

Same-Sex Behavior in Rhesus Macaques

Source: TH

Why in News?

A recent study conducted by researchers from Imperial College London, titled "Genetics, Social Environment and Evolution of Male Same-Sex Behavior in Rhesus Macaques," has challenged conventional beliefs about same-sex behaviour (SSB) in animals.

- The engagement of animals in SSB has been considered a 'Darwinian paradox': if reproduction is critical to evolution, then SSB - which is non-reproductive - should have ceased to exist.
- This recent study found that male SSB in rhesus macaques is very common and doesn't harm evolution.

What are the Key Findings from the Study?

- Male Same-Sex Behavior (SSB) in Monkeys:
 - The study focuses on male same-sex mounting behaviour observed in rhesus macaques, a common monkey model, in Cayo Santiago, an island east of Puerto Rico.
 - 72% of observed male rhesus macaques engaged in same-sex mounting.
 - Only 46% participated in different-sex mounting.
 - It challenges the notion that SSB contradicts principles of evolution due to its non-reproductive nature.

Role of Non-Genetic Factors:

- The study considers external factors like **social interactions** and the environment.
- These non-genetic elements contribute to the expression of SSB behaviour in male rhesus macaques.
 - SSB-engaging monkeys form coalitions against common enemies.
 - Male SSB could serve as a form of emotional communication and regulation.

No Trade-off with Reproductive Fitness:

- The study disputes the assumption that SSB reduces reproductive opportunities, as sexually active males engage in both SSB and different-sex sexual behaviour (DSB).
- There is no direct correlation between SSB engagement and reduced offspring count in the macaque population.

Future Research:

- Female SSB and other monkey species require further investigation to broaden understanding.
- The findings cannot be directly extrapolated to humans due to cultural and social influences.

