

Are chicks coming from commercial hatchery pessimistic?

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Background: Commercial hatchery procedures (dark and noisy incubators, transportation through conveyor belt after hatching, general rough handling) are considered as stressful for egg-laying chicks, impacting their behaviours. The aim of this study was to assess the impact of commercial hatchery procedures on the affective state of those chicks by using cognitive bias (fact that information processing by an individual, in an ambiguous context, are influenced by its emotions)



Methods: We used 30 hatchery chicks coming from commercial hatchery and 30 control chicks coming from Linköping university. Chicks were presented to three pictures: a chick (positive cue), an owl (negative cue) and an ambiguous picture. We compared how long the two groups took to reach the goal line under the different pictures. Pessimistic individual would expect the ambiguous picture to represent a negative cue and would then have longer latencies.



Results: The hatchery group took more time than the control group to reach the goal line under all pictures.

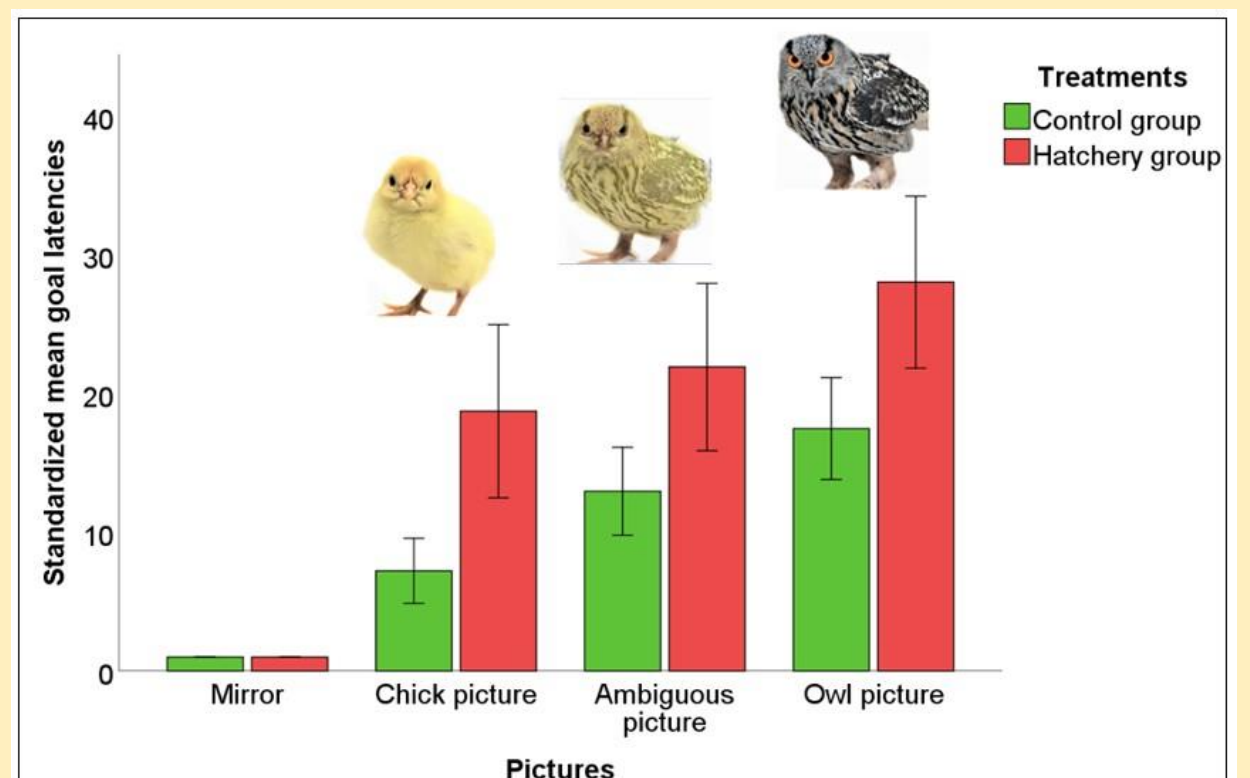


Figure 2: Latencies to reach the goal line under the chick, ambiguous and owl picture, for the control group and the hatchery group.

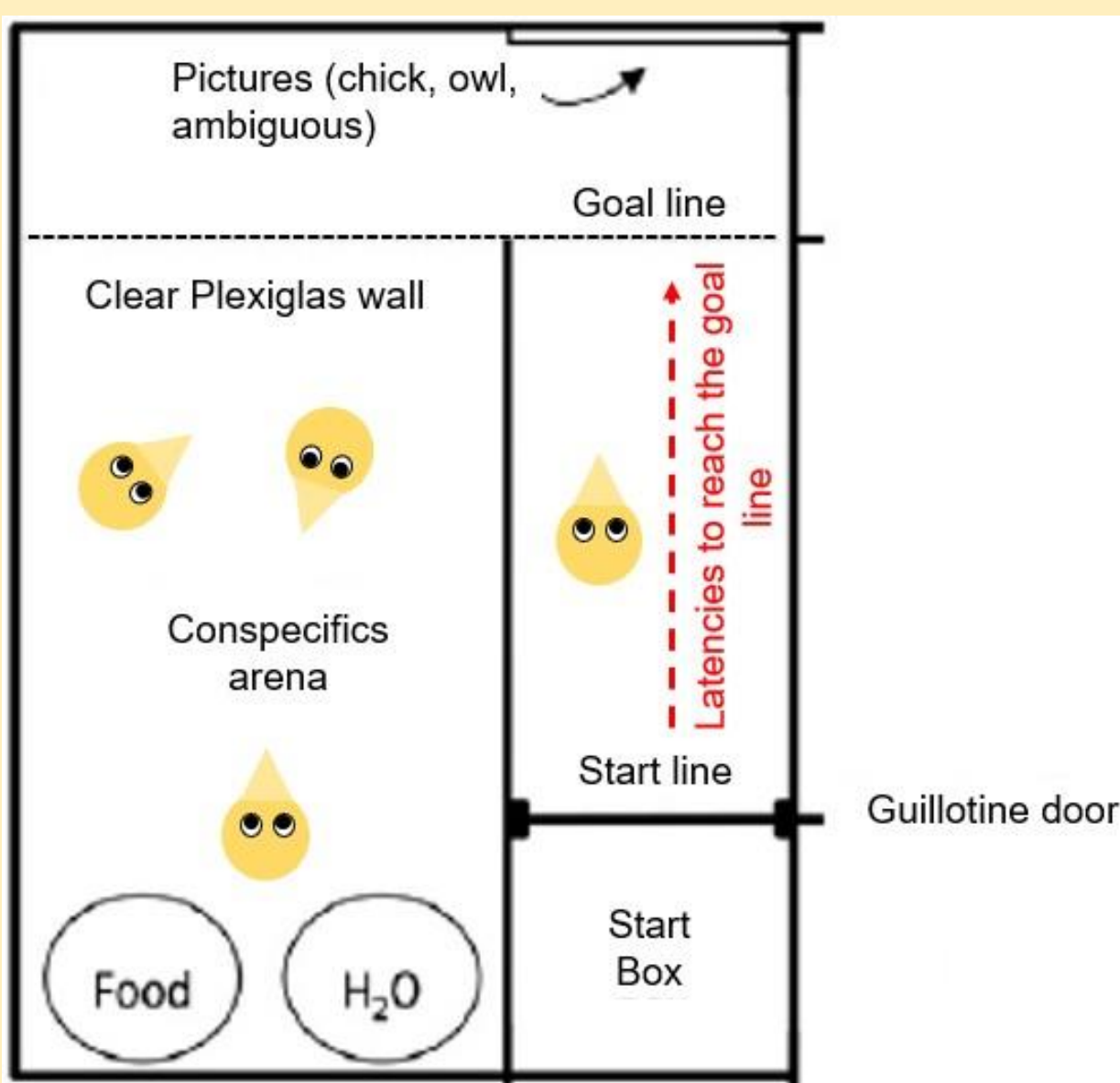


Figure 1: Arena used during the cognitive bias experiment



Conclusion: Longer latencies to reach the goal line under the ambiguous picture suggest that the hatchery group have a more **pessimistic-like judgment**. Because this group also shows longer latencies when exposed to the chick picture, this suggest a less **optimistic-like judgment**. Those two observations suggest that the hatchery chicks have a **depressive affective state**. Thus, commercial hatchery procedures might impact the affective states of the egg-laying chicks. This question the welfare of the chicks coming from commercial production.