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## Abstract

Recent legislative developments have led to a marked increase in the empirical investigation of motivations and judgements of so-called acts of ‘revenge pornography’ offending. In two independently-sampled studies, we used moderation analyses to investigate whether higher levels of intrasexual competition predicted more lenient judgements of revenge pornography offences as a function of sex (Study 1,  $N = 241$ ), and whether such relationships would be further moderated by physical attractiveness (Study 2,  $N = 402$ ). Potential covariates of callous-unemotional traits, empathy, and victimization history were controlled for. Opposing our hypotheses, we consistently observed a trend for higher levels of intrasexual competition being associated with more lenient judgements of revenge pornography offences involving male victims by female participants. The results are discussed in terms of intrasexual competition potentially sharing variance with unobserved constructs in the wider sexological literature, and of the key relevance of these findings for future empirical investigation into judgements of non-consensual image-based offending. Open data and a preprint of this paper are available at [https://osf.io/y29fq/?view\\_only=568a2c403fcf428280914c149063db95](https://osf.io/y29fq/?view_only=568a2c403fcf428280914c149063db95).

*Key words: non-consensual image-based offending; revenge porn; intrasexual competition; empathy; callous-unemotional traits*

55 **Intrasexual competition as a predictor of women’s judgements of revenge pornography**  
56 **offending**

57

58 **Introduction**

59 Recent legislative developments in the Western world, as well as high-profile celebrity  
60 scandals, have led to revenge pornography emerging as a topic of social and empirical  
61 inquiry. Revenge pornography falls under the umbrella term of ‘non-consensual  
62 pornography’ (Patella-Rey, 2018) and involves an individual ‘leaking’ private sexual images  
63 of another. This act is usually a result of a relationship breakdown (Dawkins, 2015) and is  
64 often used to damage an ex partner’s social reputation (Henry & Powell, 2014). Victims of  
65 revenge pornography not only face professional consequences, such as having their contracts  
66 terminated on the grounds of damaging an organization’s reputation (Citron & Franks, 2014),  
67 but suffer pervasive symptoms of depression, anxiety, and ongoing difficulties with regard to  
68 trusting others and their general self-image (Bates, 2017). Such consequences, in some cases,  
69 have resulted in elevated rates of suicide attempts and completions (Stroud, 2014). As such,  
70 informing policy through constructing a greater understanding of this form of sexual  
71 offending behavior is a priority.

72 Although the severity of punishment varies (i.e., from a fine to imprisonment), the non-  
73 consensual sharing of sexually explicit images is a punishable criminal offence across most  
74 of the United States of America (38 states, plus Washington D. C.), Australia, Canada, and  
75 Europe. Since the criminalization of revenge pornography offending in the Courts and  
76 Criminal Justice Act 2015 (UK), over 1,000 cases were reported by police forces in England  
77 and Wales in the latter half of 2015, with 61% of these cases resulting in no action being  
78 taken against the perpetrator (Sherlock, 2016). A noticeable gap in the emerging revenge  
79 pornography literature is how public and judicial judgements of revenge pornography

80 offences may be influenced by psychosocial factors. Our aim in this paper is to understand  
81 how one such factor, intrasexual competition, influences judgements of revenge pornography,  
82 and whether or not this association is further moderated by variation in perceived  
83 attractiveness of the victim.

84

### 85 **Understanding Potential Drivers of Revenge Pornography Judgements**

86 The prevalence of revenge pornography perpetration and victimization is largely  
87 unclear. The main reason for this is summarised in Walker & Sleath's (2017) systematic  
88 review in which they highlight a lack of consistency in terms of "populations examined,  
89 questions/measurements used, definitions employed, time periods over which the behaviors  
90 were measured, and how prevalence was calculated" (p. 21). However, best estimates suggest  
91 that as a function of sex, and contrary to popular and academic commentaries on the issue  
92 (see McGlynn, Rackley, & Houghton, 2017), males are more likely than females to be both  
93 victims and perpetrators of revenge pornography offences.

94 Consistent with other work in areas of sexual crime, judgements of revenge  
95 pornography may be rooted in attributions made about victims, their alleged role in their own  
96 victimization, and the culpability of individual offenders (Bothamley & Tully, 2018; Henry &  
97 Powell, 2016; Niemi & Young, 2016). Applied to the revenge pornography context more  
98 specifically, recent survey-based research conducted in the USA has found high levels of  
99 support for the criminalization of the non-consensual sharing of sexual images – particularly  
100 among female respondents. However, levels of support dropped when it was revealed that a  
101 victim in a specific case produced the images themselves (Lageson, McElrath, & Palmer,  
102 2018). Given that most cases of revenge pornography are a result of a betrayal of trust with  
103 what was at first a consensual sending of a private photo taken by the victim (Citron & Frank,

104 2014), it seems that *victim blaming* may play a key role in judgements of the harm caused by  
105 revenge pornography offending, and further of the criminal nature of the behavior itself.

106       Aside from the actual act of having a private sexual image shared, Bloom (2014) details  
107 a second level of abuse for the victims of revenge pornography offences through  
108 “commentators who hold them solely responsible for their misfortune” (p. 250). Victim  
109 blaming in this scenario stems from the agency that the victims are perceived to have had in  
110 the taking of sexual images, with many choosing to send these to current or previous sexual  
111 partners. Fay (2018) argues that there is a general apathy towards victims, and that blaming  
112 them for sending the pictures in the first place is just “a modern twist on the antiquated notion  
113 that a rape victim ‘asked for it’ by wearing promiscuous clothing” (p. 1844). Relatedly,  
114 Hadwin (2017) found that US participants with less knowledge and exposure to information  
115 about revenge pornography were more likely to show instances of victim blaming. This  
116 emphasizes the need for media coverage that includes information about the realities of  
117 revenge pornography victimization and its impact, rather than popular articles (e.g., “23  
118 *Reasons Why You Should Never, Ever Take A Nude Pic Again*”; Fern, 2014) that perpetuate  
119 the idea that victims are to blame for taking and sending images in the first instance.

120       Recent research into public perceptions of revenge pornography in the UK found sex  
121 differences in victim blaming, with men being significantly more likely to do this than  
122 women (Bothamley & Tully, 2018). This is consistent with victim blaming in relation to a  
123 range of sexual offences (McCaul, Veltum, Boyechko, & Crawford, 1990). However,  
124 contradictory data is reported in the unpublished work of Davies (2017), which finds that in  
125 the context of a revenge pornography offence, females had a greater tendency to blame the  
126 victim than did males. This suggests that other factors may influence the effect of sex on  
127 judgements of such offences. We outline one potential moderator of this association below,  
128 before highlighting two potential covariates which might also play a part.

129

130           **Intrasexual competition.** Intrasexual competition is an evolutionary concept related to  
131 competition with sexual rivals (Darwin, 1871). This process is primarily motivated by a  
132 desire to both obtain and retain mates, and involves competing for resources such as status,  
133 popularity, and money to help achieve that end (Arnocky & Vaillancourt, 2017). With acts of  
134 revenge pornography influencing the mate value of a victim, albeit more negatively for  
135 women than for men (Buss, Goetz, Duntley, Asao, & Conroy-Beam, 2017), the effects of sex  
136 on judgements of this form of offending behavior may be predicted by increased levels of  
137 intrasexual competition when the victim is of the same sex as the person providing their  
138 judgements of an offence. Our consideration of an evolutionary construct in this area is not  
139 at-odds with other theorizing in the area of sexual violence. For example, others have  
140 formulated evolutionary explanations of sexual crime *perpetration* (Lalumière, Harris,  
141 Quinsey, & Rice, 2005; Thornhill & Palmer, 2000). However, we are not aware of prior work  
142 that embeds an evolutionary explanation for *judgements of sexual crimes*.

143           Fisher and Cox (2011) reported four mating strategies related to intrasexual  
144 competition: (1) self-promotion, (2) competitor derogation, (3) competitor manipulation, and  
145 (4) mate manipulation. Committing, or endorsing acts of revenge pornography, may liken to  
146 competitor derogation or manipulation (through the notion of so-called ‘slut shaming’;  
147 Ringrose & Renold, 2012), with this form of intrasexual competition manifesting in attempts  
148 to compete for mates using physical cues related to fertility and attractiveness (Fisher & Cox,  
149 2011). Further, there is evidence to suggest that derogating a potential rival on the basis of  
150 her alleged sexual promiscuity is heightened among women. For example, Muggleton,  
151 Tarran, & Fincher (2018) found that women (but not men) are more willing to punish  
152 sexually-accessible, relative to sexually-restricted women, even at a slight financial cost to  
153 themselves. McAndrew (2017) states that gossiping is a woman’s ‘weapon of choice’ when it

154 comes to intrasexual competition due to their preference for indirect tactics (see also  
155 Campbell, 2004; Davis, Dufort, Desrochers, Vaillancourt, & Arnocky, 2018). Further, work  
156 by Reynolds, Baumeister, and Maner (2018) has demonstrated how women actively harmed,  
157 rather than advanced, the reputation of another woman who they felt either directly (through  
158 flirtation) or indirectly (just by being attractive or provocatively dressed) threatened their  
159 relationship (see also Vaillancourt, 2013; Vaillancourt & Sharma, 2011).

160 In contrast, men typically use luxury items to impress women as they signify high  
161 social status and economical resource acquisition - factors prioritized and considered  
162 attractive by women (Buss, 2015; Griskevicius et al., 2007; Lycett & Dunbar, 2000). Men  
163 also appear to be threatened by increased social status of other men and are more likely to  
164 label a man engaging in conspicuous consumption as a rival and mate poacher than as a  
165 potential friend (Hennighausen, Hudders, Lange, & Fink, 2016). As such, men may endeavor  
166 to use indirect means to reduce the potential mate value of other men who displaying such  
167 status. For example, Knapen, Blaker, and van Vugt (2018) found that when paired with a  
168 taller male counterpart (height being a trait valued by females in a male mate), shorter men  
169 would manipulate the distribution of resources to favour themselves.

170 Considering past research into intrasexual competition triggers and rival derogation  
171 strategies, highly competitive individuals may blame victims of a revenge pornography  
172 offence to a greater extent (or ascribe lower levels of criminality to such offences) if they are  
173 sexually attractive (versus unattractive). This may also lead to a lower expression of  
174 sympathy or perceptions of victim harm or distress. It is here where we might also expect to  
175 see sex differences between men and women. That is, owing to observed sex differences in  
176 the sexual selection, mate choice, and mate competition literature (see Buss & Dedden, 1990;  
177 Puts, 2016), and the review above, we might expect such judgements as a form of intrasexual  
178 rival derogation by women, but not men, when victims are physically attractive. For example,

179 because of the perceived value males place on the physical attractiveness of their female  
180 mates, intrasexual competition may facilitate aggression against another over aspects related  
181 to physical appearance (Arnocky & Vaillancourt, 2017). This relationship is likely  
182 underpinned by physical attractiveness being associated with fertility, health, and genetic  
183 fitness; aspects which can benefit prospective offspring. Two potential covariates of such  
184 judgements are outlined below.

185

186       **Callous-unemotional traits.** Callous-unemotional (CU) traits comprise callous,  
187 uncaring, and unemotional facets of personality. These traits are thought to map onto  
188 primary, as opposed to secondary (i.e., anti-social behavior) psychopathy-related  
189 characteristics, which manifest during adolescence, but persist into adulthood (Frick, 2004).  
190 Although not previously investigated in regards to revenge pornography specifically, CU  
191 traits (and related measures of psychopathy) have been associated with an increased  
192 propensity to commit cyber- and revenge-related crimes. For example, such traits have been  
193 associated with positive views of cyberbullying (Goodboy & Martin, 2015; March, Grieve,  
194 Marrington, & Jonason, 2017; Wright, Harper, & Wachs, 2018) and an increased likelihood  
195 to disseminate private sexual text messages or seek revenge, following the infidelity of a  
196 partner (Brewer, Hunt, James, & Abell, 2015; Clancy, Klettke, & Halford, 2019; Rasmussen  
197 & Boon, 2014). As such, in the absence of existing revenge pornography literature, more  
198 lenient judgements on revenge pornography offending may be predicted by increased levels  
199 of CU traits.

200

201       **Empathy.** Empathy, or more precisely the lack thereof, can be defined as the  
202 understanding and sharing of another's emotional experience (Decety & Lamm, 2009).  
203 Similar to CU traits, there has been no direct investigation into the role of empathy and

204 judgements of revenge pornography to date. Research over the past decade has, however,  
205 established a strong association between heightened empathy and less favourable judgements  
206 of, and likelihood to engage in cyberbullying (Doane, Pearson, & Kelly, 2014; Steffgen,  
207 König, Pfetsch, & Melzer, 2011). Moreover, empathic concern for others, in addition to the  
208 ability to take the perspective of another, has been found to mediate the negative relationship  
209 between psychopathy and forgiveness (Giammarco & Vernon, 2014) – the inability of which,  
210 is closely associated with the desire for revenge (Ho, ForsterLee, ForsterLee, & Crofts,  
211 2002). As such, it could be hypothesized that judgements of revenge pornography offences  
212 would be less lenient in individuals who possess greater empathy, potentially as a function of  
213 them being able to take the perspective of the victim and share their affective response to  
214 victimization.

215

## 216 **Overview of Studies**

217 To our knowledge, no researchers have examined whether evolutionarily-rooted  
218 psychological processes predict judgements of revenge pornography offending. In this paper,  
219 we present two studies to begin to fill this gap in the literature. The first used a cross-  
220 sectional design with a moderation analysis to test the hypothesis that higher levels of  
221 intrasexual competition would predict lenient judgements of a revenge pornography case  
222 when the judge and victim were of the same sex. Possible covariates of CU traits and  
223 empathy, were controlled for. Building on this initial study, we then experimentally  
224 manipulated the physical attractiveness of victims in mock police reports of revenge  
225 pornography offending. Here, we predicted that the relationship between intrasexual  
226 competition and leniency judgements would be moderated by attractiveness (i.e., this  
227 relationship would be strongest when the victim was attractive and of the same sex as the  
228 judge).

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## Study 1

### Methods

#### Participants

For both studies, we report how we determined our sample size, all data exclusions (if any), all manipulations, and all measures in the study. To determine our target sample size, we conducted an a priori power analysis using G\*Power (version 3.1.9.2). Assuming an anticipated medium effect size (ensuring any observed effects were of practical importance) and a standard alpha level of .05, a minimum of 129 participants would be required to have 95% power in our planned analyses. We aimed to recruit up to 250 participants in order to account for incidents of missing data and participant withdrawals, whilst allowing for generalisable results. Over-sampling also retains power in regression-based designs wherein interactions are present (Baguley, 2012).

After removing cases where more than 5% of the data were missing, a total of 241 UK participants ( $M_{age} = 36.32$  years,  $SD = 12.78$ ; 49.8% male) completed an online questionnaire, which was advertised through the crowdsourcing website *Prolific*. Although it does not overcome the more general limitations of online research (e.g., a lack of environmental control and/or participant verification), *Prolific* is considered a viable means of participant recruitment; with data quality comparable to that obtained through face-to-face means (Peer, Brandimarte, Samat, & Acquisti, 2017). Inclusion criteria dictated that participants had to be fluent in English, aged 18 years or over, and heterosexual. Participants provided written informed consent in accordance with approved central university research protocols and national ethical guidelines by ticking a box on both the first and last pages of our online survey. All completers were reimbursed with £0.60 for their participation.

254 **Materials**

255 *Demographics.* Participants were asked to report their age, sex, and whether they were  
256 aware of any instances in the past where they themselves had been a victim of revenge  
257 pornography.

258

259 *Scale for Intrasexual Competition (SIC; Buunk & Fisher, 2009).* The SIC comprises  
260 12 items that measure the occurrence of intrasexual competition (e.g., “I always want to beat  
261 other [wo]men”) using a 7-point scale. Subject nouns differed as a function of the sex of the  
262 responder. Each item is rated using a scale anchored from “*Not at all applicable*” to  
263 “*Completely applicable*” (Cronbach’s  $\alpha = .90$ ). High scores indicated greater levels of  
264 intrasexual competition.

265

266 *Judgements of Revenge Pornography (JRP; Bothamley & Tully, 2018).* Judgements  
267 of revenge pornography were measured using the procedure outlined in Bothamley and Tully  
268 (2018). Specifically, participants were asked to read a vignette outlining the breakdown of a  
269 heterosexual relationship, which resulted in the sharing of intimate images, before answering  
270 8 items (e.g., “How much do you think [victim’s name] is to blame for the incident?”) using a  
271 7-point scale. Each item is rated using a scale anchored from “*Not at all/Very unlikely*” to  
272 “*Definitely/Very likely*”. Whereas Bothamley and Tully’s (2018) original vignettes framed the  
273 mode of image dissemination as posting images online, we instead framed the act of revenge  
274 pornography as distributing images amongst a friendship group. The rationale for this was to  
275 avoid potential ceiling effects of participant responses. Specifically, both whilst posting  
276 images online or to a friendship group is intrusive and has damaging consequences, we  
277 anticipated that group-based dissemination would be viewed with less immediate  
278 condemnation and so elicit greater variability in data. In a second deviation from the original

279 study, we opted to average the item responses to create a composite score (Cronbach's  $\alpha =$   
280 .81), rather than use the two originally-reported subscales of victim blaming and offence  
281 severity. This approach was taken due to all items seemingly mapping onto a single factor.  
282 Reverse scoring was used to account for this disparity and higher scores were indicative of  
283 more lenient judgements (i.e., less harm to the victim and less of a crime). Participants were  
284 randomly split into two groups; half received a vignette where the perpetrator was male, and  
285 half received a vignette where the perpetrator was female. The names 'Taylor' and 'Ashley'  
286 were deliberately chosen so that they could act as either sex, as these are both unisex names  
287 in the UK. Directly following the vignette, participants were asked to write a sentence of text  
288 summarising the vignette as an attention check. An example of the vignette used is shown  
289 below:

290

291 Taylor and his girlfriend Ashley had been dating for a while. Throughout the relationship  
292 Taylor and Ashley agreed that it would be fine for Taylor to have some private naked  
293 images of Ashley on his mobile phone for him to view personally. After dating for a  
294 while, the relationship came to an end due to Ashley being unfaithful to Taylor.  
295 Following this, Ashley discovered that Taylor had been sending the intimate photos of  
296 her to his friends. Taylor had sent the photos after his and Ashley's relationship had  
297 finished.

298

299 ***Questionnaire of Cognitive and Affective Empathy (QCAE; Reniers et al., 2011).***

300 The QCAE comprises 31 items that measure cognitive and affective (e.g., "I am inclined to  
301 get nervous when others around me seem to be nervous") dimensions of empathy using a 4-  
302 point scale. Each item is rated using a scale anchored from "*Strongly Disagree*" to "*Strongly*

303 *Agree*". We summed item responses to create a composite score (Cronbach's  $\alpha = .89$ ). High  
304 scores indicated increased levels of empathy.

305

306 ***Inventory of Callous–Unemotional Traits (ICU; Frick, 2004)***. The ICU comprises 24  
307 items that assess the occurrence and intensity of callous, uncaring, and unemotional (e.g., "I  
308 do not care who I hurt to get what I want") traits. Each item is rated on a 4-point scale  
309 anchored from "*not at all true*" to "*definitely true*" with higher scores indicative of greater  
310 levels of CU traits. Although developed for use with adolescents, the ICU has been validated  
311 for use in adult samples (Kimonis, Branch, Hagman, Graham, & Miller, 2013). We summed  
312 item responses to create a composite score (Cronbach's  $\alpha = .83$ ).

313

#### 314 **Procedure**

315 Both studies were approval by institutional ethical review panels prior to data collection  
316 (Study 1: [REMOVED FOR PEER REVIEW / REF]; Study 2: [REMOVED FOR PEER  
317 REVIEW / REF]). Participants initially entered their demographic information, such as to  
318 allow the Qualtrics survey software to pre-populate the SIC measure with the appropriate  
319 male/female labels using a 'loop and merge' procedure. Following this, the SIC, JRP vignette  
320 and questions, QCAE, and ICU measures were presented in a randomized order.

321 Randomization was conducted for each participant by the survey software to reduce the  
322 likelihood of order effects influencing the data. On average, the study took less than 10  
323 minutes to complete.

324

#### 325 **Analysis plan**

326 In instances of missing data ( $N = 4$ ), the sample mean was calculated. Assumptions were  
327 assessed (see supplementary material for more information). Pearson correlations were

328 computed between the focal predictor (intersexual competition), the dependent variable  
329 (judgements of revenge pornography), the moderator variable (sex of the victim), and  
330 covariates (callous-unemotional traits, empathy, self-reported victimization) in relation to the  
331 whole sample, as well as within each sex. We then used Model 1 of the PROCESS plugin for  
332 SPSS (version 3; Hayes, 2018) to run two moderation models (one each for male and female  
333 responders). All regression coefficients for moderation models reported in this paper are  
334 unstandardized, as recommended in Hayes (2018), and were bootstrapped using 5000  
335 samples. Confidence intervals were not bias corrected.

336

## 337 **Results**

338 **Sex differences.** Means and standard deviations for questionnaire data are reported in  
339 Table 1. Independent *t*-tests were used to delineate sex differences within our sample. Males  
340 reported greater levels of intrasexual competition ( $t(239) = 5.09, p < .001, d = 0.65$ ) and CU  
341 traits ( $t(239) = 4.70, p < .001, d = 0.61$ ) than females, and also reported lower levels of  
342 empathy ( $t(239) = -5.40, p < .001, d = -0.70$ ) and more lenient judgements to the perpetrators  
343 of revenge pornography offences ( $t(239) = 2.62, p = .009, d = 0.34$ ). There were no  
344 significant differences in age ( $t(239) = .32, p = .747, d = 0.04$ ) or self-reported victimization  
345 ( $t(239) = .59, p = .558, d = 0.04$ ) between men and women.

346

347 [Insert Table 1 Around Here]

348

349 **Correlation analysis.** We computed bivariate Pearson correlations between predictor,  
350 dependent, and moderator variables, as well as covariates (see Table 2). Intrasexual  
351 competition was positively associated with more lenient judgements of revenge pornography  
352 and negatively associated with empathy in the whole sample. Moreover, Intrasexual

353 competition was positively associated with CU traits in the whole sample, as well as in males  
354 and females individually. Correlations observed in the whole sample, as well as for male  
355 participants specifically, suggested that more lenient judgements of revenge pornography  
356 were reported when the victim was female, relative to male. Further, more lenient judgements  
357 of revenge pornography were associated with lower empathy in the whole sample and female  
358 subsample. More lenient judgements of revenge pornography were also positively associated  
359 with CU traits in the whole sample and male subsample. Empathy was negatively associated  
360 with CU in the whole sample and male and female subsamples.

361

362 [Insert Table 2 Around Here]

363

364 **Moderation analyses.** We conducted two moderation analyses using Model 1 of the  
365 PROCESS plugin for SPSS (Hayes, 2018). In each analysis, intrasexual competition was the  
366 focal predictor (X) and judgements of revenge pornography was the dependent variable (Y).  
367 The moderator variable was the sex of the victim (W). The variables of empathy, CU traits,  
368 and self-reported victimization were controlled for as covariates. Model coefficients are  
369 presented in Tables 3 and 4. Moderated regression trends are presented in Figure 1.

370

371 **Model one: Male responders.** The moderation model for male responders accounted  
372 for 13.8% of the variance in judgements of revenge pornography, and was statistically  
373 significant,  $F(6, 113) = 3.01, p = .010$ . As indicated in Table 3, more lenient judgements of  
374 revenge pornography were reported when the victim was male. There was no main effect of  
375 intrasexual competition, nor a significant interaction between intrasexual competition and  
376 victim sex, indicating a lack of moderation. No covariates were statistically significant.

377

378 [Insert Table 3 Around Here]

379

380 **Model two: Female responders.** The moderation model for female responders  
381 accounted for 21.8% of the variance in judgements of revenge pornography, and was  
382 statistically significant,  $F(6, 114) = 5.29, p < .001$ . As indicated in Table 4, and similar to  
383 male responders, when the victim was male, females reported more lenient judgements of  
384 revenge pornography use. Further, although intrasexual competition was not a significant  
385 predictor of revenge pornography judgement (see Table 4), there was a trend towards there  
386 being a significant interaction between intrasexual competition and victim sex, with females  
387 scoring high in intrasexual competition reporting more leniency when the victim was male. In  
388 terms of covariates, higher levels of CU traits and lower levels of empathy were associated  
389 with more lenient judgements of revenge pornography.

390

391 [Insert Table 4 Around Here]

392

393 [Insert Figure 1 Around Here]

394

## 395 **Study 2**

396 Building on Study 1, this study sought to both replicate our initial findings in a second,  
397 independent sample, as well as explore these associations further by manipulating the  
398 physical attractiveness of victims of revenge pornography offending. We chose to manipulate  
399 physical attractiveness as this is a variable that is clearly displayed in the sexually-explicit  
400 images that is also linked to both intrasexual competition and rival derogation, and potentially  
401 to offence-related cognition (e.g., rape myths related to female appearance; Burt, 1980).

402 While we might expect these effects to be more pronounced among women (Buss & Dedden,

403 1990), recent research has suggested that men's use of steroids (a potential route to muscular  
404 enhancement) is also associated with intrasexual competition (Harris, Dunn, & Alwyn, 2017).

405

## 406 **Methods**

407 **Participants.** To determine our target sample size, we conducted an a priori power  
408 analysis using G\*Power (version 3.1.9.2). Assuming an anticipated effect size consistent with  
409 Study 1 and a standard alpha level of .05, a minimum of 172 participants would be required  
410 to have 95% power in our planned analyses. We aimed to recruit upwards of 400 participants  
411 to ensure higher levels of statistical power. A total of 402 UK participants ( $M_{\text{age}} = 34.91$   
412 years,  $SD = 11.65$ ; 49.5% male) completed the online questionnaire advertised through the  
413 crowdsourcing website *Prolific*. Inclusion criteria suggested that participants should be fluent  
414 in English, aged 18 years or over, and heterosexual. Using *Prolific* user-specific identification  
415 codes, we were able to automatically exclude respondents of Study 1 from taking part in  
416 Study 2; thus avoiding potential biases created by priming or repeating the experiment.  
417 Participants provided written informed consent in accordance with approved central  
418 university research protocols and national ethical guidelines by ticking a box on both the first  
419 and last pages of our online survey. All completers were reimbursed with £0.60 for their  
420 participation.

421

## 422 **Materials**

423 Materials were the same as those outlined in Study 1, save for the inclusion of an extra  
424 manipulation of attractiveness was included. Reliability coefficients for this sample were as  
425 follows: SIC (Cronbach's  $\alpha = .90$ ), RPJ (Cronbach's  $\alpha = .79$ ), QCAE (Cronbach's  $\alpha = .88$ ),  
426 and ICU (Cronbach's  $\alpha = .82$ ).

427

428            **Attractiveness manipulation.** This study made use of four images that were presented  
429 alongside police reports about an alleged revenge pornography offence. These four images  
430 represented two males (one attractive, one unattractive) and two females (one attractive, one  
431 unattractive). These images were taken from the picture set used by Thomas and Stewart-  
432 Williams (2018) and were in turn taken from the online site HotOrNot.com. We matched the  
433 attractive and unattractive images within each sex as closely as possible with reference to age  
434 and general appearance, and used Thomas and Stewart-Williams' (2018) participant ratings  
435 to classify them into attractiveness level categories. However, we also asked our own  
436 participants to rate the attractiveness of each image using a 1 (“*very unattractive*”) to 10  
437 (“*very attractive*”) scale. Our own participants judged each attractive image as more  
438 attractive than the unattractive image of the same sex, male:  $M_{\text{diff}} = 2.88$ ,  $t(401) = 26.35$ ,  $p <$   
439  $.001$ , 95% CI [2.66, 3.09]; female:  $M_{\text{diff}} = 3.11$ ,  $t(401) = 30.01$ ,  $p < .001$ , 95% CI [2.90, 3.31].

440

#### 441 **Procedure**

442 The procedure for this study mirrored that of Study 1. On average, the study took less than 10  
443 minutes to complete, and this procedure was approved by an institutional ethical review panel  
444 prior to data collection.

445

#### 446 **Analysis plan**

447 In instances of missing data ( $N = 7$ ), the sample mean was calculated. Assumptions were  
448 assessed (see supplementary material for more information). Pearson correlations were  
449 computed between the focal predictor (intersexual competition), the dependent variable  
450 (judgements of revenge pornography), the moderator variables (sex of the victim, victim  
451 attractiveness), and covariates (callous-unemotional traits, empathy, self-reported  
452 victimization) in relation to the whole sample, as well as within each sex. We then used

453 Model 3 of the PROCESS plugin for SPSS (version 3; Hayes, 2018) to run two moderated  
454 moderation models (one each for male and female responders). Moderated regression trends  
455 are presented in Figures 2-4.

456

## 457 **Results**

458 **Sex differences.** Means and standard deviations for questionnaire data are reported in  
459 Table 5. Independent *t*-tests were used to delineate sex differences within our sample. Males  
460 reported greater levels of intrasexual competition ( $t(400) = 2.73, p = .006, d = 0.27$ ) and CU  
461 traits ( $t(400) = 5.16, p < .001, d = 0.52$ ) than females, and also reported lower levels of  
462 empathy ( $t(400) = -4.23, p < .001, d = -0.42$ ), more lenient judgements to the perpetrators of  
463 revenge pornography offences ( $t(400) = 3.44, p = .001, d = 0.34$ ), and less incidence of being  
464 a victim of revenge pornography ( $t(400) = -2.87, p = .006, d = -0.24$ ). There were no  
465 significant differences in age ( $t(400) = -.91, p = .365, d = -0.09$ ) between males and females.

466

467 [Insert Table 5 Around Here]

468

469 **Correlation analysis.** We computed bivariate Pearson correlations between predictor,  
470 dependent, and moderator variables, as well as covariates (see Table 6). Intrasexual  
471 competition was positively associated with more lenient judgements of revenge pornography  
472 and CU traits in the whole sample, as well as males and females independently. Further,  
473 intrasexual competition was negatively associated with empathy in the whole sample and the  
474 female subsample. More lenient judgements of revenge pornography were associated with  
475 lower empathy in the whole sample and female subsample, and were also associated with  
476 higher levels of CU traits in the whole sample as well as males and females independently.

477 Empathy was negatively associated with CU in the whole sample and male and female  
478 subsamples.

479

480 [Insert Table 6 Around Here]

481

482 **Moderation analyses.** Two moderated moderation analyses were conducted. Each  
483 analysis mirrored those described in Study 1, save for the implementation of perceived  
484 attractiveness of the victim (*Z*) as a second moderator variable. Again, the variables of  
485 empathy, CU traits, and self-reported victimization were controlled for. Model coefficients  
486 are presented in Tables 7 and 8.

487

488 [Insert Figure 2 Around Here]

489

490 ***Model one: Male responders.*** The moderated moderation model for male responders  
491 accounted for 8.6% of the variance in judgements of revenge pornography. As indicated in  
492 Table 7, although intrasexual competition was positively associated with lenient judgements,,  
493 the overall model was not statistically significant,  $F(10, 188) = 1.77, p = .068$ . There were no  
494 statistically significant interactions between intrasexual competition, victim sex, perceived  
495 victim attractiveness, or judgements of revenge pornography. No covariates were statistically  
496 significant.

497

498 [Insert Table 7 Around Here]

499

500 [Insert Figure 3 Around Here]

501



527 levels of intrasexual competition would predict more lenient judgements of revenge  
528 pornography offences involving *same-sex* victims, either generally (Study 1) or when levels  
529 of attractiveness were manipulated (Study 2).

530 The concept of intrasexual competition has roots in evolutionary biology, and in the  
531 context of revenge pornography may manifest in an increased likelihood to share (or endorse  
532 the sharing of) sexually-explicit images of another. On average, positive associations between  
533 intrasexual competition and more lenient judgements of revenge pornography observed for  
534 men and women in these studies add weight to this claim, with this mechanism likened to the  
535 mating strategies of competitor derogation and manipulation highlighted in Fisher and Cox  
536 (2011). Moreover, we anticipated higher reports of intrasexual competition to associate with  
537 harsher views of same-sex victims (and so more lenient views of the offence itself) as a  
538 function of the distribution of the victim's most intimate images reducing their value as a  
539 rival mate (Buss et al., 2017). Of particular interest is that this finding was evident in female,  
540 but not male participants. Fisher and Cox (2011) suggest that mating strategies such as  
541 competitor derogation and mate manipulation (e.g., so called 'slut shaming') are more  
542 common among women than men, with women being readily willing to harm the reputation  
543 of other women whom they perceive as a threat to their relationship (Reynolds et al., 2018).  
544 As such, it is surprising to find that women reported more lenient judgements of revenge  
545 pornography offences involving male, not female victims in the current study, and that no  
546 interaction with attractiveness (indicative of a social threat) was found.

547 Secondary findings (correlations) of these investigations suggest associations between  
548 more lenient judgements of revenge pornography offences and both higher levels of CU traits  
549 and lower levels of empathy. CU traits were also negatively associated with empathy (see  
550 also Hodsoll, Lavie, & Viding, 2014). Such results go some way to support previous findings  
551 of associations between CU-related traits and/or empathy and variation in the frequency of,

552 and willingness to engage in cyber-related deviancy, and the non-consensual dissemination of  
553 intimate text messages (Clancy et al., 2019; Doane et al., 2014; Goodboy & Martin, 2015;  
554 March et al., 2017; Steffgen et al., 2011; Wright et al., 2018). Moreover, psychopathic traits  
555 more specifically, have been associated with an increased likelihood to engage in acts of  
556 revenge following the breakdown of a relationship (Rasmussen & Boom, 2014). As such, the  
557 findings of the current study support the view that a reduced ability to resonate with (or a  
558 callous-disregard for) the feelings and emotions of the victims are associated with more  
559 lenient judgements of revenge pornography offences.

560

### 561 **Interpretation of Findings**

562 In this section, we offer potential explanations as to why (a) the significant bivariate  
563 correlations between intrasexual competition and more lenient judgements of revenge  
564 pornography were not observed within the moderation models, and (b) the unexpected trends  
565 of higher intrasexually-competitive women reporting more lenient judgements for male, but  
566 not female, victims. The most parsimonious explanation for this first point is that the addition  
567 of the covariates (CU traits, empathy, and victimization) may account for a substantial  
568 proportion of the variance explained within the relationship between intrasexual competition  
569 and revenge pornography judgements. This explanation is partially supported by empathy and  
570 CU traits being significant in the second moderation model (female respondents) reported in  
571 Study 1, however these covariates do not reach statistical significance in any other model  
572 reported.

573 A second explanation could be that the measure of intrasexual competition (the SIC;  
574 Buunk & Fisher, 2009) may share variance with other unobserved constructs. That is, we did  
575 not see the expected effects of higher levels of intrasexual competition predicting more  
576 lenient judgements of revenge pornography offences involving same-sex victims, either

577 generally (Study 1) or when we manipulated attractiveness levels (Study 2). Instead, we  
578 observed the unexpected trend of higher intrasexual competition levels being associated with  
579 more lenient judgements made by female participants about offences with male victims. This  
580 is at-odds with established thinking about sexual victimization, and particularly about the  
581 alleged societal acceptance of revenge pornography. That is, feminist writers commonly refer  
582 to sexual offending (and lenient judgements thereof) as being motivated by the patriarchal  
583 desire of men to be socially-dominant over women (Brownmiller, 1975; for a review of this  
584 argument specifically in relation to revenge pornography, see McGlynn et al., 2017). Some  
585 readers may interpret our findings as being reflective of intrasexual competition among  
586 women leading to victim blaming of males. We do not think that this would be appropriate,  
587 and this would not necessarily be in line with established theories of wider sexual offending,  
588 such as contact offences or viewing child pornography (e.g., Finkelhor, 1984; Seto, 2019;  
589 Ward & Siegert, 2002). Although not specific to revenge pornography, these models cite  
590 sexual arousal (or a desire for sexual gratification) as a key motivating factor for sexual  
591 offending. We see intrasexual competition among females as reflective of this, possibly due  
592 to its co-occurrence with sexual promiscuity or a sociosexual orientation that is inclined  
593 toward short-term mating (Buunk & Fisher, 2009). Applying these relationships directly to  
594 our data, we may see female participants scoring high on the SIC being more lenient about  
595 cases involving male victims due to an increased desire to have potential access to their  
596 sexualized images. However, this explanation has two key limitations. First, if this were the  
597 case, we would expect to see comparable results for males. Second, promiscuity and  
598 sociosexual orientation were only weakly correlated with intrasexual competition in Buunk  
599 and Fisher (2009). Of interest and subsequent to our data collection, a recent alternative to the  
600 SIC – the Intrasexual Rivalry Scale – has been proposed (Karimi-Malekabadi, Ghanbarian,  
601 Afhami, & Chegeni, 2019). This scale reports a two-factor structure of intrasexual

602 competition (self-promotion and rival-derogation), and aids to overcome perceived  
603 limitations of the SIC through systematically developing items that are valid across both  
604 Western and non-Western countries.

605 In contrast, recent research has linked intrasexual competition among women with an  
606 increased propensity to take sexually-explicit images of themselves (Blake, Bastian, Denson,  
607 Grosjean, & Brooks, 2018). That is, using population data it was reported how posting rates  
608 of self-produced sexual images were not associated with city- or county-level indices of  
609 gender inequality, but rather were related to income inequality. Specifically, Blake et al.  
610 (2018) suggest a disproportionate share of the wealth in favour of males incentivizes women  
611 to sexualize themselves as a means of competing with their rivals to attract high-income men.  
612 Applying this to the present work, we might hypothesize that those females scoring higher on  
613 intrasexual competition in our sample may also have a higher propensity to take, post, or  
614 share sexual ‘selfies’. If this is the case, then it becomes feasible that lower leniency (or more  
615 punitive) judgements made by these participants for cases involving female victims in Study  
616 1 might stem from an affinity with those victims.

617 A final possible explanation is based around the assumption that women who are higher  
618 in intrasexual competition (and as such are higher in sociosexuality and short-term mating  
619 tendencies) will more frequently interact with men pursuing similar strategies. Such men are  
620 more likely to be directly aggressive (Cross, 2010) and sexually coercive (Westerlund et al.,  
621 2010), and express greater rape myth acceptance (Yost & Zurbriggen, 2006). As such, these  
622 women may be being harsher toward male victims so that they are less likely to encounter  
623 these men in a dating context, whereby they are at greater risk of sexual violence than men  
624 (Bullock & Beckson, 2011). This explanation helps to account for the sex differences  
625 observed in this investigation<sup>1</sup>.

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<sup>1</sup> The authors would like to thank an anonymous reviewer for suggesting this likely explanation.

626 Of interest, is a discrepancy between the absence of direct effects between intrasexual  
627 competition and judgements of revenge pornography (as a function of sex) in study 1, and  
628 prominent effects being observed in study 2. This disparity is neither fully explained by a  
629 larger sample size in the second study, nor by said effects being masked by the interaction  
630 with victim sex (as this does not explain the finding in males, where the interaction was not  
631 significant). The only other methodological alteration between the two studies, and so a likely  
632 target for future investigation, is the use of images to accompany the vignette and/or the  
633 framing of these vignettes in the style of a police report. It is possible that this method, used  
634 to operationalise our research design, helped to elicit this novel finding; possibly as a  
635 mechanism of increasing the perceived validity of the task.

636

### 637 **Limitations and Future Direction**

638 First, while findings of this investigation were replicated across two, independent  
639 samples, both samples were derived from the UK. Although this research is contextualized  
640 within wider recent legislation developments pertaining to revenge pornography across the  
641 Western world and so likely has international impact, the authors acknowledge cross-cultural  
642 variation in values and social norms and so there is likely value in international replication of  
643 these findings. Second, interpretation of our findings suggests a currently unmeasured  
644 overlap between intrasexual competition and other personality traits (e.g., sexual  
645 promiscuity). As such, future investigation should seek to evaluate this theory, using a similar  
646 methodological approach to that reported here. Third, the vignettes used throughout this  
647 investigation implied that the act of revenge pornography was facilitated by infidelity in the  
648 relationship. It is possible that this might have played some role in the responses of  
649 participants who have cheated, or have been cheated on in the past. Future investigations  
650 using this method should seek to control for this variation. Fourth, in the context of existing

651 research suggesting that both intrasexual competition (Massar, Buunk, & Rempt, 2012) and  
652 receiving sexual images (Garcia et al., 2016) is most prevalent in younger adults, it is  
653 possible that the samples reported here may respond differently from other age groups. As  
654 such this area of research is an ideal candidate for future replications. Finally, and in fitting  
655 with the movement to recognize the use of revenge pornography as just one point in the  
656 continuum of image-based sexual abuse (McGlynn et al., 2017), it is essential to extend these  
657 findings to judgements of other related offences such as upskirting, the production of deep-  
658 fake pornography, and cyber flashing. Upskirting involves taking images of the pubic area of  
659 another underneath their outer clothing, deep-fake pornography involves digitally  
660 manipulating an individual's image in a sexualized manner, and cyber flashing uses  
661 Bluetooth technology to send sexually inappropriate images to non-consenting strangers. By  
662 undertaking replication and extension studies such as these, it may be possible to examine  
663 whether the effects observed in the present study are limited to 'revenge pornography'  
664 offending, or if they apply across McGlynn et al.'s (2017) hypothesized continuum of image-  
665 based sexual abuse.

666

## 667 **Conclusion**

668 To our knowledge, the present study is the first to test the idea that intrasexual  
669 competition may be implicated in social judgements of revenge pornography offences. We  
670 found differential effects of this construct in judgements as a function of both participant and  
671 victim sex. That is, intrasexual competition played little role in the judgements made by male  
672 participants. However, female participants high on intrasexual competition were more lenient  
673 about cases involving male victims, and harsher about cases wherein the victim was female.  
674 These data highlight a nuanced role of intrasexual competition in the judgement of a sexual  
675 offence linked to a proclivity to self-produce and distribute intimate images, with the precise

676 mechanisms underpinning these associations being potentially fruitful areas of further  
677 research. We encourage psychological scientists to study the topic of image-based sexual  
678 violence (and judgements thereof) in a more empirical manner that is consistent with the  
679 broader literature on the sexual motivations of this type offending behavior.

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**Table 1.** Descriptive statistics for male and female questionnaire scores (Study 1).

	Males M (SD)	Females M (SD)	<i>p</i>
Age	36.59 (13.80)	36.06 (11.74)	.747
SIC	2.87 (1.13)	2.19 (.94)	< .001
Revenge Pornography Judgements	2.96 (1.14)	2.57 (1.13)	.009
QCAE	86.48 (10.66)	93.88 (10.58)	< .001
ICU	22.94 (7.97)	18.07 (8.11)	< .001
Victimization	1.7%	.8%	.558

**Note.** SIC = Scale of Intrasexual Competition, QCAE = Questionnaire of Cognitive and Affective Empathy, ICU = Inventory of Callous-unemotional Traits.

Victimization scored by 1 = Yes, 2 = No.

**Table 2.** Pearson correlations between variables for the whole sample, as well as within males and females (Study 1).

	Whole Sample						Males ( <i>n</i> = 121) and Females ( <i>n</i> = 120)					
	1	2	3	4	5	6	1	2	3	4	5	6
[1] SIC	-	.143*	.008	-.063	-.167**	.302***	-	.074	-.003	-.116	-.055	.247**
[2] JRP		-	.181**	-.019	-.281***	.331***	.124	-	.247**	-.098	-.176	.251**
[3] Victim Sex			-	.038	.117	.006	.026	.121	-	.130	.039	.045
[4] Victimization				-	.069	-.105	.051	.108	-.091	-	.079	-.231*
[5] QCAE					-	-.499***	-.090	-.311**	.205*	.034	-	-.443***
[6] ICU						-	.219*	.346***	-.030	.080	-.450***	-

**Note.** SIC = Scale of Intrasexual Competition, JRP = Judgements of Revenge Pornography, QCAE = Questionnaire of Cognitive and Affective Empathy, ICU = Inventory of Callous-unemotional Traits. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ . Male correlations above the diagonal, female correlations below the diagonal.

**Table 3.** Moderation coefficients for male responders (Study 1).

	<i>B</i> (SE)	<i>t</i>	<i>p</i>	95% CI ( <i>B</i> )
SIC	.01 (.09)	.01	.92	[-.17, .19]
Victim Sex	.58 (.20)	2.87	.005	[.18, .97]
SIC × Victim Sex	-.14 (.18)	-.79	.43	[-.50, .22]
†QCAE	-.01 (.01)	-1.09	.28	[-.03, .01]
†ICU	.02 (.01)	1.52	.13	[-.01, .05]
†Victimization	-.68 (.81)	-.84	.40	[-2.28, .92]

**Note.** SIC = Scale of Intrasexual Competition, QCAE = Questionnaire of Cognitive and Affective Empathy, ICU = Inventory of Callous-unemotional Traits. Victim Sex (Males = 1, Females = 2). † indicates covariates.

**Table 4.** Moderation coefficients for female responders (Study 1).

	<i>B</i> (SE)	<i>t</i>	<i>p</i>	95% CI ( <i>B</i> )
SIC	.03 (.10)	.24	.81	[-2.65, 6.20]
Victim Sex	.41 (.19)	2.15	.03	[.03, .79]
SIC × Victim Sex	.38 (.21)	1.85	.07	[-.03, .79]
†QCAE	-.03 (.01)	-2.44	.02	[-.05, -.00]
†ICU	.03 (.01)	2.13	.03	[.002, .05]
†Victimization	1.32 (1.04)	1.26	.21	[-.75, 3.38]

**Note.** SIC = Scale of Intrasexual Competition, QCAE = Questionnaire of Cognitive and Affective Empathy, ICU = Inventory of Callous-unemotional Traits. Victim Sex (Males = 1, Females = 2). † indicates covariates.

**Table 5.** Descriptive statistics for male and female questionnaire scores (Study 2).

	Males M (SD)	Females M (SD)	<i>p</i>
Age	34.38 (12.14)	35.44 (11.25)	.365
SIC	2.72 (1.06)	2.42 (1.09)	< .001
Revenge Pornography Judgements	3.08 (1.02)	2.73 (1.04)	.001
QCAE	86.38 (11.26)	90.87 (9.99)	< .001
ICU	35.37 (7.80)	31.28 (8.08)	< .001
Victimization	1.5%	7.4%	.006

**Note.** SIC = Scale of Intrasexual Competition, QCAE = Questionnaire of Cognitive and Affective Empathy, ICU = Inventory of Callous-unemotional Traits.

Victimization scored by 1 = Yes, 2 = No.

**Table 6.** Pearson correlations between variables for the whole sample, as well as within males and females (Study 2).

	Whole Sample						Males ( <i>n</i> = 199) and Females ( <i>n</i> = 203)					
	1	2	3	4	5	6	1	2	3	4	5	6
[1] SIC	-	.206***	-.016	-.083	-.120*	.225***	-	.208**	-.089	-.111	-.038	.184**
[2] JRP		-	-.090	.085	-.162***	.214***	.168*	-	-.075	.005	-.110	.201**
[3] Victim Sex			-	.048	.022	-.005	.055	-.105	-	.041	.110	-.082
[4] Victimization				-	-.064	.012	-.111	.093	.058	-	-.010	.048
[5] QCAE					-	-.522***	-.156*	-.155*	-.076	-.053	-	-.489***
[6] ICU						-	.212**	.161*	.071	-.058	-.507***	-

**Note.** SIC = Scale of Intrasexual Competition, JRP = Judgements of Revenge Pornography, QCAE = Questionnaire of Cognitive and Affective Empathy, ICU = Inventory of Callous-unemotional Traits. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ . Male correlations above the diagonal, female correlations below the diagonal.

**Table 7.** Moderated moderation coefficients for male responders model

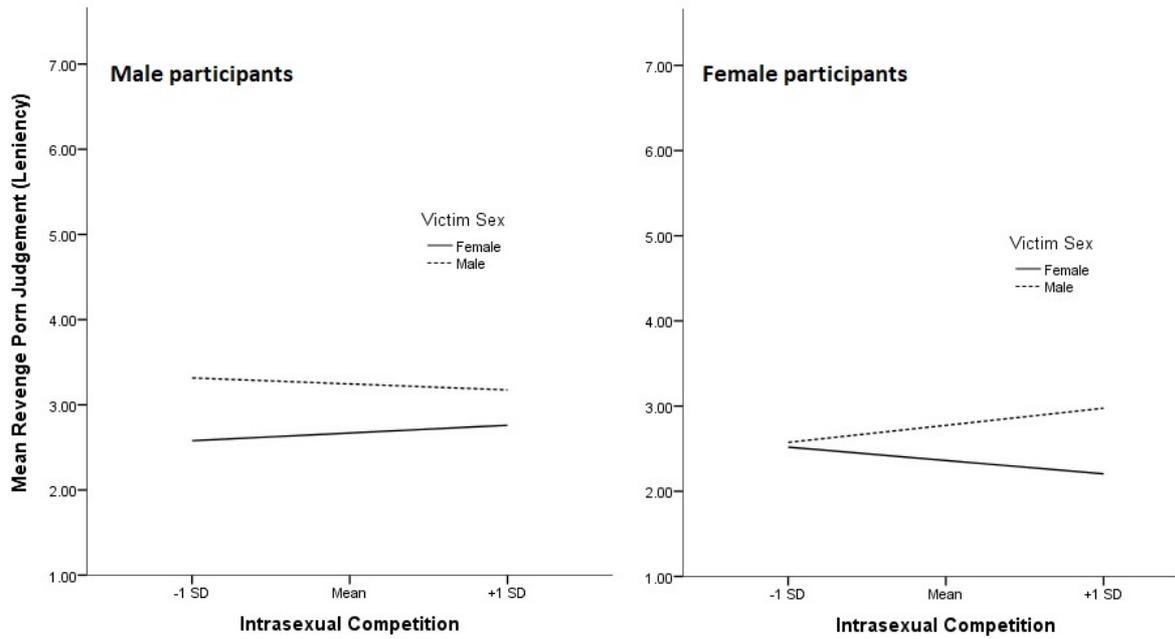
	<i>B</i> (SE)	<i>t</i>	<i>p</i>	95% CI ( <i>B</i> )
SIC	.17 (.07)	2.32	.02	[.03, .32]
Victim Sex	.09 (.07)	.65	.52	[-.19, .38]
Attractiveness	.11 (.14)	.80	.43	[-.17, .40]
SIC × Victim Sex	.10 (.14)	.65	.52	[-.19, .38]
SIC × Attractiveness	-.01 (.15)	-.09	.93	[-.30, .27]
Victim Sex × Attractiveness	.33 (.29)	1.16	.25	[-.23, .90]
SIC × Victim Sex × Attractiveness	-.08 (.29)	-.28	.78	[-.65, .49]
†QCAE	-.00 (.01)	-.18	.86	[-.02, .01]
†ICU	.02 (.01)	1.93	.06	[-.001, .04]
†Victimization	.09 (.60)	.14	.89	[-1.10, 1.27]

**Note.** SIC = Scale of Intrasexual Competition, QCAE = Questionnaire of Cognitive and Affective Empathy, ICU = Inventory of Callous-unemotional Traits. Victim Sex (Males = 1, Females = 2). † indicates covariates.

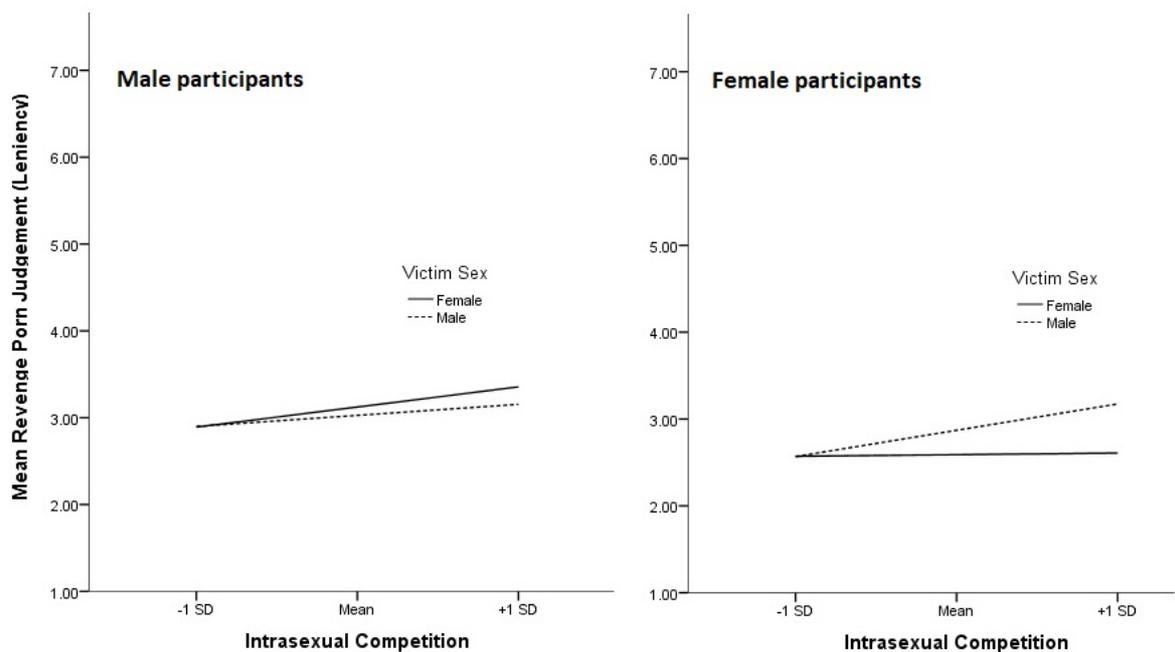
**Table 8.** Moderated moderation coefficients for female responders model

	<i>B</i> (SE)	<i>t</i>	<i>p</i>	95% CI ( <i>B</i> )
SIC	.15 (.07)	2.19	.03	[.01, .28]
Victim Sex	.28 (.14)	1.98	.05	[.001, .56]
Attractiveness	-.06 (.14)	-.41	.68	[-.34, .22]
SIC × Victim Sex	.26 (.13)	1.97	.05	[.001, .56]
SIC × Attractiveness	.18 (.13)	1.40	.16	[-.08, .44]
Victim Sex × Attractiveness	.10 (.28)	.35	.73	[-.46, .66]
SIC × Victim Sex × Attractiveness	-.21 (.26)	-.80	.42	[-.73, .31]
†QCAE	-.01 (.01)	-.88	.38	[-.02, .01]
†ICU	.01 (.01)	1.40	.16	[-.01, .04]
†Victimization	.45 (.28)	1.65	.10	[-.09, 1.00]

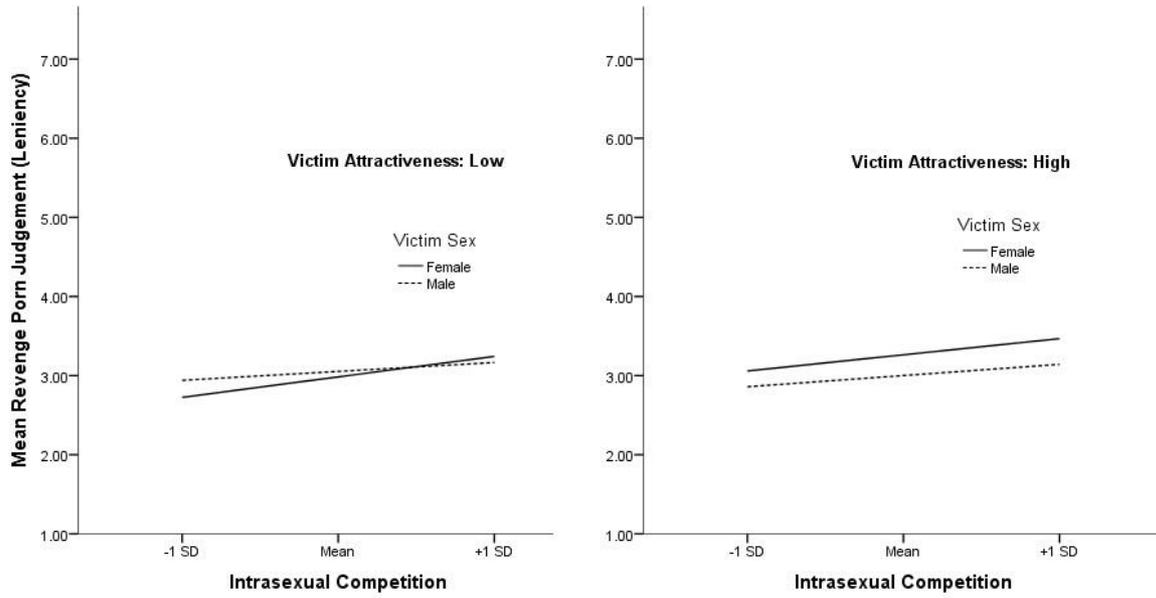
**Note.** SIC = Scale of Intrasexual Competition, QCAE = Questionnaire of Cognitive and Affective Empathy, ICU = Inventory of Callous-unemotional Traits. Victim Sex (Males = 1, Females = 2). † indicates covariates.



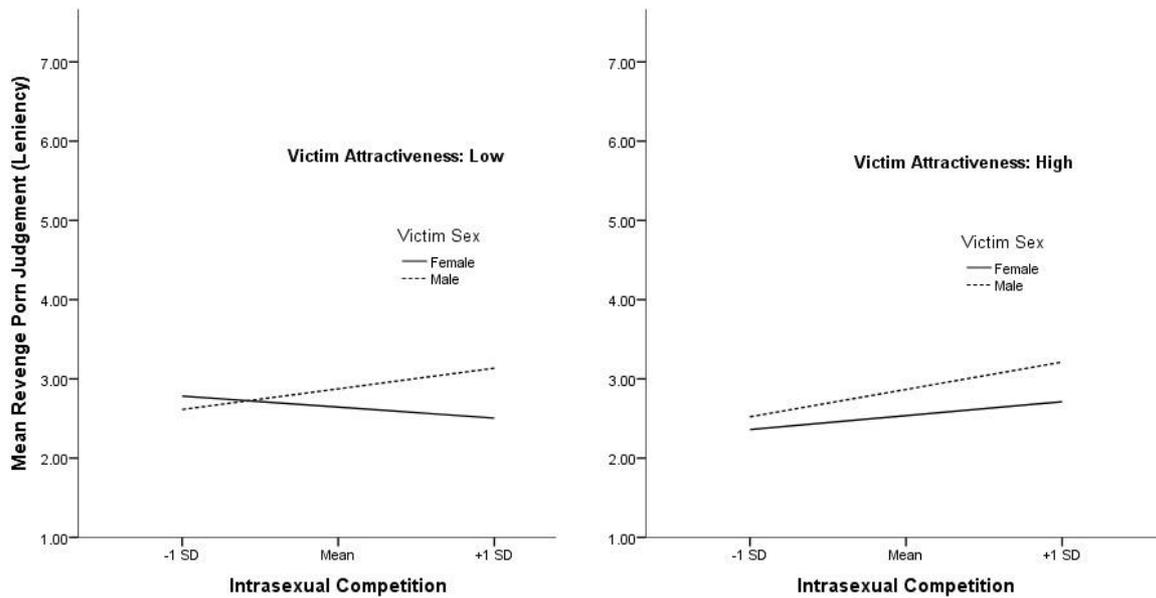
**Figure 1.** Effects of intrasexual competition on judgements of revenge pornography offences (Study 1).



**Figure 2.** Effects of intrasexual competition on judgements of revenge pornography offences (Study 2).



**Figure 3.** Effects of intrasexual competition on judgements of revenge pornography offences made by male participants, by victim attractiveness.



**Figure 4.** Effects of intrasexual competition on judgements of revenge pornography offences made by female participants, by victim attractiveness.