

The Influence of the Number of Sexual Partners on Women's Attractiveness

Thainá F. Carvalho | Felipe C. Novaes | Jean C. Natividade

email: tha.ferrazc@gmail.com

Evolutionary logic has explained that the amount of sexual partners women have had in the past can influence women's attractiveness and men's willingness to engage in committed relationships. Men and women seem to have developed different adaptations throughout the evolutionary process to respond to different challenges (Geary, 2006; Puts, 2010; Tooby & Cosmides, 1990). One of these challenges is uncertainty about paternity (Gangestad & Buss, 1993).

Women do not exhibit explicit clues of fertility (Alexander & Noonan, 1979). That means that men have no biological certainty about parenting, because they do not know if women are in fertile time during sexual relationships. Thus, men will tend to have preferences in the field of attractiveness that lessen this uncertainty. For example, men seem to care more about sexual than emotional infidelity (Bendixen, Kennair, & Buss, 2018). Female sexual infidelity may increase the chances of men investing in a child who may not be their own (Bendixen et al., 2018). In that sense, men may consider the past history of women's sexual partners as potential signs of fidelity. That is, the more sex partners a woman has, the less men will tend to engage in compromised relationships, and the less attractive they will be considered.

GOALS

An experimental study was carried out aiming to test whether the number of sexual partners women have had throughout life would influence their attractiveness, and how much men would be willing to engage in compromised relationships with them.

METHOD

Participants

Participants were 150 heterosexual men, mean age 24.0 ($SD = 4.54$) of all regions of Brazil. Most of the participants were undergraduate students (55.4%). Participants were divided in five groups of 30 men, according with experimental task.

Procedures

We collected data via internet. The participants were recruited through invitations by emails and links in social networks. They were randomly allocated in one of five questionnaires which were developed for this experiment (detailed in *instruments*).

Instruments

Five questionnaires with the experimental task were elaborated. The questionnaires contained four photos of women beside some personal descriptions. All questionnaires were equal except for the description of the number of sexual partners of women in the photos. The number of sexual partners ranged from 1 to 3, 4 to 10 and 50 to 70 partners, beyond that, there was a group with none information, and another one presenting the women as virgins. Each questionnaire presented two questions (scales from 0 to 10) asking the participants how much they considered the characters attractive, and how much they would be willing to engage in compromised relationships with them. Furthermore, there was a part of the questionnaire that had social demographic questions.

RESULTS

An ANOVA was performed to verify the difference in mean attractiveness and commitment attributed by men to women under different conditions. There was **no significant difference** in the conditions for the dependent variable **attractiveness**, $F(4, 145) = 1.96, p = .10$, however the differences between the groups were **significant** for the dependent variable **commitment** towards women with different levels of previous sex experience, $F(4, 145) = 2.69, p = .03$.

Post-hoc analyzes showed that, specifically, women in the **average sexual experience** were more desired for long-term relationships ($M = 8.71, SD = 1.59$) than women with **much sexual experience** ($M = 7.21, SD = 2.09$). The means and confidence interval are showed in the Figures 1 and 2 bellow.

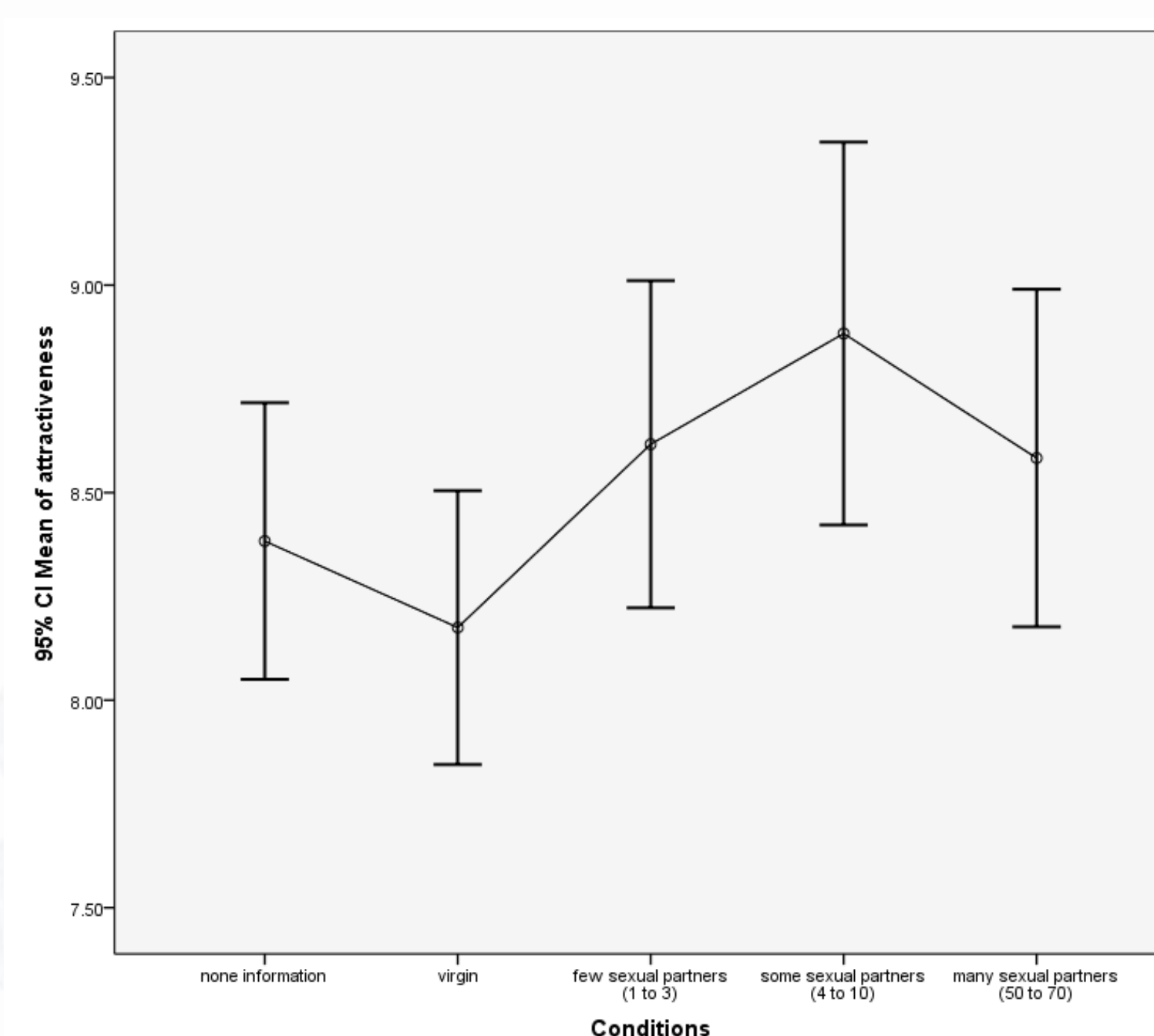


Figure 1. Means of attractiveness of women with different sexual past.

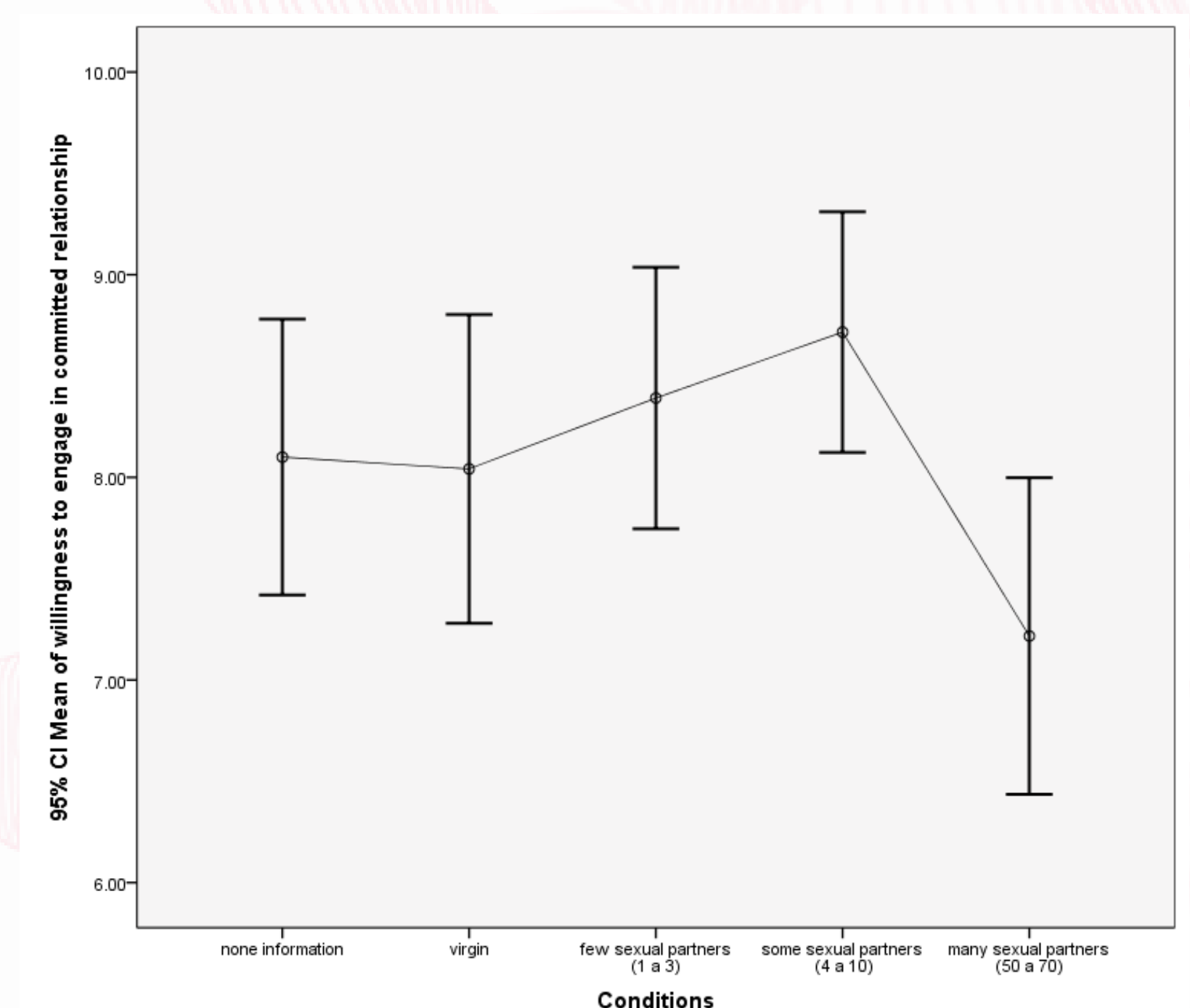


Figure 2. Means of willingness to engage in committed relationship of women with different sexual past.

DISCUSSION

The number of previous sexual partners did not impact on attractiveness, however rather on the chance of participants (all men) engaging in a long-term relationship with female partner. More specifically, participants were more willing to have committed relationships with women with average sexual experience (4 to 10 previous relationships), compared to women with a high sexual experience (50 to 70 previous relationships).

On the hypothesis of uncertainty about paternity it makes sense that the greater the preference demonstrated by the female for multiple partners, the less willing men will be to engage in committed relationships. That would happen because the greater the quantity of woman's previous sexual partners, the more men tend to fear female infidelity. That will not necessarily happen, but what matters is that men will probably think that way.

For men, the cost of having a committed relationship with an unfaithful partner is to invest resources in offspring who may be from another partner. From the point of view of biological cost-benefit that would be costly. It was hypothesized that prior sexual experience of women would have the same effect on attractiveness. That is, the greater the quantify of sexual experience, the less she would be considered attractive. The results did not corroborate that hypothesis. That may indicate that female physical beauty can be processed by men at a different level from the specific information that gives clues to fidelity (e.g., number of prior sexual partners), explaining the impact women's quantity of previous sexual partners has on male commitment, nonetheless not on attractiveness of women.

CONCLUSION

In general, this study corroborated importantly to the prevision of paternity uncertainty hypothesis. However, future studies should also measure sociosexuality. Because the level of sociosexual orientation could be associated with how much men tend to find it attractive and willing to have a committed relationship with women with different amounts of prior sexual partners.

References

- Alexander, R. D., & Noonan, K. M. (1979). Concealment of ovulation, parental care, and human social evolution. In: N.A. Chagnon, W.G. Irons (Eds.) *Evolutionary Biology and Human Social Organization*. Duxbury North Scituate, Massachusetts: 1979:436–453.
- Bendixen, M., Kennair, L. E. O., & Buss, D. M. (2015). Jealousy: Evidence of strong sex differences using both forced choice and continuous measure paradigms. *Personality and Individual Differences*, 86, 212–216. <http://doi.org/10.1016/j.paid.2015.05.035>
- Buss, D. M. (2018). Sexual and emotional infidelity: Evolved gender differences in jealousy prove robust and replicable. *Perspectives on Psychological Science*, 13(2), 155–160. <http://doi.org/10.1177/1745691617698225>
- Gangestad, S. W., & Buss, D. M. (1993). Pathogen prevalence and human mate preferences. *Ethol Sociobiol*, 14:89–96.
- Geary, D. C. (2006). Sexual selection and the evolution of human sex differences. *Psychologiske Teme*, 15(2), 203–238. Retrieved from <https://hrcak.srce.hr/9279>
- Puts, D. A. (2010). Beauty and the beast: Mechanisms of sexual selection in humans. *Evolution and Human Behavior*, 31(3), 157–175. <http://doi.org/10.1016/j.evolhumbehav.2010.02.005>
- Tooby, J., & Cosmides, L. (1990). The Past Explains the Present Emotional Adaptations and the Structure of Ancestral Environments. *Ethology and Sociobiology*, 11, 375–424. [http://doi.org/10.1016/0162-3095\(90\)90017-Z](http://doi.org/10.1016/0162-3095(90)90017-Z)

CONTACT
email: tha.ferrazc@gmail.com

L2PS – PUC-Rio
Marquês de São Vicente Street, 225, Gávea
Rio de Janeiro- RJ – Brazil
www.L2PS.org

