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#### **Final Project Summary**

Often discussed in The Evolution of Sex course are ways in which different female animals relay clear signs of fertility to the male in order to encourage reproductive behavior; with human females, these signs are hidden. From an evolutionary standpoint, it seems unlikely that humans have evolved without ways of encouraging reproductive behavior during fertility. Although these changes aren't as obvious as in animals, research and experiments prove that women have subconscious changes in their body and behavior during the fertile period. Research also proves that these changes during ovulation make woman more attractive to males. Through a garment, the goal of my project is to show the difference between a woman during ovulation verses not and how she is more attractive. In order to show the differences between a woman during these periods, the garment has two distinctive sides, the right side, the fertile side, is displayed through a revealing corset and the left, non-fertile side, is displayed through an oversized, male button up shirt.

First is the idea that during or around ovulation, women try harder through dress and self grooming to attract men. Experiments show that during ovulation, women not only wear nicer clothes, but they also show more skin [4 and 7]. Using a baggy, long sleeved, collared, button up, skin on the non-fertile side is fully covered and the body shape is masked. The oversized shirt is purposely sewed in a somewhat messy manner to exaggerate the idea that during periods lacking fertility, women do not work as hard to maintain appearance. The ovulating, corset side, draws attention to the chest, exposes the back, shoulders, and arms. Through the use of luxurious, eveningwear fabrics such as silk for the lining and satin for the shell, the corset unlike the ordinary polyester shirt, indicates great pride in appearance and self-grooming. Studies show that women have an increased sexual desire and pay closer attention to men during ovulation [1,5,7]. Keeping the shirt closed from the bottom to the collar, eight buttons are used, this is meant to show less eagerness towards sex/ decreased sexual desire during non ovulation points in comparison to the easily unlace-able back of the corset.

Based on the idea that men find the movement of ovulating women more attractive than that of non ovulating women, I attached long lace strips to the corset and short, frayed muslin strips to the shirt side. (I used lace on one side and frayed muslin on the other to go with the idea of appearance). When the woman moves, the long strips on the corset side will easily move with her, verses the little movement from the shirt side. This is meant to show that during ovulation, women have more pronounced body movements [2]. Also, it is possible that body movements look more attractive because of the small change in body shape that occurs during ovulation; lower waist to hip ratio [7]. This ratio is shown in the corset as the garment is shaped to the body using boning.

Next, to indicate differences in voice I used metal sequins which when collide, make noise or "jingle." Experiments show that men rate women's voices as being more attractive during ovulation verse at non-ovulating periods. Results show that at fertile periods women's voices are higher in frequency and judged as more appealing and younger sounding compared with women at low risks of conception whose voices are found to sound less attractive and older [6]. Because there are significantly more metal sequins on the corset, fertile side, an increased and higher pitched noise can be heard from this side verses the few sequins on the shirt, nonfertile side. Finally is the idea that men find women's body odor at ovulation to be more appealing than the smell at non-fertile periods [3]. I had the most difficulty displaying this element into my garment, originally I wanted to have one side smell and the other not, however due to the close proximity of the two sides, having the smell not linger onto both sides wasn't possible. In one experiment concerning body odor, smells from under the women's arms were collected and rated by men [3]. Although very abstract and conceptual rather than scientific, one could say that because the corset side covers little skin and the armpits are exposed, her smell could be thought of as stronger than the smell of the woman in the long sleeve shirt.

Overall the corset, fertile side of the garment is meant to come across as more appealing than the long sleeved, shirt side. Elements of each side are purposely exaggerated such as the bagginess of the shirt verses the "risqué" nature of the corset. This exaggeration is done not only to get the ideas across but for the audience to prefer one side to the other, especially straight men. Even with a lack of knowledge for the scientific information behind each element, the corset comes off as sleeker due to it's body shaping, and higher quality materials. The corset is also more interactive to look at as it laces up the back, pieces sway when the wearer moves, and noise can be heard. I am happy with this garment because I feel that not only did I challenge myself to conceptualize scientific ideas into a garment, but also the garment is both interesting and wearable.

### Works Cited

### 1.)

Anderson, Uriah S., Elaine F. Perea, D. Vaughn Becker, Joshua M. Ackerman, Jenessa R.
Shapiro, Steven L. Neuberg, Douglas T. Kenrick, "I Only Have Eyes for You: Ovulation Redirects Attention (But Not Memory) to Attractive Men, <u>Journal of Experimental Social</u> <u>Psychology</u>, Volume 46, Issue 5, September 2010, Pages 804-808. Science Direct. Pratt Institute, New York. 8 Oct. 2012.
<a href="http://www.sciencedirect.com/science/article/pii/S0022103110001022">http://www.sciencedirect.com/science/article/pii/S0022103110001022</a>.
Keywords: Attention; Memory; Ovulation; Fertility; Menstrual cycle; Evolutionary psychology

# 2.)

Fink, Bernhard, Nadine Hugill, Benjamin P. Lange, "Women's Body Movements are a Potential Cue to Ovulation," <u>Personality and Individual Differences</u>, Volume 53, Issue 6, October 2012, Pages 759-763. Science Direct. Pratt Institute, New York. 8 Oct. 2012.
<a href="http://www.sciencedirect.com/science/article/pii/S0191886912002930">http://www.sciencedirect.com/science/article/pii/S0191886912002930</a>>.
Keywords: Attractiveness; Body movement; Dance; Fertility; Gait; Menstrual cycle

#### 3.)

Gildersleeve, Kelly A., Martie G. Haselton, Christina M. Larson, Elizabeth G. Pillsworth, "Body Odor Attractiveness as a Cue of Impending Ovulation in Women: Evidence from a Study using Hormone-Confirmed Ovulation," <u>Hormones and Behavior</u>, Volume 61, Issue 2, February 2012, Pages 157-166. Science Direct. Pratt Institute, New York. 8 Oct. 2012. <a href="http://www.sciencedirect.com/science/article/pii/S0018506X11002704">http://www.sciencedirect.com/science/article/pii/S0018506X11002704</a>. Keywords: Body odor; Ovulation; Menstrual cycle; Fertility cues; Attraction; Mating; Evolutionary psychology

# 4.)

Haselton, Martie G., Mina Mortezaie, Elizabeth G. Pillsworth, April Bleske-Rechek, David A. Frederick, "Ovulatory Shifts in Human Female Ornamentation: Near ovulation, Women Dress to Impress," <u>Hormones and Behavior</u>, Volume 51, Issue 1, January 2007, Pages 40-45. Science Direct. Pratt Institute, New York. 8 Oct. 2012.
<a href="http://www.sciencedirect.com/science/article/pii/S0018506X06002509">http://www.sciencedirect.com/science/article/pii/S0018506X06002509</a>.
Keywords: Attractiveness; Clothing; Menstrual cycle; Ovulation; Sexual communication

# 5.)

Pillsworth, Elizabeth G., Martie G Haselton, David M. Buss, "Ovulatory Shifts in Female Sexual Desire," <u>The Journal of Sex Research</u>, Vol. 41, No 1, Evolutionary and Neuohormonal Perspectives on Human Sexuality, Feb., 2004, Pages 55-65. Taylor & Francis, Ltd. Jstor. Pratt Institute, New York. 8 Oct. 2012. <a href="http://www.jstor.org/stable/3813403">http://www.jstor.org/stable/3813403</a>>.

6.)

Pipitone, R. Nathan, Gordon G. Gallup Jr, "Women's Voice Attractiveness Varies Across the Menstrual Cycle," <u>Evolution and Human Behavior</u>, Volume 29, Issue 4, July 2008, Pages 268-274. Science Direct. Pratt Institute, New York. 8 Oct. 2012.
<a href="http://www.sciencedirect.com/science/article/pii/S1090513808000263">http://www.sciencedirect.com/science/article/pii/S1090513808000263</a>>.
Keywords: Voice attractiveness; Conception risk; Hormonal contraceptives; Menstrual cycle; Ovulation

#### 7.)

Young, Larry, Brian Alexander. <u>The Chemistry Between Us: Love, Sex, and the Science of Attraction</u>. New York: Penguin Books, 2012.

For this project, I was very inspired by the different experiments concerning changes in women's bodies and behaviors during ovulation. Experiment information was taken from source 6 in which men were to rate women's voices at different stages of fertility, the men were unaware that the same women's voices was used more once. The results from this experiment of men enjoying the higher frequency noise from fertile women directly encouraged my use of the metal noise making sequins. Because the experiment in source 3 uses the smell from under the armpit for men to rate, I took the artistic liberty to expose this area on the fertile side verses the non-fertile side. The results from experiments in source 4 especially contributed to my project because I made a garment. In this experiment, women were photographed on a fertile day and then on a non fertile day, on the fertile day women showed more skin and used accessories or nicer clothing to up their appearance. In addition I included source 2's rating and observing of body movements of a fertile and non fertile female and the differences, this inspired longer fringe on the fertile side of the garment. Source 1, 5, and 7 although having disagreeing viewpoints on who (single or partnered women), show that women have increased interest and sexual desire for men during ovulation; in the garment this information is relayed through closures and even the amount of skin showing, as women are working harder to grasp male attention. Finally, source 7 helped me to reaffirm experiment information and to further explain reasoning for experiment results. Throughout the process of creating the garment, I continuously reread my research to directly inform my design; I feel this was very helpful.











