

Examining Visitor Behaviors and Perceptions of Animal Activities: An Evaluation Study at the Woodland Park Zoo Jaguar Exhibit



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Introduction

Living collections are at the heart of all zoos and are ambassadors for conservation, wildlife and a zoo's mission while providing the unique opportunity for visitors to get first-hand experiences with a wide variety of species across regions and taxa; animals from all over the globe are viewable to visitors that they would otherwise never have the opportunity to see. Despite the importance of animals in living collections, little is understood about how visitors perceive the different behaviors of animals in zoo environments.

Research Question: Do different animal behaviors influence visitor behaviors and their perceptions of the animal's wellbeing, its exhibit and their enjoyment? If so, how?

Hypothesis: People would rate their perceptions the most positively when the jaguar was active and the least positively when it was repetitive. Visitors would spend the most time in the exhibit and form the largest groups when the jaguar was active and spend the least time and form the smallest groups when it was engaged in other behaviors (i.e. out of sight).

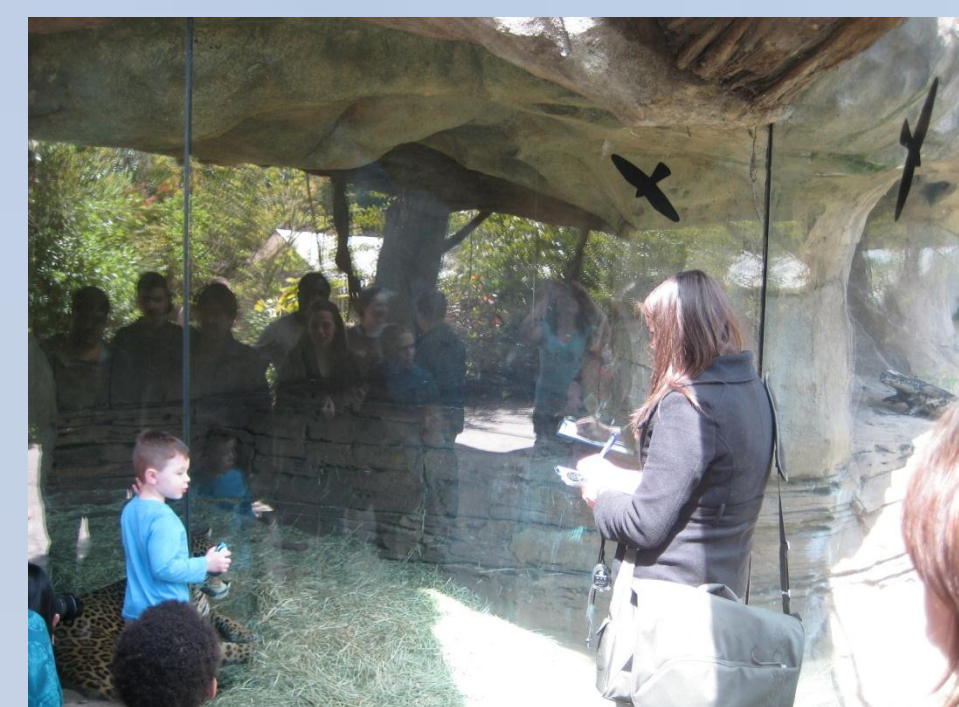
Methods

Methods comprised of two parts for a combined total of 20-minute sessions

1. Recording animal and visitor behaviors (10 minutes)
2. Administering questionnaires (10 minutes)

Group size was also recorded at the beginning and end of each 20-minute session

Animal/Visitor Behaviors



- Five animal behavior categories: active, grooming, inactive, repetitive, other
- Behaviors coded in 30-second intervals
- Visitor time was recorded in seconds beginning when an adult crossed pre-determined boundary lines

Questionnaire Methods



- Only collected questionnaires if $\geq 80\%$ of animal behaviors were of one behavior
- Participants: adults not previously observed
- Continued observing jaguar to make sure behavior did not change

Results

Behavior Type	Number of Sessions	Male %	Female %
Active	16	25.0	75.0
Inactive	17	41.2	58.8
Repetitive	16	12.5	87.5
Other	10	N/A	N/A
TOTAL	59		

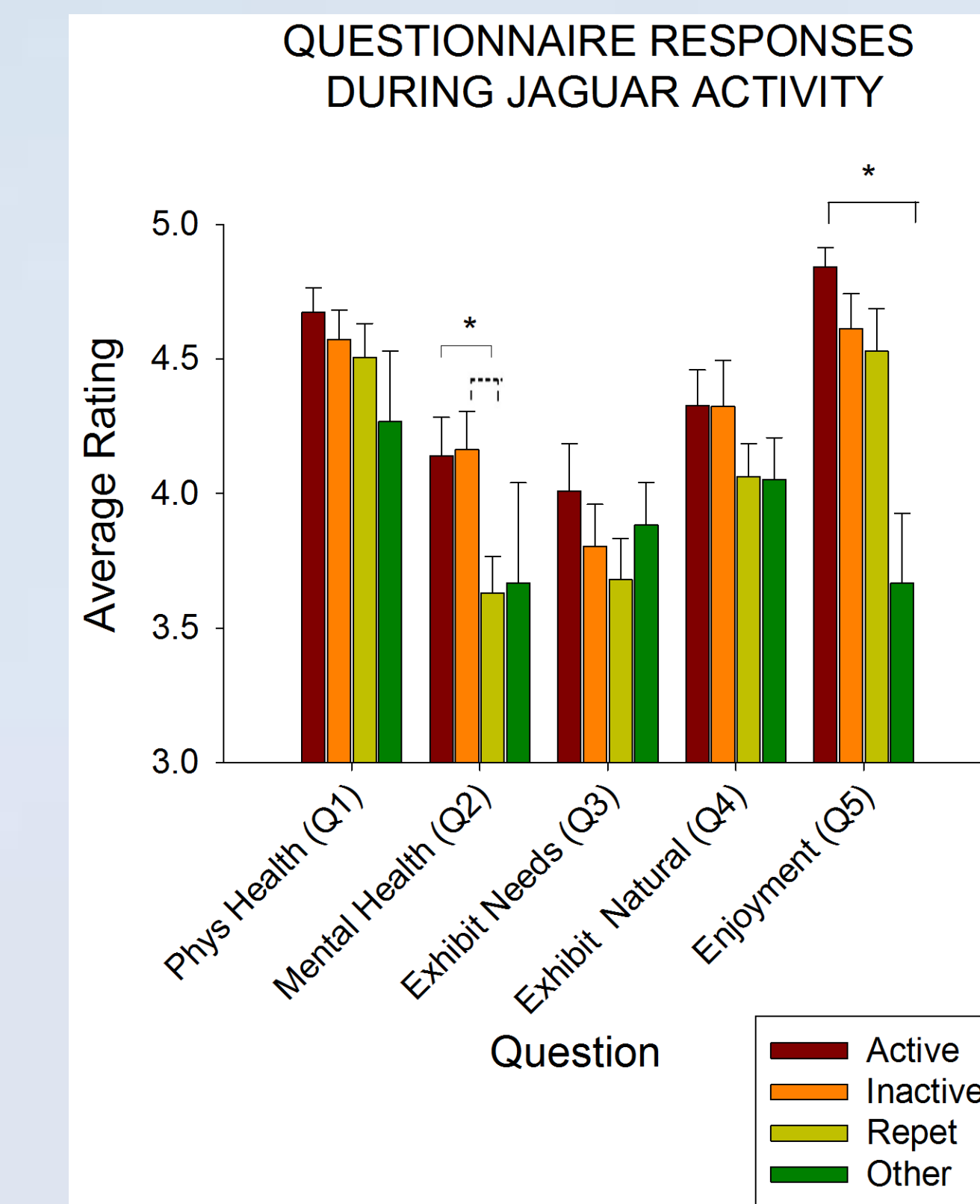
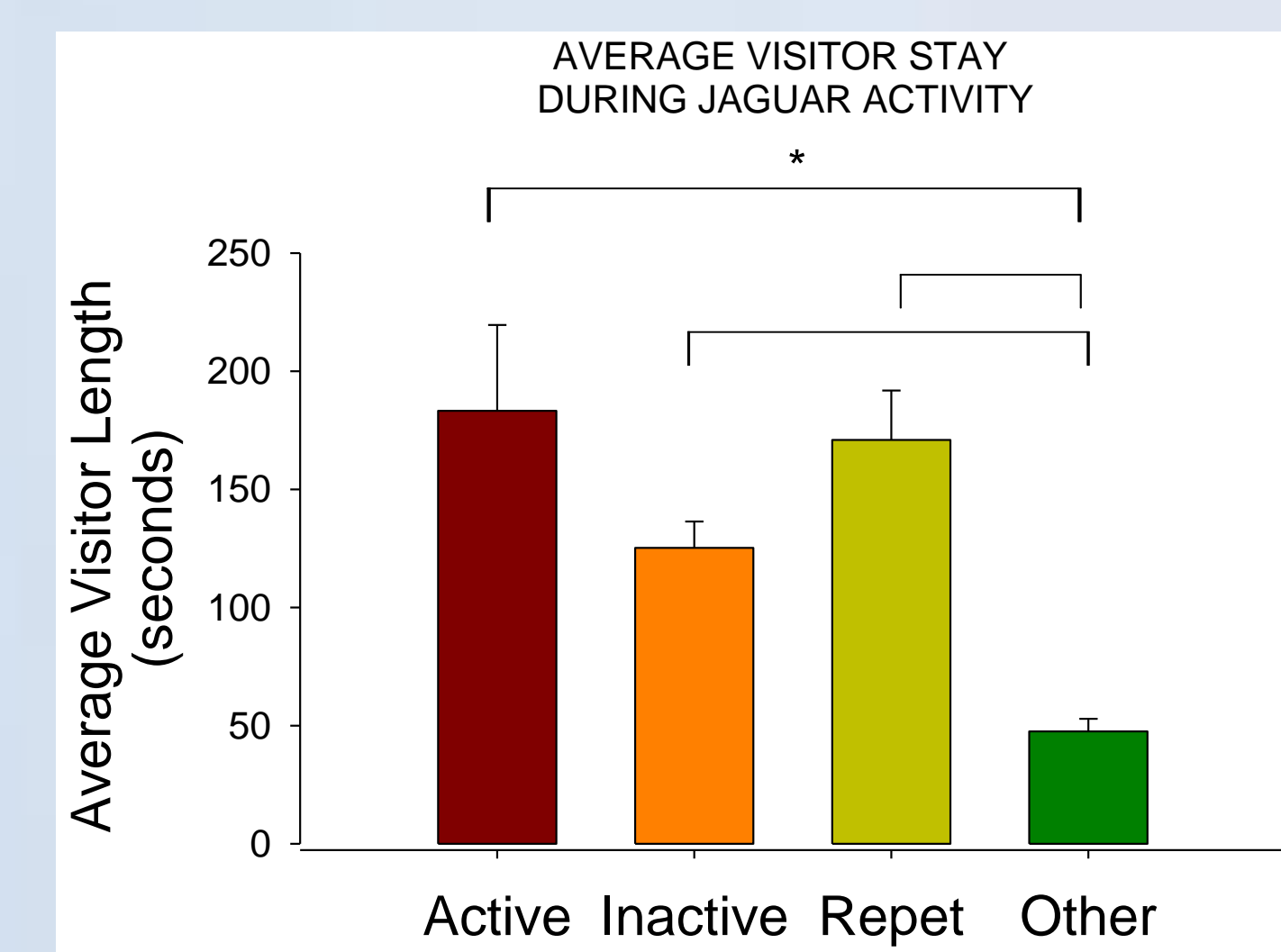
Male or Female Jaguar Presence per Behavioral Category

A total of 59 sessions were observed and 160 questionnaires were completed. No grooming sessions were observed over the course of data collection. All "Other" sessions were of the jaguars being out of sight.

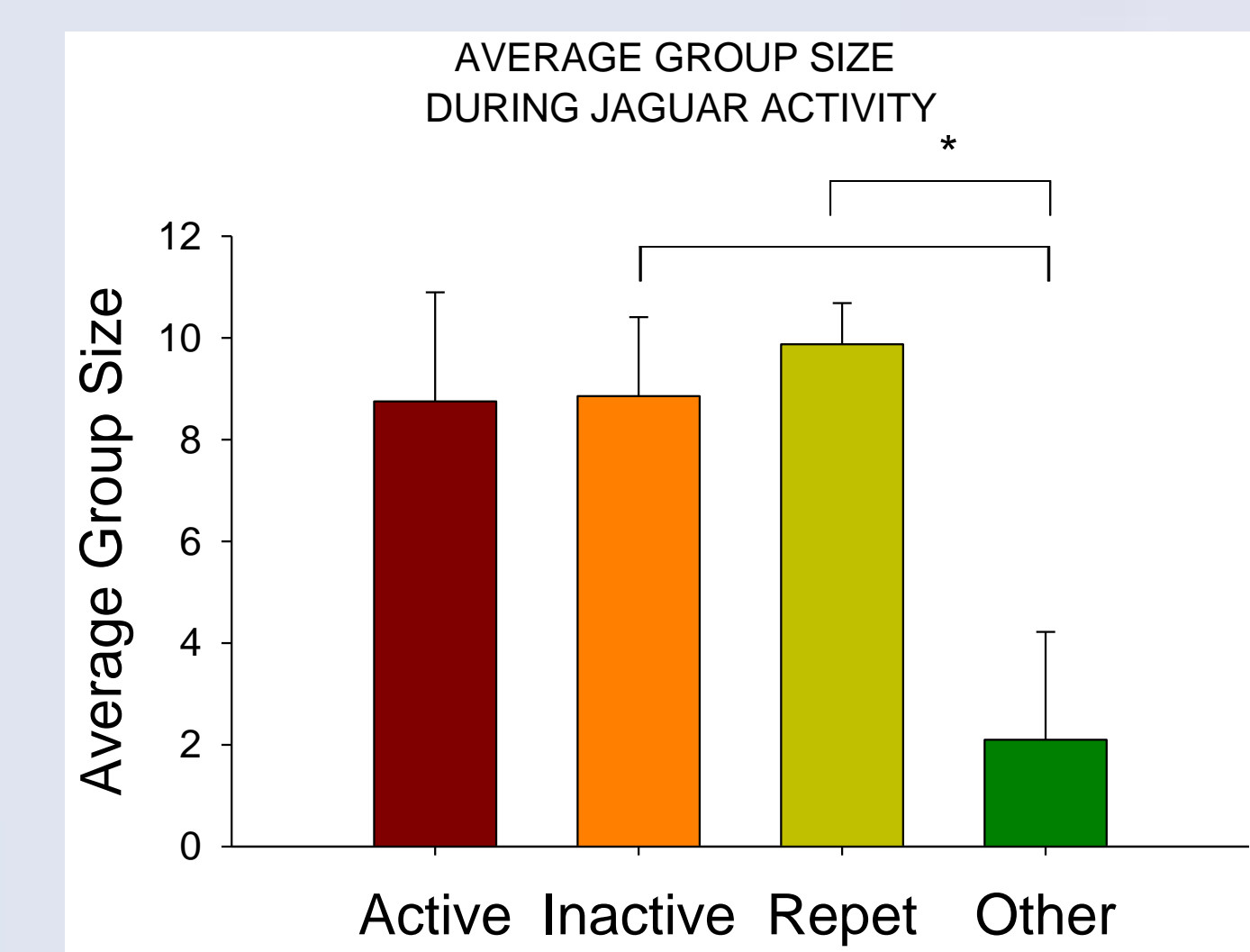
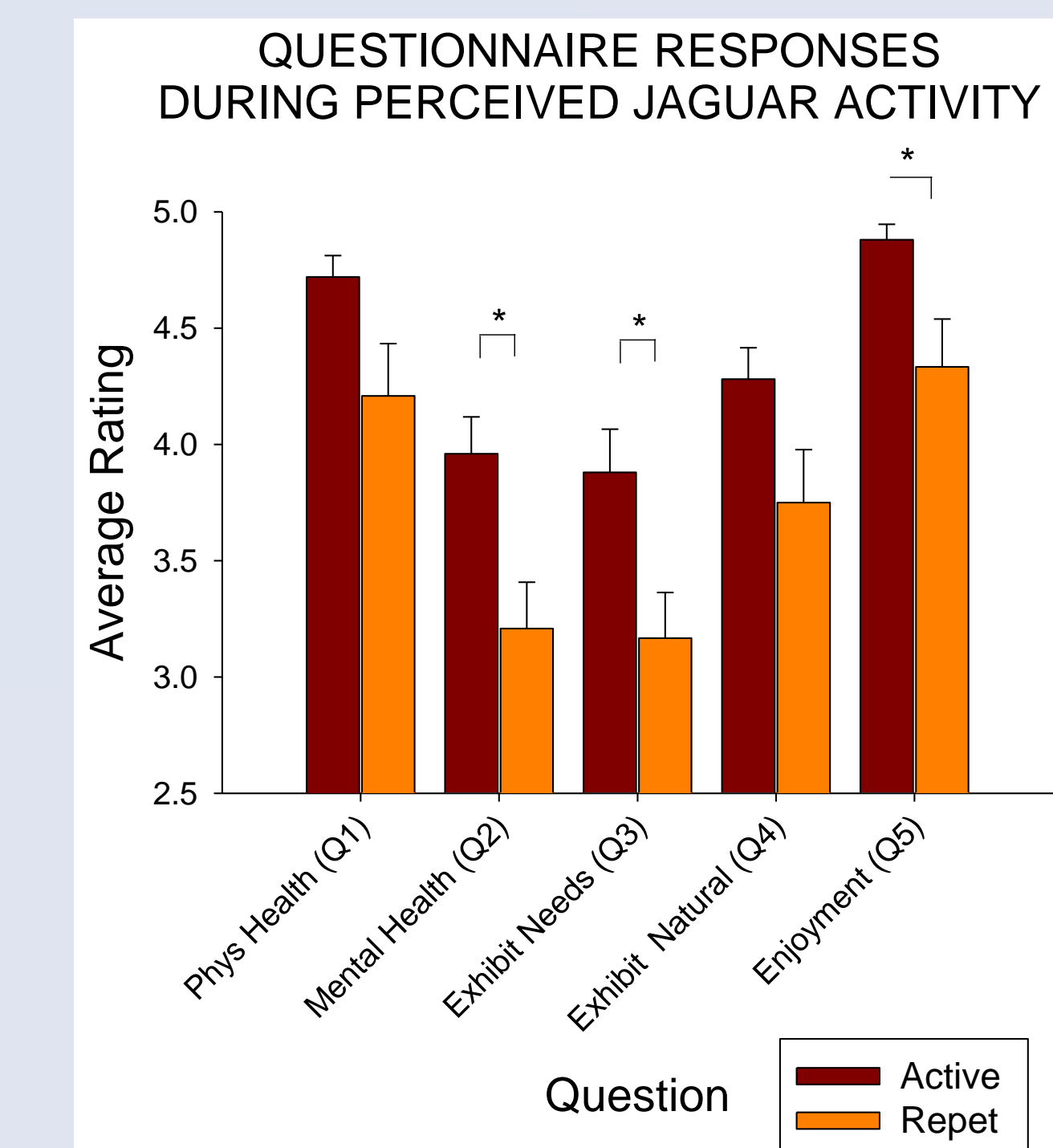
Actual Behavior Recorded	Visitor's Average Perception of Behavior (%)				
	Active	Groom	Inactive	Other	Repetitive
Active	77.7	0.0	7.5	1.3	13.5
Inactive	7.8	1.3	0.0	90.9	0.0
Repetitive	48.0	0.0	1.8	3.3	46.9
Other	2.5	0.0	5.0	90.0	2.5

Average Visitor Perceptions of Jaguar Behaviors

During repetitive sessions, approximately half of the visitors surveyed perceived repetitive behaviors to be repetitive and the other half thought they were active. The questionnaire responses were compared from these two groups of visitors to see how their perceptions of animal behaviors influenced their ratings of the animal, the exhibit and their enjoyment.



Solid lines with asterisks are statistically significant ($p < .05$) differences between groups, dotted lines with asterisks are approaching significance ($p < .10$).



In terms of visitor behaviors, the largest group sizes formed and the longest times were spent in the exhibit when the jaguar was present and doing any type of behavior as opposed to when it is out of sight.

Conclusion

• Animal behaviors do appear to influence how visitors behave and their perceptions of the animal's wellbeing, the exhibit and their enjoyment. Visitors rated all questions more positively when the jaguar was engaged in active and inactive behaviors and less positively when the animal was repetitive or was out of sight. The largest group sizes formed and the longest time spent in the exhibit occurred when the jaguar was present and engaged in any behavior as opposed to when it was out of sight.

• Zoos and other museological institutions with living collections can introduce elements (interpreters, signage, interactives) that can potentially reinforce positive perceptions of animal behaviors and improve negative ones in order to improve education and conservation goals, missions and the overall visitor experience.

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