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Lab Grown Meat Consumer Perception Analysis

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Abstract

Concerns have grown in recent years about the environmental impact and greenhouse emissions of the meat production industry and meat consumption. Attempts are under way to grow meat in labs from existing meat cells without having to additionally harvest animals and have recently been approved by the FDA. We have collected data from 252 survey respondents from the Northwest to explore consumer perceptions about such lab-grown meat products. Preliminary findings in the data display a generally positive attitude and a moderate level of confidence in the safety of lab-grown meat. Lastly, our findings suggest that businesses may be able to capitalize on consumer interest in lab grown meat by emphasizing the safety, ethical production methods, and environmental sustainability of these products. Additional analysis and results will be presented.

Comments

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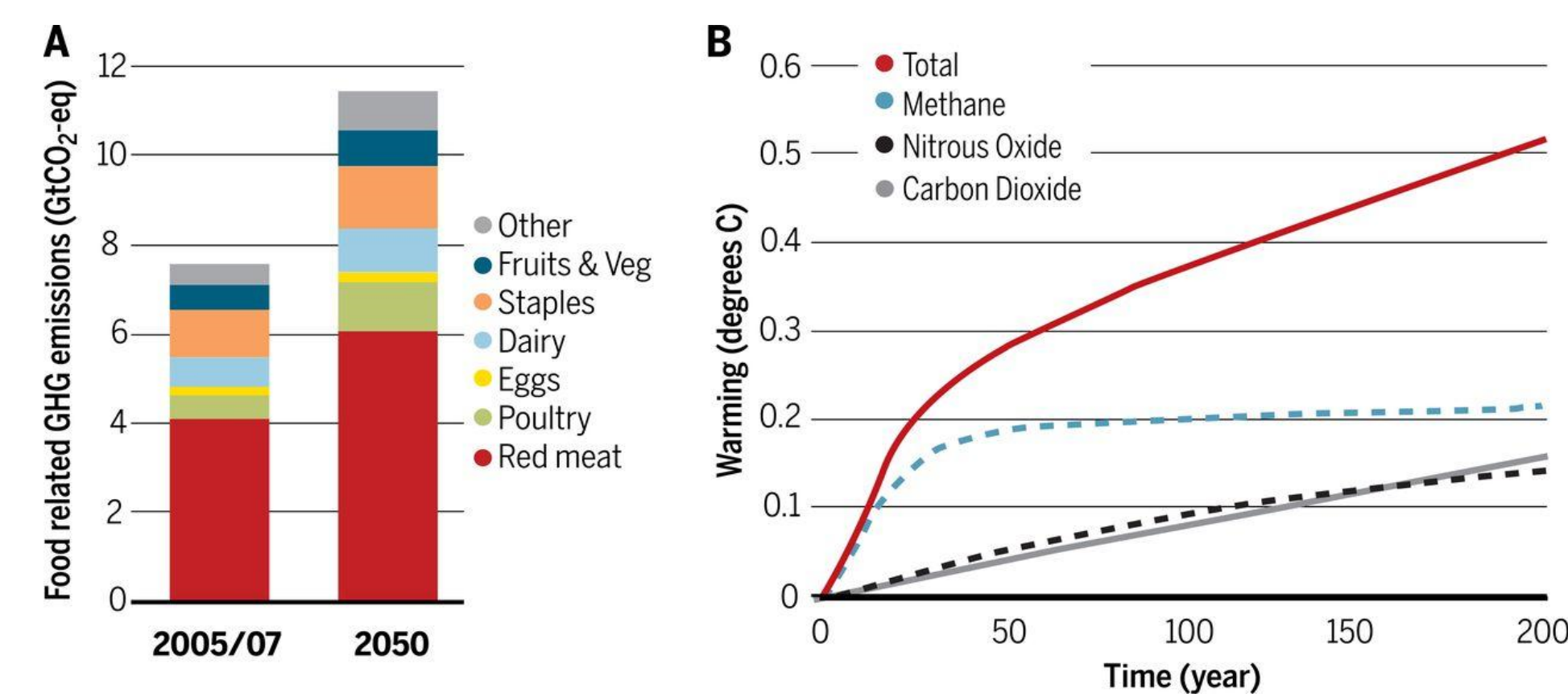
Boise State University

Ethics, Safety, Knowledge and Willingness to Try:

Introduction

Concerns have grown in recent years about the **environmental impact** and greenhouse emissions of the meat production industry and meat consumption.

We have collected data on how consumers feel about the idea of Lab-Grown meat compared to different demographics in three primary sections, - **safety, ethics, and willingness to try.**



Above shows the effect the production of red meat has on our GHG emissions.

Survey Design and Description:

- **Selection Criteria:** None.
- **Question specifics:** Demographic and attitude toward Lab-Grown meat.
- **Number of collectors:** Six, college students at Boise State.
- **Size:** 253 samples
- **Main Location:** Northwest
- **Gender:** 24.6% Male, 76.4% Female

Multiple

Multiple Regression Predicting the Key Drivers of Willingness to try Lab Grown meat	
Independent	Willingness to Try Lab Grown Meats Standardized Coefficients
Knowledge	0.116*
Ethics	0.331**
Safety	0.31**
Sustainability	0.131*
R sqr=	0.456
*p<0.05, **p<0.01, ***p<0.001	
N=	174

- **Dependent Variable:** Willingness to Try Lab Grown meat
- **Independent Variable:** Knowledge, Ethics, Safety, Sustainability

Political Story:

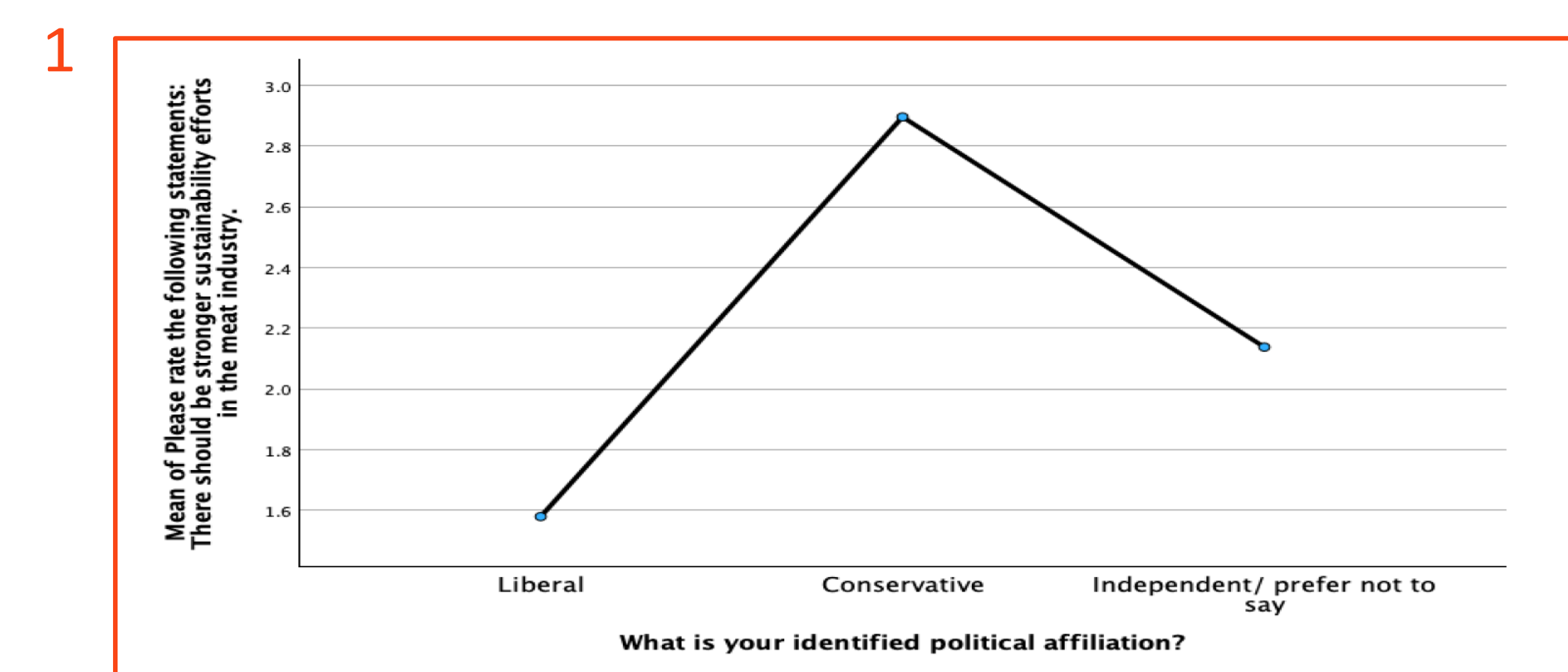
- Our main significance was found in Political Affiliation
- Age, Income, gender, and education level had no significance to attitude towards lab grown meat.

Age: > .05 Education: > .05
Income: > .05 **Political Affiliation: < .001**
Gender: > .05



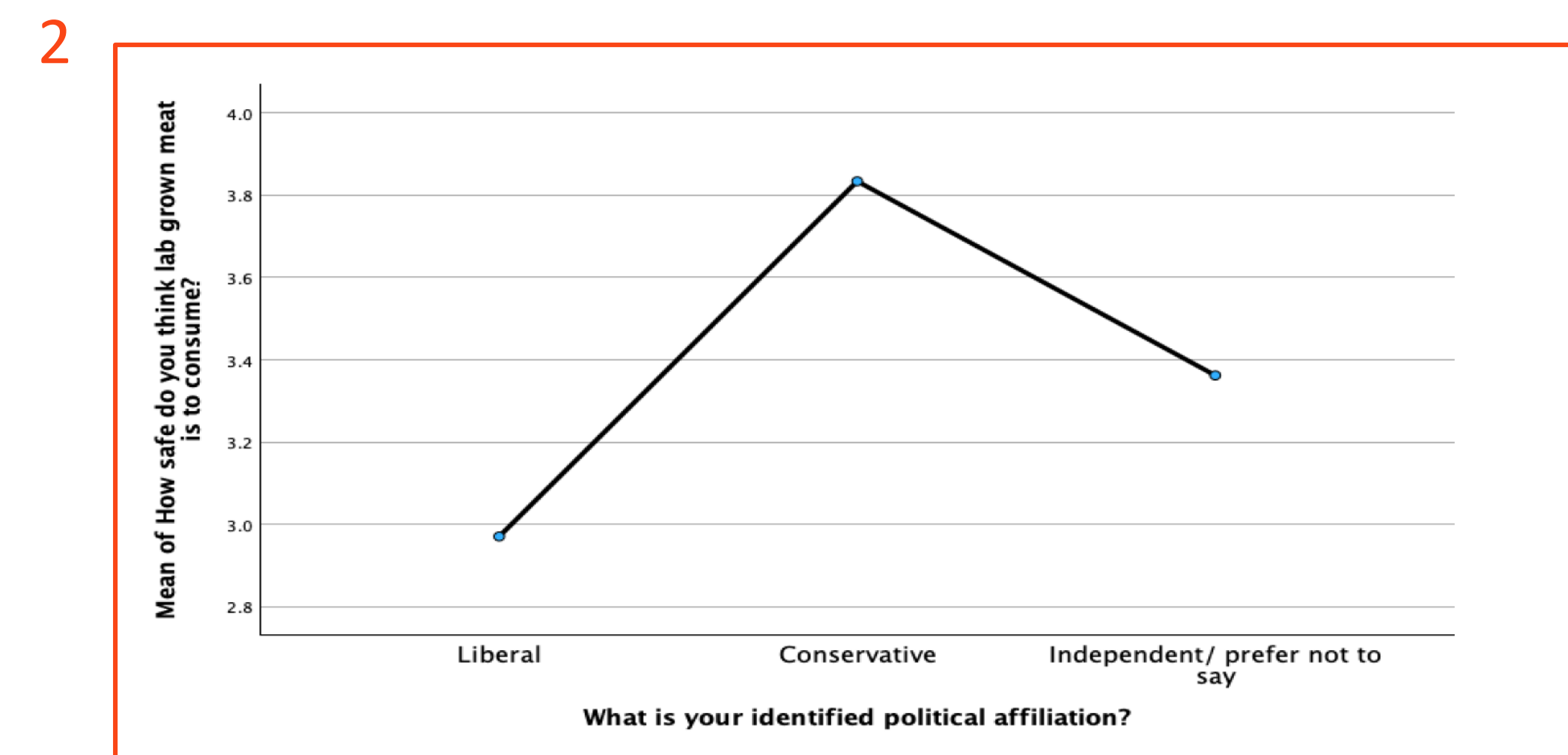
Political Data Results (ANOVA):

Political Affiliation vs. Sustainability Efforts Perception



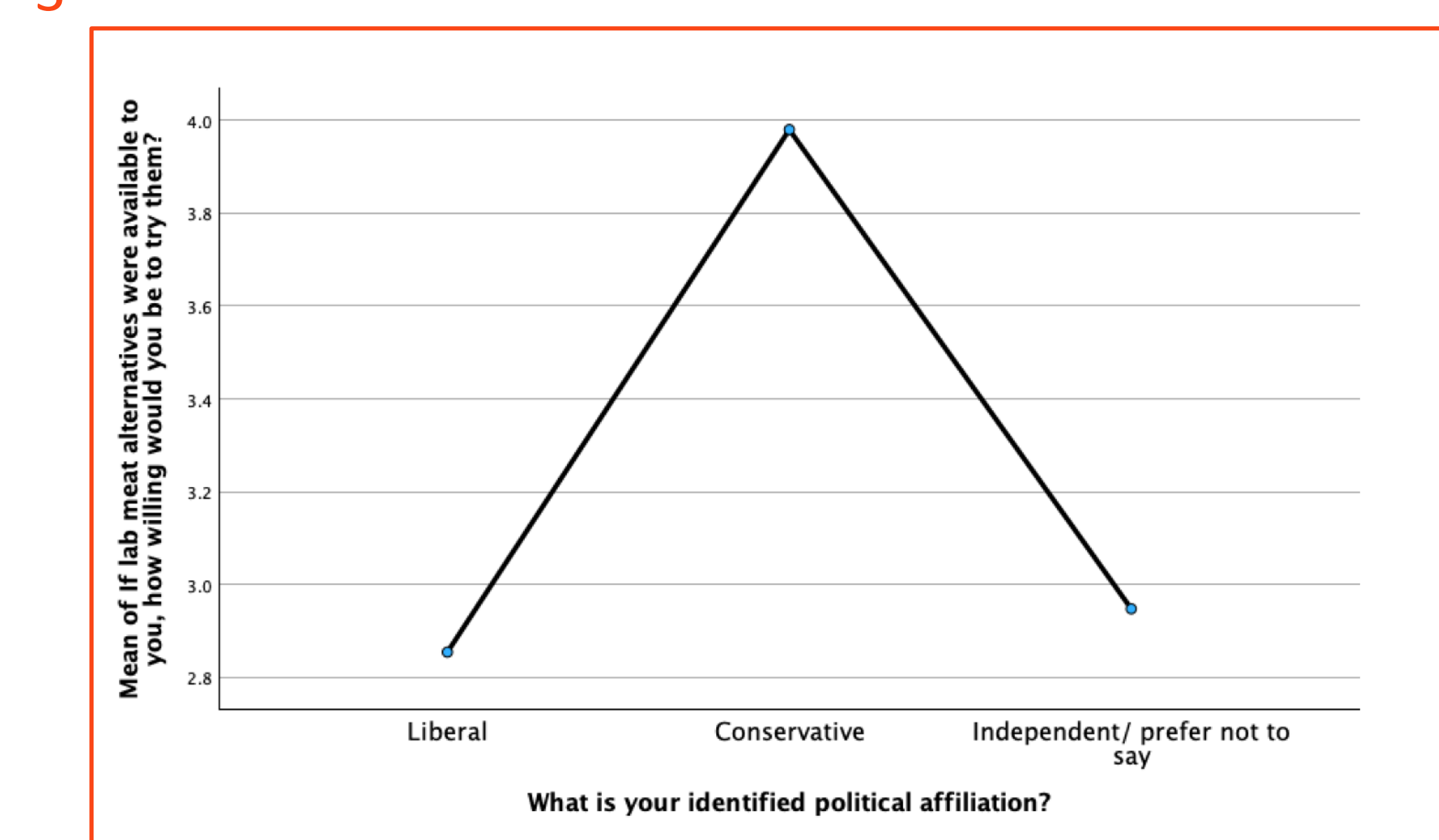
Scale of agreement: 1= strongly agree, 2= agree, 3= neutral, 4= disagree, 5= strongly disagree

Political Affiliation vs. Safety Perception



Scale of agreement: 1= strongly agree, 2= agree, 3= neutral, 4= disagree, 5= strongly disagree

Political Affiliation vs. Willingness to Try



Scale of agreement: 1= strongly agree, 2= agree, 3= neutral, 4= disagree, 5= strongly disagree

Broad Findings:

- Graph One:
 - In correlation to the need for stronger sustainability efforts
 - Liberal respondents tend to strongly agree/agree
 - Conservative respondents tend to be neutral
 - Independent respondents tend to agree
- Graph Two:
 - In correlation to safety of consumption of lab-grown meat
 - Liberal respondents tend to agree/be neutral
 - Conservative respondents tend to be neutral/disagree
 - Independent respondents tend to be neutral
- Graph Three:
 - In correlation to willingness to try
 - Liberal respondents tend to agree/be neutral
 - Conservative respondents tend to disagree
 - Independent respondents tend to agree/be neutral

Conclusion:

- The liberal consumers were more willing to try Lab Grown meat alternatives and believed they were safe and ethical.
- Conservative consumers were less open to the idea of Lab-Grown meats
- Age, Income, gender, and educational-level all had no significance towards lab grown meat.
- Independent consumers fell into the middle, but would be willing to try Lab-Grown meats if they were available.

References:

H. Charles J. Godfray et al. "Meat consumption, health, and the environment." Science 361 eaam5324 (2018). DOI:10.1126/science.aam5324