



Stereotypy and the Reinforcement of Play Behaviour in
Asian Small Clawed Otters
(*Aonyx cinerea*)

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STATEMENT

This thesis contains no material offered for the award of any other Honours Degree, or material previously published, except where due reference is made in the text.

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ABSTRACT

This 'etho-experimentation' study was aimed at altering the stereotyped behaviour in two Asian small-clawed otters (*Aonyx cinerea*) at the Adelaide Zoo. This was done by reinforcing play behaviour in the otters using the operant conditioning paradigm. The play behaviour took the form of sliding, a behaviour exhibited by otters in the wild. A secondary function of the study, was to determine whether reinforcing a play behaviour, which is intrinsically motivating, would affect the topography of the sliding behaviour. One of the otters (C) fulfilled the operant in the strict sense of the word only. C displayed an aversive reaction to sliding, producing escape/avoidance behaviour on four of the seven occurrences of sliding. The topography of the sliding that did occur did not fulfil the criterion of sliding-as-play. The otter C exhibited 'communicative intentionality' during the shaping and conditioning procedure. The other otter (D) appeared to learn by observation, shaping to part of the operant criteria. The frequency of the stereotyped behaviour was not affected by the procedure, however the topography of the stereotyped behaviour of C was altered to include single non-repetitive paces. When the behaviour frequencies of the experimental pair of otters were compared to another pair of otters, who did not exhibit stereotyped behaviour, it was found that the otters exhibiting stereotyped behaviour performed roughly the same amount of active behaviours as the control pair but, spent less time sleeping and resting. Play and nesting behaviours were found lacking in the experimental pair.

It was concluded that there was an environmental and a social effect upon the production of stereotyped behaviour. As play behaviour was lacking in the otters exhibiting stereotypy the attempt to potentiate play behaviour was considered an appropriate intervention. It was suggested that future research may look at the variables of: dominance between otters, geographical variables and potentiating play behaviour in the form of sliding, introduced gradually, or the introduction of objects which would encourage manipulative play.