PUBLIC ACCEPTANCE TOWARDS PIG HUSBANDRY IN GERMANY - A STRUCTURAL EQUATION MODELLING APPROACH

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Keywords

1 Introduction

Within the last decades, German animal husbandry has adopted technological and breeding progress and by that increased production efficiency resulting in decreasing real consumer prices. However, these developments in modern animal farming practices also led to increasing consumer criticism of the existing farming methods as people base their judgement mostly on the image of a nostalgic, traditional animal farming system. Thus public perception of animal husbandry is widely negative (CLARK ET AL., 2016; KAYSER ET AL., 2012; SIMONS ET AL., 2018) and especially little space per animal, no access to free range, inappropriate handling of animals, or lack of shelter and poor hygienic conditions hygiene, social companions are main aspects of public criticism (VENTURA ET AL., 2016; WEIBLE ET AL., 2016). This critique is fuelled by an overall mistrust in the food system, which is supposed to be a consequence of a high level of media coverage in case of food scandals (WBA, 2015). In general, animal husbandry is often perceived as highly industrialised and as a profit oriented system that does not care for animal welfare anymore (SIMONS ET AL., 2018). Obviously the perceived status quo in livestock farming does not meet public expectations results in conflicts between citizens and farmers (WBA, 2015). Since the public can push pressure on the farm sector by laws and ordinances, the meat sector faces major challenges with one being to achieve the consumers’ acceptance of production methods (BERGSTRA ET AL., 2015; BUSCH ET AL., 2018). Especially practices in the pig husbandry are seen as very critical and thus we choose to focus on that animal type in this analysis. Therefore, the aim of the present study is to identify drivers and impediments of publics’ acceptance of pig husbandry in Germany.

2 Methodology and Study design

To analyse drivers for the acceptance of animal husbandry systems a Germany-wide online survey with overall 2400 participants was conducted in August 2018. The sample was divided into six subsamples cattle, dairy cows, fattening pigs, sows and piglets, broiler and laying hens with 400 participants respectively to later compare if drivers of acceptance vary in different livestock production systems. The hypotheses were derived from literature were factors determining the perception and acceptance towards an animal raising system have been identified. We investigated those links in respect to the drivers of acceptance of fattening pig husbandry especially in Germany. Data analysis was then carried out by operationalising those hypotheses into a Structural Equation Model with the software MPLUS 7.3.

3 Results

The sample for fattening pigs comprises 402 respondents, including 201 females and 201 males. 42% of the respondents have an advanced technical college qualification or a high school diploma. The respondents’ age ranges from 18-83 years, with an average age of 52 years. Furthermore the majority 52% of the respondents has a net household income between 2000-4999€/month. Comparing the sample data with the micro-census data for Germany in 2013 indicates that the sample is representative for the selected criteria. Within the subsamples the representativeness remained the same due to pre-defined quotas. Six different questionnaires have been developed to assess the very distinct imagination people have about different livestock farming type. Results show a strong negative perception of animal husbandry and a
low acceptance of livestock farming in Germany. Across the sample, only 9% of the respondents classified the current conditions of animal husbandry as acceptable. The perception was only average (3.57 out of 7), which was measured as the level of how appropriate current housing conditions are perceived.

Overall model fit measures indicate an acceptable model fit with good values for AVE and CR on the measurement model level (Fornell et al., 1981; Hu et al., 1999). Only significant standardized coefficients are shown in Figure 1.

4 Discussion and Conclusions

The results for fattening pigs reveal that trust in the system to secure animal welfare standards are a very strong indicator on peoples’ perception. This shows that regaining trust by various actors is crucial for changing the image of pig husbandry in general. The positive interrelation between perception and acceptance was verified, while perception levels were significantly affected by peoples’ values on ethical animal treatment. This can be interpreted as a sign that animal welfare practices already in place are not recognized as such by the public. The effect of attitude towards meat consumption was detectable, but is quite low. This effect can also be found in the literature under the citizen-consumer gap and might resolved by making an interdependence between pig husbandry and pig products more visible. The effect of knowledge was also verified, but has to be interpreted carefully, because of potential reversed causality between acceptance and knowledge found in the preceding qualitative study by Simons et al., 2018. It showed that people that have a low acceptance also have a lower interest in seeking more information, because they want to keep their moral integrity over the system they not accept and thus their knowledge level is lower. Overall the results for this model give a clear indication of potential drivers of public acceptance towards pig husbandry in Germany, but will surely be stronger validated at a more elaborated stage of the analysis of the total sample. It is important to notice that model modification and model parsimoniousness are still to be improved to higher constructs discriminatory power. A next step is to repeat and compare the analysis for the different animal species.

In a broader context not only animal welfare focused practices need to established and developed, but a sustainable change of the perception how animals are getting treated has to be made. Rebuilding trust in animal husbandry system and additionally increase the animal welfare standards are key to substantially improving the acceptance of animal husbandry in Germany.
References


