

Digitalization in Equine Management

Data usage in group house systems

S. Voigtländer-Schnabel

Nürtingen-Geislingen University, Equine Management

Background

www.luda.farm/de/produkte/smart-farming/my-
luda-farm-die-schaltzentrale-fur-ihren-
landwirtschaftlichen-betrieb/ (05.06.2018)



digital transformation in agriculture:
smart farming / agriculture 4.0

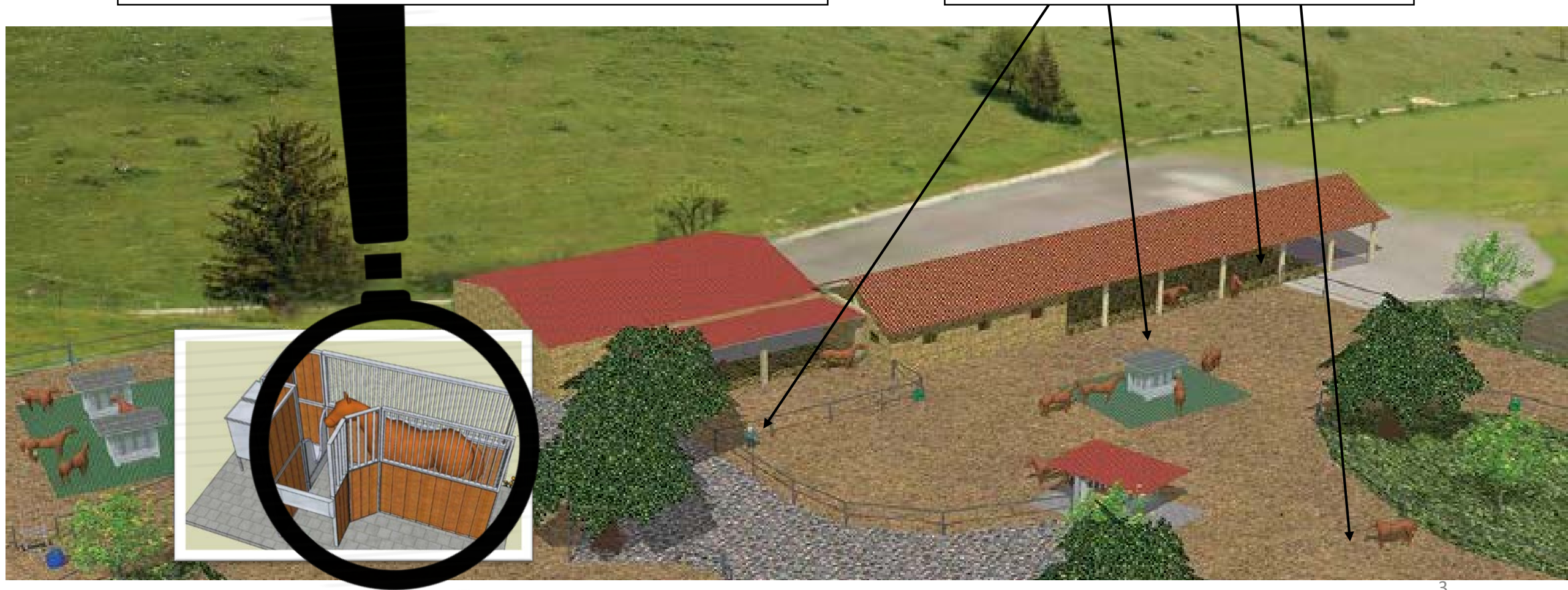


BUT low degree of digital applications in
equine management

Object of Investigation: Active Stables

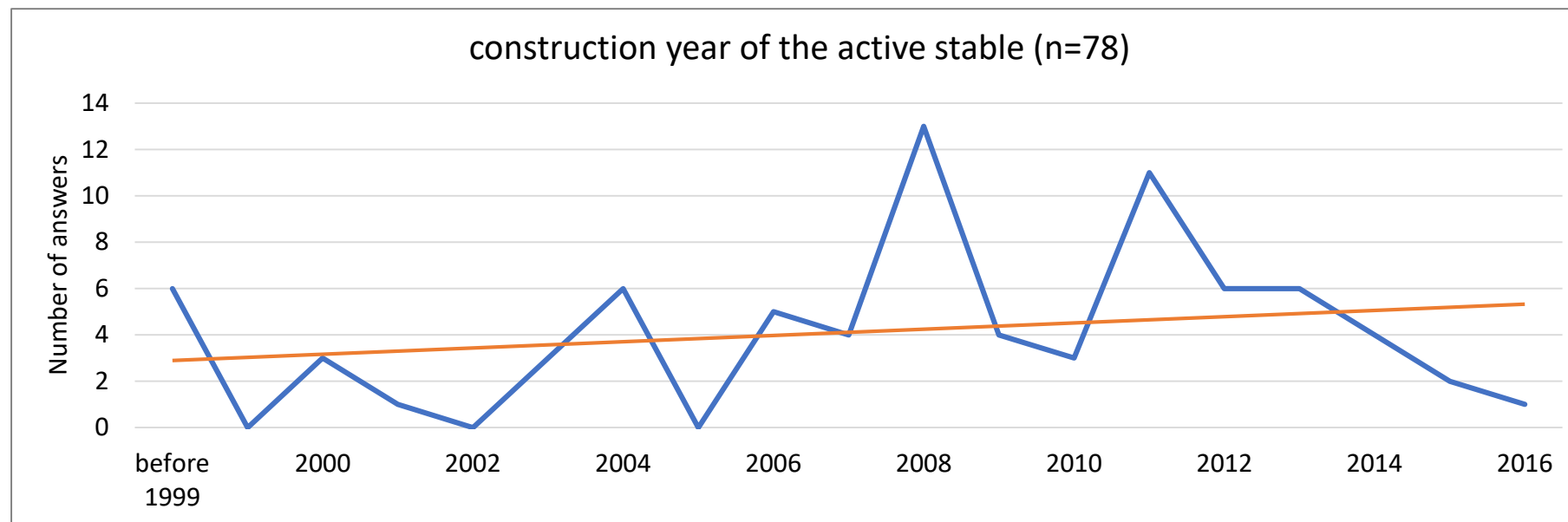
1) computer-controlled feeding station

2) functional areas



Status Quo of Active Stables

- niche market with few users and providers
- 1999/2000 first stables build in Germany



- growing market in other EU countries (SE, FR, BE, AT) and Switzerland



data collection &
potentials of Agriculture
4.0 are mainly unknown
for the equine business



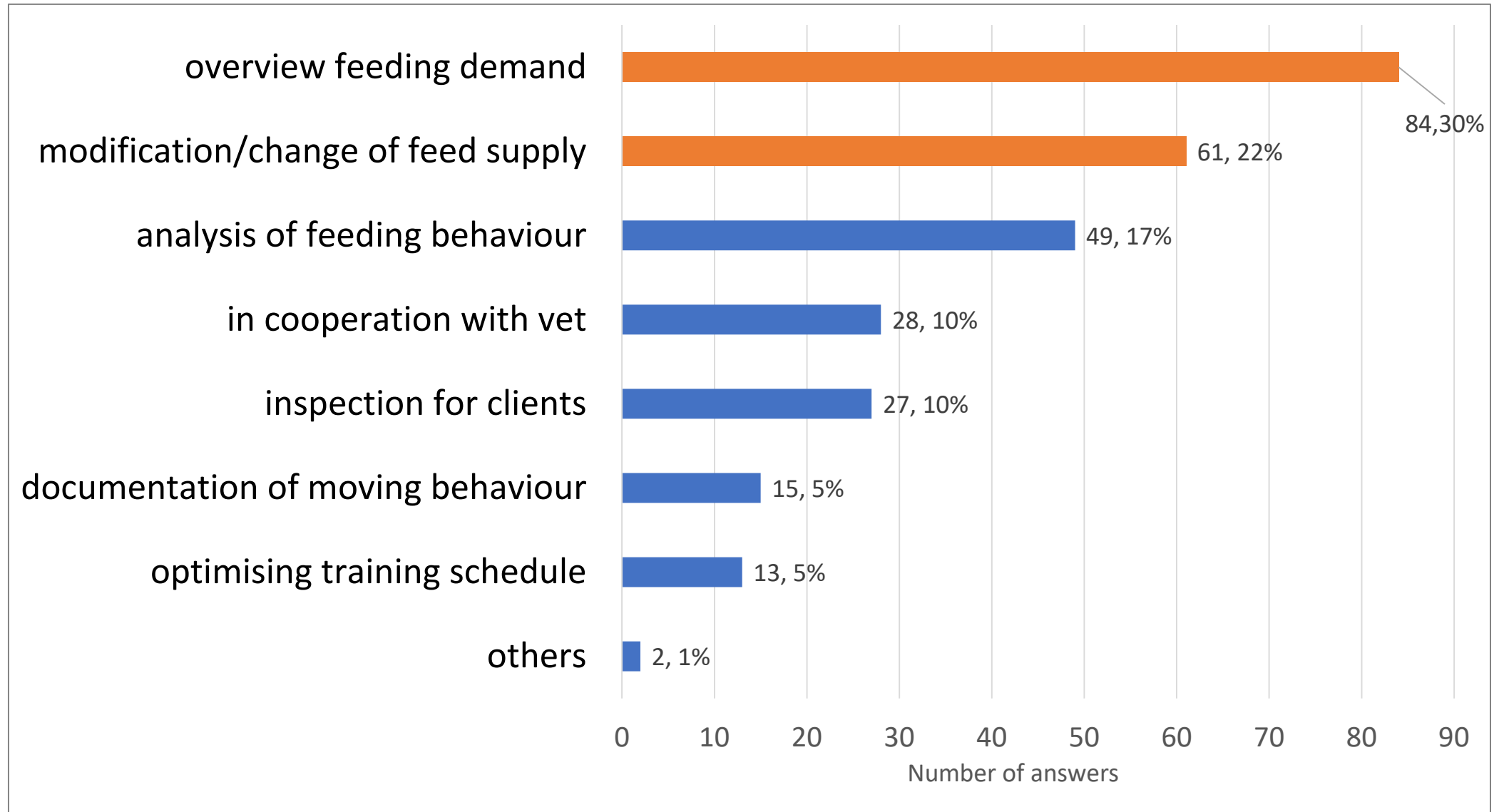
What are the reasons for
the insufficient use of the
data gained during
feeding?

- survey analysis
- active stables throughout Germany
- survey period: June/July 2016
- response rate: 40% (GG=215)



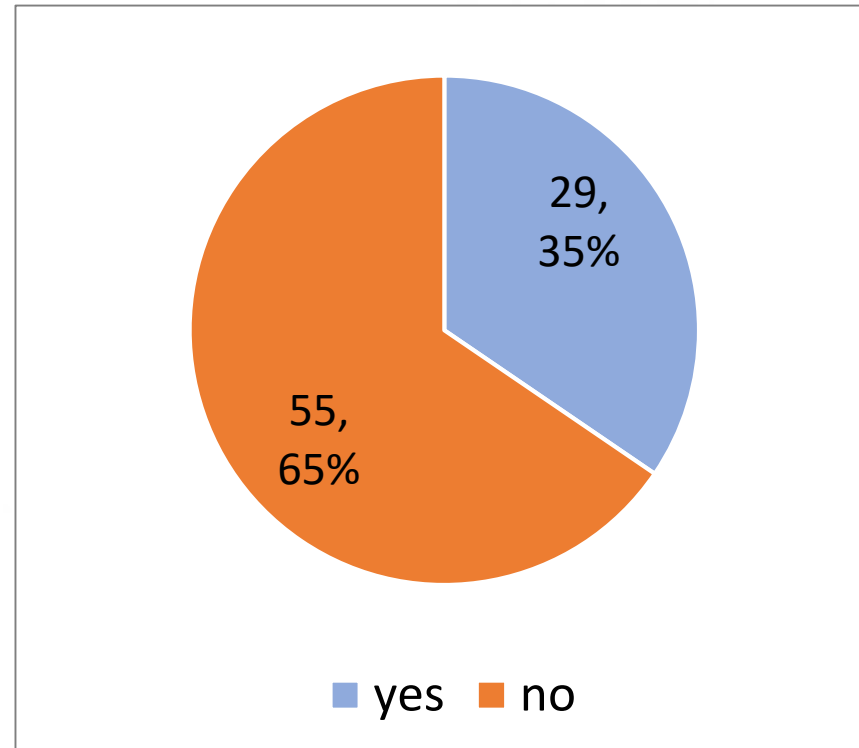


Usage of the generated data during the feeding process in descending order (n=279)



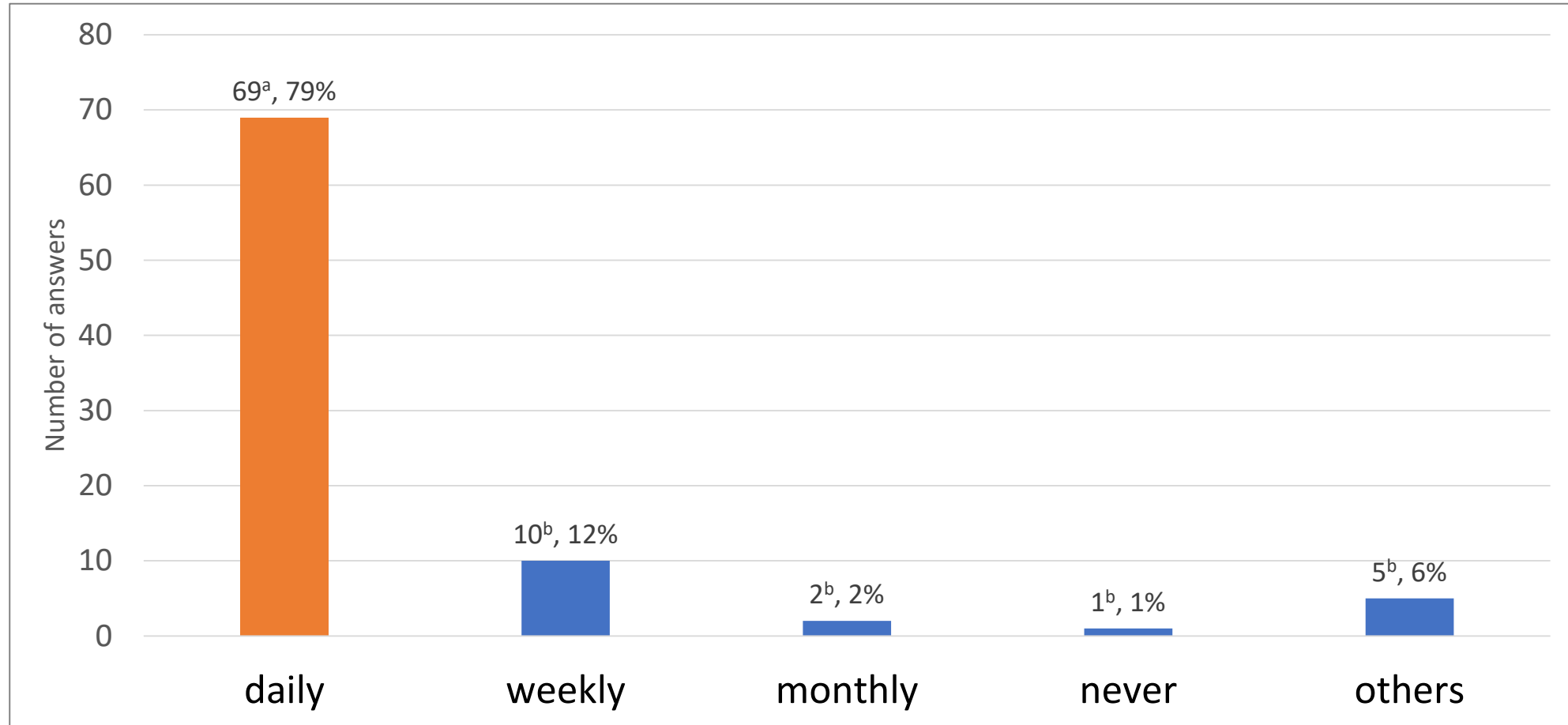
Note: chi-square test ***

connection of the feeding computer with the PC (n=84)



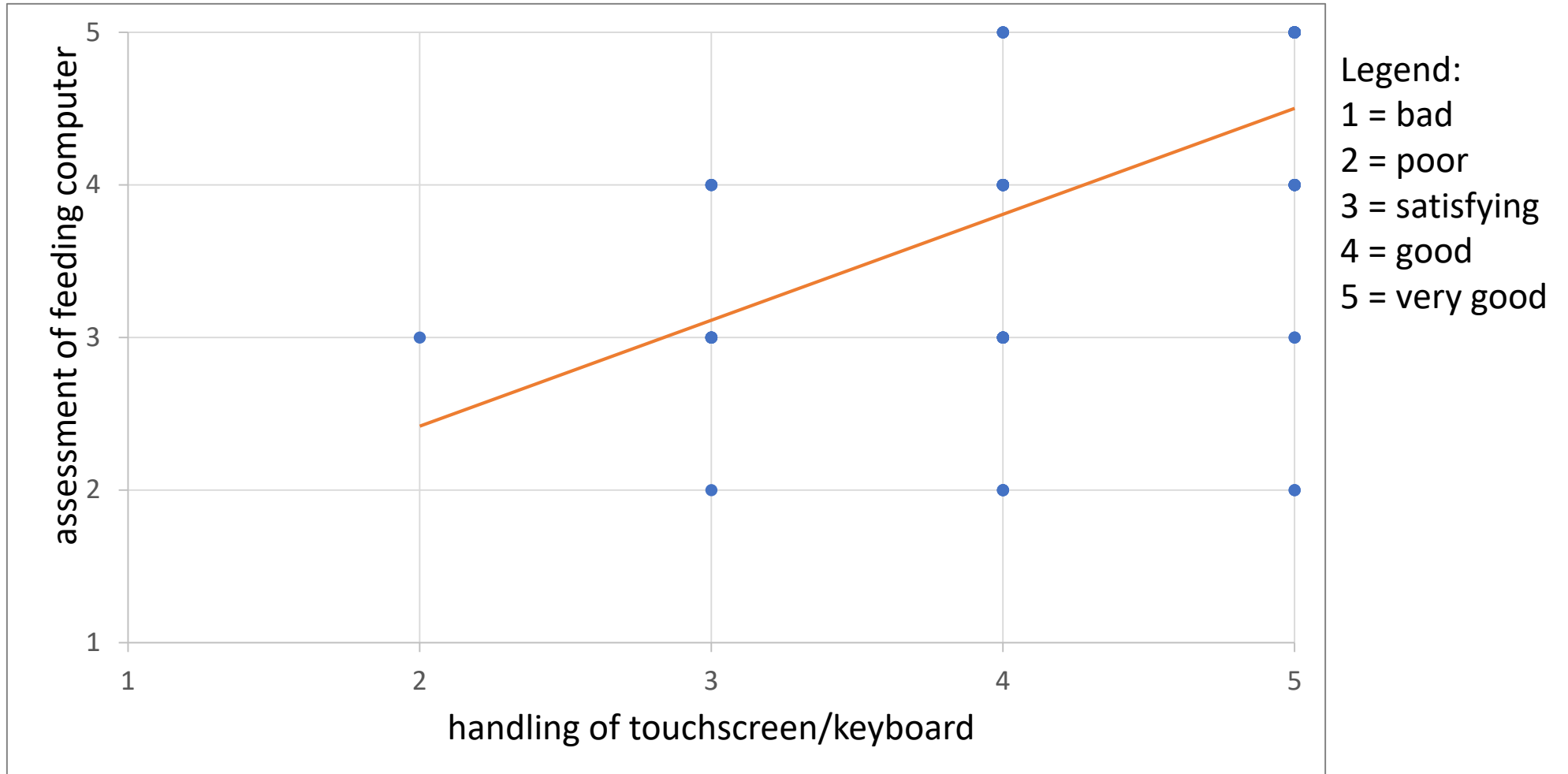
Note: binomial test **

At the same time feeding data are daily evaluated by stable owners to control the feeding access of the horses



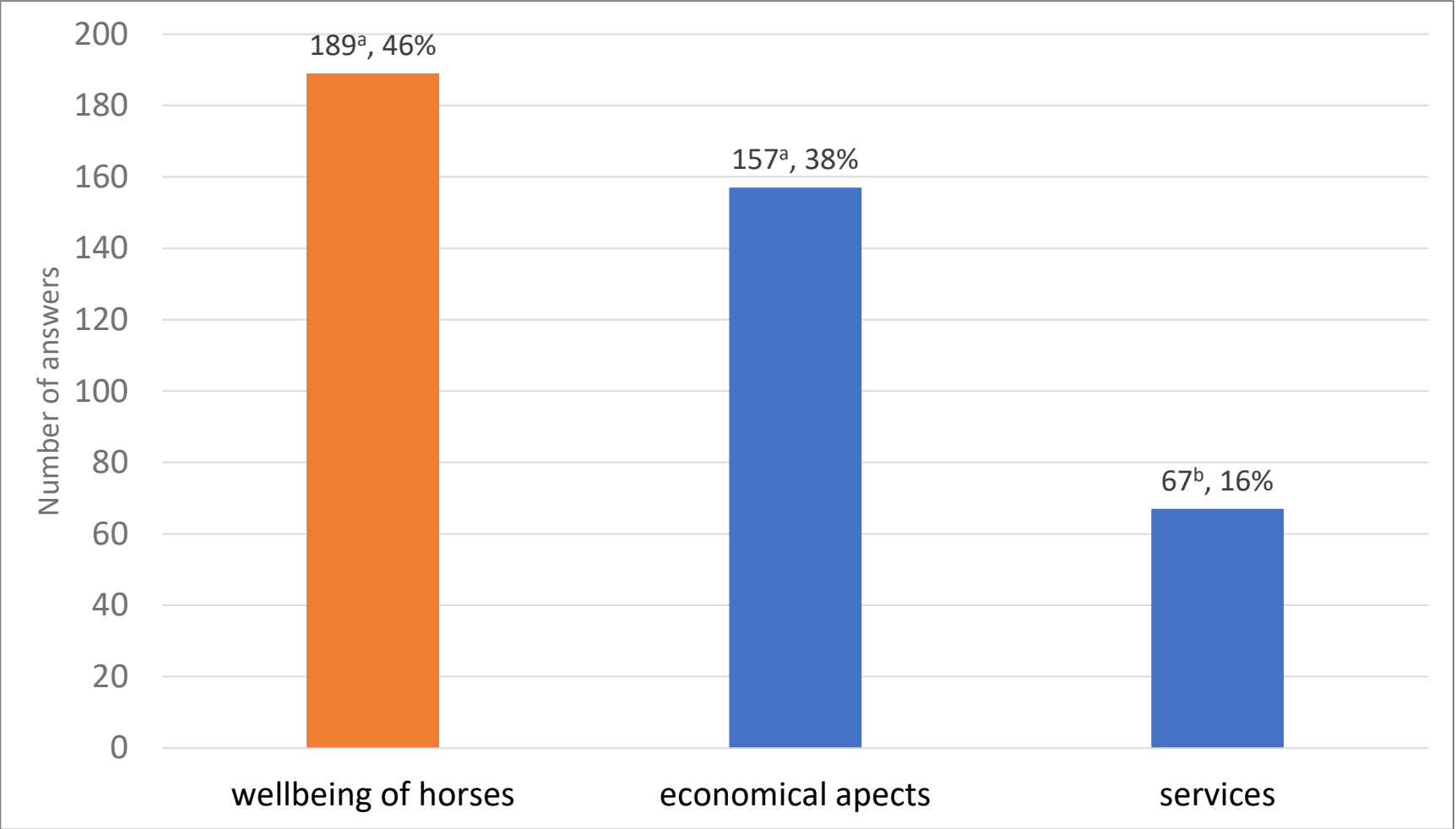
Note: chi-square test ***

Correlation between assessment of the feeding computer & handling of the touchscreen/ keyboard



Note: Spearman rang correlation test ***

Cluster analysis on the motivation of building an active stable (n=413)



Note: chi-square test ***

- ➔ other aspects of building an active stable are predominant over digital potentials
- ➔ market for active stables is growing in Germany **BUT** the degree of digitalization is low
- ➔ important to this current state is a **lack of knowledge** of the usability of existing systems
- ➔ **Acceptance barriers** connected with missing concepts on data protection & data sovereignty

Contact details

voigtlaenders@stud.hfwu.de

Link to Abstract:

researchgate.net/profile/Sophia_Voigtlaender-Schnabel

