Meeting the different expectations of producers and consumers

Implications of sentience for research





Importance of meeting societal expectations for animal use

License to operate for animal industries Social acceptance of farming methods Market access

.....implications for research

Does recognition of sentience change expectations? Will the gap between what we know and what we need to know widen?

Will this increase pressure on research to provide answers?



Research is supported by society and producers to provide...

Knowledge of animal welfare within farming systems

Scientifically defensible information on areas of industry concern and how to address them

Solutions that enable producers to implement practice change where needed

Science input into public arena – shaping expectations

Provide a science platform that supports controlled and credible legislative change



Differences in perception

Increasing metric standards (e.g.stocking density) may not be perceived as an advantage by consumers if they don't address areas they regard as important





Perceptions can "Trump" research

for species that we know very little about their experiences

for animals in different contexts

can cause biggest differences in opinions









Differences in values are clear





Natural behaviour – high concern for consumers but low for farmers

Aspects of natural behaviour of chickens were rated higher by consumers than producers and veterinarians



Decreasing trust





The proportion of consumers reporting that "farm animal welfare needs to be improved" has risen by over 10% to 88% within 10 years

Percentage that agree with the statement "farmers take good care of their animals" has declined from 38% to 19%



Urban/rural divide and revealing science





Pet ownership and increased concern for food animal welfare appear to be correlated

Increased interest in protecting food animals may stem from interactions with and emotional connections to pets

Popular science can drive expectations



Chickens 'cleverer than toddlers' Chickens may be brighter than young children in numeracy and basic skills, acc





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Don't try to wrong a raven, not even once. It's not going to forget and it's probably going to shun you for a long time



Consumers are not equal









Sentience changes what matters on farm

If we accept that animals are sentient, have the capacity for **feelings** and are aware of them...

...then the animal's experiences matter more than it's performance

...then **individuals** matter more than groups

...then **quality of life** matters more than duration





Experiences take precedence

Our approaches to animal needs and requirements must now start with consideration of the animal's experiences

Is anthropomorphism more acceptable?



"Sentience, in other words feelings, is what welfare is all about. Once it is accepted that welfare depends on what animals feel, then the methods used in assessing welfare become much more obvious" Ian Duncan, U Guelph (1996)

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Individuals take precedence

Need to consider different animal personalities when designing farming systems

Animals within a group vary in their behaviour and how they cope in our farming systems

This innate difference in how animals respond (ie personality) which in turn impacts their experience, demonstrates that welfare will need to be increasingly assessed on an individual level







Individuals take precedence

Our current assessment schemes and standards are mostly not designed this way

"Should the contribution of one more lame cow depend on how many other cows on the farm are lame?

Welfare states apply to individual animals. Therefore, group welfare in our view should be aggregated as a linear function of the proportion of affected animals, so that for example doubling the number of lame cows on a farm leads to a doubling of the welfare effect of lameness". (Not how current Welfare Quality protocols work). Peter Sandoe, U Copenhagen (2017)





Quality of life takes precedence

Quality of life concept may help us integrate positive and negative experiences over time



"QOL is a matter of how valuable each animal's life is for that animal. One (and perhaps the only) aspect of animals' lives that definitely and intrinsically has value for them is their subjective experiential states"

James Yeates, RSPCA (2016)



...but can we measure individual experiences?

- Behaviour
- Physiology
- Preference and motivation
- Cognitive bias
- Attention bias
- Lateralized viewing preference
- Qualitative Behaviour Assessment
- Neuroscience

.....in practical situations, not very well





Changing what matters on farm example: body condition



Producer focus: herd level, health, production, fertility, longevity

How does an individual cow experience low body condition and how does it impact its QoL?

Sentience makes the answer complex:

Hunger, cold, fear (of larger animals in herd), lethargy – the cow may feel bad or If food is available, temperature is warm, plenty of space - the cow may feel good

If you don't 'feel' hungry does being thinner matter? If you don't know about your physiology does it matter?

Sentience modulates the nature of hunger Hungry and can graze– pleasure/satisfaction Hungry and can't graze– discomfort/frustration



... beyond ethical consumption

we can adapt farming systems so they better address sentience....

but

increasing guilt (wilful ignorance)....

decreased consumption....



increasing interest in synthetic alternatives....

...are we ready?

what research is needed?

