Sex Drive / Sex Behavior
Sex Drive/Behavior

- Cultural stereotypes have plagued this area of research
- Stereotypes:
  - Men have hormones that control their sex drive.
  - Women have no independent sex drive.
  - Women (unlike females of other species) are always interested in - willing to - engage in sex.
  - Women’s interest in sex is equated with whether or not they have intercourse (with their husbands).
  - Put these together and it’s clear why science did not address lesbianism for a long time.
Harvey Study

- Purpose – to examine sex drive/behavior of women across the monthly cycle
- Subjects - heterosexual women using non-hormonal contraceptives with no current desire to get pregnant.
- Measure women’s engagement in sexual activity and their arousal and pleasure in response to the activity
Autosexual behaviors (masturbation, fantasy, etc.): clear peak at ovulation.

Female-initiated heterosexual behaviors: relatively flat curve compared to the one for autosexual behaviors but with a clear rise at midcycle and drop off after that point.

All female-initiated behaviors: follows the pattern of autosexual behaviors with clear peak at ovulation.
Female-Initiated Sexual Activities Across Women’s Monthly Cycle
Harvey Study

Male partners:

1. Initiate heterosexual behaviors more than female partners.
2. Are more likely to initiate sex with their partner when the woman is ovulating.
3. Pattern of male-initiated heterosexual behaviors follows that of female-initiated autosexual behaviors.
4. Men may be responding to chemical or behavioral cues from women.
Male Initiated Heterosexual Activities Across Female Partner’s Monthly Cycle
Sex drive/behavior of lesbians across the monthly cycle

- Both autosexual and self-initiated behaviors of the subject women increase at mid-cycle.
- Partner initiated behaviors do not match subject woman’s monthly cycle.
Cycle and Intercourse

No correlation between a woman’s sex drive/behavior on a given day and her estrogen level on that day.

No correlation between a woman’s average sex drive across an entire month and her average estrogen during that month.
Androgen Level and Sex Drive

- **No correlation** between a woman’s sex drive/behavior on a given day and her androgen level on that day.

- **Positive correlation** between a woman’s average sex drive across an entire month and her average androgen during that month, i.e., the higher the woman’s average androgen level the higher her sex drive.
Hypoactive Sexual Desire Disorder (HSDD)

- This is a lack of interest in sex not an inability to perform sexually.
- Marked by absence of sexual fantasies and absence of desire for sexual activity that causes distress or interpersonal difficulties.
- Occurs in both women and men but more common in women.
Addyi

- Drug approved by FDA for treatment of HSDD in premenopausal women (approval August 2015)
- Serotonin agonist/antagonist
- Taken daily in pill form
- Tested in healthy, nearly all white, non-Hispanic non-smoking, heterosexual women
Addyi

- 10-12% of women in clinical trials indicated improvement in sexual desire while taking Addyi
- No impact on enjoyment of sex by woman or her partner or woman’s experience of orgasm
- Side effects include very low blood pressure, dizziness or loss of consciousness.
  - These effects are exacerbated by alcohol
Addyi

- Hormonal contraceptive use may interfere with Addyi effectiveness and increase side-effects.
- Addyi can interfere with the effectiveness of some other medications such as antidepressants and antiepileptics.
  - These conclusions based on the effects of Addyi on specific enzymes and not on direct tests in users of such drugs
Biology and Lesbianism

- Research shows that gay men differ from straight men in terms of shape and size of various brain nuclei but no equivalent data exist for women.
- Been difficult to demonstrate a clear relationship between hormones and sexual orientation.
Genetics and Lesbianism

- For fraternal twins and non-twin siblings, the probability that one twin or sibling will identify as lesbian another identifies as lesbian is about 25%.

- Among identical (monozygotic) twins, the probability that one twin will identify as lesbian if the other identifies as lesbian is about 50%.

- So genetics plays a role does not have total control.
Biology and Lesbianism

- (Some) lesbians may be exposed to higher levels of androgens in utero than heterosexual women.

- Higher androgen exposure tied to differences in finger-length ratio (index finger to ring finger ratio)
  - Men - ring finger (4D) longer than index finger (2D).
  - Women – ring finger (4D) and index finger (2D) are nearly same length or index finger slightly longer.
Gender difference in finger length ratios - Breedlove

Figure 8. In males, the index finger (2D) tends to be shorter than the ring finger (4D). In females, the index finger (2D) tends to be as long or longer than the ring finger (4D).
Relationship between sexual preference on finger length ratios - Breedlove

Finger-length ratio differences more apparent for right hand than left. Lesbian-identifying women have more male-like ratios than heterosexual-identifying women suggesting higher androgen exposure in utero.
Other work shows pattern more male-like in “butch”-identifying lesbians than in “femme”-identifying lesbians suggesting that androgen exposure not sole controller of same-sex preference in women.

This work suggests differences in hormonal environment in development but can’t eliminate the possibility of genetic differences.
Monozygotic twins who both identify as lesbian both have similar more male-like finger-length ratios.

But monozygotic twins who are discordant for sexual preference have discordant finger-length ratios in spite of identical genes.

Lesbian-identifying twin has more male-like ratio than heterosexual-identifying twin suggesting an in-utero environmental contribution to the difference.