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STUDY OF PLAY BEHAVIOUR OF DEER FAWN WITH THEIR AGE IN TRINCOMALEE, SRI LANKA

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Abstract

Animals including mammals, fish, and even invertebrates express play behaviour. Although this behaviour has been shown to improve juveniles' physical condition and survival, we do not know how these benefits are achieved. Recent research clearly shows that animal play is an important behavioural phenotype, and that detailed analyses of the phenomenon can help us understand the evolution of social behaviour and the interaction of phylogeny, ecology, and behavioural development. According to the motor training hypothesis, play helps animals develop their motor skills. According to the self-handicapping hypothesis, animals develop cognitive and emotional skills to prepare for the unexpected by using play to practice losing and regaining postural control. We conducted focal observations and recorded videos of play to examine the specific form and timing of play in spotted deer (*Axis axis*) fawns which are present in Trincomalee, to test predictions associated with motor training hypotheses. Our study was on spotted deer fawns that were living in the bushes and caves in the historic Koneswaram Temple sites. The deer which were present in the Deer Park, Sangamiththa Viharaya, Sangamiththa Buddhist Pilgrims rest in Trincomalee, Sri Lanka. They are also spotted deer (*Axis axis ceylonensis)* species. But their behaviour like normal spotted deer of Sri Lanka. Due to different feeding habits, less nutrient availability, predators, and habitat. The play-action, duration of a play bout, fast travel, localized travel, frequency of jump, turns, tail- flag, body twist, body twitch, and knee lift of deer fawns with their age were analysed. Our results suggest a refinement of motor training hypotheses. The play behaviour of spotted deer fawns which were present in the Trincomalee (urban area) also spent more time play, early in the juvenile period like other deer species and mammals. They express their play behaviour according to motor training hypothesis. Juveniles may play to develop similar motor skills rather than species-specific antipredator tactics, with non-functional manoeuvres to promote cognitive and motor skill development during the early juvenile period.

Keywords: s*potted deer, fawns motor skill, play behaviour, Trincomalee*