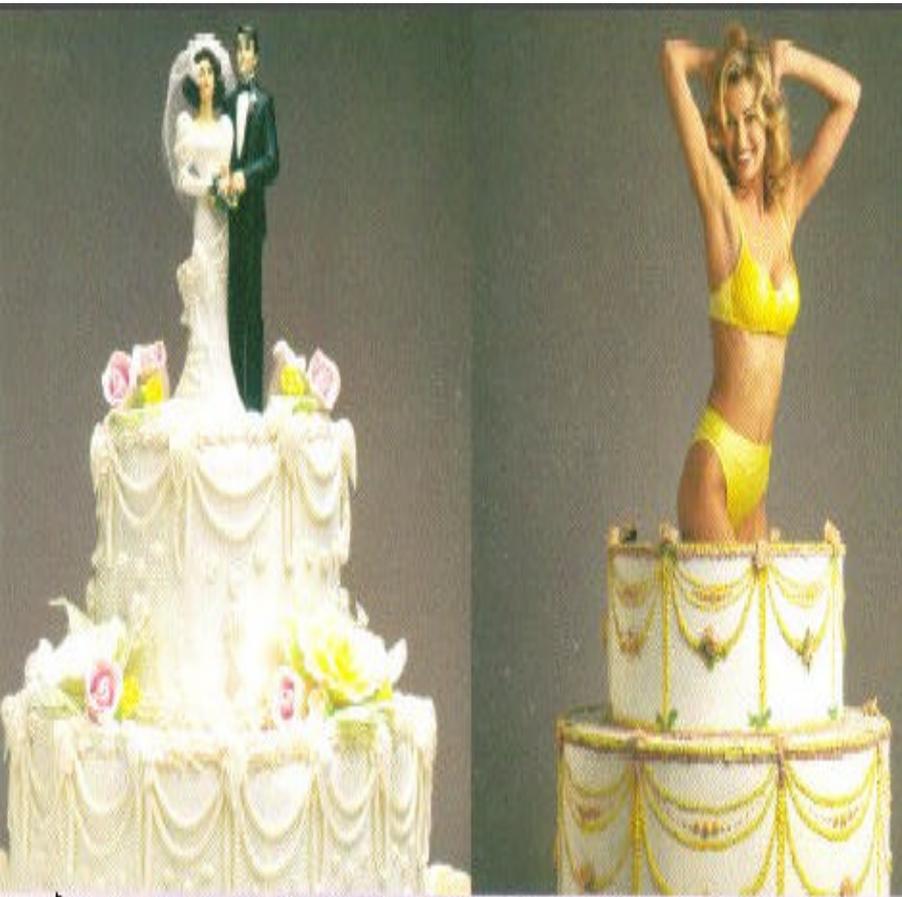


Lecture 9: Gender, Genes, Culture



Part I: Gender Similarities
and Differences

Part II: Gender Construction
(Socialization, Gender
Roles)

Part III: Evolutionary Theory
to Explain Gender
Differences

 *Women and men like different things.*

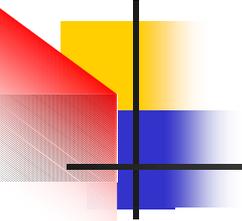
Gender Similarities

- 45 out of 46 chromosomes are unisex
- Similar in many physical traits (sitting, teething, walking)
- Similar psychological traits (overall vocabulary, creativity, intelligence, self-esteem, and happiness).

Gender Differences

- Compared to the average man, average woman have 70% more fat, 40% less muscle, and are 5 inches shorter.
- Men enter puberty two years later, and die five years sooner.
- Women are twice as vulnerable to anxiety disorders.

Real Measurable Differences:



■ Male

- Spatial Abilities
- Better at tasks & measures of spatial abilities
- Mathematics
- Verbal & Physically Aggressive
- Take charge in small groups

■ Female

- Verbal Abilities
- Start talking earlier
- Larger Vocabularies
- Better in reading
- Better at Nonverbal communication
- More sensitive to nonverbal cues
- More nonverbally expressive
- Concerned & Involved in child rearing

Should We Study Gender Differences?

- During the 1970s scholars worried that research on gender differences might re-enforce gender stereotypes.
- Seeing differences allow people to define a standard (e.g., women vote liberal), and thus ask why the group is “different,” or possibly “deviant”.
- **“Knowledge is power”, thus should we gather information regarding gender?**

Differences: Independence versus connectedness

- Boys: strive for independence, separation from mother, group play, aggressive play
- Girls: more interdependent, define identities through social connections, play in small intimate groups with more sharing and intimate discussion.



Differences: Social Dominance

- Women in cross-cultural surveys rate men as more dominant, driven, and aggressive.
- Men most often become leaders
- Men are directive in their communication, while women are more democratic.



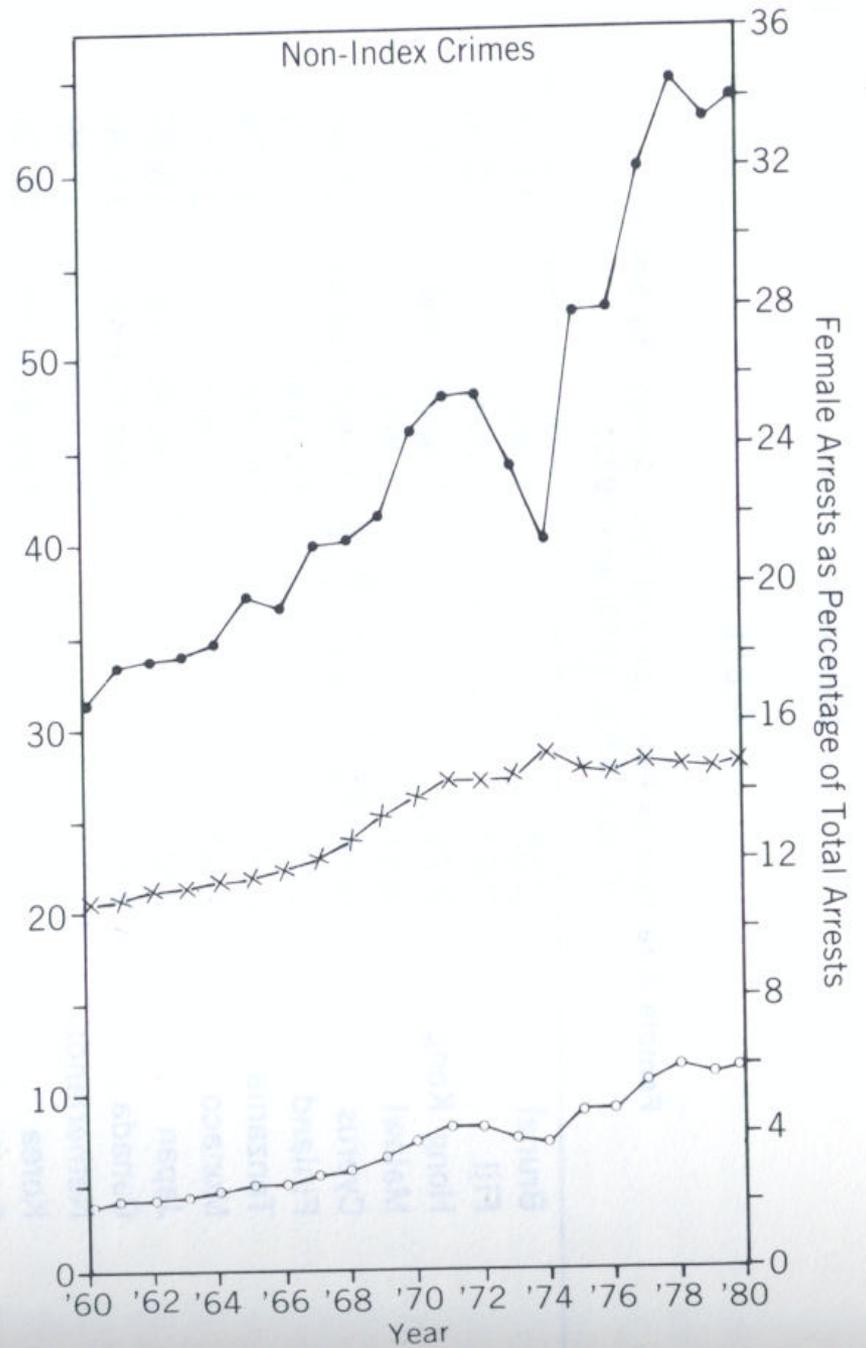
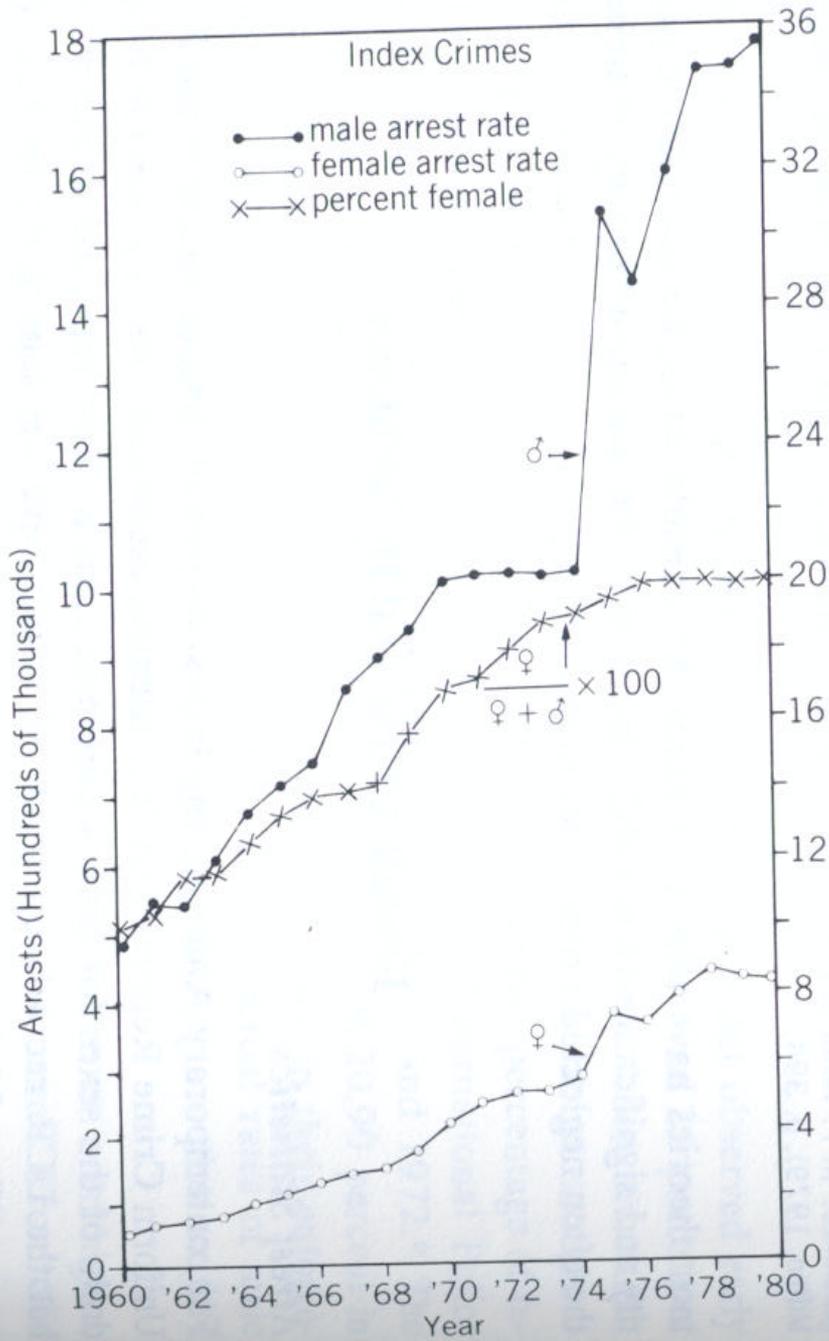
Differences: Aggression

- Men are more aggressive than women, especially concerning serious violence.
- Surveys, experiments, and archival data show that men are much more likely to become violent in a variety of situations.

TABLE 1**Female Arrestees as Percentage of Total Arrests, by Nation
(1963, 1968, 1970, and 1972)**

Brunei	2.02	Israel	11.71
Fiji	2.67	Tunisia	13.06
Hong Kong	2.76	England and Wales	13.61
Malawi	4.27	United States	13.66
Cyprus	6.38	Austria	13.75
Finland	6.66	France	14.25
Tanzania	6.85	Jamaica	15.46
Monaco	7.00	Luxembourg	16.38
Japan	9.69	West Germany	16.66
Canada	9.77	Thailand	17.38
Netherlands	10.25	New Zealand	20.56
Korea	10.51	West Indies	20.90
Scotland	11.53		

Adapted from R. J. Simon and N. Sharma, Women and crime: Does the American experience generalize? In F. Adler and R. J. Simon (eds.), *Criminology of Deviant Women* (Boston: Houghton Mifflin, 1979), p. 394.

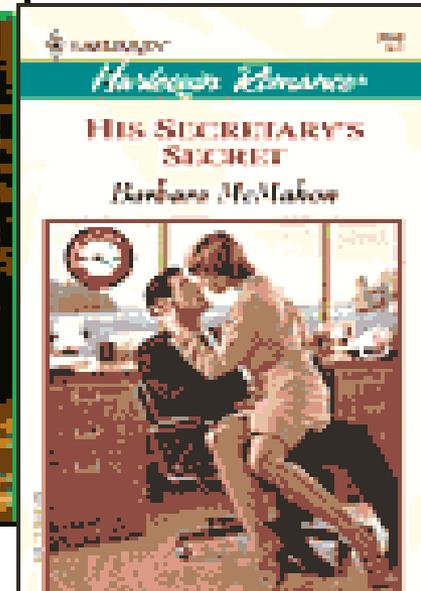
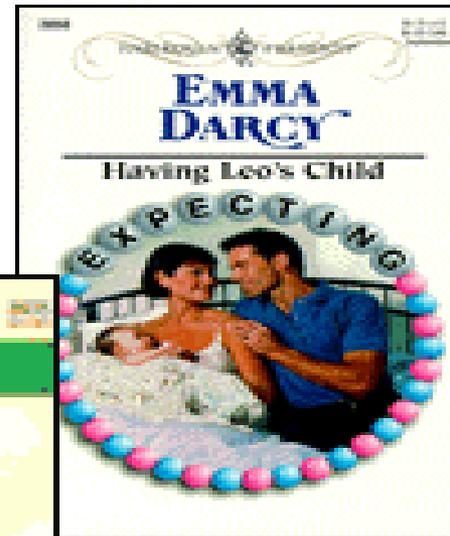
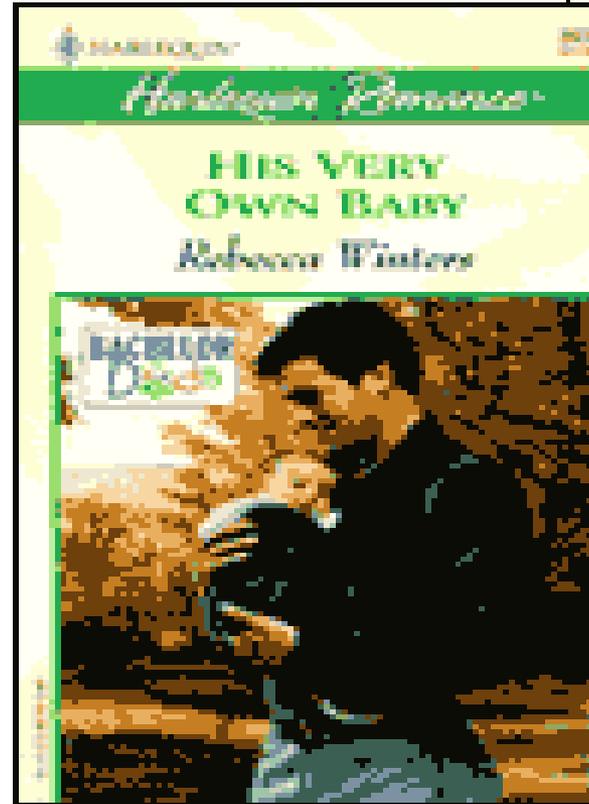


Differences: Sexuality

- “I can imagine myself being comfortable and enjoying casual sex with different partners” Agree? Men (48%), Women (12%)
- **Men generally prefer casual sex more than women.**

Differences: Sexual Fantasies

- Men are unattached and lust driven in male-oriented erotica.
- Women prefer romance novels where a male is emotionally consumed by devoted passion



**Harlequin Romance
Novels**

Part II: Gender Construction and Roles

- This perspective considers how different behaviors among males and females is caused by social forces such as gender roles and gender stereotypes.

Sex Vs. Gender: Is There A Difference?

- These terms are often used interchangeably, but there is a slight difference.
- Sex refers to the physiological status of being male or female.
- Gender is the sense of being male or female.

Physical Dimensions of Sex

Sex Dimensions	Male	Female
1. Chromosomes	XY	XX
2. Gonads	Testes	Ovaries
3. Hormones	Androgens	Estrogens
4. External genitalia	Penis, scrotum	Labia, clitoris, vaginal opening
5. Internal accessory organs	Prostate, seminal vesicles, vas deferens	Vagina, uterus, fallopian tubes, cervix
6. Secondary sex characteristics	Beard, low voice, sperm emission	Breasts, menstruation
7. Sexual orientation	Heterosexual, gay, bisexual	Heterosexual, lesbian, bisexual

What Are Gender Roles?



- Gender roles are the ways of behaving in **specific situations** thought to be typical of the sex to which a person belongs.
- For example, in dating situations, women may be *expected* to laugh at their date's jokes, and let the man pay for dinner.

Gender Stereotypes

- Gender stereotypes are mental representations about how males or females should behave. Stereotypes are more **general** than specified by gender roles.
- Each society has its own stereotypes of what the “perfect” gender role should be.

Gender Stereotypes in the United States and Other Western Cultures

- Women
- Gentle
- Dependent
- Emotional
- Weak
- Men
- Aggressive
- Independent
- Dominant
- Strong

Even newborns, who show no gender differences at all,
are described with these terms.

Sex Typing or Gender-Role Acquisition

- This is the process through which children learn what society expects from members of each gender, and come to exhibit personality traits, behaviors, interests, and attitudes related to their gender.

- As children grow and develop, they obtain ideas about their gender roles. Their behavior is influenced by the specific gender roles they learn, as well as the more general gender stereotypes they experience.



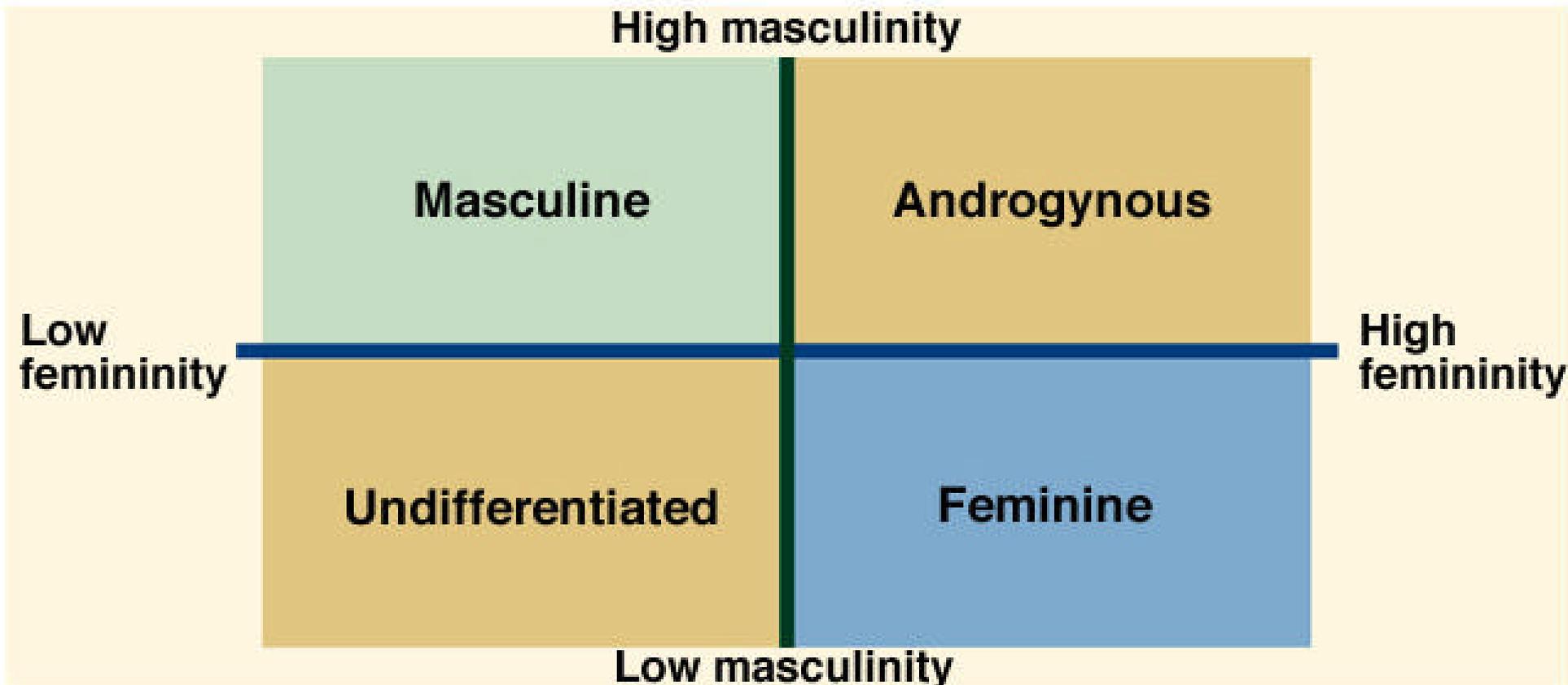
- At about age 3, children are able to correctly apply gender labels to themselves. They usually don't understand the importance of genital differences. Instead, they base gender labels on things like hairstyle and clothing. By age 7, children develop gender constancy. They should understand that a man wearing a dress is still a man.

Measuring Gender

- In 1971 Dr. Bem began looking at gender roles, and as a result created the Bem Sex Role Inventory (BSRI). Her test allows individuals to be both feminine and masculine, unlike other tests which are restrictive to only one.
- The BSRI has 20 each of feminine, masculine, and neutral characteristics.

- Individuals rate themselves as possessing characteristics on a scale from 1-7. The median score is 4.5. Anyone scoring above this is seen as having feminine or masculine traits. Unlike other tests, the individual may score high on both scales because they are scored separately. If this happens, they are seen as androgynous, applying appropriate characteristics when necessary. If the scores are below 4.5 on both scales they are seen as undifferentiated.

Model-Psychological Masculinity & Femininity



Gender Roles Vary with Time

- **Gender roles have changed dramatically over the last 100 years**

Survey asked: “Do you approve of a woman earning money in business?”

1938: 1 out of 5 Americans approved.

1996: 4 out of 5 Americans approved.



Gender Roles Vary with Culture

- Egalitarian or male controlled “Patriarchal” gender roles vary cross-culturally.
- Generally, in agricultural societies gender roles are more distinct. Women work in the fields and stay with the children.
- Roles vary tremendously in industrial societies.



Rule of thumb?

Rule of
Thumb?



Part III: Evolutionary Explanations for Gender Differences

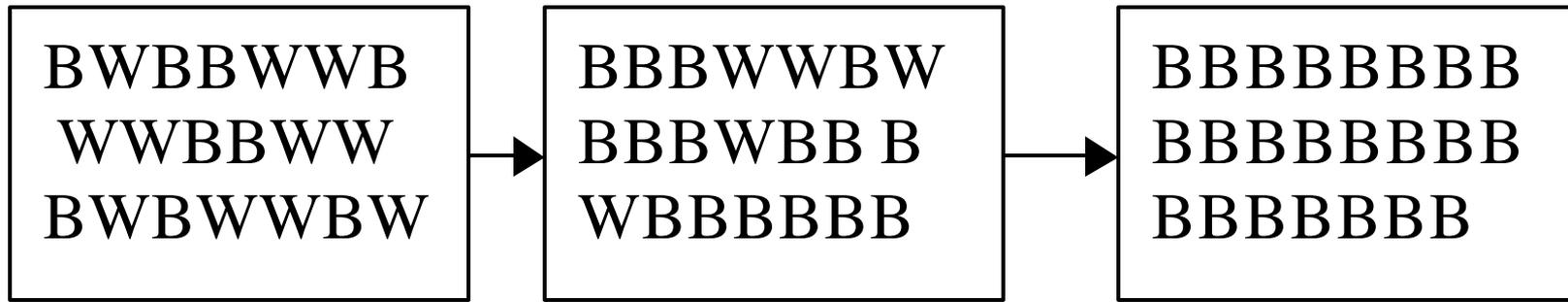
- Part A: Natural Selection and Human Behavior
- Part B: Evolutionary Predictions and Empirical Support

Assumptions of Evolutionary Theory

- Natural selection has shaped both physical and behavioral traits among *all* species, including humans.
- Individual organisms that make the best “decisions” will be the most fit (e.g., have more successful offspring).
- Evolutionary theory focuses on adaptive behavior, thus evolutionary theories view most behavior as normal rather than abnormal behavior.

Natural Selection

- Competition occurs because more offspring are produced than resources to support them
- Heritable variation exists among individuals.
- Those with “favorable” traits will survive and reproduce, thus such traits will be disproportionately represented in future generations.



Generation 1

Generation 2

Generation 3

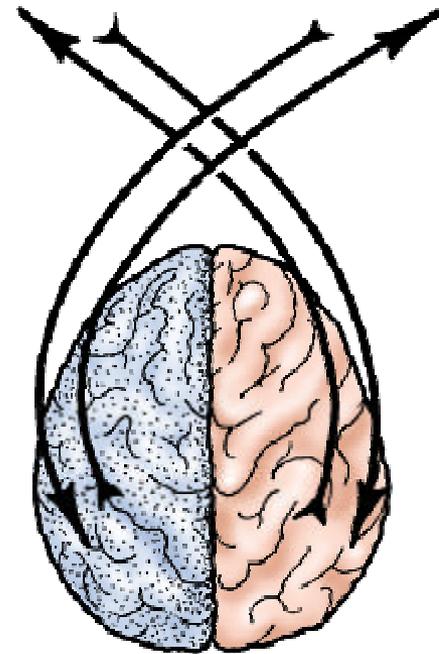
GENERATION 1: BOTH BLACK AND WHITE TREE MOTHS.

GENERATION 2: TREES TURN BLACK DUE TO SOOT FROM INDUSTRIAL REVOLUTION

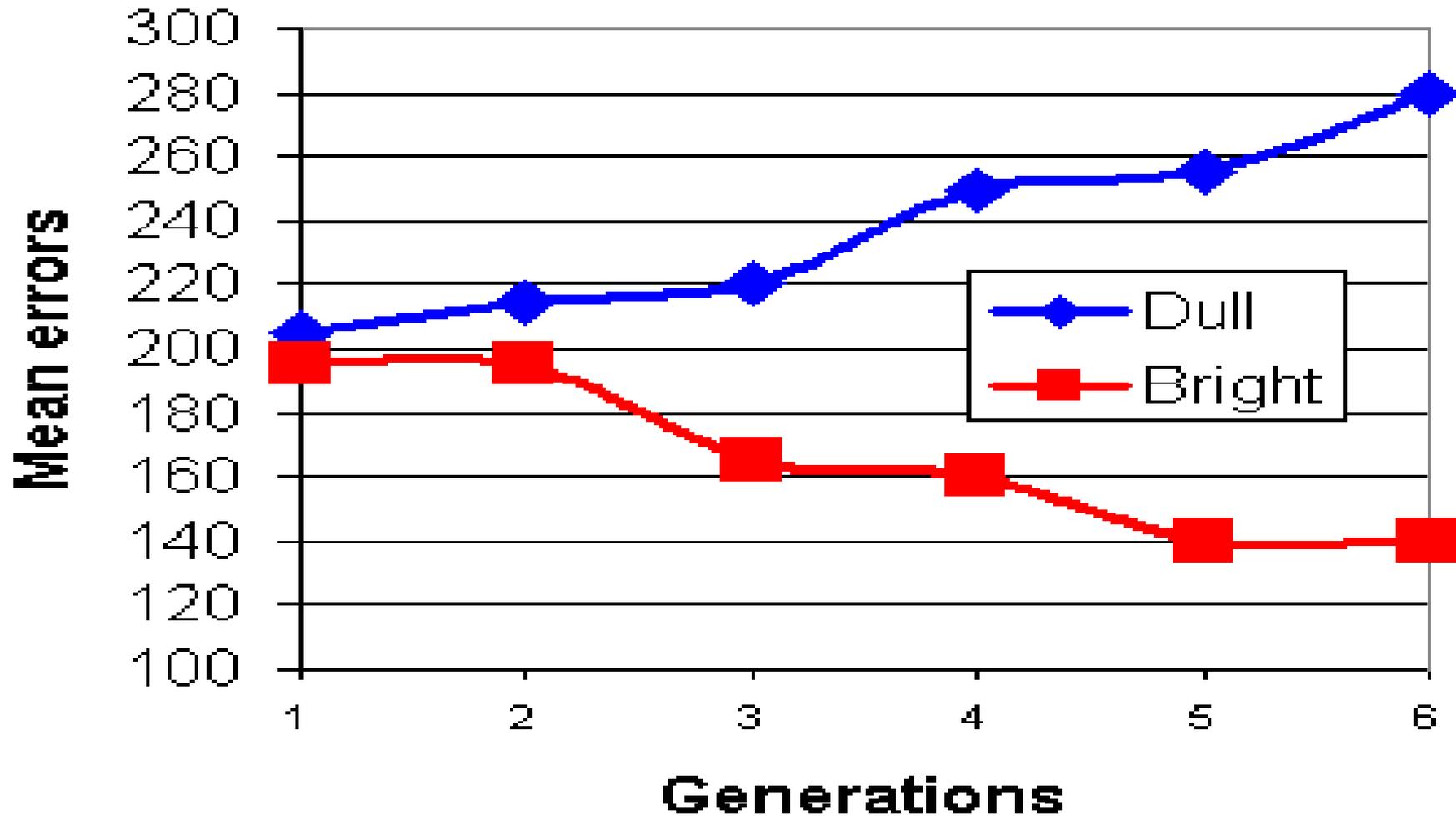
GENERATION 3: ONLY BLACK MOTHS REMAIN. BLACK MOTHS “ADAPTED” TO THEIR ENVIRONMENT.

Natural Selection and the Human Mind

- Through process of natural selection, individuals who made the best “decisions” had more offspring. Because “decisions” linked with organic brain “mechanisms”, they passed on the decision-making ability.
- The organisms in today’s environment are “fit” or “adapted” because of the process of natural selection.



Development of Maze Learning Behaviour through Selective Breeding



Milestones in 10 Million Years of Human Evolution

10 million

Bipedalism



5 million

4 million

Australopithecus



3 million

First stone tools



2 million

Homo habilis

Homo erectus

1 million

Signs of camps & meat eating

Use of fire



700,000

Environment of Evolutionary Adaption

200,000

Homo sapiens

Advanced tools

100,000

Homo sapiens sapiens

- modern humans



40,000



Cave painting about 20,000 years old

10,000

150

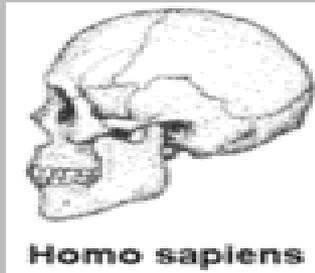
Industrial revolution

50

Technological revolution



Homo erectus
brain size = 800 cm³



Homo sapiens sapiens
brain size = 1700 cm³

Theory of Parental Investment and Sexual Selection

Natural selection has created mechanisms to increase individual fitness (e.g., number of grandchildren).

- 1.) Females invest more in offspring than males (females bear costs of pregnancy and weaning)
- 2.) Because females have more of an investment, they will be more careful in **choosing** their mates.

Parental Investment and Sexual Selection cont.

- Females choose mates that have high status and resources, and who indicate they will invest in their offspring.
- Females want parental support.



Sexual Selection cont.

- Males compete to be chosen by females by signaling that they can provision resources and defense.
- Some males can amass more wealth or territory than others. Extra resources and power can be attractive enough to attract more than one mate. As a result, the variance of successful mating and fitness is higher among males than females
- Result: There is more competition between males than between females.

Explaining Aggression

- Why are males more likely than females to be involved in violence?
- Hypothesis: Sexual selection has resulted in more competition between males, than competition between females.

Table 8.3. Two Hundred Twelve Closed Social Conflict Homicides in Detroit, 1972, in Which Victim and Offender Were Unrelated (Friends, Acquaintances or Strangers), Classified by Conflict Typology and by the Sexes of the Principals^a

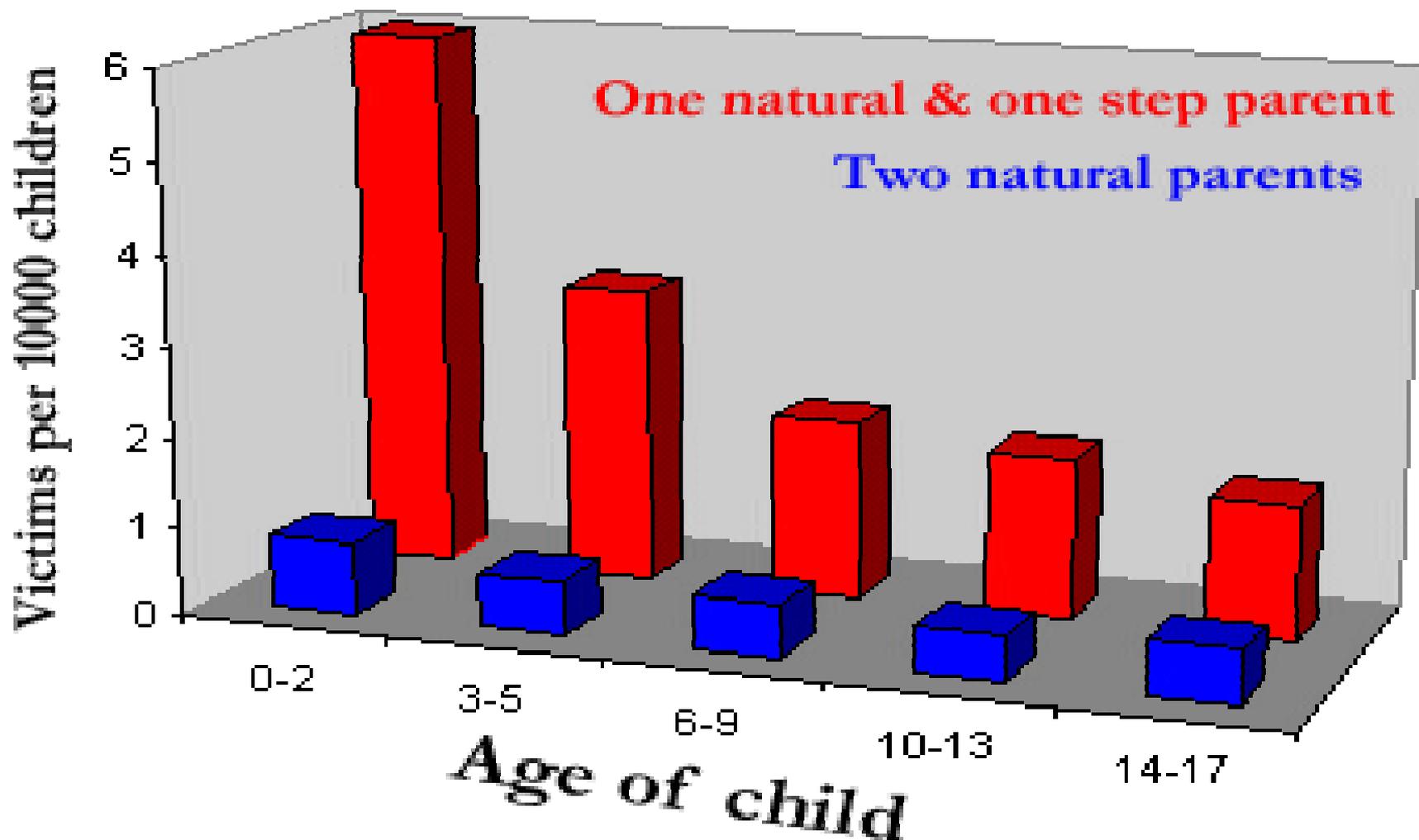
Conflict typology	Male killed male	Male killed female	Female killed male	Female killed female
Escalated showing-off contests	26	0	2	1
Retaliation for previous verbal or physical abuse	75	9	6	5
Jealousy conflicts	20	5	6	3
Business conflicts	10	1	2	0
Intervention in family dispute	5	0	0	0
Miscellaneous unique disputes	2	0	1	1
Insufficient information	<u>26</u>	<u>4</u>	<u>1</u>	<u>1</u>
Total social conflicts among nonrelatives	164	19	18	11

^aFrom Wilson and Daly (1985), Table 3.

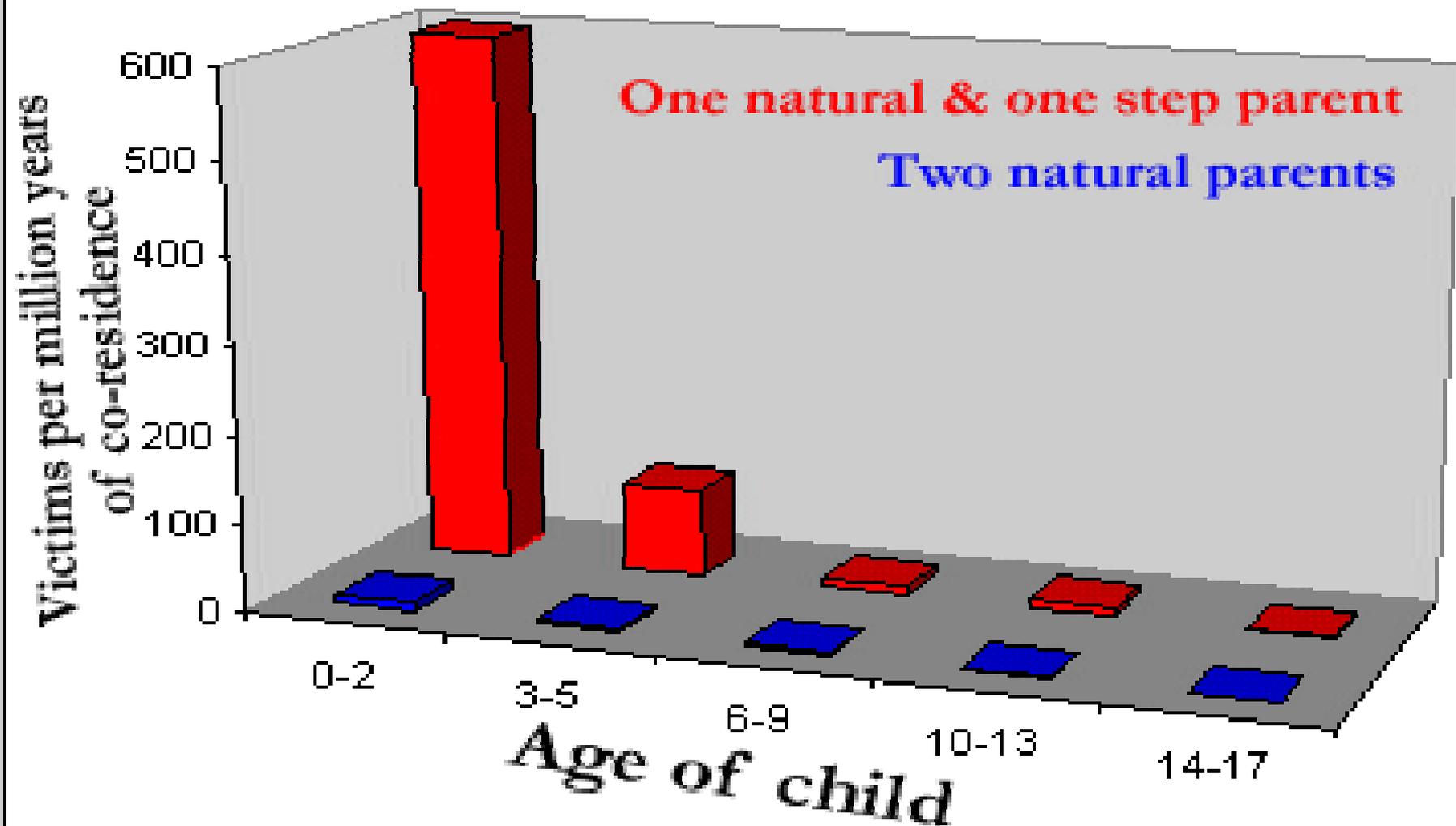
Aggression within Families: Parent-Offspring Conflict

- Evolutionary theory predicts that men should bias investment of time and other resources in favor of their **own** children.
- As a result, step children are at greater risk of child abuse and murder, than children living with both their natural parents

Child Abuse is More Common by Step Parents than Natural Parents



Child Murder is More Common by Step Parents than Natural Parents



Sexuality and Mate Choice

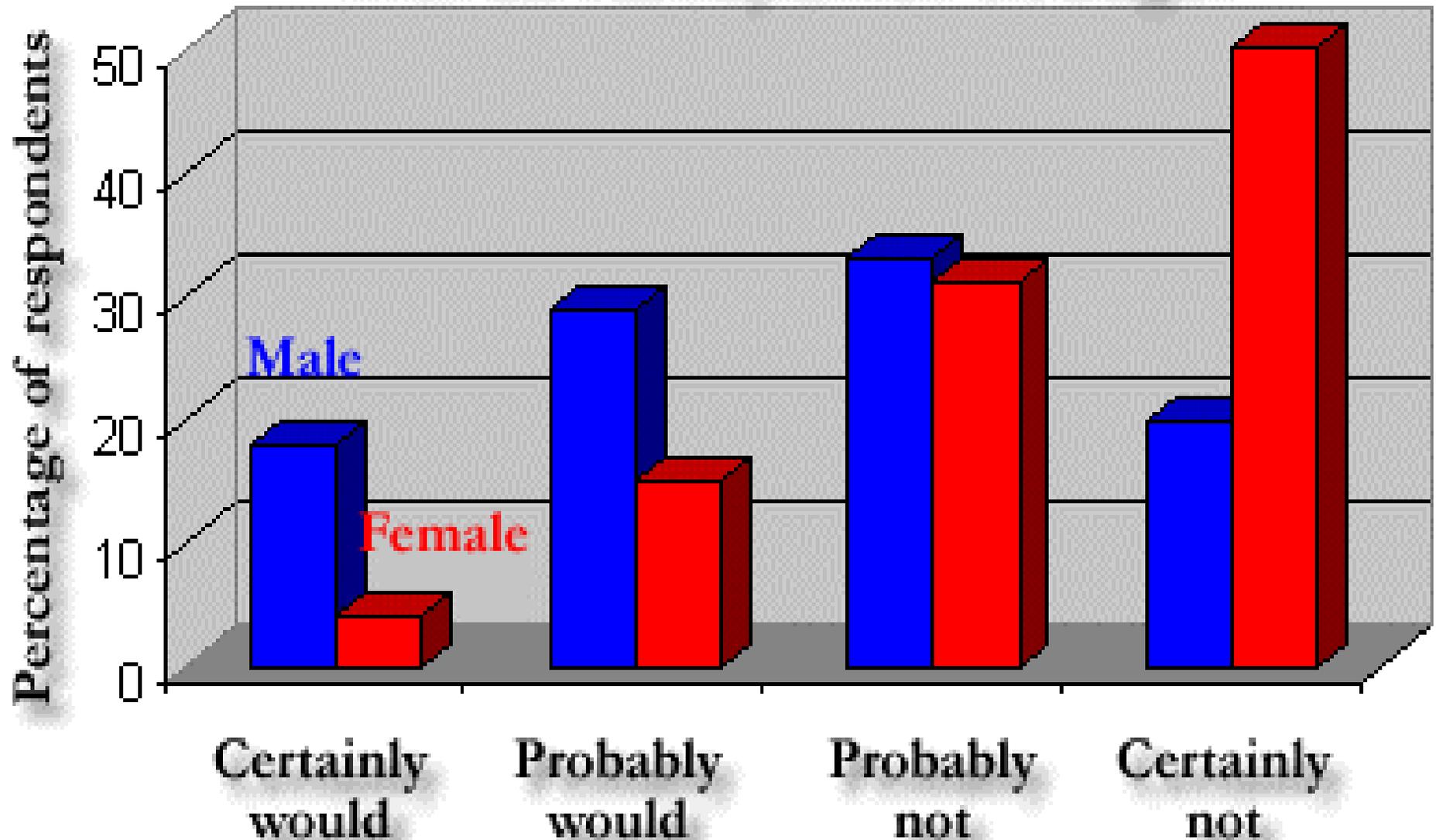
Hypotheses: Because of parental investment, females will be choosier than males.

Result:

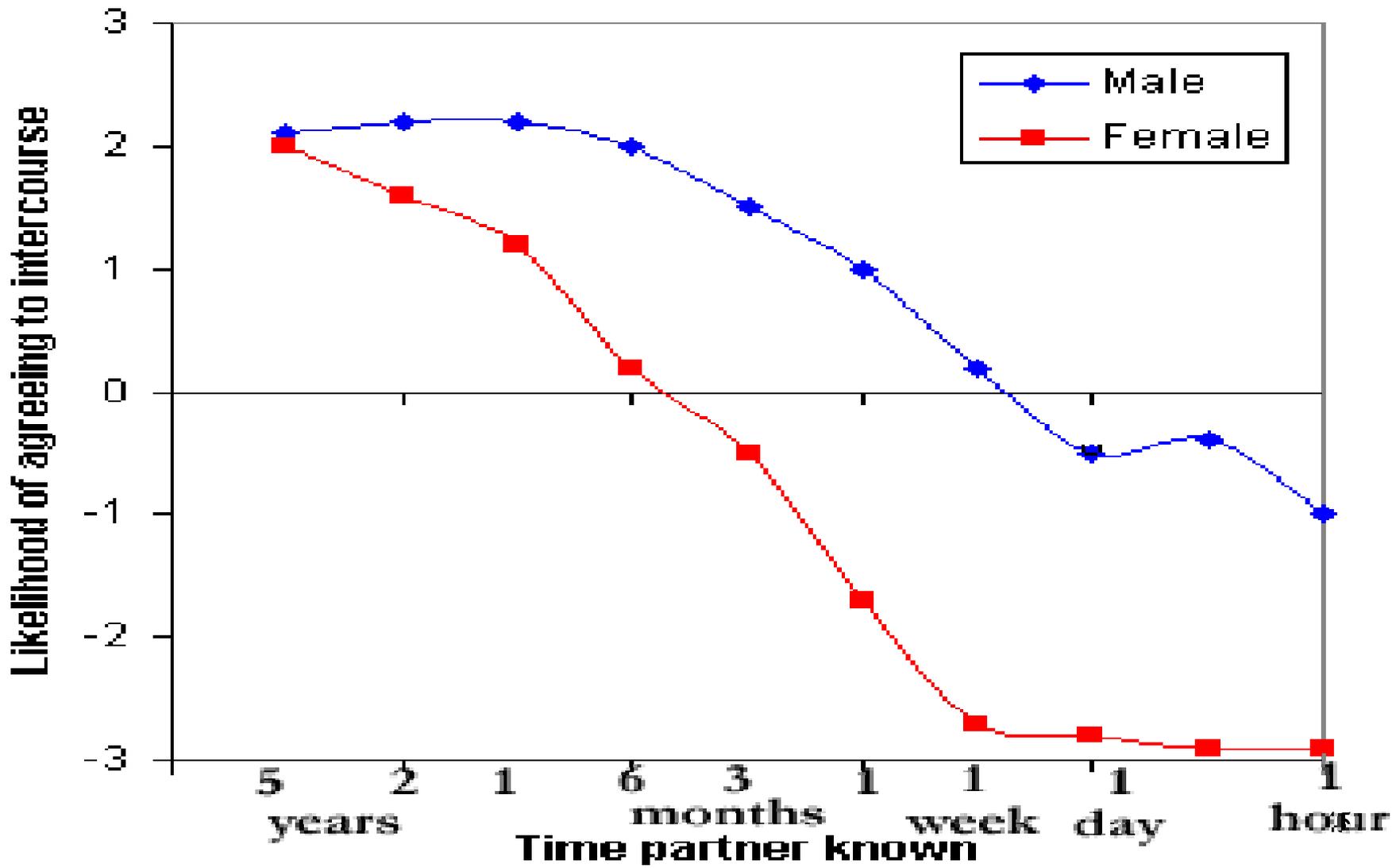
- 1.) Females less likely to engage in casual sex
- 2.) Females choose mates who have high status, intelligence, wealth, and who signal their intentions to invest in them.



Probability of Consenting to Sex with an Anonymous Stranger



Sex Difference in Likelihood of Agreeing to Sexual Intercourse

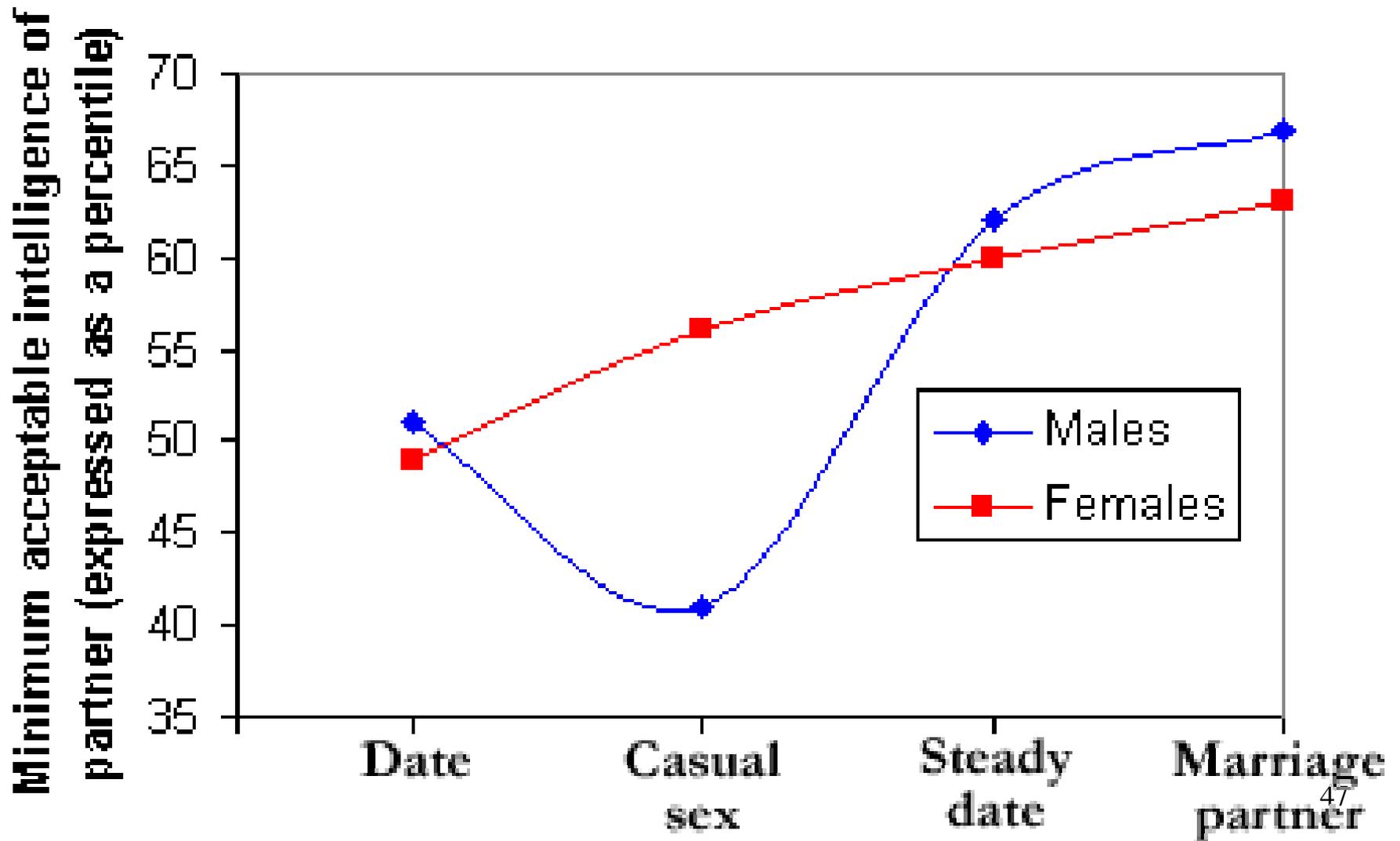


Sex Differences and Desirable Partners

- Anna Nicole Smith was 26 when she married J Howard Marshall a Texan oil tycoon who died 14 months after they married.



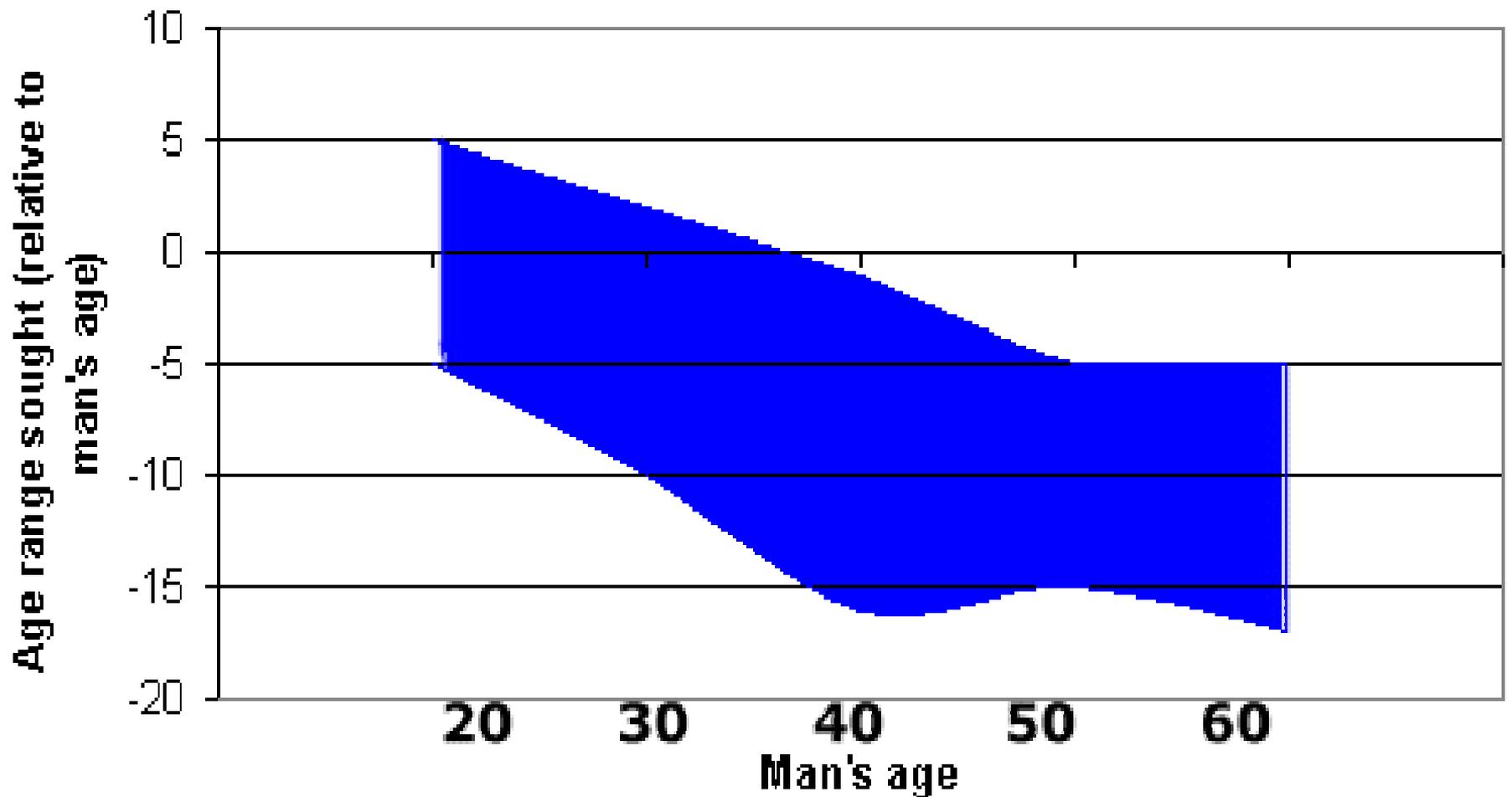
Sex Difference in Minimum Acceptable Intelligence in Partner



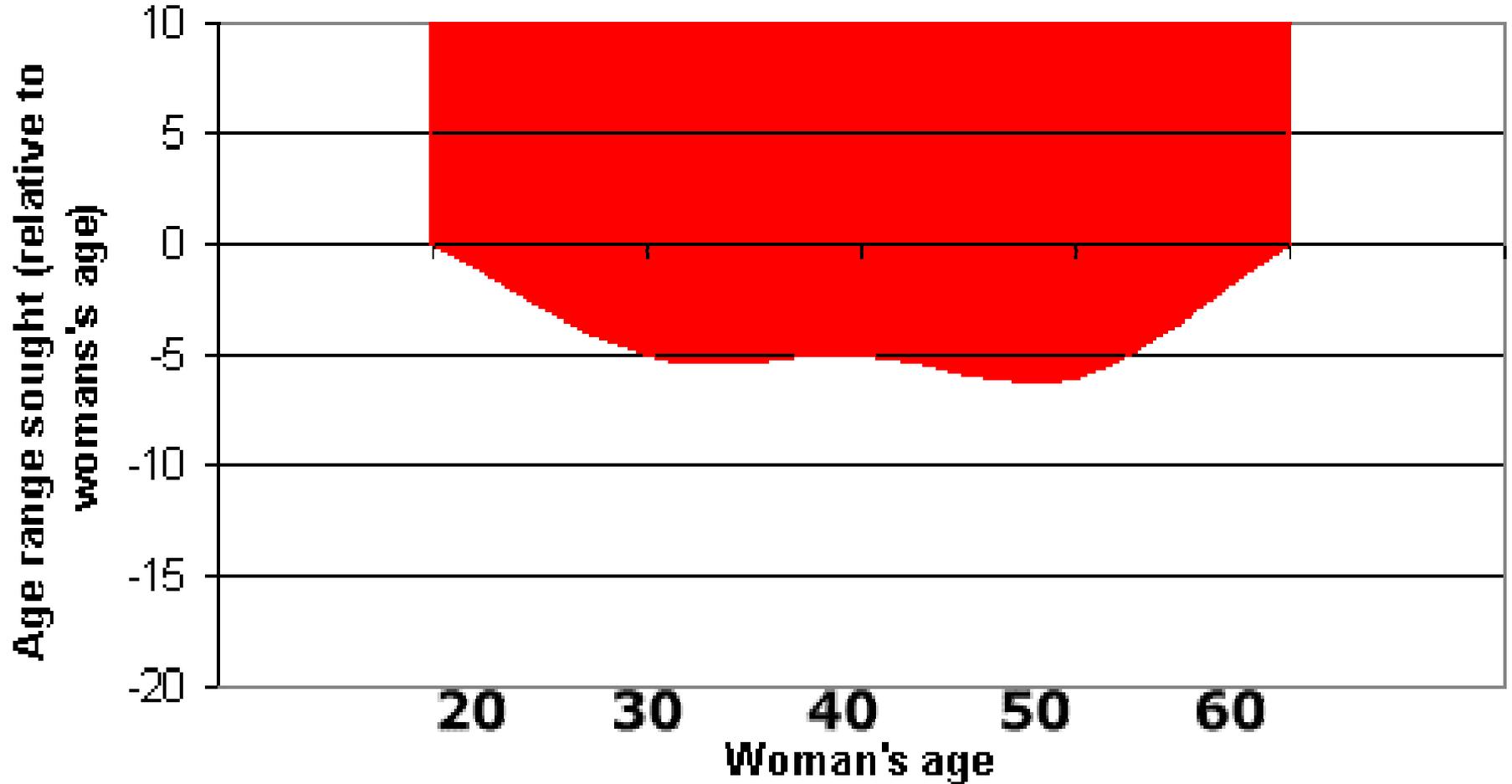
Age and Mate Choice

- Men are looking for **youthfulness** in their partners, whereas women seek mates who are older and presumably control greater resources.

Age Range of Female Partners Sought by Men



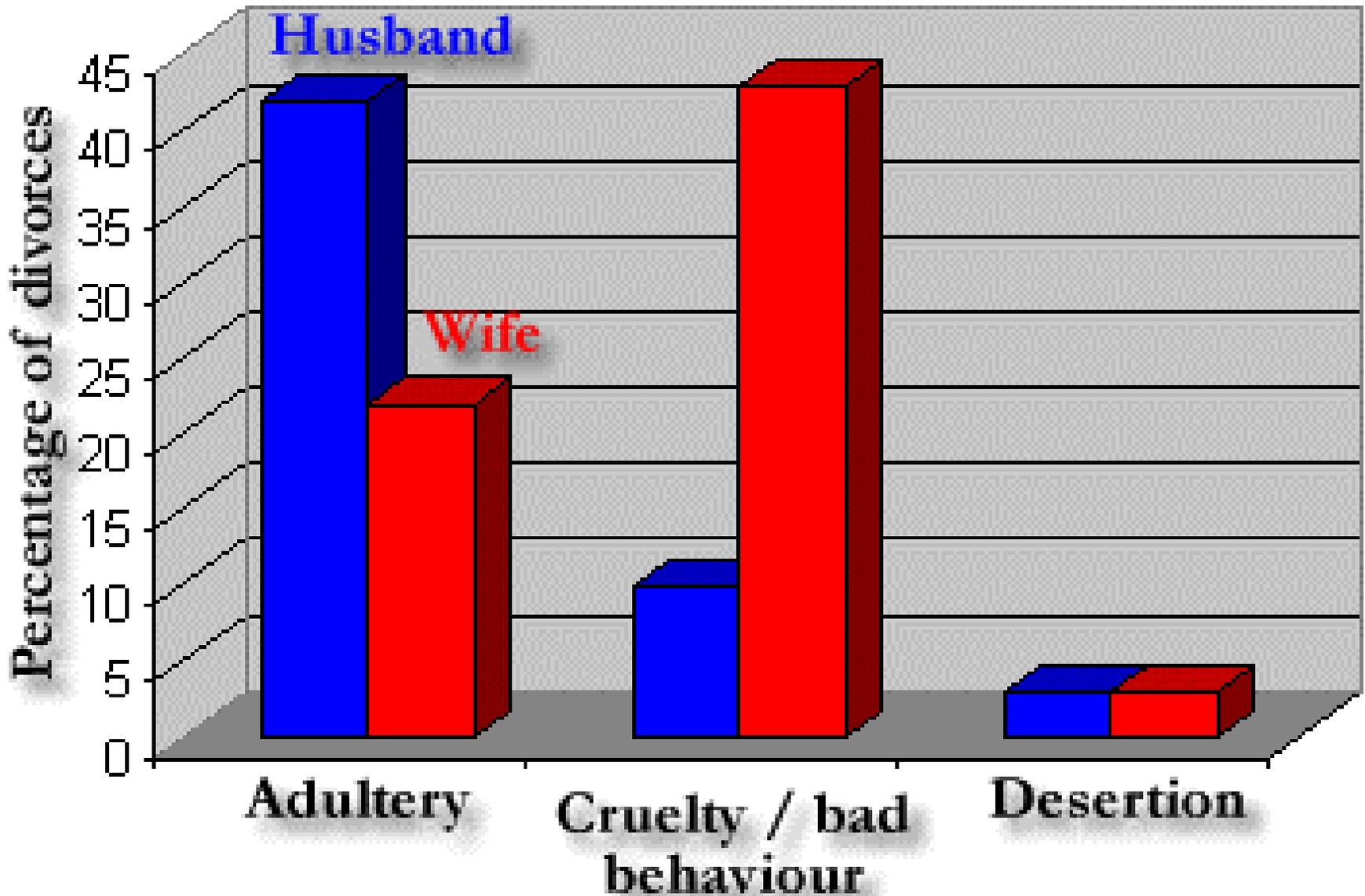
Age Range of Male Partners Sought by Women



Marriage and Paternal Certainty

- Men are concerned about paternity and therefore will seek a divorce if their wife commits adultery. (“wow, your child looks like the milk man”)
- Women will seek to end their marriage if their husband's cruelty and aggression signals that he is not acting as a good provider for his wife and children.

Sex Differences in Grounds for Divorce



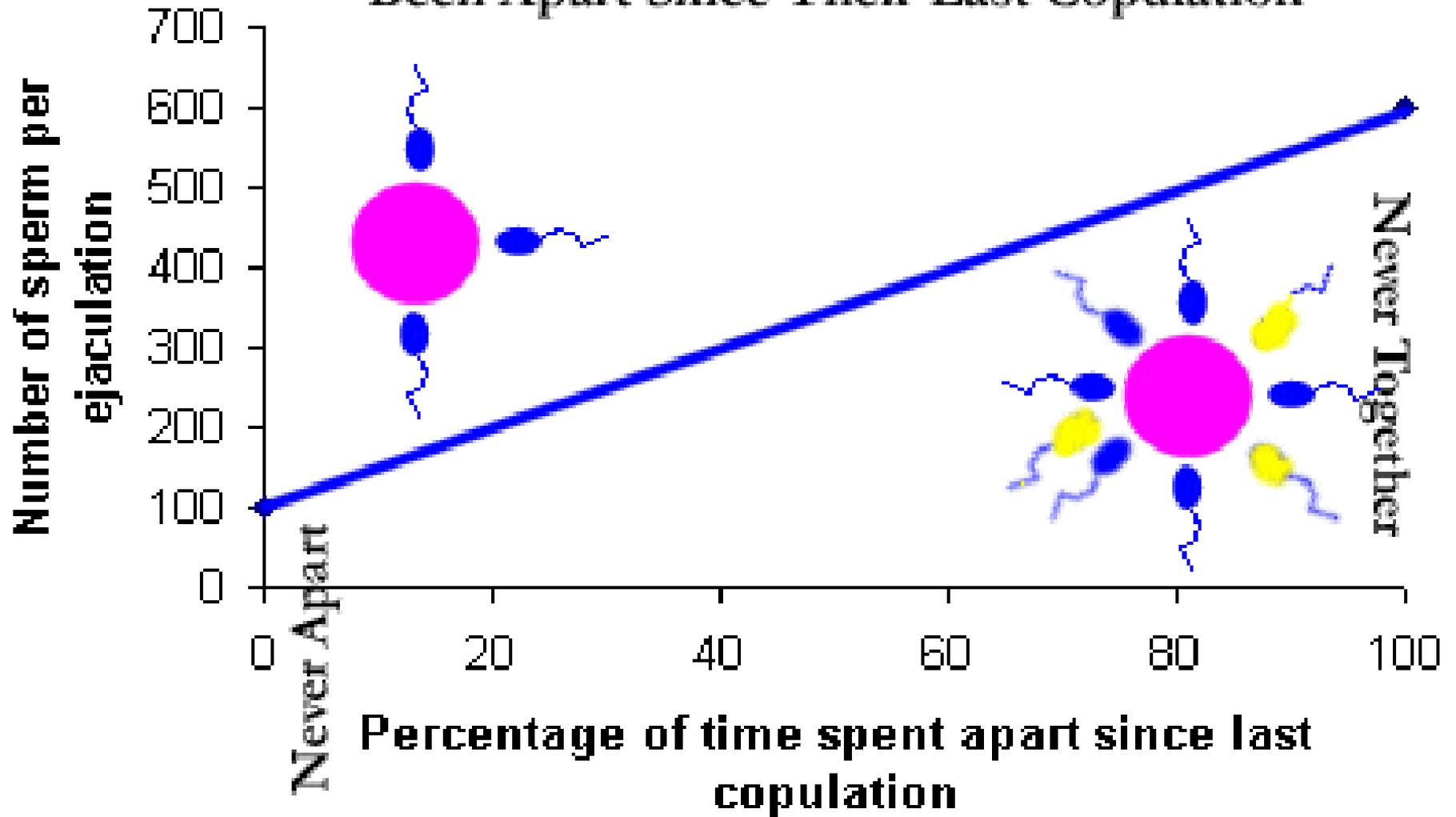
Paternal Certainty

- DNA labs find that **One in seven fathers 'not the real parent' !!!**



Her dad was really Hughie Green₃₃

The Number of Male Sperm in an Ejaculate Increases the Longer a Man & Woman Have Been Apart Since Their Last Copulation



Can evolutionary theory help explain gender roles ?

- Men reduce paternal uncertainty by controlling women through the creation and enforcement of gender roles (rules).



Can Evolutionary Theory Explain Changing Gender Roles?



Waist to hip ratio

- A ratio of 0.7 (indicating a curvaceous body) is said by evolutionary theories to be the optimum of attractiveness.

