Ovulating Women Primed with Aggression Prefer Less Masculine Men Than Non-Ovulating Women Ashalee C. Hurst and Jessica L. Alquist **Texas Tech University**

Introduction

- Ovulating women prefer more masculine men than non-ovulating women (e.g., Gangestad et al., 2007; Little, Jones, & Burriss, 2007; Perrett et al., 1998)
- Ovulating women are more sensitive to sexually coercive threats than non-ovulating women (e.g., Garver-Apgar, Gangestad, & Simpson, 2007)
- Masculinity may signal a likelihood of aggression (Stillman, Maner, & Baumeister, 2010)

HYPOTHESIS:

Women primed with aggression will be less attracted to high masculinity as they approach peak fertility. Women in control condition will be more attracted to high masculinity as they approach peak fertility.

Study 1 Method

PARTICIPANTS

- 111 women from mTurk
- Naturally cycling
 - E.g., not on hormonal birth control
- Heterosexual
- Ages 20-40

MATERIALS & PROCEDURES

- Prime: vignette about woman who was followed to her car (Petralia & Gallup, 2002)
 - **Aggression**: followed by man at night
 - **Control:** followed by squirrel during day
- Rated Male Bodies: 10 images of male bodies that varied in muscularity
 - "How physically attractive is this image?"
 - not at all 0-1-2-3-4-5-6-7 extremely
- Fertility: Reported first day of last menses. Counted forward to study date for estimate of conception likelihood (Wilcox et al., 2001)



Study 1 Results

PRIME x FERTILITY x MUSCLE INTERACTION

t(268) = -3.18, B = -5.14, p = .002, 95% C/[-8.33, -1.96], $pseudo-R^2 = .45$

Interaction between Prime and Fertility

on Level-10 Muscle



Study 2 Method

PARTICIPANTS

- 78 female TTU students
- Naturally cycling
 - E.g., not on hormonal birth control
- Heterosexual
- Ages 20-40

MATERIALS & PROCEDURES

- Prime: 8 photographs, 3 times (Li et al., 2014)
 - **Aggression**: man-on-woman violence
 - **Control:** no depictions of violence
- **Selected Male Face:** 1 masculinized face and 1 feminized face (Perrett et al., 1998)
 - "Select the face that you find most attractive as a short-term mate"
- Fertility: Reported first day of last menses. Counted forward to study date for estimate of conception likelihood (Wilcox et al., 2001)

Study 2 Masculinity

Feminized Face

Masculinized Face

(from Perrett et al., 1998)

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Study 2 Results

PRIME x FERTILITY INTERACTION

 $\chi^2(1) = 5.03, B = -42.08, p = .025, 95\%$ CI [-78.85, -5.30], $pseudo-R^2 = .15$

Interaction between Prime and Fertility



General Discussion

- Women's fertility-enhanced attraction to masculinity is context sensitive.
 - Aggression Prime: Ovulating women were less attracted to masculinity than non-ovulating women (Studies 1 & 2)
 - **Control Prime**: Ovulating women were more attracted to masculinity than nonovulating women (Study 1)
- Environmental cues interact with women's ovulatory cycle to enhance women's ability to choose male mates

REFERENCES

Gangestad, S. W., Garver-Apgar, C. E., Simpson, J. A., Cousins, A. J. (2007). Changes in women's mate preferences across the ovulatory cycle. Journal of Personality and Social *Psychology*, *92*, *151-163*. doi: 10.1037/0022-3514.92.1.15

Garver-Apgar, C. E., Gangestad, S. W., & Simpson, J. A. (2007). Women's perceptions of men's sexual coerciveness change across the menstrual cycle. Acta Psychologica Sinica, 23, 536-540.

Li, Y., Bailey, D. H., Winegard, B., Puts, D. A., Welling, L. L. M., & Geary, D. C. (2014). Women's preference for masculine traits is disrupted by images of male-on-female aggression. *PLoS ONE, 9,* e110497. doi:10.1371/journal.pone.0110497

Little, A. C., Jones, B. C., Burriss, R. P. (2007). Preferences for masculinity in male bodies change across the menstrual cycle. Hormones and Behavior, 51, 633-639. doi: 10.1016/j.yhbeh.2007.03.006

Perrett, D. I., Lee, K. J., Penton-Voak, I. S., Rowland, D. R., Yoshikawa, S., Burt, D. M., Henzi, S. P., Castles, D. L. & Akamatsu, S. (1998). Effects of sexual dimorphism on facial attractiveness. *Nature*, 394, 884-887. doi:10.1038/29772

Petralia, S. M., & Gallup, G. G. (2002). Effects of a sexual assault scenario on handgrip strength across the menstrual cycle. Evolution and Human Behavior, 23, 3-10. doi: 10.1016/S1090-5138(01)00085-X

Stillman, T.F., Maner, J. K., & Baumeister, R. F. (2010). A thin slice of violence: Distinguishing violent from nonviolent sex offenders at a glance. Evolution and Human Behavior, 31, 298-303. doi: 10.1016/j.evolhumbehav.2009.12.001

Wilcox, A. J., Dunson, D. B., Weinberg, C. R., Trussell, J., & Baird, D. D. (2001). Likelihood of conception with a single act of intercourse: Providing benchmark rates for assessment of post coital contraceptives. Contraception, 63, 211-215.