Breed differences in the human-chicken relationship

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Background

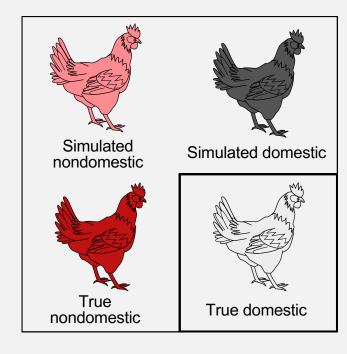
A positive human-animal relationship contributes directly to the welfare of animals in captivity. However, there has been little study into how chickens perceive and interact with their human caretakers.

This project aims to begin describing the human-chicken relationship and compare between domestic and nondomestic breeds.

Breed groups

- Simulated groups:

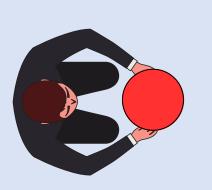
 11 generations of
 selection for high and
 low fear of humans in
 red junglefowl
- Nondomestic:Red junglefowl breed
- **Domestic**: White Leghorn breed



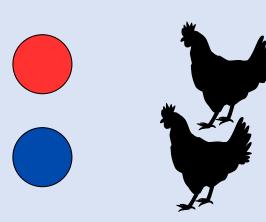
Methods

After familiarizing the birds to my presence, each breed group was tested to assess how their behavior was affected by human presence

The birds were shown a colored bowl to assess **attentiveness**

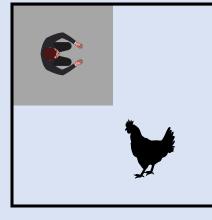


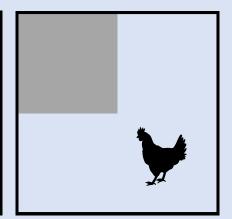


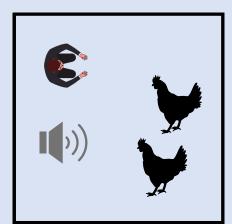


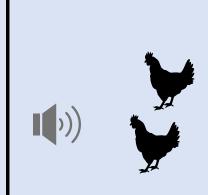
The birds were presented with colored bowls to assess social referencing

The birds were introduced to an arena to assess **exploratory behavior** with and without human presence



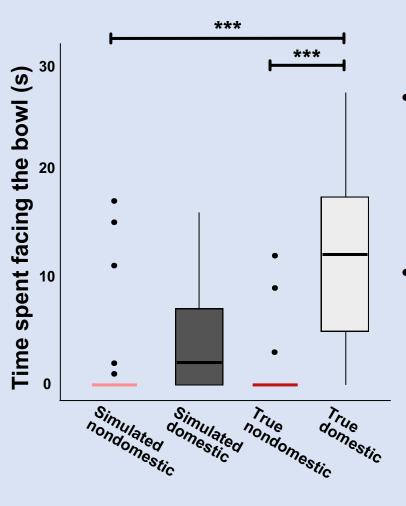




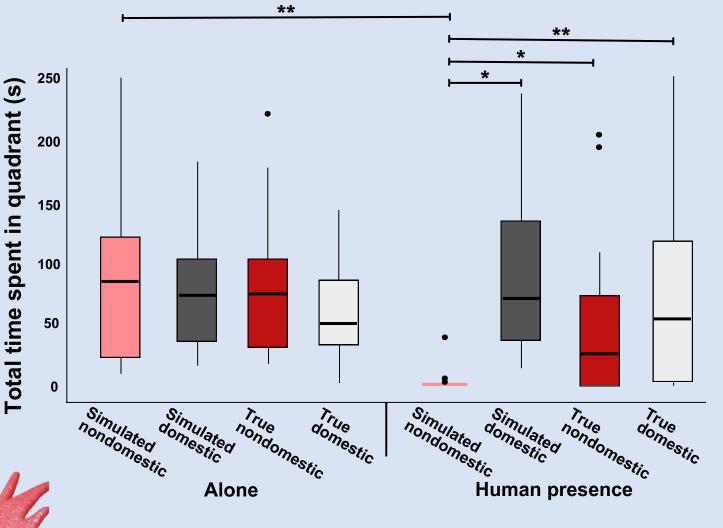


A sudden noise was played to assess **freezing behavior** with and without human presence

Results



- The domestic breed was the most attentive to the human
- The domestic breed was also the most eager to engage with the bowl tasks



- The simulated nondomestic breed avoided proximity to the human more than the other breeds
- The true nondomestic breed was less active in human presence
- Exploratory behaviors were unchanged in both the simulated and true domestic breeds

Conclusion

The domestic breed was more engaged with the human. Behavior in a stressful situation was unaffected by human presence.

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