

# Individual differences in mate retention strategies based on health and romantic jealousy

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## Introduction

- Physical health has been argued to provide a range of reproductive advantages such as being preferentially chosen as a mate, having more disease resistant children, and possessing a higher capacity to invest in mates, offspring, allies, and kin.
- Individuals report overt mate preferences for healthy mates, as well as subtle preferences for phenotypes that are putatively linked to health in a partner
- Therefore, unhealthy individuals are at a distinct mating disadvantage
- Arnocky et al., (2015) found that unhealthy individuals perceived greater risk of partner infidelity and expressed more jealousy
- Few researchers have, however, examined how perceptions of health status may correspond to the strategies that individuals use to vie for and to retain desired mates.

## Hypotheses

- Poorer self-perceived physical health would predict stronger feelings of jealousy
- Poorer self-perceived physical health would predict greater engagement in two domains of mate (benefit-provisioning and cost-inflicting)
- Jealousy will mediate the relationship between poorer health and enactment of mate retention behavior.

## Method

**Participants.** 314 undergraduates aged 17 to 30 ( $M = 20.22$ ,  $SD = 2.07$ ). 56% ( $n = 175$ ) of the sample were female. Of the sample, 48% ( $n = 151$ ) indicated that they were in a romantic relationship.

**Health Symptoms Survey (Knack, 2009).** Measure frequency and severity of physical health problems (e.g., fatigue, muscle aches, chest pain, sleep problems, fever, headache, etc). Frequency is assessed with 26 items along a 4-point Likert-type scale ranging from 1 (Not at all) to 4 (All the time) ( $\alpha = .87$ ). Participants responded to the same items in regard to symptom severity using a different 4-point Likert-type scale ranging from 1 (Does not hurt at all) to 4 (Unbearable) ( $\alpha = .89$ ).

**The Revised Anticipated Sexual Jealousy Scale (Buunk, 1997).** 15-item self-report measure scored on a 5-point scale. Example items include “I worry about the idea that my partner could have a sexual relationship with someone else,” “It is not acceptable to me if my partner sees people of the opposite sex on a friendly basis” ( $\alpha = .89$ ).

## Method

Buss et al. (2009) 38-item Mate Retention Inventory Short-Form. Scored along a 4-point Likert-type scale ranging from 0 (Never) to 3 (Often). Single participants were prompted to report on their last relationship. Items were averaged to yield benefit-provisioning (e.g., “Took my partner to a nice restaurant”;  $\alpha = .90$ ) and cost-inflicting (e.g., “Insisted that my partner spend all of her/his free time with me”;  $\alpha = .86$ ) frequency scores.

## Results

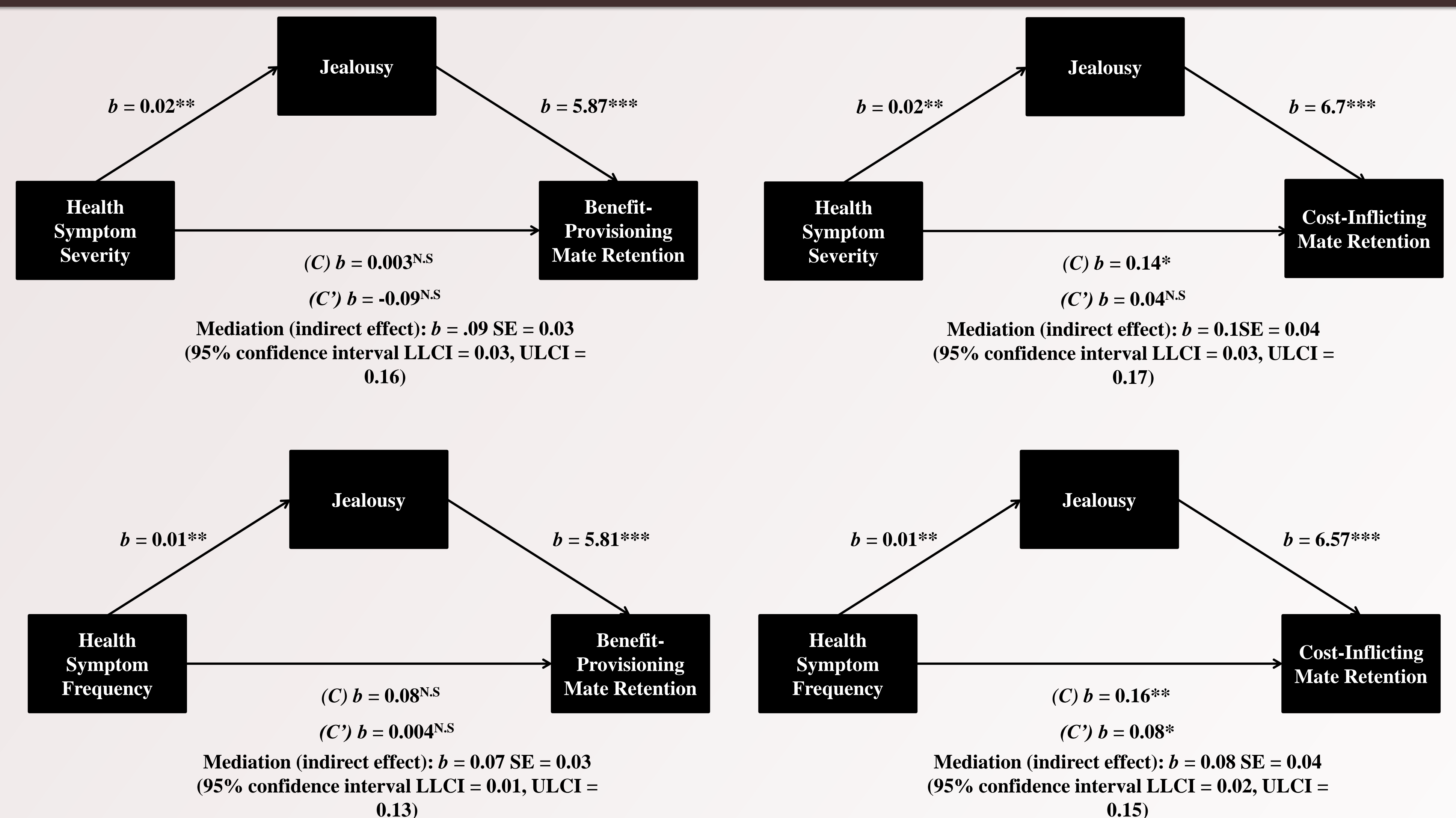


Figure 1. Four mediation models (PROCESS, Model 4) (Hayes, 2013) were analyzed to test whether poorer self-perceived physical health would predict stronger feelings of jealousy. Top left: jealousy mediates the non-significant relationship between health symptom severity and benefit-provision mate retention. Top right: jealousy mediates the relationship between health symptom severity and cost-inflicting mate retention. Bottom left: jealousy mediates the non-significant relationship between health symptom frequency and benefit-provision mate retention. Bottom right: jealousy mediates the relationship between health symptom frequency and cost-inflicting mate retention.

## Discussion

Health status is regarded to be an important variable that impacts mate competition and mating success; however, empirical support for this claim among humans is scant. Replicating Arnocky et al. (2015) previous work, the current study demonstrated perceived severity and frequency of physical health problems corresponds to greater feelings of romantic jealousy (Hypothesis 1). In extending this work, the current study found self-perceived health status was positively associated with cost-inflicting mate retention behavior (Hypothesis 2). Furthermore, we found support that feelings of romantic jealousy mediated all of these relationships. Our findings generally accord with those found by other researchers that men and women who are (actually or perceivably) lower in mate value tend to engage in more cost-inflicting acts. Although, in the current study we found that indices of lower mate value in women and men (as signaled by poorer self-perceived physical health status) were not only linked to the performance of more cost-inflicting behavior, but also indirectly associated benefit-provisioning mate retention through jealousy. Collectively, our results support the idea that those in poorer physical health may be at a mating disadvantage; an adaptive challenge that relatively unhealthy women and men seek to overcome by elevating their levels of jealousy and engaging in more acts of mate retention.

## References

- Arnocky, S., Pearson, M., & Vaillancourt, T. (2015). Health, anticipated partner infidelity, and jealousy in men and women. *Evolutionary Psychology*, 13(3), 1–10. doi:10.1177/1474704915593666
- Buss, D.M., Shackelford, T.K., & McKibbin, W. F. (2008). The mate retention inventory-short form (MRI-SF). *Journal of Personality and Individual Differences*, 44, 322–334. doi: 10.1016/j.paid.2007.08.013
- Buunk, B. P. (1997). Personality, birth order and attachment styles as related to various types of jealousy. *Personality and Individual Differences*, 23, 997–1006. doi:10.1016/S0191-8869(97)00136-0
- Knack, J. M. (2009). Influence of peer victimization and social support on cortisol production (doctoral dissertation). Retrieved January 8, 2012, from [http://dspace.uta.edu/bitstream/handle/10106/1694/Knack\\_uta\\_2502D\\_10246.pdf?sequence=1](http://dspace.uta.edu/bitstream/handle/10106/1694/Knack_uta_2502D_10246.pdf?sequence=1)

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