## Stereotypies

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#### Goals

- What are stereotypies and where do they occur?
- When do stereotypies occur?
- Why do they occur? Are the bad?
- Cognitive Approach
- What is being done about these behaviors?

### Stereotypies

- Stereotypies are categorized by behavior patterns that are repetitive and serve no apparent goal or function (Mason, 1991).
- Often found in humans with mental handicaps/ disorders.
- Have long been noted in a variety of captive settings.

## When do stereotypies occur?

- One variable that appears to be directly related to stereotypic activity is the timing of food events.
- Stereotypic activity often peaks immediately prior and following a large feeding. The peak is usually species specific.

# Why do they Occur and are they Bad?

 Stereotypies have been positively correlated with a number of conditions (age, food schedules, estrus periods, settings etc)

 General consensus is that these activities reflect poorly on welfare of animals.

#### **Effects**

- Increased cortisol levels have been observed in animals that engage in frequent stereotypic behavior.
- These prolonged high levels of cortisol have been associated with severe neurological impairments and cognitive deficits.
- Can also lead to abnormalities in dendrtic reshaping process of hippocampus, amygdala, and ventral prefrontal cortex.

## Cognitive Approach

- Related to mental disorders
  e.g. Tourette's syndrome
- Described as a failure to express knowledge possessed in the behavioral responses made.
- Impaired performance on extinction learning.

## What is being done about these behaviors?

Many enrichment efforts--species specific.

Food schedule experiments.

 More naturalistic enclosures to promote more naturalistic behaviors.

#### Conclusion

- Stereotypies are seen as a negative- in both animals and humans.
- They are seen as a product of different things in different areas, but are in many ways dealt with in the same manner.
- More research is needed to find the "cause" of these behaviors, but current research shows that they can be effected by variant food schedules.

#### References

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