. References**
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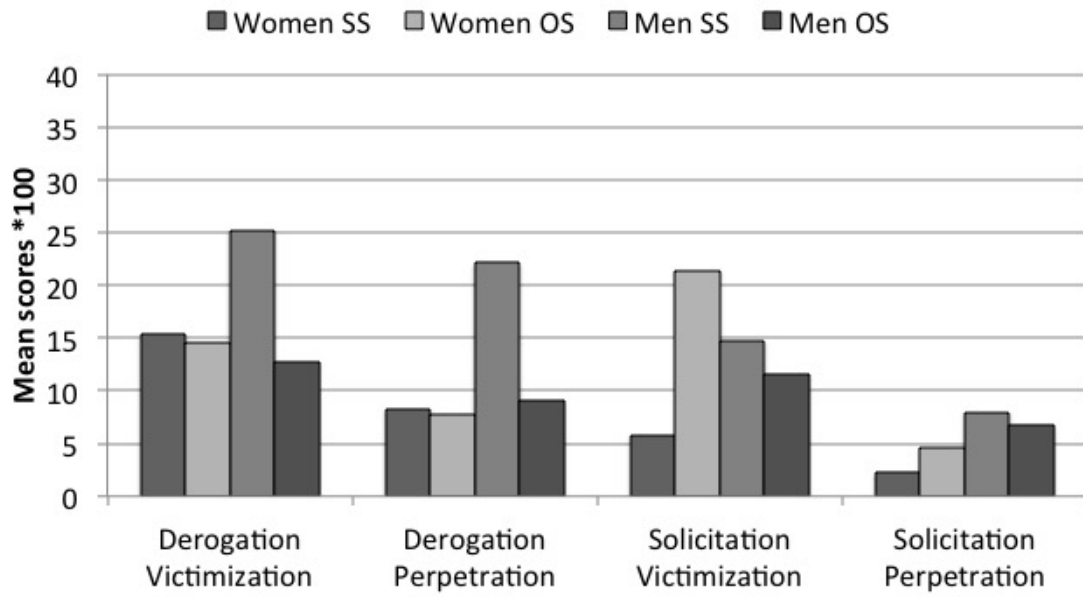


Figure 1. Mean scale scores (x100) for victims and perpetrators of derogation and solicitation. SS = same-sex, OS = opposite-sex

Table 1. Mean Variable and Scale Scores and Standard Deviations (SD) for Women (n=694-759) and Men (n=521-567).

Scales	Women		Men		<i>t</i> ^a	ES ^a
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
1. SOI-R (Total 9 items)	2.98	1.31	4.26	1.59	15.15***	.89
a. Behavior [1-9]	1.95	1.22	2.15	1.70	2.31*	.14
b. Attitudes [1-9]	4.38	2.28	6.24	2.27	14.41***	.82
c. Desire [1-9]	2.60	1.68	4.34	2.25	14.82***	.89
2. Porn Exposure [0-12]	0.69	1.62	5.27	3.55	27.77***	1.74
3. Rape Stereotypes [1-5]	2.28	0.58	2.52	0.64	7.14***	.40
4. Hostile Sexism						
a. Toward Women [1-5]	2.55	0.73	2.92	0.89	7.83***	.46
b. Toward Men [1-5]	2.49	0.72	2.37	0.77	2.89**	-.17
5. Being Sexually Harassed						
a. By Women [0-1]	0.10	0.15	0.11	0.19	1.45	.08
b. By Men [0-1]	0.16	0.22	0.18	0.22	1.52	.09
6. Sexually Harassing						
a. Women [0-1]	0.05	0.12	0.08	0.18	2.79**	.17
b. Men [0-1]	0.06	0.13	0.15	0.22	8.55***	.51

Note. **p* < .05, ***p* < .01, ****p* < .001. Numbers in brackets are range of continuous scores. ^aUnequal variances assumed. ES=Cohen's *d*.

Table 2. Predictors of Being Sexually Harassed by Same-Sex and Opposite-Sex Peers

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

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

	Same sex		Opposite sex	
	β	t	β	t
Women (n=625)				
SOI-Behavior	.114	2.20*	.134	2.32*
SOI-Attitudes	.020	0.37	.009	0.18
SOI-Desire	.117	2.15*	.162	3.05**
Porn Exposure	.110	1.82†	.144	2.19*
Rape Stereotypes	-.074	-1.50	-.012	-0.26
Hostile Sexism	.137	2.74**	.101	2.84**
Men (n=474)				
SOI-Behavior	.048	0.85	.130	2.29*
SOI-Attitudes	.182	3.86**	.082	1.77†
SOI-Desire	.051	1.01	.056	1.14
Porn Exposure	.100	1.92†	.086	1.62
Rape Stereotypes	.097	1.86†	.148	2.44*
Hostile Sexism	.065	1.28	.073	1.38

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

	Derogation			Solicitation		
	<i>F</i>	η_p^2	<i>d</i>	<i>F</i>	η_p^2	<i>d</i>
SS vs. OS (Within)	111.81	0.078	0.58	79.95	0.057	0.49
Sex (Between)	9.72	0.007	0.17	0.15	0.000	0.00
Interaction	85.67	0.061	0.51	180.18	0.120	0.74

Note. SS = Same-Sex, OS = Opposite-Sex

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Table 5. Mixed Design ANOVA's for Derogation ($df = 1.308$) and Solicitation ($df = 1.310$) Perpetration

	Derogation			Solicitation		
	F	η_p^2	d	F	η_p^2	d
SS vs. OS (Within)	161.69	0.110	0.70	1.95	0.001	0.06
Sex (Between)	40.82	0.030	0.35	32.01	0.024	0.32
Interaction	134.95	0.094	0.64	23.18	0.017	0.26

Note. SS = Same-Sex, OS = Opposite-Sex

Table 6. Zero-Order Correlation between Sociosexuality (SOI-R), Same-Sex (SS) - and Opposite-Sex (OS) Harassment (Left Panel). Remaining Direct Effects (C') of Sociosexuality on Opposite-Sex Derogation and Same-Sex Solicitation when the Effect of the Mediator is Accounted for.

		Mediation analysis						
		<i>a</i>	<i>c</i>	<i>b</i>	<i>c'</i>	<i>p</i>	Indirect / Total	Indirect / Direct
Derogation	Women harassed	.19	.15	.62	.03	0.263	0.785	3.7
	Men Harassed	.25	.25	.63	.09	0.006	0.629	1.7
	Women harassing	.20	.20	.72	.06	0.025	0.712	2.5
	Men harassing	.25	.21	.59	.06	0.082	0.704	2.4
Solicitation	Women harassed	.25	.10	.42	.00	0.943	1.024	43.1
	Men harassed	.31	.25	.48	.10	0.012	0.606	1.5
	Women harassing	.18	.11	.40	.04	0.280	0.659	1.9
	Men harassing	.27	.23	.65	.06	0.066	0.736	2.8

Note. For Derogation the mediator is SS, $a = r(\text{SOI-R} \times \text{SS})$, $c = r(\text{SOI-R} \times \text{OS})$. For Solicitation the mediator is OS, $a = r(\text{SOI-R} \times \text{OS})$, $c = r(\text{SOI-R} \times \text{SS})$. $b = r(\text{SS} \times \text{OS})$ for both harassment types.

1
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4 Appendix A

5
6 Harassment acts

- 7
- 8 1. Denigrating comments such as "whore", "manwhore", "slut", "manslut",
9 "loose", etc.
 - 10
 - 11 2. Denigrating comments such as "gay", "lesbo", "fag", "dyke", etc.
 - 12
 - 13 3. Denigrating comments such "cunt", "prick", "asshole", "bitch", etc.
 - 14
 - 15 4. Dirty/debasing talk or denigrating comments on body or looks
 - 16
 - 17 5. Showed sexually laden pictures or objects
 - 18
 - 19 6. Spreading of sexual rumors
 - 20
 - 21 7. Having had pictures of you distributed online when undressed*
 - 22
 - 23 8. Receiving/sending sexual content through electronic media (mobile or
24 internet)
 - 25
 - 26 9. Sexual requests (asking for or requiring sexual service)
 - 27
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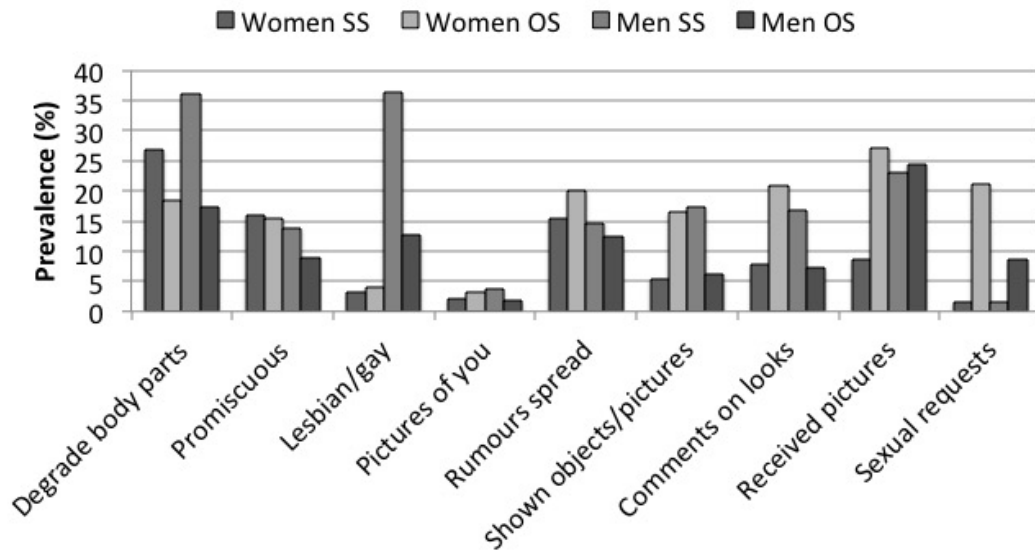
30 *Note:* *only the victimization item asked about sex of distributor (sender)

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Appendix B.

Prevalence rates for the nine acts of being sexually harassed by peers.

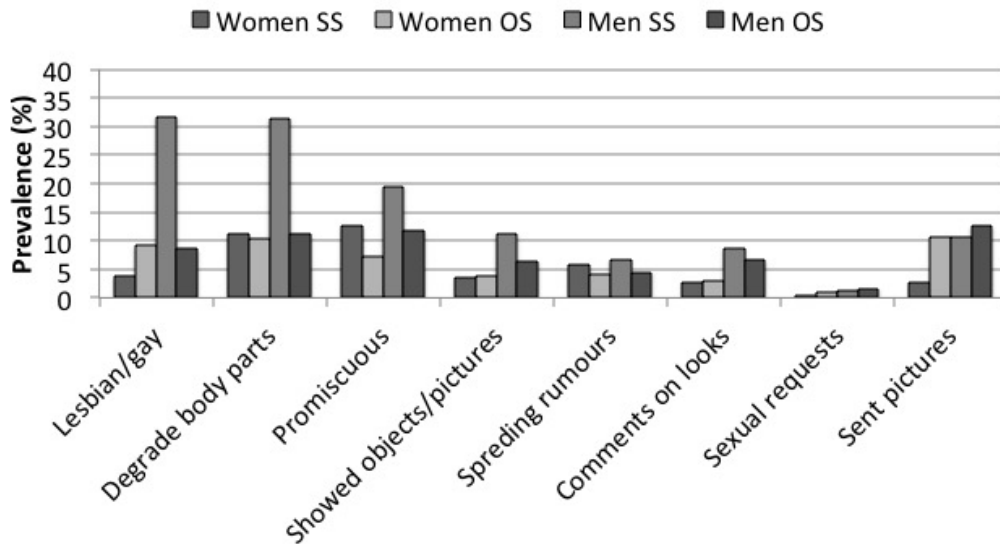
SS = same-sex, OS = opposite-sex



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

Mons Bendixen^{a*}

Leif Edward Ottesen Kennair^a

*Corresponding author. Email: mons.bendixen@svt.ntnu.no, telephone: (+47)
7359 7484, Department of Psychology, Norwegian University of Science and
Technology, 7491 Trondheim, Norway

^aDepartment of Psychology, Norwegian University of Science and Technology,
Trondheim, Norway

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