Effect of daytime and age on the approach and avoidance behaviour of commercial broiler chicken

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BACKGROUND
Protocols assessing the on-farm welfare status (Welfare Quality®) have implemented the assessment of the human-animal-relationship, however, detailed knowledge about limitations of the applied tests is scare.

OBJECTIVE
This study aimed at investigating variables that might influence the performance of commercial broiler chicken in applied fear tests.

METHODS
On-farm studies were carried out in 14 commercial meat chicken flocks of three Danish and one Dutch producer.

A forced and a voluntary approach test were conducted to measure the avoidance distance (AD) and the voluntarily approach (VA) towards an observer:

- during morning and evening hours
- at three different ages (6-12d, 21-24d & 33-36d)
- at four different locations in the house (I-IV)

RESULTS

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<th>Daytime</th>
<th>Overall, no effect on AD or VA</th>
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<td>Age</td>
<td>AD and VA changed depending on age, with a peak at three weeks</td>
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<td>Observer location</td>
<td>VA higher in the area of the entrance door</td>
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<td>AD was not affected</td>
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CONCLUSION
The applied tests appear to be potentially applicable independent of daytime restrictions. However, the birds age and the observer location in the house may influence the outcome of the tests.

RECOMMENDATION
Data collection spots should be evenly distributed in the whole house. Tests applied to birds of different age should not be compared.

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