

PRELIMINARY INVESTIGATION OF SOCIAL AFFILIATION AS CORRELATES OF HORMONES IN FEMALE CAPTIVE CAPUCHIN MONKEYS (*CEBUS APELLA*).

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Social behaviour is both determined by and predictive of hormone secretion. The secretion of steroidal hormones, specifically cortisol, testosterone and oestrogen, offers explanations of social behaviour seen in social systems in the primate order. In previous studies average amounts of these hormones have been correlated with rates of social behaviour, such as intensity of testosterone and aggression. However, due to the transient concentrations of hormones, it would appear that correlation of behavioural variables with mean levels may produce erroneous results. Therefore, illustration of temporally related relationships between hormonal fluctuations and patterns of affiliation within and between individuals may produce more valid results. The present study endeavours to directly correlate observed behaviours and consequent levels of hormones. Animals being observed ($n = 8$) are members of two separate but environmentally similar groups of captive female capuchin monkeys housed at the Living Links to Human Evolution research centre at Edinburgh Zoo. Observed affiliations, such as grooming, playing, approach/avoid and spatial proximity were documented in conjunction with subsequent faecal samples; collected the day after recorded behaviour, to allow for time lag in secretion and excretion of the target hormone. Results will be discussed in terms of social position within and between individuals.

Keywords: Capuchin (*Cebus apella*), Affiliative Behaviour, Faecal Hormones, Social correlates.