

# Predicting Consumers' Local Food Attitude with Personal Values and Local Food Online Videos

Shuyang Qu<sup>1</sup>, Alexa Lamm<sup>2</sup>, Joy Rumble<sup>3</sup> & Ricky Telg<sup>4</sup>

## Abstract

*This study assessed how the personal value associated with local food messages in an online video format influenced U.S. consumers' attitudes toward local food. To accomplish this, we created two video treatments focusing on how local food supports the local economy and strengthens social connections, respectively. We developed two scales to measure the personal values (personal value of supporting the local economy and personal value of strengthening social connection). These values were associated to the video treatments' message frames. Descriptive analyses revealed a neutral personal value of supporting local economy and strengthening social connection among U.S. consumers, and a positive attitude toward local food. Multiple regression indicated that the personal value associated with the video treatment was not always a stronger predictor of attitude than the other personal value. In fact, we found that the personal value of supporting the local economy was a more significant predictor of local food attitude than personal value of strengthening social connection in both video treatments.*

**Keywords:** local food, personal values, farming, schema, online video, messages

## Introduction

For many years, agricultural companies and organizations have used the phrase “safe, affordable, abundant food” to provide an image of modern agriculture to consumers, however research has found consumers no longer relate to or find such messages credible (Ketchum & Maslansky, 2013). Instead, consumers have become increasingly interested in the long-term health effects and the economic, social and environmental effects of what they eat (Ketchum & Maslansky, 2013). Additionally, people tend to have favorable attitudes toward farmers and ranchers, but not farming and ranching as an industry (Ketchum & Maslansky, 2013). These attitudes are better understood in the context of two competing agricultural paradigms that exist in the U.S.: conventional agriculture and alternative agriculture (Beus & Dunlap, 1990).

Knorr and Watkins (1984) described conventional agriculture as “capital-intensive, large-scale, highly mechanized agriculture with monocultures of crops and extensive use of artificial fertilizer, herbicides and pesticides, with intensive animal husbandry” (p. x). Alternative agriculture

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<sup>1</sup> Shuyang Qu an Assistant Professor in the Department of Agricultural Education and Studies at Iowa State University, 209A Curtiss Hall, Ames, IA 50011, 515-294-8343 or [squ@iastate.edu](mailto:squ@iastate.edu)

<sup>2</sup> Alexa Lamm is an Associate Professor in the Department of Agricultural Education and Communication and the Associate Director of the Center for Public Issues Education in Agriculture and Natural Resources at the University of Florida, 121E Bryant Space Science Center, Gainesville, FL, 32611, [alamm@ufl.edu](mailto:alamm@ufl.edu)

<sup>3</sup> Joy N. Rumble is an Assistant Professor of Agricultural Communication in the Department of Agricultural Education and Communication and the Center for Public Issues Education at the University of Florida, PO Box 115040, Gainesville, FL, 32611, [jnrumble@ufl.edu](mailto:jnrumble@ufl.edu).

<sup>4</sup> Ricky Telg is a professor in the Agricultural Education and Communication department and the Director of the Center for Public Issues Education in Agriculture and Natural Resources at the University of Florida, 101B Bryant Hall, Gainesville, FL, 32611, [rwtelg@ufl.edu](mailto:rwtelg@ufl.edu).

is more difficult to define because of its vast diversity, such as organic agriculture, sustainable agriculture, and low-input agriculture (Buttel, Gillespie, Janke, Caldwell, & Sarrantonio, 1986). The Alternative Farming System Information Center (AFSIC) has reported that practices and enterprises of alternative agriculture are anything distinguished from conventional agriculture using “direct marketing and other entrepreneurial marketing strategies” (Schuck, 1988, p. 1).

The United State Department of Agriculture (USDA) developed AFSIC to “identify resources about sustainable food systems and practices in support of its effort to ensure a sustainable future for agriculture and farmers worldwide” (USDA National Agricultural Library, 2016, para. 1). Land-grant colleges of agriculture have also been placing emphasis on education, research, and outreach of alternative agriculture (Buttel & Gillespie, 1988; Parr, Trexler, Khanna, & Battisti, 2007).

Placing an emphasis on local food is part of the alternative agriculture. Feenstra (2002) described local community food systems as a way to collaboratively build sustainable food economies that are locally based, making the distribution process one that becomes centered in a certain place in terms of economics as well as environmental and social health. Local food has also been described as a “championed” response to conventional agricultural production and supply (Ilbery & Maye, 2006, p. 352).

Research studies have identified local food’s superior food quality, potential of improving consumers’ nutrition and leading consumers to healthier food options (Ahern, Brown, & Dukas, 2011; Salois, 2011; Martinez et al., 2010; Norberg-Hodge, Merrifield, Gorelick, 2002; Saarinen, Jantunen, & Haahtela, 2010), although other research counter argued that local foods are not necessarily more nutritious or fresh (Edwards-Jones, 2010). Factors such as consumption patten and food availability should be taken into consideration. Studies have also indicated local food’s ability to empower small scale producers as most local food chains eliminate the middlemen between purchasers and consumers (Norberg-Hodge et al. 2002; Tropp, 2014). However, the capability of meeting the food safety guidelines and sustaining the needs of the consumers from small scale producers were called into question (Godette, Beratan, & Nowell, 2015).

The social benefits of local food have also been documented in the literature, and findings indicate that having people actively engaged in the food system enables individuals in the community to build connections within the community, improve the social awareness, and thus enhance the place they live (Kato, 2014; Perrett, & Jackson, 2015). Some scholars expressed their concerns of linking the social benefits directly to the scale of food (Belliveau 2005; DuPuis & Goodman 2005; Hinrichs, 2003; Johnston & Baker 2005), and the limit of local scale should be considered before implementing local food as the solution of a social issue (Lake, Sisson, & Jaskiewicz, 2015).

Researchers have emphasized the importance of communicating continuously about the local food movement. Bianchi and Mortimer (2015) stressed the importance of developing communication materials explaining how consuming local food supports local businesses and farmers, and suggested effective local food campaigns would reinforce personal values associated with local consumption. Goodwin (2013) suggested message testing could be used to address the local food conversation.

Using the appropriate communication format plays a critical role in effective communication (Webster & Ksiazek, 2012), and video has become a common communication method for promoting products, and has recently been considered the most powerful storytelling medium (Schroeder, 2015) as well as the most utilized content medium by marketers (Borowski,

2014). Online video's characteristics of being entertaining, informational, and engaging have also gained approval from a variety of audiences (Hagerty, 2008; Schroeder, 2015, Trimble, 2015).

Recently, the United States (U.S.) Farmers and Ranchers Alliance suggested that if consumers' concerns about food and agriculture continue to go unaddressed, communication efforts will never be able to enhance the credibility of the agricultural industry (Schroeder, 2015). Therefore, it becomes important to examine how deep-rooted values drive the effect of local food messages on consumers' attitude toward local food. Specifically, this study investigated how two personal values influenced the effect of online video on consumers' attitude toward local food. This study adds to Priority Five and Six of the National Research Agenda of the American Association for Agricultural Education: "Efficient and Effective Agricultural Education Programs" and "Vibrant, Resilient Communities" (Roberts, Harder, & Brashears, 2016, p. 41, p. 49), and contributes to the research questions under the priorities, "What methods, models, and programs are effective in communicating with diverse audiences?" (p. 43) and "How do agricultural leadership, education, and communication teaching, research, and extension programs impact local communities?" Further, this research was necessary to inform agricultural educators and communicators on how to effectively influence the public about agriculture from the aspect of local food, which enhances economy and social connections in a local community.

### **Literature Review**

Framing theory was one of the theories used to guide this study as we considered the two discourses we were interested in regarding local food: enhancing local economy and strengthening social connections. Shoemaker and Reese (1996) referred to framing as the way journalists and other communicators present information, which resonates with audiences' existing schemas. Per the assumption of the sociological approach to framing, human beings are incapable of fully understanding the world and rely on the information that is available to them to make sense of the world (Goffman, 1974; Heider, 1959; Scheufele, 2000). The information individuals obtain is largely influenced by how journalists and communicators frame the information (Scheufele, 1999). Framing provides media audiences with "greater apparent relevance to the issue than they might appear to have under an alternative frame" by stressing certain values and facts (Nelson, Clawson, & Oxley, 1997, p. 567). However, framing is not a "magic bullet" to change an audience's perceptions and attitude (Cantril, Gaudet, & Herzog, 1940). A wide-range of literature on framing has revealed framing effects are not universal and individual characteristics such as demographics and personal experience have a great amount of influence on opinions (Brewer, 2003; Druckman, 2001, 2004; Druckman & Nelson, 2003).

How audiences process and interpret information varies based on their "preexisting meaning structures or schemas" (Scheufele, 1999, p. 105). As indicated in Scheufele's (1999) process model of framing, existing audience frames moderate the relationship between media frames and their outcome to an audience. Scheufele and Iyengar (2012) stated framing effects vary in strength depending upon audiences' preexisting schema (p. 14).

Given the effect of personal schema on decisions-making processes, we used schema theory to guide this study in light of its connection between information processing and attitude. Neisser (1976) regarded schemata as "the medium by which the past affects the future; information already acquired determines what will be picked up next" (p. 74). When new information is presented, individuals search for existing schemata for satisfying interpretations (Axelrod, 1973). Those who find satisfying interpretation for the new information may extend usage of the selected schema, upgrade source credibility, and use this schema with more confidence in the future. If the new information fails to match any existing interpretations, people will place blame with either the

old or the new information source. These individuals will either exit the new information processing with their old interpretation or combine old and new information to find new explanations. If they are successful in combining information, a person may modify or extend usage of selected schema and use the interpretation, with more confidence in the future (Axelrod, 1973).

Personal values play important roles in forming schema that guide attitudes and behaviors (Schwartz & Bilsky, 1987). Rokeach (1973) defined *values* as “enduring beliefs that a specific mode of conduct or end-state of existence” (p. 5). Values have often been treated as stable mental structures that vary little by situation (Hitlin & Piliavin, 2004). This trait of values distinguishes itself from *attitude*, where *attitude* is “an organization of several beliefs around a specific object or situation” (Rokeach, 1973, p. 18). The values an individual follows play an important role in consumer attitude and the decision-making process on food choice (Burgess, 1992; Honkanen, Verplanken, & Olsen, 2006; Vermeir & Verbeke, 2008).

Personal value is also an important indicator of the framing effect of an issue. Previous literature on public opinion has revealed the receptivity to an issue frame is determined by the consistency between the message conveyed in the frame and the audience member's personal beliefs and values (Haider-Markel & Joslyn, 2001; Ramirez & Verkuyten, 2011; Zaller & Feldman, 1992). When individuals link their attitude of an issue to important values, the communication messages are usually less effective (Douglas, Westley, & Chaffee, 1970; Johnson & Eagly, 1989). However, when the message is consistent with the audience member's personal values, a positive attitude of the issue can be predicted (Hullett, 2002; Maio & Olson, 1994).

Consumer attitude is a relatively stable state, which implies a degree of resistance to change (Eagly & Chaiken, 1995), with strong attitudes being more predictive of consequent behavior (Eagly & Chaiken, 1995). The fact that audience attitudes moderate the relationships between the received media information and behavioral outcomes makes attitude a valuable concept for mass media research (Petty et al., 2009). With additional research showing the success of a media campaign was determined by whether the campaign changed the media recipient's attitudes in the desired direction or would lead to the desired behavior change (Petty, Brinol, & Priester, 2009).

Previous research has demonstrated consumers exhibit positive attitudes toward local food (Bianchi & Mortimer, 2015; Godette et al., 2015) and that local food consistently has been considered fresher and more nutritious (Chambers, Lobb, Butler, Harvey, & Traill, 2007; Zepeda & Leviten-Reid, 2004), better for the local community (Morris & Buller, 2003; Qu, Roper, & Rumble, 2014; Thilmany, Bond, & Bond, 2008), and more environmentally friendly (Gracia & Albisu, 2001; Zepeda & Leviten-Reid, 2004) than conventional products.

### **Purpose and Objectives**

The purpose of this study was to assess how a personal value associated with the local food messages delivered through online videos influenced U.S. consumers' attitudes toward local food. Each of the online videos was developed to feature how local food supports the local economy and builds social connections, respectively. The personal values associated with the two videos were the personal value of supporting the local economy and the personal value of strengthening social connection. The specific objectives were:

**Objective 1:** Describe U.S. consumers' personal value of supporting the local economy, personal value of strengthening social connections, and attitude toward local food after watching an assigned online video about how local food supports the local economy or after watching an assigned online video about how local food strengthens social connection.

**Objective 2:** Determine if U.S. consumers' personal value (personal value of supporting the local economy; personal value of strengthening social connection) associated with the message frame on their assigned video (an online video featuring local food benefiting local economy; an online video featuring local food benefiting local economy strengthening social connection) predicts their attitudes toward local food.

The hypothesis used was that the personal value associated with the treatment message frame was a stronger predictor of attitude toward local food than the other personal value.

### **Methods**

This study was part of a national study examining U.S. consumers' food-related perceptions and behaviors, where we designed a between-subject post-test only experiment to fulfill the objectives. Two video treatments were developed with one focused on how local food supports local economy, and the other focused on how local food strengthens social connection.

We conducted eight cognitive interviews to ensure that the video treatment was understood as the researcher intended (Dillman, Smyth, & Christian, 2014). Cognitive interviews help researchers revise "wording, question order, visual design, and navigation problems" (Dillman et al., 2014, p. 243). We selected the interviewees from a convenience sample of grocery shoppers residing in California, Florida, Iowa, and Wisconsin. None of the interviewees had an agricultural background. With the feedback provided by the interviewees, we reworded several long sentences for clarity and replaced a few images in the videos to avoid bias.

We also conducted a pilot test in a class within a college of agricultural and life sciences of a large southeastern university to determine instrument reliability and validity. Prior to the pilot test, a panel of experts reviewed the instrument for face and content validity. We selected a panel of experts based on members' knowledge and experience in the fields of consumer attitudes, communication theory, experimental design, survey design, video production, and health and science messaging. The instruments were deemed reliable from the pilot study (Cronbach Alpha value of local economy scale (pilot study) = .75; Cronbach Alpha value of social connection scale (pilot study) = .85; Cronbach Alpha attitude toward local food (pilot study) = .92) as well as in the final data collection (Cronbach's Alpha value of local economy scale = .79; Cronbach's Alpha value of social connection scale = .85; Cronbach's Alpha attitude toward local food scale = .88).

Qualtrics, an online survey company, was selected to distribute the survey, and they provide a non-probability opt-in panel sampling method to recruit respondents representative of U.S. residents age 18 or older. To compensate for the possible error of non-probability sampling such as coverage error and non-randomization, this study weighted the sample data using sex, age, and race from the 2010 U.S. Census data (Baker et al., 2013).

We created the videos with messages specifically about how local food supported local economy and strengthened social connections, respectively. We combined still images that fit the messages in the videos, and to control the effect of stimuli, we kept the messages in both videos in the same style of narration, same tone, same technical effects, and utilized the same intro and outro. We inserted manipulation check questions in the survey to ensure the respondents experienced what the researcher intentionally manipulated (Gravetter & Forzano, 2015). In addition, at the beginning of the survey, we asked the respondents to test their audio before the video started playing and respond whether they could view and hear a test video. Respondents who were unable to view or hear the video were directed to the end of the survey. To ensure respondents spent sufficient time

viewing the video, respondents could not progress through the survey until 35 seconds had elapsed while they were supposed to be watching the video.

This study is part of a large study examining U.S. consumers' food-related perceptions and behaviors. The original survey was launched on April 26, 2016 for a duration of four days, and closed on April 29, yielding 3,097 responses, 1,024 of which were complete (33.1%). Respondents randomly received one of the video treatments. The original study contains a control group and another video treatment group that are not relevant to the objectives of this study. According to the objectives of this specific study, we removed the irrelevant participants, leaving a total of 432 responses relevant for this study. Table 1 displays the frequencies and percentages of the respondents in each treatment group and the links to the video treatments used in this study.

Table 1

*Respondents of Each Treatment and Video Treatment Link*

|   | <i>f</i> | %    | Video URL   |
|---|----------|------|---|
| Support of local economy treatment        | 215      | 49.8 | <a href="https://youtu.be/u-HZXo4GTqE">https://youtu.be/u-HZXo4GTqE</a> |
| Strengthening social connection treatment | 217      | 50.2 | <a href="https://youtu.be/wJwHwTGhie4">https://youtu.be/wJwHwTGhie4</a> |

Researchers of this study developed scales for two personal values (personal value of supporting of the local economy and personal value of strengthening social connection) as well as one attitude toward local food. We measured each of the three scales using responses to a list of statements on a 5-point Likert scale (i.e., 1 = *Strongly Disagree*, 2 = *Disagree*, 3 = *Neither Agree nor Disagree*, 4 = *Agree*, 5 = *Strongly Agree*). The two personal value scales were worded in a way to address the personal values in general, not as they specifically related to local food. Each of the personal value measurements had two statements negatively worded and the rest positively worded (e.g., “I prefer that money I spend stay in my neighborhood community” and “Social interaction with members of my neighborhood community is irrelevant to me”). We reverse-coded the negatively worded statements for the analysis. Each of the scales was summed and averaged to generate a mean score. The range of each scale was from one to five. The real limits standard set to interpret the scales were: 1.00 – 1.49 = *Strongly Disagree*, 1.50 – 2.49 = *Disagree*, 2.50 – 3.49 = *Neutral*, 3.50 – 4.49 = *Agree*, and 4.50 – 5.00 = *Strongly Agree*.

**Data Analyses**

We used descriptive statistics to address objective one. For objective two, we hypothesized that respondents' personal value associated with their received video treatment drove the respondent's attitude toward local food. That is, the personal value associated with the video treatment (either supporting the local economy with the local economy video treatment, or strengthening social connection with the social connection video treatment) was expected to be a more significant predictor of attitude toward local food when compared to the other non-associated personal value. To ensure the comparability of the two value scales, the respondents' score for each value was converted to z-scores using the formula,  $z = \frac{x-\mu}{\sigma}$ . Z-scores convey the standard deviations from their means for a normal distribution (Field, 2013). The z-score assisted in making the two personal value scales comparable in the sense that both respondents' personal value scores are compared according to the mean and standard deviation of each personal value.

Multiple regression was used to determine how each standardized personal value predicted attitude toward local food in each video treatment group. In both treatment groups, we used the z-score of the two personal values to predict the participants' attitudes toward local food. Further, we identified if the personal value associated with the video treatment was the stronger predictor of the attitude toward local food. The predictor variables were the standardized personal values of supporting the local economy (ECO) and strengthening social connection (SOC). The response variable was attitude toward local food. Prior to conducting multiple regression analysis, assumptions of normality, independence, homoscedasticity, additivity and linearity, and multicollinearity were tested and satisfied (Field, 2013).

**Results**

**Objective 1**

Objective one was to describe U.S. consumers' personal value of supporting the local economy, personal value of strengthening social connections, and attitude toward local food after watching one of the assigned online videos about how local food supports the local economy or about how local food strengthens social connection.

For the personal value of supporting the local economy, the mean was 3.44 (*SD* = .63), indicating respondents held a neutral personal value of supporting the local economy (see Table 2). Similarly, for the personal value of strengthening social connection scale, a mean of 3.45 (*SD* = .72) was determined, indicating a neutral value of social connection. Attitude toward local food in the treatment groups was 3.62 and 3.59 respectively, demonstrating a positive attitude toward local food after viewing either of the two video treatments.

Table 2

*Descriptive Analyses of Personal Values and Attitude*

|  | Original          |           | Standardized (z-score) |           |
|--|-------------------|-----------|------------------------|-----------|
|  | <i>M</i>          | <i>SD</i> | <i>M</i>               | <i>SD</i> |
| Value of supporting the local economy    | 3.44 <sup>a</sup> | .63       | .01                    | 1.01      |
| Value of strengthening social connection | 3.45 <sup>a</sup> | .76       | -.00                   | 0.95      |
| Attitude toward local food               |                   |           |                        |           |
| In local economy treatment               | 3.62 <sup>a</sup> | .62       |                        |           |
| In social connection treatment           | 3.59 <sup>a</sup> | .67       |                        |           |

Note. <sup>a</sup> 1 = *Strongly Disagree*, 2 = *Disagree*, 3 = *Neither Agree nor Disagree*, 4 = *Agree*, 5 = *Strongly Agree*; The real limits standard is: 1.00 – 1.49 = *Strongly Disagree*, 1.50 – 2.49 = *Disagree*, 2.50 – 3.49 = *Neutral*, 3.50 – 4.49 = *Agree*, and 4.50 – 5.00 = *Strongly Agree*.

A majority of the respondents agreed or strongly agreed with the statements, “The prosperity of my neighborhood community economy is important to me,” and “I prefer money I spend stay in my neighborhood community.” The percentages of combined *agree* and *strongly agree* and combined *disagree* and *strongly disagree* were both close to 30% with the statements “I am all right if the money I spend does not benefit my neighborhood community,” and “I hardly think about whether or not the money I spend benefits my neighborhood” (see Table 3).

Table 3

Personal Values of Supporting the Local Economy Scale (n = 432)

| Statement  | Level of Agreement/Disagreement |               |                  |               |                |
|--|---------------------------------|---------------|------------------|---------------|----------------|
|  | <i>SD</i><br>%                  | <i>D</i><br>% | <i>NAND</i><br>% | <i>A</i><br>% | <i>SA</i><br>% |
| The prosperity of my neighborhood community economy is important to me.                            | .5                              | 3.9           | 21.6             | 54.0          | 20.0           |
| I prefer that money I spend stay in my neighborhood community.                                     | 1.8                             | 3.7           | 26.5             | 50.2          | 17.8           |
| It is important for me to know that the money I spend benefits those in my neighborhood community. | 1.7                             | 6.2           | 31.5             | 46.5          | 14.0           |
| I am concerned about the economy associated with my neighborhood community shrinking.              | 2.6                             | 13.2          | 35.7             | 35.7          | 12.8           |
| I am all right if the money I spend does not benefit my neighborhood community <sup>a</sup>        | 5.5                             | 23.7          | 40.4             | 24.7          | 5.7            |
| I hardly think about whether or not the money I spend benefits my neighborhood <sup>a</sup>        | 9.9                             | 25.5          | 34.0             | 23.1          | 7.5            |

Note. Scale: <sup>a</sup> Reverse-coded items.

For the personal value of strengthening social connection scale, more than half of the respondents agreed or strongly agreed with the statement, “It is valuable to interact with people whom are different from myself in my neighborhood community,” “It is important for me to be able to discuss issues with others in my neighborhood community,” and “It is valuable to listen to different opinions from people in my neighborhood community” (see Table 4). About half of respondents disagreed or strongly disagreed with the statements, “I do not see the value of interacting with others in my neighborhood community,” and “Social interaction with members of my neighborhood community is irrelevant to me.”



Table 4

Personal Values of Strengthening Social Connection Scale (n = 432)

| Statement  | Level of Agreement/Disagreement |      |        |      |      |
|--|---------------------------------|------|--------|------|------|
|  | SD%                             | D%   | NAND % | A%   | SA%  |
| Connecting with the members of my neighborhood community is important to me.                       | 4.1                             | 15.3 | 34.2   | 37.4 | 9.1  |
| It is valuable to interact with people who are different from myself in my neighborhood community. | 2.8                             | 4.6  | 34.9   | 46.5 | 11.2 |
| It is important for me to be able to discuss issues with others in my neighborhood community.      | 3.8                             | 12.3 | 31.5   | 42.2 | 10.3 |
| It is valuable to listen to different opinions from people in my neighborhood community.           | 2.1                             | 3.4  | 33.4   | 47.2 | 13.9 |
| I do not see the value of interacting with others in my neighborhood community <sup>a</sup>        | 15.4                            | 34.7 | 30.0   | 16.9 | 2.9  |
| Social interaction with members of my neighborhood community is irrelevant to me <sup>a</sup>      | 13.2                            | 32.6 | 26.9   | 10.7 | 6.5  |

Note. Scale: <sup>a</sup> Reverse-coded items.

Table 5 displays the frequencies of attitude toward local food. Zero respondents in the strengthening social connection treatment group strongly disagreed with the statement “I prefer locally produced food than food produced elsewhere,” while about 60% in both treatment groups agreed or strongly agreed with the same statement. Similarly, more than 60% of the respondents in both treatment groups agreed or strongly agreed with the statements “Having access to locally produced food is important to me,” “I believe consuming locally-produced food has more benefits than consuming non-locally produced food,” “It is necessary for people to have access to local food,” and “Locally grown food is more appealing to me than non-locally-produced food.”

Table 5

Attitude Toward Local Food in Each Treatment Group (N = 432)

|   | <i>SD</i> | <i>D</i> | <i>NAND</i> | <i>A</i> | <i>SA</i> |
|---|-----------|----------|-------------|----------|-----------|
|   | %         | %        | %           | %        | %         |
| I prefer locally produced food than food produced elsewhere.  |           |          |             |          |           |
| Local economy treatment (n = 215)   | 1.3       | 1.6      | 36.3        | 39.7     | 21.1      |
| Social connection treatment (n = 217)   | 0         | 4.3      | 35.3        | 40.5     | 19.9      |
| Having access to locally produced food is important to me.  |           |          |             |          |           |
| Local economy treatment   | .4        | 2.3      | 36.1        | 45.0     | 16.2      |
| Social connection treatment   | .3        | 6.4      | 32.7        | 40.5     | 20.1      |
| I believe consuming locally produced food has more benefits than consuming non-locally-produced food. |           |          |             |          |           |
| Local economy treatment   | 1.1       | 3.2      | 31.4        | 43.6     | 20.8      |
| Social connection treatment   | 1.3       | 5.9      | 29.7        | 44.2     | 18.9      |
| To me, locally produced food is more valuable than non-locally produced food.                         |           |          |             |          |           |
| Local economy treatment   | 1.8       | 3.7      | 36.9        | 42.8     | 14.9      |
| Social connection treatment   | 1.0       | 9.0      | 26.2        | 46.6     | 17.3      |
| It is necessary for people to have access to local food.  |           |          |             |          |           |
| Local economy treatment   | 1.3       | 4.5      | 29.5        | 45.2     | 19.5      |
| Social connection treatment   | .2        | 3.9      | 22.8        | 49.5     | 23.7      |
| Locally grown food is more appealing to me than non-locally-produced food.                            |           |          |             |          |           |
| Local economy treatment   | 1.1       | 3.7      | 28.8        | 43.1     | 23.3      |
| Social connection treatment   | .4        | 7.7      | 24.5        | 45.0     | 22.5      |
| Consuming non-local food does not bother me. <sup>a</sup>   |           |          |             |          |           |
| Local economy treatment   | 3.3       | 21.1     | 32.9        | 32.7     | 10.1      |
| Social connection treatment   | 3.1       | 10.2     | 30.1        | 48.8     | 7.8       |
| Consuming local food is irrelevant to me. <sup>a</sup>  |           |          |             |          |           |
| Local economy treatment   | 14.8      | 49.9     | 23.0        | 8.0      | 4.3       |
| Social connection treatment   | 18.2      | 31.7     | 35.0        | 12.3     | 2.8       |

Note. Scale: <sup>a</sup> Items were reverse-coded when attitude index was created.

**Objective 2**

Objective two was to determine if U.S. consumers' personal value (supporting the local economy or strengthening social connection) associated with the message frame on their assigned video (an online video featuring local food benefiting local economy; an online video featuring local food benefiting local economy strengthening social connection) predicts their attitudes toward local food.

Results showed U.S. consumers' personal values of supporting the local economy and strengthening social connection significantly predict their attitude toward local food in both video treatment groups (see Table 6).

In the local economy video treatment group, both personal values (supporting the local economy and strengthening social connection) explained 37.4% of the variance of the attitude toward local food. In the social connection video treatment group, both personal values explained 50.9% of the variance of the attitude toward local food.

Table 6

*Regression Coefficients of the Multiple Linear Regression Model Predicting Attitude Toward Local Food and Total Variance Associated with Attitude Toward Local Food within Each Treatment Group*

| Group                       | Variables      | $\beta$ | $t$    | $p$   | $R^2$ | Adjusted $R^2$ | $F$    | Model $p$ |
|-----------------------------|----------------|---------|--------|-------|-------|----------------|--------|-----------|
| Local Economy Treatment     | (Constant)     |         | 107.06 | .00** | .380  | .374           | 64.89  | .00**     |
|                             | Z-value of ECO | .43     | 5.84   | .00** |       |                |        |           |
|                             | Z-value of SOC | .24     | 3.25   | .00** |       |                |        |           |
| Social Connection Treatment | (Constant)     |         | 111.58 | .00** | .513  | .509           | 113.14 | .00**     |
|                             | Z-value of ECO | .65     | 10.29  | .00** |       |                |        |           |
|                             | Z-value of SOC | .09     | 1.46   | .15   |       |                |        |           |

Within the local economy treatment group, both standardized personal values were significant predictors of respondents' attitudes toward local food (see Table 6). Personal value of supporting the local economy was a stronger predictor of attitudes toward local food than personal value of strengthening social connection for respondents who received the local economy video treatment ( $\beta_{ECO} = .43, p < .01; \beta_{SOC} = .24, p < .01$ ). Among those receiving the video about how local food strengthens social connections, the personal value of strengthening social connection was not a significant predictor of respondents' attitudes toward local food ( $\beta_{SOC} = .09, p = .15$ ), while the personal value of supporting the local economy was significant predictors of attitude toward local food ( $\beta_{ECO} = .65, p < .01$ ) (see Table 6).

These results revealed, regardless of which video treatment the respondents viewed, their personal value of supporting the local economy predicted more of their local food attitude than their personal value of strengthening social connection. Because the personal value that associated with the video message frames was not the most significant predictor for the local food attitudes, the hypothesis stating "the personal value that associated with the message frame of the video

treatment was a stronger predictor of attitude toward local food than the other personal value” was rejected.

### **Conclusions**

The findings of this study indicated U.S. consumers held a neutral personal value of supporting the local economy and strengthening social connection. With viewing either video treatment, U.S. consumers' attitudes toward local food were shifted to positive. The personal value of supporting the local economy was a significant predictor of a consumer's attitude toward local food after they were exposed to either video featuring local food's benefits of supporting the local economy or strengthening social connection. Additionally, the personal value of strengthening social connection was also a significant predictor of local food attitude for those who watched the video about how local food supports the local economy, but not a significant predictor of local food attitude for those who watched the video about how local food strengthens social connection. In other words, for those who watched the video presenting local food's benefits on social connection, their attitude toward local food was not driven more by their personal value of strengthening social connection than other personal values. This finding aligned with previous research findings that communication messages about an issue are less effective when individuals already link the issue with their important values (Douglas et al., 1970; Johnson & Eagly, 1989).

These findings demonstrated that the personal value associated with the media frame could be a significant predictor of local food attitude, but may not be the most significant predictor. In fact, the personal value associated with the media frame of a video treatment can even be an insignificant predictor of attitudes toward local food. It also implies that individuals do not rely on their personal values most directly associated with the media message frame to inform their attitudes toward local food. The local economy value—the stronger predictor of local food attitude in both treatment groups—is consistent with previous findings that consumers mainly associate local food with supporting the local economy (Thilmany et al., 2008; Zepeda & Leviten-Reid, 2004). This finding also is consistent with previous studies about values and attitude, which is that a positive attitude can be predicted when communication messages agree with the audience members' values (Hullett, 2002; Maio & Olson, 1994)

Additionally, these findings indicate that when an individual's personal value of supporting the local economy increased, videos showing local food's benefits of supporting the local economy or strengthening social connection yielded a more positive attitude toward local food. Agricultural communicators should expect a more favorable local food attitude among people who care more about supporting their local economy if showing them a video demonstrating supporting the local economy or strengthening social connection media frames about local food.

### **Recommendations**

The message frames about local food benefits on the video treatments did not seem to trigger consumers' corresponding personal values to influence their attitudes toward local food. In fact, results showed personal value of supporting the local economy is a stronger predictor of attitude toward local food, regardless of the local food benefit message frame presented. Therefore, future research should use a qualitative approach to explore the rationale behind this finding. Focus groups should be conducted where participants are shown the two videos and asked to discuss what they think about local food after viewing the videos. Focus group research would provide an opportunity to discover why the personal value of supporting the local economy is the most important when local economy-related information is not even discussed in the social connection

video. Such findings would be insightful and help researchers better understand the dynamic between media materials, individuals' values systems, and attitude formation.

This study found the personal value of strengthening social connection does not predict local food attitudes when respondents received the social connection video treatment. More interestingly, the personal value of strengthening social connection did significantly predict local food attitude when the video was about benefits to the local economy, but not the social connection treatment. Future research should use qualitative study to explore if the personal value strengthening of social connection scale in this study accurately measured this personal value.

In addition, the videos should be tested with different populations. For example, testing them with populations who have different levels of experience purchasing local food or individuals who have an agricultural background versus those that do not could be informative. Testing the same video treatment with diverse populations could help to create targeted communication materials about local food to different groups of people.

A major finding from the study was that personal values of supporting local food was a significant predictor of local food attitudes in both video treatment groups. This finding indicated local food attitudes can be expected to increase when personal value of supporting the local economy increases. Because individuals' personal value of supporting the local economy was also found neutral, communication and education strategies should be implemented to increase consumers' local economy values. It is important to recognize value is a stable mental structure that varies little by situation (Hitlin & Piliavin, 2004). Therefore, agricultural communicators should not expect personal values to be modified easily and quickly. Other types of media format or long-term communication or education plans should be studied to examine how to increase consumers' personal values effectively, further increasing consumers' favorable attitudes toward local food. We should also use this approach to explore the connection between personal values and consumers' attitude toward other agricultural issues.

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