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# A STUDY ON DIURNAL ACTIVITIES OF CAPTIVE CHIMPANZEES FROM THE ZOOLOGICAL GARDEN ALIPORE, INDIA

# Debojyoty Ghosh<sup>1</sup>

<sup>1</sup> Research Assistant, Sundarban Tiger Reserve ORCID: 0000-0002-3478-1867

### **ABSTRACT**

Chimpanzees (Pan troglodytes) are well adapted great apes and best known for the pivotal role in hominid evolution. They are social animals like human. For the conservation purpose, these primates are kept into zoos throughout the world, and India is not an exception. The present study was carried out in The Zoological Garden, Alipore in Kolkata. They show various activities in the exsitu conservation system. The present study was focused on the general diurnal activities of the adult chimpanzees in ex-situ condition and negative interactions of three adult chimpanzees to the visitors in the summer season (March- April, 2019). The observer found different activities with different anthropogenic cues as well as natural cues. Ad Libitum sampling technique was followed by the instantaneous scan sampling [1] for recording data. Each scan took five minutes with next five minute interval immediately. A mobile alarm (device: ASUS zenfone Max) was used for time maintenance to record the data perfectly. Total ten scans had been done per day to fulfill the objectives. Though the study is not concluding, but this type of effort is the very basic of observing the animals in ex-situ condition.

#### **RESULT & DISCUSSION**

Thirteen (13) different kinds of activities along with negative interactions with the visitors were identified and recorded from the instantaneous scan sampling data (Table 1). The activities were categorized into- throwing objects and movements, passivity, bathing, swinging, playing, climbing, foraging, clapping, autogrooming, heterogrooming, offering objects to the visitors, facial expression and keen looking towards the visitors. From the graphical presentation of Fig 1, it is found that Adult male 1 show the activities in varying range rather than Adult male 2 and the female one. Adult female lack these activities, namely- swinging, throwing object- movement, climbing on the poles, clapping, facial expression and keen looking towards visitors.

From Fig 1, the comparative assessment shows that, adult males show a higher percentage in foraging, object throwing, and facial expressions, climbing and swinging on poles. But in case of the female, autogrooming and heterogrooming activities are seen significantly higher than that of the males. They foraged on natural grass, green leaves and provided foods viz. carrots, cabbage, cauliflower etc.

Being annoyed by the activities of some visitors the chimpanzees threw some objects like vegetables ate, stones and even poop. These peculier activities of the chimps had considered under negative interaction with the zoo visitors. Male chimpanzees were observed with poop-throwing activity mostly, rather than the female one. A large variety of tool-use behaviors in chimps was well studied by several researchers [2]. The undesirable poop-throwing activity was well studied by several researchers in captive chimpanzees [3] which agree with the recent findings of the observation. Poop throwing activity is considered as stool in the graphical presentation (Fig 2).

Activity	% Ad male 1	% Ad male 2	% Ad female
Throwing objects -Movement	62.50	37.50	0.00
Passivity	81.82	18.18	100.00
Bathing	63.16	36.84	100.00
Swinging	71.43	28.57	0.00
Playing	50.00	50.00	100.00
Climbing	50.00	50.00	0.00
Foraging	75.00	25.00	100.00
Clapping	100.00	0.00	0.00
Autogrooming	66.67	33.33	100.00

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Heterogrooming	60.00	40.00	50.00
Offering Objects	100.00	0.00	100.00
Facial expression	100.00	0.00	0.00
Keen looking towards visitors	100.00	0.00	0.00

Table 1: General activities of three adult captive chimpanzees.

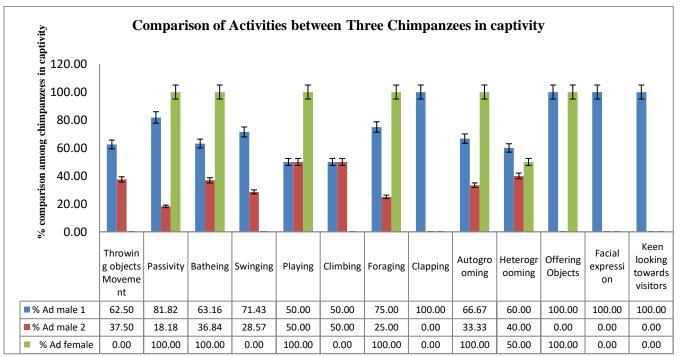


Fig 1: Comparative study of three captive chimps with 5% SE.

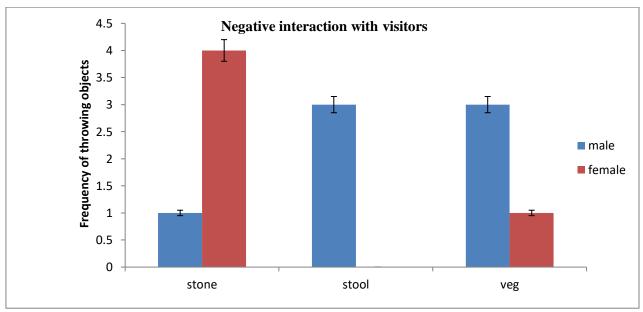


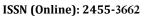
Fig 2: Negative interaction by the compiled data on two males and one female chimpanzees with the visitors with 5% SE.

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