



Project Number & Title 1C 120 HUMAN ENRICHMENT PROGRAM FOR BREEDING SOWS: PROOF OF CONCEPT

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Aims and Objectives The objective was to investigate the effect of daily short term (2 minutes) human enrichment (HE) of group housed gestating sows on their stress resilience, emotionality and reproductive performance. The study involved 360 sows over two replicates and also investigated the effect of parity (P1 and 2 and P3 and older).

Key Findings

Daily human enrichment/interaction with sows had no effect on any measure of stress resilience or reproductive performance.
Human enrichment did however reduce the animals “fear” of humans during routine procedures such as pregnancy testing and vaccination. In one of the two replicates HE also increased serum brain-derived neurotrophic factor (BDNF) concentrations at 5 weeks of gestation. Several studies have shown that environmental enrichment increases BDNF, resulting in higher stress resilience.

Application to Industry

This was a proof of concept study which showed that human enrichment commencing after mixing reduced the fear of humans based on responses to technicians conducting pregnancy testing and vaccinations and in one replicate increased BDNF concentration which is an indicator of improved affective state and higher stress resilience. Provides excellent background information of HE on most indicators of stress resilience and behaviour and suggests further longer term studies are required.