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Does Jealousy Protect People from Infidelity? Investigating the Interplay Between Romantic Jealousy, Personality and the Probability of Detecting Infidelity

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Abstract

Objective Extra-pair mating has potentially severe costs, which favor the evolution of mechanisms that would enable people to reduce them by detecting their partners' infidelity. Such a mechanism is romantic jealousy, and the current research attempted to examine the interplay between romantic jealousy, personality and the probability of detecting infidelity.

Method We employed quantitative research methods on a sample of 916 Greek-speaking participants.

Results we found that higher scorers in romantic jealousy were more likely to detect infidelity than lower scorers. The effect was independent of one's own infidelity, sex and age. We also found that neuroticism and openness predicted the probability to detect infidelity indirectly through jealousy. More specifically, high scorers in neuroticism experienced stronger jealousy, which in turn, was associated with increased probability to detect infidelity. On the other hand, high scorers in openness experienced lower jealousy that was associated with a decreased probability of detecting infidelity.

Conclusions Our results were consistent with the hypothesis that the jealousy mechanism has evolved to enable individuals to detect infidelity.

Keywords Jealousy \cdot Romantic jealousy \cdot Infidelity \cdot Cheating \cdot Infidelity detection \cdot Big-five

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Forming long-term intimate relationships is a human universal (Brown, 1991; Coontz, 2005; Epstein & Guttman, 1984), and so is infidelity (Betzig, 1989; Fisher, 2017). Extra-pair mating can have severe negative consequences for the legitimate partner, which in turn, translate into strong selection pressures for mechanisms to evolve that would protect people from their partner's infidelity (Platek & Shackelford, 2006; for a review on infidelity research see Fincham & May 2017; Haseli et al., 2019). It has been proposed that romantic jealousy is such a mechanism (Buss, 2000; for an extensive review of the jealousy literature see Martínez-León et al., 2017), and the current research attempts to examine if it is indeed effective in detecting infidelity.

Infidelity and Romantic Jealousy

Having extra-pair partners could potentially bring considerable fitness benefits (i.e., reproductive and survival benefits) for men, such as gaining access to the reproductive capacity of several woman, but also for women, such as receiving material benefits and good genes from extra-pair partners (Buss, 2000; Buss & Schmitt, 1993, 2019; Schacht & Kramer, 2019). In addition, extra-pair relationships can be beneficial for both sexes in considering other partners if the current ones die, abandon or do not satisfy them (Buss et al., 2017). These benefits have favored the evolution of an extra-pair mating strategy, but its secretive nature prevents us from accurately measuring its prevalence. Despite this limitation, current evidence indicates that infidelity is a widespread phenomenon. For instance, studies of American couples indicated that about one in three married men and about one in five married women were expected to have an extramarital affair during their lifetime (Greeley, 1994; Tafoya & Spitzberg, 2007). One study found that 33% of French women admitted to having had sexual intercourse with someone other than their partner in the course of their lives (IFOP, 2016).

The adoption of an extra-pair strategy can potentially have severe fitness costs for the legitimate partners. In particular, men risk raising other men's children without being aware of it, women risk losing a considerable part of their partners' investment to other women and their children, while both men and women risk losing their partners to others or contracting a sexual transmitted disease (Buss, 2000; Buss et al., 2017; Buss & Schmitt, 1993; Greiling & Buss, 2000). These costs would select for adaptations that reduce the risk of suffering them. It has been argued that romantic jealousy is such a mechanism (Buss, 2000).

More specifically, if legitimate partners are able to detect their partners' infidelity, they can take corrective action, including terminating the relationship or getting their partners to terminate any extra-pair relationships. Accordingly, one primary function of jealousy is to motivate individuals to take action in order to detect their partners' infidelity (Buss, 2000; Buss & Shackelford 1997; Daly & Wilson, 1988). One study has found that people employ at least six strategies for this purpose, including spying on their partners, searching their things, and confronting them to observe their reactions (Apostolou & Ioannidou, 2021). To put it differently, people who have a high threshold of jealousy, are vulnerable to the costs of infidelity, because they would not

be especially motivated to take action in order to detect it. Based on this reasoning, we predict that the level of jealousy one experiences would be a significant predictor of infidelity detection, with a lower threshold being associated with increased probability of detecting infidelity.

Personality plays an important role in many domains of life (Larsen & Buss, 2017), including mating (Botwin et al., 1997; Little et al., 2006). Personality is also linked to jealousy.

In particular, people who score high in neuroticism, one of the Big-fiver personality dimensions, experience higher levels of jealousy (McCrae & John, 1992; Melamed, 1991; Saeed Abbasi et al., 2018; Spark & O'Connor, 2020, but see Wade & Walsh 2008). If jealousy enables people to detect infidelity, then individuals who score higher in neuroticism, and thus, experience more jealousy, would be more likely to detect their partners' infidelity than low scorers. That is, we predict that neuroticism would have an indirect effect on the probability of detecting infidelity, by mediating the level of jealousy.

Overall, in the current study we aimed to test (a) the prediction that higher jealousy would be associated with higher probability of detecting infidelity, and (b) the prediction that higher scorers in neuroticism would be associated with higher probability of detecting infidelity due to increased levels of jealousy. We also examined the effects of other personality traits without making specific predictions.

Methods

Participants

The study was designed and executed at a private university in the Republic of Cyprus. In order to recruit participants, the link of the study was promoted to social media as a Facebook ad, and was forwarded by email to students and colleagues with the request to forward it further. The research received approval from the institution's ethics committee board. The only requirement for participation was for individuals to be at least 18 years old. Participants received no reimbursement for taking part. In total, 916 Greek-speaking individuals participated (495 women, 419 men, and two participants who did not indicate their sex). The mean age of women was 31.8 (SD=11.3) years, and the mean age of men was 35.4 (SD=12.9) years. In addition, 38.1% of the participants were single, 33.3% in a relationship, 22.3% married, and 6.2% indicated their marital status as "other."

Materials

The survey was in Greek and run online. It consisted of four parts. In the first part, we employed a shorter version of an instrument developed by Pines and Aronson (1983) to measure jealousy, from which we dropped the items that were related to how participants would see their partner's jealousy, as they were not relevant to our hypotheses (see Appendix A). Participants' rated seven items in a 7-point Likert scale, with higher scores indicating higher jealousy. The Cronbach's alpha for these seven items

was 0.71. In the second part, participants were asked to rate the Big Five Inventory (BFI) (John et al., 1991), which consisted of 44 items. Participant had to score each item in a five-point Likert scale (1- Disagree strongly, 5 - Agree strongly). In the third part, participants were asked the following questions: "Have you ever found out that your current or previous partners cheated on you?" and "Have you ever cheated on your current or previous partners?" In both questions, participants' answers were recorded in the following scale: "Never," "Few times," "Several times." In the fourth part, participants were asked to indicate their demographic details, including their sex, age and marital status. The order of presentation of the first three parts as well as the order of presentation of the questions composing each part, were randomized across participants.

Statistical Analysis

In order to examine the association between jealousy and infidelity detection, we created a variable with two levels, namely "No" (participants' responded "Never") and "Yes" (participants' responded "Few times" and "Several times"). Subsequently, we run binomial logistic regression, where participants' responses on whether they had detected infidelity were entered as the dependent variable, and their jealousy scores, sex and age were entered as the independent variables. Moreover, people who themselves had been unfaithful, may have a lower threshold of jealousy than those who have never been faithful, because they may think that their partners are also likely to engage in extra-pair mating. Thus, since we would like to investigate the effect of jealousy on infidelity detection irrespectively of an individual's own extra-pair experiences, we have also entered participants' responses on whether they had cheated on their partners as an independent variable in order to keep it statistically constant. Furthermore, in order to examine the association of jealousy and the frequency of detecting infidelity, we employed multinomial logistic regression, as above, with the difference that we entered participants' responses on how frequently they have detected infidelity as the dependent variable.

Moreover, in order to examine whether personality traits were associated with the probability of detecting infidelity mediated by jealousy, we performed mediation analysis. In particular, we attempted to identify the effect of a given personality trait, mediated by the level of jealousy on the probability of having detected infidelity (Fig. 1). The dichotomous variable of infidelity detection ("No," "Yes") was entered as the dependent variable, participants' scores on jealousy was entered as the mediator, participants' scores on a given personality trait was entered as the independent variable, and participants' scores on the remaining four personality traits, as well as sex and age, were entered as covariates. For this analysis the PROCESS version 3.5 macro for SPSS was used. Unstandardized indirect effects were computed for each of 5,000 bootstrapped samples, and the 95% confidence interval was computed by determining the indirect effects at the 2.5th and 97.5th percentiles. This analysis was repeated five times, once for each personality trait.



Fig. 1 The figure above depicts the mediation effect of personality on infidelity detection

Results

Descriptive Statistics

To begin with, with respect to having detected their partners cheating, 50.3% of the participants had indicated "Yes" (i.e., 39.3% "Few times," 11.0% "Several times") and 49.7% "No." With respect to their own infidelity, 52.6% indicated "Never," 40.8% "Few times" and 6.7% "Several times." In order to get a better picture of the association of jealousy with infidelity detection, we divided participants in three groups, those with mean jealousy scores of "5" or more (indicating high jealousy), those with mean scores between "5" and "3" and those with mean scores "3" or less. We found that, in the high jealousy group, 75.4% indicated "Yes" (36.8% "Few times," 38.6% "Several times") and 24.6% "No." On the other hand, in the "3" and lower group 44.5% of the participants indicated "Yes" (39.2% "Few times," 5.2% "Several times") and 55.5% "No."

Jealousy Main Effect

Moving on to the statistical analysis, as we can see from Table 1, there was a significant main effect of jealousy on having discovered infidelity. In particular, one unit increase in jealousy was associated with 1.48 times increase in the probability to be in the "Yes" than in the "No" category. We can see further that the one's own infidelity variable was significant, with the odds ratios indicating that having been unfaithful was associated with an increased probability of detecting a partner's infidelity. We also performed the analysis by entering jealousy as a categorical variable. The results indicated that there was a significant main effect of jealousy on having discovered infidelity [$X^2(1, N=916)=45.27, p<.001$]. In particular, those in the high jealousy group were 4.97 (CI-95%= 3.00–8.22) times more likely to have detected infidelity than those in the low jealousy group. In addition, those in the moderate jealousy group were 1.46 (CI-95%= 1.08–1.98) times more likely to have detected infidelity than those in the low jealousy group. We have also performed both analyses without Table 1 The logistics regression Variables results on the probability of X^2 p-value OR CI-95% detecting infidelity 49.95 < 0.001 1.48 1.32 - 1.66Jealousy 15.96 Own infidelity* < 0.001 Never unfaithful 0.57 0.31 - 1.05Few times unfaithful 1.03 0.56-1.90 Sex** 0.74 0.55-0.99 4.23 0.040 Age 28.12 < 0.001 1.03 1.02 - 1.05Note. The reference category was "No."

*The reference group was "several times" unfaithful

**The reference category was women

including the one's own infidelity variable. The results indicated very similar effects of jealousy on infidelity detection.

With respect to the frequency of having detected infidelity, there was a significant main effect of jealousy on having discovered infidelity (Table 2). For instance, one unit increase in jealousy was associated with 2.39 times increase in the probability to be in the "Several times" than in the "Never" category. We also performed the analysis by entering jealousy as a categorical variable. The results indicated that there was a significant main effect of jealousy on the frequency of having detected infidelity $[X^{2}(2, N=916)=96.94, p<.001]$. In particular, participants in the high jealousy group were 2.67 (CI-95% = 1.54-4.65) times and those in the moderate jealousy group were 1.31 (CI-95% = 0.95-1.81) times more likely than those in the low jealousy group to indicate that they have detected their partners to be unfaithful few times than never. Similarly, those in the high jealousy group were 21.11 (CI-95%=10.72-41.54) times and those in the moderate jealousy group were 2.51 (CI-95%=1.41-4.56) times more likely than those in the low jealousy group to indicate that they have detected their partners to be unfaithful several times than never. As before, we also performed both analyses without one's own infidelity as the dependent variable. We found that the effects of jealousy on the frequency of having detected infidelity were very similar.

Mediation Analysis

Moving on to the mediation analysis, the regression coefficient of the effect of neuroticism on jealousy (a) was 0.496 (0.37–0.62) [t(839)=7.74, p<.001], indicating that one unit increase in neuroticism, was associated with 0.496 units increase in jealousy. Furthermore, the OR of the neuroticism (c') to the dependent variable (infidelity detection) was 1.34 (p=.012) (CI-95% = 1.07-1.68), and the OR of the mediator (b) (jealousy) to the dependent variable (infidelity detection) was 1.15 (significant at 5%) (CI-95% = 1.08-1.24). These findings indicate that one unit increase in neuroticism, increased the probability to detect infidelity directly by 1.34 times or 35%, and indirectly through increasing romantic jealousy by 1.15 times or 15%.

Furthermore, we found that the regression coefficient of the effect of openness on jealousy (a) was -0.21 [CI-95% = (-0.33) - (-0.57)] [t(839) = -2.68, p=.008], indicating that one unit increase in neuroticism was associated with 0.496 units increase in romantic jealousy. Furthermore, the OR of the openness (c') to the dependent

Table 2 The logistics regression results on the frequency of having detected infidelity	Variables				
		X^2	<i>p</i> -value	OR	CI-95%
	Jealousy	96.94	< 0.001		
	Few times			1.29	1.14-1.46
	Several times			2.39	1.98-2.89
	Own infidelity*	27.56	< 0.001		
	Few times (Never unfaithful)			0.52	0.27-0.99
	Few times (Few times unfaithful)			1.10	0.58–2.08
	Several times (Never unfaithful)			0.79	0.32–1.91
	Several times (Few times unfaithful)			0.69	0.28–1.69
Note. The reference category was "Never." *The reference group was "several times" unfaithful **The reference category was	Sex**	5.19	0.075		
	Few times			0.70	0.52-0.95
	Several times			0.83	0.51-1.35
	Age	28.33	< 0.001		
	Few times			1.03	1.02 - 1.05
women	Several times			1.04	1.02 - 1.06

variable was 1.50 (p=.003) (CI-95% = 1.15–1.97), while the OR of the mediator (b) (jealousy) to the dependent variable was 0.94 (significant at 5%) (CI-95% = 0.89–0.98). These results indicated that, one unit increase in openness, increased the probability to detect infidelity directly by 1.50 times or 50%, but decreased the probability to detect infidelity indirectly through reduced jealousy by 6%. Finally, no significant effects were found for the agreeableness, conscientiousness and extraversion variables.

Discussion

Consistent with the prediction derived from the evolutionary theoretical framework, participants who experienced more romantic jealousy, were more likely to have detected infidelity than those who experienced less romantic jealousy. The effect was independent of one's own infidelity, sex and age. The Odds Ratios indicated that the effect was relatively large, with a one unit increase in the jealousy scale increasing considerably the chances of detecting infidelity. We also found that neuroticism and openness affected the probability of detecting infidelity indirectly through jealousy. In particular, high scorers in neuroticism, experienced stronger romantic jealousy that was associated with increased probability to detect infidelity. On the other hand, high scorers in openness, experienced lower romantic jealousy that was associated with a decreased probability of detecting infidelity.

In the current study, we found that people who scored high in jealousy reported that they have detected their partners' infidelity more frequently than those who scored low. One interpretation of this finding, which is consistent with the proposed evolutionary framework, is that higher scorers in jealousy were more strongly motivated to take action in order to detect infidelity, which led to more instances of infidelity detection, giving rise to the observed association. Still, the correlational nature of the present research does not allow us to prove causality, so other explanations may apply. More specifically, there is the possibility that people who have detected their current or previous partners to be unfaithful, may experience more jealousy than those who have never detected infidelity. In this interpretation, the significant effect of jealousy is not due to people who experience lower threshold of jealousy having higher chances of detecting infidelity, but people who have experienced infidelity having a lower threshold of jealousy. We are not aware of any studies which find that infidelity calibrates the jealousy threshold. Yet, this is a possibility, and if true, suggests that our results capture both effects: Jealousy significantly predicts the probability of detecting infidelity, and the discovery of infidelity significantly predicts the level of jealousy one experiences. The latter effect, if present, is probably weaker than the former, because if people experience a high threshold of jealousy, the probability of detecting infidelity in the first place would be low. It could also be the case that, to the extent that jealously is damaging to relationships, it could lead to more infidelity. In this scenario, high jealousy causes more infidelity and more infidelity leads to higher probability of detection. Future studies need to attempt to distinguish between alternative explanations.

Consistent with our original prediction, people who scored higher in neuroticism experienced more jealousy, which in turn, was associated with a higher probability to detect infidelity. Higher scores in neuroticism were also associated with higher probability to detect infidelity, independently of jealousy. One possible explanation is that, people who score high in this personality dimension, experience higher levels of anxiety, which translates into worrying about their partners' faithfulness, which in turn, motivates them to check on their partners, increasing in effect the probability to detect infidelity. Thus, the increased probability of detecting infidelity arising from high neuroticism is due to higher worry and jealousy. An alternative interpretation for the observed direct effect is that, people who score higher in neuroticism, experience more difficulties in their relationships (see Abbasi 2017; Heller et al., 2004; Karney & Bradbury, 1995), which increases the probability that their partners are unfaithful, and so the probability that they detect infidelity. Future research needs to distinguish between the two effects.

We also found that, people who scored higher in openness, experienced less romantic jealousy. One reason can be that high scorers are open to new experiences and to trying new things (Larsen & Buss, 2017), and they would not be able to do so if they experienced high jealousy. Yet, lower jealousy makes them less likely to detect infidelity. We also found an effect of openness, which was independent of jealousy, with higher scorers being more likely to have detected infidelity than lower scorers. One possible reason is that, by being more open to different experiences, high scorers tend to make relationships with individuals who also score high in openness, and who are thus, less likely to be faithful. Moreover, in such relationships, partners may be less motivated to hide their unfaithfulness. In effect, high scorers in openness may experience more infidelity, and would be more likely to detect it than low scorers, which gives rise to the observed direct effect.

Our findings are not informative on how jealousy leads to an increase in the probability of detecting infidelity. One recent study has identified several strategies that people use in order to detect their partners' unfaithfulness (Apostolou & Ioannidou, 2021), and jealousy can lead to the detection of infidelity by motivating people to adopt such strategies. Furthermore, jealousy may protect people from infidelity by having a deterrent function: If people are aware that their partners score high in jealousy, they may refrain from cheating in the first place, as they fear that they would be detected. Nevertheless, the design of the current study does not allow us to test this protective effect of jealousy.

In our theoretical framework, one adaptive function of jealousy is to motivate people to take action in order to detect their partners' infidelity, which in turn, would enable them to take corrective action. Yet, jealousy could be corrosive to the relationship. More specifically, jealousy can motivate legitimate partners to close guard their mates in order to prevent them from being unfaithful, but such close guarding could be constraining for the latter causing adverse reactions. Thus, in this case, a low threshold of jealousy would have the associated cost of reduced relationship quality. On the other hand, a high threshold of jealousy would have an associate cost of being more vulnerable to infidelity, but the benefit of having a better relationship with one's partner. This argument could possibly explain why selection forces have allowed considerable variation in the levels of jealousy that is, why some people have a high and other a low jealousy threshold. More theoretical and empirical work is necessary in order to be able to understand individual differences in the jealousy threshold.

We employed self-report instruments, so our data may be prone to biases, such as getting inaccurate answers. For instance, those with a low threshold of jealousy may be more prone to falsely report infidelity that is, to believe that their partners have cheated on them, without this to have been actually the case. Furthermore, we employed a non-probability sample, so our findings may not readily generalize to the population. In addition, the current study examined only a simple linear relationship between jealousy and the probability of detecting infidelity. Yet, the relationship between the two is probably more complex, and more variables are at play (see Haseli et al., 2019). In particular, jealousy may motivate people to employ infidelity detection strategies, such as being more vigilant for changes in a partner's behavior. Such strategies may produce indirect evidence of infidelity (e.g., partners paying more attention to their looks), which in turn would trigger stronger jealousy. Higher levels of jealousy would motivate the adoption of more drastic infidelity detection strategies, including spying on partners. If infidelity is detected, it may have a longterm effect, permanently decreasing individuals' threshold of jealousy, motivating them to adopt different strategies of infidelity detection, even if there are limited reasons for doing so. The interplay between jealousy and infidelity detection is a complex but fascinating phenomenon, which requires more research in order to be more deeply understood.

Moving on, in the current research we have examined the interactions between jealousy and personality on the probability of detecting infidelity. Yet, other variables such a mate value could be at play. For instance, lower mate value partners may be more jealous of the higher mate value partners, or partners of high mate value may be may cheat more because they have more opportunities to do so. Similarly, women on birth control report higher levels of jealousy (Cobey et al., 2011; Geary et al., 2001). Accordingly, women who use birth control, may be better at detecting infidelity than those who do not. Future research needs to extend our work by examining the interac-

tions of jealousy with a more inclusive list of variables. In addition, men and women focus differentially on detecting emotional or sexual infidelity as a partner's commission of these types of infidelity has different fitness consequences (Kuhle et al., 2009; Shackelford & Buss, 1997; Schützwohl, 2006). Thus, future studies can examine the effect of jealousy and its interaction with sex by distinguishing between detecting emotional and sexual infidelity. Finally, in the current study we did not record participants' sexual orientation which can affect jealousy responses (Martínez-León et al., 2017), and future studies need to examine if the effect of jealousy on the probability of detecting infidelity is similar across different sexual orientation groups.

Overall, the current study produced evidence that a low threshold of jealousy is associated with increased probability of detecting infidelity. It also produced evidence that personality traits predict infidelity detection by having an effect on the jealousy threshold. More work is necessary in order to better understand the observed associations between jealousy, personality and infidelity detection.

Appendix A

The items of the jealousy instrument.

- 1. In general, how jealous you consider yourself to be?
- 2. When you are in a romantic relationship, how often do you feel very jealous?
- 3. Do you consider your jealousy a problem for your intimate relationships?
- 4. Have any intimate relationships ended because of jealousy?
- 5. Do most people who know you well consider you a jealous person?
- 6. Do people you have been intimate with consider you jealous?
- 7. Can you make yourself stop being jealous?

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Data Availability The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

Declarations

Conflict of Interest The authors do not have any conflict of interest to report.

Ethical Standards The study received approval from the institution's ethics committee board.

References

- Abbasi, I. S. (2017). Personality and marital relationships: Developing a satisfactory relationship with an imperfect partner. *Contemporary Family Therapy: An International Journal*, 39(3), 184–194. https:// doi.org/10.1007/s10591-017-9414-1
- Apostolou, M., & Ioannidou, M. (2021). Strategies for detecting infidelity: An explorative analysis. Evolutionary Psychological Science. https://doi.org/10.1007/s40806-021-00287-9
- Betzig, L. (1989). Causes of conjugal dissolution: A cross-cultural study. Current Anthropology, 30, 654– 676. https://doi.org/10.1086/203798

- Botwin, M. D., Buss, D. M., & Shackelford, T. K. (1997). Personality and mate preferences: Five factors in mate selection and marital satisfaction. *Journal of Personality*, 65, 107–136. https://doi. org/10.1111/j.1467-6494.1997.tb00531.x
- Buss, D. M. (2000). The dangerous passion: Why jealousy is as necessary as love and sex. The Free Press
- Buss, D. M., Goetz, C., Duntley, J. D., Asao, K., & Conroy-Beam, D. (2017). The mate switching hypothesis. Personality and Individual Differences, 104, 143–149. https://doi.org/10.1016/j.paid.2016.07.022
- Buss, D. M., & Schmitt, D. P. (1993). Sexual strategies theory: An evolutionary perspective on human mating. *Psychological Review*, 100, 204–232. https://doi.org/10.1037/0033-295X.100.2.204
- Buss, D. M., & Schmitt, D. P. (2019). Mate preferences and their behavioral manifestations. Annual Review of Psychology, 70, 77–110. https://doi.org/10.1146/annurev-psych-010418-103408
- Buss, D. M., & Shackelford, T. K. (1997). From vigilance to violence: Mate retention tactics in married couples. *Journal of Personality and Social Psychology*, 72, 346–361. https://doi. org/10.1037//0022-3514.72.2.346
- Brown, D. E. (1991). Human universals. McGraw-Hill
- Cobey, K. D., Pollet, T. V., Roberts, S. C., & Buunk, A. P. (2011). Hormonal birth control use and relationship jealousy: Evidence for estrogen dosage effects. *Personality and Individual Differences*, 50(2), 315–317. https://doi.org/10.1016/j.paid.2010.09.012
- Coontz, S. (2005). Marriage, a history: From obedience to intimacy, or how love conquered marriage. Viking
- Daly, M., & Wilson, M. (1988). Homicide. Aldine de Gruyter
- Epstein, E., & Guttman, R. (1984). Mate selection in man: Evidence, theory, and outcome. Social Biology, 31, 243–278. https://doi.org/10.1080/19485565.1984.9988579
- Fincham, F. D., & May, R. W. (2017). Infidelity in romantic relationships. Current Opinion in Psychology, 13, 70–74. https://doi.org/10.1016/j.copsyc.2016.03.008
- Fisher, H. (2017). Anatomy of love: A natural history of mating, marriage, and why we stray. Norton
- Geary, D. C., DeSoto, M. C., Hoard, M. K., Sheldon, M. S., & Cooper, M. L. (2001). Estrogens and relationship jealousy. *Human Nature*, 12(4), 299–320. https://doi.org/10.1007/s12110-001-1001-2
- Greeley, A. (1994). Marital infidelity. Society, 31, 9-13. https://doi.org/10.1007/BF02693241
- Greiling, H., & Buss, D. M. (2000). Women's sexual strategies: The hidden dimension of extrapair mating. *Personality and Individual Differences*, 28, 929–963. https://doi.org/10.1016/ S0191-8869(99)00151-8
- Haseli, A., Shariati, M., Nazari, A. M., Keramat, A., & Emamian, M. H. (2019). Infidelity and its associated factors: A systematic review. *The Journal of Sexual Medicine*, 16(8), 1155–1169. https://doi.org/10.1016/j.jsxm.2019.04.011
- Heller, D., Watson, D., & Ilies, R. (2004). The role of person versus situation in life satisfaction: A critical examination. *Psychological Bulletin*, 130, 574–600. https://doi.org/10.1037/0033-2909. 130.4.574
- IFOP (2016). Les Françaises et l'infidélité feminine à l'heure des sites de rencontre. Retrieved from: https://www.ifop.com/wp-content/uploads/2018/03/3601-1-study_file.pdf
- John, O. P., Donahue, E. M., & Kentle, R. L. (1991). The Big Five Inventory-versions 4a and 54. University of California
- Karney, B. R., & Bradbury, T. N. (1995). The longitudinal course of marital quality and stability: A review of theory, method, and research. *Psychological Bulletin*, 118(1), 3–34. https://doi. org/10.1037/0033-2909.118.1.3
- Kuhle, B. X., Smedley, K. D., & Schmitt, D. P. (2009). Sex differences in the motivation and mitigation of jealousy-induced interrogations. *Personality and Individual Differences*, 46(4), 499–502. https://doi. org/10.1016/j.paid.2008.11.023
- Larsen, R. J., & Buss, D. M. (2017). Personality Psychology: Domains of knowledge about human nature (6th ed.). McGraw-Hill
- Little, A. C., Burt, D. M., & Perrett, D. I. (2006). Assortative mating for perceived personality traits. Personality and Individual Differences, 40, 973–984. https://doi.org/10.1016/j.paid.2005.09.016
- Martínez-León, N. C., Peña, J. J., Salazar, H., García, A., & Sierra, J. C. (2017). A systematic review of romantic jealousy in relationships. *Terapia psicológica*, 35(2), 203–212. https://doi.org/10.4067/ s0718-48082017000200203
- McCrae, R. R., & John, O. P. (1992). An introduction to the five-factor model and its applications. *Journal of Personality*, 60, 175–215. https://doi.org/10.1111/j.1467-6494.1992.tb00970.x
- Melamed, T. (1991). Individual differences in romantic jealousy: The moderating effect of relationship characteristics. *European Journal of Social Psychology*, 21(5), 455–461. https://doi.org/10.1002/ ejsp.2420210508

- Platek, S. M., & Shackelford, T. K. (Eds.). (2006). Female infidelity and paternal uncertainty. Cambridge University Press
- Saeed Abbasi, I., Rattan, N., Kousar, T., & Khalifa Elsayed, F. (2018). Neuroticism and close relationships: How negative affect is linked with relationship disaffection in couples. *The American Journal of Family Therapy*, 46(2), 139–152. https://doi.org/10.1080/01926187.2018.1461030
- Schacht, R., & Kramer, K. L. (2019). Are we monogamous? A review of the evolution of pair-bonding in humans and its contemporary variation cross-culturally. *Frontiers in Ecology and Evolution*, 7, Article: 230. https://doi.org/10.3389/fevo.2019.00230
- Shackelford, T. K., & Buss, D. M. (1997). Cues to infidelity. Personality and Social Psychology Bulletin, 23(10), 1034–1045. https://doi.org/10.1177/01461672972310004
- Spark, A., & O'Connor, P. J. (2020). Extraversion rather than neuroticism is the dominant trait predictor of forecasted affect in relation to social situations. *Personality and Individual Differences*, 160, 109934. https://doi.org/10.1016/j.paid.2020.109934
- Schützwohl, A. (2006). Sex differences in jealousy: Information search and cognitive preoccupation. Personality and Individual Differences, 40(2), 285–292. https://doi.org/10.1016/j.paid.2005.06.024
- Tafoya, M., A., & Spitzberg, B. H. (2007). The dark side of infidelity: Its nature, prevalence, and communicative functions. In B. H. Spitzberg, & W. R. Cupach (Eds.), *The dark side of interpersonal communication* (2nd ed., pp. 201–242). Lawrence Erlbaum Associates
- Wade, T. J., & Walsh, H. (2008). Does the Big-5 relate to jealousy, or infidelity reactions? Journal of Social Evolutionary and Cultural Psychology, 2(3), 133–143. https://doi.org/10.1037/h0099349

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