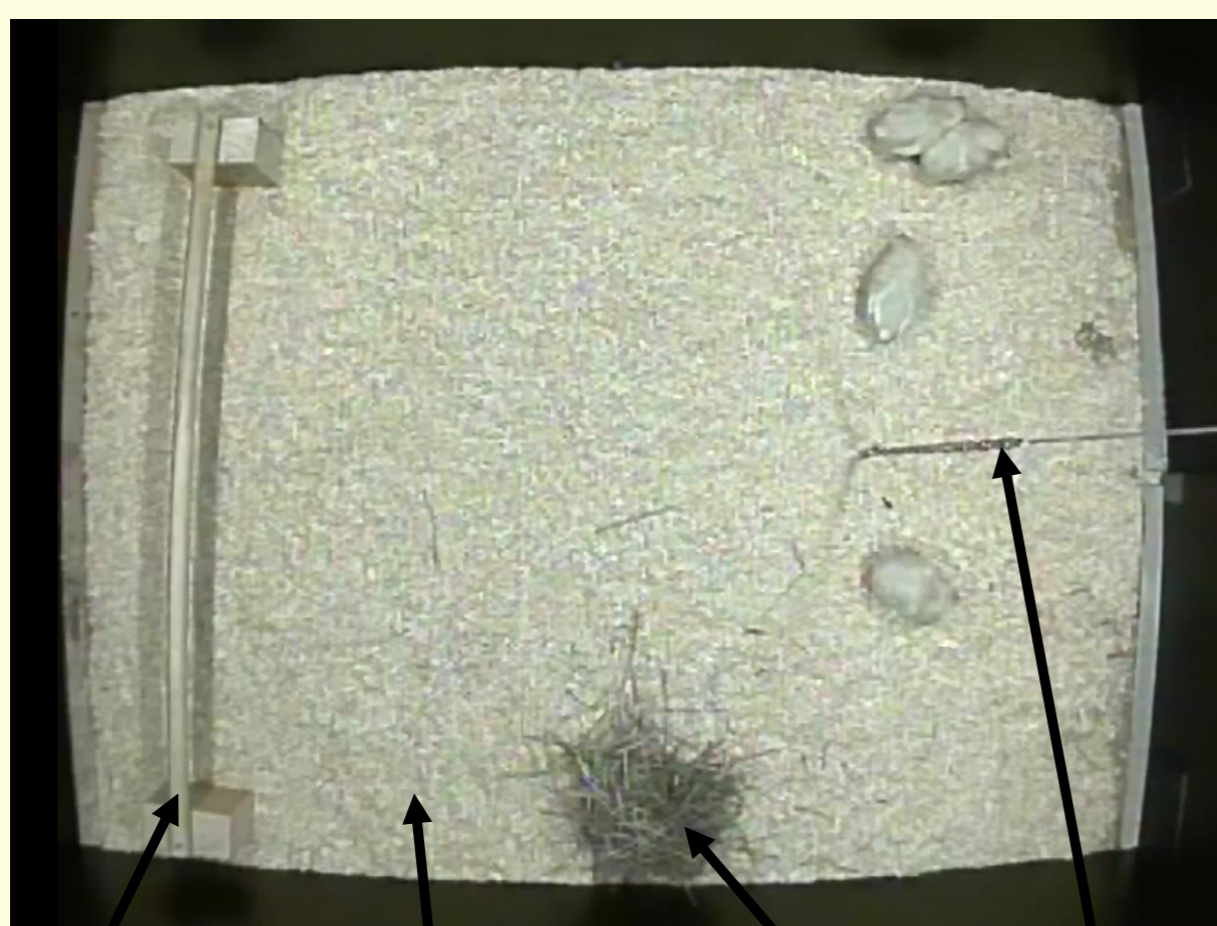
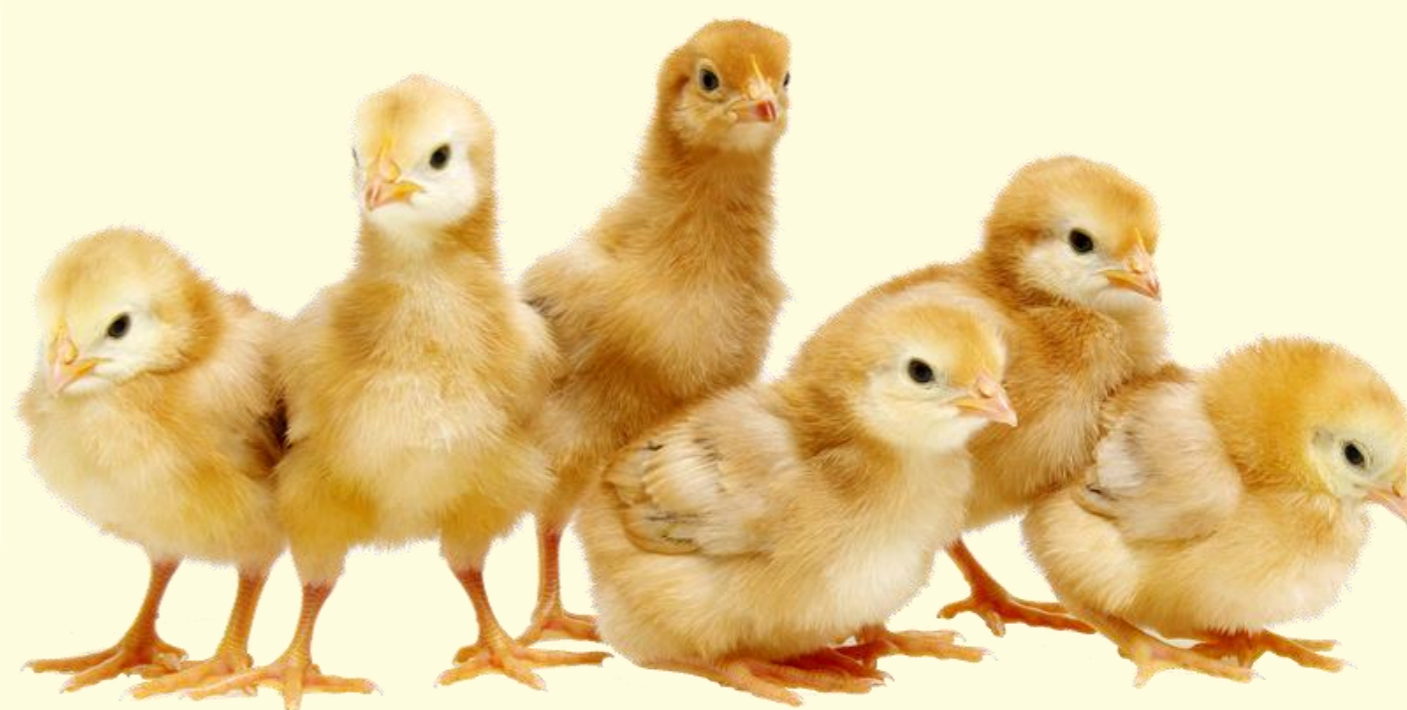


How does hatchery stress affect the development of play behavior?

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Introduction

Play behavior indicates positive experiences in animals and can therefore be used as an indicator of animal welfare. Commercial hatcheries expose chicks to several stressors but so far, knowledge is lacking regarding play in chickens. The aim of this study was therefore to describe the ontogeny of various play behaviors in modern laying hens and to investigate how stress affects play behavior in chicks.



Perch Wood shavings Straw Metal chain

Figure 1. The enriched test arena used in the study.

Results

More play occurred during certain ages than others and both treatments had a similar developmental pattern for all types of play. There was no significant difference between treatments in the amount of play performed but there was a tendency for more play in hatchery chicks.

Methods

Chickens hatched at a hatchery and chickens hatched under controlled conditions at Linköping University were observed twice a week during five weeks in enriched test arenas. Occurrence of play behaviors was recorded and then compared between treatments to determine how play behavior is affected by hatchery stress.

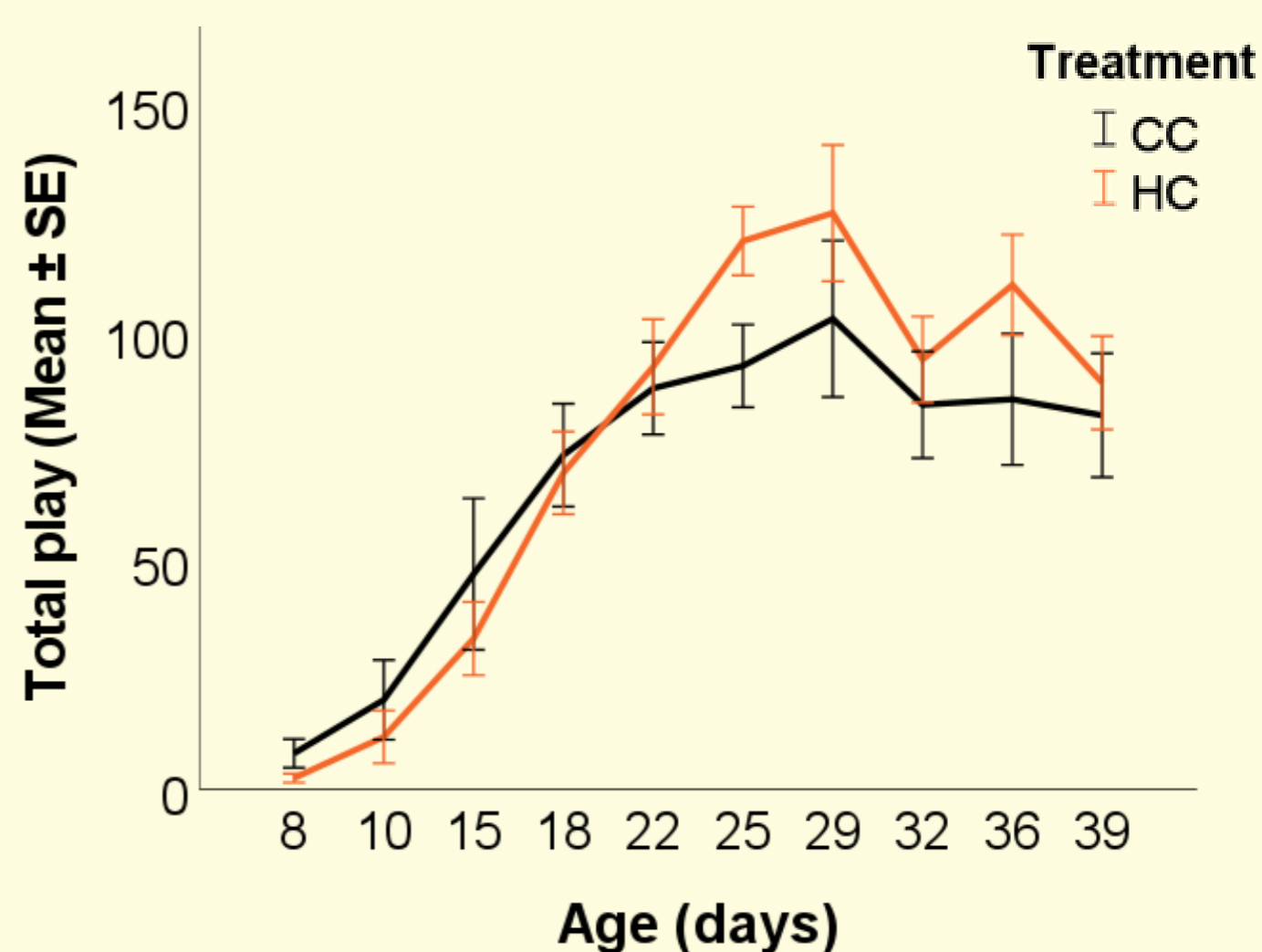


Figure 2. Mean of sum on all observed behaviors (\pm SE) (total play) over time as a comparison between hatchery chicks (HC) and control chicks (CC).

Conclusions

Age is an important factor for play behavior. More play in hatchery chicks contradicts previous studies and was thus a surprising result. The result may suggest compensatory play in hatchery chicks.