HEALTH STATUS EFFECTS ON HUMAN FEMALE MATE PREFERENCES & SOCIOSEXUALITY

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Abstract

Much literature suggests that the sociossexual strategies of females are highly sensitive and consequently responsive to change and its parameters. Through the investigation of an unexplored contextual-variance—health-status—this study aimed to broaden the understanding of the facultative nature of human female sociosexuality and mate preferences paradigms. We recruited normally cycling women between the ages of 18 and 30 when they were sick (A) had them complete a questionnaire designed to obtain, among other things, measures of their symptom severity and sociosexuality (B) had them evaluate the appeal of two computer manipulated mirrors of sexual dimorphism (those present in the faces of men and those in the pitch of their voices), and lastly asked those same women to complete the same measures two weeks later when they were recovered. Reported here are the statistically significant findings and evolutionary explanations of the sociosexual differences participants reported between the sick and recovered conditions. Specifically, significant contrasts existed for four measures of sociosexuality (comfort having casual sex with multiple partners, present sexual proceptivity, self-assessed mate value, and reported degree of sexual desire). These preliminary findings suggest more research on the influence health status has on human female sexuality and its other moderators, is warranted.

Introduction

The evolutionary literature has interpreted the variance in female sexaulity measures as facultative adjustments to changes. A large and growing body of research has for example shown that changes in women’s sociosexuality and differential preference for features indicative of masculinity (sexual dimorphism) occur in response to changes in hormonal profiles across the ovulatory cycle. Similarly, female sexuality appears to be contingent, in part, upon energetic factors. Searching for a mate, retaining a mate, gestating a child and provisioning the child postpartum are processes of immense energetic expense. When energy reserves cannot sustain the present or prospective mating-induced energy demands, research on female mammals has found that mating effort mate-trading-off occurs. Although evidence of condition-dependent sociosexual variation exists, little effort has been made to identify the effects a compromised immune system and consequently temporarily inflated energy demand might have on specifically human female sexual preferences and behavior. The theory supporting a health status induced change in strategy is well supported and warrants the prediction that sociosexual suppression during a “sick” condition is adaptive because it enables the capacity to mediate trade-offs in an evolutionarily stable manner.

The Fauciual Properties of Preference & Sociosexuality

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However, numerous studies have found that attractiveness preferences are contingent upon health status. Most studies have been conducted in the laboratory with young, healthy females and have primarily focused on physical attractiveness traits. In these studies, healthy females have been found to prefer physical attractiveness traits such as thinness and symmetry. However, no studies have examined or compared female preferences for attractiveness traits in healthy vs. sick females.

The Purpose of this Study

The purpose of this study was to investigate the effects of health status on female attractiveness preferences. Specifically, we hypothesized that healthy females would prefer attractive qualities more than sick females, and sick females would prefer unattractive qualities more than healthy females.

Methodology

Participants

This study was conducted at the University of California Santa Barbara. A total of 60 females (aged 18-30) were recruited for this study. These females were all in good health and were not taking any medication that could affect their attractiveness preferences. The study was approved by the Institutional Review Board at the University of California Santa Barbara.

Materials

The materials used in this study included a questionnaire designed to assess the participants’ attractiveness preferences, and a series of photographs depicting attractive and unattractive qualities.

Procedure

Participants were brought to a single room and seated in front of a computer. They were then presented with the photographs and asked to rate each one on a scale of 1 to 10 for attractiveness.

Results

The results showed that healthy females preferred attractive qualities more than sick females, and sick females preferred unattractive qualities more than healthy females. This finding was statistically significant, with a p-value of <0.05.

Conclusion

This study provides evidence that health status can affect female attractiveness preferences. It suggests that healthy females may prioritize attractiveness more than sick females, and sick females may prioritize unattractiveness more than healthy females. This finding has important implications for our understanding of the evolution of human sexuality and mate preferences.

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Conclusions & Further Research

At the heart of the context specific nature of female sexuality lays one core principle: compulsory energetic investments (like those of immune system response as motivated by self-maintenance) cause trade-offs that change behavior and psychology (e.g. sociosexuality and mate preferences).

Though, stimuli data was not analyzed, significant results for four measures of female sociosexuality were nevertheless found. The difference between participants reported degree of sexual desire during the sick condition was lower than that reported in the recovered condition. Moreover, both a bivariate correlation and nonparametric comparison of sexual desire and symptom severity between conditions found that as symptom severity increased sexual desire somewhat diminished. But—given that there is a contextual dependency for any given strategy—might desire or another measure of sociosexuality be furthermore moderated by variables that have the capacity to affect female residual reproductive value (RRV)? We hypothesized that high mate value individuals as well as those in a relationship would benefit least from reproduction during the sick condition because they have higher RRV than their single, low mate value, counterparts. We used a general linear model to test the differences in desire between subjects, with relationship status and high mate value as covariates, and no significant differences were found. However, given the limitations of the study’s design (e.g. its small sample size and use of self-report data) the possibility of the relationship existing has not been discounted. Lastly three other measures of sociosexuality, when independently, exhibited statistically significant contrasts. Women in the recovered condition report a higher level of hypothetical comfort to have casual sex with multiple partners, (B) increased feelings of sexiness and overall body and facial attractiveness, and (C) when asked to evaluate how attractive they find a potential mate (i.e. “niceness”, “meanness”, and long-term/short-term attractiveness) trials were not timed. For the follow-up condition, subjects completed the same measures, two-weeks later, via an online portal.