HEALTH STATUS EFFECTS ON HUMAN FEMALE MATE PREFERENCES & SOCIOSEXUALITY

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Abstract

Much literature suggests that the sociosexual strategies of females are highly sensitive and consequently responsive to change and its parameters. Through the investigation of an unexplored contextual variable—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 images of male faces, and (C) 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, health cues, long-term attractiveness), trials were not timed. For the follow-up condition, subjects completed a questionnaire designed to obtain, among other things, measures of their symptom severity and sociosexuality, relationship status, symptom severity effects participants reported between the sick and recovered conditions. Moreover, both a bivariate correlation and nonparametric comparison of sexual desire and symptom severity between conditions found that as symptom severity increased sexual desire respectively diminished. But—given that there is a contextual dependency for any given strategy—might desire or another measure of sociosexuality be further 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 ran independently, exhibited statistically significant contrasts. Women in the recovered condition report (A) 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 were (to potential partners, females) answered reflected an increased state of self-assessed attractiveness. Such findings, though preliminary, warrant future research. Such research should identify the proximate mechanisms responsible for the condition contrasts. Moreover, research on the effect health status might have on human female mate preferences should target the effect facial features like symmetry and cues of ‘good health’ might have on attraction assessments. Lastly, it would be interesting to see if a facultative preference for a type of immunocompatibility marker varies across health status conditions.

Introduction

The evolutionary literature has interpreted the variance in female sexuality 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 immediate energetic expense. When energy reserves cannot sustain current or prospective mating-induced energy demands, research on female mammals has found that mating effort mating trade-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 Faculative Properties of Preference & Sociosexuality

1. Life History Theory—Age affects sociosexual strategy and the preference for masculinity. Women at peak reproductive age have been found to express both (A) a preference for cues indicative of masculinity and (B) more open sociosexualities than they older counterparts (Koscinski 2011, Little et al 2010). Life history demands, such as those experienced by pregnant women, also moderate the preference for facial characteristics. The unique hormonal profile of pregnancy, characterized by constantly elevated levels of progesterone, produces a preference self-resemblance and/or healthy looking faces (Debrune et al 2005, Jones et al 2005)

2. The Endocrinology of the Luteal & Follicular Phases—During the luteal phase women experiencing an acute increase in progesterone. Accordingly, women employ the use of prophylactic precautions that affect both their mate preferences and behavior (Fleishman & Fessler 2010). Specifically, they have been found to prefer both (A) feminine male voice pitches and (B) facial health cues (Puts 2006, Jones et al 2005). Ovulation also alters mating behavior and sociosexuality,

19 normally cycling adult females, mean age 22, experiencing the symptoms of an upper respiratory infection were completed a six page questionnaire designed to assess sociodemographic data, sociosexuality measures, relationship status, symptom severity, and current, if any, hormonally altering method of contraception and/or medication. Participants evaluated (1) the appeal of pre-recorded male voices varying in masculinity by (A) Puts et al 2007 for stimuli information) and (2) five sets of 2D composite male faces that featured varying degrees of facial dimorphism (see Pinto-Voak 2002 for stimuli information). Participants were asked to evaluate the 2D photographs in terms of five characteristics (health, “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.

Methodology

Acknowledgements

For your unwavering support and commitment, thank you Dr. Peter Gray, Cliff Rattigan, Michelle Escasa, Sharon Young, Ron Garner, Silvia Gonzalez, Sabrina Ramos, Brian Gilliland, & the McNair Staff.

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 tradeoffs that affect 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 respectively diminished. But—given that there is a contextual dependency for any given strategy—might desire or another measure of sociosexuality be further 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 ran independently, exhibited statistically significant contrasts. Women in the recovered condition report (A) 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 were (to potential partners, females) answered reflected an increased state of self-assessed attractiveness. Such findings, though preliminary, warrant future research. Such research should identify the proximate mechanisms responsible for the condition contrasts. Moreover, research on the effect health status might have on human female mate preferences should target the effect facial features like symmetry and cues of ‘good health’ might have on attraction assessments. Lastly, it would be interesting to see if a facultative preference for a type of immunocompatibility marker varies across health status conditions.