The effects of the identity of the experimenters on the behavioural response of Montagu's harrier chicks during field monitoring

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Abstract

Human activities are stress factors for animals which perceive them as a predation risk. Animals facing anthropogenic disturbances may exhibit different behavioural responses depending on their perception of the risk. Experimental measures of behavioural, physiological and life history traits may be biased by the disturbance due to experimenter handlings and activities. In this study, we assessed the effects of repeated visits on 16 nests of Montagu's harrier ($Circus\ pygargus$) on the behavioural responses of chicks, by changing or not the identity of experimenters at each visit. These nests were divided into two groups: Group A = nests were visited by the same three experimenters at each visit and Group B = nests were visited by three different experimenters at each visit. Nests were visited four times. We noted that the two groups of experimenters had different effects on chick behaviours depending on the order of nest visits. Contrary to our hypothesis, handling by the same persons at each visit did not reduce aggressive behaviours (scores of movements and attacks with beak and claws) of the chicks towards experimenters. These results suggest that the identity of the experimenters may affect the development of the behaviour of the chicks and are discussed for their implication in studies of conservation biology.

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