

COMPARISON OF BEHAVIORAL AND PHYSIOLOGICAL STATE IN CASPIAN PONY BEFORE AND AFTER STRESS

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Behavioral scores (BS) offer a non-invasive, objective and easy to use way of assessing welfare in horses. Their development has, however, largely focused on behavioral reactions to stressful events (often induced), and so far no use of physiological measures has been made to underpin and validate the behavioral measures in the Caspian ponies. This study aimed to develop a physiologically validated scale of behavioral indicators of stress for the purpose of welfare. A physiologically validated scale of behavioral and physiological data assessment in the stabled Caspian ponies. To achieve this, behavioral and physiological data were collected from 16 Caspian ponies that underwent routine husbandry procedures. The ponies were divided into two groups, a control and a treatment group (8 each). The ponies in the treatment group took part in a 700 meter race. Analysis of the behavioral data were undertaken by a panel of equestrian industry professionals. Physiological measures (salivary and serum cortisol level) were significantly correlated with the behavioral scores confirming that the scores were meaningful and reflected the physiological stress. The scores offer an easy to use tool for rapid, reliable non-invasive welfare assessment in Caspian ponies, and reduce the need for potentially invasive physiological measures.

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