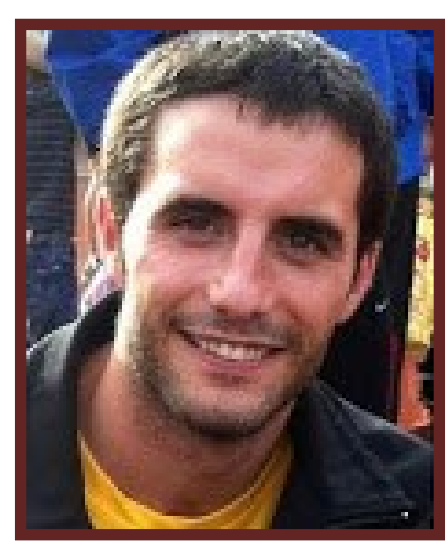


The use of the Welfare Quality® Protocol to compare the welfare of pigs subjected to two different housing conditions



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Aim: to assess the effect of the type of floor, the presence of straw and space allowance on the welfare of pigs using some criteria of the Welfare Quality® protocol

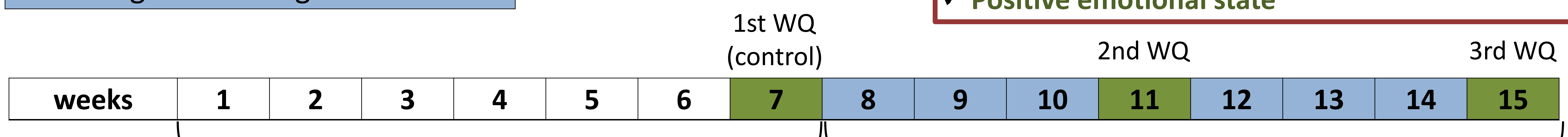
Material and methods:

➤ 44 female pigs of 8 weeks of age grouped in 4 pens

➤ 3 Welfare Quality assessment (WQ) → criteria and measures →

➤ Change of housing conditions

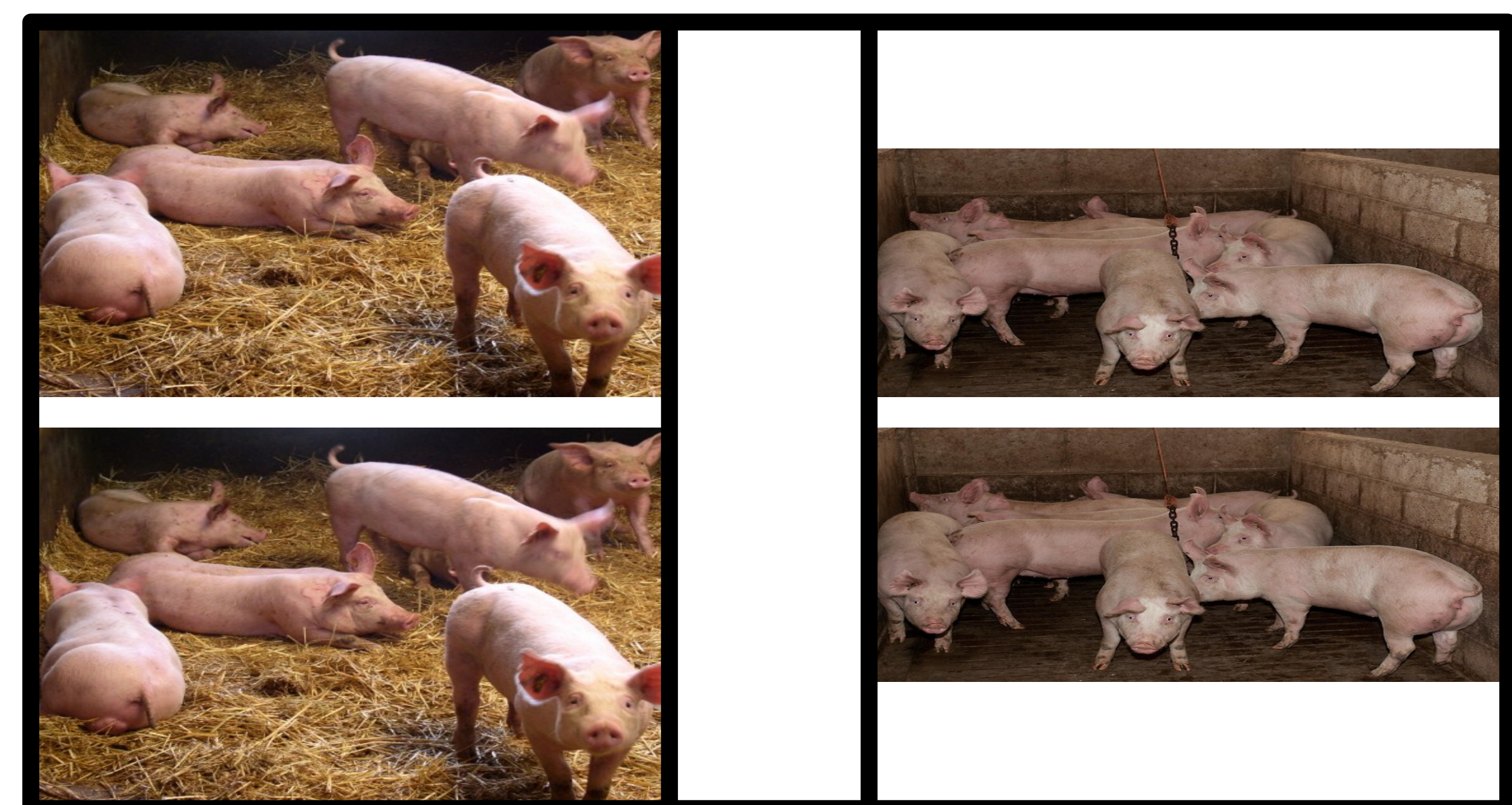
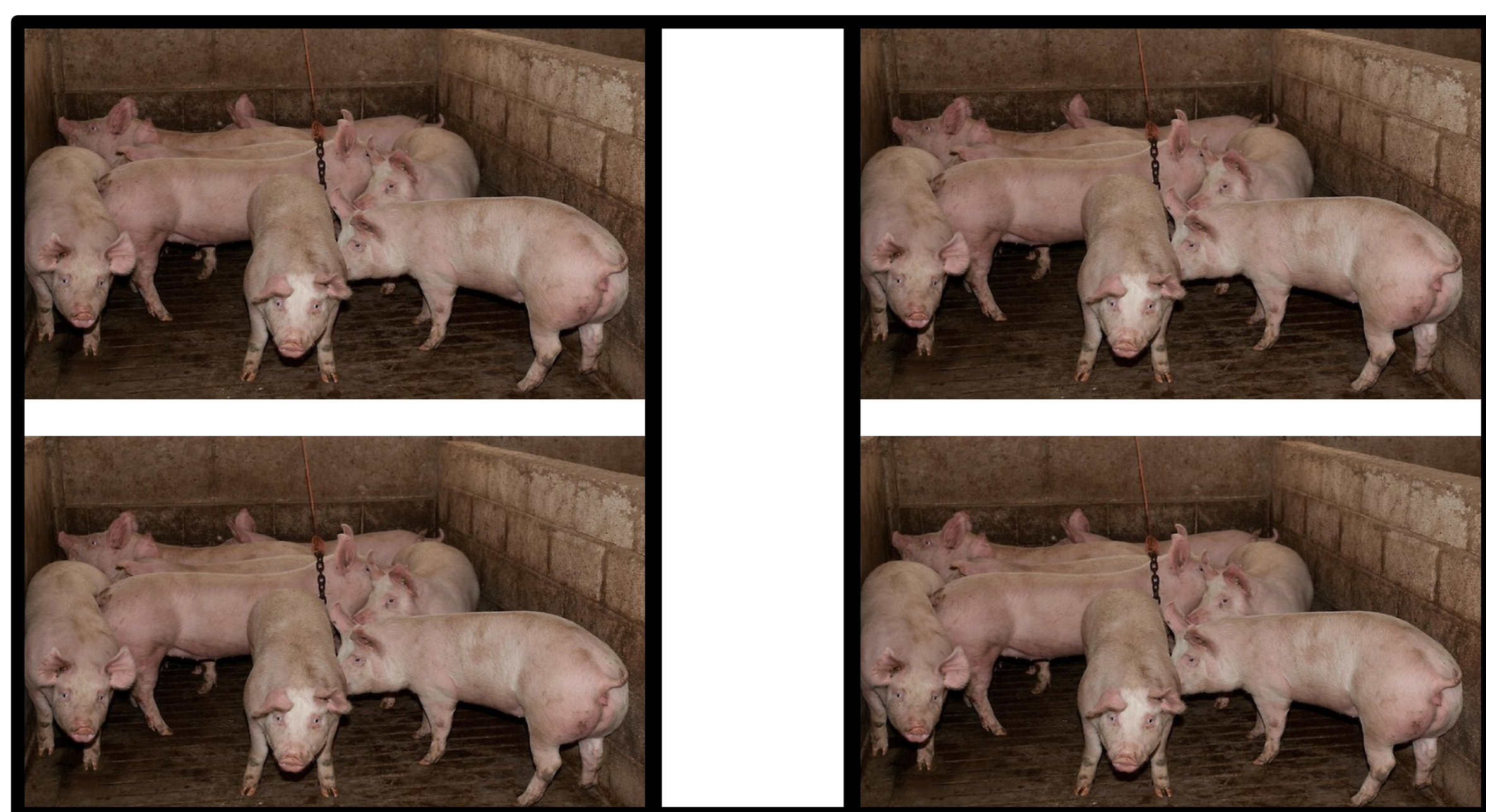
- ✓ **Comfort around resting: bursitis and absence of manure on the body**
- ✓ **Absence of injuries: lameness, wounds on body and tail biting**
- ✓ **Expression of social and exploratory behaviour**
- ✓ **Positive emotional state**



4 pens: full slatted floor density of 1.2 m²/pig

2 pens: **Enriched**
Full concrete floor
700g of straw/pig/2-3 days
Density of 1.2 m²/pig

2 pens: **Barren**
Full slatted floor
Density of 0.7 m²/pig



Results and discussion:

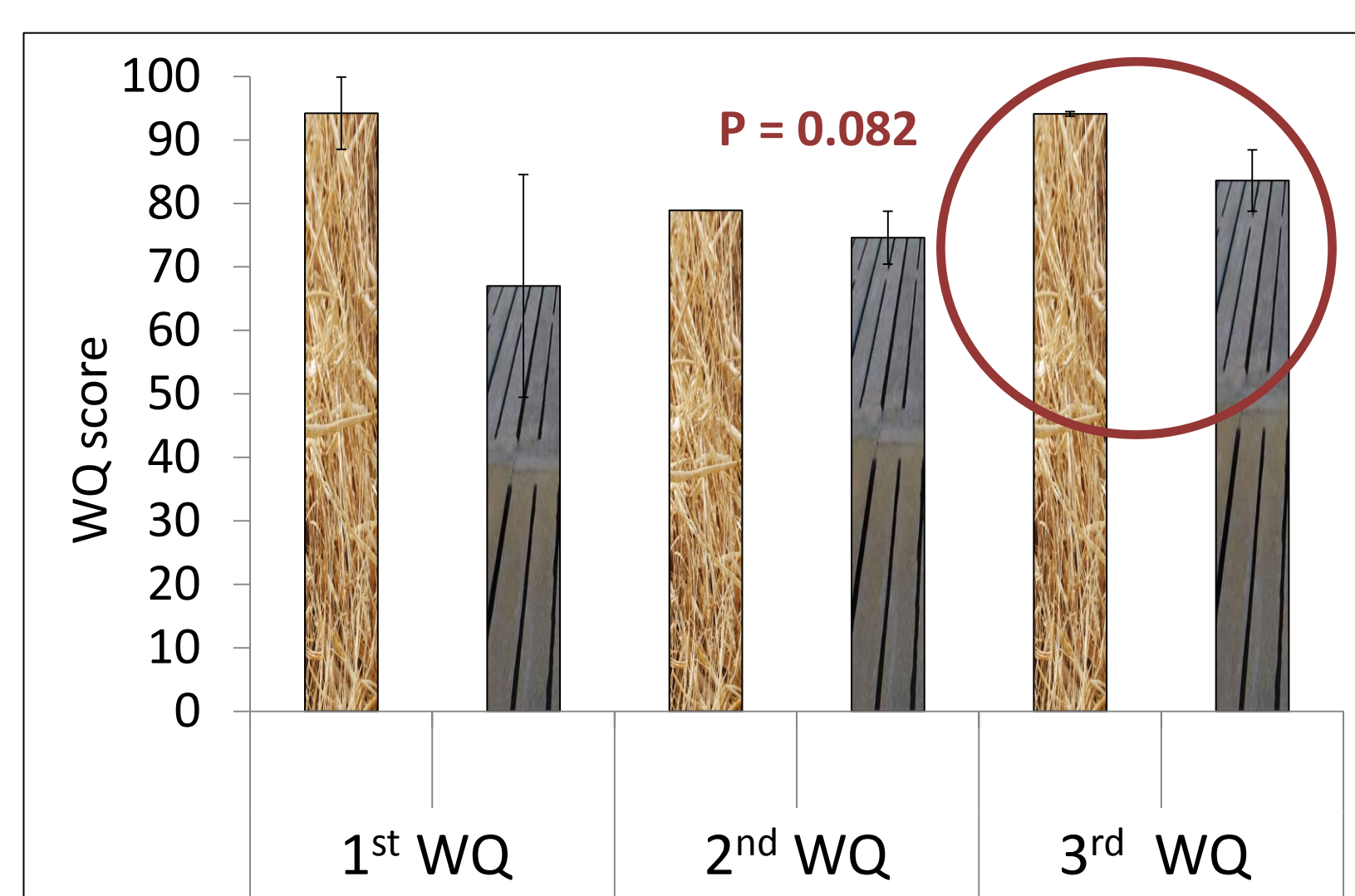


Fig.1. Absence of injuries

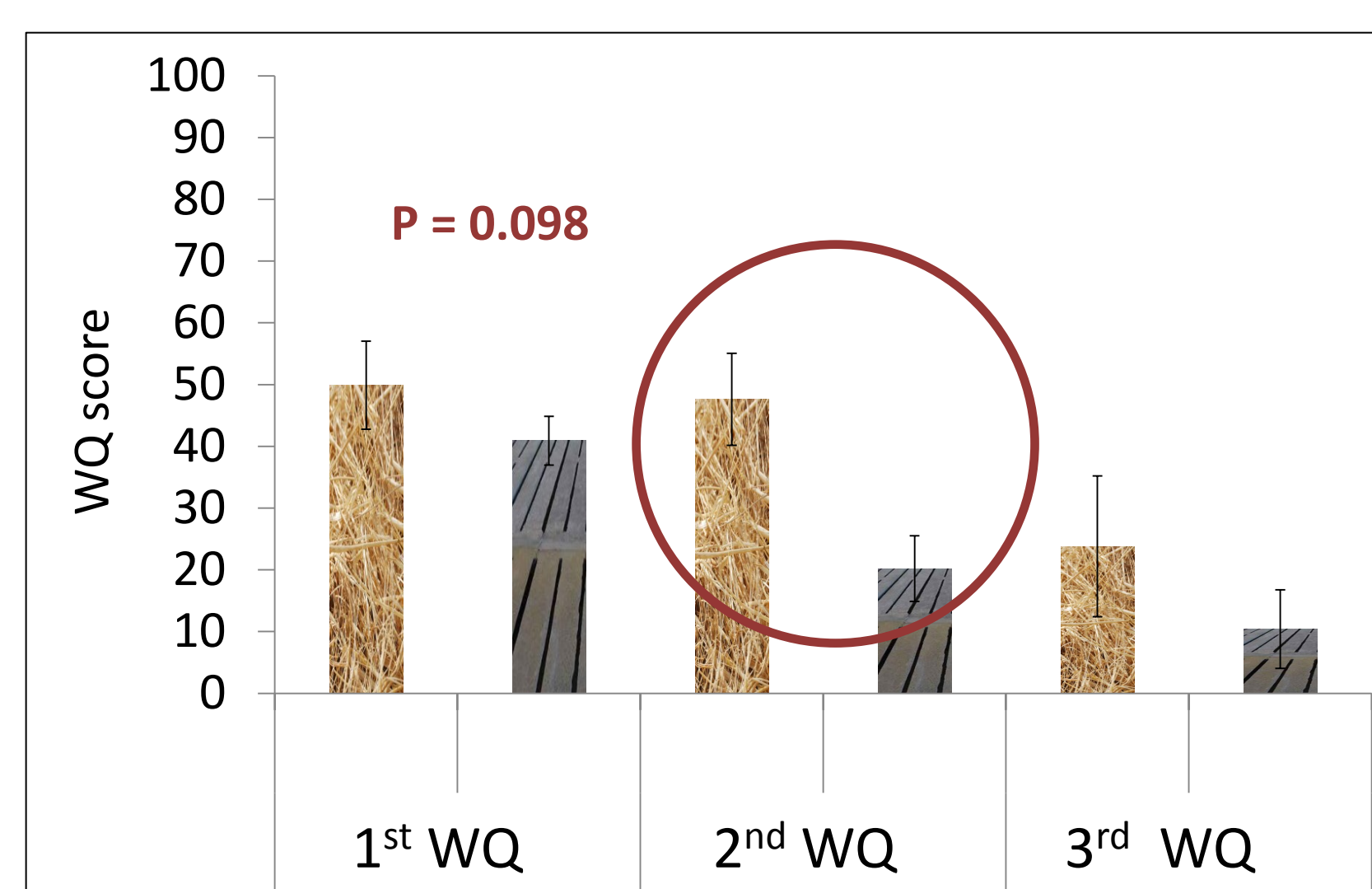


Fig.2. Expression of exploratory behaviour

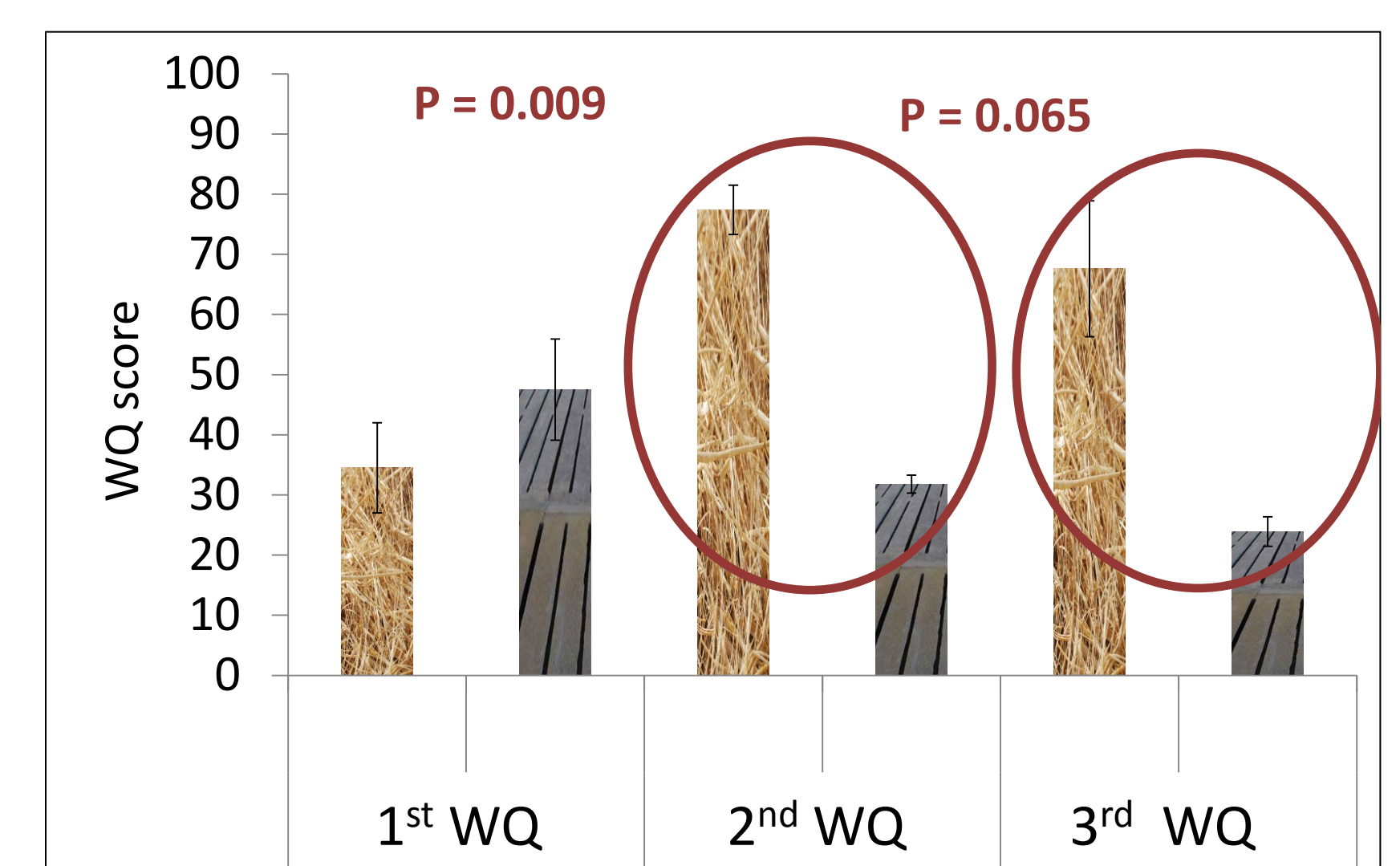


Fig.3. Positive emotional state

Scores are calculated using the Welfare Quality® scoring system (<http://www1.clermont.inra.fr/wq/>)

- **Comfort around resting and expression of social behaviour:** No differences between enriched and barren groups were found.
- The **absence of injuries** was higher in the enriched group during the third WQ, suggesting that the barren environment promotes more injuries probably due to fights for space allowance and the absence of enrichment material.
- The **expression of exploratory behaviour** was higher in the enriched group during the second WQ but not during the third WQ, suggesting that enrichment material promotes exploratory behaviour during the first days but decrease once pigs get used to it.
- The **positive emotional state** was higher in the enriched group in the second WQ and the third WQ, supporting the idea that housing conditions like lower density, concrete floor and presence of straw, could have a positive effect on the emotional state of the pigs.

These results suggest that housing conditions such as more space allowance, concrete floor and presence of straw have a positive effect on the welfare of the pigs and some of the WQ criteria used are a valid tool to assess it.