

Parental Investment is defined under the concept of life-history fitness tradeoffs (Stearns, 1992):

- Current reproductive effort diminishes residual reproductive value, or prospects for future reproduction, either by reduced survivorship or fertility (Fisher, 1930)
- Investment by the parent in an individual offspring increases their chance of survival (Direct and inclusive fitness for parent) at the cost of parent's ability to invest in other offspring (at the moment and in the future).
- Parental investment is measured in reference to its negative effect on the parent's ability to invest in other offspring

Given the above definition of Parental Investment, What are the primary costs associated with maternal investment for primates?

Using the article provided, define the Trivers-Willard (1973) Hypothesis and the assumptions underlying it

What circumstances (for primates and/or humans) would create a circumstance in which a biased sex ratio increased maternal RS?

How would this be related to skewed patterns of investment? Ranking or Social Hierarchy? Patriarchy? Mating Systems?

What are some of the different ways that mothers could influence the sex-ratio of offspring (the proximate mechanism)?

What are some of the ways this hypothesis could be tested? What would you look for in terms of both observational and experimental studies? What kind of research design was used in your article? What other kinds of studies would test this hypothesis?

What were the results of the study (your article)? How did the authors interpret these results?

Male Quality Model

When sexual selection mechanisms are more strongly biased toward intra-sexual selection in males, mothers in good condition will invest heavily in sons

Local Resource Competition Model

When there is sex-biased dispersal, mothers invest more in the sex that competes less for resources

Population Adjustment Model

When there are sex differences in infant survival, mothers invest more in the offspring sex that is more likely to survive