Sociosexuality, Commitment, and Sexual Desire for an Attractive Person

David Rodrigues\textsuperscript{12} - Diniz Lopes\textsuperscript{1}

Received: 2 January 2015 / Revised: 25 March 2016 / Accepted: 14 July 2016 / Published online: 27 July 2016
© Springer Science+Business Media New York 2016

Abstract Sociosexuality refers to a personal predisposition to engage in uncommitted sex. Romantically involved individuals are more likely to engage in infidelity when more unrestricted in their sociosexuality and less committed to their current partners. However, commitment reliably predicts relationship maintenance and the activation of pro-relationship behaviors, regardless of sociosexuality levels. In two studies (Study 1: $N = 566$ heterosexuals; $M_{\text{age}} = 21.24$, $SD = 4.45$; Study 2: $N = 168$ heterosexuals; $M_{\text{age}} = 23.28$, $SD = 5.60$), the association between sociosexuality and commitment was examined. Replicating previous findings, men were more sociosexually unrestricted than women, and single individuals were more sociosexually unrestricted than their romantically involved counterparts (Study 1). Results also showed that more committed individuals were more restricted in their sociosexuality (Studies 1 and 2) and that commitment was negatively associated with physical and sexual attraction to an attractive person, regardless of sociosexuality levels (Study 2). Furthermore, commitment, but not sociosexuality, predicted sexual infidelity in the current relationship and this effect emerged even among sociosexually unrestricted individuals (Studies 1 and 2). No additional gender differences were found across studies. These results converge with findings suggesting that individuals shift their mating strategies and restrict their sociosexuality when in a romantic relationship and that commitment prevents relationship threatening behaviors such as sexual attraction or sexual infidelity.

Keywords Sociosexuality - Commitment - Sexual attraction - Extradyadic sex - Infidelity

Introduction

Sexuality is an important aspect of psychological adjustment and happiness (Mulhall, King, Glina, & Hvidsten, 2008), influencing mating strategies and the pursuit of potential partners (Buss, 1998; Buss & Barnes, 1986). Individual differences in sociosexuality, which is defined as the predisposition to engage in uncommitted sex (Simpson & Gangestad, 1991, 1992), have been among the most widely researched sexuality-related constructs. Closer to the lower end of the sociosexuality continuum, restricted individuals have the need for closeness and intimacy before engaging and being comfortable with casual sex. Inversely, toward the upper end of this continuum unrestricted individuals feel relatively comfortable and enjoy sex without closeness or intimacy.

In the interpersonal relationships context, unrestricted (vs. restricted) individuals display more approachable behaviors to new acquaintances (e.g., smiling, flirting) (Simpson, Gangestad, & Biek, 1993) and are more attracted to others who display these same behaviors (Simpson, Wilson, & Winterheld, 2004). In romantic relationships, unrestricted (vs. restricted) individuals are more likely to engage in both hypothetical (Seal, Agostinelli, & Hannett, 1994) and real-life infidelity behaviors (Barta & Kiene, 2005; Ostovich & Sabini, 2004; Simpson & Gangestad, 1991). As these behaviors can have negative consequences for the relationship (e.g., breakup) (Vangelisti & Gerstenberger, 2004), sociosexuality may be central to explaining the maintenance and stability of romantic relationships.

There is also ample evidence showing that individuals in romantic relationships shift their mating strategies from short term to long term in order to attain their relationship goals...
These gender differences are cross-culturally robust (Schmitt, 2007; Schmitt, 2003, 2005; Simpson & Gangestad, 1991) and have more unrestricted sociosexuality (Jackson & Kirkpatrick, 2009). Research has consistently shown that men, compared to women, are more oriented toward a stable relationship and value less attractive and charismatic partners that are kinder and more dependable. In contrast, restricted individuals are more oriented toward a stable relationship and value less attractive and charismatic partners that are kinder and more affectionate. The fact that different mating strategies lead individuals to value distinct attributes does not necessarily imply they settle for the first person that meets their needs. For instance, unrestricted individuals may strive to choose the most attractive

Sociosexuality

Sociosexuality was originally defined as a behavioral and attitudinal predisposition to engage in casual sex and operationalized by the widely used Sociosexual Orientation Inventory (SOI) (Simpson & Gangestad, 1991; see also Jackson & Kirkpatrick, 2007; Webster & Bryan, 2007). A more recent version of this measure (SOI-R) (Penke & Asendorpf, 2008) expands the construct and suggests that sociosexuality comprises three interdependent components: (1) behaviors, referring to behavioral tendencies and personal histories of casual sex, (2) attitudes, referring to the evaluative disposition toward uncommitted sex, influenced by socialization, and (3) desire, referring to the interest in casual sex often associated with sexual arousal and sexual fantasies. Averaging these components results in a global sociosexuality score. Below, we review research that shows the associations between gender, romantic involvement, relationship quality, and sociosexuality.

Gender Differences

Research has consistently shown that men, compared to women, have more unrestricted sociosexuality (Jackson & Kirkpatrick, 2007; Schmitt, 2003, 2005; Simpson & Gangestad, 1991) and report more unrestricted behaviors, attitudes, and desires (Fisher, 2009; Petersen & Hyde, 2011; Sprecher, Treger, & Sakaluk, 2013). These gender differences are cross-culturally robust (Schmitt, 2003, 2005) and have been hypothesized to derive from evolutionary factors (Buss, 1998; Buss & Schmitt, 1993) and from socialization and normative gender roles (Eagly & Wood, 1999; Wood & Eagly, 2002). For instance, sexually permissive behaviors are more socially acceptable for men than for women, a finding often referred to as the sexual double standard phenomenon. Even though the existence of this phenomenon can be debatable (Marks & Fraley, 2005, 2006), a systematic review of the literature supports its existence (Crawford & Popp, 2003).

Despite these gender differences, research shows a greater intra-gender, rather than inter-gender, variability in sociosexuality (see Simpson et al., 2004). Regardless of gender, sociosexually unrestricted individuals tend to adopt short-term mating strategies, report a greater number of sex partners, prioritize different characteristics when evaluating potential partners (e.g., unrestricted individuals value traits related to physical attractiveness), and have sex earlier in their relationships, when compared to restricted individuals (Buss & Schmitt, 1993; Fletcher, Simpson, Thomas, & Giles, 1999; Gangestad & Simpson, 2000; Ostovich & Sabini, 2004; Petersen & Hyde, 2010; Simpson & Gangestad, 1991, 1992; Simpson et al., 2004). Asendorpf and Penke (2005) have also shown that sociosexuality predicts flirting with another person, regardless of gender.

Romantic Involvement

Single individuals might be motivated to have sporadic sexual encounters (e.g., hooking up), to undertake recurrent casual sexual encounters (e.g., one-night stands) or to have repeated sexual encounters (Jonason, 2013). If so, they adopt a short-term mating strategy and tend to value attributes related to immediate rewards such as physical attractiveness (Regan & Berscheid, 1995, 1997; Regan, Levin, Sprecher, Scott, & Christopher, 2000). In these instances, sociosexuality predicts the frequency of casual sex and the total number of partners (greater among unrestricted individuals) (Ostovich & Sabini, 2004; Penke & Asendorpf, 2008).

When single individuals are motivated to develop a romantic relationship, they adopt a long-term mating strategy. In such instances, unrestricted individuals tend to value attributes related to social visibility (e.g., physical attractiveness), whereas more restricted individuals tend to value attributes related to relationship stability (e.g., faithfulness, compatibility) (Simpson & Gangestad, 1991). For example, Simpson and Gangestad (1992) showed that, regardless of gender, unrestricted individuals value more physically and sexually attractive partners, who also prove more charismatic and less dependable. In contrast, restricted individuals are more oriented toward a stable relationship and value less attractive and charismatic partners that are kinder and more affectionate. The fact that different mating strategies lead individuals to value distinct attributes does not necessarily imply they settle for the first person that meets their needs. For instance, unrestricted individuals may strive to choose the most attractive
partner they can, whereas restricted individuals may strive to choose a partner that offers them the greatest security and commitment (e.g., Simpson et al., 2004).

Romantic Relationship Quality

When individuals are romantically involved, differences in sociosexuality can be associated with differences in relationship quality. Research shows that unrestricted individuals tend to develop shorter relationships with lesser quality (e.g., fewer investments) and to have greater difficulties in settling down, in contrast to their restricted counterparts (Jones, 1998; Simpson & Gangestad, 1991; Simpson et al., 2004). Importantly, sociosexuality also seems to predict extradyadic sexual desire and sexual behavior, such that unrestricted individuals are more likely to engage in infidelity behaviors (e.g., exchanging phone numbers, asking for a date, sexual infidelity) (Seal et al., 1994). This suggests that unrestricted individuals would be more likely to engage in infidelity behaviors, presumably due to lack of intimacy or investments in their relationships.

However, this might not be necessarily the case. Unrestricted individuals are as sexually invested in their relationships and they do not show greater sexual accessibility of flirting with alternatives others, when compared to restricted individuals (Tempelhof & Allen, 2008). This converges with the notion that individuals strategically shift their mating strategies in order to attain their goals (Gangestad & Simpson, 2000). Indeed, individuals are influenced not only by biological factors, but also by personal motivations, predispositions, needs, and their immediate social context (Bronfenbrenner & Morris, 2006). In this sense, individuals motivated to maintain their romantic relationship may accommodate personal dispositions (e.g., unrestricted sociosexuality) to situational or relational cues (e.g., being in a relationship with a committed partner) in order to prevent behaviors that can potentially threaten the stability of their relationship (e.g., sexual infidelity). Partially supporting this argument, research shows that sociosexuality is influenced by being in a relationship (Asendorpf & Penke, 2005; Schmitt, 2005), such that sociosexuality becomes more restricted when individuals initiate a new relationship and becomes more unrestricted when they end a relationship (Penke & Asendorpf, 2008).

The fact that unrestricted sociosexuality is not a sufficient condition for infidelity is of great importance for our study, since infidelity arises out of dissatisfaction with the relationship, feeling neglected by the partner, and anger or boredom over sexuality within the relationship (Barta & Kiene, 2005; Shackelford & Buss, 1997). Hence, even though unrestricted individuals are more likely to engage in infidelity behaviors, actually pursuing such behaviors requires motivation (Barta & Kiene, 2005) that can come from having a poorer relationship quality. Relationship commitment can serve as a possible explanation why unrestricted individuals become more restricted in romantic relationships, due to its association with relationship quality (Rusbult et al., 1998).

Commitment and Sociosexuality

Commitment is broadly defined as the motivation to remain in a long-term relationship (Arriaga & Agnew, 2001; Stanley, Rhoades, & Whitton, 2010) and is a central variable of the empirically robust Investment Model (Rusbult, 1980, 1983). Within this theoretical model, greater relationship satisfaction, greater investments applied in the relationship, and the perception of alternatives as having lesser quality promote greater relationship commitment. Regardless of gender, commitment has been consistently shown to predict happiness, sexual adjustment, intimacy, couple well-being, and relationship maintenance (for meta-analyses, see Le & Agnew, 2003; Le, Dove, Agnew, Korn, & Mutso, 2010; Rusbult et al., 1998). When faced with a potential threat to the stability of the relationship, commitment promotes the activation of pro-relationship behaviors (Rusbult & Buunk, 1993). Derogation is one of these behaviors, whereby romantically involved individuals feel less attracted (Johnson & Rusbult, 1989; Simpson, Gangestad, & Lerma, 1990) and spend less time attending to attractive others (Miller, 1997). For instance, although arousal sometimes signals sexual or romantic attraction (Foster, Witcher, Campbell, & Green, 1998), this effect occurs especially for single individuals and not for those in a romantic relationship (Meston & Frohlich, 2003).

This suggests that commitment plays an important role on the decision to actually act upon the predisposition for casual sex. Supporting this reasoning, recent studies have shown that more committed individuals are less likely to engage in infidelity (Martins et al., 2016; Rodrigues, Lopes, & Pereira, 2016) and this seems to be independent of sociosexuality (Mattingly et al., 2011). When considering the possibility of engaging in casual extradyadic sex, committed individuals seem to contemplate the long-term consequences of such behavior for all aspects of their current relationship and compare them with its short-term benefits. Commitment acts to dismiss such predisposition and transform personal motivations for casual sex into a relational motivation (Drigotas, Rusbult, & Verette, 1999a), thus preventing both men and women from engaging in extradyadic sex (Shaw et al., 2013). By helping individuals refrain from engaging in such behavior, commitment provides them with security and trust that they will behave similarly in future situations (Drigotas et al., 1999b). This clearly conveys commitment as a relational variable that influences relationship stability for both genders, by motivating them to protect their relationship against a perceived potential threat (i.e., feelings of attraction to an attractive other). Thus, it is an important variable to take into account when analyzing sociosexuality within romantic relationships.

From this reasoning, we argue sociosexuality to be a trait that influences sexual activity among single individuals. However,
when romantically involved, individuals’ sociosexuality should be influenced by relational cues and by personal motivations to remain in the relationship. Hence, sociosexuality should adapt to external relational cues and interplay with relational motivations such as commitment to prevent sexual infidelity or feelings of attraction. We examined these ideas in two studies. Study 1 focused on the interaction between sociosexuality and commitment, as well as their role in preventing sexual infidelity. Study 2 extended this to a setting in which individuals were asked to report their attraction to an attractive person. Gender differences were also examined in both studies.

Study 1

In line with the typical findings reported in the literature, we hypothesized that:

H1 Men should report more unrestricted sociosexuality than women (Buss, 1998; Buss & Schmitt, 1993; Schmitt, 2003, 2005);

H2 Single individuals should report more unrestricted sociosexuality than romantically involved individuals (Gangestad & Simpson, 2000; Schmitt, 2005), we hypothesized that:

H3 Commitment and sociosexuality should be negatively associated, such that more committed individuals should report more restricted sociosexuality.

Following the evidence that individuals accommodate their sociosexuality to relational cues (Asendorpf & Penke, 2005; Schmitt, 2005), we hypothesized that:

H4 Commitment should predict extradyadic sex in the current relationship, such that more committed individuals should be less likely to have engaged in sexual infidelity;

H5 Commitment effects in extradyadic sex should occur among unrestricted individuals, such that more committed individuals should indicate less sexual infidelity when sociosexually unrestricted.

Relying on intra-gender variability (Simpson et al., 2004), all these effects should hold true for both men and women.

Method

Participants

Participants were 566 Portuguese heterosexuals (70% women; M_{age} = 21.24, SD = 4.45) who voluntarily took part in this study. Participants resided mostly in Portuguese metropolitan areas (47.4%) and completed high school (56.6%), an undergraduate degree (36%) or their Masters/Ph.D. (4.4%). Half of the sample was single and not currently dating another person (47%), whereas the other half was involved in a consensual monogamous romantic relationship for a mean length of 25.55 months (SD = 24.23).

Measures

Revised Sociosexual Orientation Inventory (SOI-R)

The SOI-R (Penke & Asendorpf, 2008) has nine items (men: \(\alpha = .83\); women: \(\alpha = .83\)) that assess the predisposition to engage in casual sex. This measure comprises three components: (1) behavior (3 items; men \(\alpha = .85\), women \(\alpha = .84\); e.g., “With how many different partners have you had sex within the past 12 months?”), (2) attitudes (3 items; men: \(\alpha = .87\), women: \(\alpha = .83\); e.g., “Sex without love is ok”), and (3) desire (3 items; men: \(\alpha = .86\), women: \(\alpha = .85\); e.g., “How often do you have fantasies about having sex with someone with whom you do not have a committed romantic relationship?”). Averaging the items within each component results in a mean score for that component and averaging all items results in a mean global score. Higher mean scores indicate unrestricted sociosexuality, that is, a greater predisposition to engage in casual sex.

This measure had to be validated in Portugal beforehand. The items were translated by a team of social psychologists and back-translated by a Portuguese native speaker with residence in the US Disagreements were resolved through discussion (90% agreement). Response scales were transformed to 7-point scales for behavior (1 = Rarely; 7 = Frequently), attitude (1 = Strongly disagree; 7 = Strongly agree), and desire (1 = Rarely; 7 = Frequently). Validation results for the Portuguese SOI-R are presented in “Results” section.

Commitment

We used the seven-items Commitment scale (\(\alpha = .89\); e.g., “I want our relationship to last for a very long time”) from the Investment Model scale (Rusbult et al., 1998; Portuguese adaptation and validation by Rodrigues & Lopes, 2013b). Responses to each item were given on a 7-point scale (1 = Do not agree at all; 7 = Agreed completely), and averaging all items results in a mean commitment score.

Extradyadic Sex

This was assessed by the item “Have you had sexual encounters outside your current relationship without your partner’s knowledge?” (Yes/No). The question was derived from previous research in extradyadic sexual involvement (Rodrigues et al., 2016; Shaw et al., 2013). In case individuals responded “yes,”
they were additionally asked: “Are casual sexual encounters outside your current relationship allowed?” (Yes/No). This allowed us to control for consensual non-monogamy that can influence the perception of which behaviors constitute infidelity (Cohen, 2015; Mogilski, Memering, Welling, & Shackelford, 2015).

Procedure

The study was in agreement with the Ethics Guidelines issued by the Scientific Commission of ISCTE-IUL. A Web survey was developed in Qualtrics®, and the link to the survey was published in social networking sites, sent to mailing lists, and made available at a webpage purposely developed for this study. When accessing the questionnaire, participants were informed that they would be taking part in a research project about personal relationships and that they could abandon the study at any point simply by closing the Web browser (see Barchard & Williams, 2008). After providing informed consent by clicking on the “I agree” option, participants were presented with standard demographic questions (e.g., age, gender, relationship status and sexual orientation), followed by the SOI-R measure. Those in a romantic relationship were additionally presented with the Commitment scale and with the extradyadic sex measure. At the end, all participants were thanked, debriefed, and provided with an e-mail address to information or clarify any question regarding the research.

Three correlated components (Penke & Asendorpf, 2008) for the total sample and for women and men separately. Using Mplus with maximum likelihood estimation (Muthén & Muthén, 2015), we obtained relative and absolute goodness-of-fit indexes: chi-squared statistic ($\chi^2$), relative chi-square ($\chi^2/df$), comparative fit index (CFI), Tucker–Lewis index (TLI), standardized root-mean-square residual (SMR), and the root-mean-square error of approximation (RMSEA). Based on the standards established in the literature for fit indexes (Bentler, 1990; Browne & Cudeck, 1989; Byrne, 2012; Jöreskog & Sörbom, 1984), all models reported appropriate fits (see Table 1).

As expected, behavior correlated with attitudes (total sample: $\phi = .57$, $p < .001$; women: $\phi = .54$, $p < .001$; men: $\phi = .51$, $p < .001$) and with desire (total sample: $\phi = .43$, $p < .001$; women: $\phi = .38$, $p < .001$; men: $\phi = .37$, $p < .001$). Attitudes correlated with desire (total sample: $\phi = .68$, $p < .001$; women: $\phi = .68$, $p < .001$; men: $\phi = .48$, $p < .001$). Furthermore, high reliability levels were found for the global scores ($z = .84$), behavior ($z = .81$), attitudes ($z = .82$), and desire ($z = .85$) components (see Table 2).

Differences in Sociosexuality

A 2 (Gender: women vs. men) $\times$ 2 (Relationship status: single vs. romantically involved) ANOVA on global SOI-R scores yielded significant main effects for both gender, $F(1, 525) = 64.81$, MSE = 69.16, $p < .001$, $R^2 = .11$, and relationship status, $F(1, 525) = 40.28$, $p < .001$, MSE = 42.99, $R^2 = .07$. Men reported a more unrestricted global sociosexuality ($M = 3.32$, SD = 1.10) than women ($M = 2.45$, SD = 1.06), and single participants reported a more unrestricted global sociosexuality ($M = 3.09$, SD = 1.17) than romantically involved participants ($M = 2.40$, SD = 1.02) (see Table 2). The interaction between these factors was nonsignificant, $F < 1$.

To examine whether the same pattern emerged for each SOI-R component separately, we conducted a 2 (Gender) $\times$ 2 (Relationship status) MANOVA with each SOI-R component. Results showed a significant effect of both gender, Wilks’ lambda = .87, $F(3, 523) = 26.60$, $p < .001$, $R^2 = .13$, and relationship status, Wilks’ lambda = .87, $F(3, 523) = 26.38$, $p < .001$, $R^2 = .13$. Again, the interaction between the factors was nonsignificant, $F < 1$.

Table 1 Summary of fit indexes for the SOI-R (Study 1)

| Models                        | $df$ | $\chi^2$ | $\chi^2/df$ | CFI  | TLI  | SRMR  | RMSEA (CI) |
|-------------------------------|------|----------|-------------|------|------|--------|-------------|
| Model (total sample)          | 24   | 82.07    | 3.42        | .97  | .96  | .04    | .07 [.05; .09] |
| Model (women)                 | 24   | 53.81    | 2.24        | .97  | .96  | .04    | .06 [.04; .08] |
| Model (men)                   | 24   | 29.27    | 1.22        | .99  | .99  | .04    | .04 [.00; .07] |

CFI Comparative fit index, TLI Tucker–Lewis fit index, SRMR standardized root-mean-square residual, RMSEA root-mean-square error of approximation, CI 95% confidence interval

SOI-R: Confirmatory Factor Models, Correlations, and Reliability

Since this measure was not validated in Portugal, we conducted confirmatory factor analysis (CFA) to test its structure comprising three correlated components (Penke & Asendorpf, 2008) for the total sample and for women and men separately. Using Mplus with maximum likelihood estimation (Muthén & Muthén, 2015), we obtained relative and absolute goodness-of-fit indexes: chi-squared statistic ($\chi^2$), relative chi-square ($\chi^2/df$), comparative fit index (CFI), Tucker–Lewis index (TLI), standardized root-mean-square residual (SMR), and the root-mean-square error of approximation (RMSEA). Based on the standards established in the literature for fit indexes (Bentler, 1990; Browne & Cudeck, 1989; Byrne, 2012; Jöreskog & Sörbom, 1984), all models reported appropriate fits (see Table 1).
Men reported more unrestricted behavior (men: $M = 2.10$, $SD = 1.21$; women: $M = 1.86$, $SD = 0.96$), $F(1, 525) = 5.20$, $MSE = 5.62$, $p = .023$, $\eta^2_g = .01$, more unrestricted attitudes (men: $M = 4.27$, $SD = 1.65$; women: $M = 3.04$, $SD = 1.61$), $F(1, 525) = 58.20$, $MSE = 149.53$, $p < .001$, $\eta^2_g = .10$, and more unrestricted desire (men: $M = 2.47$, $SD = 1.49$), $F(1, 525) = 54.55$, $MSE = 107.08$, $p < .001$, $\eta^2_g = .09$.

Single participants reported more unrestricted attitudes (single: $M = 3.75$, $SD = 1.76$; romantically involved: $M = 3.11$, $SD = 1.62$), $F(1, 525) = 14.14$, $MSE = 36.33$, $p < .001$, $\eta^2_g = .03$, and more unrestricted desire (single: $M = 3.52$, $SD = 1.55$; romantically involved: $M = 2.20$, $SD = 1.40$), $F(1, 525) = 78.40$, $MSE = 153.91$, $p < .001$, $\eta^2_g = .13$. No significant differences in behavior emerged between single participants ($M = 1.99$, $SD = 1.19$) and those romantically involved ($M = 1.88$, $SD = 0.91$), $F(1, 525) = 1.41$, $MSE = 1.52$, $p = .236$.1

### Commitment and Sociosexuality

To examine the association between commitment and sociosexuality among romantically involved individuals in greater detail, we conducted a series of bootstrapped linear regressions with 5000 samples using PROCESS macro for SPSS (Hayes, 2013). Commitment, gender (coded 0 = women, 1 = men), and their respective interaction were the predictors. Global SOI-R and scores on each SOI-R component served as dependent variables. Relationship length was the control variable in all analyses. All variables were centered prior to the analyses. Results are shown in Table 3. There was a main effect of commitment on global sociosexuality ($p < .001$), attitudes ($p = .002$), and desire ($p < .001$). There was also a main effect of gender on global sociosexuality ($p < .001$), attitudes ($p < .001$), and desire ($p < .001$). No other main effects attained significance. Variance inflation factor (VIF) values were within the acceptable range in all linear regression analyses [1.036; 1.240], thus not indicating multicollinearity issues.

Simple slope analyses indicated that the association between commitment and sociosexuality was negative and significant for women and men: global (both $p < .001$), attitudes (both $p < .050$), and desire (both $p < .001$). Slopes for behavior were nonsignificant. Hence, more committed individuals (+1 SD) reported a more restricted global sociosexuality as well as more restricted attitudes and desire than less committed individuals (−1 SD).

### Commitment, Sociosexuality, and Sexual Infidelity

To further test our hypothesis that unrestricted individuals would be less likely to have extradyadic sex when more committed to their current partner, we conducted a series of bootstrapped logistic regression models (samples = 5000) again.

---

1 Even though this component presents high reliability, increased reliability might still be achieved by removing SOI-R Item 1 “With how many different partners have you had sex within the past 12 months?” from this component (α = .84; women α = .83; men α = .85). By computing a new mean score for behavior without this item, a 2 (Gender) x 2 (Relationship status) ANOVA replicated the significant effect of gender, $F(1, 525) = 4.62$, $MSE = 6.88$, $p = .032$, $\eta^2_g = .01$, but more importantly demonstrates the expected effect of relationship status albeit marginal, $F(1, 525) = 3.28$, $MSE = 4.89$, $p = .071$, $\eta^2_g = .01$. Single participants reported more unrestricted behavior ($M = 1.95$, $SD = 1.31$) than those romantically involved ($M = 1.77$, $SD = 1.15$). This may be due to the fact that Item 1 asked participants to disclose their sexual activity within the last 12 months, whereas Items 2 and 3 asked for behavioral tendencies throughout their lives. This consideration might prove of importance to future research as the currently conveyed social norms regarding unrestricted sexual behavior may prevent individuals from disclosing their current behaviors (e.g., Fisher, 2009) and can possibly hinder the results obtained with this measure.
using PROCESS. We adopted this strategy for three reasons. First, the dependent variable was dichotomous, asking individuals to disclose whether they had had non-mutually consented extradyadic sex (coded 0 = no, 1 = yes). Second, and possibly due to reluctance over disclosing such sensitive information, the distribution of this variable proved highly biased and consequently nonlinear. Third, separating dependent variables allowed us to avoid multicollinearity. In all regressions, commitment, sociosexuality, and their respective interactions were the predictors. Extradyadic sex was the dependent variable. As no significant gender differences were found in the commitment—infidelity link, gender was added as a control variable along with relationship length.

Results showed that sexual infidelity was negatively and significantly predicted by commitment in our regressions (all Nagelkerke $R^2 > .21$): global: $b = -0.54$, SE = .23, $z(205) = -2.29, p = .022$, 95% CI [−0.99, −0.08], behavior: $b = -0.54$, SE = .21, $z(205) = -2.58, p = .010$, 95% CI [−0.96, −0.13], attitudes: $b = -0.53$, SE = .23, $z(205) = -2.25, p = .024$, 95% CI [−0.99, −0.07], and desire: $b = -0.50$, SE = .24, $z(205) = -2.10, p = .036$, 95% CI [−0.97, −0.03]. Sociosexuality did not emerge as a significant predictor in either regression (all $p > .451$).

Although the expected interaction between sociosexuality and commitment was not found (all $p > .112$), a detailed analysis of the simple slopes showed that increases in commitment were associated with significantly less likelihood of extradyadic sex in more sociosexually unrestricted individuals (+1 SD): global: $b = -0.69$, SE = .27, $z(205) = -2.57, p = .010$, 95% CI [−1.21, −0.16], attitudes, $b = -0.85$, SE = .28, $z(205) = -3.05, p = .002$, 95% CI [−1.39, −0.30], and desire, $b = -0.60$, SE = .26, $z(205) = -2.27, p = .023$, 95% CI [−1.11, −0.08]. The slope for behavior was nonsignificant ($p = .590$).

### Discussion

Taken together, our results replicate the extensive literature reporting that men tend to be more sociosexually unrestricted than women (supporting H1) (Buss, 1998; Buss & Schmitt, 1993) and that single individuals are more sociosexually unrestricted than those in relationships (supporting H2) (Gangestad &

| Table 3 | Regression analyses on sociosexuality predicted by commitment and gender (Study 1) |
|---------|---------------------------------|
| Dependent                                   | Predictor     | b     | SE  | t     | p      | 95% CI         |
| Global sociosexuality                       | Commitment    | -0.31*** | .05  | -5.87 | <.001  | [−0.41, −0.21]|
|                                                | Gender        | 0.71*** | .14  | 5.03  | <.001  | [0.43, 0.99]  |
|                                                | Commitment × Gender | -0.02 | .11  | -0.18 | .856   | [−0.24, 0.20] |
|                                                | Simple slope for women | -0.30*** | .06  | -4.82 | <.001  | [−0.43, −0.18]|
|                                                | Simple slope for men | -0.32*** | .09  | -3.55 | <.001  | [−0.51, −0.14]|
| Sociosexual behavior                        | Commitment    | -0.07  | .05  | -1.36 | .175   | [−0.17, 0.03]|
|                                                | Gender        | 0.06   | .14  | 0.40  | .689   | [−0.22, 0.33]|
|                                                | Commitment × Gender | 0.03 | .11  | 0.32  | .753   | [−0.18, 0.25]|
|                                                | Simple slope for women | -0.08 | .06  | -1.27 | .205   | [−0.20, 0.04]|
|                                                | Simple slope for men | -0.05  | .09  | -0.50 | .621   | [−0.22, 0.13]|
| Sociosexual attitudes                        | Commitment    | -0.31** | .10  | -3.20 | .002   | [−0.49, −0.12]|
|                                                | Gender        | 1.05*** | .26  | 4.08  | <.001  | [0.54, 1.55]  |
|                                                | Commitment × Gender | -0.03 | .20  | -0.13 | .894   | [−0.42, 0.37]|
|                                                | Simple slope for women | -0.30** | .11  | -2.61 | .010   | [−0.52, −0.07]|
|                                                | Simple slope for men | -0.33* | .17  | -1.97 | .050   | [−0.65, −0.01]|
| Sociosexual desire                           | Commitment    | -0.55*** | .07  | -8.21 | <.001  | [−0.68, −0.42]|
|                                                | Gender        | 1.04*** | .18  | 5.73  | <.001  | [0.68, 1.39]  |
|                                                | Commitment × Gender | -0.07 | .14  | -0.49 | .628   | [−0.35, 0.21]|
|                                                | Simple slope for women | -0.53*** | .08  | -6.64 | <.001  | [−0.69, −0.38]|
|                                                | Simple slope for men | -0.60*** | .12  | -5.18 | <.001  | [−0.83, −0.37]|

Controlling for relationship length. Gender [0 = women, 1 = men]. Variables were standardized prior to analysis

- $b$ unstandardized coefficient, SE standard error. Degrees of freedom for t statistics = 203, CI confidence interval

- $p < .05$, **$p < .01$, ***$p < .001$
Simpson, 2000). Indeed, individuals in relationships reported being more restricted, especially in their attitudes and desire toward potential alternative others. This converges with considerations over how individuals with more unrestricted sociosexuality do not shun, but are indeed able to maintain, long-term committed romantic relationships (Simpson & Gangestad, 1991; Simpson et al., 2004).

For those romantically involved, commitment was found to be associated with sociosexuality (supporting H3), such that more (vs. less) committed individuals reported more restricted global sociosexuality. These individuals were also more restricted in their attitudes and in their desire. The fact that no significant association emerged for behavior may be explained, at least partially, by the fact that this component reflects behavioral tendencies throughout life (e.g., “With how many different partners have you had sexual intercourse on one and only one occasion?”) and does not necessarily represent current behavior. Indeed, only SOI-R Item 1 asked individuals to report their sexual behavior within the past 12 months and our participants were in a relationship for a mean length of approximately 24 months. Furthermore, neither global nor each of the SOI-R components predicted sexual infidelity in our sample. This suggests that more unrestricted sociosexuality is not necessarily associated with greater likelihood of extradyadic sex. Commitment, however, predicted infidelity to a greater extent (supporting H5).

These last pieces of evidence hold extreme importance and back the literature showing that commitment activates different pro-relationship behaviors oriented at maintaining the stability of the relationship (e.g., derogating feelings of attraction) in the face of potential threats (e.g., an attractive other) (Rusbult & Buunk, 1993). Such behaviors seem to occur especially when levels of commitment and those of perceived threat are calibrated (high commitment/high attractiveness) (Lydon, Meana, Sepinwall, Richards, & Mayman, 1999). As sociosexuality refers to the predisposition toward casual sex, if individuals experience sexual attraction to an attractive other while in a highly committed relationship, their commitment may activate a pro-relationship strategy oriented at protecting one’s self from having unrestricted behaviors or experiencing sexual desire. Greater commitment may also lead unrestricted individuals to restrict their favorable attitudes toward casual sex, again as a protection strategy guarding their relationship. Following this, in Study 2, we examined whether greater commitment also activates derogation among sociosexually unrestricted individuals.

**Study 2**

In this study, we aimed at replicating the results from Study 1. However, we examined a context of initial physical and sexual attraction to an unknown attractive target. We hypothesized that:

- **H1** Single individuals would report greater attraction to the attractive target, whereas romantically involved individuals would report less attraction and evidence derogation as a pro-relationship behavior (Johnson & Rusbult, 1989; Meston & Frohlich, 2003; Simpson et al., 1990);

- **H2a** Derogation should be especially evident for more committed individuals (Lydon et al., 1999), such that more committed individuals would report less attraction to the attractive target compared to their less committed counterparts;

- **H2b** This effect of commitment should occur over and above sociosexuality levels (Mattingly et al., 2011).

Replicating the results from Study 1, we further hypothesized that:

- **H3** Commitment should predict occurrences of extradyadic sex in the current relationship (Martins et al., 2016; Rodrigues et al., 2016; Shaw et al., 2013; Simpson & Gangestad, 1991). More importantly, our results further showed that unrestricted individuals were less likely to be sexually unfaithful to their relationships when more committed to their relationships (partially supporting H5).

Method

Participants

Participants were 168 Portuguese heterosexuals (65.5 % women; $M_{\text{age}} = 23.28, SD = 5.60$) who voluntarily took part in this study. Participants resided mostly in Portuguese metropolitan areas (57.7 %) and completed high school (53.2 %), an undergraduate degree (40.4 %) or a Master/Ph.D. (6.4 %). Half of the sample was single and not currently dating another person (43.6 %), whereas the other half was involved in a consensual monogamous romantic relationship for mean length of 33.79 months (SD = 44.18).
Measures

Physical and Sexual Attraction

Participants were shown a picture of an attractive opposite-sex target and asked to report their attraction. Drawing from research on interpersonal and sexual attraction (e.g., Foster et al., 1998; Meston & Frohlich, 2003), this measure comprised three items (“How much would you like to ask this person out on a date?”, “How much would you like to kiss this person?”, and “How much desire [physical, emotional, mental] do you feel for this person?”). Participants answered on a 7-point scale (1 = Not at all; 7 = A lot). Averaging all item scores resulted in a mean physical/sexual attraction score. In the current sample, this measure had a high level of reliability (α = .96) and a one-factor model accounting for 92.12% of the variance.

Sociosexuality

This measure was presented in Study 1. The reliability coefficients for the current sample were similar to those obtained in Study 1 (global: 9 items, α = .84; behavior: 3 items, α = .84; attitudes: 3 items, α = .84; and desire: 3 items, α = .87).

Commitment

This measure was also presented in Study 1. The reliability coefficient of this scale for the current sample was similar to that obtained in the previous study (α = .91).

Extradyadic Sex

This was assessed using the items presented in Study 1.

Procedure

This study was again in agreement with the Ethics Guidelines issued by the Scientific Commission of ISCTE-IUL. Procedure was similar to Study 1. After providing informed consent to participate in a research project about personal relationships, participants were presented with the Web survey that started with standard demographic questions (e.g., age, gender, relationship status, and sexual orientation). Participants were then presented with a photograph of an opposite-sex attractive target (pretested; Rodrigues & Lopes, 2013a). After 6 s, the photograph disappeared from the screen and participants were asked to report their physical and sexual attraction toward the target. Following this, all participants completed the SOI-R measure. Romantically involved participants were additionally presented with the Commitment scale and the extradyadic sex measure. At the end, all participants were thanked, debriefed, and provided with an e-mail address to contact the research team should they want to obtain further information or clarify any question regarding the research. There was no time limit for completing the questionnaire (Mcompletion time = 10 min), and there were no repeated IP addresses.

Results

Gender and Derogation

A 2 (Gender: women vs. men) × 2 (Relationship status: single vs. romantically involved) ANOVA yielded only a main effect of relationship status, F(1, 157) = 5.91, MSE = 7.06, p = .016, ηp² = .04. Romantically involved participants reported significantly less physical and sexual attraction (M = 1.47, SD = 0.89) than their single counterparts (M = 2.00, SD = 1.31). No other results attained statistical significance.2

Commitment and Sociosexuality

To examine whether romantically involved individuals derogated the attractive alternative regardless of sociosexuality levels, we conducted a series of bootstrapped linear regressions (samples = 5000) using PROCESS. Commitment, each of the SOI-R components, and their respective interaction terms were the predictors. Physical/sexual attraction was the dependent variable. Relationship length was the control variable in all analyses. All variables were centered prior to the analyses. Results are shown in Table 4. As can be seen, there was a main effect of commitment on attraction, over and above sociosexuality (all p < .010). Sociosexuality main effects were nonsignificant in all analyses (all p > .338). VIF values of all linear regression analyses were within the acceptable range [1.11; 1.99].

Simple slope analyses further revealed a significant association between commitment and physical/sexual attraction regardless of global sociosexuality (both p > .006), behavior (both p > .031), attitudes (both p > .001), and desire (both p > .030).

Commitment, Sociosexuality, and Sexual Infidelity

Replicating the procedures presented in Study 1, a series of additional bootstrapped logistic regressions (samples = 5000) using PROCESS examined whether unrestricted individuals were less likely to have extradyadic sex when more committed to their current partner. Results again showed that sexual infidelity was negative and significantly predicted by commitment (all Nagelkerke R² > .24): global b = −0.91, SE = .38, z(94) = −2.42, p = .016, 95% CI [−1.64, −0.17], behavior b = −0.82,

2 As we found no significant gender differences in the association between commitment and sociosexuality (Study 1) or in the attraction to the attractive target (Study 2), gender was dropped from subsequent analyses.
SE = .32, z(94) = −2.58, p = .010, 95% CI [−1.45, −0.20], attitudes $b = −0.71, SE = .36, z(94) = −1.95, p = .050, 95% CI [−1.42, −0.01], and desire $b = −1.22, SE = .42, z(94) = −2.90, p = .004, 95% CI [−2.04, −0.40]. Sociosexuality did not emerge as a significant predictor in neither regression (all $p > .851$).

Again, the expected interaction between sociosexuality and commitment was not found (all $p > .173$). However, simple slopes analyses showed that increases in commitment were associated with significantly less likelihood of extradyadic sex in more sociosexually unrestricted individuals (+1 SD): global $b = −0.78, SE = .35, z(94) = −2.23, p = .026, 95% CI [−1.47, −0.09], attitudes $b = −0.89, SE = .37, z(94) = −2.41, p = .016, 95% CI [−1.61, −0.17], and desire $b = −0.80, SE = .37, z(94) = −2.16, p = .031, 95% CI [−1.52, −0.07]. The slope for behavior was nonsignificant ($p = .115$).

### Discussion

Overall, our results showed that single participants reported greater attraction to the attractive target. Romantically involved individuals, however, reported less attraction, evidencing the activation of derogation as a pro-relationship strategy against a perceived external threat posed by the attractive target (supporting H1). Importantly, derogation occurred over and above sociosexuality (supporting H2a and H2b). In other words, more committed individuals derogated the attractive target to a similar extent, regardless of having restricted or unrestricted sociosexuality, arguably as a means to protect the stability of the relationship. These results complement and extend those showing the predictive value of commitment in sexual infidelity (supporting H3), in the sense that just as commitment emerged as the only variable negatively associated with physical/sexual attraction to an unknown attractive target, it emerged also as the sole predictor of sexual infidelity in both studies. Equally important, we replicated the finding that unrestricted individuals were less likely to indicate sexual infidelity when more committed to their partners (partially supporting H4).

### General Discussion

Sociosexuality is a personal predisposition that potentially influences the initiation and early development of romantic relationships (e.g., unrestricted individuals may have greater difficulties with a committed relationship). In this article, we argued that increases in commitment should lead individuals to accommodate this predisposition to their relationship goals.

### Table 4 Regression analyses on attraction predicted by commitment and sociosexuality (Study 2)

| Predictor                        | $b$  | SE  | $t$  | $p$    | 95% CI        |
|----------------------------------|------|-----|------|--------|---------------|
| Commitment                       | $−0.43^{***}$ | .12 | −3.60 | <.001  | [−0.67, −0.19]|
| Global sociosexuality            | 0.04 | .10 | 0.37 | .714   | [−0.16, 0.24] |
| Commitment × Global sociosexuality | 0.10 | .09 | 1.18 | .242   | [−0.24, 0.20] |
| Simple slope for restricted (+1 SD) | $−0.54^{**}$ | .19 | −2.83 | .006   | [−0.92, −0.16]|
| Simple slope for unrestricted (+1 SD) | $−0.32^{***}$ | .09 | −3.48 | <.001  | [−0.51, −0.14]|
| Commitment                       | $−0.40^{***}$ | .08 | −4.80 | <.001  | [−0.57, −0.23]|
| Sociosexual behavior             | 0.09 | .09 | 0.95 | .347   | [−0.09, 0.27] |
| Commitment × Sociosexual behavior | $−0.18$ | .09 | −1.88 | .065   | [−0.37, 0.01] |
| Simple slope for restricted (+1 SD) | $−0.25^{*}$  | .11 | −2.20 | .031   | [−0.44, −0.02]|
| Simple slope for unrestricted (+1 SD) | $−0.57^{***}$ | .14 | −4.10 | <.001  | [−0.85, −0.30]|
| Commitment                       | $−0.51^{***}$ | .10 | −4.99 | <.001  | [−0.71, −0.31]|
| Sociosexual attitudes            | $−1.03$ | .05 | −0.55 | .586   | [−0.13, 0.07] |
| Commitment × Sociosexual attitudes | 0.12*  | .05 | 2.40  | .019   | [0.02, 0.23]  |
| Simple slope for restricted (+1 SD) | $−0.72^{***}$ | .17 | −4.24 | <.001  | [−1.06, −0.38]|
| Simple slope for unrestricted (+1 SD) | $−0.29^{***}$ | .09 | −3.32 | .001   | [−0.47, −0.12]|
| Commitment                       | $−0.36^{**}$ | .14 | −2.64 | .010   | [−0.63, −0.09]|
| Sociosexual desire               | 0.07 | .08 | 0.97 | .338   | [−0.08, 0.22] |
| Commitment × Sociosexual desire  | 0.04 | .06 | 0.78 | .438   | [−0.07, 0.15] |
| Simple slope for restricted (+1 SD) | $−0.41^{*}$  | .19 | −2.21 | .030   | [−0.78, −0.04]|
| Simple slope for unrestricted (+1 SD) | $−0.29^{**}$  | .11 | −2.75 | .007   | [−0.51, −0.08]|

Controlling for relationship length. Variables were standardized prior to analysis.

$b$ unstandardized coefficient, SE standard error. Degrees of freedom for $t$ statistics = 72, CI confidence interval

$^{*}p < .05, ^{**}p < .01, ^{***}p < .001$
(e.g., a committed relationship). This would be reflected in more restricted sociosexuality levels.

To examine this argument, the SOI-R measure was first validated in a sample of Portuguese individuals (Study 1). Not only was the original three-factor structure replicated (Penke & Asendorpf, 2008), but the SOI-R showed good internal consistency for the global, behaviors, attitudes, and desire scores. Moreover, both the factorial structure and the internal consistency indexes were replicated for women and men suggesting the appropriateness of this instrument in assessing sociosexuality in both genders.

Results from Study 1 showed that men have more unrestricted sociosexuality than women. This was also the case for all SOI-R components, that is, men indicated more unrestricted behaviors, attitudes, and desires than women. Results also showed that single individuals were more unrestricted than romantically involved individuals. In detailing each SOI-R component separately, this was also the case for attitudes and desires. The lack of differences for sociosexual behavior could be associated with social desirability and the negative double standard in sexual behavior, such that casual sex tends to be more socially accepted among men than women (Allison & Risman, 2013; Crawford & Popp, 2003; Fisher, 2009; Sprecher et al., 2013). This may be associated with societal norms and socialization asymmetries regarding gender roles (Eagly & Wood, 1999; Schmitt, 2005).

Another plausible explanation for this finding derives from cross-cultural findings showing that Portugal has relatively restricted sociosexuality levels when compared to other countries (Schmitt, 2005). Indeed, Portugal is a patriarchal society governed by traditional and religious norms and single women may also conform to these norms (Nogueira, Saavedra, & Costa, 2008), underreporting past sexual behaviors. Further research should seek to investigate this in greater detail, especially because Study 1 was an anonymous Web survey, which has been shown to reduce the likelihood of biased reports of sexual behavior in both genders (see Beaussart & Kaufman, 2013; Ostovich & Sabini, 2004).

Results from Study 1 also showed that when in a romantic relationship, both genders reported more restricted sociosexuality than single individuals. This converges with pluralistic views of human mating (e.g., Gangestad & Simpson, 2000), positing that both women and men shift between short- and long-term mating strategies depending on their specific context and motivations. When motivated to maintain long-term committed romantic relationship, individuals are more likely to activate a common relational self (Aron, Mashek, & Aron, 2004) and commitment becomes more salient (Agnew, Van Lange, Rusbult, & Langston, 1998), which in turn promotes the activation of pro-relationship behaviors. In line with this, our results showed that highly committed individuals (i.e., those oriented toward the long-term maintenance of their relationship) were more sociosexually restricted (Study 1), activate derogation by feeling less physically and sexually attracted to an unknown attractive target (Study 2), and were less likely to engage in extradyadic sex and consequently sexual infidelity (Studies 1 and 2). Equally important, the effects of commitment on sexual infidelity were observed even among sociosexually unrestricted individuals (Studies 1 and 2).

These results converge with past empirical findings suggesting that individuals restrict their sociosexuality when in a romantic relationship (Penke & Asendorpf, 2008). These results also converge with past empirical findings suggesting commitment as one of the most reliable predictors of sexual infidelity (Martins et al., 2016; Rodrigues et al., 2016; Shaw et al., 2013). By deciding not to engage in sexual infidelity based on their high commitment, restricted and unrestricted individuals appear to transform their personal motivations into relational motivations (Drigotas et al., 1999b) and establish a norm that serves as the basis for similar future situations (Buunk & Bakker, 1995; Drigotas et al., 1999a). Our studies do not allow us to fully examine the causal directions of these findings. For instance, the finding that more committed individuals are less sociosexually unrestricted and less likely to engage in extradyadic sex might also be a result of having a sample of mostly sociosexually unrestricted individuals to begin with. Future research should seek to employ a longitudinal methodology to examine if individuals restrict their sociosexuality because they are more committed to their relationship, if they maintain their unrestricted sociosexuality by being less committed to their relationship. Researchers could also expand to include different types of infidelity (e.g., emotional infidelity), different extradyadic behaviors (e.g., kissing, online sexual activities), and reasons for engaging in extradyadic sex (e.g., sexual dissatisfaction with the partner). A longitudinal study would also allow researchers to examine the predictive power of commitment and sociosexuality, taking into account types of infidelity, extradyadic behaviors, and motivations underlying such behaviors.

Our results also showed that individuals in relationships activate strategies and restrict their sociosexuality in order to protect the stability of their romantic relationship (Study 2). For both genders, commitment seems to act as a barrier in itself to feeling physically and sexually attracted to another person, which consequently helps to prevent infidelity behaviors. As long as individuals are highly committed, they maintain their focus on their current relationship regardless of their sociosexuality and are unaffected (or at least less affected) by their predisposition to casual sex.

It is possible that restricted and unrestricted individuals activate derogation for different reasons. As restricted individuals are not, by themselves, predisposed or motivated to casual sex, derogation may act as an intrinsic protection against a perceived external threat (e.g., an attractive target) that may harm the stability of the relationship. As unrestricted individuals have such predisposition or motivation, derogation may act as an intrinsic protection against a perceived internal threat (e.g., feelings of sexual attraction). Hence, derogating an attractive target would protect unrestricted individuals against themselves and
their predisposition for casual sex, thus shifting their mating strategy according to the context. Such a type of accommodation is in line with the strategic pluralism model (Gangestad & Simpson, 2000). More research is needed to disentangle the role of commitment in sexuality (see also Simpson et al., 2004). Future research might incorporate measurements of jealousy (e.g., Pfeiffer & Wong, 1989) or reactions to hypothetical infidelity by their partners (e.g., Buss, Larsen, Westen, & Semmelroth, 1992). If derogation acts as a protection against an external threat among restricted individuals, then restricted individuals should feel greater jealousy toward their partners in a sexual infidelity context. If derogation acts as a protection against an internal threat among unrestricted individuals, then unrestricted individuals should be more willing to forgive their partner’s infidelity and possibly feel less jealousy. Future studies should analyze these hypotheses.

On a broader note, future research should also analyze data from both partners in the couple (e.g., using the actor–partner interdependence model) (Cook & Kenny, 2005). This would allow to examine how complementary or opposite sociosexuality influences commitment and extradyadic sex.

This research was conducted online and guaranteed anonymity for those who chose to participate, which helps in improving the accuracy of responses. Furthermore, our sample was diverse in terms of demographic features, including age, geographic location, and relationship length. Still, this methodology may have biased the characteristics of our sample, given that individuals more likely to participate in this type of studies tend to have higher levels of education, reside in urban centers, and have higher socioeconomic status. These limitations notwithstanding, this article presents empirical evidence that advances our knowledge in five different ways. First, our findings demonstrate that, regardless of sociosexuality, commitment activates derogation. Second, our data corroborate the assertion by Simpson and Gangestad (1991) and Simpson et al. (2004) that sociosexually unrestricted individuals have stable romantic relationships and activate protective mechanisms against perceived external threats. Third, our findings showed that derogation was greater when individuals were highly committed, regardless of having restricted or unrestricted sociosexuality. Not only was sociosexuality not associated with extradyadic sex, it was not associated with physical and sexual attraction to an unknown attractive target. Fourth, our data suggest that sociosexuality is likely to undergo modifications depending on situational variables (e.g., being in a committed relationship). This is not to say that sociosexuality (e.g., attitudes toward casual sex) changes drastically with the development of a relationship. Instead, it suggests that individuals tone down their sociosexuality to accommodate a highly committed and stable relationship (see Penke & Asendorpf, 2008). Lastly, and in line with this, our findings showed commitment as one of the most important relational variables in predicting sexual infidelity in mutually consented monogamous relationships.

Not only are these findings promising and open up new venues for researchers to continue their research on the interplay between sociosexuality and commitment, they are also informative for professionals to better understand human sexuality within romantic relationships and to help devise specific intervention programs (e.g., relationship guidance therapy) to boost sexual and psychological health.

Acknowledgments This research was funded by the grant SFRH/BPD/73528/2010, awarded by Fundação para a Ciência e a Tecnologia to the first author. The authors would like to thank Aleksandra Huic and the anonymous reviewers for their helpful comments.

References

Agnew, C. R., Van Lange, P. A., Rusbult, C. E., & Langston, C. A. (1998). Cognitive interdependence: Commitment and the mental representation of close relationships. Journal of Personality and Social Psychology, 74, 939–954. doi:10.1037/0022-3514.74.4.939.

Allison, R., & Risman, B. J. (2013). A double standard for “hooking up”: How far have we come toward gender equality? Social Science Research, 42, 1191–1206. doi:10.1016/j.ssresearch.2013.04.006.

Aron, A. P., Mashek, D. J., & Aron, E. N. (2004). Closeness as including other in the self. In D. J. Mashek & A. P. Aron (Eds.), Encyclopedia of Intimacy and Intimacy (pp. 27–41). Mahwah, NJ: Lawrence Erlbaum Associates.

Arriaga, X. B., & Agnew, C. R. (2001). Being committed: Affective, cognitive, and conative components of relationship commitment. Personality and Social Psychology Bulletin, 27, 1190–1203. doi:10.1177/1041616721279011.

Asendorpf, J. B., & Penke, L. (2005). A mature evolutionary psychology demands careful conclusions about sex differences. Behavioral and Brain Sciences, 28, 275–276. doi:10.1017/S0140525X05220058.

Barchard, K. A., & Williams, J. (2008). Practical advice for conducting ethical online experiments and questionnaires for United States psychologists. Behavior Research Methods, 40, 1111–1128. doi:10.3758/BRM.40.4.1111.

Barta, W. D., & Kiene, S. M. (2005). Motivations for infidelity in heterosexual dating couples: The roles of gender, personality differences, and sociosexual orientation. Journal of Social and Personal Relationships, 22, 339–360. doi:10.1080/026540750505052440.

Beaussart, M. L., & Kaufman, J. C. (2013). Gender differences and the effects of perceived internet privacy on self-reports of sexual behavior and sociosexuality. Computers in Human Behavior, 29, 2524–2529. doi:10.1016/j.chb.2013.06.014.

Bentler, P. M. (1990). Comparative fit indexes in structural models. Psychological Bulletin, 107, 238–246. doi:10.1037/0033-2909.107.2.238.

Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In R. Lerner & W. Damon (Eds.), Handbook of child psychology (6th ed., Vol. 1, pp. 793–828). Hoboken, NJ: Wiley.

Browne, M. W., & Cudeck, R. (1989). Single sample cross-validation indices for covariance structures. Multivariate Behavioral Research, 24, 445–455. doi:10.1207/s15327906mbvr2404_4.

Buss, D. M. (1998). Sexual strategies theory: Historical origins and current status. Journal of Sex Research, 35, 19–31. doi:10.1080/00224990490519114.

Buss, D. M., & Barnes, M. (1986). Preferences in human mate selection. Journal of Personality and Social Psychology, 50, 559–570. doi:10.1037/0022-3514.50.3.559.
Schmitt, D. P. (2003). Universal sex differences in the desire for sexual
Rusbult, C. E. (1980). Commitment and satisfaction in romantic associ-
Rusbult, C. E. (1983). A longitudinal test of the Investment Model: The
Rodbir, D., Lopes, D., & Pereira, M. (2016). Sociosexuality, commit-
Rothfels, D., & Lopes, D. (2013b). The Investment Model Scale (IMS):
Petersen, J. L., & Hyde, J. S. (2011). Gender differences in sexual attitudes
Regan, P. C., & Berscheid, E. (1995). Gender differences in beliefs about
Regan, P. C., & Berscheid, E. (1997). Gender differences in characteristics
desired in a potential sexual and marriage partner. Journal of Psychology
Rodrigues, D., Lopes, D., & Pereira, M. (2016). Sociosexuality, commit-
tual roles, 31, 1–22. doi:10.1007/BF01560274.

Shackelford, T. K., & Buss, D. M. (1997). Cues to infidelity. Personality
and Social Psychology Bulletin, 23, 1034–1045. doi:10.1177/0146
1672972310004.

Shaw, A. M., Rhoades, G. K., Allen, E. S., Stanley, S. M., & Markman, H.
J. (2013). Predictors of extradyadic sexual involvement in unmarried
opposite-sex relationships. Journal of Sex Research, 50, 598–610. 
doi:10.1080/00224449.2012.666816.

Simpson, J. A., & Gangestad, S. W. (1991). Individual differences in
sociosexuality: Evidence for convergent and discriminant validity. 
Journal of Personality and Social Psychology, 60, 870–883. doi:10. 
1037/0022-3514.60.6.870.

Simpson, J. A., & Gangestad, S. W. (1992). Sociosexuality and romantic
partner choice. Journal of Personality, 60, 31–51. doi:10.1111/j.
1467-6494.1992.tb00264.x.

Simpson, J. A., Gangestad, S. W., & Biek, M. (1993). Personality and
nonverbal social behavior: An ethological perspective of relation-
ship initiation. Journal of Experimental Social Psychology, 29,
434–461. doi:10.1006/jesp.1993.1020.

Simpson, J. A., Gangestad, S. W., & Lerma, M. (1990). Perception of
physical attractiveness: Mechanisms involved in the maintenance of
romantic relationships. Journal of Personality and Social Psychol-
ogy, 59, 1192–1201. doi:10.1037/0022-3514.59.6.1192.

Simpson, J. A., Wilson, C. L., & Winterheld, H. A. (2004). Sociosex-
uality and romantic relationships. In J. H. Harvey, A. Wenzel, & S.
Sprecher (Eds.), The handbook of sexuality in close relationships
(pp. 87–112). Mahwah, NJ: Lawrence Erlbaum Associates.

Sprecher, S., Treger, S., & Sakaluk, K. J. (2013). Premarital sexual stan-
dards and sociosexuality: Gender, ethnicity, and cohort differences.
Archives of Sexual Behavior, 42, 1395–1405. doi:10.1007/s10508-
013-0145-6.

Stanley, S. M., Rhoades, G. K., & Whitton, S. W. (2010). Commitment:
Functions, formation, and the securing of romantic attachment. 
Journal of Family Theory and Review, 2, 243–257. doi:10.1111/j.
1756-2589.2010.00060.x.

Tampelhof, T. C., & Allen, J. S. (2008). Partner-specific investment strategies:
Similarities and differences in couples and associations with sociosexual
orientation and attachment dimensions. Personality and Individual
Differences, 45, 41–48. doi:10.1016/j.paid.2008.02.016.

Vangelisti, A. L., & Gerstenberger, M. (2004). Communication and marital
infidelity. In J. Duncombe, K. Harrison, G. Allan, & D. Marsden (Eds.), 
The state of affairs: Explorations in infidelity and commitment (pp. 59–
78). Mahwah, NJ: Lawrence Erlbaum Associates.

Webster, G. D., & Bryan, A. (2007). Sociosexual attitudes and behaviors:
Why two factors are better than one. Journal of Research in Personality,
41, 917–922. doi:10.1016/j.jrp.2006.08.007.

Wood, W., & Eagly, A. H. (2002). A cross-cultural analysis of the behavior
of women and men: Implications for the origins of sex differences.
Psychological Bulletin, 128, 699–727. doi:10.1037/0033-2909.128.5.
699.