

The role of stockperson beliefs and behaviour in the welfare of extensively managed sheep

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Introduction



In intensive systems, stockperson attitude and behaviour affect animal fear, welfare and productivity

Are similar relationships present in extensively managed animals with infrequent direct human contact?



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Interactions with humans (and dogs)



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- Does stockperson attitude affect management decisions that have an impact on sheep welfare?
- Stockpersons can affect sheep welfare by:
 - Direct interactions with sheep
 - Indirectly through management decisions that impact on welfare

Study 1: Management and perception



- Survey on gathering sent to 80 hill farmers in Scotland, Wales and England
 - Questions on management and beliefs about gathering sheep
- 37 respondents (46%): sheep gathered 2-20 times per year (median=5); time taken 2-16 hours (median=4)
- Followed by visits to 11 farms to collect data on gather process (time, metrics, behaviour, recovery after gather)



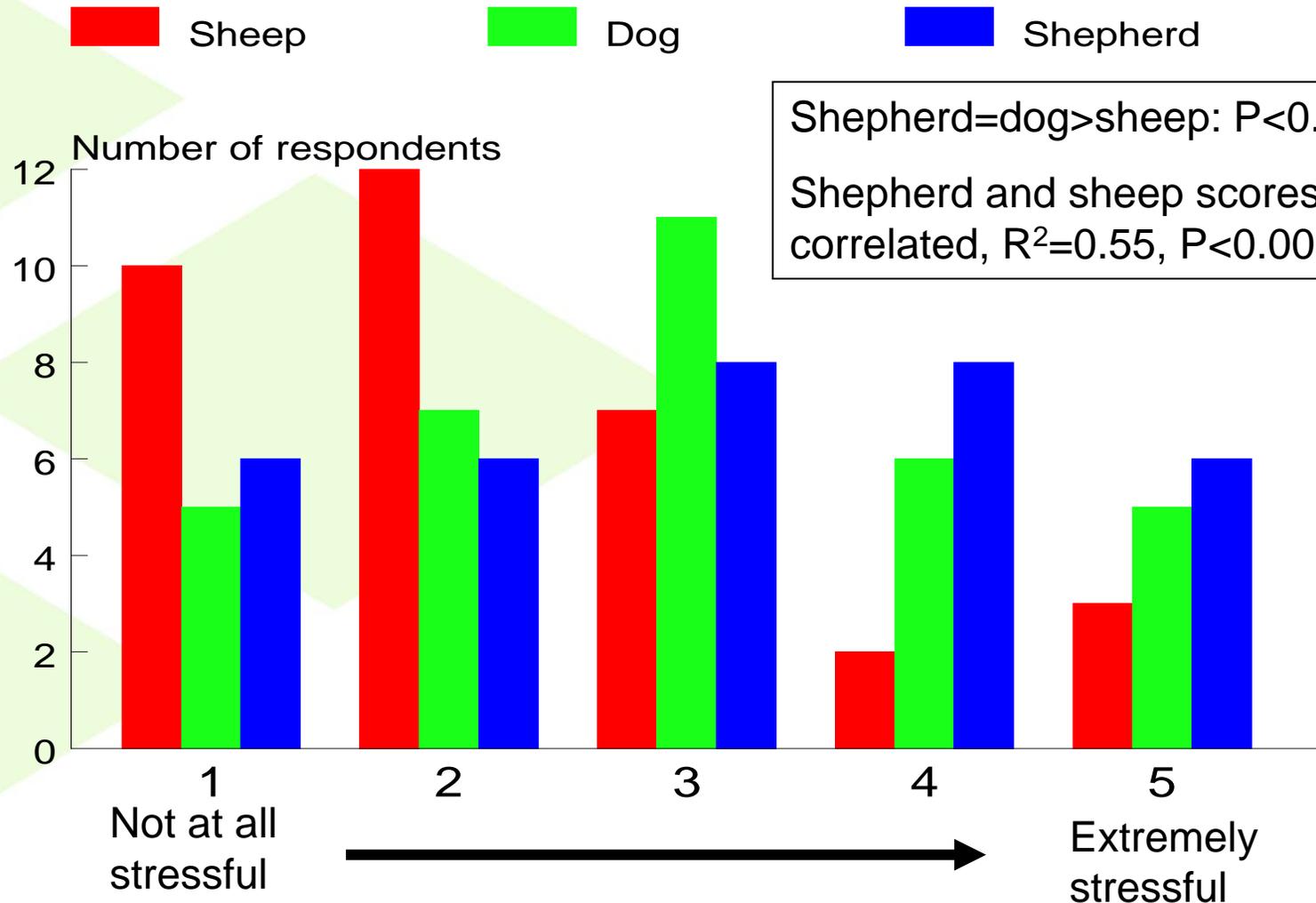
Study 2



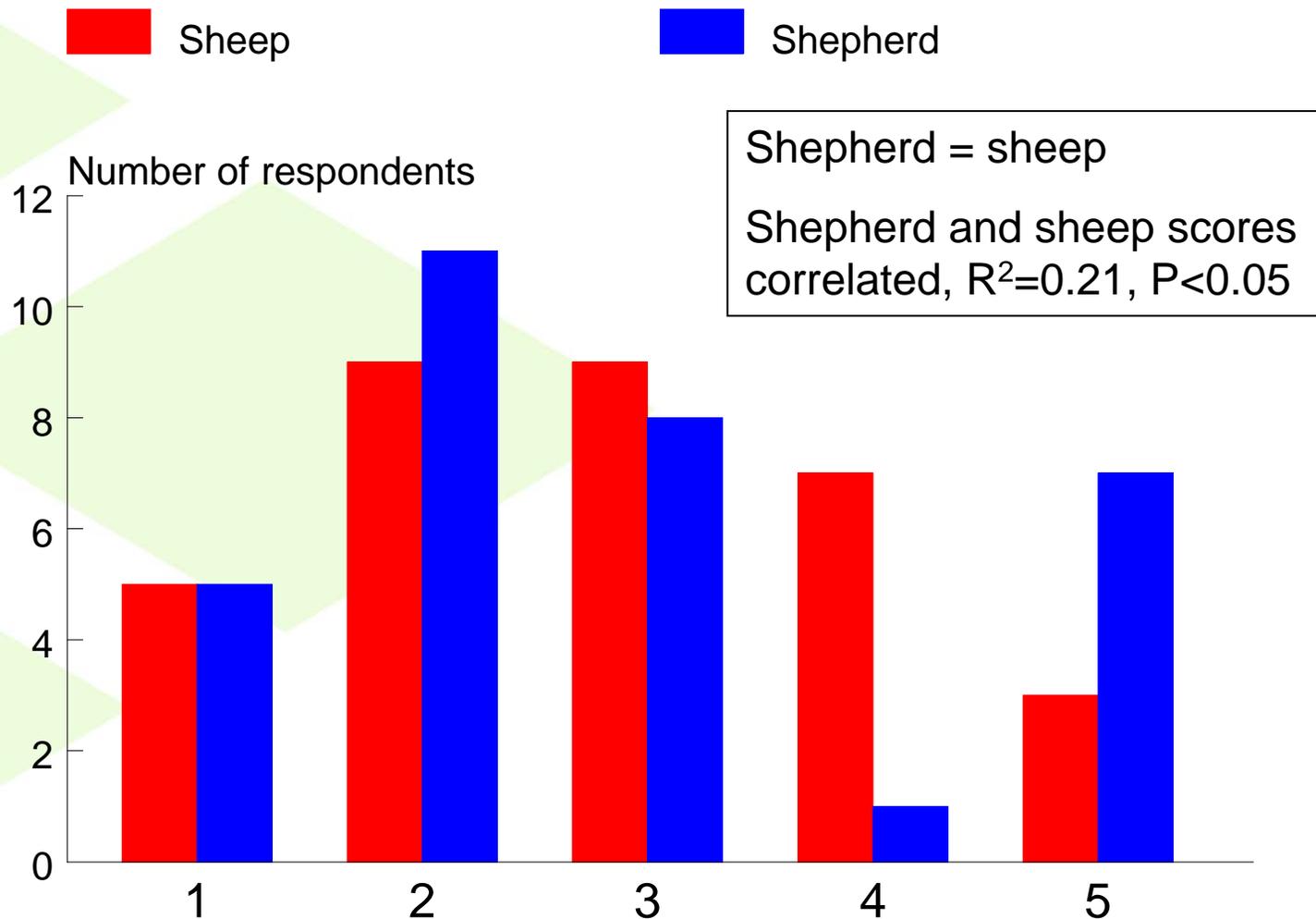
- Data on handler behaviour collected on 18 shepherds from 6 different farms when moving animals in handling pens
- Behaviour scored for type, severity and frequency:
 - Physical interactions: Gentle, moderate, hard;
 - Sounds: soft (low voice/tap), moderate (whistle, flap bag), loud (shout/clap/banging);
 - Other behaviours: waving/flapping
 - frequency each used: never, few, some, many, continual
- Cluster analysis to identify handling 'styles'



Gathering stress beliefs



Handling/shearing stress



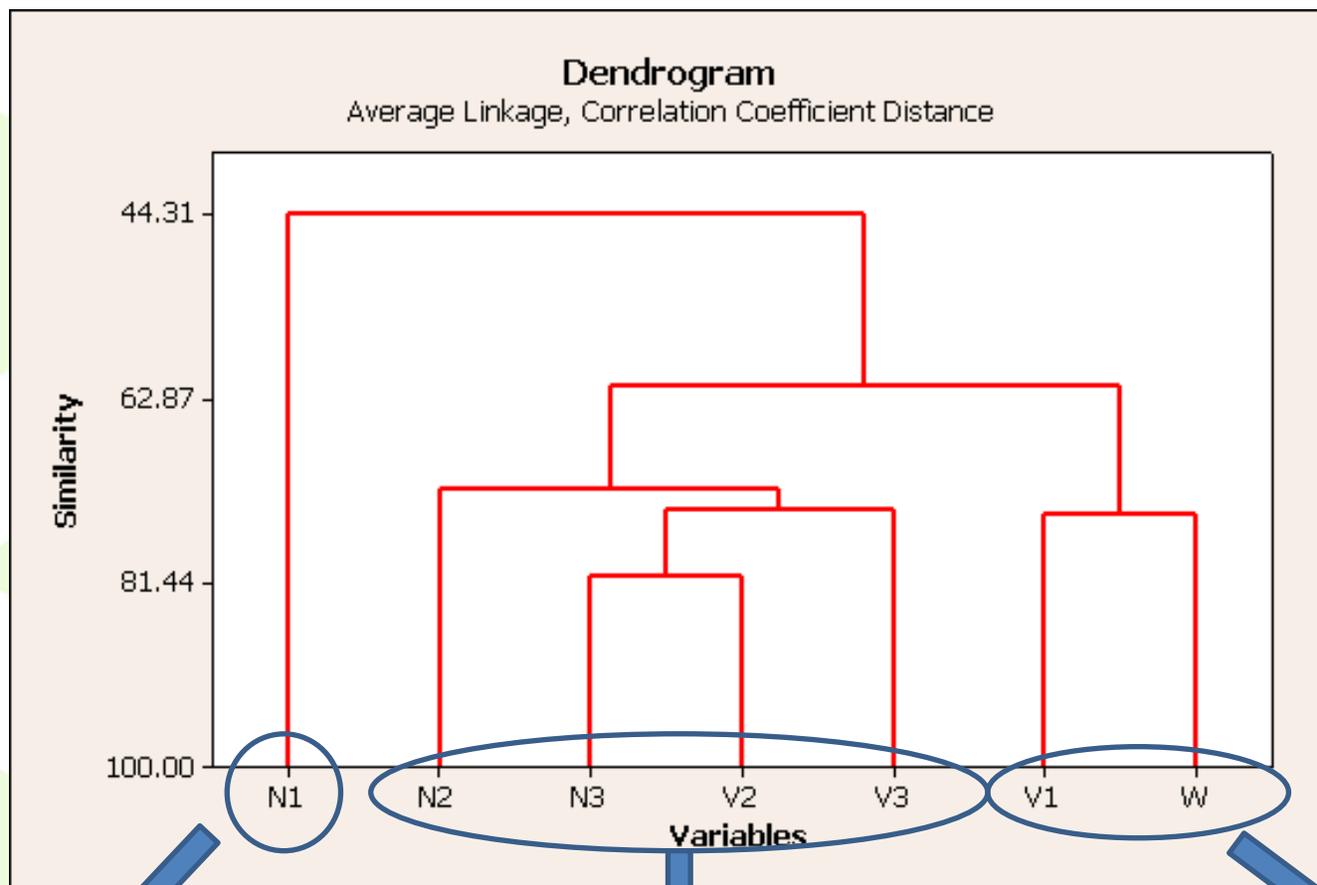
On farm data collection



Sheep recovery from gathering

- Gather process highly variable animals at front and back of group
- Gathers took 2.7 h (1.2 – 3.8 h)
- Open-mouth panting seen in 73% flocks in up to 80% of ewes
- Recovery to normal behaviour = 67 mins (0 – 161 mins)

Handling styles



Gentle
physical only

Moderate to loud
noises, moderate
to hard contacts

Quiet noises, hand
gestures, no physical
contact

Handling styles



- Frequent loud noises and moderate to hard contacts most frequently used style – 44.4%
 - Likely to be the most aversive to the sheep
- Quiet vocalisations and gestures only next most common – 38.9%
 - Likely to reduce animal stress from our other data
- Gentle contacts only not commonly used – 16.7%
 - If animals are touched generally contacts are moderate to hard
- Unable to compare directly to animal responses as often more than 1 handler present at the same time
- Similar styles were not always used on same farm

Discussion and conclusions



- Farmers may believe that their interactions with the sheep are less stressful than they really are
- In particular farmers often underestimate the stress of exposure to dogs
- Gathering is potentially most stressful for the most vulnerable sheep in the flock, but little research in this area
- Considerable variation in handling styles exist, even on same farm
- Our previous data suggests that this may affect the way sheep respond to handling
- On farm variation may also be an issue, as sheep cannot predict likely handling

Acknowledgements



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