CORE organic

Why observers should train clinical scoring

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Introduction

Epidemiological studies often involve clinical scoring by several observers. Extensive observer training improves observer agreement. However, this is still not common in international cooperations.

Objective

→ illustrate consequences of suboptimal observer training

Methods

Scoring systems

- body condition: 5-level scale
- injuries: no. of lesions >3 cm
- lameness: 3-level scale
- dirtiness: 3-level scale
- skin alterations: 3-level scale (adapted from Welfare Quality ®)

Training & testing

- training: 2 days, 2 farms, thereafter farm visits
- testing: ≤ 50 gestating (indoor/ outdoor) and lactating sows (outdoor), 2 organic farms, 9 observers, 1 day

Analysis

- collapse parameters into binary variables
- Prevalence Adjusted Bias Adjusted Kappas (PABAK)

Results

- parameter with best agreement: “too thin”
- good agreement but low prevalence: lameness, obesity (prevalence: 3 and 8 %)
- explanation for poor agreement for skin problems and dirtiness: misunderstandings regarding parameter definition (e.g. inclusion of mud soiling).

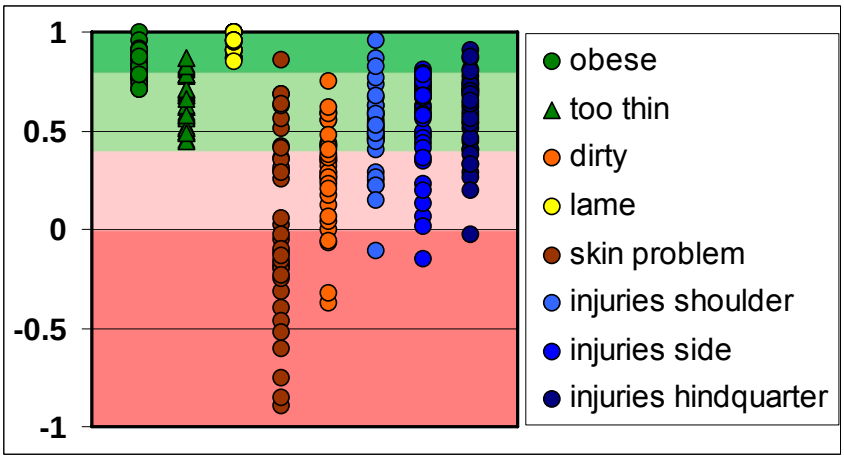

Fig. 1: Pairwise PABAK for eight tested parameters.

Conclusions

1) Intensive observer training before data collection is important to ensure observer agreement
2) Inter-observer agreement tests before and after data collection are strongly recommended.

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