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FEMALE AND MALE PIGS' PERFORMANCE IN A JUDGMENT BIAS TASK

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Common husbandry practices in industrialized pig farming may compromise the welfare of pigs kept for meat production. This is an incentive to develop and use valid instruments for assessing pigs' welfare. One such instrument is the judgment bias task, which is assumed to provide a measure of affective state. Judgment bias tasks are based on the notion that an animal's current affective state influences its judgment of ambiguous stimuli, e.g. a negative affective state will produce a pessimistic judgment of an ambiguous stimulus. Judgment bias tasks have previously been applied to pigs of both sexes, without systematically addressing possible sex effects. These studies produced mixed results, warranting further investigation of pigs' baseline performance in judgment bias tasks. The present study compared the performance of ten female and ten male pigs, socially housed in an enriched environment, in an active choice judgment bias task.

Pigs were trained to associate a 'positive' tone-cue with a large food reward, available in a designated goal-box. A 'negative' tone-cue was associated with a smaller food reward in another goal-box. After completing training on these tone-cues, pigs were presented with three different ambiguous tone-cues with frequencies between the two previously used tones. Approaches to the 'positive' or 'negative' goal-boxes in response to ambiguous tones were recorded as optimistic or pessimistic responses.

Both females and males displayed a slightly optimistic judgment bias. This low level of optimism in spite of (social) enrichment could have been caused by a decrease in optimistic responses as testing progressed. The pigs may have learned about the unrewarded outcome of ambiguous cues, rendering these tone-cues no longer ambiguous, but predicting a negative outcome (no reward). Loss of ambiguity could lead to incorrect conclusions about the pigs' affective state. Further improvement of the judgment bias task as a welfare indicator is deemed necessary.