Presentation by Nick Dibitetto

REASONS FOR INFIDELITY

October - 2024

Understanding Infidelity

Prevalence and Evolutionary Implications

Infidelity is a widespread phenomenon in human relationships and many species. It has evolutionary roots that pose risks and benefits.

Study Methodology

The study surveyed participants across multiple countries to assess perceptions of partners. Key metrics were attractiveness and mate value.

COMPONENT	DETAILS
Sample Size	254 individuals
Countries	19
Metrics	Physical, parental, personal attractiveness
Main Focus	Mate value comparison

Male Infidelity Hypotheses

Strategic Dualism Hypothesis

The notion to pursue both "good genes" from extra-pair partners (affairs) and secure parental investment from their primary partner. This dual strategy allows them to optimize reproductive success by combining desirable traits from different partners for genetic and caregiving benefits.

Variety Hypothesis

The variety aspect of social dating suggests that individuals may seek multiple partners to experience novelty and sexual variety, often driven by boredom or dissatisfaction in their current relationship. This behavior can serve evolutionary purposes like increasing genetic diversity in offspring or hedging against potential fertility issues.

Female Infidelity Hypotheses

Mate-Switching Hypothesis

This theory posits that infidelity provides women the opportunity to find better long-term mates without losing their current partner. By testing the waters with potential new mates, they can secure a partner with higher mate value or better resources, often without experiencing a period of relationship loss or deprivation.

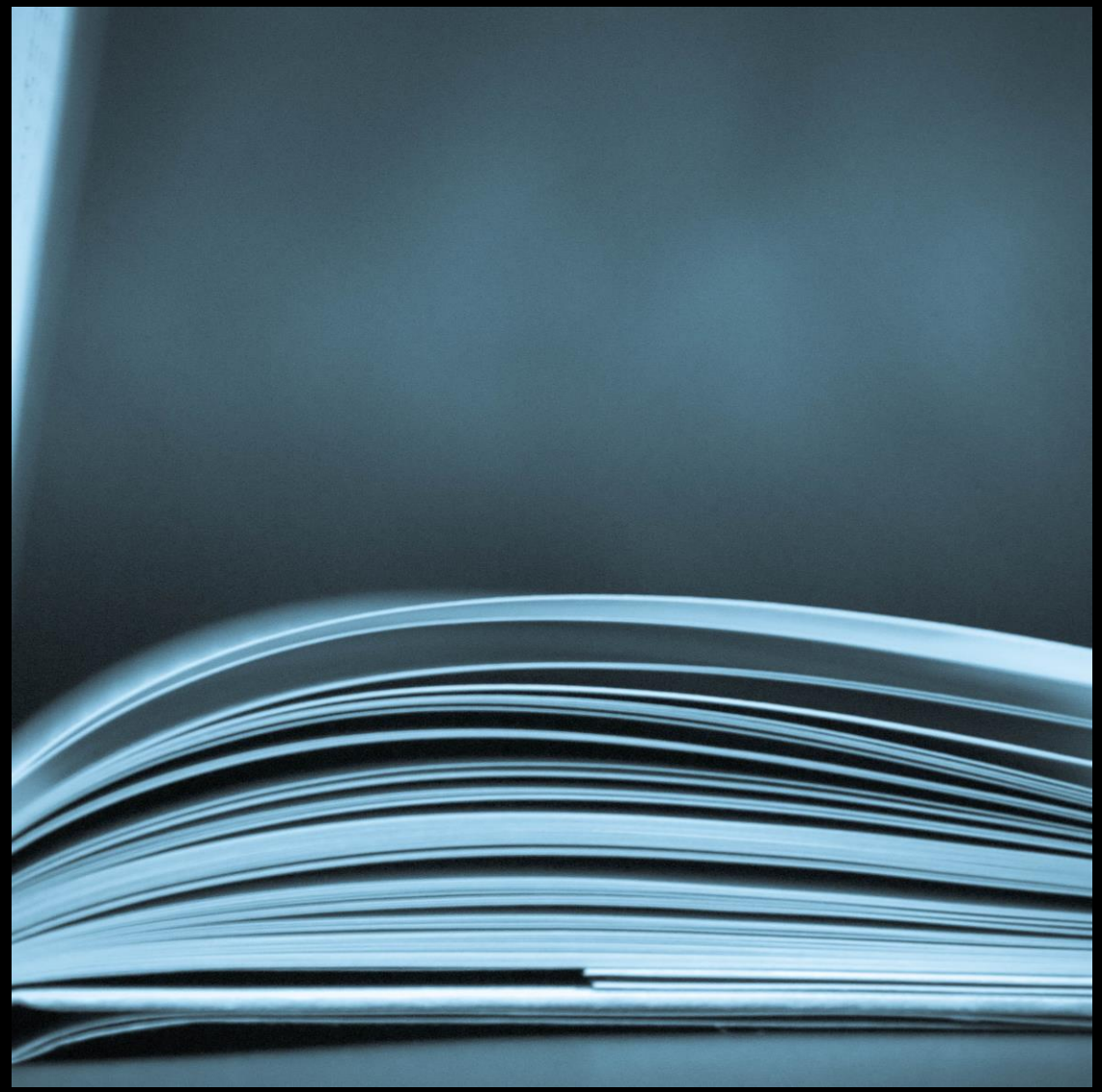
Good Genes Hypothesis

The "good genes" hypothesis posits that women may engage in infidelity to secure genetically superior traits from an extra-pair partner for their offspring. This strategy involves selecting physically attractive or otherwise genetically advantageous partners for reproduction, while relying on their primary partner for parental investment and resources.

ANOVA (Analysis of Variance)

Test 1

The study used repeated measures ANOVAs to compare women’s ratings of their primary and affair partners, and a second ANOVA was run with men’s responses to test for gender differences. This method allowed for the evaluation of partner type effects on each attraction scale, and sex differences as a potential moderator. To further verify results, an additional ANOVA excluded the item measuring others' perceptions of partners, focusing solely on participants' own perceptions. Qualitative responses were analyzed for recurring themes by two independent coders, and interrater reliability was confirmed using Cohen's Kappa, with chi-square tests exploring sex differences. All analyses were conducted using R.



Results for Women

The study found support for the "good genes" hypothesis, with women rating their affair partners as significantly more physically attractive but less parentally attractive compared to their primary partners. No support was found for the mate-switching hypothesis, as there was no significant difference in mate value or personal attraction between affair and primary partners.

Measure	Primary Partner	Affair Partner	$F(1, 115)$	p
Physical attraction	**6.98** (SD=7.65)	**8.91** (SD=7.78)	**4.50**	**.036***
Parental attraction	**5.36** (SD=8.74)	**2.03** (SD=8.54)	**8.70**	**.004****
Personal attraction	6.88 (SD=6.54)	7.31 (SD=6.29)	0.28	.598
Mate value	4.91 (SD=5.23)	5.06 (SD=5.34)	0.05	.816

* $p<.05$.

Test 2

Qualitative Data in contrast with supporting Hypotheses

Cohen's Kappa is a statistical measure used to assess the level of agreement or reliability between two raters or observers who classify items into categorical variables. It accounts for the agreement that could occur by chance, providing a more accurate representation of the agreement between the raters than simple percentage agreement.

- **Kappa = 1**: Perfect agreement.
- **Kappa = 0**: No agreement beyond chance.
- **Kappa < 0**: Less agreement than would be expected by chance.
- **Kappa values** can also be interpreted as:
- 0.81−1.000.81 - 1.000.81−1.00: Almost perfect agreement
- 0.61−0.800.61 - 0.800.61−0.80: Substantial agreement
- 0.41−0.600.41 - 0.600.41−0.60: Moderate agreement
- 0.21−0.400.21 - 0.400.21−0.40: Fair agreement
- 0.01−0.200.01 - 0.200.01−0.20: Slight agreement
- ≤0.00\leq 0.00≤0.00: Poor agreement

Table 4. Qualitative Support for Infidelity Hypotheses in Participants' Stated Infidelity Motivations.

Hypothesis	Interrater reliability (Cohen's Kappa)	Men (N=138)	Women (N=116)	X^2 (1, N=254)	p
Strategic dualism[a]	**0.90*****	**15.94%**	**6.03%**	**6.12**	**.013***
Mate-switching	0.77***	2.90%	6.03%	1.50	.221
Variety[b]	0.79***	13.04%	11.21%	0.20	.656
Information acquisition	0.72***	5.07%	6.03%	0.11	.738
Multiple investors[c,d]	0	0%	0.86%	1.19	.274
Revenge	**0.90*****	**4.35%**	**15.52%**	**9.19**	**.002****
Walk away[d]	0.93***	1.45%	4.31%	1.92	.165

Our instructions for qualitative coding, each rater's decisions, and their final agreement are all available on the OSF (https://osf.io/buj2z/?view_only=05181b9c77ba430d83c30f1691f6986e).

Results

- **Strategic dualism** had strong qualitative support, with significantly higher endorsement by men (15.94%) than women (6.03%). The interrater reliability was high (Cohen's Kappa = 0.90, **p = .013**), suggesting this hypothesis plays a significant role in male motivations for infidelity.
- **Variety** was endorsed similarly by men (13.04%) and women (11.21%), but this difference was not significant (p = .656). The interrater reliability for this hypothesis was also high (Cohen's Kappa = 0.79).
- **Revenge** as a motive was notably more common among women (15.52%) compared to men (4.35%), with significant results (p = .002). The interrater reliability for this hypothesis was also strong (Cohen's Kappa = 0.90).
- **Mate-switching** and **walk away** strategies showed low endorsement from both men and women, with no significant gender differences (p > .05), though interrater reliability remained high for these hypotheses (Cohen's Kappa = 0.77 and 0.93, respectively).

Test 3

- **Men**: Relationship dissatisfaction (30.43%) and attractive affair partner (15.94%).
- **Women**: Relationship dissatisfaction (64.66%) and partner's affair (15.52%).
- **Evidence**: Chronic relationship unhappiness and differences in sexual desire are significant predictors.

Table 6. Recurrent Themes in Participants' Stated Motivations.

Theme	Intra-rater reliability (Cohen's Kappa)	Men (N=138)	Women (N=116)	X^2 (1, N=254)	p
Imminent breakup	0.44***	4.35%	6.03%	0.37	.543
Partner's affair	**0.86*** **	**2.90%**	**15.52%**	**12.69**	**<.001*** **
Drugs & alcohol[a]	0.93***	4.35%	1.72%	1.42	.233
Opportunity	0.62***	7.97%	2.59%	3.51	.061†
Long-distance	0.88***	9.42%	3.45%	3.60	.058†
External stress[a]	0.66***	5.07%	0.86%	3.66	.056†
Validation & self-esteem	0.76***	3.62%	6.90%	1.39	.238
Regret[a]	0.86***	1.45%	0.86%	0.19	.666
Boredom	0.84***	5.80%	7.76%	0.39	.533
Novelty-seeking	0.57***	10.87%	5.17%	2.70	.101
Sexual dissatisfaction	0.85***	9.42%	8.62%	0.05	.825
Sexual desire	**0.60*** **	**13.77%**	**2.59%**	**9.96**	**.002** **
Attractive affair partner	**0.89*** **	**15.94%**	**5.17%**	**7.45**	**.006** **
Mental health issues[a]	0.66***	1.45%	0.86%	0.19	.666
Relationship dissatisfaction	**0.71*** **	**30.43%**	**64.66%**	**29.70**	**<.001*** **
Uninvested primary partner	**0.72*** **	**5.07%**	**22.41%**	**16.77**	**<.001*** **
Love for affair partner[a]	0.54***	2.17%	1.72%	0.07	.797
Foolishness / youth	0.79***	5.80%	3.45%	0.77	.379

[a] Due to low expected frequencies (less than five), we re-ran marked analyses with Fisher's exact test—all results were non-significant. † p<.1, ** p<.01,*** p<.001.

Key Findings: Good Genes

Support for Good Genes Hypothesis

Participants rated affair partners significantly higher in physical attractiveness compared to primary partners, affirming the hypothesis.

Haseli et al. (2019) reviewed factors linked to in fidelity and found that both the attractiveness of an affair partner and the unattractiveness of a pr imary partner contribute to infidelity. Scelza an d Prall (2018) supported the multiple-investors hypothesis but also observed a subtle preference for physical attractiveness in extra-pair partners for both genders, suggesting a bias for "good genes" even in affairs driven by other motives.

Key Findings: Mate-Switching

Lack of Support for Mate-Switching

Affair partners did not score higher in overall mate value, indicating that mate-switching is less favorable in this context. Our examination of moderation by participant sex found consistency between men and women regarding their ratings of their extra-pair versus in-pair partners' attractiveness, arguably suggesting that both sexes are dual strategists, prioritizing conceptive benefits (“good genes,” fertility) in affair partners, and parental benefits in primary partners.

Conclusion Summary

Future Research

While the findings are compelling, further research is needed to explore mate-switching influences and cultural variations.

Significance of Dual Mating Strategy

Strategic pluralism and diversity in human extra-pair mating, with individuals seeking multiple fitness benefits from affairs. Although mate switching was a noted motivation, quantitative data showed affair partners were generally not seen as better than primary partners, except in physical attractiveness. Both men and women appeared to prioritize genetic benefits from affair partners and parental investment from primary partners, indicating dual strategies in infidelities

References

•Albrecht et al., 2009

T. Albrecht, M. Vinkler, J. Schnitzer, R. Poláková, P. Munclinger, J. Bryja

•Evolution and Human Behavior

Volume 45, Issue 5, September 2024, 106595

•Zietsch, Westberg, Santtila and Jern, 2015

•B.P. Zietsch, L. Westberg, P. Santtila, P. Jern

•Yasui, 2001

•Y. Yasui

•Wheeless, Frymier and Thompson, 1992

•L.R. Wheeless, A.B. Frymier, C.A. Thompson