



Consistency of personality traits from calf to adulthood in dairy cattle

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- Dairy cattle show individual ‘personalities’, but little is known about the stability of these personality traits
- **Our aim:** to assess long-term consistency of personality traits from preweaning to first-lactation

What we did

Two group-housed cohorts were enrolled: Cohort 1: n = 33, Cohort 2: n = 56. Animals were observed individually in 3 behavioural tests:



Novel environment
(empty arena, 30 min)



Human approach
(stationary human, 10 min)



Novel object
(bucket or tent, 15 min)

Animals were tested at 4 developmental periods:



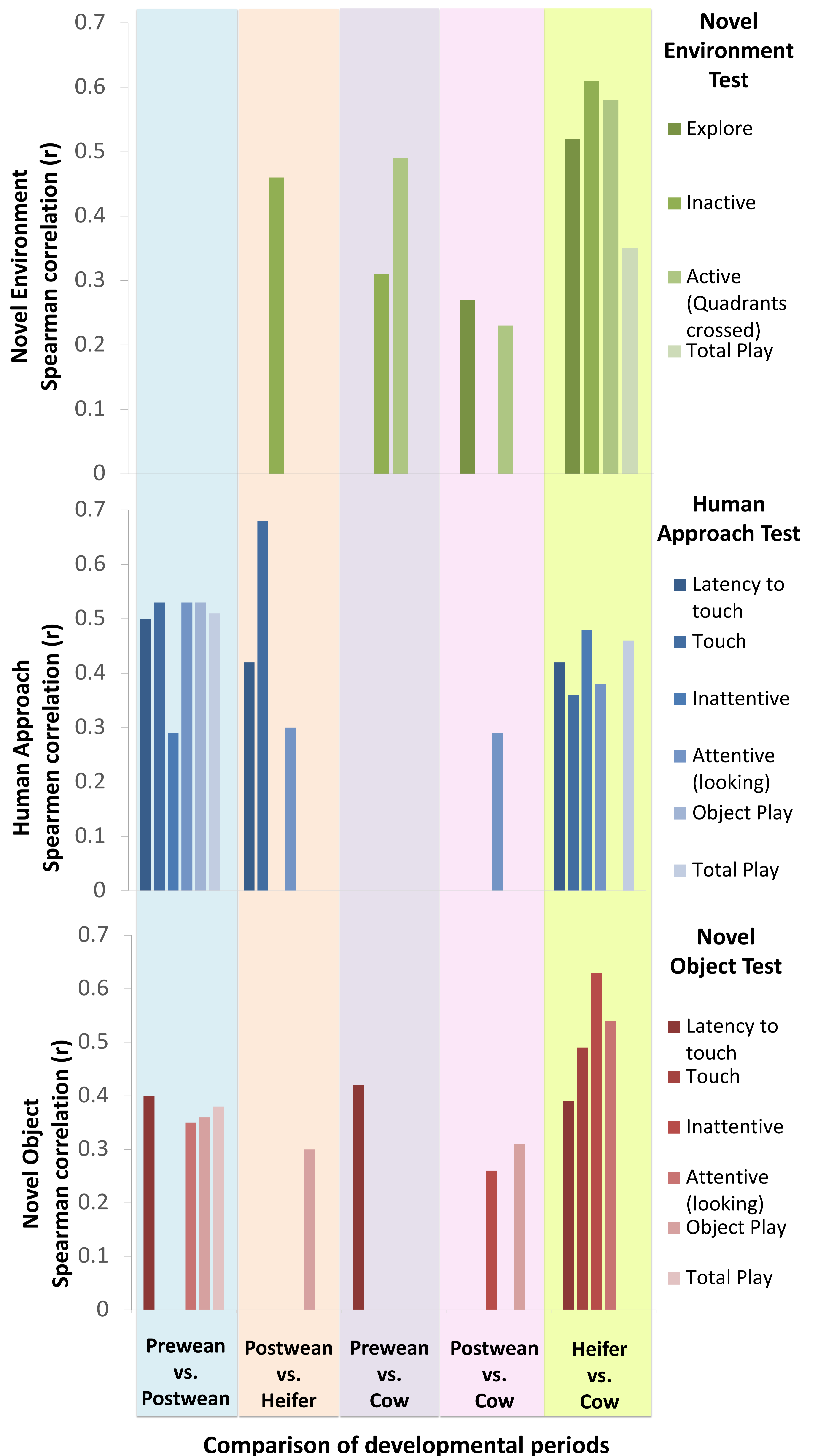
Behaviours were recorded during each test to assess responses to novelty. Spearman Rank correlation was used to assess consistency of the same behaviour over time. Significant ($P < 0.05$) relationships and tendencies are reported.

What we found

Many behaviours in the human approach and novel object tests were consistent between pre- and post-weaning periods, and between heifer and cow period, but less so from pre- or post-weaning to adulthood.

Latency to touch the human or object was correlated at all time periods.

Behaviours recorded in the novel environment test were consistent between heifer and cow periods, but not at other developmental periods.



Conclusion: These results suggest that personality traits in heifers are generally stable during the early and later rearing periods, but are less consistent between 3-mo and 1-yr of age