

Audio/Visual Enrichment Preferences Noted in Captive Cynomolgus Monkeys (*Macaca fascicularis*)

Bonnie BoWell, Anthony Ferraro, Rachel Strittmatter, and Debra Tiano

Boehringer Ingelheim Pharmaceuticals, Inc

INTRODUCTION

Studies have demonstrated that nonhuman primates (NHPs) prefer to watch video programming rather than be exposed to nothing at all. However, much is still unknown about this form of enrichment. At our facility we have a robust enrichment program that includes the use of DVDs. However, preference for certain types of programming has not been previously demonstrated.

METHODS/MATERIALS

DVDs were chosen at random. Observations were made on 7-8 nonhuman primates (*Macaca fascicularis*) per session. Scan sampling was used at time intervals of three minutes following an initial assessment for baseline behavior and an acclimation to the presence of the observer in the room. A total of twenty seven DVDs, including twelve live action DVDs, twelve animated DVDs, and three DVDs with a mixture of live action and animation were assessed.



ETHOGRAM USED FOR OBSERVATIONS

NONHUMAN PRIMATE DVD BEHAVIORAL OBSERVATIONS

PERFORMED BY:

DVD:

Baseline

0 min 3 min 6 min 9 min 12 min 15 min 18 min

F

P/E

Inv

Gr

Int

St

RN

RW

F= forage

Int= Interaction with others

RW= Resting- watching tv

P= Process/Eat

ST= stereotypy

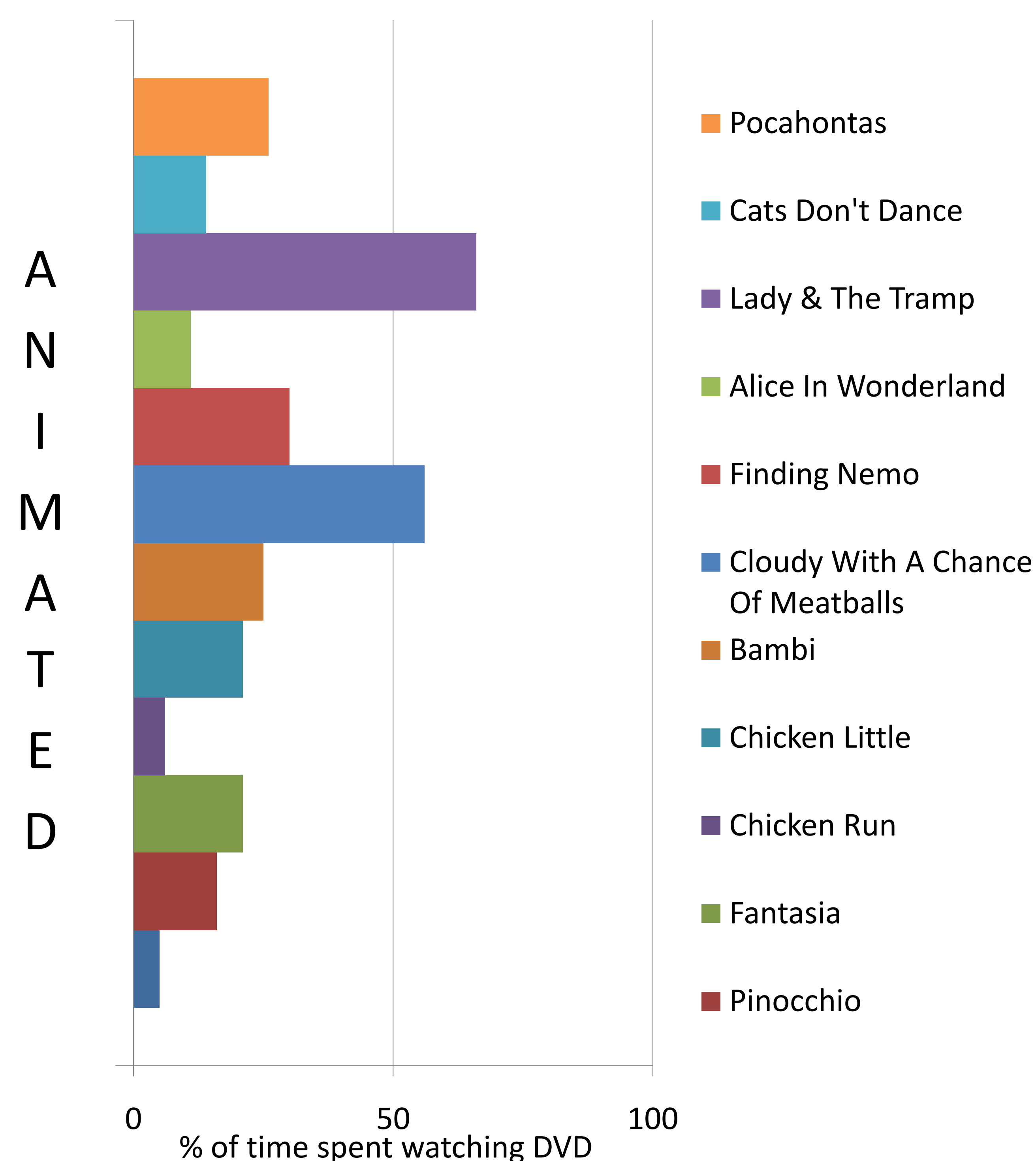
WTV= Interacting with TV

Inv= Investigate cage/toys

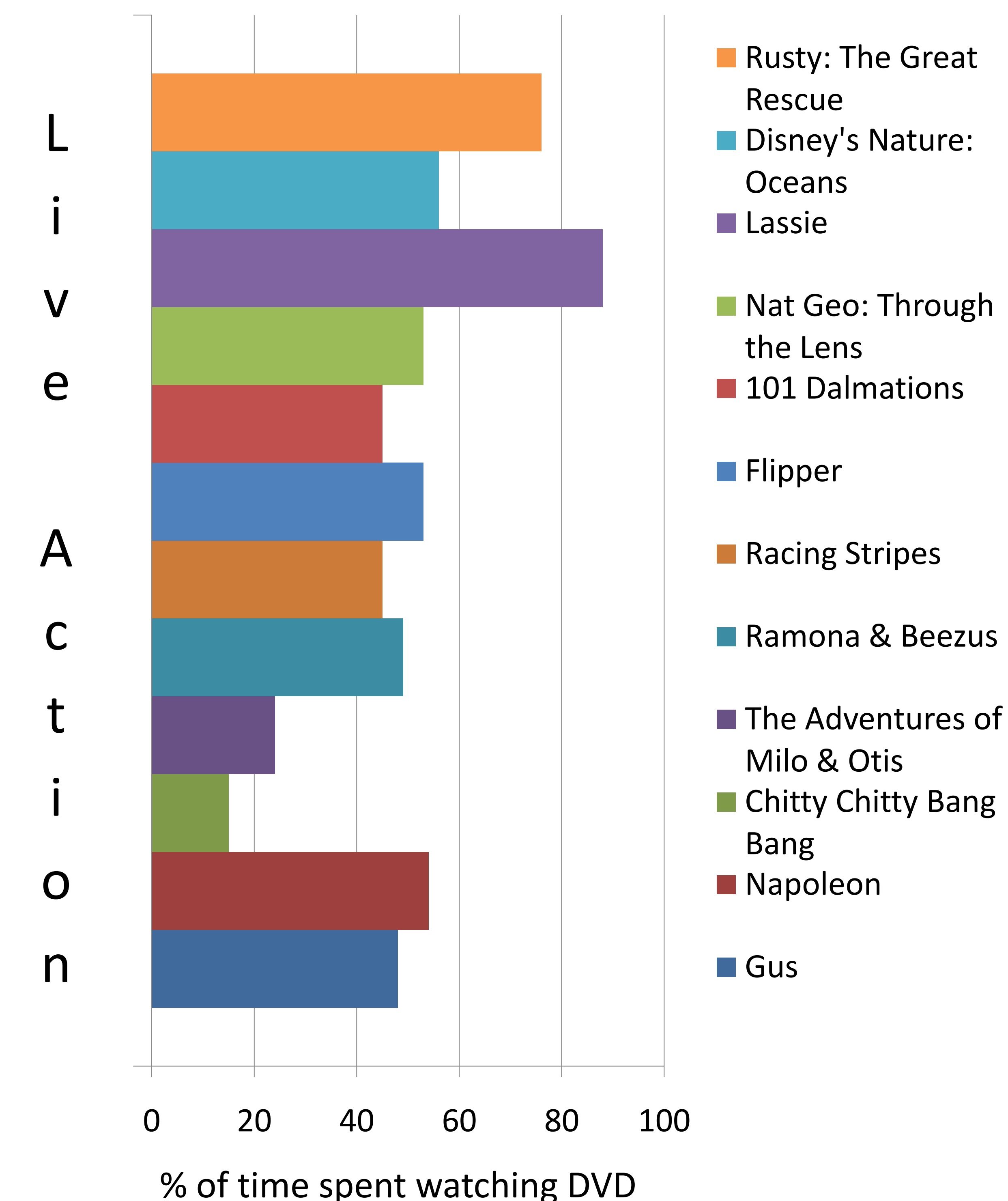
RN= Resting- not watching tv

GR= Grooming self or partner

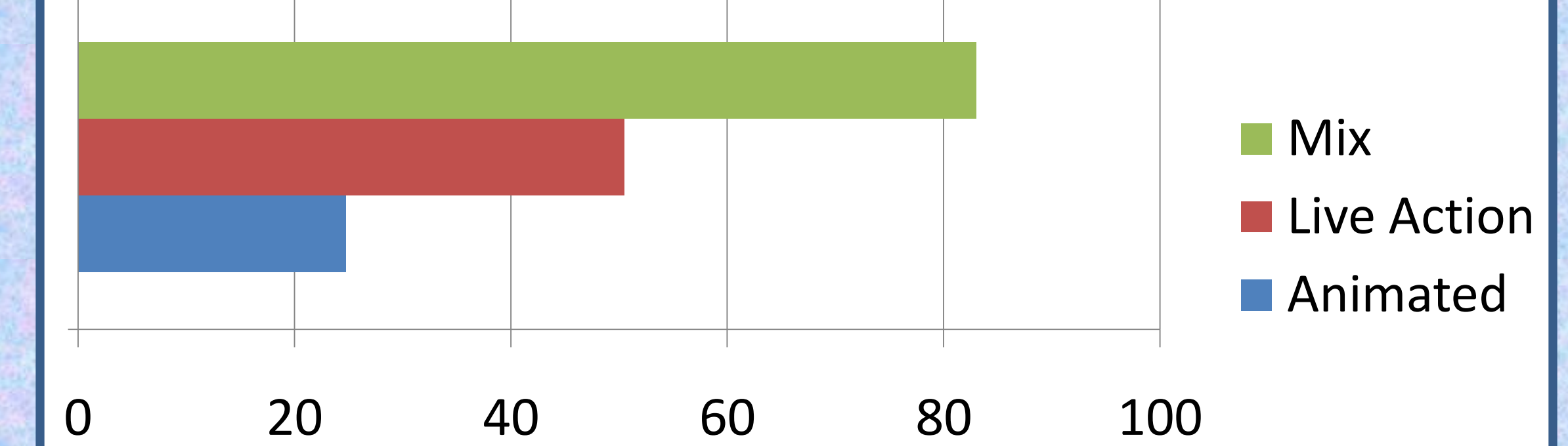
% OF TIME OBSERVED WATCHING ANIMATED DVD



% OF TIME OBSERVED WATCHING LIVE ACTION DVD



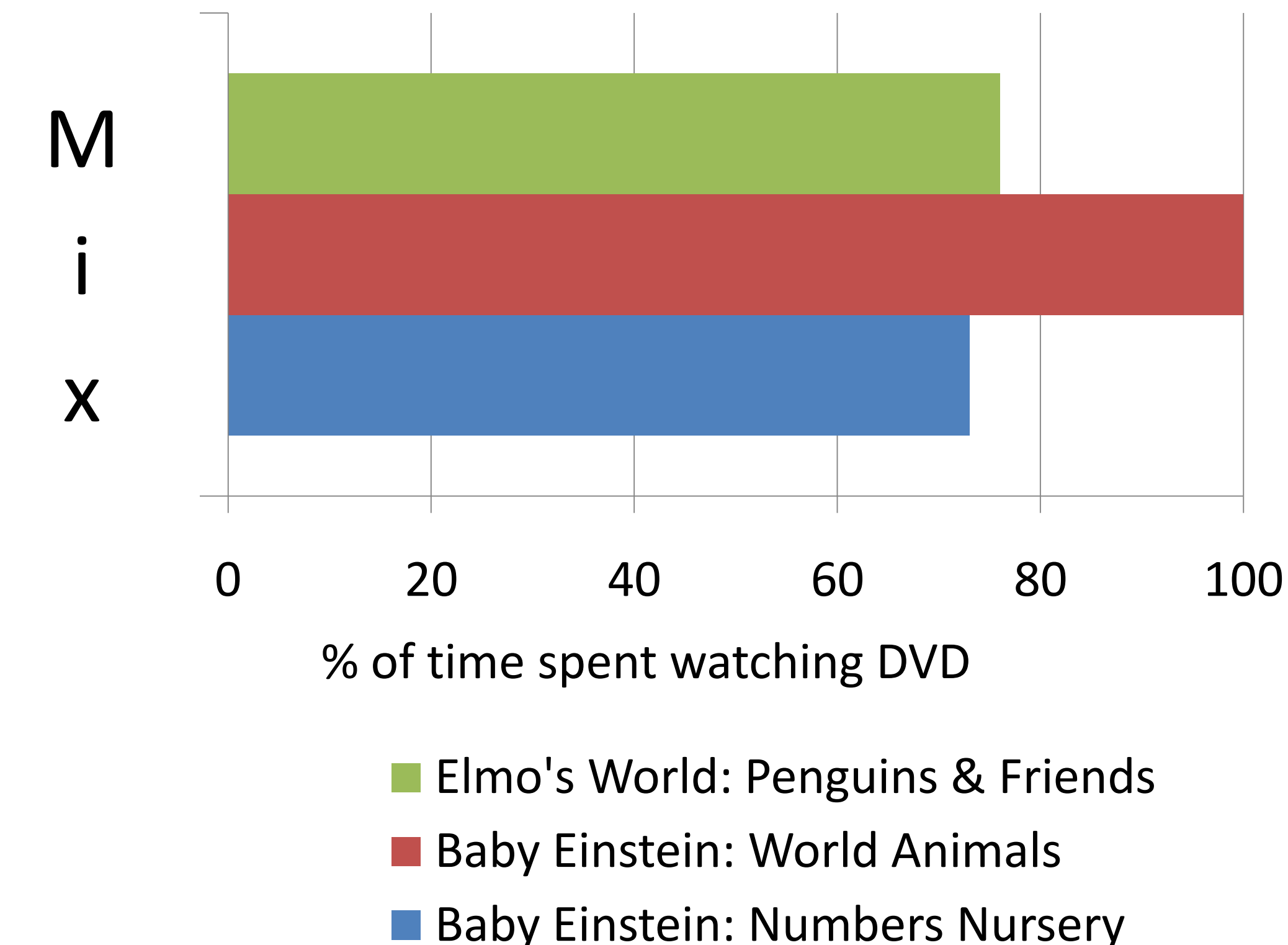
% OF TIME WATCHING DVD BY CATEGORY



RESULTS

- Preference for live action or the mixture of live action/animation over animated DVDs.
- Of the top 50 per cent of DVDs that held the NHPs interest, only two were fully animated.
- The three mixed DVDs (which are aimed at toddlers or very young children) all ranked in the top five.
- Some animals with a history of exhibiting stereotypic behavior, decreased the amount of time spent performing stereotypies when DVDs were playing.

% OF TIME OBSERVED WATCHING MIXED DVD



CONCLUSIONS

As a result of this study, we have been able to adjust our DVD collection to include only the DVDs that are frequently observed and well received by the NHPs on our study. In addition, it had been noted that some primates had a decreased frequency of stereotypies compared to baseline while observing video programming. Therefore, we believe that watching preferred DVDs can decrease time spent performing stereotypies in NHPs. Finally, the preference for "Mixed" programming, indicates that more varied audio-visual stimuli may be preferential to NHPs.