

* Add research design & variables.

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Hassett et al. (monkey toy preferences)

The psychology being investigated

Play

Sex differences and the role of nature

Socialisation and the role of nurture

Hormones and toy preferences

Background: General

- Socialization processes, parents, or peers encouraging play with gender specific toys are thought to be primary force shaping sex differences in toy preferences.
- Toy preferences reflect biologically determined preferences for specific activities facilitated by specific toys.
- Hormones are the source of differences. Girls with congenital ~~adn~~ adrenal hyperplasia (CAH), which causes increased adrenal androgens, show toy preferences more in line with boys than girls.
- When girls with (CAH) are encouraged to play with stereotypical female toys, they reject this and continue to play with the stereotypical male toys.

Aim

1. To test if sex differences in children's toy preferences result from biological factors - for example, from prenatal hormone exposure rather than through specialisation.
2. To investigate this, if male and female rhesus monkeys have similar toy preferences to human infants, despite no specialisation with human toys.

Sample Size

- Subjects were rhesus monkey members of a multi-male, multi-female social group of 135 animals that had lived together for more than 25 years at the Yerkes National Primate Research Center Field Station.
- 39 baby (≤ 3 months) - not included
- 14 monkeys - not included (took part in a previous study)
- 61 females included
- 21 male included
- Males and females by rank's totals and participation.

Procedure

- Seven 25-minute trials were conducted with the large indoor/outdoor enclosure that housed the social group.
- Prior to each trial, subjects and other social group members were sequestered indoors while one wheeled and one plush toy separated by 10 m were placed in the outdoor living area, with left or right placement location counterbalanced across trials.
- Monkeys were then released into the outdoor area and each toy and any animal interacting with it was videotaped using separate cameras for each toy.
- Two observers watched the videos and used a behavioural checklist to code (or categorised) every interaction between the monkey and toys.

Results

Female monkeys show no consistent preference

Interaction with plush toys : Female mean [7.97]

" " wheeled toys : Female mean [6.96]

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- There was also no significant difference between the males and females in terms of frequency of wheeled toy play.
- * Male monkeys preferred wheeled toys.
- Males significantly preferred wheeled toys compared to the plush toys.
- Males and females showed no significant difference in the frequency of interactions of wheeled toys compared to plush toys.
- Males' duration was significantly lower with wheeled toys compared to the plush toys.
- Females' duration of interaction was not significantly different between wheeled toys & plush toys.
- There were rank differences between the females only. Rank significantly positive correlated with frequency of interaction for both types of toys. Females with no preferences ranked lower than the females with a plush preference.
- There were rank differences between the females only. Rank significantly positively correlated with duration of interaction with plush toys.

Conclusion

Toy preference in rhesus monkeys seems to reflect behavioural and cognitive biases influenced by hormones, which in turn are affected by some social pressures to form observable sex differences.

NOTE: Independent measures design

Evaluation of the study.

- **Generasibility**: This study has poor generasibility, as the sampling technique was opportunity. This means that it may not be generalisable to other captive or wild rhesus monkey.
- **Reliability**: This study's reliability is very good as they used a standardised procedure including where the toys were placed and the toy choosen. This means that another researcher could easily replicate this study and test for reliability.
- **Validity**: Validity is good. There were two observers who interviewed the video evidence. Also, the use of structured observation via the use of behavioural checklist allows objective quantative data to be collected.
- **Ethics**: Very good. No harm to diet, the data was also reused from previous study.

Individual & situational explanations

- * Both sides were seen. There were individual differences seen in some of the rhesus monkeys and they had to be excluded from data analysis.

* In terms of situational explanations, the rhesus monkey were placed in new, exciting situation. This situation could have encouraged them.

Hassett et al. believed that toy preference in humans may be due to nature and caused by biological not learned differences.