



The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

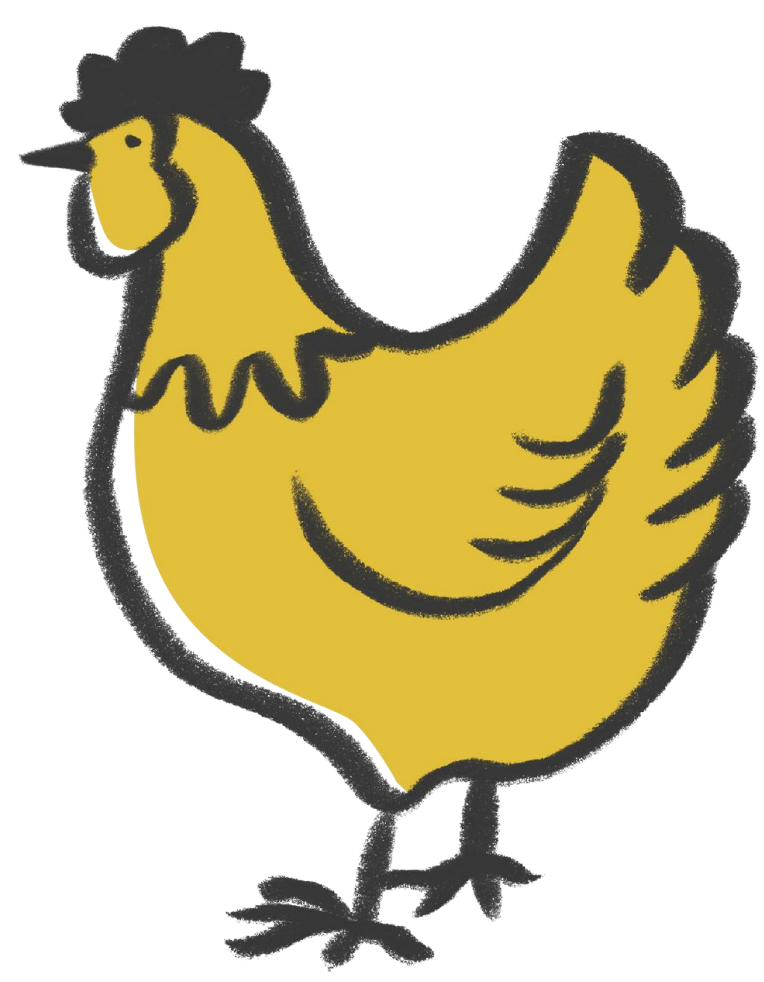
AgEcon Search

<http://ageconsearch.umn.edu>

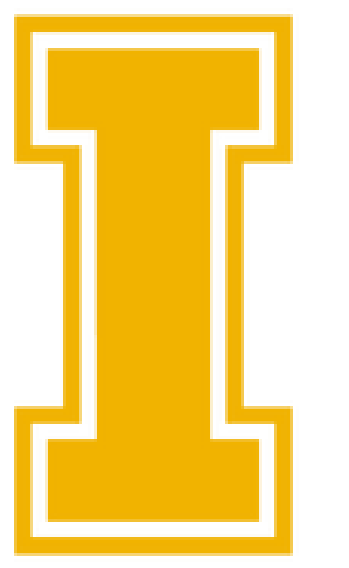
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.



Consumer Preferences for Animal Welfare in Poultry Production



University
of Idaho

Qi Zhang and Xiaoli Etienne

Department of Agricultural Economics and Rural Sociology, University of Idaho

Introduction

- Consumer concern for animal welfare is rising, but actual purchasing often prioritizes taste and price, revealing a “citizen-consumer paradox.”
- This study disaggregates welfare into four USDA-defined dimensions: feeding, housing, medical care, and slaughter.
- We uncover a complex mix of moral concern and hedonic motivation, revealing that consumer support is conditional, emotionally driven, and dimension-specific.

Research Questions

- Do consumers genuinely care about animal welfare or are choices driven by taste?
- How does information framing (text vs. image) affect concern and WTP?
- Are preferences consistent across welfare dimensions, or conditional and selective?

Choice Experiment

- Survey in December 2024 via Qualtrics with **1,000** responses from primary grocery shoppers in US.
- Use discrete choice experiment (DCE).
- A survey method to understand how people make decisions between different products/services.
- Participants choose among hypothetical options of a product with varying features.
- Each participant make 8 choices of poultry products with varying levels of **price**, **animal** feeding, housing, medical care, and slaughter method.
- Participants were randomly assigned to one of three groups:
 - Control (basic info)
 - Text (descriptive info)
 - Picture (text + image)
- Design allows for causal identification of information framing effects on preferences and WTP

Below are two options for purchasing whole chicken.
Which do you prefer?

Option 1	Option 2
Conventional feeding	Adequate and high-quality feeding
Spacious, clean, regulated housing	Conventional housing
Healthy, preventative care	Conventional care
Humane slaughter	Conventional slaughter
\$4.00	\$3.00

You choose:

☐ Option 1 ☐ Option 2 ☐ Neither

WTP Estimation

- Mixed Logit Model estimates individual-level WTP for each welfare attribute:

$$U_{i,j,s} = \alpha_i P_{i,j,s} + \beta'_i X_{i,j,s} + e_{i,j,s}$$

$$WTP_{ik} = \frac{\sum_{r=1}^{1000} WTP_{irk} \cdot S_i(WTP_{irk})}{\sum_{r=1}^{1000} S_i(WTP_{irk})}$$

- Allows for preference heterogeneity via random coefficients.
- Estimation via simulated maximum likelihood with 1,000 Halton draws per individual.

Treatment Effects on Concern

- Regressions to assess how text and image treatments influence concern:

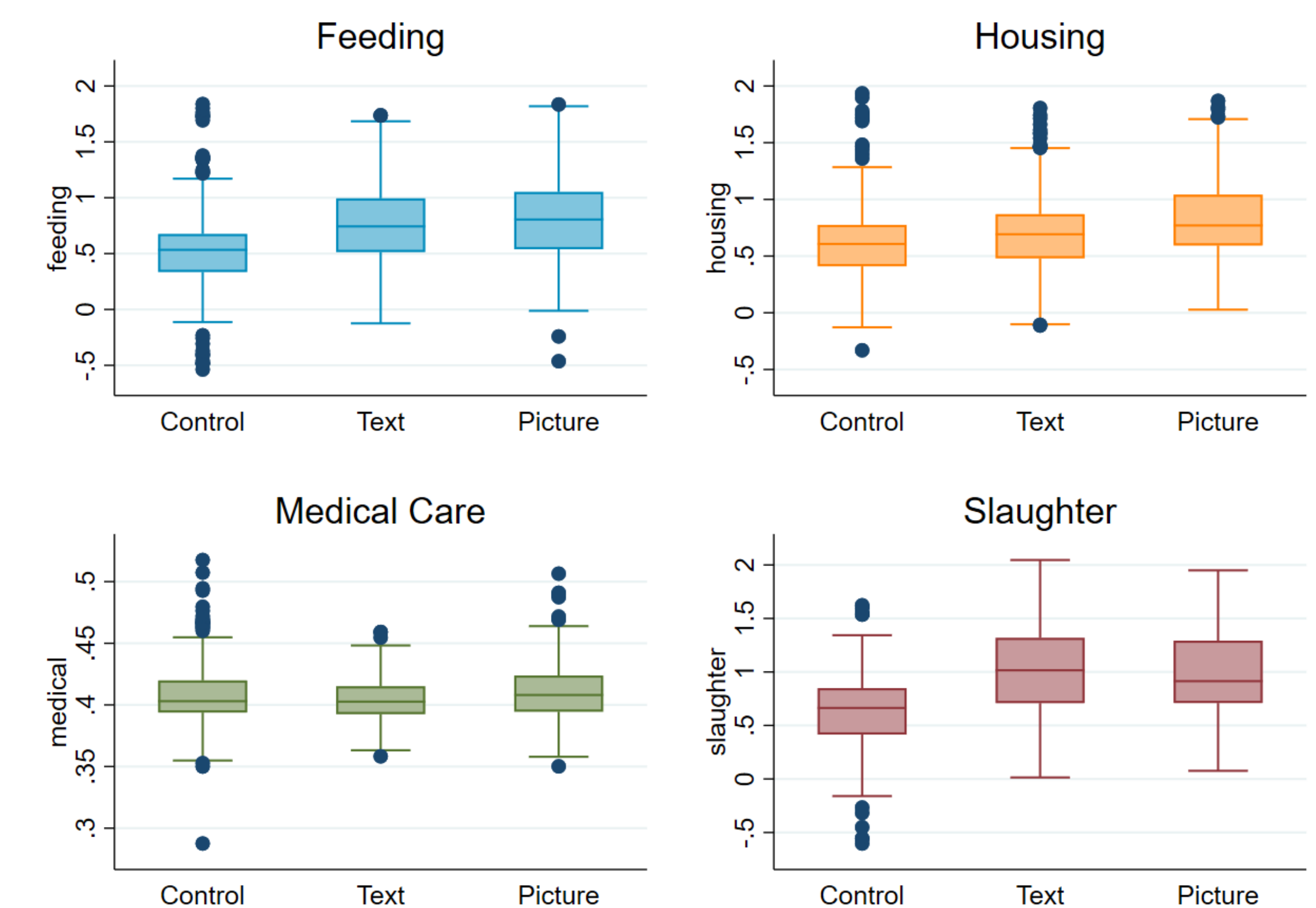
$$Y_i = \beta_0 + \beta_1 Text_i + \beta_2 Image_i + \gamma' X_i + \varepsilon_i$$

Further estimate interaction models to test:

- Does taste importance reduce treatment effects?
- Do ethical priors amplify visual impact?

Results

Willingness to Pay for Improved Welfare	
Factor	Impact on WTP
Slaughter	\$0.90/ lb
Housing	\$0.73/ lb
Feeding	\$0.70/ lb
Medical Care	\$0.41/ lb



- Image framing significantly raised WTP, especially for slaughter & housing
- Medical care elicited little response, even with visual cues
- Taste preference increases concern for feeding & housing, but not slaughter

Do Consumers Care or Just Taste?

- Text and image both raised concern, but visuals triggered stronger emotional engagement
- Consumers who prioritize taste were less responsive to information on housing
- Pre-existing ethical concern amplified the effect of visual framing

Conclusion

- Consumer support for animal welfare is often emotional and taste-driven, not purely ethical.
- Visual framing raises concern, but effects vary.
- Voluntary action alone is limited, most consumers still prioritize taste and price.
- Policy should combine labeling, retail nudges, and regulatory standards to promote welfare even when ethics are weak.



Funding support: This project is supported by the USDA NIFA under grant no. 2019-68008-29828 and 2023-68008-39849