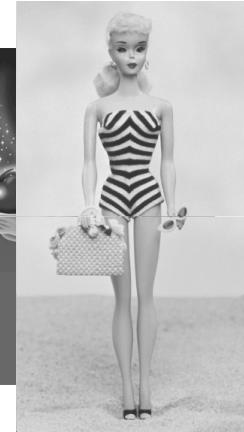
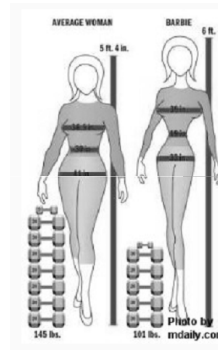


Evolutionary Psychology

Mating & Reproduction

1



I. Sex as evolved/selected strategy

- A. Why sex works
- B. Why monogamy works
- Hints:
 1. See sex as phenomenon
 2. Distal vs. proximal causality
 3. Consider why uncomfortable
 - mortality salience

Why Sex Works

- Genetic diversity like portfolio against risk
- Protection against parasites (game reset)

Why Monogamy Works

- Structural benefits
 1. K (vs. r) reproduction strategy
 - Learn language, culture, technology
 - Monogamy doubles resources
 2. Reduces male-male competition
- Compare Humans & Chimps
 1. Obviousness of estrus?
 2. Sex without estrus?
 3. Number of partners?
 4. Investment of males in offspring?
- Inherent two-way tensions
 1. Is (undetected) infidelity rewarded?

Overview of Mating Dynamics

Attracting & Attractiveness

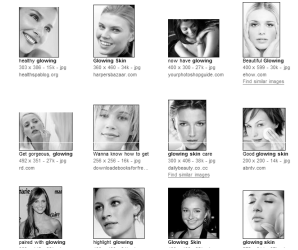
1. Timing - Signaling fertility
2. Behaviors
3. Pheromones
4. Personality

Forming pair-bonds

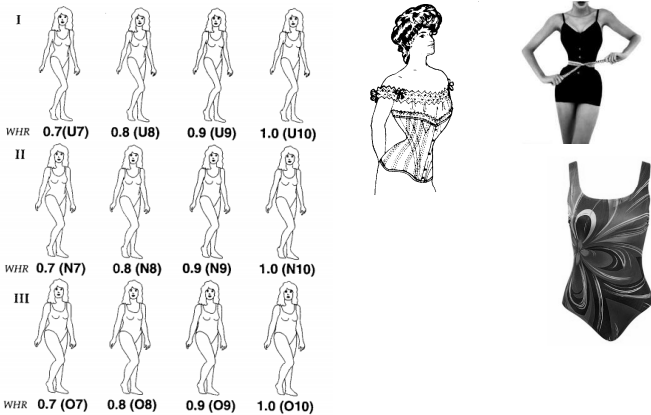
1. Arranged marriages vs. Courtship
2. Evidence of polygamy

1. Timing – What signals fertility

1. That ovulatory “glow”
2. Lighter skin
3. Hips accentuated
 - See following figure
 - Culture universal (SSSM fails)



1. Timing – What signals fertility



2. Behaviors (Flirting)

1. More skin during ovulation
2. Shorter and tighter skirts
3. More sexual desire at ovulation (graph)
4. Specific cues indicating interest
 - Primp, head-toos, hair flip, coy smile
 - Gaze, arm flex

3. Pheromones (Why his sweaty clothes smell good)

1. Prefer dissimilar MHC
 - Major histo-compatibility complex
2. Pheromones (?): T-shirts
 - Rikowski & Grammer (1999)
 - Worn 3 days, frozen
 - Female scent cor w/ facial attractiveness and body odor sexiness
 - Male scent cor w/ symmetry (but only for ovulating females)



4. Personality (Why you have "so much in common.")

1. Kind, understanding, intelligent, loving, caring
2. Exciting, good health, looks, adaptability
3. Similarity as proxy for similar genes
 - Social psych findings on liking

1. Forming Pair-bonds

1. Self-initiated vs. Arranged Marriages



2. Evidence of polygamy

- Sexual dimorphism
 1. Males and females differ in size
 2. Why is large size good "investment" for males?



PART II

Evolutionary Psychology, Reproduction

Women's Reproductive Strategies

- Remember evolutionary context:
 1. Nomadic, Paleolithic – tough
- Plan A:
 1. Resource rich partner
 2. Committed to you

What's the problem here? Think game theory.
- More attracted to.... (why?)

Buff/athletic	Older	Status
Dominance	Loyalty	
- Interaction with male preference:

Why most marriages in 20s and 30s?



...

- Plan B: (Start early)
- Strategy determined by environment
 1. Discordant male-female relationships
 2. Unreliable males
 3. What strategy emerges?
- Similarities with Lizard behavior?
- How more than just behavior?

...

- Infidelity (secondary strategy)
 1. Diversifying “the portfolio”
 2. Extramarital incidence: M 50%, W 30%-50%
 3. Ovulation period – different behaviors
 - Fantasies about different partners
 - Extra marital sex and orgasms
 - Men: vigilance, monopolizing, spoiling
 4. At birth, 80% mothers liken baby to “father”

Men’s Reproductive Strategies

- Context: Lots of resources, primary chance
 1. Mate fertility, childbearing capacity essential
 - Can compensate for everything else
 2. Seek beauty (early to mid twenties)
 - Markers: Smooth skin, lustrous hair, clear eyes, symmetry
 - .7 WHR – more fertile; not too fat/skinny; post-puberty; estrogen regulates weight distribution
 - Virginal? Purely cultural norm? Why desirable?
 3. Guarding
 1. Biblical injunctions
 2. Story: Guys on my porch

Symmetry as signal



Application: Attracting the Oaf!

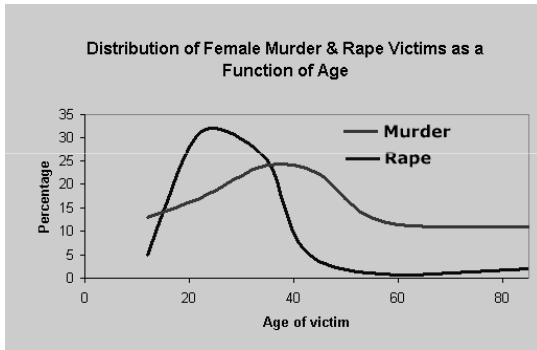
- Relate the make-up jewelry and jewelry women use to male’s selection strategy?



...

- Extramarital strategies
 1. Infidelity (“Had trouble staying home”)
 - Adapted for opportunistic mating
 - Coolidge Effect
 2. Rape
 1. Sex or Power?
 2. Age of victims: reproductive years
 3. Pregnancy chances: Consensual: 3%; Rape: 8%
 4. Rapist: insecure, hostile, distrustful

What motivation suggested?

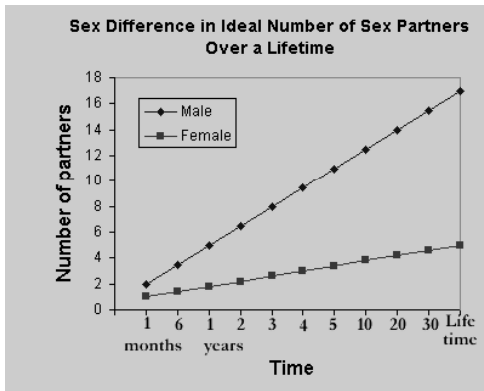


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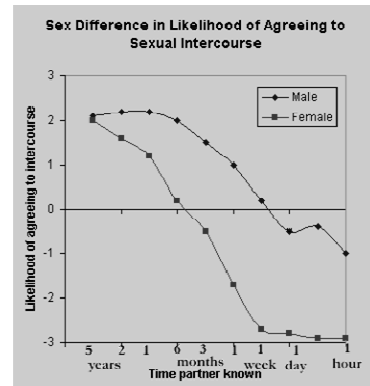
▪ Sperm competition

1. More is better – volume after separation
2. Killer sperm (watch for upcoming movie – in 3D!!!)
 1. Two types
 2. Chimps: only 1% not killer

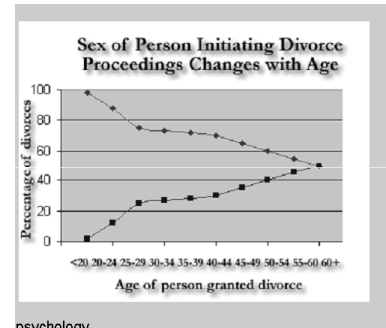
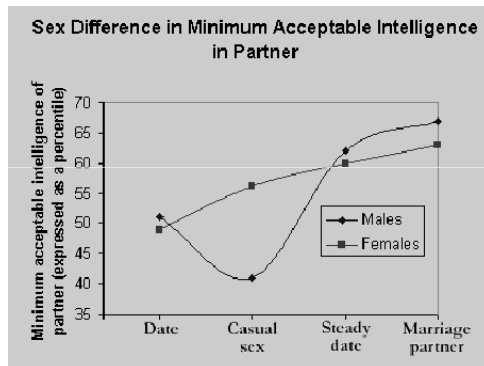
Data comparing men and women



Data comparing men and women



Data comparing men and women



Male Homosexuality: Evolutionary Puzzle

1. Strong evidence for biological origins
 - Not correlated with early experience
 - See in other species
2. Cost theory:
 - benefits outweigh obvious costs
 - Older brother effect: 33% increase per
 - Increase in mother of Y-linked antigens
 - Shown to affect sex differences in fetal brain
 - Byproduct of selection for immune system
3. Biological differences between gay/straight
 - Brain structures, Finger patterns, Finger length

Moral virtues via sexual selection

- From Miller (2008) – Kindness, fidelity, & other sexually selected virtues.
- *“We lust for people’s bodies, but we fall in love with their mental and moral traits.”*

Background: Natural vs. Sexual Selection

Natural selection

Trait enables organism to survive longer

- Smarter – so outwit predator
- Faster – so can catch more prey

Sexual Selection

Trait attracts better mate

- Smarter – so more attractive to potential mate
- Honest – so more attractive to potential mate

Better mate means

- Better genes to combine with
- Better capacity to nurture and develop offspring

Romantically attractive traits

- Have moral or quasi-moral status
- Examples:
 1. Intelligence
 2. Wisdom
 3. Kindness
 4. Bravery
 5. Honesty
 6. Good taste?

Integrity and Fidelity: Why Important?

- Mental fitness indicators (like good skin)
- Suggest better capacity for...
 1. cooperative relationship
 2. raising and investing in children
- Courtship as moral obstacle course
 1. Ritualized test of diverse moral virtues
 2. Kindness: gift and food sharing
 3. Conscientiousness: keeping dates/promises
 4. Empathy
 5. Sexual self-control

Sexual selection can explain altruism

1. Evolutionary puzzle
 - Hard to explain with natural selection
 - Self-sacrifice undermines success
2. Cost-signaling theory
 1. Peacock’s tail provides info
 2. Same for morals? *“I can afford to be virtuous.”*
 3. Beyond faking
 4. Meaning of great hunter sharing food:
shows generosity to attract better mate
 5. Consider mating consequences of moral failure:
 1. Laziness, under-tipping waiter, mean to children, mean to animals.

