

Evaluating an Evaluation of Farm Animal Welfare Stakeholder Views in Flanders and Europe

In a 2008 issue of *Livestock Science*, Vanhonacker *et al*'s "Do citizens and farmers interpret the concept of farm animal welfare differently?" presents the results of a 2006 quantitative study undertaken in Flanders. The authors build on existing data from Eurobarometer surveys and previous American and European research by quantifying the hypothesized difference in farmers and citizens "perceived importance" and "evaluative belief[s]" regarding different elements in farm animal welfare (FAW) assessment.

Because the short answer to the paper's titular question is "yes", it may be useful to examine the accuracy with which the authors portray their sources' insights. Specifically, I look at two special Eurobarometer surveys and one 2002 article from the *Journal of Agricultural and Environmental Ethics* to evaluate the validity of the authors' pertinent claims. Before one can understand whether or not the supporting sources actually support the paper's primary claims, however, it is necessary to understand Vanhonacker *et al*'s results.

Farmers and Citizens in the Flemish Balance. After a reasonably exhaustive literature review that focuses on European and Belgian stakeholder perceptions of farm animal welfare, the authors outline the methods of their study. Drawing from a web-distributed sample of 459 citizens—204 farmers and the rest other citizens—with stratification for gender, age, living environment (urban or rural), province, and level of

education, (Vanhonacker 2008, 128) the authors' questionnaire catalogued views on 72 aspects of farm animal welfare. In particular, the participants were asked to indicate both whether the aspect in question is of *perceived importance* to the citizen or farmer, and whether "they believe the aspect poses a potential problem with respect to animal welfare in present Flemish livestock farming (*evaluative belief*).” (Vanhonacker 2008, 128) They use the combination of these two measures as a general assessment of values.

Using SPSS 12.0, the authors use independent samples *t*-tests on the collected means and standard deviations to detect differences in farmers' and citizens' measures of perceived importance and evaluative beliefs. They find that while there is a fair degree of overlap in citizens' and farmers' interpretations of FAW, citizens report generally higher perceived importance scores (possibly due to 'acquiescence bias', the tendency to report more positively to attitudinal over factual questions). And while there is an overall similarity of interpretations, farmers tend to score differently on domains that may require hands-on husbandry knowledge and lower on indices that are related to the ability to engage in natural behavior.

The quantitative data attained in the authors' questionnaires are internally valid to the extent that the methods used and survey structures employed are appropriate. My paper, however, is not intended to assess the validity of Vanhonacker *et al*'s quantitative arguments. Rather, I assess the applicability and manner of use of the sources that are driving the authors' research question. These sources are: the 2007 EUROPA press release "EU consumers willing to pay for better animal welfare"; the 2005 Special Eurobarometer survey titled "Attitudes of consumers towards the welfare of farmed animals"; and Te Velde *et al*'s 2002 article, "Dealing with ambivalence: farmers' and

consumers' perceptions of animal welfare in livestock breeding." I will address the context and reliability of each in turn, in ascending order of the amount of attention Vanhonacker *et al* allot to each source.

2007 Press Release. This press release elicits the following from Vanhonacker *et al*: "Even though there is still a tendency to buy the cheapest meat, animal welfare is considered a priority by an increasing number of European citizens." The first problem with this citation is that it is citing the wrong thing: just as the authors later cite the 2005 Eurobarometer survey, they should in this case be citing the 2007 Eurobarometer survey upon which this press release was predicated, Special Eurobarometer 270.

The press release is a two-page summary of an 82-page survey, and Vanhonacker *et al* were probably deferring to the EU's research competency when they appropriated the press release's first line, which reads: "EU consumers are willing to make an extra effort to buy animal welfare friendly products, even if this means changing where they shop or paying more for goods, according to a Eurobarometer survey on attitudes to animal welfare, published today." ("EU consumers..." 2007) As will become apparent below, Vanhonacker *et al*'s framing is actually *more* defensible than the wording put forth by the EC's press release.

Like all Special Eurobarometer surveys, the 2007 "Attitudes of EU citizens towards Animal Welfare" followed the methodology¹ used by the European Commission's Directorate General for Communication (Unit for Public Opinion and Media Monitoring). Carried out by TNS Opinion & Social, the survey's sample size was

¹ I will examine the actual survey methodology for the 2005 survey alone, as the methods used—appended to both surveys in a technical note—are identical for the 2005 and 2007 surveys.

29,152, drawn from 25 member states between September 6 and October 10 of 2006. (Eurobarometer 2007, 2) Like the 2005 survey, Special Eurobarometer 270 cites the 1999 Amsterdam Treaty's 'Protocol on protection and welfare of animals' and the 2006 five-year Community Action Plan for the protection and welfare of animals as rationales for the survey's execution.

The ambiguity concerning *which* European citizens prioritize FAW underscores Vanhonacker *et al* intentionally vague "animal welfare is considered a priority by an increasing number of citizens." Special Eurobarometer 270 states that "European knowledge is not homogeneous in this regard. Some citizens, in particular those in Nordic countries, claim knowledge levels well above the European average. Meanwhile those in Spain and Malta appear relatively under-informed. The primary influence on knowledge levels is an interest in the subject." (Eurobarometer 2007, 51)

Thus, while "the average respondent [may] rat[e] the [importance of the] subject [of animal welfare] at almost 8 out of 10", (Eurobarometer 2007, 50) it may be useful to draw on an insight from *The Economist's* Charlemagne for Feb 21st 2008, "Ask a silly question": "in an infamous incident last year, the commission trumpeted a poll showing 80% support for the European satellite navigation system, Galileo, and 3% support for spending billions on it, though only 40% of the respondents had heard of Galileo before they were telephoned for the survey." 80% approval given imperfect information and potentially conflicting or irrational preferences,² in other words, is not necessarily as helpful an indicator as one may think.

² This source of inconsistency in polling data is too rich to fully address here; the literature on the differences between citizen- and consumer-oriented polling data is substantial. See *The Myth of the Rational Voter* for a behavioral economist's account of why people make irrational decisions. Or, as *The Economist* piece puts it, "Tantalisingly for Eurocrats, Eurobarometer polls tell them that voters like

With this extended caveat aside, however, the EC press release's assertion is generally defensible. And Vanhonacker *et al*'s broader claim is thoroughly justifiable.

Special Eurobarometer 229:³ “Attitudes of consumers towards the welfare of farmed animals.” Although there is a fair amount of overlap between the 2005 and 2007 Eurobarometer surveys, the 2005 survey (Special Eurobarometer 229) sought to assess consumer preferences rather than citizen preferences. (This dichotomy is present throughout Vanhonacker *et al* as well.) Regarding the 2005 study, Vanhonacker *et al* state that

Citizens have a rather negative overall perception of the current state of farm animal welfare. The 2005 Eurobarometer study ($n=44,514$ covering 31 European countries) on farm animal welfare indicates that 82.3% of the Europeans evaluate the overall welfare of farm animals within the range of moderate to very bad. Furthermore, 78.3% of the respondents strongly believe that more should be done to improve the welfare and protection of farm animals within the EU. Also, 89.3% indicate not to receive sufficient information concerning the welfare conditions and protection of animals farmed within the EU, which illustrates the emerging need for more and clearer information. (Vanhonacker *et al*, 127)

The most striking inconsistency in this passage is the authors' data on the sample size and coverage of the 2005 study: the study itself indicates that “the survey has been carried out by TNS Opinion & Social, interviewing 24,708 citizens in the 25 Member States of the European Union between 9 February and 20 March 2005.” (Eurobarometer 2005, 2) There are indeed more European countries than there are EU Member States, but the

European-wide action on all sorts of issues (fully 81% say they want joint European action against terrorism). Yet national governments can point to other Eurobarometer polls showing that among the very same citizens, support for the EU is not that high.”

³ As an aside, the data from the 2005 survey also overwhelmingly support the qualifier raised about the 2007 survey. Each graph that represents citizen preferences for FAW by Member State shows a precipitous drop-off in interest from North/West to East/South (see, for example, Eurobarometer 2005, 25). The Eurobarometer authors also specifically mention this discrepancy in their conclusion (Eurobarometer 2005, 72).

survey data specifically breaks down responses by Member State country. Vanhonacker *et al*'s numbers are simply wrong.

The cited passage also runs the risk of committing the fallacy of composition (that is, assuming that what is true of the part is necessarily true of the whole); in the domain of FAW, as in many other domains, the *idea* of Europe is often quite different from the semi-fractured reality of Europe. When the survey turns to general views about animal welfare⁴—in section 3, “animal welfare at the European level”, the topic addressed by the cited passage in Vanhonacker *et al*—we again run into difficulties regarding how to aggregate Hungary and Sweden, Lithuania and Finland. Thus, while “82.3% of the Europeans evaluate the overall welfare of farm animals within the range of moderate to very bad”, “more than four out of ten respondents in Finland (54%), the Netherlands (43%) and Sweden (41%) thinks that animal welfare is adequately accounted for in their countries.” (Eurobarometer 2005, 65) In light of the data presented here and elsewhere—see, for example, page 27 of the study, which contrasts the views of FAW-related decisions in Northern or Western versus Southern or, especially, Eastern (newly acceded) Europe—it is potentially misleading to even postulate a unified “European opinion” on FAW.

In terms of Eurobarometer survey methodology, the methods are outlined in the “technical specifications” annex. Unlike the “standard Eurobarometer”, which is a twice yearly report on a wide variety of Europeanization-related topics, the “special Eurobarometer” surveys focus on specific topical domains. Covering Member State residents aged 15 or older,

⁴ The survey spends a great deal of time (sections 1 and 2) discussing Member State citizens' individual views on FAW in different species and on willingness to pay for increased FAW in eggs and other products.

The basic sample design applied in all states is a multi-stage, random (probability) one. In each country, a number of sampling points was drawn with probability proportional to population size (for a total coverage of the country) and to population density...In order to do so, the sampling points were drawn systematically from each of the “administrative regional units”, after stratification by individual unit and type of area...

In each of the selected sampling points, a starting address was drawn, at random. Further addresses (every nth address) were selected by standard ‘random route’ procedures, from the initial address. In each household, the respondent was drawn, at random...All interviews were conducted face-to-face in people’s homes and in the appropriate national language...

For each country a comparison between the sample and the universe was carried out. The Universe description was derived from Euro stat population data or from national statistics offices. For all countries surveyed, a national weighting procedure, using marginal and intercellular weighting was carried out based on this Universe description.

The annex concludes with a note stating that all results are estimates with increasing confidence limits for increasing observed percentages of response.

This methodology demonstrates that a sufficient effort was made to incorporate and distinguish the influence of location (rural or urban), gender, education, and income on FAW preferences, all of which have marked effects. It would have been nice to see some more detailed information about methodology, but none was provided beyond what is stated above, either in the document or at the EC Directorate-General press and Communication, Opinion Polls department website.

One unaddressed potential problem is the fact that Eurobarometer surveys (both general and special) tend to conduct approximately 1,000 surveys per Member State without fully addressing the substantial disparities in population size between countries. Italy, a country with a population where over 49 million people are above the age of 15, is thus placed on the same field as Latvia, a country where just over 1 million people are above the age of 15. The sample size and method may be large enough to account for this discrepancy—as, indeed, the last paragraph of the above passage addresses—but it seems to me to be a potential shortcoming.

In general, Vanhonacker *et al*'s referencing of the 2005 Eurobarometer is guilty of some of the same 'selective hearing' that Eurocrats sometimes use the Eurobarometer for; I can't help but feel that Vanhonacker *et al* only cited the data that served their purpose. This is not entirely fair, however—insofar as the rest of their article shows a genuine interest in honestly assessing perceptions and views rather than in distorting them to fit personal biases—and it may be due as much to the European Commission's portrayal of the Eurobarometer data as to the authors' interpretation of that data.

Te Velde *et al*: “Dealing with ambivalence: farmers’ and consumers’ perceptions of animal welfare in livestock breeding.” Unlike the authors' references to the Eurobarometer surveys, Te Velde *et al*'s article is referenced many times throughout Vanhonacker *et al*'s piece. Vanhonacker *et al* use Te Velde *et al*'s conceptual framework, in which stakeholder preferences are coded as: perceptions, convictions, values, norms, knowledge, or interests. Vanhonacker *et al* also draw on various insights from Te Velde *et al*'s study about stakeholder motivation.⁵

I will focus on the following assertions by Vanhonacker *et al*, which can most demonstrably be either supported or refuted:

- “farmers...have a much more positive perception of the current state of farm animal welfare [than do citizens...because of] the opposite perceptions between citizens and farmers based on a different interpretation of the components by which perception is determined” (Vanhonacker *et al* 2008, 127)
- “both farmers and citizens associate animal welfare with issues such as physical health, an adequate amount of food and drinking water, and sufficient heating and protection. Citizens, however, tend to include two additional values: freedom to move and freedom to fulfill natural desires”⁶ (Vanhonacker *et al* 2008, 127)

⁵ For one example, Vanhonacker *et al* state, citing Te Velde *et al*, that “the components of the frame of reference explaining the perception of the concept of farm animal welfare can be assumed to be more stable over time among farmers”. (Vanhonacker *et al*, 135)

⁶ This quote references Lassen *et al* and Marie as well as Te Velde *et al*, so Te Velde's article alone does not have to carry the brunt of justificatory weight.

- “the majority of the aspects within the dimensions of Feed and Water, Animal Health and Human-Animal Relationship...confirm...the more fine-grained perception of the farmer [relative to the citizen]. (Vanhonacker *et al* 2008, 134, citing Te Velde and others)
- “a switch towards a production system that gives more consideration to the ability to engage in natural behaviour involves huge investments and may jeopardize the economic performance and continuity of their farm. Te Velde *et al.* (2002) also mentioned that farmers consider this as returning to more traditional ways of farming, with worse working conditions as a consequence.” (Vanhonacker *et al* 2008, 134)

I therefore examine the methodology and results of the Te Velde *et al* study to determine if Vanhonacker *et al* are correct in attributing the following to the Te Velde *et al* study: 1) farmers view FAW generally more positively than do citizens; 2) consumers prioritize natural behaviors more than farmers do; 3) farmers are more attuned to certain practical aspects of FAW than are citizens; 4) farmers have rationally self-interested motives to avoid the consideration of natural behaviors.

The Te Velde *et al* study is structured as follows: a qualitative, semi-structured set of in-depth interviews with 30 people: 15 farmers and 15 consumers, each set purportedly drawn from a group as diversely situated in the various relevant demographic factors as possible:

We selected 15 consumers, widely differing in age, education level, size of the place of residence (big city versus countryside), ethnic backgrounds, and occupation (for instance a family doctor, a cleaning woman, a lecturer in psychology, a bricklayer, a furniture-maker, and a cook). The 15 livestock-breeding farmers who were interested consist of breeders of pigs, broiler chickens, and (meat) calves, whose farms widely differed in type and size (for instance varying from 800 to 11,000 pigs, and from 60,000 to 200,000 chickens), all working in a current (non-biological) farming system. (Te Velde *et al*, 207)

The Te Velde *et al* study, then, is qualitative where Vanhonacker *et al*'s is quantitative.⁷

One possible shortcoming of the farmer sample interviewed above is that “from 60,000 to 200,000 chickens” does not, for me at least, constitute a “wide differ[ence] in type and size.” This is an important clarifier in explaining much of Vanhonacker *et al*'s use of Te

⁷ I apologize for this article's relative lack of quantitative data; it was used very heavily by Vanhonacker *et al*, and there was little to draw on beyond the special Eurobarometer surveys in the way of quantitative sources.

Velde *et al*, but this problem would be solved by replacing “farmers” with “conventional larger-scale farmers” (800 pigs may not be ‘larger-scale’, but 60,000 chickens probably is). With this caveat in mind, I look at each of the four claims in turn.

1) farmers view FAW generally more positively than do citizens. At least within the parameters of the 15 farmers and citizens interviewed, this is clearly a fair assertion. The interviewed farmers talked mainly about health and didn’t much care for welfare discussion, and the authors parse this language to explain the underlying values and the rationality of avoiding attitudes that conflict with their interests. Thus do we see statements like “as long as my chickens grow well and look healthy, I suppose their welfare is OK.” (Te Velde *et al* 2002, 207) Accordingly, “due to the above described convictions, values, norms, and interests farmers are not internally motivated to actively search for more *knowledge* about animal welfare...instead they refer to alternative farming by describing bugbears...and stereotyping.” (Te Velde *et al* 2002, 209)

Again, this assertion only holds to the extent that Te Velde *et al*’s study accurately captures the domain “farmers”; the data listed above suggests that this might not be entirely the case, as does the implicit assumption inherent in the reference to “alternative farming”. Rather, it would be more conservatively reliable to say that this assertion holds true for “conventional larger-scale farmers”.

2) consumers prioritize natural behaviors more than farmers do. The first thing to point out about this assertion is that it is referring to consumers, not to citizens. Nonetheless, the interviews indicate that the opinions discussed are relevant to citizens’ concerns rather than consumer concerns per se. Given this caveat, this statement appears to be supported by the interview research as indicated by quotes such as “the pigs don’t

have much space...you can't say they have freedom to move" and "as soon as a piglet is born they take it away from its mother." (Te Velde *et al* 2002, 210)

3) farmers are more attuned to certain practical aspects of FAW than are citizens. Although this is a defensible statement, and one that is supported by much of the data in Vanhonacker *et al*, it is not actually a major focus of the Te Velde *et al* piece. Te Velde *et al* neither support nor deny this claim; they focus instead on the various 'coping strategies' that farmers and consumers use to justify their respective positions. This does not undermine Vanhonacker *et al*'s trustworthiness, however, for they referenced other authors as well when referring to this pattern of behavior.

4) farmers have rationally self-interested motives to avoid consideration of natural behaviors. This is clearly true, and it is supported by the convictions of farmers who say things like "sometimes it seems that they want to drive us out of the country." (Te Velde *et al*, 208)

In sum, Vanhonacker *et al* use Te Velde *et al*'s insights fairly, and the only possible misrepresentation—in the classification of "farmers"—seems to come from Te Velde *et al*'s paper itself.

Conclusion. If the sampling of the above three sources—two quantitative and one qualitative—are reasonably representative of the whole, Vanhonacker *et al*'s study uses its sources in a generally accurate way while not necessarily highlighting contrarian points or data that interfere with the lesson the authors are trying to impart.

This shortcoming was most apparent in the authors' citation of the 2005 Special Eurobarometer report, although the Eurobarometer survey was long enough that

Vanhonacker *et al* could not reasonably include most of what the survey had to report. Nonetheless, a reference to the difference between North/West and newly acceded East/Southeast Europe would have been helpful. The same criticism holds for the 2007 press report, although Vanhonacker's guarded single sentence is cautious enough to be justifiable. Vanhonacker *et al*'s use of Te Velde *et al* also appears quite solid, especially in light of Vanhonacker's helpful quantification of assertions that were gathered qualitatively by Te Velde *et al* and others.

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