

BIO1300 The Human Animal
Topic 5: Reproduction, mating and sex

Key Words

Estrus
Signs of fertility
Ovulation
Promiscuity of chimps
Human ovulation is cryptic
Fertility impact on reproduction
Reproductive success is variable
Assessing fertility is not obvious
Reproductive value
Correlation with visual cues
Decrease with age
Preferred age difference
Men seek younger women
Optimize reproductive value
Age preference in teens
Teenage boys prefer older women
Teenage girls still prefer boys their age
Stereotypes for female attractiveness
Coincide with fertility and reproductive value
Consistent across cultures
Good genes and youthfulness
Skin tone
Hair lustre
Makeup and hair product industry
Qualities decrease with age
Indicators of femininity
Full lips
Large eyes
Thin jaws
High cheek bones
High voice
Sprightly gait
Estrogen levels
Correlation with fertility
Lost with age
Desire for attractiveness
Male biased
Consistent across cultures
Genetic evidence

Preference emerges early in life
Independent of media exposure
Independent of training
Innate preferences
Consistent across cultures
Attractive faces appeal to all
Independent of media influence
Neurophysiology of attractiveness
Functional magnetic resonance imagery
Nucleus accumbens
Male brain stimulated by female attractiveness
Beautiful faces are rewarding
Preference for body attractiveness
Varies by culture
Associated with resource availability
Low waist-to-hip ratio typically preferred
Associated with fertility
Hourglass figure
Big hips good for birthing
Small waist can't hide pregnancy
Consistent across cultures
Selection for fertility
Large breasts
Good for nurturing
Correlates with fertility
Estrogen levels
Breasts
Sexual secondary characteristics
Remaining engorged
Signal of fertility
Increase attractiveness to males
Comparison with other primates
Selection for Fertility
Ovulatory cycle
Subtle changes
Facial features
Voice intonation
Body language
Composite facial images
Cryptic ovulation
Uncertainty of paternity
Extra-pair copulations
Preventing infidelity

Preference for chastity
Male biased
Some cultures important for both sexes
Other cultures more sexually liberal
Mate guarding
Occurs in many animals
Preventing other males from mating with mated female
Marriage as mate guarding
Social institution
Advertising unavailability
Ringed fingers
Benefits to female
Commitment over long-term
Benefits to male
Acquire better mate
Assure paternity
Frequent copulations
Survival success of offspring
Offspring mating success
Paternal coaching
Allies of extended family
Additional resources
Testosterone
Benefits are greater before coupling
Increased levels for impressing females
After coupling, aggression not as appropriate
Varying the levels of testosterone
Conditional strategy
Differential costs to reproduction
Standards increase with commitment
Males readily willing for casual sex
Females more choosy
Sexual conflict
Number of ideal partners
Male-biased
Men can increase reproductive success with more offspring
Women must choose sires carefully
Willingness to engage in sex
Men always ready
Women need to court for some time
Alternative mating strategies

Marine iguanas
Dominance
Subordinates get dismounted
Can inseminate with pre-ejaculation only
Can't win by playing by the rules
Choose a different strategy
Satellite males
Not chosen by female
Hang around sexy males
Get some reproductive benefit
Influenced by changes in condition
Switching strategies over time
Coercive sex
Unchosen males can impose themselves
Allows 'losing' genes to be passed on
Winning by losing
Water striders
Only strongest males can catch the females
Intra-sexual selection process
Rape in humans
Not directed towards powerful women only
Mostly directed towards highly fertile women
Would have reproductive consequences
Lack of contraception
Lack of abortion services
Based on male sex drive
'Loser' males that can't compete
We must teach our boys to court
Human murder
Unique among species
Only chimps also murder
Ancestral trait
Marauding bands of males
Bonobos are peaceful
Promiscuous sex
Murder rate as a function of life expectancy
Risky behaviour as an alternate strategy
Improve conditions and opportunities