

**Selling a Story: A survey investigating the willingness of consumers in the Midwest to
acquire specialty crops viewed in an online environment**

by

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Abstract

The underpinning of this work is focused on small-scale family-operated farms of specialty crops within the U.S. Midwestern region. The Midwestern region, encompassing the states of: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota and Wisconsin was selected for this study, in part, because of the concentration of specialty crop growers which represent an important and diverse industry. For instance, the value of domestically grown tree nuts, citrus, and noncitrus fruits has increased from \$9.1 billion in 1995 to \$30.6 billion in 2017. Against this backdrop, the aim of this research is to explore if the manipulation of narratives and or storytelling, prices, and logistics can influence consumers' willingness to purchase specialty crops viewed in an online environment.

Many small-scale family-farms promote their agricultural produce locally to prospective buyers. The types of promotion vary from farm to farm but typically include farmer markets, stores selling locally-grown food and garden centers. Additionally, the local-food movement has redirected consumers' interest toward agricultural produce emerging from small-scale family-farms. The shift in consumers' interest can be attributed in part to heightened public concerns with food security at the community level, environmental impact associated with the distribution of food, and perceptions of large agricultural entities. The foregoing concerns have motivated many consumers to acquire cognizance of the origin of their food with the ultimate aim of patronizing local farmers.

The aim of this study is to investigate the facets that persuade consumers to purchase specialty crops hinged upon what is observed online. Against this backdrop, this study will embrace the variables of storytelling/narrative, travel distance, door-to-door delivery, and price to explore consumers' interest to acquire specialty crops.

This study referenced the elaboration likelihood model, as persuasive communication is an acknowledged element in selling efforts. This work reviewed literature pertaining to credible sources and how credible sources can contribute to the profitability of selling specialty crops online. The review also included framing messages with an emotional appeal which are best suited for an audience with little or no knowledge of specialty crops.

Results indicate that there is interest among consumers to acquire specialty crops viewed in an online environment, as 85.6% of respondents chose to purchase over not purchasing

specialty crops. In particular, this study revealed that consumers are willing to have specialty crops delivered door-to-door within the price intervals of \$15 to \$17.50 for eight to twelve pounds of seasonal local produce—with an additional fixed-delivery fee of \$5.00. Although a price of \$20.00 resulted in a lesser degree of interest. Also, growers should target technologically savvy consumers comfortable with being online.

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Chapter 1 - Introduction

Prelude

The purpose of this introductory excerpt is to provide a precis of how this work came into being. The underpinning of this work can be described as a loosely-defined partnership of three entities: the United States Department of Agriculture (USDA), the Federal State Marketing Improvement Program (FSMIP), and the Center for Rural Enterprise Engagement (CREE).

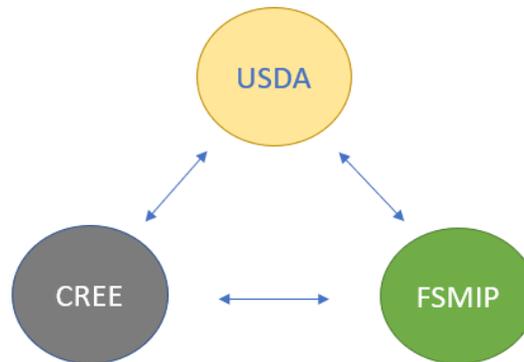


Figure 1.1 The partnership which has financed this work

The mission statement of the Federal State Marketing Improvement Program (FSMIP) cites its purpose is “to explore new market opportunities for U.S. food and agricultural products, and encourage research and innovation aimed at improving the efficiency and performance of the U.S. agricultural marketing system” (USDA Agricultural Marketing Service, n.d. -a, para. 1). FSMIP awards matching funds on a competitive basis to state departments of agriculture, state agriculture experiment stations, and other appropriate agencies such as state universities, colleges and state governmental entities (USDA Agricultural Marketing Service, n.d. -a, para. 2). The research presented within this work represents the partial fulfillment of a FSMIP grant awarded to the Center for Rural Enterprise Engagement at Kansas State University. The center of interest of this work was to explore the willingness of potential consumers to pay for the delivery of specialty crops versus retrieving the crops themselves on the basis of what is viewed on a screen. This research was intended to explore new market opportunities for U.S. agricultural products and embrace research and innovation.

Overview

This initial chapter will begin by defining specialty crops and proceeds to clarify the states that encompass the U.S. Midwest. Thereafter, this work will describe the Midwest outwardly in terms of agricultural production and continues to expound on the significance of specialty crops from an economic perspective. Afterwards, this text will digress to demonstrate the disparity amidst the degree of advocacy or publicity received by the growers of the foremost commodities (i.e., wheat, corn, soybeans, and sorghum) versus the growers of specialty crops. Following that, this chapter will discuss, at the macro-level, the U.S. 2018 Farm Bill to reveal a presumed shortcoming in the bill that could conceivably advance the economic well-being of rural specialty crop growers. An improved economic well-being of rural specialty crop growers may, in turn, contribute, to some extent, to the repopulation of rural communities. The foregoing concepts (i.e., rural prosperity and economic development) are emphatically stated in the USDA's strategic objectives of 2018 to 2022—which served as the model for the development of the U.S. 2018 Farm Bill. Against this landscape, the aim of this research is to explore if the manipulation of narratives and or storytelling, prices and logistics can influence the willingness of consumers to acquire specialty crops—emanating from the Midwest—online and incur the additional expenditure to have produce delivered, or alternatively to travel to growers' farms to purchase specialty crops.

Subsequent to examining the disparity of advocacy among crop growers, the U.S. 2018 Farm Bill, and the USDA's strategic objectives, this work will present the Center for Rural Enterprise Engagement (CREE), a transdisciplinary entity that assists small-scale rural agricultural-based growers to flourish, in part, by embracing new-media technology to improve their livelihoods. Furthermore, aligned with CREE's mission, a supplemental yet distinct rationale for assisting specialty crop growers in the Midwest is concomitant with rural-to-urban migration. This chapter will draw attention to the multifaceted elements associated with rural-to-urban migration in the Midwest.

Acknowledging there is substantive anecdotal evidence cited on the web affirming that narratives and or storytelling contribute to improved online sales, this chapter will examine how message frames can contribute to changing affective and cognitive attitudes while, albeit briefly, introducing the Elaboration Likelihood Model (ELM).

To guide the research of this study, namely, to evaluate consumers' preferences, the following research objectives have been developed.

- RO1:** To determine the influence of a narrative and or storytelling when selling specialty crops in an online environment.
- RO2:** To determine the willingness of respondents to travel to purchase specialty crops viewed in an online environment.
- RO3:** To determine respondents' willingness to have specialty crops shipped directly to them.
- RO4:** To explore if the rural location of potential consumers may contribute to their willingness to retrieve the crops themselves via a U-pick farm (e.g., agritourism).

Specialty Crops and the U.S. Midwest

The USDA's Agricultural Marketing Service (AMS) (n.d. -a) defines specialty crops in terms of section 101 of the Specialty Crops Competitiveness Act of 2004 and subsequent amendments, whereby specialty crops refer to "fruits and vegetables, tree nuts, dried fruits, horticulture, and nursery crops (including floriculture)" (para 1). Additionally, "eligible plants must be cultivated or managed and used by people for food, medicinal purposes, and/or aesthetic gratification to be considered specialty crops" (AMS), n.d., para 1). Notwithstanding the above, the AMS (n.d.) has elaborated its own detailed definition of specialty crops specifying fruits, vegetables, tree nuts, nursery crops and floricultural crops are all considered to be horticultural crops. An issue arises, cites AMS, as all crops groups classified as plants—qualify as a specialty crop. As a consequence, an elucidation is, therefore, required to specify which plants can be classified as horticulture crops.

The term Midwest denotes the states of: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota and Wisconsin (Census Bureau, 2015; USDA, 2017). Chite (2012) affirms the pre-eminent states engaged in specialty crop agriculture are: "California, Florida, Washington, Oregon, North Dakota, and Michigan, although he asserts every state, in varying degrees, is engaged in commercial specialty crop production" (p. 15). The increase in specialty crop production has contributed to the value of

domestically grown tree nuts, citrus, and noncitrus fruits from \$9.1 billion in 1995 to \$30.6 billion in 2017 (USDA-ERS, 2019).

The market value of agricultural crops sold on farms with specialty crops is indicated below to provide an overview of the varying levels of agricultural production within the Midwest (NASS, 2015). The data presented refers to the twelve-month period of 2012, noting NASS is expected to release an update on specialty crops in December 2019, as part of the subject series publications (NASS, 2019).

Table 1.1

2012 Market Value of Agricultural Crops Sold on Farms in the Midwest with Specialty Crops

State	Monetary value
North Dakota	\$3.0 billion
Illinois	\$2.5 billion
Michigan	\$2.5 billion
Minnesota	\$2.5 billion
Wisconsin	\$1,4 billion
Nebraska	\$867 million
Ohio	\$800 million
Indiana	\$524 million
Missouri	\$298 million
Iowa	\$216 million
South Dakota	\$192 million
Kansas	\$186 million

The NASS (2012) cites 245,000 specialty crop farms in the U.S. on a total of 69.4 billion acres in 2012 were owned by a combination of individuals, families, or corporations both family and non-family held (p. 2). Additionally, the NASS (2012) affirms the market value for specialty crops sold in 2012 equated to \$83.4 billion. Furthermore, the NASS (2015) proclaims the total agricultural sales of crops in 2012 amounted to \$212.4 billion, and when compared with the \$83.4 billion of specialty crop sales, one can estimate specialty crop sales accounted for an approximate 39.3% of the total value of U.S. crop production. Although, should a comparison be made between the total agricultural sales in 2012, encompassing both crops and livestock, specialty crops would account for an estimated 21.1% (\$83.4 billion versus \$394.6 billion) of the total value of U.S. agricultural sales.

Advocacy or a lack Thereof for Specialty Crops

In the aftermath of the successful bipartisan approval of the U.S. 2018 Farm Bill in December, Nouri (2019) published a short article in *Nature*, titled “Farmers could teach scientists a trick or two for lobbying” (para 1). Concisely, Nouri (2019) attributes, in part, the successful approval of the 2018 U.S. Farm Bill to the diligence of farmers in forming

partnerships to advance their agenda, coupled with frequent visits to their legislators. One can postulate the sheer quantity and diversity of items constituting specialty crops contributes, in part, to hindering the formation of lobby groups to represent each single crop. For example, the Specialty Crop Farm Bill Alliance (2019) cites it is “a national coalition of more than 120 organizations representing growers of fruits, vegetables, dried fruit, tree nuts, nursery plants and other products” (para 1). Upon closer review of the 2018 priorities of the Alliance, one can postulate the primary focus of the Alliance has been to advocate for the inclusion of a multitude of collective priorities as part of the 2018 U.S. Farm Bill (Specialty Crop Farm Bill Alliance, 2019). Noting, the Alliance did not advocate for the priorities related to a single grower or sector.

In outwardly reviewing the type of advocacy received by the growers of wheat and corn in the U.S., the growers of these two prominent commodities are represented by national entities (i.e., National Association of Wheat Growers (NAWG) and the National Corn Growers Association). Additionally, wheat and corn growers are represented at the state level. For instance, in the state of Kansas, the Kansas Association of Wheat Growers and the Kansas Corn Growers Association seek to advance the agenda of these commodity growers, noting the two-tier structure of advocacy (i.e., national and state-level) can be construed as an archetype embraced by other growers of prominent commodities. In sum, an example encompassing solely Kansas has been provided, although the two-tiered archetype of advocacy is replicated by other commodity growers throughout the Midwest region.

One can postulate the growers of the foremost commodities possess an advantage in the degree of lobbying or promotion, intended as part of the national milieu of advocacy, received in contrast to specialty crop growers. The perceived lesser-degree of lobbying efforts provided to specialty crop growers can possibly be attributed to the specificity of providing advocacy to a diverse typology of specialty crops. Acknowledging, there are commodity checkoff programs which encompass both the foremost commodities and specialty crops. For instance, the National Potato Promotion Board actively seeks to preserve and bolster existing markets and cultivate new markets for potatoes and potato-by-products (AMS, n.d. -b). Notwithstanding the above, the varying degree of advocacy raises the question: if red tart cherries growers in Michigan or Californian and Floridian citrus growers and their plight with huanglongbing (i.e., citrus greening) receive the same or a comparable level of promotion as growers of soybeans in Iowa—the largest producer of soybean in the U.S.

The U.S Farm Bill: An Introduction

Research and development within the agricultural sector is predominantly financed by the public sector, namely by means of the farm bill. The U.S. Farm Bill came into existence during President Roosevelt's administration in the 1930s as a medium to boost crop prices, as a supply-management tool, at the time of the Great Depression (McGranahan, Brown, Schult & Tyndall, 2013). At its inception, the farm bill provided support for staple commodities such as corn, soybeans, wheat, and cotton. However, recent farm bills have been extended to include nutrition assistance, horticulture, conservation, and food aid among other topics (McGranahan, Brown, Schult & Tyndall, 2013). The farm bill is an omnibus bill, a consolidation of numerous, often unrelated, smaller appropriations, which is either approved or rejected in a single legislative vote (Krutz, 2001; Sinclair, 1997). Furthermore, the farm bill can be construed as the law authorizing the creation and implementation of policy related to agricultural and food matters, noting each farm bill has a duration of approximately five years (Johnson & Monke, 2018).

The 2018 U.S. Farm Bill

The Specialty Crop Farm Bill Alliance (2018) and United Fresh (2019) published an account of the 2018 farm bill and related advantages for specialty crop growers. In an abbreviated format, the U.S. 2018 Farm Bill includes substantive funding to bolster trade. For example, provision has been allocated amounting to \$200 million for the Market Access Program (MAP), which seeks to share the cost of overseas marketing to create commercial export markets; \$34.5 million for Foreign Market Development (FMD) to expand and maintain long-term export markets for U.S. agricultural products; \$10 million for the Emerging Markets Program (EMP) which intends to promote exports of U.S. agricultural commodities; \$9 million for the Technical Assistance for Specialty Crops (TASC) program which is focused on reducing trade barriers (Fatka, 2018; Specialty Crop Farm Bill Alliance, 2018; United Fresh Produce Organization, 2019; UDSA, 2019 -a; AMS, n.d. -b; USDA, 2019 -c; USDA, 2019 -d).

A second policy focus of the farm bill is improved research; \$85 million for the Specialty Crop Block Grant Program (SCBGP) which is intended to fund a wide array of projects such as value-added processing, food-hub development, farmer food-safety training and farm-to-school initiatives; \$80 million for the Specialty Crop Research Initiative (SCRI) in support of research

that promotes scientific discovery aligned with the needs of specialty crop industries; \$75 million for combating invasive pests and diseases; \$25 million for the citrus greening program, and \$7.5 million for the creation of the National Clean Plant Network (National Sustainable Agriculture Coalition, 2018; Specialty Crop Farm Bill Alliance, 2018; United Fresh Produce Organization, 2019; AMS, n.d. -b).

While not cited as a specific component of the U.S. 2018 Farm Bill, the following appropriations have been made available by the USDA's Agriculture Marketing Service (AMS) during the fourth quarter of 2018 (USDA 2018); \$13.35 million for the Farmers Market Promotion Program (FMPP) which supports direct producer-to-consumer marketing projects, including farmer's markets, community-supported agriculture programs, roadside stands, and agritourism. Eligible entities include agricultural businesses and cooperatives, local governments, nonprofit organizations, and producer organizations (USDA, 2018; USDA, n.d. - a). Additionally, \$13.45 million for the Local Food Promotion Program (LFPP) to support the development and expansion of local food businesses to increase domestic consumption of locally grown food and provide access to agricultural products grown regionally (USDA, 2018). A sampling of activities may include technical assistance for business enterprises or producers working with a business enterprise, improvements to business enterprise facilities and marketing to buyers (Duke University, n.d.).

On a cursory level, the aforesaid sum of money restricted for specialty crops focuses on a fairly wide cross-section of issues, ranging from boosting agricultural trade to research that promotes scientific innovation. In its totality, the U.S. 2018 Farm Bill will seemingly contribute to the economic well-being of rural America. Specialty crop growers will benefit as nutrition programs which are estimated at almost 80% of the farm bill total (Johnson & Monke, 2018). Recalling, fruits, nuts, and vegetables are specialty crops and representative of nutritious food.

Upon closer examination, there is relatively, little assistance for small-scale rural growers. Whilst there is provision for the promotion of farmers' markets and the consumption of local food, the programs focused on specialty crops fail to assist farmers in promoting their produce online. Conceding the promotion of specialty crops locally does contribute to improving the economic prosperity of small rural farmers. Marketing specialty crops online to promising and economically-prosperous consumers residing in urban or metropolitan areas offers small rural farmers access to emerging markets that may not otherwise be attainable.

USDA's Strategic Objectives and the Center for Rural Enterprise Engagement

The elaboration of the farm bill is undoubtedly multifaceted, yet one can posit the formulation of the farm bill is, in part, guided by the USDA's four-year strategic plan. The goals of the 2018 to 2022 quadrennium encompass seven strategies listed below:

1. Ensure USDA programs are delivered efficiently, effectively, with integrity and a focus on customer service.
2. Maximize the ability of American agricultural producers to prosper by feeding and clothing the world.
3. Promote American agricultural products and exports.
4. Facilitate rural prosperity and economic development.
5. Strengthen the stewardship of private lands through technology and research.
6. Ensure productive and sustainable use of our National Forest System Lands.
7. Provide all Americans access to a safe, nutritious, and secure food supply. (USDA, n.d. - c, para 1)

Aligned with USDA's strategic goals, CREE, has obtained competitive funding from the Federal-State Marketing Improvement Program (FSMIP) for its public educative outreach which embraces research and evidence-based practices. The purview of CREE's work is to assist small-scale rural farmers in attaining sustained economic prosperity.

Rural-to-Urban Migration

A motive for assisting farmers in the Midwestern United States is related to outmigration. From a historic perspective, Ravenstein (1885) asserts rural-to-urban migration during the nineteenth and twentieth centuries was predominantly motivated by employment. Outmigration in the American South between 1910 and 1930 was characterized by Afro-American southerners seeking entry into the manufacturing sector (Smith II, 2015). This extensive outmigration contributed to sprawling heterogeneous urban centers in Northern cities—such as Chicago (Tolnay & Beck, 1992). During the World War II (WWII) the farm population decreased, and later increased, albeit modestly, during the post-WWII era (Taeuber, 1947). Jacquet, Gutherie and Jackson (2017) describe rural America in the aftermath of WWII as a place of out-migration, a narrative, argue the authors, that continues to accurately describe life in rural areas today.

Baltensperger (1991) affirms counties without *central places* or access to interstate roadways encountered dwindling populations throughout the 1970s. For instance, Baltensperger (1991) cites the rural Great Plains was subjected to a reduction in population, noting populace figures last peaked during the early 1900s. During the same period that rural or non-metropolitan areas have experienced a decline in population, cities experienced an upsurge (Jacquet, Gutherie, & Jackson, 2017). For instance, rural areas within the Great Plains region have been profoundly stricken by outmigration resulting in, some cases, the substantive loss of populations throughout the past 70 years (Jacquet et al., 2017). Indubitably, in today's society, the determinants of migration are multifaceted, including, but not limited to, an individual's accumulated employment competencies, incentives for moving, the overall market conditions of employment, and the prevailing conditions of taxation (Greenwood, 1985; Long & Hansen, 1979). Additionally, Golding (2014); Greenwood (1985) cite elements related to an individual's life cycle—encompassing marriage, divorce, rearing of children, retirement and one's self-perception of quality of life can also influence outmigration. Although, Shumway, Otterstrom, and Glavac (2014) maintain persistent and drastic environmental hazards also influence outmigration. In sum, one can postulate the motivations of outmigration are complex and encompass numerous variables which are context specific.

Notwithstanding the above, Carr and Kafalas (2010) argue that the utmost talented students in non-metropolitan areas are often emboldened by their teachers to pursue further education, away from their towns, after completing high school. In situations where the economic circumstances of a family may not permit a child to pursue further education, some rural-youth embrace the military as a means to migrate from their towns (Carr and Kafalas, 2010). As a consequence of completing education or service duties away from their towns, many rural-youths discover they are no longer conformable for employment in the non-metropolitan areas of their birth. In a study conducted in Iowa, Chang (1974) asserted age-selective migration contributes to the momentum of natural population decline, as youth of reproductive age move away. One can posit the Midwestern states, encompassing part of the Great Plains region, has experienced periods of growth and decline. The future, however, of many small communities appears dim without a reversal of rural-to-urban migration of young and educated people. Although, in Utah, which belongs to the Western Region, there are innovative opportunities offered to rural residents. For instance, the Utah Governor's Office of Economic Development in

partnership with the Utah State University has created the Rural Online Initiative (ROI) program. The ROI program assists unemployed or underemployed rural residents, through education and mentoring, to obtain freelance, remote or online employment (Utah Governor's Office of Economic Development, 2019; Utah State University Extension, 2019). For instance, the ROI program offers a professional master certificate administered by the University of Utah to promote remote work opportunities. Within the Midwestern region, the Kansas State University's Center for Engagement and Community Development seeks to maintain the viability of communities by aligning its resources with issues of communal urgency (Kansas State University, n.d.). Also, the Rural Opportunity Zone (ROZ) program offered by the Kansas Department of Commerce seeks to attract out-of-state workers to relocate to determined areas of the state (Kansas Department of Commerce, 2019). The out-of-state workers who participate in the program are rewarded with a partial payoff of student loans and tax exemptions. The ROZ program, however, does not promote online or remote employment, as the program excludes counties with internet connectivity (Wichita's NPR Station, 2019).

No empirical evidence exists which upholds that selling specialty crops online can contribute to lessening rural-to-urban migration in the Midwest. Despite the lack of empirical evidence, one can postulate that embracing online sales may be more appealing to emerging adults, as social-networking sites have become an integral element of emerging adults' daily routine (Boyd & Ellison, 2007; Gemmill & Peterson, 2006; Steinfield, Ellison & Lampe, 2008). Thus, it is possible to infer that developing and operating an online business for farmers selling specialty crops may provide sufficient stimuli for emerging adults to remain in rural areas, which may, in turn, lessen outmigration.

Selling Online, Narratives, and Storytelling

Apart from anecdotal evidence, there is no empirical evidence that affirms the inclusion of a narrative or embracing storytelling will contribute to improved online sales of specialty crops. Despite the lack of empirical evidence, Myer and Tormala (2010) assert in everyday discourse, laypeople often embrace "I feel" or "I think" message frames which are indicative of affective and cognitive attitudes to share their subjective opinion of a topic. Eagly (1974); Myer & Tormala (2010); Petty, Cacioppo and Goldman (1981) concede the foregoing message frames are often employed by individuals interchangeably, although, the influence on persuasion may not be interchangeable. In sum, message frames containing affective information will typically

be successful at changing affective attitudes; whereas, message frames with cognitive details are inclined to alter cognitive attitudes (Drolet & Aaker, 2008; Fabrigar & Petty, 1999; Myer & Tormala, 2010). Against this landscape, the Elaboration Likelihood Model (ELM) seeks to make intelligible how attitudes emerge, are influenced, and change with persuasive messages. Simplistically, the ELM asserts individuals when confronted with information, or messages, engage in varying degrees of *elaboration*. The term elaboration can be construed as the exertion an individual undertakes to assess, recall and uphold, or disavow a message.

Purpose and Research Objectives

The concise purpose of this work is to investigate the facets that persuade consumers to purchase specialty crops hinged upon what is observed online. Consequently, to guide the research of this study, namely, to evaluate consumers' preferences, the following research objectives have been developed.

- RO1:** To determine the influence of a narrative and or storytelling when selling specialty crops in an online environment.
- RO2:** To determine the willingness of respondents to travel to purchase specialty crops viewed in an online environment.
- RO3:** To determine respondents' willingness to have specialty crops shipped directly to them.
- RO4:** To explore if the rural location of potential consumers may contribute to their willingness to retrieve the crops themselves via a U-pick farm (e.g., agritourism).

Assumptions

The underpinning of this work is best recounted by MacIntyre (2007) in his statement “man is in his actions and practice, as well as in his fictions, essentially a story-telling animal” (p. 216). Against this backdrop is a tale of two paths, namely *central* and *peripheral route* processing, as elaborated by (Petty, Cacioppo, & Goldman, 1981). In consonant with the central and peripheral route processing of the ELM, this work assumes that an individual or an audience that perceives to be directly impacted by an issue or topic is likely to process information or messages using the central route. Succinctly, this work assumes the foregoing individuals will likely pay heed to and

examine carefully the strength of arguments, noting attitudes adopted by means of this process of elaboration are seemingly more enduring and resistant to change from counterarguments. A second related assumption pertains to peripheral route processing whereby information which is processed by individuals or an audience outwardly. In other words, an audience may pay less heed to the strength of the arguments contained within these messages. In sum, this work, as does the ELM, assumes peripheral route processing influences audiences through the employment of secondary sources such as visual appeal, presentation among other enticements. Additionally, attitudes adopted by means of this process of elaboration are seemingly less enduring, resistant to change from counterarguments, and may require continual reinforcement.

Definition of Key Terms

Central places – During the 1930s in Germany, W. Christaller and A. Lösch developed the concept of central places to describe the clustering of goods and services provided to a surrounding population often located in close proximity to consumers in rural areas (Pumain, 2014; Forbes, 1972).

Elaboration Likelihood Model (ELM) – The Oregon State University (n.d.) defines the ELM as a dual process model of persuasion encompassing the central and peripheral paths. The central path contributes to attitudinal change by means of reflection, whereby lasting persuasion is likely if an individual reflects favorably about a message(s). The peripheral path contributes to attitudinal change by associating a message(s) with positive thoughts an individual already possesses. If a peripheral cue is accepted there may be a temporary attitude change and or possibly future elaboration. If not, the individual will retain the original attitude initially held.

Midwest or Midwestern region – According to the Census Bureau (n.d.), the Midwest encompasses the following states: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota and Wisconsin.

Narrative - The Cambridge Dictionary (2019) defines a narrative as a story or a description of a series of events or as a particular way of explaining or understanding events.

Semiotics - Eco (1976) describes semiotics as the study of signs, whereby “a sign is implicitly a communicative device taking place between two human beings intentionally aiming to express or communicate something” (p. 15).

Summary

This initial chapter commenced by defining specialty crops and proceeded to clarify the states that encompass the U.S. Midwest. Thereafter, this work outwardly described the Midwest in terms of agricultural production and the significance of specialty crops from an economic perspective. Afterwards, this work digressed to review the degree of advocacy received between the foremost commodity crops (i.e. wheat, corn soybeans, and sorghum) versus specialty crops (e.g. fruits, vegetables, horticulture, and tree nuts etc.), noting an outward examination indicates a substantive disparity in advocacy between the foregoing two crop varieties. Succeeding the discussion of advocacy, the work presented an overview of the U.S. 2018 Farm Bill, whereby a limitation is identified which might otherwise contribute to further reinforcing the economic well-being of rural communities. The aforementioned limitation refers to the perceived restricted provision allocated for small-scale rural growers in terms of selling their produce online. It is, nonetheless, sagacious to cite the farm bill does extend to a fairly-wide cross-section of issues, ranging from boosting agricultural trade to research that promotes scientific innovation among other themes. Upon examining the disparity of advocacy among crop growers and the imbalance of funding for traditional and specialty crop growers as part of the U.S. 2018 Farm Bill, this work introduced the Center for Rural Enterprise Engagement (CREE). Additionally, this work did, albeit outwardly, review a subordinated rationale for assisting small-scale specialty crop growers in the Midwest which is concomitant with rural-to-urban migration. On a related note, the after-effect of obtaining competitive funding from the Federal-State Marketing Improvement Program (FSMIP) has permitted the CREE to sponsor a comprehensive assessment of consumers' willingness to acquire specialty crops online. The assessment will explore the use of narratives and or storytelling, price variations and contrasting logistical options to determine if the use of variables, including, but not limited to, narratives aligned with the ELM can contribute to changing affective and cogitative attitudes towards acquiring specialty crops online.

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Chapter 2 - Literature Review

In the previous chapter an overview of this work was furnished to provide readers with a definition of the U.S. Midwest and specialty crops. Examples were provided of specialty crops grown within the Midwestern states and the economic significance of these crops. Thereafter, this work digressed to draw attention to the varying degree of advocacy between specialty crops and the foremost commodities (e.g., corn, wheat, soybeans, and sorghum). The U.S. 2018 Farm Bill was introduced whereby relevant segments of funding pertinent to specialty crops were accentuated. In outwardly reviewing the bill, a presumed shortcoming was identified which may conceivably foster economic growth for small-scale specialty crop growers. Namely, providing assistance to small-scale specialty crop growers to explore the feasibility of promoting and or selling their specialty crops online. The concept of small-scale growers selling their specialty crops online is coequal to the USDA's 2018 to 2022 strategic goals.

Against this backdrop, the purpose of this work is to explore the degree of influence a narrative and or storytelling, prices, and logistics has in persuading prospective consumers to acquire specialty crops online or retrieve the crops themselves on the basis of what they view in an online environment. To contribute to improved cognizance of the varying themes of this study, a careful review has been undertaken from an abundant cross-section of published literature on the historical origin of narratives, the applied use of narratives (i.e., in education and entertainment), and the theory of narratives as a landscape to introduce the narrative paradigm (Fisher). After that, this work introduces the transportation theory (Green and Brock) and the elaboration likelihood model (ELM) as elements which contribute to persuasion and attitudinal change, acknowledging the functioning of the ELM and the transportation theory are distinct. A motivating factor for the inclusion of the foregoing models is related to the use of narratives in selling specialty crops online. For example, a review is undertaken of how the elements of persuasiveness associated with the ELM can be applied to selling specialty crops online. Wilson, Barnes, and Irani (2013) assert a product sold from a perceived trustworthy source is likely to be elaborated by consumers via the peripheral route (i.e., a lower degree of elaborative route processing), which may lead to improved sales—permitting farmers to gain access to new emerging markets. Lastly, this chapter concludes with an analysis of the challenges in selling

specialty crops online which is a relatively new endeavor. For instance, proponents of selling specialty crops online advocate online sales contribute to sustainability through sales across a wider forum. While opponents cite specialty crops are not suited for an online audience, as consumers desire to handle produce prior to acquisition which may hinder potential consumers from participating in online, direct selling.

Narrative: The Beginning

The genesis of storytelling through narrative was prevalent in many, if not all, societies from antiquity to modern day. The task of defining a narrative, or any notion, would be made easier if one could order stories within a class or group of related entities. Ryan (2007) asserts several scholars have embarked on devising a typology by categories of text, although a lack of concurrence among scholars has hindered the efforts in defining a narrative. Furthermore, Ryan (2007) clarifies it was during the sixties that narrative was being discussed by theorists and semioticians, noting previous interest was largely focused on folk tales, myth or other fictitious prose. Why is it so difficult for narratologists to agree on a definition of narrative? Ryan (2007) contends the definition of narrative is not a cognitive query but rather a philosophical one. Rudrum (2006) maintains we are all cognizant of what a narrative is and can identify one visually. The difficulty arises when we seek to describe our mental construct of a narrative in written form. Rudrum (2006), reminds us that for every conjecture there is an exception and for each definition there is latitude for supplementary denotation. Despite the continuing controversy in defining a narrative, Fisher (1987) maintains we, as human beings, establish a meaningful life and world by narrating and accounting stories.

In the text “After virtue: A study in moral theory”, MacIntyre (1981) employs a teleological approach to describe narratives, citing narratives are useful “because we all live out narratives in our lives, and because we understand our own lives in terms of narratives” (p. 197). Moreover, in tracing the virtues of heroic societies, whether the Greek Archaic period (c. BC 800-400), the early medieval period in Northwestern Europe (c. AD 600-1150), or the English Renaissance (c. AD 1500-1688), MacIntyre (1981) avows stories have been used as a preeminent means of communicating morality. Moreover, the mere notion epics from heroic societies existed was sufficient to influence and define societies' standpoints or attitudes. Furthermore, in drawing a denouement one can refer to a phrasal idiom cited by MacIntyre (2007) “man is in his actions and practice, as well as in his fictions, essentially a story-telling animal” (p. 216).

Can oral narratives be considered the same as written narratives? Against the backdrop of Alexander Romanovich Luria's research conducted in the former Soviet Union, specifically in Uzbekistan and Kirghizia in the 1930s, Redick and Underwood (2007), maintain the degree of reasoning of oral peoples differs from literate peoples. The authors cite the distinction is grounded in the manner which experience is classified. For instance, literate people utilize intellect which encompasses alphabetic writing to create complex statements. The ability to apply logic to alphabetic writing allowed individuals to extend beyond concrete experience and apply reason to the thoughts contained or expressed within a written text (Redick & Underwood, 2007). As literacy became more prevalent, educated individuals tended to consider oral peoples as irrational.

The English writer and poet David Herbert Lawrence, often referred to as simply D. H. Lawrence, offered the following advice to future critics of American literature. The advice appears in the opening chapter of *Studies in Classic American Literature* as:

The artist usually sets out - or used to - to point a moral and adorn a tale. The tale, however, points the other way, as a rule. Two blankly opposing morals, the artist's and the tale's. Never trust the artist. Trust the tale. The proper function of a critic is to save the tale from the artist who created it (Lawrence, 1923/1969, p. 9).

Watson (1985) asserts American artists, according to Lawrence, were 'hopeless liars' and the purpose of criticism was to save 'the American tale from the American artist'. Watson (1985) further underscores Lawrence's advice to critics was intended as a rationale to save the tale not only 'from the artist who created it' but also from the artist's morality. Similarly, as alluded to by MacIntyre (1981), D. H. Lawrence also conveys an inkling of narratives being written to convey principles of moral behavior. Timmons (2012) affirms moral theory can be employed to uncover explanations to moral queries. The structure of moral theory, however, cites Timmons (2012), is dependent upon dissimilar branches of moral theory which include: the theory of right conduct, theory of value, intrinsic value and moral worth. Mackie (1977) underscores "moral principles and ethical theories do not stand alone: they affect and are affected by beliefs and assumptions which belong to other fields, and not least to psychology, metaphysics, and religion" (Mackie, 1977, p. 203).

Entertainment-Education Strategy

The media of narratives has evolved with the advancement of technology and the evolution of broadcast programming of TV and radio programs. In particular, the changes with TV programming during the 1950s, and thereafter, has contributed to the birth of entertainment-education. Concisely, one can postulate the significance of written and oral narratives, in a strict sense, has diminished in favor of newer technology. Despite the media of narratives having changed, one can posit television has, nonetheless, continued to promote development and convey principles of morality. For example, during the 1970s Miguel Sabido, a Mexican television writer and producer, introduced the first entertainment-education strategy to promote development and social change with soap operas (Khalid & Ahmed, 2014). The entertainment-media strategy, at its inception, was representative of an innovative and persuasive approach to attend to social change (Singhal & Brown, 1996); (McPhail, 2009). Concisely, Singhal & Brown (1996) assert the general idea is to employ the universal lure of entertainment to illustrate how individuals can live safer, healthier, and contented. As cited by McPhail (2009), entertainment-education is an amalgamation whereby education is contrived in the narrative of entertainment to foster change among audiences targeted. For instance, the Johns Hopkins University (2019) embraces narratives by way of storytelling to motivate audiences to identify with protagonists and facilitate behavioral changes.

Narrative Theory: Toward a definition

Cebik (1986) reminds us many suppositions pertaining to narratives have become apparent as a result of inquiries and, therefore, asserts Cebik, individuals cannot grasp the concept of narrative theory without acknowledging the purpose of it (narrative theory) which, presumably, contributes to the difficulty in defining narratives. Bal (1985) elucidates *narratology* is the theory of narrative texts and employs a triad to elaborate her description of narratology. The three elements of Bal's triad encompass a *narrative*, *story*, and *fabula* which are representative of narratology. Concisely, a narrative, according to Bal, is principally *an account* conveyed by an individual(s) to a reader(s) which is comprised of figurative language, sound, and buildings (Bal, 1985). Additionally, a story, cites Bal 1985, refers to the content of an account which, in turn, serves to identify and elaborate a fabula. Lastly, a fabula alludes to chronology (i.e., time and location) and its functioning associated with events that are

encountered by readers or the result from the protagonists of an account. Bronzwaer (1981) further elucidates Bal's theoretical construct by detailing the progression the narratology model follows, namely: a fable is altered into a story which, in turn, is transmuted into a narrative text. Furthermore, Bronzwaer (1981) maintains Bal's model was derived from Gérard Genette's "Discours du récit" and essentially portrays the complex transformation of a fable to that of a narrative.

The Narrative Paradigm

Kreiwirth (1992); Martin (1986); Fisher (1984/2009) affirm the emergence of a growing enthusiasm in narrative theory within the humanities and social sciences during the 1970/80s. Additionally, Martin (1986) argues the growing enthusiasm for narratives was representative of an element or component of a larger movement. Griffin (2003), postulates scientists throughout the 1970s were in quest of an all-encompassing model or paradigm to make communication behavior intelligible. One can postulate it was the narrative paradigm (Fisher) that intended to explain all communication.

In elaborating the *narrative paradigm*, Fisher (1985a/2006) traced the origin of logic to the pre-Socratic philosophers, namely Plato and Aristotle. Astutely, Fisher (1985a/2006) reminds his readers at the inception or *incipit* was the word *logos*. Fisher (1985a/2006) describes the significance of logos as: "story, reason, rationale, conception, discourse, and or thought" (p. 1). As a point of clarification, Moss (2014) cites the ancient-term logos has numerous interpretations, noting the Liddell and Scott Greek-English Lexicon lists ten major headings and over sixty translations. Fisher (1985b/2009) elaborates extensively, citing numerous sources affirming the manner which the narrative paradigm relates to traditional theories belonging to the social sciences and humanities which include: Newcomb (1953); Hovland, Janis, and Kelley (1953); Goffman (1959); Barthes (1977); Masterman (1970); and Ricoeur (1984). Although, Fisher (1984/2009, 1985a/2006) underscores the narrative paradigm does not negate what existed previously but rather is assimilated within the paradigm.

Against the landscape of the *post-structuralist* period, literary criticism encompassing *new historicism* and *cultural studies* unhurriedly began to become more prominent (Sarup, 1993). New historicists, according to Veeseer (1989), suggest historical narrative is subject to the historian's interpretative subjectivity which is reflected in historical narratives. Furthermore, cites Veeseer (1989), a historian's biases (e.g., social and cultural) has prompted new historicists

to advocate that history should not be immune to new interpretation but rather new meaning can and should be obtained from textual traces of the past. On a related note, cultural studies, according to Abrams and Harpam (2015) can be described as a cross-disciplinary undertaking to examine the functioning of social, economic, and political forces and how contemporary culture processes its history, social interaction, and the effect of various economic phenomena. Johnson (1986) postulates new historicism and cultural studies can be considered as representative of a small departure from post-structuralism. Withal, Kuhn (1962/2012) postulates the acquisition of new knowledge is not linear but rather undergoes *paradigm shifts*, implying new historicism and cultural studies may be exemplar of subtle paradigm shifts. Furthermore, Kreiswirth (1992) adduces the sheer increase in literary studies published in theoretical journals in the 1970/80s provided a new impetus in narratives. One can postulate the emerging interest in narratives during the late 20th century was encapsulated in post-structuralism.

Presumably in seeking to provide a rationale for the emergence of the narrative paradigm, Martin (1986) put forward the notion the applied logic with the *rational world paradigm* or the *dominant rhetorical paradigm* became inadequate for understanding society and culture. Glenister-Roberts (2004); Fisher (1985a/2006) cite the narrative paradigm was conceived as an alternative theoretical construct for understanding communication. The process which Martin and Glenister-Roberts refer to aligns well with what Kuhn (1962/2012) describes as the decision to reject one paradigm in favor of another, or simply stated as a *paradigm shift*. One can posit Fisher's narrative paradigm is representative of a paradigm shift from traditional rationalism toward social and cultural erudition or scholarship.

Fisher (1987) describes the rational world paradigm as an elitist tendency to "place that which is not formally logical or which is not characterized by expertise within a somehow subhuman framework of behavior" (p. 20). Moreover, according to Fisher (1984/2009) the rational world paradigm appertains to the scientific or philosophical preamble to knowledge, insinuating individuals typically take decisions according to lines of reasoning or evidence. The underpinning of the rational world paradigm is founded on rhetoric and logic. Although, one can predicate society is influenced by the subjectivity of individual values and experiences. Goldberg (1982), furthermore, argues:

Neither the facts nor our experience come to us in discrete and disconnected packets which simply await the appropriate moral

principle to be applied. Rather, they stand in need of some narrative which can bind the facts of our experience together in a coherent pattern and it is thus in virtue of that narrative that our abstracted rules, principles, and notions gain their full intelligibility (p. 242).

Taking his cue from MacIntyre, Fisher (1984/2009) introduces the metaphor “homo narrans” as being representative of the essential nature of human beings. Moreover, Fisher (1984/2009), emphatically states “human beings are fundamentally storytelling creatures; therefore, the most persuasive or influential message is not that of rational fact, but instead a narrative that convinces us of “good reasons” for engaging in a particular action or belief” (p. 7).

In sum, from antiquity, storytelling was embraced to communicate morality. Subsequently, in the following centuries, Aristotle and his mentor Plato contributed to the development of an archetype which formed the basis of scholarship to resolve controversies in the *public sphere*. The term public sphere is intended as the sphere of influence which emerges as dissimilar individuals are engaged in oral communication (Cox, 2013). The underpinning of the archetype was founded on logic, the soundness of arguments, and reasoning. The Stanford Encyclopedia (2015) asserts Plato and Aristotle were the forerunners of what is known today as the *scientific method*. Conversely, during the twentieth century, Fisher (1985) held the viewpoint the foregoing archetype was inadequate to understanding society and culture. Additionally, Fisher (1985a/2006) perceived controversies in the public sphere were best resolved by embracing a narrative approach, encompassing public moral argument. Fisher’s reasoning led to the development of the narrative paradigm.

The emergence of Fisher’s narrative paradigm can be contrived by some as representative of a division in intellectual thought between the sciences and humanities. As expressed by the learned British scholar C. P. Snow in his Rede lecture “The Two Cultures”, the division of thought between the sciences and the humanities can be considered as a hindrance in terms of solving problems in the public sphere.

Table 2.1

A Brief Precipis of Aristotle's Dialectical Synthesis and Fisher's Narrative Paradigm

Aristotle's dialectical synthesis (i.e., the precursor to the scientific method)	Walter R. Fisher's narrative paradigm
A theoretical construct elaborated to explain reality on the basis of scholarship with the impetus of resolving controversies in the public sphere.	A theoretical construct which seeks to extend Aristotle's dialectical synthesis to include the subjectivity of individual value and experience through narrative. Succinctly, the paradigm endeavors to explain rhetoric, knowledge and the relations of society and culture.
The underpinning of the construct is comprised of logic, reasoning and the soundness of arguments which is supported by evidence.	The construct is founded on the notion that understanding society entails communication through narratives which often embraces anecdotal accounts of laypeople.
Accordingly, the world can be described as a series of rational and logical relationships.	Fisher (1985a/2006) maintained controversies in the public sphere were best resolved by embodying narratives.

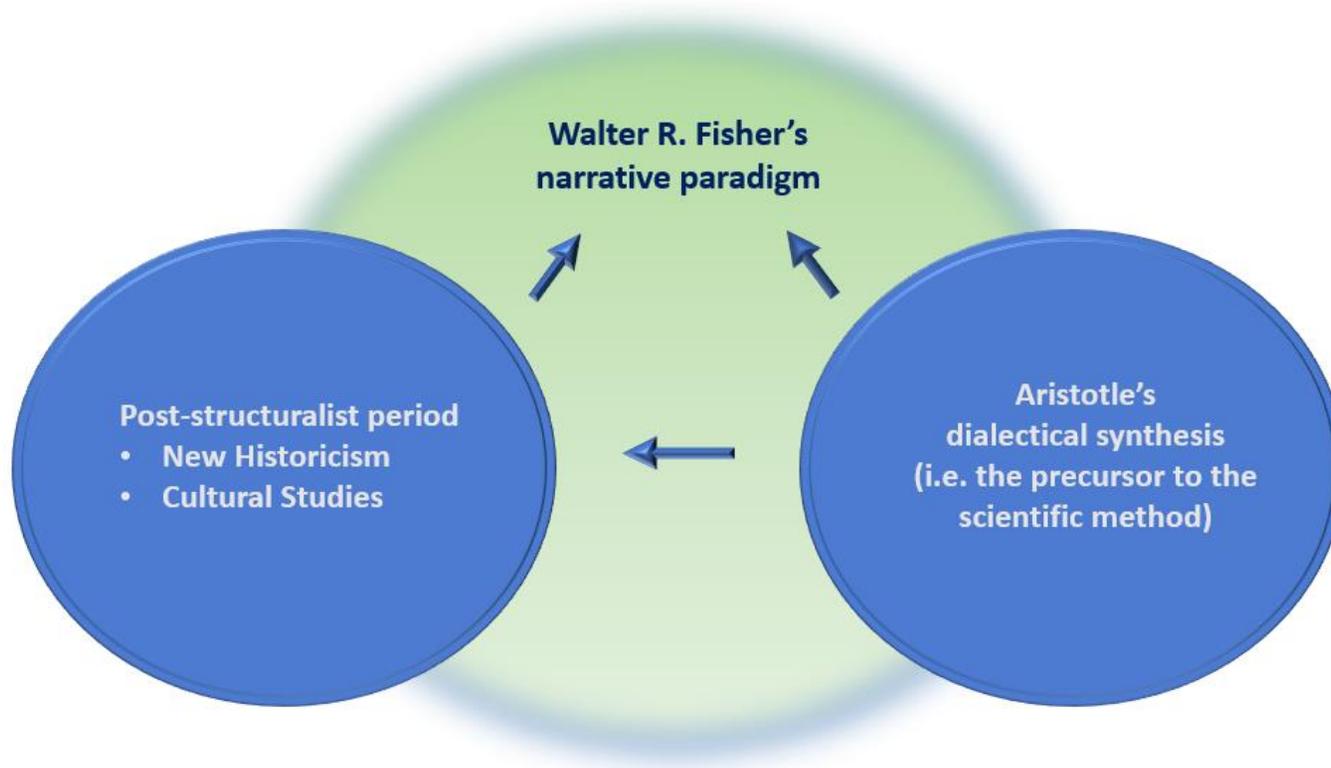


Figure 2.1 The concepts which influenced the development of Fisher's Narrative Paradigm

Texturing the Narrative Paradigm and Transportation Theory

A new impetus in narratives emerged during the second half of the twentieth century which became evident with the increase of literary criticism in refereed journals (Britton & Pellegrini, 1990; Cohen & Shires, 1988; Kreiswith, 1992). Bruner (1991); Fisher (1984/2009) maintain that narrative can persuade us to embrace a distinct action or belief. Similar to Fisher's stance toward the narrative, Green and Fitzgerald (2017); Redick and Underwood (2007), uphold stories have been a principal medium of communicating information, as oral storytelling permitted the sharing of myths, folktales, legends, fairytales, fables, etc. prior to the Mesopotamian script and other systems of writing (Schmandt-Besserat, 2007). Edson-Escalas, (2013); Green & Fitzgerald (2017) contend a key function of storytelling pertains to the degree of salience of persuasion which through stories contributes to altering the attitudes and beliefs held by individuals through stories.

In addition to the aforementioned aspects of storytelling, narratives have been thoughtfully studied in the context of consciousness-change mechanisms. For example, Nell (1988) asserted reading novels can account for ludic reading, entrancement, and the experience of *being transported* by narrative, and thirdly the notion that reading narrative can contribute to abstinence, noting reading narrative can become habit-forming and, in some contexts, addictive. The idiomatic expression being transported by a narrative can be described as a cognitive undertaking which, according to Fitzgerald and Green (2017); Green and Brock (2000), can contribute to persuasion or affecting opinions or convictions. Gerrig (1993) recounts transportation as follows:

Someone ("the traveler") is transported, by some means of transportation, as a result of performing certain actions. The traveler goes some distance from his or her world of origin, which makes some aspects of the world of origin inaccessible. The traveler returns to the world of origin, somewhat changed by the journey (p. 10-11).

Succinctly, the term *transportation* refers to the conflation between a narrative experience and the literal experience of traveling (i.e., a trip or journey), whereby an individual arrives back from a cognitive or physical excursion to some extent altered, as a consequence of the

experience. The term transportation is not restricted to written texts, implying transportation can take place with audio and video narratives (Green & Fitzgerald, 2017). The dimensions of transportation are measured by the Transportation Scale developed by Green & Broc (2000) which utilizes a self-reporting scale.

Participating in mental simulation, as described by Taylor and Schneider (1989), refers to the “cognitive construction of hypothetical scenarios or the reconstruction of real scenarios” (p. 175). Furthermore, Taylor & Schneider (1989), assert mental simulation can include the elaboration of hypothetical future events, the cognitive re-enactment of past events, indulging in fantasies, and a mix of the foregoing elements. Singer (2004), emphasizes the recollection of self-defining memories unifies the cognitive, affective, and motivational systems of an individual’s personality. Withal, the interrelation between memories and an individual’s personality, describes Singer (2004), is subordinate to an individual’s cognitive system and is commonly referred to as narrative processing. Although, McAdams, and McLean (2013) refer to narrative processing as the recalling and expressing a personally significant experience as a story. Notwithstanding the above, individuals who engage in mental simulation, asserts Edson-Escalas (2013), concurrently participate in narrative processing which transports (in the context of narrative effect) attention from critical thought while contributing to a positive affect towards persuasion. Green & Broc (2000); Fitzgerald & Green (2017) cite transportation contributes to inducement through lessened negative cognitive responses (i.e., counterarguing), strong affective responses (i.e., emotional engagement), and a perceived sublime sense of reality.

Mazzocco, Green, Sasota, and Jones (2010) maintain that individuals with cogent preexisting attitudes may experience a reduced degree of transportation, surmising not all individuals’ experience transportation equally. Fitzgerald & Green (2017); Green & Fitzgerald (2017) clarify traits such as comprehension capacity employed to imagine the elements comprised within a narrative, coupled with an individual’s degree of emotional response (i.e., empathy) can affect transportation (i.e., transportability). Additionally, Green & Fitzgerald (2017) assert initial empirical evidence suggests individuals with an increased requirement for cognition will probably be transported to higher-exertion media, such as books. Whereas, individuals with a lower requirement for cognition will likely be transported to comparably lower-exertion media, such as video.

Conversely, Mazzocco et al. (2010) assert the relationship between transportability and attitudes is affected by emotive responses rather than rationalistic assessments.

Furthermore, transportation is typically compared with dual-process models of persuasion, such as the Elaboration Likelihood Model (ELM) (Edson-Escalas, 2013; Green & Fitzgerald, 2017). The ELM contributes to attitude change by means of logical reflection and reasoning along with the assessment of arguments. Conversely, transportation elicits attitudinal change through lessened negative cognitive responses (i.e., counterarguing), an elevated degree of empathy and a perceived sublime sense of reality (Fitzgerald & Green, 2017; Green & Broc, 2000).

Elaboration Likelihood Model: An Introduction

The elaboration likelihood model (ELM) is premised on the construct that attitudes are important because attitudes guide decisions and other behaviors. Acknowledging, however, attitudes can be construed as a predisposition associated with differing elements, of which persuasion is professedly a dominant element (Ajzen & Fishbein, 1970). Cacioppo and Petty (1979) avow there was limited research conducted during the 1970s by social scientists on the study of attitudinal and behavioral effects of recurring persuasive messages. As a consequence, Cacioppo and Petty, developed a hypothesis to test the cognitive effects of message repetition to determine if recurring persuasive messages would result in comparable attitudinal change. The results, cite Cacioppo & Petty (1979), indicate the repetition and content of persuasive advocacy messages does affect the number of thoughts individuals conceive which is, argue the authors, representative of observed attitudinal change in response to advocacy messages. Petty & Cacioppo (1986), in subsequent years, underscored, despite the expansive data and theories applicable to persuasion during the 1970s, a significant obstacle facing persuasion researchers was a lack of consensus clarifying if and how messages affected attitude change.

Petty & Cacioppo (1981a) presented an abbreviated version of a general theory of attitude change, which the authors referred to as the *elaboration likelihood model* (ELM). Petty & Cacioppo (1981a) assert the model “provides a fairly general framework for organizing, categorizing and understanding the basic processes underlying the effectiveness of persuasive communications” (p. 125). As part of the model, Petty, Cacioppo, and Goldman (1981b) describe two distinguishable perspectives of persuasion. The first perspective is named the *central route*, referring to the attitudinal modification which emerges as a consequence of

thorough consideration of issue-relevant reasoning. One can surmise the word elaboration is synonymous with the thought process associated with the central route perspective. Withal, Petty & Cacioppo (1986b) describe elaboration as “the extent to which a person carefully thinks about issue-relevant arguments contained in a persuasive communication” (p. 7). Griffin (2003) elucidates the central route as a logical approach to processing new information, citing how individuals may reflect on issues or topics to determine if an issue or topic is merit-worthy. Frewer, Howard, Hedderley, and Shepherd (1997) maintain the degree in which individuals engage additional cognition depends on individual traits and contextual factors. An example of research conducted within this central route domain is a study led by Eagly (1974) titled “Comprehensibility of persuasive arguments as a determinant of opinion change” which can be construed emphasizing the cognition, scholarship, and recalling of message arguments.

In juxtaposition with the central route perspective, Petty et al. (1981b) developed a second perspective, namely the *peripheral route*. With the peripheral route, underscore the authors, attitude change is affected by affirmative or dissenting *cues*. For example, the mention of cues may embrace rudimentary elements such as food and pain. Zanna, Kiesler, and Pilkons (1970) contend attitudes are defined by inclinations to respond to positive and negative cues (e.g., pain via electric shock). In such circumstances, Petty & Cacioppo (1981a) maintain choices are decided by individuals “without any active thinking about the attributes of the issue or object of consideration” (p. 25 6). Alternatively, Petty et al. (1981b) allude to subordinate cues, such as credible sources (e.g., credible communicators) and the ability of such sources to influence attitude. McCroskey (1997) defined source credibility as “the attitude toward a source of communication held at a given time by a receiver” (p. 87). Kelman and Hovland (1953) clarify the communicator is representative of a cue which can lead to either affirmative or dissenting attitudinal change.

One can speculate throughout history some of the most sensational and dramatic events involved powerful attitudes. For example, President Lincoln’s Gettysburg Address which encompasses 271 words, is considered by some as one of America’s most influential speeches. More recently, examples of powerful attitudes can include conflicting statements made by both President Trump and Obama regarding climate change. For example, President Trump (2012) tweeted “the concept of global warming was created by and for the Chinese in order to make

U.S. manufacturing non-competitive” (para. 1). Conversely, President Obama (2015) stated “no challenge poses a greater threat to our children, our planet, and future generations than climate change — and that no other country on Earth is better equipped to lead the world towards a solution” (para. 1). Although, Cacioppo & Petty (1982); Petty et al. (1981b) underscore individuals with a personal stake in an issue are likely to engage in a greater degree of cognition and, typically, are more influenced by what is conveyed by a message’s contents than the individual who imparts the message. Conversely, messages deemed irrelevant by individuals, argue Cacioppo & Petty (1982), are subordinated to the peripheral route perspective, implying a lesser degree is cognition is applied.

Table 2.2

A Cursory Synopsis of the Elaboration Likelihood Model

Central route processing	Peripheral route processing
Attitude change is affected by the consequence of thorough consideration of issue-relevant reasoning.	Attitude change is affected by affirmative or dissenting cues often emanating from perceived credible or untrustworthy sources.
For instance, if a product is new or unknown it is likely potential consumers will focus on a message’s strengths and what a message is expressing. The process of considering accepting or rejecting a message on the basis of its strength is commonly referred to as central route processing.	For instance, if the brand of a product is known, it is likely consumers will embrace the less elaborative route of processing, the peripheral route, to assess a product—if messages emerge from a perceived reliable source.

The Elaboration Likelihood Model: An Application

Petty & Cacioppo (1986c) allude to motivation and ability as the principle variables to determine whether a message will be elaborated by individuals. Acknowledging, not all messages are elaborated equally by individuals, suggesting cognition biases are prevalent, as cited within the social-judgement theory (Hovland, Harvey, & Sherif, 1957). For example, Petty & Cacioppo (1986b) postulate prior cognition of an issue or topic associated with an individual’s attitude will typically not change with additional cognition. Rather, additional cognition will, at most, lead to reinforcing the existing opinion or attitude. Petty & Cacioppo (1986a) refers to the aforementioned as *biased elaboration*. Conversely, *objective elaboration or unbiased*

elaboration refers to the amplification of an issue or topic on the strength of the line of reasoning contained in the message or communication (Petty, Cacioppo, & Goldman, 1981b). In sum, whilst one might initially suspect messages elaborated by the central route have greater attitudinal influence than those messages elaborated by the peripheral route, Petty & Cacioppo (1986c) remind us there are other circumstances which contribute to the persuasiveness of messages in terms of attitudinal change. Other elements which may affect the persuasiveness of messages include, for example, the degree of bias or objectivity of a message in addition to its quality of reasoning.

For instance, if a message is elaborated unbiasedly, the success of a message can be considered analogous with its perceived strength in terms of its attitudinal impact (Krosnick & Petty, 1995). A decade earlier, Raden (1985) cited the term *attitude strength* is used by numerous researchers to convey a high degree of conviction related to an attitude. Although, Raden (1985) underscores the term attitude strength can signify different interpretations depending on the distinct or basal attitudinal theory concerned. Nonetheless, Krosnick & Petty (1995) argue “attitudes can influence information processing and judgements, in the sense that they make it likely that certain information will come to mind, or that certain decisions will be rendered” (p. 3). Noting, strong attitudes are more inclined to convey a bias to individuals’ cognition and judgement which may in turn guide behavior more so than weak attitudes (Krosnick & Petty, 1995). Conceding, the authors Krosnick & Petty (1995) do draw attention to the significance of strong attitudes, the authors, however, omit describing what constitutes a strong message apart from stating a strong message can influence behavior.

In terms of this body of work, the ELM can conceivably contribute to the profitability of selling specialty crops online. Kelman & Hovland (1953); Krause, Meyers, Irlbeck, & Chambers (2015); Petty & Cacioppo (1981) cite credible sources encompassing communicators and the ability of such communicators to influence attitude can lead to either affirmative or dissenting attitudinal change. For instance, using medical practitioners and nutritionists, as credible sources, to convey the nutritious benefit of consuming specialty crops may conceivably work efficaciously as a peripheral cue to influence individuals with prior knowledge of nutrition. Frewer et al. (1997) assert information which is most personally significant will probably be processed in depth, as opposed to information which is believed to be irrelevant.

Perceived personal relevance, or salience, of the information is also likely to act as an important peripheral cue in the extent to which people internalize information. Krause et al. (2015) advocate framing messages which are aligned with a marked audiences' values. Messages with emotional appeals may be used effectively to mark an audience with little or no knowledge of the relationship between specialty crops and nutrition. Withal, Frewer et al. (1997) underscore a message will have a maximum effect if the person conveying the message is perceived as arguing against personal self-interest.

Settle, Baker, and Irani (2014); Ehrenberg, Barnard, and Scriven (1997) assert promoting the essential features of a product can contribute to rendering a product more salient which may improve its visibility to potential consumers. For instance, consumers' attitude toward words, phrases, and related communication matters should be tested to ensure a marketing scheme would elicit a positive reaction from potential consumers (Wilson, Barnes, & Irani, 2013). For instance, the Florida Nursery, Growers and Landscape Association (FNGLA) developed a state-specific plant-brand to market plants (FNGLA, 2011). The terms "superior and proven" were embraced to promote the Florida Garden Select brand which, in turn, contributed to the success of the brand among other factors. Goodwin, 2013; Meyers, 2008; uphold a less extensive thought process is employed by consumers in evaluating agricultural products which may have contributed to the success of the Florida Garden Select brand.

In drawing a denouement, Wilson et al. (2013) cite as the visibility of a product improves, it is likely consumers will embrace the less-elaborative route of processing, the peripheral route, if messages emerge from a perceived reliable source. Taking into account the noteworthiness of being perceived as a reliable source, Wilson et al. (2013), stress a branding campaign should call attention to an entity's credibility. One can posit developing a brand for the selling of specialty crops online, taking into account the aforementioned recommendations, may likely contribute to improved sales, and offer rural farmers access to new emerging markets, and profitability.

E-commerce: An Overview

Baourakis and Kourgiantakis (2002) cite the outburst of e-commerce during the early 1990s, attributed to the widespread diffusion of the Internet and web which rendered e-commerce for businesses affordable and uncomplicated. Today one can describe the Internet as an established marketing channel for commercial transactions involving millions of consumers across the globe.

The emergence of e-commerce, cite Johnson and Malicky (1999), has, for many multinational entities, simplified the management of large employee populations and third-party suppliers typically geographically-scattered. Drew (2003), similar to Johnson and Malicky, accentuates the advantages of e-commerce for small and medium-size entities (SMEs) while subordinating the drawbacks. For instance, Drew (2003) affirms e-commerce permits SMEs to communicate more effectively with online consumers while providing access to new distant markets in different geographical areas with reduced operational costs. Conversely, Elia, Lefebvre, and Lefebvre (2007) contend e-commerce also permits larger firms to access local niche markets, creating new threats for SMEs which previously may have experienced minimum competition. Also, Elia et al. (2007) draw attention to e-commerce activities straining the typically lean financial and human resources of an SME during a start-up phase. Although, Hooker, Heilig, and Ernst (2001) emphatically claim a considerable difficulty in operating an e-commerce SME is the integration of business strategies, typically encompassing: pricing (e.g., should prices be similar across all marketing channels; customer service (e.g., the adoption of customer's relationship management IT systems); business processes (e.g., automating chain-management systems), and e-business management involving the assessment of new innovation to retain competitive advantages. In sum, Elia et al. (2007) emphasize the trade-off between the benefits and drawbacks of e-commerce for SMEs are unfailingly not clear-cut but rather context specific. Acknowledging, the aforementioned commentary was published more than a decade ago, recent peer-reviewed articles, however, continue to cite similar findings.

Hooker et al. (2001) cite e-agribusinesses encounter similar concerns as entities operating in dissimilar sectors. Although, cite Baker, Boyer, Peterson, and King (2018); Hooker et al. (2001), there are characteristics which are specific to the agricultural sector which may impede the execution of e-commerce. For example, the tendency to adhere to tradition, or specifically traditional business practices, may contribute to agricultural growers resisting the adoption of innovative practices, such as e-commerce (Hooker et al., 2001). Additionally, Baker et al. (2018) draw attention to the continued use of inefficient marketing channels: asynchronous communication, e-mails, and printed matter. Furthermore Hooker et al. (2001) underscore selling commodities is largely driven by the economic principles of supply and demand which are for the most part predictable. Contrarily, the adoption of e-commerce is less predictable, as it (e-commerce) can expand a traditional client base to include new potential clients in different

regions of varying size and experience in a brief period of time. The foregoing subtleties are alien to traditional agricultural growers, assert Hooker et al. (2001), which, argue the authors, renders the adoption of new business models focused on information technology difficult for agricultural growers.

Whitacre (2010/2018) describes broadband internet access in the rural Midwest, in the context of the urban–rural digital divide. Whitacre (2018) elaborates that while much improvement has been achieved, an approximate 69% of rural areas do not have access to broadband in 2016, whereas in urban areas the rate of access is 98%. The issue of broadband access is embodied as part of the American Recovery and Reinvestment Act of 2009 which is a government initiative to confront long-neglected matters pertaining to the nation’s infrastructure, including broadband access to all Americans (National Telecommunications and Information Administration, n.d.). A comprehensive analysis conducted by the Federal Communications Commission (FCC) (2010) specified an approximate seven-million housing units without access to terrestrial-broadband infrastructure. Furthermore, states the FCC (2010), the total cost of providing broadband access to the seven million housing units exceeds projected revenue streams, implying it is highly unlikely private capital will finance the infrastructure. What is the estimated cost of the infrastructure? The FCC (2010) estimates \$23.5 billion to the extend broadband service to all Americans. The FCC (2018) has reported that rural and tribal areas trail behind urban centers and, notwithstanding limited improvement to terrestrial-broadband infrastructure, broadband access to the rural Midwest has improved through Long-Term Evolution (LTE) services. Within the Midwest, at the state level, in 2018, the Kansas Department of Commerce established a task force to review the status of broadband infrastructure and formulate recommendations to expand broadband coverage and capacity throughout Kansas.

Selling Specialty Crops Online

Hooker et al. (2001) mention specialty crops are seemingly well suited to be marketed online. Although, Hooker et al. (2001); Park and Kim (2003) posit consumers’ wish to physically handle produce prior to acquisition may obstruct some consumers from purchasing crops online. Li, Troutt, Brandyberry, and Wang (2011) assert the risk of an agricultural grower losing its competitive advantage and straggling behind its competitors may often lead a SME to adopt innovation (i.e. e-commerce). Concisely, Li et al. (2011) contend growers will be motivated to adopt innovation to compete effectively with other growers, as opposed to embracing an

innovation for an improved competitive advantage. Alternatively, Carpio, Isengildina-Massa, Lamie, and Zapata (2013) maintain e-commerce offers an alternative venue for growers to market agricultural produce in diverse geographical locations. Also, e-commerce allows growers to present detailed product information online, including high-resolution photos at a relatively low-cost which may not otherwise be attainable. Baker et al. (2018) infer transitioning to online direct selling (ODS) can be especially difficult for smaller independently-owned specialty crop businesses. Despite the difficulty, Baker et al. (2018) maintain taking on ODS is especially beneficial for rural businesses, as ODS can contribute to sustainability through sales across a wider forum. The authors describe selling via online marketplaces, such as Amazon and eBay which provide a settled and acknowledged infrastructure. Such alternatives can reduce some of the risks associated with SMEs developing their own e-commerce businesses, noting Amazon's sales of live plants has increased. Although, Baker et al. (2018) surmise SMEs selling horticultural items via their own e-commerce website can provide superior customer service and personalized branding. Whilst the selling of horticultural items online (i.e., plants, specialty crops, etc.) is relatively a new endeavor, one can posit e-commerce offers promising results for specialty crop growers to remain operational in rural areas amid fierce competition. Albeit at a subordinated level, the selling of specialty crops online can potentially contribute to lessen rural-to-urban migration.

Despite the limited involvement of SMEs in selling specialty crops online, Amazon has expanded its "Yard and Outdoors" offerings to include a range of landscaping services. Additionally, the category of merchandise "Patio, Lawn & Garden" includes a wide array of live ornamental plants and near natural artificial plants. Apart from Amazon, major chain supermarkets located throughout the Midwest (e.g., Hy-Vee, Kroger, among others) permit online orders and delivery to consumers.

Summary

This chapter commences with the onerous challenge of defining a narrative, noting a narrative represents one of the independent variables manipulated in exploring consumers' willingness to acquire specialty crops viewed online. The challenges in defining a narrative, according to Rudrum (2006), are linked with the intricacy of describing one's mental construct of a narrative in a written form. Furthermore, cites Rudrum (2006), for each conjecture, there is an exception, and for each definition, there is latitude for additional denotation which, in turn, contributes to

further amplifying to the aforementioned intricacy. In spite of the foregoing, this chapter proceeds to outwardly trace the origin of narratives embraced by heroic societies, encompassing the Greek Archaic period (c. BC 800-400), the early medieval period in Northwestern Europe (c. AD 600-1150), and the English Renaissance (c. AD 1500-1688). MacIntyre (1981) avows narratives have been used as a preeminent means of communicating morality and ultimately defining societies' standpoints or attitudes. Additionally, MacIntyre (1981/2007) concludes we as humans acquire cognizance of our lives by means of narratives, and through “our actions and practice we are essentially a story-telling animal” (p. 216). Thereafter, this work digresses to introducing the communication paradigm elucidated by Walter R. Fisher, conceived as an alternative theoretical construct for understanding communication (Fisher, 1984/1985a/1985b/1987). In short, Fisher (1984/2009, 1985a/2006) considered the communication paradigm an alternative to traditional rationalism (i.e. the rational world paradigm). Noting, Fisher maintained messages of the greatest influence or persuasiveness as narratives, in contrast with messages established on the basis of rational fact. In sum, Fisher (1984/2009) asserted a narrative convinces individuals to engage in a particular action or stance. Against the landscape of persuasion, readers of this work became acquainted with the elaboration likelihood model (ELM), a dual-process model of persuasion (i.e., the central and peripheral routes of persuasion). On a similar theme, readers were made conversant with the transportation theory, a study of narratives in the context of consciousness-change mechanisms or simply being transported, figuratively, by narrative. After that, this work culminated to unite the elaboration likelihood theory, the transportation theory and narrative in an application, encompassing online sales. For instance, Wilson et al. (2013) provide further insight as to how the ELM might be embraced to sell specialty crops online. Acknowledging, some readers may be convinced selling specialty crops is the best option for growers to consider. Hooker et al. (2001); Li et al. (2011) highlight there are numerous challenges to selling specialty crops online, noting Baker et al. (2018) in a benchmark study of online plant sales emphasize a limited presence on Amazon and other online marketplaces, and of online direct selling. While one can speculate great potential for selling specialty crops online, there are still challenges growers must overcome

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Chapter 3 - Methodology

In the former section, an examination of published literature was undertaken to recapitulate, in a synthesized format, the pertinent themes of this work by differing scholars. The themes explored included the definition of a narrative and narrative theory which culminated the narrative paradigm (Fisher). Furthermore, other themes cited were the transportation theory, the elaboration likelihood model, E-commerce, and selling specialty crops online. Relevant theories were also introduced in the former section with the aim of providing readers with an overview of the scholarship embodied within this endeavor—prior to presenting the contents within this chapter.

A choice-based conjoint design has been embraced for this study, as the methodology has been developed to gain insight to consumers' preferences. Hair, Black, Babin, and Anderson (2014) describe a conjoint design as a multivariate methodology typically embraced in new product development. Additionally, a conjoint design allows for the evaluation of different attributes while providing practical decision criteria for respondents (Hair et al., 2014). Furthermore, the methodology permits a researcher to assess the importance and the degree of each attribute, as a population evaluates varying combinations of products (Hair et al., 2014). The conjoint methodology is aligned with Lancaster's (1966) consumer theory which postulates that "goods possess, or give rise to, multiple characteristics in fixed proportions and that it is these characteristics, not goods themselves, on which the consumer's preferences are exercised" (p. 154).

To guide the research of this study, namely, to evaluate the consumers' preferences, the following research objectives will be utilized.

- RO1:** To determine the influence of a narrative and or storytelling when selling specialty crops in an online environment.
- RO2:** To determine the willingness of respondents to travel to purchase specialty crops viewed in an online environment.
- RO3:** To determine respondents' willingness to have specialty crops shipped directly to them.

RO4: To explore if the rural location of potential consumers may contribute to their willingness to retrieve the crops themselves via a U-pick farm (e.g., agritourism).

Instrumentation

An electronic survey was embraced using Qualtrics as the instrument of data collection. A stratified random survey was administered by a panel company to residents in the Midwest, as defined by the U.S. Census Bureau. The survey consisted of six prescreening questions to determine whether prospective respondents were eligible to participate in the study. The six prescreening queries sought to ensure the willingness of the respondents to partake in the 25-minute survey, provided they resided within the geographic region of the study, and used social media such as Facebook, Twitter, posted original content to a Wiki (e.g., Wikipedia, PBworks, etc.), tagged webpages using social bookmarking (e.g., Digg and StumbleUpon), viewed user-generated videos online, published or updated one's own web page/site among others at a minimum fortnightly.

Validity and Reliability

The instrument used for this specific study has been reviewed by a panel of experts comprised of an associate professor with extensive experience in survey design, new-media technologies and agricultural theory; a second associate professor with a noteworthy background in cooperative-extension and in social-media marketing for horticultural industries, and lastly a full professor with significant training in agricultural economics and substantive experience in food and agricultural marketing with significant cognizance of consumer issues. The review of the instrument conducted by the aforementioned subject-matter experts, concluded the instrument is appropriate or valid for the interpretations that will be drawn from this exploratory study.

The reliability or internal consistency of an instrument can be described as the level in which the elements that make up a scale—measure the same concept (Pallant, 2013). The coefficient alpha (i.e., Cronbach's alpha) will be employed to estimate the reliability of the respondents' composite scores, noting Cronbach's alpha is commonly applied to test internal consistency (Pallant, 2013). A reliability coefficient of .70 or above was acceptable and over .90

equates to high reliability (Cronbach, 1951).

Table 3.1

Reliability Stated by Respondents' Self-Reported Social Networking Site Use

Variable type (items measured)	Corresponding queries	<i>n</i>	Cronbach's Alpha
Internet use (5)	Q9.1-Q9.9, Q10.1-Q10.8, Q11.1-Q11.7, Q12.1-Q12.5, Q13.1-Q13.8	37	.939

To ascertain if the data associated with respondents' self-reported social networking site use would be suitable for a factor analysis, the statistical test Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) was embraced. The test aims to identify the strength of the inter-correlations among data. The scale of the test ranges between 0 to 1 while "values below .50 are unacceptable, in the .50s miserable, in the .60s mediocre, in the .70s middling, in the .80s meritorious, and in the .90s marvelous" (Kaiser, 1974, p. 35). Conversely, Tabachnick and Fidell (2007) state a KMO with 0.6 is suggested as the lowermost value for a good factor analysis. From the KMO test conducted for the aforementioned data, a value of 0.950 was obtained, indicating it is reasonable that a factor analysis is appropriate for this data set. As a point of clarification, the terms *principal components analysis* and *factor analysis* are often used interchangeably by researchers as well as in this work, as both techniques seek to produce fewer combinations of the original variables in a manner that accounts for the variability among correlations (Pallant, 2013). Although, there are unique differences between the two techniques which should be noted.

Regarding test content validity, Schwarz, Strack, and Mai (1991) assert if two survey questions are perceived by respondents as belonging together, respondents will interpret a general question to refer to aspects differently from the aspects intended by the specific question which the authors describe as an assimilation effect. To mitigate assimilation effect with this study, survey questions were displayed in a random order. Additionally, research literature reveals the term "incentive" has referred to tangible and non-tangible rewards for survey participation. Rose, Sidle, and Griffith (2007); Deutskens, de Ruyter, Wetzels, and Osterveld (2004) cited considerable literature affirms incentives and follow-up are effective approaches to improve survey response rates. Although, Singer and Ye (2013) deduce the use of incentives

contributes to improved response rates in all forms. Withal, for this study, Qualtrics was paid an incentive of \$5.00 per completed response to recruit consumers within the target market, noting the amount disbursed to participants was much less.

Dependent Variable

The dependent variable for this work refers to the element or elements representative of respondents' willingness to pay for the delivery of specialty crops. To identify the elements which relate to the respondents' willingness to acquire specialty crops viewed online, this work manipulated three independent variables, namely: narratives and or storytelling, prices, and logistics (i.e., travel time to purchase specialty crops or the cost of door-to-door delivery). Additionally, albeit to a lesser extent, the respondents' social technographics profile was also assessed. Succinctly, this study assessed the variation of the dependent variable in relation to the independent variables.

Independent Variables

The instrument used 24 identical images of produce displayed in a cardboard box, described textually as eight to twelve pounds of seasonal local produce. Examples of the images used are depicted immediately below, recalling the images were held constant throughout the survey.



Figure 3.1 Examples of the images which respondents viewed, recalling the narratives, price and logistics (i.e., travel time or door-to-door delivery) varied per choice

In addition to the foregoing sample images, the independent variables representative of this work are presented in Table 3.2 below. Chiefly, respondents viewed four separate screens with each screen containing two images—presented side by side. In sum, each respondent viewed a total of eight images and a mix of narratives, prices, and logistics. The respondents were then requested to select an option per screen they would order, or alternatively select “I would not choose either of the two options above”.

The typology of narratives in each option can be described in terms of four dominant themes, namely:

Theme one: A family farm’s story: a narrative which incorporates individuals’ names and requests prospective consumers to communicate directly with the owners of the farm.

The Narrative: Our farm is a 5th-generation family farm founded by Jim and Jane Anderson in 1905. Bob, his wife Linda and their four children live and work on the farm, and their youngest daughter Beth manages online sales while staying home with her energetic toddler Grayson. Please contact us with any questions you have about how we run our farm.

Theme two: Private sector business: A narrative that aims to provide what customers seek—ease of online shopping and purchasing while expounding on the businesses’ efficiency, effectiveness and adoption of new technology.

The Narrative: Our farm uses cutting-edge technology in efficiently producing our products and serving our customers. It is our goal to provide our customers with a seamless purchasing experience and on-time delivery. We stand by our products and will replace any product that is damaged in the shipping process.

Theme three: Environmentally friendly: A narrative that tenets environmental sustainability.

The Narrative: Our farm seeks to lessen the environmental impact of farming through minimum tillage, reduced water use, and natural pest control measures. Our products are shipped to you using green packing materials that are 100% recyclable. We want to leave our land in a better condition than we found it for future generations.

Theme four: Community commitment: A narrative that communicates a family farm’s involvement in its rural community, expounding on the events it finances.

The Narrative: Our farm began with a passion and love for growing. We are proud to work and live in our rural community where we host our town's annual art and music festival to support our local schools. Your purchases help our farm remain in our rural community doing what we love.

Table 3.2

Consumer Choice Experiment Options (N° 1 to 12): An Overview of the Narrative Typologies, Prices and Logistics Utilized to Explore Consumers' Willingness to Acquire Specialty Crops Viewed in an Online Environment

N°	Narrative typology	Prices	Logistics
1.	Choice A: Environmentally friendly	\$17.50 / box of produce	50-minute travel (One way)
	Choice B: A family farm's story	\$15 / box of produce \$4.99 / shipping \$19.99 total	Delivered to door
	I would not choose either of the two options above		
2.	Choice A: Environmentally friendly	\$15 / box of produce	20-minute travel (One way)
	Choice B: Community commitment	\$20 / box of produce	50-minute travel (One way)
	I would not choose either of the two options above		
3.	Choice A: Community commitment	\$15 / box of produce	20-minute travel (One way)
	Choice B: Private sector business	\$17.50 / box of produce	50-minute travel (One way)
	I would not choose either of the two options above		
4.	Choice A: Private sector business	\$20 / box of produce	20-minute travel (One way)
	Choice B: Environmentally friendly	\$17.50 / box of produce \$4.99 / shipping \$22.49 total	Delivered to door
	I would not choose either of the two options above		
5.	Choice A: Environmentally friendly	\$15 / box of produce	50-minute travel (One way)
	Choice B: A family farm's story	\$17.50 / box of produce \$4.99 / shipping \$22.49 total	Delivered to door
	I would not choose either of the two options above		
6.	Choice A: Community commitment	\$17.50 / box of produce	20-minute travel (One way)

N°	Narrative typology	Prices	Logistics
	Choice B: Environmentally friendly	\$20 / box of produce \$4.99 / shipping \$24.49 total	Delivered to door
	I would not choose either of the two options above		
7.	Choice A: Private sector business	\$17.50 / box of produce \$4.99 / shipping \$24.49 total	Delivered to door
	Choice B: A family farm's story	\$20.00 / box of produce	50-minute travel (One way)
	I would not choose either of the two options above		
8.	Choice A: Community commitment	\$20 / box of produce \$4.99 / shipping \$24.49 total	Delivered to door
	Choice B: A family farm's story	\$15 / box of produce	50-minute travel (One way)
	I would not choose either of the two options above		
9.	Choice A: Community commitment	\$17.50 / box of produce	50-minute travel (One way)
	Choice B: Private sector business	\$20 / box of produce \$4.99 / shipping \$24.99 total	Delivered to door
	I would not choose either of the two options above		
10.	Choice A: Private sector business	\$20 / box of produce	20-minute travel (One way)
	Choice B: A family farm's story	\$15 / box of produce \$4.99 / shipping \$19.99 total	Delivered to door
	I would not choose either of the two options above		
11.	Choice A: Environmentally friendly	\$20 / box of produce	20-minute travel (One way)
	Choice B: Private sector business	\$15 / box of produce	50-minute travel (One way)
	I would not choose either of the two options above		

N°	Narrative typology	Prices	Logistics
12	Choice A: Community commitment	\$15 / box of produce \$4.99 / shipping \$19.99 total	Delivered to door
	Choice B: A family farm's story	\$17.50 / box of produce	20-minute travel (One way)
I would not choose either of the two options above			

Data Analysis

A Pearson Product Moment correlation coefficient or simply the Pearson correlation was used to measure the statistical relationship between two continuous variables. Thereafter, a simple or linear regression analysis was conducted to acquire cognizance beyond what the Pearson correlation revealed. The regression analysis served to permit the inference of causality via inductive reasoning of cause and effect. As prelude to causation, it would seem appropriate to present the thoughts of the preeminent 18th century English philosopher David Hume. Why David Hume? Few issues have given rise to so much controversy and disagreement as Hume's theory of causality. For instance, related to physical causation:

We may define a CAUSE to be 'An object precedent and contiguous to another, and where all the objects resembling the former are placed in like relations of precedency and contiguity to those objects, that resemble the latter (Hume, 1739/1978, p. 170).

Conversely, with pertinence to a mental construct of a causal relationship, Hume wrote:

A CAUSE is an object precedent and contiguous to another, and so united with it, that the idea of the one determines the mind to form the idea of the other, and the impression of the one to form a more lively idea of the other (Hume, 1739/1978, p. 170).

Field (2009) summarizes the relationship of cause and effect must occur in close proximity in time, the cause must occur prior to an effect, and an effect cannot occur without the presence of the cause. Furthermore, the aforementioned conditions imply causality can be inferred with attesting evidence whereby cause is regarded as the same as high degrees of correlation between two or more variable or agents (Field, 2009).

One of the challenges of this work, as is pervasive throughout the social sciences and other fields, is the difficulty of ascribing causes to effects. Guyon et al. (2008) cite an important goal of causal modeling is to elucidate sufficient data to formulate predictions of manipulated

variables studied. As an initial step of this process, simple linear regression analyses were conducted to permit, if applicable, the inference of causal relationships between the independent and dependent variables of this work. On a related note, the value of R^2 was embraced to assess the substantive importance of an effect or the significance of an effect, noting R^2 cannot be used to infer causal relationships. With a linear regression, Field (2009) describes the effect as “the variance in y accounted by x, or the variation in one variable explained by the other” (p. 198). Instances of the variation on one variable explained by the other are provided under the individual research objectives later in this chapter.

Sample

Demographic data has been collected to gain insight of the population, e.g. gender, ethnicity/race, age, education, income, and employment status. One can posit demographic data can be employed to obtain cognizance of why consumers make choices. For instance, are choices made on the basis of location, age, gender and or children? This study has grouped demographic data into dissimilar variables to perceive the significance of the studied populations’ preferences. In perceiving the significance of the populations’ preferences, it is the intention that such data can, in turn, be used to determine the willingness of the population to acquire specialty crops viewed in an online environment.

Indicated below is a series of tables which serve to describe the population of the three surveys which is representative of this work. The populations’ feedback has been grouped into class intervals for presentational purposes. A class interval refers to a block of scores or values which is commonly used to group scores together (Shavelson, Ruiz-Primo, & Mitchell, 1996).

Demographics – gender, ethnicity, and age.

Table 3.3

Demographics of the Population Which Include the Frequencies, Percentages, Cumulative Frequencies, Cumulative Percentages of Gender, Race/Ethnicity, and Approximate Age Which Has Been Obtained from the Year of Birth Provided by Respondents

Demographic data	<i>f</i>	%	<i>cf</i>	c%
Gender				
Female	1,052	84.6	1,052	84.6
Male	182	14.6	1,234	99.2
Self-identified	10	.8	1,244	100
Race / Ethnicity				
White	1,078	86.7	1,078	86.7
Black or African American	90	7.2	1,168	93.9
American India or Alaskan	25	2.0	1,193	95.9
Asian or Pacific Islander	28	2.3	1,221	98.2
Latino or Spanish	47	3.8	1,268	102
Other	16	1.3	1,284 ^a	103.3 ^a
Approximate age				
18 – 24	137	11.0	137	11.0
25 – 34	354	28.5	491	39.5
35 – 44	306	24.6	797	64.1
45 – 54	203	16.3	1,000	80.4
55 – 64	166	13.3	1,166	93.7
65+	78	6.3	1,244	100

^a Respondents were permitted to provide more than one comment regarding their race/ethnicity which accounts for the sum in excess of the number of respondents. For example, one respondent indicated she was White, American India or Alaskan Native and Asian or Pacific Islander.

Table 3.4

Comparison of Demographic Data Between Survey Respondents and the Population of the Midwestern Region Encompassing Gender, Race, and Age.

Demographic data	Survey respondents %	Midwestern region %
Gender		
Female	84.6	51
Male	14.6	49
Self-identified	0.8	-
Race/Ethnicity		
White	86.7	75.0
Black or African American	7.2	10.0
American Indian or Alaskan	2.0	1.0
Asian or Pacific Islander	2.3	-
Asian	-	3.0
Pacific Islander	-	-
Latino or Spanish	3.8	8.0
Other	1.3	-
Approximate age		
18 – 24	11.0	9.5
25 – 34	28.5	10.0
35 – 44	24.6	12.3
45 – 54	16.3	12.5
55 – 64	13.3	13.5
65+	6.3	16.4

Table 3.5

Demographics of the Sample Which Include the Frequencies, Percentages, Cumulative Frequencies, Cumulative Percentages as Reported by Education Attainment, Employment Status, and Income Earned in 2017 Before Taxes

Demographic data	<i>f</i>	%	<i>cf</i>	c%
Education attainment				
High school graduate or less	345	27.8	345	27.8
Some college, but no degree	374	30.1	719	57.9
Associate degree (2-year)	178	14.3	897	72.2
Bachelor's degree (4-year)	237	19.1	1,134	91.3
Master's degree	89	7.2	1,223	98.5
Doctoral degree	13	1.0	1,236	99.5
Professional degree (JD or MD)	8	.5	1,244	100
Current employment status				
Employed 40 hours per week	570	45.8	570	45.8
Employed 1-39 hours per week	266	21.4	836	67.2
Not employed, but looking for work	84	6.8	920	74.0
Not employed, NOT looking for work	123	9.9	1,043	83.9
Retired	94	7.6	1,137	91.5
Disabled, not able to work	107	8.5	1,244	100
Income earned in 2017 before taxes				
Less than \$30,000 per year	317	25.5	317	25.5
\$25,000-\$44,999	211	17.0	518	42.5
\$45,000-\$99,999	518	41.6	1,046	84.1
\$100,000-\$200,00+	198	15.9	1,244	100

Table 3.6

Comparison of Demographic data Between the Sample and the Midwestern Region by Education Attainment and Employment Status

Demographic data	Respondents %	Midwestern region %
Education attainment		
High school graduate or less	27.8	38.4
Some college, or but no degree	30.1	-
Associate degree (2-year)	14.3	-
Some college or associate degree	-	30.6
Bachelor's degree (4-year)	19.1	19.5
Graduate or professional degree	-	11.6
Master's degree	7.2	-
Doctoral degree	1.0	-
Professional degree (JD or MD)	0.5	-
Employment status		
Employed 40 hours per week	45.8	-
Employed 1-39 hours per week	21.4	-
Employed 35 hours or more per week	-	61.6
Employed 1-34 hours or more per week	-	18.4
Not employed, but looking for work	6.8	-
Not employed, NOT looking for work	9.9	-
Retired	7.6	-
Disabled, not able to work	8.5	-
Unemployed	-	20.0

Note. In some cases, no comparable data was available.

Table 3.7

Comparison of Demographic data Between the Sample and the Midwestern Region by Income

Demographic data	Survey respondents %	Midwestern region %
Income		
Less than \$30,000	30.5	24.3
\$30,000 to \$34,999	5.3	4.9
\$35,000 to \$39,999	4.6	4.5
\$40,000 to \$44,999	2.1	4.6
\$45,000 to \$49,999	7.4	4.1
\$50,000 to \$59,999	9.5	7.8
\$60,000 to \$74,999	11.8	10.5
\$75,000 to \$99,999	12.9	13.2
\$100,000 to \$124,999	8.1	9.2
\$125,000 to \$149,999	3.3	5.6
\$150,000 to \$199,999	2.7	5.7
\$200,000 or more	1.8	5.6

Note. The respondents' household earnings reported above pertain to 2017, whereas household earnings shown for the Midwestern region are for 2018.

Table 3.8

Demographics of the Sample Which Relate to Children Residing at Home and Their Ages

Demographic data	<i>f</i>	%	<i>cf</i>	c%
Number of children living at home				
Children at home - 0	578	46.5	578	46.5
Children at home - 1	277	22.3	855	68.8
Children at home - 2	206	16.6	1,061	85.4
Children at home - 3	108	8.7	1,169	94.1
Children at home - 4	52	4.2	1,221	98.3
Children at home - 5+	23	1.7	1,244	100
Age ranges of children residing at home				
No Children	312	25.1	312	25.1
Age up to 5	359	28.9	617	54.0
Age 6 - 12	324	26.0	995	80.0
Age 13 - 17	249	20.0	1,244	100

Table 3.9

Comparison of Demographic data Between the Sample and the Midwestern Region by the Number of Children Residing at Home

Number of children living at home	Survey Respondents %	Midwestern region %
Children at home - 0	46.5	-
Children at home - 1	22.3	-
Children at home - 2	16.6	-
Children at home - 3	8.7	-
Children at home - 4	4.2	-
Children at home - 5+	1.7	-

Note. No comparable data.

Table 3.10

Comparison of Demographic data Between the Sample and the Midwestern Region by the Age of Children Residing at Home

Number of children living at home	Survey Respondents %	Midwestern region %
No Children	25.1	-
Age up to 5	28.9	32.0
Age 6 – 12	26.0	-
Age 6 – 11	-	33.3
Age 13 – 17	20.0	-
Age 12 – 17	-	34.4

The Social Technographics Ladder

Li and Bernoff (2011) describe the social technographics ladder as a tool for analyzing individuals’ participation in online social activities. Although the entity which developed the social technographics ladder (i.e. Forrester) asserts the genesis of a successful social program is understanding one’s target audiences’ social behaviors and preferences (Elliot, 2013).

Furthermore, cites Elliot (2013), social technographics has assisted marketing professionals, researchers and academicians to better grasp the degree of online social engagement which, in turn, led to the development of a typology, typically illustrated as a ladder, to classify end-users’ behavior in the online environment. Against the aforementioned backdrop, a variation of the Forrester’s social technographics ladder has been embraced to portray the populations’ technology and social-media use as reported. In elaborating the technographics ladder, the respondents self-reported social media use was grouped into six classes, namely: creator, spectator, critic, collector, joiner, and inactive. The basis for the grouping was the topmost sum after averaging the values reported across six queries, as part of the instrumentation. In sum, respondents were grouped into one of the aforementioned six categories, on the basis of respondents’ topmost average score pertaining to six queries associated with internet use.

Without specifying the social networking sites contained in the instrumentation embraced for this work, it is plausible the reported use of social media can be interpreted diversely by different readers of this work. Therefore, as a point of clarity, the population was requested to report on its frequency use of the following social media:

Facebook, Twitter, view user-generated videos online, listen to podcasts, read online forums, search and read articles identified on the Internet, comment on webpages, blogs, Tweets, Facebook Posts, post ratings/reviews on products or services, reply to a discussion thread on a forum, click “Like” a post on Facebook, publish or update one’s own web page/site, write a blog, upload videos to the Web, post original content to Facebook/Twitter or another social media site, initiate a discussion or a forum, upload photos to the Web, post original content to a Wiki (e.g., Wikipedia, PBworks, etc.), tag webpages using social bookmarking (e.g., Digg and StumbleUpon), subscribe to a website/blog using RSS feeds, subscribe to a podcast, video website channel (e.g., YouTube), subscribe to an online forum, or create and post comments to a blogging website (e.g., WordPress).

Table 3.11

Self-Reported Social Networking Site Use

Frequency of internet use or habits	<i>f</i>	%	<i>cf</i>	<i>c%</i>
Daily	187	15.0	187	15
2/3 times a week	178	14.3	365	29.3
Once weekly	255	20.5	620	49.8
2/3 times monthly	257	20.7	877	70.5
Once monthly	248	19.9	1,125	90.4
Several times monthly	106	8.5	1,231	98.9
Once yearly or less	13	1.1	1,244	100
Never	0	0.0	1,244	100

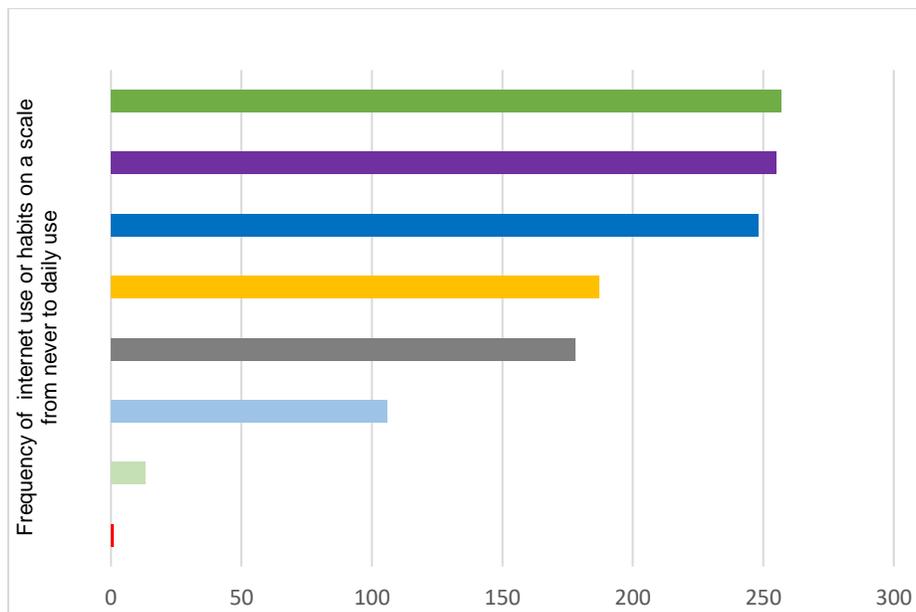


Figure 3.2 Respondents' self-reported frequency of internet use

Table 3.12

Respondents' Tendencies Toward Social Networking Site Use Grouped Into Six Classes Aligned With Forrester's Social Technographics™ Ladder

Population grouped in six classes	<i>f</i>	%	<i>cf</i>	<i>c%</i>
Creator	262	21.1	262	21.1
Critic	358	28.8	620	49.9
Collector	383	30.8	1,003	80.7
Joiner	228	18.3	1,231	99.0
Spectator	13	1.0	1,244	100
Inactive	-	-	1,244	100

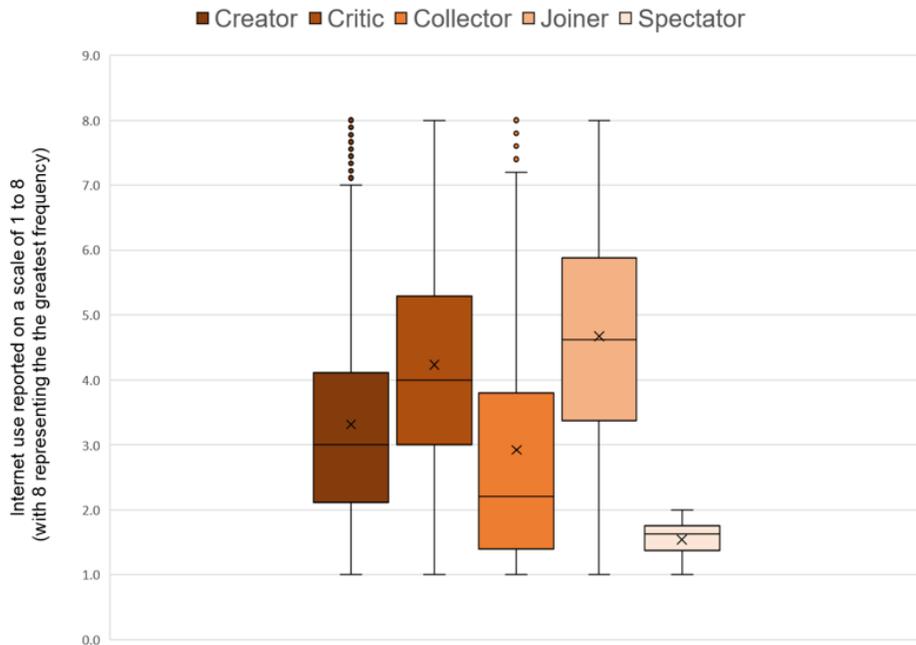


Figure 3.3 Respondents' self-reported social-media use grouped into five social technographic categories using a cumulative average score obtained from 37 queries—as part of the instrumentation.

Social Technographics Ladder

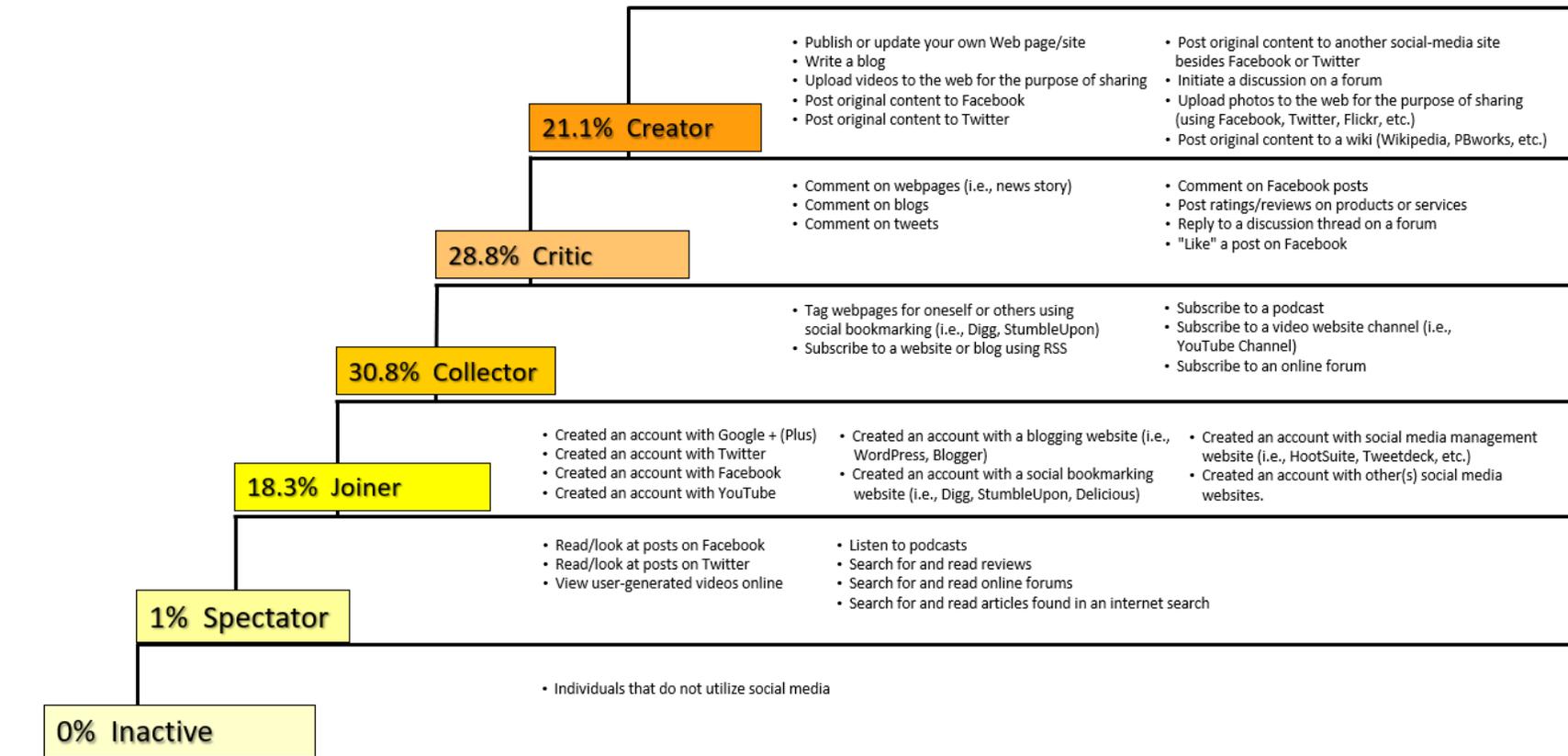


Figure 3.4 The self-reported social media use grouped into six classes, including the percentage of users for each class. Reprinted from Forrester's Social Technographics Ladder, Forrester (2007), <https://go.forrester.com/>

Summary

A conjoint design has been adopted for this study to ascertain the single feature or combination of features that affect consumers' choice and or decision making. In sum, a choice-based conjoint design is a multivariate methodology, cite (Hair et al., 2014) which is typically used in new product development, as it allows for the testing and evaluation of various product or service features. For instance, this work embraced an instrument which presented respondents with a choice of set options to choose from, which were composed of multiple randomly assigned variables. The instrument was developed with the software Qualtrics which permitted the administration of prescreening queries to ensure respondents were eligible to partake in the 25-minute survey. Additionally, to safeguard against instrument validity, the instrument for this study was reviewed by a panel of experts with significant and specialized experience in survey design, new-media technologies, social-media marketing, agricultural economics and consumer issues. Moreover, to mitigate the risks associated with content validity (e.g., assimilation effect), survey questions were displayed in a random order. Furthermore, to control the threats to external validity a panel company administered the survey and was paid the sum of \$5 per completed response to recruit qualified respondents within the target market.

The dependent variable for this work can be described as the respondents' willingness to acquire specialty crops viewed online. To acquire cognizance of respondents' decision-making processes, this work manipulated three independent variables, namely: storytelling and or narratives, prices, and logistics. Lastly, this chapter presents a modified version of the social technographics ladder to describe the respondents' social behaviors and preferences online.

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Chapter 4 - Results

The former chapter presented the instrumentation used for this work and carefully described the variables of the study. Also, the multivariate methodology (choice-based design) was discussed which is the crux of the statistical technique applied to this work. The chapter progressed to provide descriptive statistics of the sample, including a classification of social-media use by embracing a modified version of Forrester's Social Technographics™ Ladder.

The succeeding research objectives have been developed to assess the willingness of potential consumers to acquire specialty crops viewed online.

- RO1:** To determine the influence of a narrative and or storytelling when selling specialty crops in an online environment.
- RO2:** To determine the willingness of respondents to travel to purchase specialty crops viewed in an online environment.
- RO3:** To determine respondents' willingness to have specialty crops shipped directly to them.
- RO4:** To explore the relationships between a narrative and or storytelling, price, and logistics (i.e., comprised of travel to and from a U-pick farm versus the cost of door-to-door delivery).
- RO5:** To explore if the rural location of potential consumers may contribute to their willingness to retrieve the crops themselves via a U-pick farm (e.g., agritourism).

The initial data analyzed and reported for this work relates, in part, to a choice-based conjoint design technique to determine how respondents valued the varying choices presented as part of the instrumentation. Twelve choices were elaborated across the full sample of 1,244 for the three instruments used for this work with 408, 415, and 421 in each sample. Each respondent viewed four separate screens with each screen containing two images—presented side by side as indicated in *Figure 3.2*. As a point of clarification, respondents viewed eight of the possible 12 choices. Each screen contained a mix of narratives, prices and logistics for which respondents were requested to select a choice per screen which they would purchase or alternatively select “I

would not choose either of the two choices above”. The underlying-premise for each participant was comprised of four options with each option containing three choices.

The succeeding 12 *Tables 4.1. to 4.12* depict the full array of the twelve options and related choices utilized for this work. For each option, the tables specify respondents’ choices by frequency and related percentages. Additional detailed information applicable to the narratives, prices and logistics is cited in *chapter three*—the independent variables section.

In outwardly reviewing the succeeding 12 tables, respondents selected the options, nearly always, that were least costly. Respondents chose a more costly alternative when presented with a lessor cost which required a longer travel time (i.e., 50-minute travel time). Examples which encompass the aforementioned characteristics were consumer option *five, eight, and nine*. Also, option 12 was worthy of mention, as there was a minimal difference in deciding *choice a* over *choice b*. Succinctly, option 12 included a choice with a cost of \$15.00, door to door delivery, and a frequency of 196 which was selected versus a choice containing a cost of \$17.50, a 20-minute travel time, and a frequency of 191. In recapitulating, the overwhelming options preferred by respondents were those offering a lesser cost, although lesser travel time did seemingly contribute to the selection process.

Table 4.1

Consumer Option 1: Choice A - an Environmentally Friendly Message, Cost \$17.50 per Box of Produce, 50-Minute Travel Time and Choice B - a Family Farm's Story, \$15 per Box of Produce, and Delivery to Door \$4.99 (n = 415)

Description of options	<i>f</i>	%
Choice A: Environmental message, cost \$17.50, and a 50-minute travel time	122	29.4%
Choice B: Family farm's story, \$15 per box of produce, and delivery to door \$4.99	223	53.7%
Choose not to purchase	70	16.9%
Total	415	100%

Table 4.2

Consumer Option 2: Choice A - an Environmentally Friendly Message, Cost \$15.00 per Box of Produce, 20-Minute Travel Time and Choice B – a Community Commitment Message, \$20 Per Box of Produce, and 50-Minute Travel Time. (n = 415)

Description of options	<i>f</i>	%
Choice A: Environmental message, cost \$15.00, and a 20-minute travel time	289	69.6%
Choice B: Community commitment message, \$20 per box of produce, and 50-minute travel time	65	15.7%
Choose not to purchase	61	14.7%
Total	415	100%

Table 4.3

Consumer Option 3: Choice A – a Community Commitment Message, Cost \$15.00 per Box of Produce, 20-Minute Travel Time and Choice B – a Private Sector Message, \$17.50 per Box of Produce, and 50-Minute Travel Time. (n = 415)

Description of options	<i>f</i>	%
Choice A: Community commitment message, cost \$15, and a 20-minute travel time.	314	75.7%
Choice B: Private sector message, \$17.50 per box of produce, and 50-minute travel time	41	9.8%
Choose not to purchase	60	14.5%
Total	415	100%

Table 4.4

Consumer Option 4: Choice A – a Private Sector Message, Cost \$20.00 per Box of Produce, 20-Minute Travel Time and Choice B – an Environmentally Friendly Message, \$17.50 per Box of Produce, and Delivery to Door \$4.99 (n = 415)

Description of options	<i>f</i>	%
Choice A: Private sector message, cost \$20.00, and a 20-minute travel time.	159	38.3%
Choice B: Environmentally friendly message, \$17.50 per box of produce, and delivery to door \$4.99	190	45.8%
Choose not to purchase	66	15.9%
Total	415	100%

Table 4.5

Consumer Option 5: Choice A – an Environmentally Friendly Message, Cost \$15.00 per Box of Produce, 50-Minute Travel Time and Choice B – a Family Farm’s Story, \$17.50 per Box of Produce, and Delivery-to-Door \$4.99. (n = 408)

Description of options	<i>f</i>	%
Choice A: Environmentally friendly message, cost \$15.00, and a 50-minute travel time.	156	38.2%
Choice B: Family farm’s story, \$17.50 per box of produce, and delivery to door \$4.99	193	47.3%
Choose not to purchase	59	14.5%
Total	408	100%

Table 4.6

Consumer Option 6: Choice A – a Community Commitment Message, Cost \$17.50 per Box of Produce, 20-Minute Travel Time and Choice B – an Environmentally Friendly Message, \$20.00 per Box of Produce, and Delivery-to-Door \$4.99. (n = 408)

Description of options	<i>f</i>	%
Choice A: Community commitment message, cost \$17.50, and a 20-minute travel time.	252	61.8%
Choice B: Environmentally friendly message, \$20.00 per box of produce, and delivery to door \$4.99	117	28.7%
Choose not to purchase	39	9.5%
Total	408	100.0%

Table 4.7

Consumer Option 7: Choice A – a Private Sector Message, Cost \$17.50 per Box of Produce, Delivery to Door \$4.99 and Choice B – a Family Farm’s Story, \$20.00 per Box of Produce, and 50-Minute Travel Time. (n = 408)

Description of options	<i>f</i>	%
Choice A: Private sector message, cost \$17.50, and delivery to door \$4.99.	222	54.4%
Choice B: Family Farm’s Story, \$20.00 per box of produce, and 50-minute travel time.	110	27%
Choose not to purchase	76	18.6%
Total	408	100%

Table 4.8

Consumer Option 8: Choice A – a Community Commitment Message, Cost \$20.00 per Box of Produce, Delivery to Door \$4.99 and Choice B – a Family Farm’s Story, \$15.00 per Box of Produce, and 50-Minute Travel Time. (n = 408)

Description of options	<i>f</i>	%
Choice A: Community commitment message, cost \$20.00, and delivery to door \$4.99.	208	51.0%
Choice B: Family farm’s story, \$15.00 per box of produce, and 50-minute travel time.	129	31.6%
Choose not to purchase	71	17.4%
Total	408	100%

Table 4.9

Consumer option 9: Choice A – a Community Commitment Message, Cost \$17.50 per box of Produce, 50-Minute Travel Time and Choice B – a Private Sector Message, \$20.00 per box of Produce, and Delivery-to-Door \$4.99. (n = 421)

Description of options	<i>f</i>	%
Choice A: Community commitment message, cost \$17.50, and a 50-minute travel time.	170	40.4%
Choice B: Private sector message, \$20.00 per box of produce, and delivery to door \$4.99.	175	41.6%
Choose not to purchase	76	18.0%
Total	421	100.0%

Table 4.10

Consumer option 10: Choice A – a Private Sector Message, Cost \$20.00 per box of Produce, 20-Minute Travel Time and Choice B – a Family Farm’s Story, \$15.00 per box of Produce, and Delivery-to-Door \$4.99. (n = 421)

Description of options	<i>f</i>	%
Choice A: Private sector message, cost \$20.00, and 20-minute travel time.	158	37.5%
Choice B: Family farm’s story, \$15.00 per box of produce, and delivery to door \$4.99.	223	53%
Choose not to purchase	40	9.5%
Total	421	100%

Table 4.11

Consumer Option 11: Choice A – An Environmentally Friendly Message, Cost \$20.00 per box of Produce, 20-Minute Travel Time and Choice B – a Private Sector Message, \$15.00 per Box of Produce, and 50-Minute Travel Time. (n = 421)

Description of options	<i>f</i>	%
Choice A: Environmentally friendly message, cost \$20.00, and 20-minute travel time.	292	69.3%
Choice B: Private sector message, \$15.00 per box of produce, and 50-minute travel time.	68	16.2%
Choose not to purchase	61	14.5%
Total	421	100.0%

Table 4.12

Consumer Option 12: Choice A – a Community Commitment Message, Cost \$15.00 per box of Produce \$15.00, and Delivery-to-Door \$4.99 and Choice B – a Family Farm’s Story, \$17.50 per box of Produce, and 20-Minute Travel Time. (n = 421)

Description of options	<i>f</i>	%
Choice A: Community Commitment message, cost \$15.00, and 20-minute travel time.	196	46.5%
Choice B: Family Farm’s Story, \$17.50 per box of produce, and 20-minute travel time.	191	45.4%
Choose not to purchase	34	8.1%
Total	421	100.0%

RO1: To Determine the Influence of a Narrative and or Storytelling When Selling Specialty Crops in an Online Environment

To explore the influence of choices, analyses were conducted to examine the frequency the variables of interest were selected versus the frequency the variables were offered. Against this landscape, this chapter begins by presenting the mean as an indication of the central tendency referring to the number of times each narrative was selected versus the number of times each narrative was offered. Thereafter, the analyses proceeded to explore the frequency of each narrative—reported by respondents' ages using U.S. Census Bureau age intervals.

Subsequently, a Pearson correlation was carried out to explore the statistical relationship between two continuous variables, noting only variables with a significant correlation were reported. A significant relationship is cited by Cohen (1988) as: $r = .10$ to $.29$ (small); $r = .30$ to $.49$ (medium); and $r = .50$ to 1.0 (large). Although, Pallant (2013) states the degree of significance is influenced by the sample size. For instance, in a small sample ($n = 30$) moderate correlations may exist that are not statistically significance at the $p < .05$ level (Pallant, 2013). Whereas, Pallant cites, in large samples ($n = 100+$) very small correlations (i.e., $r = .2$) may result in statistical significance. Thereafter, a simple regression analysis was conducted to determine the degree of significance of an effect between variables whereby the variation in one variable was utilized to determine the variation in the other.

Narratives: An analysis

The table below is intended to provide an indication of the central tendency of the narrative variables for this study in terms of the frequency a narrative was selected versus the frequency a narrative was offered. As depicted below, there is no single dominant narrative but rather the narratives are grouped around the mean.

Table 4.13

The Mean of the Number of Times the Narrative Variables were Selected Versus the Number of Times the Narrative Variables were Offered

Ratio of choice - narratives	<i>M</i>	<i>SD</i>
Community commitment	.4912	.3257
Family farm's story	.4751	.3860
Private sector business	.3659	.3883
Environmentally friendly	.3074	.3654

An analysis encompassing respondents' age by narrative was conducted to gain insight to the elements influencing consumers' willingness to acquire specialty crops.

Table 4.14

The Frequency the Community Choice Narrative was Selected Versus the Frequency the Narrative was Offered–Shown by Census Bureau Age Intervals

Ratio (selected/offered) by age intervals	18-24	25-34	35-44	45-54	55-64	65+	Sum	Community choice narrative not offered	Total
Frequency which respondents selected the community choice narrative	120	276	258	149	110	56	969	275	1,244

Table 4.15

The Frequency the Community Choice Narrative was Selected Versus the Frequency the Narrative was Offered–Shown by Census Bureau Age Intervals Expressed as a Percentage

Ratio (selected/offered) by age intervals	18-24	25-34	35-44	45-54	55-64	65+	Sum	Community choice narrative not offered	Total
Frequency which respondents selected the community choice narrative	9.6%	22.2%	20.7%	12.0%	8.8%	4.5%	77.9%	22.2%	100%

Table 4.16

The Frequency the Environmentally Friendly Narrative was Selected Versus the Frequency the Narrative was Offered– Shown by Census Bureau Age Intervals

Ratio (selected/offered) by age intervals	18-24	25-34	35-44	45-54	55-64	65+	Sum	Environmentally friendly narrative not offered	Total
Frequency respondents selected the environmentally friendly narrative	70	271	165	46	25	15	592	652	1,244

Table 4.17

The Frequency the Environmentally Friendly Narrative was Selected Versus the Frequency the Narrative was Offered–Shown by Census Bureau Age Intervals Expressed as a Percentage

Ratio (selected/offered) by age intervals	18-24	25-34	35-44	45-54	55-64	65+	Sum	Environmentally friendly narrative not offered	Total
Frequency which respondents selected the environmentally friendly narrative	5.6%	21.8%	13.3%	3.7%	2.0%	1.2%	47.6%	52.4%	100%

Table 4.18

The Frequency the Family Farm Narrative was Selected Versus the Frequency the Narrative was Offered—Shown by Census Bureau Age Intervals

Ratio (selected/offered) by age intervals	18-24	25-34	35-44	45-54	55-64	65+	Sum	Family Farm narrative not offered	Total
Frequency which respondents selected the family farm narrative	11	264	270	165	138	56	841	403	1,244

Table 4.19

The Frequency the Family Farm Narrative was Selected Versus the Frequency the Narrative was Offered—Shown by Census Bureau Age Intervals Expressed as a Percentage

Ratio (selected/offered) by age intervals	18-24	25-34	35-44	45-54	55-64	65+	Sum	Family Farm narrative not offered	Total
Frequency which respondents selected the family farm narrative	0.9%	21.2%	16.6%	13.3%	11.1%	4.5%	67.6%	32.4%	100%

Table 4.20

The Frequency the Private Sector Narrative was Selected Versus the Frequency the Narrative was Offered–Shown by Census Bureau Age Intervals Expressed as a Percentage

Ratio (selected/offered) by age intervals	18-24	25-34	35-44	45-54	55-64	65+	Sum	Private sector narrative not offered	Total
Frequency which respondents selected the private sector narrative	78	140	162	142	122	52	696	548	1,244

Table 4.21

The Frequency the Family Farm Narrative was Selected Versus the Frequency the Narrative was Offered–Shown by Census Bureau Age Intervals Expressed as a Percentage

Ratio (selected/offered) by age intervals	18-24	25-34	35-44	45-54	55-64	65+	Sum	private sector narrative not offered	Total
Frequency which respondents selected the private sector narrative	6.3%	11.3%	13.0%	11.4%	9.8%	4.2%	55.9%	44.1%	100%

Narratives: Correlation and regression analyses.

A Pearson Product Moment correlation coefficient was used to measure a relationship between narratives and the variables of interest. The narratives examined for this objective included: the community choice, environmental, family farm, and private sector stories. The variables studied with a correlation were the age, education, employment status of respondents, and the age segments of respondents' children up to five years and children between 13 to 17 years of age. Additionally, the four narratives of this study were reviewed with variables encompassing: social technographics, children six to 12 years of age and income, although no correlation was identified.

Table 4.22

The Correlation Between Narratives in Selling Specialty Crops Online and Variables of Interest

Variable	Narrative	<i>r</i>
Age	Environmental story	.210**
Children13-17 years	Family farm story	.100**
Children13-17 years	Private sector story	-.056*
Education	Community choice story	-.058*
Children up to 5 years	Family farm story	-.101**
Children up to 5 years	Environmental story	-.111**

Note: ** $p < .001$; * $p < .05$

The correlation between the community commitment narrative and education was significant at the $p < .05$ level. A simple linear regression was performed to determine how much of the independent variable (i.e., education) could explain the variance of consumers' willingness to purchase specialty crops on the basis of the community commitment narrative. A simple linear regression analysis was conducted, however as the results were insignificant, it was excluded from further analysis.

The correlation between the environmentally friendly narrative, respondents ages, and their children's ages up to five years was significant at $p < .001$. A simple linear regression analysis was conducted to determine the degree the variables of interest (i.e., respondents ages and the ages of respondents' children up to five years) could explain the variance of consumers' willingness to purchase specialty crops on the basis of the environmentally friendly narrative. However, as the results were insignificant, it was excluded from further analysis

RO2: To Determine the Willingness of Respondents to Travel to Purchase Specialty Crops Viewed in an Online Environment

Similar to the approach embraced above under research objective one, the same analyses (e.g., frequency of choice, a Pearson correlation and linear regression) have been conducted to assess the variables pertinent to this objective.

Travel times of 20 and 50-minutes: An analysis.

The table below is intended to provide an indication of the central tendency of the 20 and 50-minute travel variables for this study in terms of the frequency these variables were selected versus the frequency these variables were offered.

Table 4.23

The Frequency of the Variable of Travelling to Acquire Specialty Crops was Selected Versus the Frequency the Variable of Travelling to Acquire Specialty Crops was Offered

Ratio of choice - logistics	<i>M</i>	<i>SD</i>
20-minute delivery option	.5788	.3949
50-minute delivery option	.2631	.3141

An analysis encompassing respondents' age by 20 and 50-minute travel time was conducted to gain insight to the elements influencing consumers' willingness to acquire specialty crops.

Table 4.24

The Frequency the 20-Minute Travel Time was Selected Versus the Frequency the 20-Minute Travel Time was Offered—Shown by Census Bureau Age Intervals

Ratio (selected/offered) by age intervals	18-24	25-34	35-44	45-54	55-64	65+	Sum	20-minute travel time option not offered	Total
Frequency which respondents selected the 20-minute travel time	128	270	190	167	139	57	951	293	1,244

Table 4.25

The Frequency the 20-Minute Travel Time was Selected Versus the Frequency the 20-Minute Travel Time was Offered—Shown by Census Bureau Age Intervals Expressed as a Percentage

Ratio (selected/offered) by age intervals	18-24	25-34	35-44	45-54	55-64	65+	Sum	20-minute travel time option not offered	Total
Frequency which respondents selected the 20-minute travel time	10.3%	21.7%	15.3%	13.4%	11.2%	4.6%	76.4%	23.6%	100%

Table 4.26

The Frequency the 50-Minute Travel Time was Selected Versus the Frequency the 50-Minute Travel Time was Offered—Shown by Census Bureau Age Intervals

Ratio (selected/offered) by age intervals	18-24	25-34	35-44	45-54	55-64	65+	Sum	50-minute travel time option not offered	Total
Frequency which respondents selected the 50-minute travel time	122	88	169	105	82	35	601	643	1,244

Table 4.27

The Frequency the 50-Minute Travel Time was Selected Versus the Frequency the 20-Minute Travel Time was Offered—Shown by Census Bureau Age Intervals Expressed as a Percentage

Ratio (selected/offered) by age intervals	18-24	25-34	35-44	45-54	55-64	65+	Sum	20-minute travel time option not offered	Total
Frequency which respondents selected the 50-minute travel time	9.8%	7.1%	13.6%	8.4%	6.6%	2.8%	48.3%	51.7%	100%

Travel time: Correlation and regression analyses.

A Pearson Product Moment correlation coefficient was used to measure a relationship between 20 and 50-minute travel times and variables of interest. The variables studied with a correlation were the age and employment status of respondents, and the age segment of respondents' children up to five years. Additionally, the 20 and 50-minute travel times of this study were reviewed with variables encompassing: respondents' internet use or habits (i.e., social technographics), USDA's Rural-Urban Continuum Codes, and children six to 12 and 13 to 17 years of age, although no correlation was identified.

Table 4.28

Correlation Between Consumers' Willingness to Travel to Purchase Specialty Crops Viewed Online and Variables of Interest

Variable	Travel times	<i>r</i>
Age	20-minute	.123**
Children up to 5 years	50-minute	.072*
Age	50-minute	-.060*
Employment status	20-minute	-.070*

Note: ** $p < .001$; * $p < .05$

The correlation of the respondents' ages, their employment status, and the 20-minute travel time was significant at the $p < .001$ and $p < .05$ levels. A simple linear regression was performed to determine how much of the variables of interest (i.e., age and employment status) could explain the variance of consumers' willingness to travel 20 minutes to purchase specialty crops. A simple linear regression analysis was conducted, however as the results were insignificant, it was excluded from further analysis.

RO3: To Determine Respondents' Willingness to have Specialty Crops Shipped

Comparable to the approach embraced for the two foregoing research objectives, the same analyses (e.g., a frequency of choice, a Pearson correlation and linear regression) have been conducted to assess the variables pertinent to this objective.

Door-to-door delivery: An analysis.

The table below is intended to provide an indication of the central tendency of the door-to-door delivery variable for this study in terms of the frequency this variable was selected versus the frequency this variable was offered.

Table 4.29

The Number of Times the Door-to-Door Delivery Option was Selected Versus the number of times the Door-to-Door Delivery Option was Offered

Ratio of choice - logistics	<i>M</i>	<i>SD</i>
Delivered to door variable	.4739	.3706

Table 4.30

The Frequency the Door-to-Door Delivery Option was Selected Versus the Frequency the Door-to-Door Delivery Option was Offered—Reported by Census Bureau Age Intervals

Door-to-door delivery selected / not offered by age intervals	18-24	25-34	35-44	45-54	55-64	65+	Sum	Delivery option not offered	Total
Frequency which respondents selected / not offered door-to-door delivery	52	282	223	155	125	57	894	350	1,244

Table 4.31

The Frequency the Door-to-Door Delivery Option was Selected Versus the Frequency the Door-to-Door Delivery Option was Offered—Reported by Census Bureau Age Intervals Expressed as a Percentage

Door-to-door delivery selected / not offered by age intervals	18-24	25-34	35-44	45-54	55-64	65+	Sum	Delivery option not offered	Total
Frequency which respondents selected / not offered door-to-door delivery	4.2%	22.7%	17.9%	12.5%	10.0%	4.6%	71.9%	28.1%	100%

Table 4.32

The Frequency the Door-to-Door Delivery Option was Selected Versus the Frequency the Door-to-Door Delivery Option was Offered—Reported by Employment Status

Door-to-door delivery selected / not offered by employment status	Delivery option selected	Delivery option not offered	Total
Employed, working 40 or more hours per week	400	170	570
Employed, working 1-39 hours per week	186	80	266
Not employed, looking for work	61	23	84
Not employed, NOT looking for work	89	34	123
Retired	70	24	94
Disabled, not able to work	88	19	107
Total	894	350	1,244

Table 4.33

The Frequency the Door-to-Door Delivery Option was Selected Versus the Frequency the Door-to-Door Delivery Option was Offered—Reported by Employment Status Expressed as a Percentage

Door-to-door delivery selected / not offered by employment status	Delivery option selected %	Delivery option not offered %	Total
Employed, working 40 or more hours per week	70	30	100%
Employed, working 1-39 hours per week	70	30	100%
Not employed, looking for work	73	27	100%
Not employed, NOT looking for work	72	2%	100%
Retired	74	26	100%
Disabled, not able to work	82	18	100%
Total	71.6	28.14	100%

Table 4.34

The Frequency the Door-to-Door Delivery Option was Selected Versus the Frequency the Door-to-Door Delivery Option was Offered—Reported by Respondents' 2017 Income Before Taxes

Door-to-door delivery selected / not offered by employment status	Delivery option selected	Delivery option not offered	Total
Less than \$15,000	126	54	180
\$15,000 to \$24,999	95	42	137
\$25,000 to \$34,999	88	40	128
\$35,000 to \$49,999	127	48	175
\$50,000 to \$74,999	191	74	265
\$75,000 to \$99,999	123	38	161
\$100,000 to \$149,000	106	36	142
\$150,000 to \$199,999	23	11	34
\$200,000 or more	15	7	22
Total	894	350	1,244

Table 4.35

The Frequency the Door-to-Door Delivery Option was Selected Versus the Frequency the Door-to-Door Delivery Option was Offered—Reported by Respondents' 2017 Income Expressed as a Percentage

Door-to-door delivery selected / not offered by employment status	Delivery option selected %	Delivery option not offered %	Total
Less than \$15,000	14	15	29
\$15,000 to \$24,999	11	12	23
\$25,000 to \$34,999	10	11	21
\$35,000 to \$49,999	14	14	28
\$50,000 to \$74,999	21	21	42
\$75,000 to \$99,999	14	11	25
\$100,000 to \$149,000	12	10	22
\$150,000 to \$199,999	3	3	6
\$200,000 or more	2	2	4
Total	100	100	

Door-to-door delivery: Correlation and regression analyses.

A Pearson Product Moment correlation coefficient was used to measure a relationship between respondents' willingness to have specialty crops shipped and variables of interest. The variables studied with a correlation were the prices, narratives, and employment status. Additionally, the door-to-door variable of this study was reviewed with other variables encompassing: respondents' age and internet use or habits (i.e., social technographics), USDA's Rural-Urban Continuum Codes, income, education attainment, and respondents' children up to five, six to 12 and 13 to 17 years of age, although no correlation was identified.

Table 4.36

Correlation Between Respondents' Willingness to Have Specialty Crops Shipped Door-to-Door and Variables of Interest

Variable	Description	<i>r</i>
Prices	\$15.00 + \$4.99 box	.629**
Prices	\$17.50 + \$4.99 box	.600**
Narrative	Environmental story	.575**
Narrative	Family farm	.493**
Prices	\$20 + \$4.99 box	.472**
Narrative	Community choice	.231**
Narrative	Private sector	.166**
Employment status	Door-to-door delivery	.059*
Prices	\$17.50 box	-.443**

Note: ** $p < .001$; * $p < .05$

The correlation of respondents' employment status, narratives, prices and the willingness to have specialty crops shipped door-to-door was significant at the $p < .001$ and $p < .05$ levels. A simple linear regression was performed to determine how much of the variables of interest (i.e., employment status, narratives, and prices to have the specialty crops delivered door-to-door) could explain the variance of consumers' willingness to have specialty crops shipped door-to-door. A significant regression equation yielded $R^2 = .989$, $F(9, 1234) = 11849.70$, and $p < .001$. This analysis explains 98.9% of the variance in consumers' willingness to have specialty crops delivered door-to-door. This result signifies, a mere 1.1% cannot be explained by these variables.

Table 4.37

Regression Analysis of the Door-to-Door Shipment Element and Variables of Interest

Variables of interest	<i>b</i>	<i>B</i>
Price \$15.00 + \$4.99	.643	.532
Price \$17.50 + \$4.99	.564	.480
Environmental story	.019	.020
Family farm story	-0.20	-.019
Price \$20 + \$4.99	.487	.442
Community choice story	.063	.071
Private sector story	-.007	-.007
Employment status	.006	.001
Price \$17.50	-.003	-.003

Note. The *b* refers to the standardized beta whereby the closer the value is to 1 or -1, the stronger the relationship with the dependent variable (i.e., door-to-door delivery). The *B* represents the slope of the line between the variables of interest and the dependent variable.

RO4: To Explore if the Rural Location of Potential Consumers May Contribute to Their Willingness to Retrieve the Crops Themselves via a U-Pick Farm (e.g., Agritourism).

The postal codes obtained from respondents via the instrumentation used for this work, were used to identify the corresponding counties within the Midwest with the software *SimpleMaps.com*. Once the counties were ascertained, the USDA's 2013 Rural-Urban Continuum Codes (RUCC) were used to classify respondents' locations as either metropolitan (metro) or non-metropolitan (non-metro). USDA (2019 a) describes the RUCC as a categorization system whereby metro counties are determined by their size, and non-metro counties are decided upon, on the level of urbanization and the neighboring zones of each county. The Office of Management and Budget (2013) affirms there are nine categories of metro and non-metro counties which have been grouped as three metro and six non-metro (Office of Management and Budget, n.d.). For this work, the nine counties were consolidated into two—metro or non-metro. The underlying motive for adopting RUCC codes for this work was that there was a one-to-one match between counties which permitted a metro and non-metro classification for postal codes provided by respondents.

Conversely, the USDA’s rural-urban commuting area (RUCA) codes classify U.S. census districts on the basis of daily commuting (e.g., direction and volume) and population size (USDA, 2019 b). Succinctly, a range from one to ten depict metro and non-metro commuting areas (e.g., one equates with a metro area and ten as a small town). One can postulate the USDA’s RUCA codes may be an optimum approach to employ in classifying rural and urban areas by postal codes. Although, a single county may contain both an urban and rural area which would hinder any attempt to classify counties as being either urban or rural. Therefore, for this work the RUCC codes were more appropriate on the basis of the source data available to conduct this analysis.

Table 4.38

The Frequency of Respondents’ Location by Rural-Urban Continuum Codes

Description respondents’ location	<i>f</i>	%
Metropolitan	440	35.4
Non-metropolitan	804	64.6
Total	1,244	100%

Respondents' location: An analysis.

Table 4.39

The Frequency a 20-Minute Travel Option was Selected Versus the Frequency a 20-Minute Travel Option was Offered—Reported by Metro and Non-Metro Locations

A 20-minute trip selected / not offered	20-minute travel option selected	20-minute travel option not offered	Total
Metro	338	102	440
Non-metro	613	191	804
Total	951	293	1,244

The difference between 338 and 613 cited in *Table 4.39* between metro and non-metro residents who selected the 20-minute travel option is attributed to the number of people. In *Table 4.40*, however, there is a minimal difference between the metro and non-metro residents (i.e., 77% and 76%). As a point of clarification, the calculation of these percentages is performed on the basis of the metro and non-metro totals. Concisely, the 77% is calculated as follows: 338 / 440 yielding 77%.

Table 4.40

The Frequency a 20-Minute Travel Option was Selected Versus the Frequency a 20-Minute Travel Option was Offered—Reported by Metro and Non-Metro Locations Expressed as a Percentage

A 20-minute trip selected / not offered	20-minute travel offered	20-minute travel not offered	Total
Metro	76.8%	23.2%	100%
Non-metro	76.2%	23.8%	100%

Table 4.41

The Frequency a 50-Minute Travel Option was Selected Versus the Frequency a 50-Minute Travel Option was Offered—Reported by Metro and Non-Metro Locations

A 50-minute trip selected / not offered	50-minute travel selected	50-minute travel not offered	Total
Metro	216	224	440
Non-metro	385	419	804
Total	601	643	1,244

The difference between 216 and 385 cited in *Table 4.41* between metro and non-metro residents who selected the 50-minute travel option is attributed to the number of people. In *Table 4.42*, however, there is minimal difference between the metro and non-metro residents (i.e., 49% and 48%). As a point of clarification, the calculation of these percentages is performed on the basis of the metro and non-metro totals. Concisely, the 49% is calculated as follows: $216 / 440$ yielding 49%.

Table 4.42

The Frequency a 50-Minute Travel Option was Selected Versus the Frequency a 50-Minute Travel Option was Offered—Reported by Metro and Non-Metro Locations Expressed as a Percentage

A 50-minute trip selected / not offered	50-minute travel selected	50-minute travel not offered	Total
Metro	49.1%	50.9%	100%
Non-metro	47.9%	52.1%	100%

Table 4.43

The Frequency of Respondents’ Children Up To Five Years Old Versus the Frequency of Respondents’ Without Children Up To Five Years Old—Reported by Metro and Non-Metro Locations

Respondents’ children up to five years old	Respondents’ with children up to five years of age	Respondents’ without children up to five years of age	Total
Metro	143	297	440
Non-metro	216	588	804
Total	359	885	1,244

Table 4.44

The Frequency of Respondents’ Children Up To Five Years Old Versus the Frequency of Respondents’ Without Children Up To Five Years Old—Reported by Metro and Non-Metro Locations Expressed as a Percentage

Respondents’ children up to five years old	Respondents’ with children up to five years of age	Respondents’ without children up to five years of age	Total
Metro	32.5%	67.5%	100%
Non-metro	26.9%	73.1%	100%

Respondents’ rural location and their willingness to retrieve specialty crops: correlation and regression analyses.

A Pearson correlation analysis was conducted to explore the relationship between the RUCC codes, narratives, travel time, and prices. The correlations were not significant, whereas the correlations did not exceed .032. No correlation emerged between RUCC codes and respondents’ age, education, employment status, income and children’s ages (i.e., 6 to 12 and 13 to 17). Although, a correlation was identified between USDA’s Rural-Urban Continuum Codes and respondents’ children up to five years of age.

Table 4.45

Correlation Between Rural-Urban Continuum Codes and Variables of Interest

Variable	Description	<i>r</i>
Respondents' children	Children up to 5 years	.059*

Note: * $p < .05$

The correlation between the ages of respondents' children up to five years, and the RUCC was significant at the $p < .05$ level. A simple linear regression was performed to determine how much of the variables of interest (i.e., respondents' children up to five years) could explain the variance of consumers' location and their willingness to retrieve specialty crops themselves via a U-pick farm (e.g., agritourism). A simple linear regression analysis was conducted, although the results were insignificant.

Summary

In recapitulating, this segment was centered on quantitative analyses to explore the research objectives of this work. This chapter commenced with describing the twelve options which constitute the instrumentation used for this work. The mean was presented to provide an indication of the central tendency referring to the number of times each narrative was selected versus the number of times each narrative was offered. Subsequently, the analyses proceeded to explore the frequency of each variable of interest. Thereafter, a Pearson correlation was employed to explore the statistical relationship between variables of interest by research objective. After that, a simple regression analysis was conducted to determine the degree of significance of an effect between variables whereby the variation in one variable was utilized to determine the variation in the other.

The most significant finding related to a correlation between the third objective (i.e., willingness of respondents to have specialty crops shipped door-to-door) and variables of interest which were significant at the $p < .001$ and $p < .05$ levels. Additionally, a linear regression analysis yielded a $R^2 = .989$, indicating 98.9% of the variance is explained by this model. Withal, this study revealed that consumers are willing to have specialty crops delivered door-to-door within the price intervals of \$15 to \$17.50 for eight to twelve pounds of seasonal local produce— with an additional fixed-delivery fee of \$5.00. Although, interest decreased with a price of \$20.00.

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Chapter 5 - Conclusions, Recommendations, and Discussion

Conclusion and Discussion

RO1 – Influence of a narrative or storytelling in selling specialty crops online.

A Pearson Product Moment correlation coefficient revealed a range from .210 to -.111 between narratives and variables of interest, which indicates there is a relationship between the narratives embraced for this work and the willingness to purchase specialty crops online. In particular, the *environmentally friendly* story had the most significant correlation—albeit a small correlation. However, a subsequent linear regression analysis confirmed the impact of narratives in selling specialty crops online was inconclusive.

While results of the use of a story were inconclusive for this work, the correlations indicate story may still have a valuable place, as does previous work on the importance of storytelling. As a point worth noting, scholars among others have shown an interest in storytelling since Aristotle's treatise *Peri poietikés* (i.e., *Poetics*) in ca. 330 BC.

The results were contrary to peer-reviewed research which affirms the importance of narratives in selling efforts. Robinson and Hawpe (1986) cite narrative processing permits people to make decisions, typically by establishing causal models and heuristics—within a perceived environment of ambiguity, uncertainty, and a deficiency of information. Lowering uncertainty, cite Crosby, Evans, and Cowles (1994), is a top priority of any selling effort or relationship building initiative—which stories can effectively accomplish. From a business perspective a narrative can play a pivotal role in a product success story (Robinson & Hawpe, 1986).

In response to an advertisement that conveys a story, narrative processing, as known today, typically results in a link between a brand and the self (Edson-Escalas, 2004). Although, the narrative was representative of solely one element within this study, one can posit the respondents did not focus on the story, as they might have if the entire marketing set was geared toward the narrative.

An observation seemingly worth raising relates to the positioning of the narratives versus the prices of local produce viewed online as part of the instrumentation. For instance, the prices and shipping costs appeared above the narratives, noting the font size for prices was larger and was in bold (see image examples in Figure 3.2 or in Appendix A).

RO2 – Willingness of respondents to travel to purchase specialty crops.

An initial Pearson Product Moment correlation coefficient revealed a range from .123 to -.070 between travel times and variables of interest, which indicates there is a relationship between consumers' willingness to travel to acquire specialty crops viewed online. However, a linear regression analysis was inconclusive.

Nonetheless, the strongest correlation was with respondents' age and 20-minute travel. One can infer there is interest among consumers residing in rural areas or in close proximity to rural areas to travel to specialty crop growers or sellers to purchase specialty crops. Respondents between 25 and 54 years of age represent 50% of the sample willing to travel 20-minutes to acquire specialty crops.

The second strongest correlation was between respondents' children up to five years of age and a 50-minute drive. One can infer there is interest to travel 50-minutes with a young child or children up to five years of age to presumably experience agritourism in addition to purchasing specialty crops. Respondents between 35 – 44 (13.6%) and 18 – 24 (9.8%) years of age represented 23.4% of the sample willing to travel 50-minutes to purchase specialty crops.

In summarizing, the reduction in the correlation between a 20-minute and 50-minute drive may be interpreted as follows: the further the drive time, the interest to acquire specialty crops diminishes. Although, with the 50-minute drive there is a greater interest among a parent or parents with children up to five to possibly experience agritourism and purchase specialty crops. One can raise the question if this work was extended beyond the Midwest, would the travel times studied (i.e., 20 and 50-minutes) yield different results.

RO3 – Willingness of respondents to have specialty crops shipped door-to-door.

An initial Pearson Product Moment correlation coefficient revealed a large correlation, ranging from .629 to -.443 between the door-to-door delivery of specialty crops and variables of interest. Related to the variables of interest, the most significant correlation was the price of \$15.00 (.629), which came before \$17.50 (.600). Thereafter, the environmental story (.575), family farm story (.493) and the price of \$20.00 (.472) followed. Furthermore, a linear regression analysis yielded $R^2 = .989$, implying 98.9% of the variance of consumers' willingness to have specialty crops delivered door-to-door can be explained by this model.

The peak interest in the price of shipping crops included the variation of \$15.00 to \$17.50 plus shipping costs, noting interest decreased at the \$20.00 price level. Respondents aged between 25 – 34 (22.7%), 35 – 44 (17.9%), and 45 – 54 (12.4%) represented 53.1% of the sample willing to have specialty crops delivered door-to-door.

In recapitulating, the sample has expressed a keen interest to have specialty crops delivered within the range of \$15.00 to \$17.50, although a price of \$20.00 resulted in a lesser degree of interest. Also, the strong correlation with the environmental and family farm narratives was undoubtedly indicative of the samples' interest in these two themes. One can infer the interest in these two themes may be aligned with research pertinent to the local-food movement. Burnett, Kuethe, and Price (2011) describe the movement as a public concern with the environmental impact associated with food distribution and perceptions of large agricultural entities, resulting in a preference for patronizing local farmers. Additionally, one can further infer this result is most promising for small-scale specialty crop growers, as this outcome may lead to improved economic well-being through online sales. Aligned with current research, Baker et al. (2018) describe the selling of horticultural items, plants and specialty crops online is in a preliminary stage of development. While e-commerce offers promising results for crop growers to remain competitive, the transition to online direct selling poses numerous challenges for smaller growers.

RO4 – Rural location and specialty crop retrieval via U-pick farm (e.g., agritourism).

An initial Pearson Product Moment correlation coefficient revealed a single significant correlation between respondents' rural location (i.e., rural-urban continuum codes) and respondents' children up to five years of age. A simple linear regression analysis was conducted—however the results were inconclusive.

A frequency analysis of 20 and 50-minute travel revealed that more respondents residing in non-metro areas indicated a preference to travel 20-minutes versus 50-minutes to acquire specialty crops. Also, a higher number of respondents in non-metro areas with children up to five years of age expressed an interest to travel to acquire specialty crops.

Despite the inconclusive results, the correlation of .059 does indicate there is synergy with the aforementioned research objective two—traveling to purchase specialty crops. One can infer there is interest in retrieving specialty crops from a U-pick farm or agritourism, especially

for a parent or parents with children up to five years of age, which is also seemingly aligned well with the local-food movement elaborated in research objective three.

The results were, however, somewhat contrary to peer-reviewed literature which affirms the popularity of agritourism operations in the U.S. as becoming increasingly prevalent (Rozier-Rich, Standish, Tomas, Barbieri, & Ainley, 2016). For instance, USDA's Economic Research Service (2008) cited income associated with on-farm recreation (agritourism) at \$560 million per annum. As a consequence of the foregoing, agritourism should continue to be monitored and explored further.

Recommendations for Theory

In terms of this body of work, the ELM can conceivably contribute to the profitability of selling specialty crops online. A review of published literature indicates the use of credible sources encompassing communicators and the ability of such communicators to influence attitude can contribute to attitudinal change. For instance, using farmers' friends, as credible sources, to convey the environmentally friendly approach embraced by a small-scale family farm may conceivably work well as a peripheral cue to influence individuals with prior knowledge of specialty crops and agriculture. Conversely, messages with emotional appeals may be used effectively to mark an audience with little or no knowledge of specialty crops. For instance, the community commitment narrative that communicates a family farm's involvement in its rural community may work well as an emotional appeal to influence an audience with little or no knowledge of specialty crops. Frewer et al. (1997) underscore a message will have a maximum effect if the person conveying the message is perceived as arguing against personal self-interest.

Promoting the essential features of a product can contribute to rendering a product more salient which may improve its visibility to potential consumers. The attitude of perspective consumers toward words, phrases, and related communication matters should be tested to ensure a marketing scheme would elicit a positive reaction from potential consumers. In using the above example of specialty crops and farmers' friends, the term "locally grown" may resonate with some consumers who possess knowledge of specialty crops. Conversely, embracing the terms "committed to our community" may resonate well for some consumers with little or no knowledge of specialty crops. As the visibility of a product improves it is likely consumers will

embrace the less elaborative route of processing, the peripheral route, provided messages arise from a perceived reliable source.

Recommendations for Practice (those selling farm products online)

The significant high correlations between the research objective door-to-door delivery and the variable price (i.e., \$15 and \$17.50 per box) were viewed favorably by respondents, noting these correlations decreased with a \$20 price. Specifically, respondents between the 25 and 54 years of age represented 53.1% of the sample willing to have specialty crops delivered door-to-door. In summarizing, therefore, it is recommended that growers should select a price range between \$15.00 to \$17.50 and a shipping cost of \$5.00. Also, growers should target consumers between the ages 25 – 34 (22.7%) as this segment expressed the greatest interest to have specialty crops delivered.

Also, the high/medium correlations for door-to-door delivery and narratives (i.e., environmentally friendly and family farm) were more prevalent than other themes. It is recommended growers of specialty crops embrace environmentally friendly practices and family farm proprietors should emphasize these characteristics in selling their specialty crops. For producers not embracing environmentally friendly practices, a cost-benefit analysis may assist to determine if adopting such practices might be economically feasible.

It was noted in this study, 85.6% of respondents chose to purchase over not purchasing specialty crops. Furthermore, respondents were classified by the social technographics ladder as technologically savvy and are online frequently. Based on the degree of respondents' social networking site use, it would be appropriate for growers to develop a social media campaign to promote their produce. On the basis of the foregoing, one can postulate marketing specialty crops online to consumers who are comfortable with an online environment and can afford to pay a premium for the delivery of specialty crops will likely result in a favorable outcome.

Recommendations for Research

The result of research objective one (influence of narratives) contradicts the findings of Crosby, Evans, and Cowles (1994); Edson-Escalas (2004); Robinson and Hawpe (1986) who suggest lowering consumers uncertainty is crucial for any selling effort and narratives which narratives effectively accomplish. Future research should investigate the influence of a story or

narrative related to online selling of agricultural products as a whole-packaged story with text, images, and complete brand promise.

In future studies, researchers should request the county where respondents reside, in addition to respondents' postal codes which will permit the use of USDA's rural-urban commuting area codes. The rural-urban codes can then be used to classify respondents' locations as either metropolitan (metro) or non-metropolitan (non-metro) commuting areas.

Social networking site use was reported for the purpose of describing the frequency of respondents' social media use. Future research might study the performance of brand salience and differentiation strategies of specialty crops in an online environment.

The two-tiered archetype of travel times was embraced by this study (i.e., 20 and 50-minute travel times) which revealed a small correlation between consumers and U-pick farm (e.g., agritourism). Although, Rozier-Rich, Standish, Tomas, Barbieri, & Ainley (2016) cite the popularity of agritourism operations in the U.S. is becoming increasingly prevalent. For instance, USDA's Economic Research Service (2008) cited income associated with on-farm recreation (agritourism) at \$560 million. As a consequence of the foregoing, agritourism should continue to be monitored and explored further.

Based on the correlations between traveling to purchase specialty crops and the corresponding travel times of 20 or 50-minutes, future research should develop an audience segment profile based on levels of content salience by media type (e.g., traditional media or new media). The results of which should, in turn, contribute to the development of specific messages to differing audience segments.

This work focused on growers in the Midwest, however future research should extend beyond the Midwest to study growers of specialty crops in other states and or regions where perhaps specialty crops are more common. A few examples include: Florida, California, Washington, Oregon, Texas, New Mexico, North Carolina, and Georgia.

Limitations

This study only tested the text related to a story but held the image constant and focused the image on the product, not the story. Additionally, this work focused exclusively on the Midwest, noting there are many other states outside of the Midwest which grow specialty crops. Moreover, this study did not distinguish specialty crops by type (e.g., fruits, vegetables, dried fruit, tree nuts, nursery plants, among other products). Furthermore, the specialty crops studied were not

differentiated as being grown organically or conventionally. As a point worth noting, many of the elements indicated above were excluded to lessen survey fatigue.

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Appendix A - Survey Instrument

Survey One

This survey, *Courting the Consumer: Social-Media Marketing of Farm Products*, will take approximately 25 minutes to complete. The results of this study will be used to recommend more effective ways for agricultural businesses to communicate with consumers. Your participation is completely voluntary. You don't have to answer any questions that you don't want to, and you may quit at any time. Please read this consent document carefully before you decide to participate in this study. Thank you for taking the time to participate in this study. Your participation is completely voluntary. There is no penalty for not participating. If you choose to participate, the survey will take approximately 25 minutes to complete. You can withdraw from the survey at any time without penalty, and you do not have to answer any question you do not wish to answer. All answers are confidential to the extent provided by law. This project is sponsored by the USDA Federal State Marketing Improvement Program and examines consumers' preferences toward social-media marketing by farm-based businesses. There are no known risks associated with this study, and there is no compensation or other direct benefit to you for participation. We will not collect any identifying information from you. If you would like to learn more about this study, please contact Dr. Lauri Baker by e-mail at lbaker@ksu.edu. If you have questions about your rights as a research participant, please contact Rick Scheidt, Chair, Committee on Research Involving Human Subjects, 203 Fairchild Hall, Kansas State University, Manhattan, KS 66506, (785) 532-3224, IRB#9452. By clicking agree below, you are saying you have read the procedure described above and voluntarily agree to participate in the procedure, and have received a copy of this description. By clicking agree below, you agree that you have read this statement and are aware of your rights.

Do you agree to participate?

- Yes (1)
- No (2)

In which state do you currently reside?

▼ Alabama (1) ... I do not reside in the United States (53)

Have you checked your Facebook account at least once during the last two weeks?

- Yes (1)
- No (2)
- I do not have a Facebook account (3)

Have you been to a u-pick farm such as an apple orchard or pumpkin patch during the last two years?

- Yes (1)
- No (2)

Have you purchased fresh produce directly from a farm, u-pick/you-pick business, farmer's market, or other agricultural places during the last two years?

- Yes (1)
- No (2)

On the Internet, approximately how often do you...

	Never (1)	Once a Year or Less (2)	Several Times a Year (3)	Once a Month (4)	2-3 Times a Month (5)	Once a Week (6)	2-3 Times a Week (7)	Daily (8)
Publish or update your own Web page/site (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Write a blog (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Upload videos to the web for the purpose of sharing (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Post original content to Facebook (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Post original content to Twitter (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Post original content to another social-media site besides Facebook or Twitter (6)



Initiate a discussion on a forum (7)



Upload photos to the web for the purpose of sharing (using Facebook, Twitter, Flickr, etc.) (8)



Post original content to a wiki (Wikipedia, PBworks, etc.) (9)



On the Internet, approximately how often do you...

	Never (1)	Once a Year or Less (2)	Several Times a Year (3)	Once a Month (4)	2-3 Times a Month (5)	Once a Week (6)	2-3 Times a Week (7)	Daily (8)
Read/look at posts on Facebook (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Read/look at posts on Twitter (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Read a blog (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
View user- generated videos online (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Listen to podcasts (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Search for and read reviews (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Search for
and read
online
forums
(7)



Search for
and read
articles
found in
an
internet
search (8)



On the Internet, approximately how often do you...

	Never (1)	Once a Year or Less (2)	Several Times a Year (3)	Once a Month (4)	2-3 Times a Month (5)	Once a Week (6)	2-3 Times a Week (7)	Daily (8)
Comment on webpages (i.e., news story) (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comment on blogs (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comment on tweets (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comment on Facebook posts (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Post ratings/reviews on products or services (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reply to a discussion thread on a forum (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
"Like" a post on Facebook (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

On the Internet, approximately how often do you...

	Never (1)	Once a Year or Less (2)	Several Times a Year (3)	Once a Month (4)	2-3 Times a Month (5)	Once a Week (6)	2-3 Times a Week (7)	Daily (8)
Tag webpages for yourself or others using social bookmarking (i.e., Digg, StumbleUpon) (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Subscribe to a website or blog using RSS (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Subscribe to a podcast (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Subscribe to a video website channel (i.e., YouTube Channel) (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Subscribe to an online forum (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Which of the following social media sites have you joined and created an account?

	Yes (1)	No (2)
Google + (Plus) (1)	<input type="radio"/>	<input type="radio"/>
Twitter (2)	<input type="radio"/>	<input type="radio"/>
Facebook (3)	<input type="radio"/>	<input type="radio"/>
YouTube (4)	<input type="radio"/>	<input type="radio"/>
Blogging Website (i.e., WordPress, Blogger) (5)	<input type="radio"/>	<input type="radio"/>
Social Bookmarking (i.e., Digg, StumbleUpon, Delicious) (6)	<input type="radio"/>	<input type="radio"/>
Social media management tool (i.e., HootSuite, Tweetdeck, etc.) (7)	<input type="radio"/>	<input type="radio"/>
Other(s) (8)	<input type="radio"/>	<input type="radio"/>

In the next series of 4 questions, you will be asked to consider a hypothetical case of purchasing an assorted box of local farm produce. Suppose this assorted mixed box contains about **8-12 pounds of fresh vegetables from a local farm**. It would typically include: broccoli, cauliflower, carrots, peas, peppers, cucumbers, summer squash, kale, leaf lettuce, garlic, chives, rosemary, or other herbs. But, as if with any such box, specific selection may change due to seasonal availability of items. In each question you have two options to purchase the box. Each option is available at different **price** levels and varying **logistics** of getting the box along with distinct **messages** from the specific farm. Otherwise, the content of the boxes is identical. Please evaluate each pair of options carefully and indicate your choice.

Which of the two options would you order for your box of local produce (8-12 pounds with seasonally available items)?



\$17.50/box

Travel 50 minutes one way to purchase box on site

Our farm began with a passion and love for growing.

We are proud to work and live in our rural community where we host our town's annual art and music festival to support our local schools.

Your purchases help our farm remain in our rural community doing what we love.



**\$20.00/box
(\$24.99 with shipping)**

Delivered to door for \$4.99

Our farm uses cutting-edge technology in efficiently producing our products and serving our customers.

It is our goal to provide our customers with a seamless purchasing experience and on-time delivery.

We stand by our products and will replace any product that is damaged in the shipping process.

- Click to write Choice (1)
- Click to write Choice (2)
- I would not choose either of these. (3)

Which of the two options would you order for your box of local produce (8-12 pounds with seasonally available items)?



\$20.00/box

Travel 20 minutes one way to purchase box on site

Our farm uses cutting-edge technology in efficiently producing our products and serving our customers.

It is our goal to provide our customers with a seamless purchasing experience and on-time delivery.

We stand by our products and will replace any product that is damaged in the shipping process.



\$15.00/box
(\$19.99 with shipping)

Delivered to door for \$4.99

Our farm is a 5th-generation family farm founded by Jim and Jane Anderson in 1905.

Bob and wife Linda and their 4 children live and work on the farm, and their youngest daughter Beth manages online sales while staying home with her energetic toddler Grayson.

Please contact us with any questions you have about how we run our farm.

- Click to write Choice (1)
- Click to write Choice (2)
- I would not choose either of these. (3)

Which of the two options would you order for your box of local produce (8-12 pounds with seasonally available items)?



\$20.00/box

Travel 20 minutes one way to purchase box on site

Our farm seeks to lessen the environmental impact of farming through minimum tillage, reduced water use, and natural pest control measures.

Our products are shipped to you using green packing materials that are 100% recyclable.

We want to leave our land in a better condition than we found it for future generations.



\$15.00/box

Travel 50 minutes one way to purchase box on site

Our farm uses cutting-edge technology in efficiently producing our products and serving our customers.

It is our goal to provide our customers with a seamless purchasing experience and on-time delivery.

We stand by our products and will replace any product that is damaged in the shipping process.

- Click to write Choice (1)
- Click to write Choice (2)
- I would not choose either of these. (3)

Which of the two options would you order for your box of local produce (8-12 pounds with seasonally available items)?



\$15.00/box
(\$19.99 with shipping)

Delivered to door for
\$4.99

Our farm began with a passion and love for growing.

We are proud to work and live in our rural community where we host our town's annual art and music festival to support our local schools.

Your purchases help our farm remain in our rural community doing what we love.



\$17.50/box

Travel 20 minutes one way to purchase box on site

Our farm is a 5th-generation family farm founded by Jim and Jane Anderson in 1905.

Bob and wife Linda and their 4 children live and work on the farm, and their youngest daughter Beth manages online sales while staying home with her energetic toddler Grayson.

Please contact us with any questions you have about how we run our farm.

- Click to write Choice (1)
- Click to write Choice (2)
- I would not choose either of these. (3)

In this final section, you will be asked a series of demographic questions.

What is the five-digit zip code of your residence?

Zip Code (1) _____

What year were you born?

▼ 1937 (1) ... 2001 or after (65)

Select your gender.

Male (1)

Female (2)

Self-identified (3)

What is your racial/ethnic background? Please check all that apply.

- White (1)
- Black or African American (2)
- American Indian or Alaska Native (3)
- Asian/Pacific Islander (4)
- Hispanic, Latino, or Spanish (5)
- Other (6)

How many adults live in your household?

How many children live in your household?

- 0 (1)
- 1 (2)
- 2 (3)
- 3 (4)
- 4 (5)
- 5+ (6)

Are your children in the following age ranges?

	Yes (1)	No (2)
Age 0-5 (1)	<input type="radio"/>	<input type="radio"/>
Age 6-12 (2)	<input type="radio"/>	<input type="radio"/>
Age 13-17 (3)	<input type="radio"/>	<input type="radio"/>

Please indicate the answer that includes your entire household income before taxes in 2017.

- Less than \$10,000 (1)
- \$10,000 to \$14,999 (2)
- \$15,000 to \$19,999 (3)
- \$20,000 to \$24,999 (4)
- \$25,000 to \$29,999 (5)
- \$30,000 to \$34,999 (6)
- \$35,000 to \$39,999 (7)
- \$40,000 to \$44,999 (8)
- \$45,000 to \$49,999 (9)
- \$50,000 to \$59,000 (10)
- \$60,000 to \$74,999 (11)
- \$75,000 to \$99,999 (12)
- \$100,000 to \$124,999 (13)
- \$125,000 to \$149,000 (14)
- \$150,000 to \$199,999 (15)
- \$200,000 or more (16)

What is the highest level of school you have completed or the highest degree you have received?

- Less than high school degree (1)
- High school graduate (high school diploma or equivalent including GED) (2)
- Some college, but no degree (3)
- Associate degree in college (2-year) (4)
- Bachelor's degree in college (4-year) (5)
- Master's degree (6)
- Doctoral degree (7)
- Professional degree (JD, MD) (8)

Which of the following categories best describes your current employment status?

- Employed, working 40 or more hours per week (1)
- Employed, working 1-39 hours per week (2)
- Not employed, looking for work (3)
- Not employed, NOT looking for work (4)
- Retired (5)
- Disabled, not able to work (6)

You have reached the end of this survey. Your answers will be used to improve marketing of small, rural agricultural businesses on social media. Thank you for your participation.

Survey Two

This survey, *Courting the Consumer: Social-Media Marketing of Farm Products*, will take approximately 25 minutes to complete. The results of this study will be used to recommend more effective ways for agricultural businesses to communicate with consumers. Your participation is completely voluntary. You don't have to answer any questions that you don't want to, and you may quit at any time. Please read this consent document carefully before you decide to participate in this study. Thank you for taking the time to participate in this study. Your participation is completely voluntary. There is no penalty for not participating. If you choose to participate, the survey will take approximately 25 minutes to complete. You can withdraw from the survey at any time without penalty, and you do not have to answer any question you do not wish to answer. All answers are confidential to the extent provided by law. This project is sponsored by the USDA Federal State Marketing Improvement Program and examines consumers' preferences toward social-media marketing by farm-based businesses. There are no known risks associated with this study, and there is no compensation or other direct benefit to you for participation. We will not collect any identifying information from you. If you would like to learn more about this study, please contact Dr. Lauri Baker by e-mail at lbaker@ksu.edu. If you have questions about your rights as a research participant, please contact Rick Scheidt, Chair, Committee on Research Involving Human Subjects, 203 Fairchild Hall, Kansas State University, Manhattan, KS 66506, (785) 532-3224, IRB#9452. By clicking agree below, you are saying you have read the procedure described above and voluntarily agree to participate in the procedure, and have received a copy of this description. By clicking agree below, you agree that you have read this statement and are aware of your rights.

Do you agree to participate?

Yes (1)

No (2)

In which state do you currently reside?

▼ Alabama (1) ... I do not reside in the United States (53)

Have you checked your Facebook account at least once during the last two weeks?

- Yes (1)
- No (2)
- I do not have a Facebook account (3)

Have you purchased fresh produce directly from a farm, u-pick/you-pick business, farmer's market, or other agricultural places during the last two years?

- Yes (1)
- No (2)

On the Internet, approximately how often do you...

	Never (1)	Once a Year or Less (2)	Several Times a Year (3)	Once a Month (4)	2-3 Times a Month (5)	Once a Week (6)	2-3 Times a Week (7)	Daily (8)
Publish or update your own Web page/site (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Write a blog (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Upload videos to the web for the purpose of sharing (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Post original content to Facebook (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Post original content to Twitter (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Post
original
content to
another
social-
media site
besides
Facebook
or Twitter
(6)



Initiate a discussion on a forum (7)

Upload photos to the web for the purpose of sharing (using Facebook, Twitter, Flickr, etc.) (8)

Post original content to a wiki (Wikipedia, PBworks, etc.) (9)

On the Internet, approximately how often do you...

	Never (1)	Once a Year or Less (2)	Several Times a Year (3)	Once a Month (4)	2-3 Times a Month (5)	Once a Week (6)	2-3 Times a Week (7)	Daily (8)
Read/look at posts on Facebook (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Read/look at posts on Twitter (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Read a blog (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
View user- generated videos online (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Listen to podcasts (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Search for and read reviews (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Search for and read online forums (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Search for
and read
articles
found in
an internet
search (8)



On the Internet, approximately how often do you...

	Never (1)	Once a Year or Less (2)	Several Times a Year (3)	Once a Month (4)	2-3 Times a Month (5)	Once a Week (6)	2-3 Times a Week (7)	Daily (8)
Comment on webpages (i.e., news story) (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comment on blogs (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comment on tweets (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comment on Facebook posts (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Post ratings/reviews on products or services (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reply to a discussion thread on a forum (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
"Like" a post on Facebook (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

On the Internet, approximately how often do you...

	Never (1)	Once a Year or Less (2)	Several Times a Year (3)	Once a Month (4)	2-3 Times a Month (5)	Once a Week (6)	2-3 Times a Week (7)	Daily (8)
Tag webpages for yourself or others using social bookmarking (i.e., Digg, StumbleUpon) (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Subscribe to a website or blog using RSS (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Subscribe to a podcast (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Subscribe to a video website channel (i.e., YouTube Channel) (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Subscribe to an online forum (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Which of the following social media sites have you joined and created an account?

	Yes (1)	No (2)
Google + (Plus) (1)	<input type="radio"/>	<input type="radio"/>
Twitter (2)	<input type="radio"/>	<input type="radio"/>
Facebook (3)	<input type="radio"/>	<input type="radio"/>
YouTube (4)	<input type="radio"/>	<input type="radio"/>
Blogging Website (i.e., WordPress, Blogger) (5)	<input type="radio"/>	<input type="radio"/>
Social Bookmarking (i.e., Digg, StumbleUpon, Delicious) (6)	<input type="radio"/>	<input type="radio"/>
Social media management tool (i.e., HootSuite, Tweetdeck, etc.) (7)	<input type="radio"/>	<input type="radio"/>
Other(s) (8)	<input type="radio"/>	<input type="radio"/>

In the next series of 4 questions, you will be asked to consider a hypothetical case of purchasing an assorted box of local farm produce. Suppose this assorted mixed box contains about 8-12 pounds of fresh vegetables from a local farm. It would typically include: broccoli, cauliflower, carrots, peas, peppers, cucumbers, summer squash, kale, leaf lettuce, garlic, chives, rosemary, or other herbs. But, as if with any such box, specific selection may change due to seasonal availability of items. In each question you have two options to purchase the box. Each option is available at different price levels and varying logistics of getting the box along with distinct messages from the specific farm. Otherwise, the content of the boxes are identical. Please evaluate each pair of options carefully and indicate your choice.

Which of the two options would you order for your box of local produce (8-12 pounds with seasonally available items)?



\$17.50/box

Travel 50 minutes one way to purchase box on site

Our farm seeks to lessen the environmental impact of farming through minimum tillage, reduced water use, and natural pest control measures.

Our products are shipped to you using green packing materials that are 100% recyclable.

We want to leave our land in a better condition than we found it for future generations.



\$15.00/box
(\$19.99 with shipping)

Delivered to door for \$4.99

Our farm is a 5th-generation family farm founded by Jim and Jane Anderson in 1905.

Bob and wife Linda and their 4 children live and work on the farm, and their youngest daughter Beth manages online sales while staying home with her energetic toddler Grayson.

Please contact us with any questions you have about how we run our farm.

- Click to write Choice (1)
- Click to write Choice (2)
- I would not choose either of these. (3)

Which of the two options would you order for your box of local produce (8-12 pounds with seasonally available items)?



\$15.00/box

Travel 20 minutes one way to purchase box on site

Our farm seeks to lessen the environmental impact of farming through minimum tillage, reduced water use, and natural pest control measures.

Our products are shipped to you using green packing materials that are 100% recyclable.

We want to leave our land in a better condition than we found it for future generations.



\$20.00/box

Travel 50 minutes one way to purchase box on site

Our farm began with a passion and love for growing.

We are proud to work and live in our rural community where we host our town's annual art and music festival to support our local schools.

Your purchases help our farm remain in our rural community doing what we love.

- Click to write Choice (1)
- Click to write Choice (2)
- I would not choose either of these. (3)

Which of the two options would you order for your box of local produce (8-12 pounds with seasonally available items)?



\$15.00/box

Travel 20 minutes one way to purchase box on site

Our farm began with a passion and love for growing.

We are proud to work and live in our rural community where we host our town's annual art and music festival to support our local schools.

Your purchases help our farm remain in our rural community doing what we love.



\$17.50/box

Travel 50 minutes one way to purchase box on site

Our farm uses cutting-edge technology in efficiently producing our products and serving our customers.

It is our goal to provide our customers with a seamless purchasing experience and on-time delivery.

We stand by our products and will replace any product that is damaged in the shipping process.

- Click to write Choice (1)
- Click to write Choice (2)
- I would not choose either of these. (3)

Which of the two options would you order for your box of local produce (8-12 pounds with seasonally available items)?



\$20.00/box

Travel 20 minutes one way to purchase box on site

Our farm uses cutting-edge technology in efficiently producing our products and serving our customers.

It is our goal to provide our customers with a seamless purchasing experience and on-time delivery.

We stand by our products and will replace any product that is damaged in the shipping process.



\$17.50/box
(\$22.49 with shipping)

Delivered to door for \$4.99

Our farm seeks to lessen the environmental impact of farming through minimum tillage, reduced water use, and natural pest control measures.

Our products are shipped to you using green packing materials that are 100% recyclable.

We want to leave our land in a better condition than we found it for future generations.

- Click to write Choice (1)
- Click to write Choice (2)
- I would not choose either of these. (3)

In this final section, you will be asked a series of demographic questions.

What is the five-digit zip code of your residence?

Zip Code (1) _____

What year were you born?

▼ 1937 (1) ... 2001 or after (65)

Select your gender.

Male (1)

Female (2)

Self-identified (3)

What is your racial/ethnic background? Please check all that apply.

- White (1)
- Black or African American (2)
- American Indian or Alaska Native (3)
- Asian (4)
- Hispanic, Latino, or Spanish (5)
- Native Hawaiian Pacific Islander (6)
- Other (7) _____

How many adults live in your household?

How many children live in your household?

- 0 (1)
- 1 (2)
- 2 (3)
- 3 (4)
- 4 (5)
- 5+ (6)

Are your children in the following age ranges?

	Yes (1)	No (2)
Age 0-5 (1)	<input type="radio"/>	<input type="radio"/>
Age 6-12 (2)	<input type="radio"/>	<input type="radio"/>
Age 13-17 (3)	<input type="radio"/>	<input type="radio"/>

Please indicate the answer that includes your entire household income before taxes in 2017.

- Less than \$10,000 (1)
- \$10,000 to \$14,999 (2)
- \$15,000 to \$19,999 (3)
- \$20,000 to \$24,999 (4)
- \$25,000 to \$29,999 (5)
- \$30,000 to \$34,999 (6)
- \$35,000 to \$39,999 (7)
- \$40,000 to \$44,999 (8)
- \$45,000 to \$49,999 (9)
- \$50,000 to \$59,000 (10)
- \$60,000 to \$74,999 (11)
- \$75,000 to \$99,999 (12)
- \$100,000 to \$124,999 (13)
- \$125,000 to \$149,000 (14)
- \$150,000 to \$199,999 (15)
- \$200,000 or more (16)

What is the highest level of school you have completed or the highest degree you have received?

- Less than high school degree (1)
- High school graduate (high school diploma or equivalent including GED) (2)
- Some college, but no degree (3)
- Associate degree in college (2-year) (4)
- Bachelor's degree in college (4-year) (5)
- Master's degree (6)
- Doctoral degree (7)
- Professional degree (JD, MD) (8)

Which of the following categories best describes your current employment status?

- Employed, working 40 or more hours per week (1)
- Employed, working 1-39 hours per week (2)
- Not employed, looking for work (3)
- Not employed, NOT looking for work (4)
- Retired (5)
- Disabled, not able to work (6)

You have reached the end of this survey. Your answers will be used to improve marketing of small, rural agricultural businesses on social media. Thank you for your participation.

Survey Three

This survey, *Courting the Consumer: Social-Media Marketing of Farm Products*, will take approximately 25 minutes to complete. The results of this study will be used to recommend more effective ways for agricultural businesses to communicate with consumers. Your participation is completely voluntary. You don't have to answer any questions that you don't want to, and you may quit at any time. Please read this consent document carefully before you decide to participate in this study. Thank you for taking the time to participate in this study. Your participation is completely voluntary. There is no penalty for not participating. If you choose to participate, the survey will take approximately 25 minutes to complete. You can withdraw from the survey at any time without penalty, and you do not have to answer any question you do not wish to answer. All answers are confidential to the extent provided by law. This project is sponsored by the USDA Federal State Marketing Improvement Program and examines consumers' preferences toward social-media marketing by farm-based businesses. There are no known risks associated with this study, and there is no compensation or other direct benefit to you for participation. We will not collect any identifying information from you. If you would like to learn more about this study, please contact Dr. Lauri Baker by e-mail at lbaker@ksu.edu. If you have questions about your rights as a research participant, please contact Rick Scheidt, Chair, Committee on Research Involving Human Subjects, 203 Fairchild Hall, Kansas State University, Manhattan, KS 66506, (785) 532-3224, IRB#9452. By clicking agree below, you are saying you have read the procedure described above and voluntarily agree to participate in the procedure, and have received a copy of this description. By clicking agree below, you agree that you have read this statement and are aware of your rights.

Do you agree to participate?

Yes (1)

No (2)

In which state do you currently reside?

▼ Alabama (1) ... I do not reside in the United States (53)

Have you checked your Facebook account at least once during the last two weeks?

- Yes (1)
- No (2)
- I do not have a Facebook account (3)

Have you purchased fresh produce directly from a farm, pick-your-own business, farmer's market, or other agricultural places during the last two years?

- Yes (1)
- No (2)

In the next series of questions, you will be asked about technology and social-media use.

On the Internet, approximately how often do you...

	Never (1)	Once a Year or Less (2)	Several Times a Year (3)	Once a Month (4)	2-3 Times a Month (5)	Once a Week (6)	2-3 Times a Week (7)	Daily (8)
Publish or update your own Web page/site (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Write a blog (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Upload videos to the web for the purpose of sharing (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Post original content to Facebook (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Post original content to Twitter (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Post
original
content to
another
social-
media site
besides
Facebook
or Twitter
(6)



Initiate a discussion on a forum (7)



Upload photos to the web for the purpose of sharing (using Facebook, Twitter, Flickr, etc.) (8)



Post original content to a wiki (Wikipedia, pbworks, etc.) (9)



On the Internet, approximately how often do you...

	Never (1)	Once a Year or Less (2)	Several Times a Year (3)	Once a Month (4)	2-3 Times a Month (5)	Once a Week (6)	2-3 Times a Week (7)	Daily (8)
Read/look at posts on Facebook (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Read/look at posts on Twitter (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Read a blog (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
View user- generated videos online (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Listen to podcasts (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Search for and read reviews (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Search for
and read
online
forums (7)



Search for
and read
articles
found in
an internet
search (8)



On the Internet, approximately how often do you...

	Never (1)	Once a Year or Less (2)	Several Times a Year (3)	Once a Month (4)	2-3 Times a Month (5)	Once a Week (6)	2-3 Times a Week (7)	Daily (8)
Comment on webpages (i.e., news story) (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comment on blogs (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comment on tweets (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comment on Facebook posts (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Post ratings/reviews on products or services (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reply to a discussion thread on a forum (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
"Like" a post on Facebook (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

On the Internet, approximately how often do you...

	Never (1)	Once a Year or Less (2)	Several Times a Year (3)	Once a Month (4)	2-3 Times a Month (5)	Once a Week (6)	2-3 Times a Week (7)	Daily (8)
Tag webpages for yourself or others using social bookmarking (i.e., Digg, StumbleUpon) (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Subscribe to a website or blog using RSS (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Subscribe to a podcast (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Subscribe to a video website channel (i.e., YouTube Channel) (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Subscribe to an online forum (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Which of the following social-media sites have you joined and created an account?

	Yes (1)	No (2)
Google + (Plus) (1)	<input type="radio"/>	<input type="radio"/>
Twitter (2)	<input type="radio"/>	<input type="radio"/>
Facebook (3)	<input type="radio"/>	<input type="radio"/>
YouTube (4)	<input type="radio"/>	<input type="radio"/>
Blogging Website (i.e., WordPress, Blogger) (5)	<input type="radio"/>	<input type="radio"/>
Social Bookmarking (i.e., Digg, StumbleUpon, Delicious) (6)	<input type="radio"/>	<input type="radio"/>
Social media management tool (i.e., HootSuite, Tweetdeck, etc.) (7)	<input type="radio"/>	<input type="radio"/>
Other(s) (8)	<input type="radio"/>	<input type="radio"/>

In the next series of 4 questions, you will be asked to consider a hypothetical case of purchasing an assorted box of local farm produce. Suppose this assorted mixed box contains about **8-12 pounds of fresh vegetables from a local farm**. It would typically include: broccoli, cauliflower, carrots, peas, peppers, cucumbers, summer squash, kale, leaf lettuce, garlic, chives, rosemary, or other herbs. But, as if with any such box, specific selection may change due to seasonal availability of items. In each question you have two options to purchase the box. Each option is available at different **price** levels and varying **logistics** of getting the box along with distinct **messages** from the specific farm. Otherwise, the content of the boxes is identical. Please evaluate each pair of options carefully and indicate your choice.

Which of the two options would you order for your box of local produce (8-12 pounds with seasonally available items)?



\$17.50/box

Travel 50 minutes one way to purchase box on site

Our farm seeks to lessen the environmental impact of farming through minimum tillage, reduced water use, and natural pest control measures.

Our products are shipped to you using green packing materials that are 100% recyclable.

We want to leave our land in a better condition than we found it for future generations.



**\$15.00/box
(\$19.99 with shipping)**

Delivered to door for \$4.99

Our farm is a 5th-generation family farm founded by Jim and Jane Anderson in 1905.

Bob and wife Linda and their 4 children live and work on the farm, and their youngest daughter Beth manages online sales while staying home with her energetic toddler Crayson.

Please contact us with any questions you have about how we run our farm.

- Click to write Choice (1)
- Click to write Choice (2)
- I would not choose either of these. (3)

Which of the two options would you order for your box of local produce (8-12 pounds with seasonally available items)?



\$15.00/box

Travel 20 minutes one way to purchase box on site

Our farm seeks to lessen the environmental impact of farming through minimum tillage, reduced water use, and natural pest control measures.

Our products are shipped to you using green packing materials that are 100% recyclable.

We want to leave our land in a better condition than we found it for future generations.



\$20.00/box

Travel 50 minutes one way to purchase box on site

Our farm began with a passion and love for growing.

We are proud to work and live in our rural community where we host our town's annual art and music festival to support our local schools.

Your purchases help our farm remain in our rural community doing what we love.

- Click to write Choice (1)
- Click to write Choice (2)
- I would not choose either of these. (3)

Which of the two options would you order for your box of local produce (8-12 pounds with seasonally available items)?



\$15.00/box

Travel 20 minutes one way to purchase box on site

Our farm began with a passion and love for growing.

We are proud to work and live in our rural community where we host our town's annual art and music festival to support our local schools.

Your purchases help our farm remain in our rural community doing what we love.



\$17.50/box

Travel 50 minutes one way to purchase box on site

Our farm uses cutting-edge technology in efficiently producing our products and serving our customers.

It is our goal to provide our customers with a seamless purchasing experience and on-time delivery.

We stand by our products and will replace any product that is damaged in the shipping process.

- Click to write Choice (1)
- Click to write Choice (2)
- I would not choose either of these. (3)

Which of the two options would you order for your box of local produce (8-12 pounds with seasonally available items)?



\$20.00/box

Travel 20 minutes one way to purchase box on site

Our farm uses cutting-edge technology in efficiently producing our products and serving our customers.

It is our goal to provide our customers with a seamless purchasing experience and on-time delivery.

We stand by our products and will replace any product that is damaged in the shipping process.



\$17.50/box
(\$22.49 with shipping)

Delivered to door for \$4.99

Our farm seeks to lessen the environmental impact of farming through minimum tillage, reduced water use, and natural pest control measures.

Our products are shipped to you using green packing materials that are 100% recyclable.

We want to leave our land in a better condition than we found it for future generations.

- Click to write Choice (1)
- Click to write Choice (2)
- I would not choose either of these. (3)

In this final section, you will be asked a series of demographic questions.

What is the five-digit zip code of your residence?

Zip Code (1) _____

What year were you born?

▼ 1937 (1) ... 2001 or after (65)

Select your gender.

Male (1)

Female (2)

Self-identified (3)

What is your racial/ethnic background? Please check all that apply.

White (1)

Black or African American (2)

American Indian or Alaska Native (3)

Asian/Pacific Islander (4)

Hispanic, Latino, or Spanish (5)

Other (6)

How many adults live in your household?

How many children live in your household?

0 (1)

1 (2)

2 (3)

3 (4)

4 (5)

5+ (6)

Are your children in the following age ranges?

	Yes (1)	No (2)
Age 0-5 (1)	<input type="radio"/>	<input type="radio"/>
Age 6-12 (2)	<input type="radio"/>	<input type="radio"/>
Age 13-17 (3)	<input type="radio"/>	<input type="radio"/>

Please indicate the answer that includes your entire household income before taxes in 2017.

- Less than \$10,000 (1)
- \$10,000 to \$14,999 (2)
- \$15,000 to \$19,999 (3)
- \$20,000 to \$24,999 (4)
- \$25,000 to \$29,999 (5)
- \$30,000 to \$34,999 (6)
- \$35,000 to \$39,999 (7)
- \$40,000 to \$44,999 (8)
- \$45,000 to \$49,999 (9)
- \$50,000 to \$59,000 (10)
- \$60,000 to \$74,999 (11)
- \$75,000 to \$99,999 (12)
- \$100,000 to \$124,999 (13)
- \$125,000 to \$149,000 (14)
- \$150,000 to \$199,999 (15)
- \$200,000 or more (16)

What is the highest level of school you have completed or the highest degree you have received?

- Less than high school degree (1)
- High school graduate (high school diploma or equivalent including GED) (2)
- Some college, but no degree (3)
- Associate degree in college (2-year) (4)
- Bachelor's degree in college (4-year) (5)
- Master's degree (6)
- Doctoral degree (7)
- Professional degree (JD, MD) (8)

Which of the following categories best describes your current employment status?

- Employed, working 40 or more hours per week (1)
- Employed, working 1-39 hours per week (2)
- Not employed, looking for work (3)
- Not employed, NOT looking for work (4)
- Retired (5)
- Disabled, not able to work (6)

You have reached the end of this survey. Your answers will be used to improve marketing of small, rural agricultural businesses on social media. Thank you for your participation.

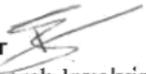
Appendix B - IRB Exemption



University Research Compliance Office

TO: Dr. Lauri Baker
Communications and Agricultural Education
307 Umberger Hall

Proposal Number: 9452

FROM: Rick Scheidt, Chair 
Committee on Research Involving Human Subjects

DATE: 09/27/2018

RE: Proposal Entitled, "Courting the Consumer: Social-Media Marketing of Farm Products"

The Committee on Research Involving Human Subjects / Institutional Review Board (IRB) for Kansas State University has reviewed the proposal identified above and has determined that it is EXEMPT from further IRB review. This exemption applies only to the proposal - as written - and currently on file with the IRB. Any change potentially affecting human subjects must be approved by the IRB prior to implementation and may disqualify the proposal from exemption.

Based upon information provided to the IRB, this activity is exempt under the criteria set forth in the Federal Policy for the Protection of Human Subjects, **45 CFR §46.101, paragraph b, category: 2, subsection: ii.**

Certain research is exempt from the requirements of HHS/OHRP regulations. A determination that research is exempt does not imply that investigators have no ethical responsibilities to subjects in such research; it means only that the regulatory requirements related to IRB review, informed consent, and assurance of compliance do not apply to the research.

Any unanticipated problems involving risk to subjects or to others must be reported immediately to the Chair of the Committee on Research Involving Human Subjects, the University Research Compliance Office, and if the subjects are KSU students, to the Director of the Student Health Center.