

The effect of blindfolding and swaddling on the stress response to handling in domestic rabbits

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Abstract

Stress during handling can negatively impact the welfare of an animal. Gradual habituation or systematic desensitisation can reduce this but is not always possible. Blindfolding has been shown to decrease stress indicators, including heart rate and struggling in cattle (*Bos taurus*), but has not been studied in domestic rabbits (*Oryctolagus cuniculus*). We surveyed 49 wildlife rescues, rehabilitators and veterinarians, and found that blindfolding and swaddling are widely used and believed to reduce stress and struggling in rabbits. However, these methods may simply preclude escape and result in sensitisation over repeated exposure. We next conducted a controlled trial investigating the effects of blindfolding and swaddling repeatedly over five days on behavioural and physiological indicators of stress in 40 domestic rabbits. Neither blindfolding nor swaddling had significant impacts on heart or respiratory rate, compared to a partial hood control treatment, which involved similar levels of manipulation, but without visual or movement restriction. Behavioural responses showed variable trends, eg rabbits were more likely to approach food after handling with swaddling. Baseline levels varied significantly between individuals, suggesting previous experience to be an important determinant. Heart rates were universally high, showing that individuals in this study were stressed by handling to such an extent, that overall, effects of both blindfolding and swaddling on physiological indicators of stress were minimal. We suggest that blindfolding and swaddling may be useful as means of limiting the procedure duration and risk of injury by reducing struggling, but this study provides no evidence that welfare is otherwise improved.

Keywords: animal welfare, blindfolding, handling, rabbit, stress, swaddling