

# Subjective scoring of rideability by professional riders: - is it linked to objective measures?

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# Aim

- Do professional riders agree in their scoring of rideability?
- Do horse conflict behavior, rein tension, heart rate (HR/HRV) and salivary cortisol reflect the scores given by riders?
- Can we detect rider differences in application of aids (rein tension and saddle pressure)?

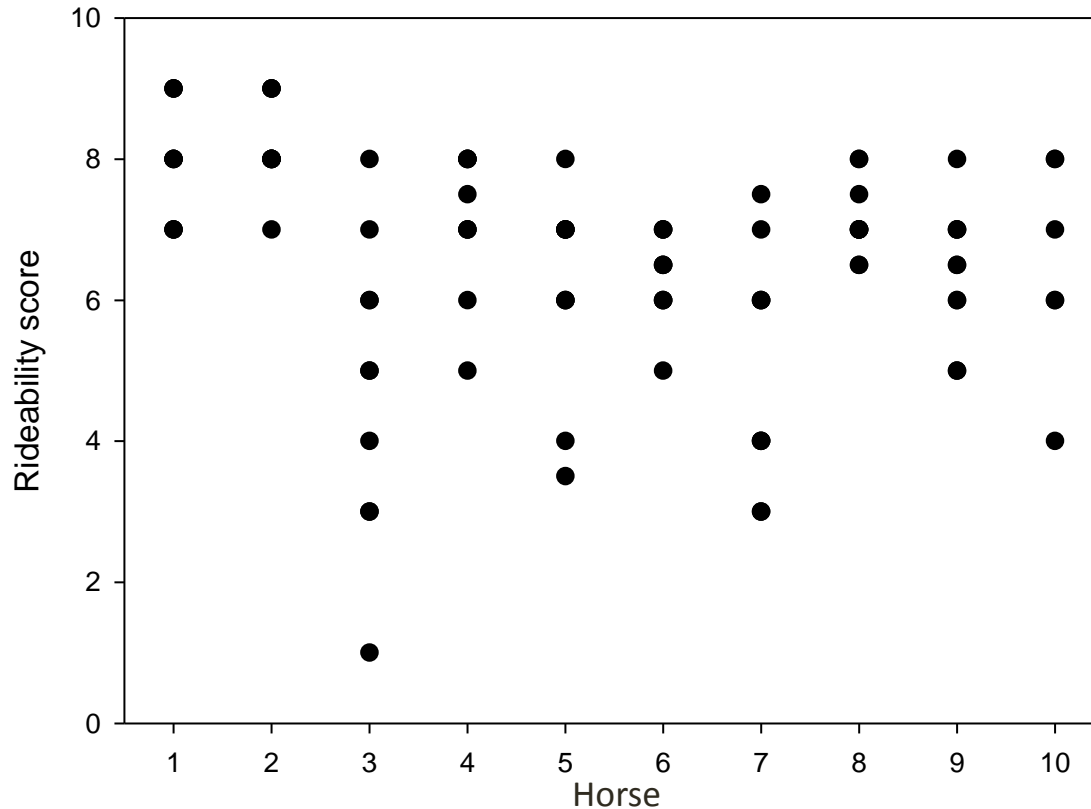


# Methods

- 10 professional female riders
- 10 dressage horses (level M, German scale)
- Test: standard dressage program
- Riders gave each horse a rideability score (1-10)
- Horses were fitted with heart rate monitors, saddle pressure pads, rein tension equipment and motion sensors (poster 22)
- Salivary samples were collected before (-30 min) and after (0 and 5 min) each test for cortisol analysis
- Conflict behaviour was scored from video recordings
  
- Each horse ridden by two riders per day



# Results Rideability scores



Significant effect of conflict behaviour ( $P=0.017$ )

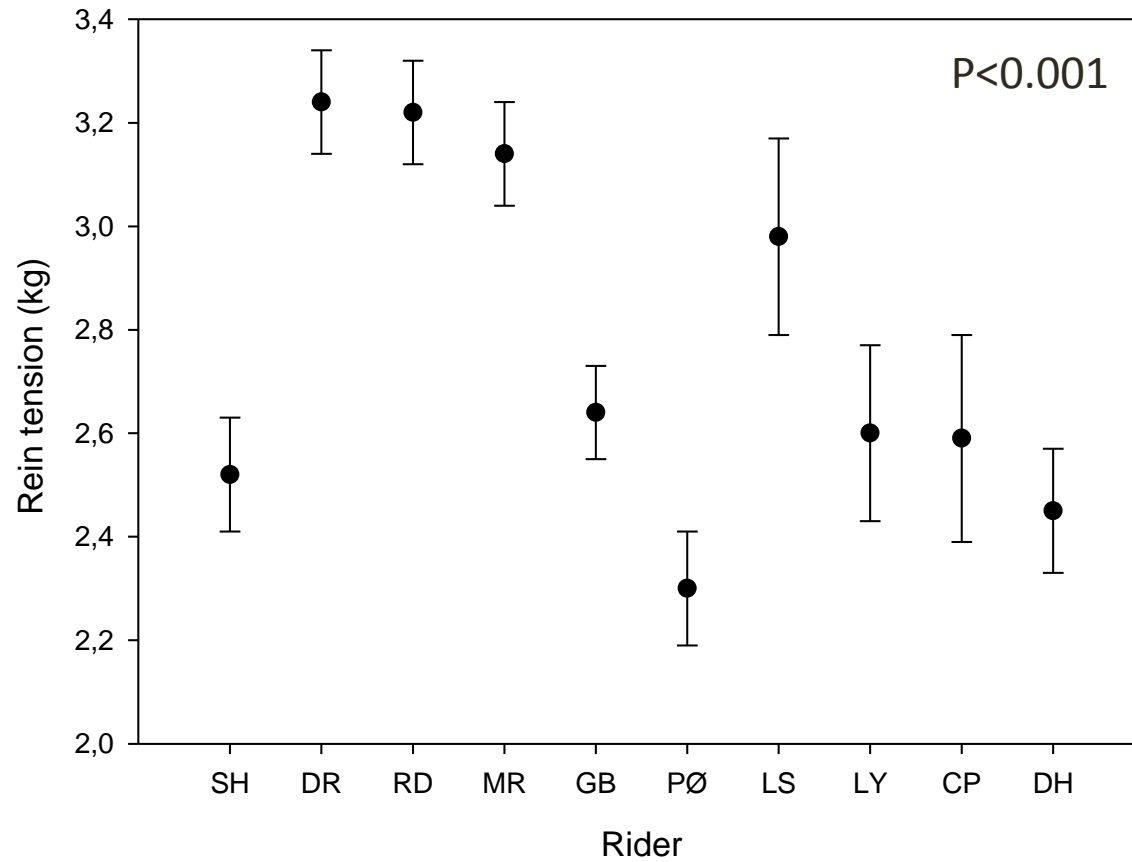
- no effect of rein tension, HR/HRV, salivary cortisol and saddle pressure

# Aim

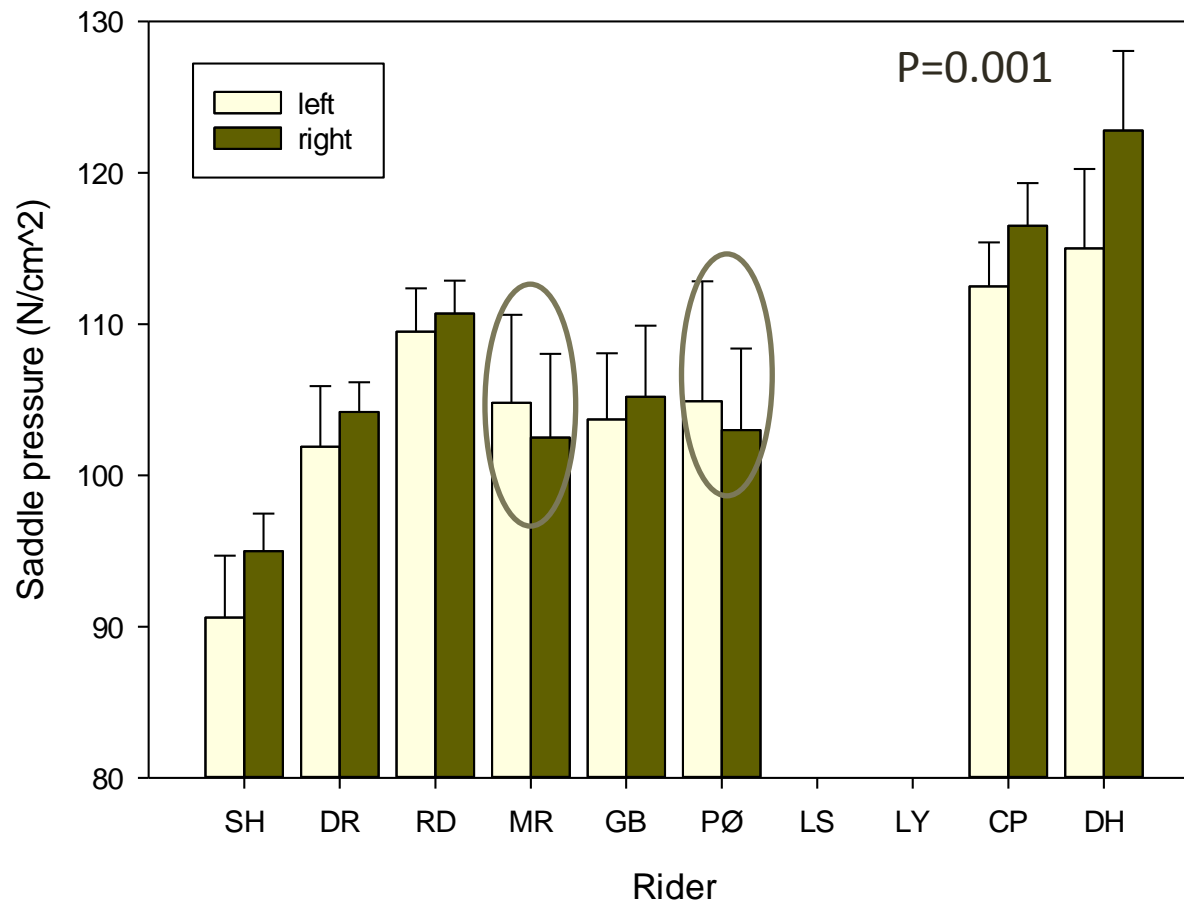
- Do professional riders agree in their scoring of rideability? **NO**
- Do horse conflict behavior, rein tension, heart rate (HR/HRV) and salivary cortisol reflect the scores given by riders? **YES**
- Can we detect rider differences in application of aids (rein tension and saddle pressure)? **NO**



# Results Rein tension



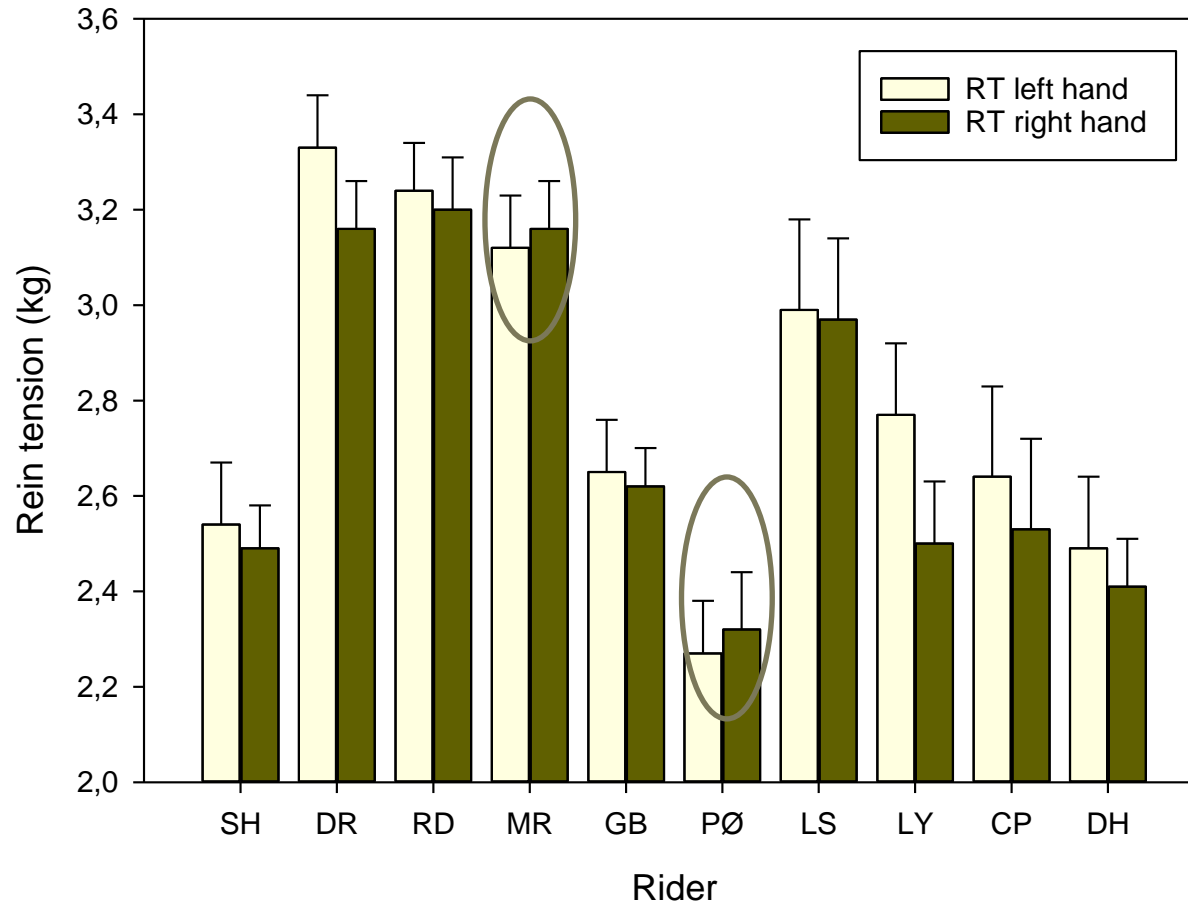
# Results Saddle pressure pads



Differences do not reflect rider weight!



# Results Rein tension distribution

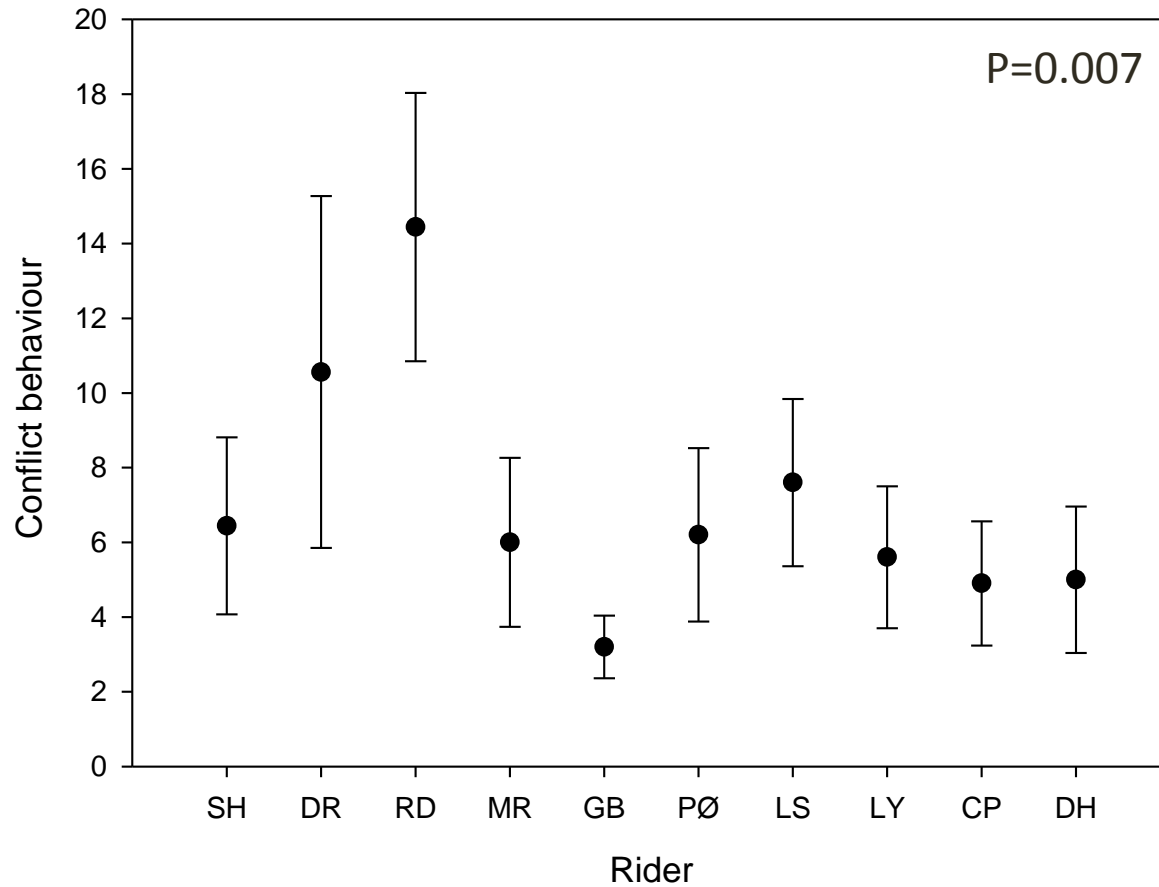


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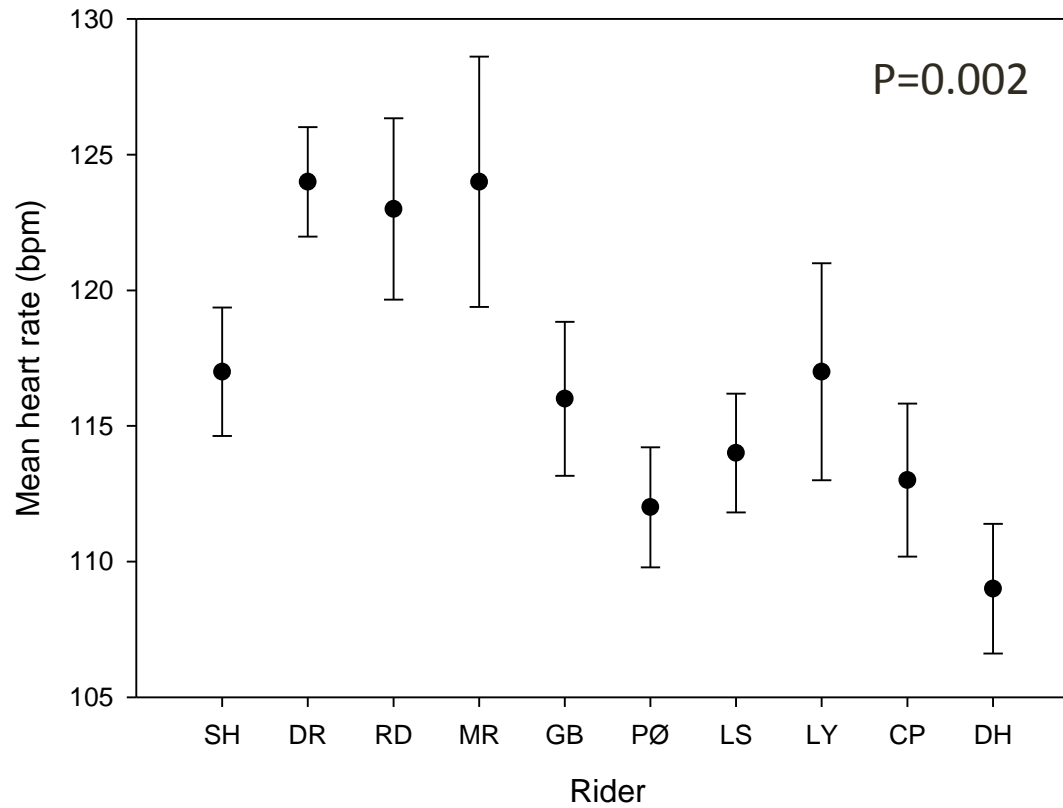
- Do professional riders agree in their scoring of rideability? **NO**
- Do horse conflict behavior, rein tension, heart rate (HR/HRV) and salivary cortisol reflect the scores given by riders? **YES**
- Can we detect rider differences in application of aids (rein tension and saddle pressure)? **YES**



# Results Conflict behaviour



# Results Mean heart rate





# Conclusion

- Large variation in rideability scores
- Rideability scores depended on the level of conflict behaviour
- The riders applied different levels of rein tension and distribution of saddle pressure when riding the same 10 horses through the same dressage program
- More studies are needed to investigate how different riding styles affect horse health and welfare

