



Comparing animal welfare assessments by researchers and free-range pig farmers with the PIGLOW app

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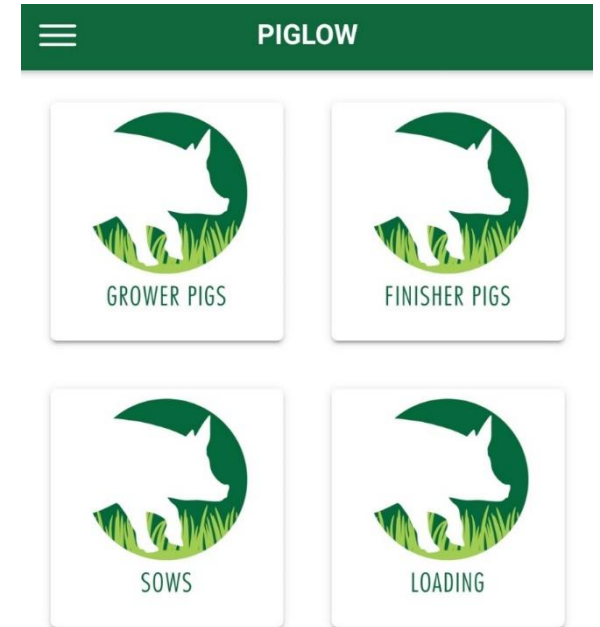
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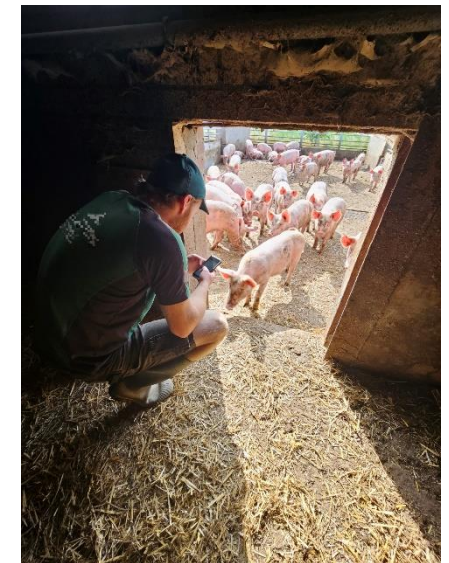
PIGLOW app

- PIGLOW app for animal welfare assessments by farmers
- Specific for free-range and organic farms
- Meant to sensitize farmers towards possible welfare issues
- Available in the Google Play Store and App Store in 9 languages



Longitudinal study

- Two-year study on the effect of the app on animal welfare
- 12 participating farmers in Belgium and The Netherlands
- Participants conduct periodical animal welfare assessments for finishing pigs (at least 6)
- Farm visits at the beginning and end of the study
- Farmers and researchers conduct the first and last welfare assessments simultaneously
- Goal: to compare welfare assessments by farmers and researchers at the beginning and end of the study



Individual level (13)

Scratches

Skin wounds

Ear lesions

Tail lesions

Lameness

Skin irritation

Too small

Bad general state

Laboured breathing

Covered in dirt

Panting

Shivering

Enrichment use

Results – Farm visit 1: farmers vs researchers

Indicator (individual level)	Mean absolute difference % farmer - % researcher	Number of different scores	Higher score
Enrichment use	21,22	11	7 Farmer - 4 Researcher
Scratches	6,48	8	1F 7R
Too small	2,44	6	4F 2R
Covered in dirt	2,25	5	3F 2R
Skin wounds	1,70	5	3F 2R
Lameness	1,30	3	1F 2R
Tail lesions	1,26	4	1F 3R
Laboured breathing	0,93	3	1F 2R
Ear lesions	0,53	3	1F 2R
Bad general state	0,43	2	2R
Panting	0,39	2	2R
Skin irritation	0,2	1	1R
Shivering	0,15	1	1F

More severe score: 20F - 34R

n = 12 ⁵

Results – Farm visit 1 vs farm visit 2

Differences in 12 individual welfare indicators – Farm visit 1 vs 2	Farm visit 1	Farm visit 2
Average mean absolute difference	1,51	0,89
Average number of different scores	3,58	2,83
Number of indicators with largest difference in this round	7	5

Difference in average scores for 12 welfare indicators – Farm visit 1 vs 2	Farmers	Researchers
Average score farm visit 1	0,92	1,48
Average score farm visit 2	0,96	0,96
Difference between farm visit 1 and 2	-0,04	0,52

Farmers gave a slightly higher (more severe) score during farm visit 2
Researchers gave a lower (less severe) score during farm visit 2

Conclusion

- Overall, farmers assessed the welfare of their pigs a bit more positively than researchers during farm visit 1
- Differences between researchers and farmers during farm visit 1 show that:
 - Some welfare indicators are less suitable for quick observations
 - Certain welfare indicators require more focus and/or skills to be assessed reliably
 - Farmers might be more strict when observing welfare indicators that also have economic value
- Overall differences in welfare assessments of farmers and researchers were smaller at the end of the two-year study than at the beginning, but it differed per welfare indicator
- The smaller difference was mostly due to researchers scoring welfare more positively at the end of the study, while farmers only scored slightly more negatively
- This could indicate that animal welfare has improved and that farmers have learned to measure more strictly, but alternative explanations are also possible

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Thank you for your attention

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