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Mate Choice Effects

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Synonyms

Partner preference effects

Definition

By suppressing ovulation, hormonal contraceptives alter men's and women's mate choices that depend on women's menstrual cycles.

Introduction

Men's and women's mate choices (i.e., mate preferences) vary according to the normal hormonal fluctuations associated with women's ovulatory cycles. Hormonal contraceptives, however, suppress ovulation by altering these normal hormonal fluctuations and thus affect men's and women's stated mate preferences. This entry will describe the (a) extent to which women's hormonal contraceptive use alters their mate preferences, (b) extent to which women's hormonal contraceptive use alters men's mate preferences, and (c) implications of these mate-preference alterations for men's and women's long-term relationships.

Hormonal Contraceptives Disrupt Women's Mate Preferences

A robust body of research demonstrates that women's mate preferences change across the ovulatory cycle (for a review, see Gildersleeve et al. 2014; for an alternative perspective, see Wood et al. 2014). For example, naturally cycling women demonstrate stronger preferences for cues of male genetic quality (e.g., masculinity, symmetry) near ovulation compared to less-fertile phases of their ovulatory cycles (Meltzer 2016; for a review, see Alvergne and Lummaa 2010; Gildersleeve et al. 2014; Little et al. 2008). Likewise, naturally cycling women display greater sexual attraction and responsiveness to mates whose major histocompatibility complex (MHC) genotype differs from their own MHC genotype near ovulation compared to less fertile phases of their ovulatory cycles (Garver-Apgar et al. 2006). The MHC genotype is a genetic marker of immune functioning, and mating with dissimilar-MHC partners can result in increased variability among and immunocompetence of offspring. Thus, women may reproductively benefit to the extent that they experience increased attraction to such mates at a time when they are most likely to

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conceive (i.e., ovulation). Moreover, naturally cycling women demonstrate a stronger preference for facial cues of health (e.g., pallor) in potential mates during the luteal phase of their ovulatory cycles (i.e., when progesterone levels are highest and women's bodies are preparing for pregnancy; Jones et al. 2005). Notably, such facial cues may be indicative of men's immune system strength, and mating with such immunocompetent men would be beneficial for potential offspring.

Researchers have recently demonstrated, however, that women's hormonal contraceptive use can shift these preferences. Indeed, women who use hormonal contraceptives show weaker preferences for facial and vocal masculinity (for a review, see Alvergne and Lummaa 2010) and behavioral masculinity (Meltzer 2016), suggesting that hormonal contraceptives interrupt women's preference for masculine men (but also see Jones et al. 2018). Likewise, women who use hormonal contraceptives demonstrate a stronger preference for MHC-*similar* mates (Roberts et al. 2008) rather than MHC-dissimilar mates. Given the benefits associated with partner masculinity and MHC dissimilarity, such shifts in women's mate preferences could have negative consequences for offspring fitness. Interestingly, women who use hormonal contraceptives demonstrate a stronger preference for men's facial cues of health than do naturally cycling women – likely because hormonal contraceptives elevate women's progesterone and it is hypothesized that progesterone increases women's attraction to facial cues of health.

Hormonal Contraceptives Disrupt Men's Mate Preferences

Scholars previously posited that because women's ovulation is concealed, men's psychological processes (including their mate preferences) are not affected by women's ovulatory cycle. Recent empirical evidence, however, demonstrates that this may not be the case – there are subtle cues of women's fertility such as appearance, scent, and voice that influence men's mating behaviors, including men's preferences for and perceptions of women. For example, men report greater physical attraction to ovulating women (compared to less fertile women; for a review, see Alvergne and Lummaa 2010), and they treat such women differently (Miller et al. 2007). Indeed, in a study of exotic dancers, men provided greater monetary tips to dancers near ovulation versus less fertile phases of their menstrual cycle (Miller et al. 2007). Likewise, men rate the scent of ovulating women as more attractive than non-ovulating women (Kuukasjärvi et al. 2004) and exhibit physiological changes such as elevated testosterone following exposure to the scent of ovulating women (Miller and Maner 2009). Additionally, men report an increased preference for women's voices near peak fertility compared to less fertile phases of the ovulatory cycle (for a review, see Alvergne and Lummaa 2010).

Recent research, however, has demonstrated that hormonal contraceptives indirectly alter these preferences. For example, men do not demonstrate an increased attraction to or preference for the mid-cycle scent (Kuukasjärvi et al. 2004) or voice (Alvergne and Lummaa 2010) of women using hormonal contraceptives. Additionally, in that study of exotic dancers, men did not provide greater tips mid-cycle to dancers who were using hormonal contraceptives (Miller et al. 2007). Together, this evidence suggests that women's hormonal contraceptive use influences men's mate preferences by suppressing women's naturally fluctuating hormones and thus the subtle cues of fertility associated with those hormones.

The Implications of Women's Hormonal Contraceptive Use for their Long–Term Relationships

The extant evidence clearly suggests that women's hormonal contraceptive use alters both men's and women's mate preferences and thus may have implications for the mates they choose. If this is indeed true, then women's hormonal contraceptive use could also have lasting implications for long-term relationships. Some empirical evidence is consistent with this notion.

Long-term relationships are long lasting and typically characterized by high levels of commitment. Given women's increased preference for and attraction to men who display cues of genetic quality (e.g., masculinity, symmetry, MHC dissimilarity; Alvergne and Lummaa 2010; Garver-Apgar et al. 2006; Little et al. 2008), women are most satisfied to the extent that their long-term mates display such cues (e.g., Meltzer 2016). Because these preferences are muted among women who use hormonal contraceptives, however, there may be unintended consequences for women's long-term relationships. Many women begin long-term relationships while using hormonal contraceptives and thus choose their long-term partners while using hormonal contraceptives. But at some point during their relationships, women often discontinue using hormonal contraceptives in order to conceive. Other women, in contrast, choose their long-term partners while not using hormonal contraceptives and at some point during the relationship begin using hormonal contraceptives as they become sexually active. Any changes in preferences for partner genetic fitness associated with such changes in hormonal contraceptive usage may have implications for men's and women's long-term relationships.

Empirical evidence supports this notion. Women who use hormonal contraceptives when they meet their long-term partners and later discontinue those contraceptives report lower sexual satisfaction (Roberts et al. 2014) and relationship satisfaction (Russell et al. 2014) compared to those women who meet their long-term partners while using hormonal contraceptives and continue using those contraceptives (but also see Jern et al. 2018). Interestingly, the association between women's congruency in hormonal contraceptive use and relationship satisfaction depends on their long-term partners' facial attractiveness – women who meet their long-term partners while using hormonal contraceptives and later discontinue those contraceptives report increased relationship satisfaction if their partners have more attractive faces, but they report decreased relationship satisfaction if their partners have less attractive faces (Russell et al. 2014). This finding supports the notion that hormonal contraceptives influence women's long-term relationships because they potentially influence who women select as long-term partners.

Summary

Men's and women's mate preferences fluctuate across women's ovulatory cycles. Specifically, women demonstrate a mid-cycle preference for masculine and symmetrical men, and men demonstrate a preference for and increased attraction to ovulating women compared to less fertile women. Notably, these preference shifts likely have implications for the long-term partners that men and women choose. Hormonal contraceptives, however, suppress ovulation in women and consequently interrupt these effects. Taken together, this growing body of research suggests that hormonal contraceptives interrupt the evolved psychology of attraction, which may have maladaptive implications for offspring fitness and relationships in general.

Cross-References

- ▶ Birth Control
- ▶ Concealed Ovulation
- ▶ Hormone Effects
- ▶ Menstrual Cycle
- ▶ Ovulation Suppression

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