A QUALITATIVE EXPLORATION OF ENTREPRENEURIAL LEARNING AMONG
LOCAL FARMERS IN COCHISE COUNTY, ARIZONA

By

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Statement by the Author

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Abstract
The number of farmers markets in the United States increased from 3,706 in 2004 to 8,268 in 2014 (Agriculture Marketing Service, 2014). Often times, small-scale agricultural producers do not harvest enough goods to be sold in large grocery store corporations and thus have turned to farmers’ markets, roadside stands, you-pick operations, and community supported agriculture (CSA) shares as pathways for reaching customers directly (Chase & Winn, 1981; Payne, 2002). The purpose of this study was to explore and describe how such small-scale producers who participate in farmers’ markets gain and develop business-related information and business skills. A single case study design developed and applied to explore the entrepreneurial learning environment relevant to small-scale agricultural producers in Cochise County, Arizona. The current study is framed conceptually by Politis’s (2005) entrepreneurial learning model. The data was collected through semi-structured interviews, observations, and relevant documents. Data was organized and analyzed both ideographically and nomothetically. The findings indicate that some small-scale agricultural producers who reside in Cochise County, Arizona participate in Southern Arizona farmers’ markets for economic viability and/or lifestyle reasons. The producers who participate in Southern Arizona farmers’ markets as their sole means of generating income and/or to continue to be able to afford their engagement in agricultural activities were categorized under the economic viability theme. Those producers who participate in Southern Arizona farmers’ market primarily to socialize and to exchange knowledge with community members and other farmers or ranchers were categorized under the lifestyle theme. The data also revealed that the participants engaged in entrepreneurial learning primarily within informal settings and through corresponding channels. While, informal learning is likely to remain the primary method of knowledge sharing across the small-scale agricultural producer community in Cochise County,
Arizona. However, by providing such producers with greater opportunities to develop deeper and more robust knowledge and skills specific to entrepreneurship and small business development and management through non-formal learning opportunities (e.g., innovative Extension program), the number of producers with enhanced training capacities and cutting edge knowledge will increase across Cochise County.
Chapter 1: Introduction

Background and Setting

Farmers’ markets have a long history in the development of agriculture and have become particularly prevalent in the contemporary era following the passing of the Farmer-to-Consumer Direct Marketing Act of 1976 (Thilmany & Watson, 2004). The number of farmers markets increased from 3,706 in 2004 to 8,268 in 2014 (Agriculture Marketing Service, 2014). Small-scale producers do not harvest enough goods to be sold in large grocery store corporations and thus have turned to farmers’ markets, roadside stands, you-pick operations, and community supported agriculture (CSA) shares as pathways for reaching customers directly (Chase & Winn, 1981; Payne, 2002). The focus of the current study is on small-scale agriculture producer engagement in farmers’ markets. More specifically, empirical focus will be on how local farmers within the Cochise County, located in the Southeastern corner of Arizona who participate in farmers’ markets obtain entrepreneurial knowledge.

Presently, small-scale agricultural producers earn approximately twenty-two dollars for every hundred dollars spent by consumers (Integrity Systems Cooperative, 1997). Farmers who participate in sustainable community food systems could potentially increase twenty-two dollars to thirty dollars through the lowering of marketing costs. This thirty-seven percent increase would significantly improve the economic status to the average American farmer. Unfortunately, it is not clear that small-scale agricultural producers have the business knowledge or skills to lower marketing and other operational costs. It is equally unclear that such small-scale agricultural producers have access to adequate training in areas specific to entrepreneurship and small business development.
Statement of the Problem

Information about the operations of farmers’ markets is lacking on a national level (Payne, 2002). To explore how producers acquire knowledge and develop skills about farmers’ market operations and other entrepreneurial-related areas the following question will be asked: How do producers who participate in farmers’ markets gain information and skills specific to entrepreneurship and small business development?

Purpose and Research Questions

The aim of this single, qualitative case study is to explore and describe how small-scale agricultural producers who participate in farmers’ markets gain information and skills specific to entrepreneurship and small business development. To explore the main guiding question, three more specific questions will be explored. These questions include:

- How, if at all, do producers gain information and skills specific to entrepreneurship and small business development and operations through formal learning channels?
- How, if at all, do producers gain information and skills specific to entrepreneurship and small business development and operations through non-formal learning channels?
- How, if at all, do producers gain information and skills specific to entrepreneurship and small business development and operations through informal learning channels?

Significance of the Problem

According to the United States Department of Agriculture (USDA), the number of farmers’ markets in the United States have increased from 3,706 markets in 2004 to 8,268 markets in 2014 (AMS, 2014). Farmers’ markets can provide opportunities to part-time and otherwise small-scale
producers to grow into a larger agriculture operation and gross 200% to 250% more than wholesale/distributors (Hilchey, Lyons, & Gillespie, 1995; Hughes & Mattson, 1995; Integrity Systems Cooperative, 1997). Farmers’ markets are also beneficial for consumers. Consumers can directly buy fresh produce or product from farmers, gain a greater level of agricultural literacy, help support local agriculture and surrounding economies, and so on. (Abel, Thomson, & Maretzki, 1999). Among the many benefits of farmers’ markets to local communities are opportunities for residents to learn about agriculture and food production, the creation of a range of new small business opportunities, and the establishment of collaborative networks that help to both sustain the markets and increase accessibility of fresh produce to food insecure populations. However, curriculum about farmers’ markets and their procedures is lacking (Payne, 2002). The lack of information is problematic for new or current producers who participate in farmers’ markets.

The Cooperative Extension system, located within land-grant universities, can help address the aforesaid problem by creating and distributing learning materials for farmers and vendors, facilitating workshops on marketing and business practices and informing the community of the nutrition benefit of farmers’ markets. (Abel, Thomson, & Maretzki, 1999). Similarly, farmers’ markets can contribute to the creation and dissemination of knowledge by providing “economic, nutritive, educational, social and psychological benefits to vendors and the community” (Abel, Thomson, & Maretzki, 1999 “Conclusions” para. 2).
Definition of Terms

The following terms are used throughout the study. The terms are defined to provide clarity and enhance the comprehension of the problem, design, findings, and recommendations. The definitions are:

- **Small-scale agricultural producers:**
  - A farmer or rancher/livestock producer who harvests too little to compete in conventional grocery store settings and thus reaches customers directly through local venues including, but not limited to farmers’ markets.

- **Vendor:**
  - A person or producer who sells products the one has bought or raised themselves.

- **Farmers’ market:**
  - A community-based, agricultural formed area that producers gather and sell a variety of fruit, vegetables and other farm products to consumers directly (Payne, 2002).

- **Formal Learning Setting:**
  - A place where a person learns skills and educational information about farmers’ market business practices through a hierarchically structured, graded official university educational system (Coombs, 1973 & Etling, 1993). Formal learning settings are structured with pre-determined objectives. Formal learning takes place through high schools, community colleges and universities.

- **Non-formal Learning Setting:**
  - A place where a person learns skills and educational information about farmers’ market business practices through an organizational setting and are in presence of a teacher (Eshach, 2007). Non-formal learning is semi-structured with pre-designed plans and takes
place in various settings including workshops, trainings, county extension offices and agricultural organizations.

- Informal Learning Setting:
  - A place where a person learns skills and educational information about farmers’ market business practices through unstructured, spontaneous and non-evaluated enterprise that is adapted to fit the producers’ needs (Etling, 1993). Informal learning happens in various settlings including knowledge exchange with other producers at farmers’ markets, previous experiences and social interactions.

**Limitation of the Study**

Consistent with all qualitative research, the findings of the current study cannot be generalized to the broader population. The study specifically focuses on Cochise County, Arizona and its unique culture, border situation and Cooperative Extension program. However, the findings can contribute to the overall understanding of how small-scale agricultural producers who participate in direct-to-consumer market activities obtain entrepreneurial and small business development knowledge. Limited access to resources and the confined availability of participants also presented this study with limitations.
Basic Assumptions

Basic assumptions about the study include the following:

- Small-scale agricultural producers from Cochise County, Arizona who participate in Southern Arizona farmers’ markets will be willing to commit time to participate in the study.

- Small-scale agricultural producers from Cochise County, Arizona who participate in Southern Arizona farmers’ markets will be asked a series of questions and answer interview questions completely and truthfully.
Chapter 2: Literature Review/ Theoretical Framework

Review of Literature of the Characteristics

*Formal, Informal and Non-formal Learning Settings*

The settings in which individuals acquire new knowledge and develop skill sets, including those related to entrepreneurship and small business operations are categorized as formal, informal and non-formal. These three learning settings are distinct and have both strengths and weaknesses.

Formal learning settings include elementary and secondary schools, as well as colleges, universities, and other post-secondary institutions (e.g., vocational training schools). A suitable definition for formal education is “the hierarchically structured, chronologically graded educational system running from primary school through university and including, in addition to general academic studies, a variety of specialized programs and institutions for full-time technical and professional training” (Coombs, 1973, p. 11). Eshach (2007) described formal education as structured, compulsory, sequential, and teacher-led. Some examples of formal education for entrepreneurs in agri-food sector include traditional courses, vocational education, training on-the-job and e-learning (Lans, Wesselink, Biemans & Mulder, 2004).

Non-formal and formal learning settings are similar in that both conform to varying degrees of structure. However, non-formal education is not confined to institutions / traditional classrooms, is often non-sequential and instructor led (Eshch, 2007). Moreover, students voluntarily engage in non-formal learning. Some examples of non-formal education for entrepreneurs in agri-food sector include business visits, conferences, study groups and extension cooperatives (Lans, Wesselink, Biemans & Mulder, 2004). Non-formal education can be more optimal than formal education because unmotivated learners can leave at any time and the environment is learner centered (Eshch, 2007). Another important aspect of non-formal is that it is responsive to learner needs and...
demands. In this regard, the learners and instructors are co-creating/co-developing the learning objectives.

Informal learning settings are characterized by learners gaining knowledge and skills through unstructured, spontaneous and non-evaluated interactions that are directly aligned with the distinct needs and interests of individual learners (Eshch, 2007). Some examples of informal learning sources include professional journals, colleagues, producers, pre-entry experience, on-the-job learning, peer-to-peer knowledge exchange, television and radio (Lans, Wesselink, Biemans & Mulder, 2004). These informal educational experiences “stimulate cognitive conflict and promote social interaction” (Gerber, 1997 & Ramsey & Edwards, 2004, p. 89).

**Conceptual Framework**

The current study conceptually follows the entrepreneurial learning as an experiential process framework as developed by Politis (2005) (see Figure 1). Politis aimed to understand what information and skills entrepreneurs gain from their startup businesses and how these entrepreneurs convert their experiences into expertise and knowledge. Politis described entrepreneurial learning “as a continuous process that facilitates the development of necessary knowledge for being effective in starting up and managing new ventures” (p. 401). Entrepreneurial learning through experience can serve as a framework to explain the direct link between entrepreneurs’ career experiences and the acquisition of entrepreneurial and small business develop knowledge and skills. (see Figure 1) Additionally, the factors influencing the transformation process is linked to the transformation process. The transformation process is how an individual transforms experience into knowledge, which is used to guide new experiences. Politis’s framework will guide the exploration of how small-scale agricultural producers, who
participate in local farmers’ markets, acquire and develop entrepreneurial and small business knowledge and skills.

![Diagram of entrepreneurial learning framework]


**Entrepreneurial Knowledge**

Entrepreneurial knowledge is directly related to entrepreneurs’ career experiences. Politis’s (2005) entrepreneurial learning framework associates entrepreneurial knowledge with two learning outcomes called opportunity recognition and coping with the liabilities of newness.
Opportunity recognition of entrepreneurs is influenced by the possession of prior information necessary to identify an opportunity and the cognitive properties necessary to value it. The two aspects describe two different aspects; however it is necessary to identify and perform on entrepreneurial opportunities. This could mean that even if an individual had prior information about and skills relevant to entrepreneurial opportunities, he/she could fail to identify new relationships.

Coping with the liabilities of newness can be more difficult for an individual with no previous experiences. Individuals with previous experiences compared to individuals with no experience, have a greater chance of coping with the liabilities of newness because of previous business skills, networking channels and a professional reputation. Individuals also learn new knowledge that can spark him/her to enter new markets and use new technology tools with greater success.

**Entrepreneurs’ Career Experiences**

Politis (2005) indicated the career experiences of entrepreneurs consist of start-up experience, management experience and industry-specific experience. Start-up experience provides individual entrepreneurs with opportunities to develop the capacity to make pressured decisions quickly and under conditions of uncertainty. The individuals with start-up experience are more likely to recognize and act on opportunities than are those without such experience. Start-up experience is internal to the current business. These individual learn by doing and experimentation. Management experience is gained by individuals with previous experience that is external to the current business. Management experience also provides basis knowledge of business practices and entrepreneurs to identify and act on entrepreneurial opportunities. Entrepreneurs with management experience are more likely to be able to cope with the liabilities
of newness. Individuals with industry-specific experience tend to have a greater understanding of what is needed to meet conditions in the marketplace and provide more information that outsiders do not have access to. These individuals have a greater understanding of the industry they are actively involved with. These three factors do not imply that the individuals are vulnerable to certain problems, but rather how the individuals use their experience to approach situations.

*The Transformation Process*

The transformation process is how an individual transforms experience into knowledge, which is used to guide new experiences. The transformation process has two distinct phases: exploration and exploitation (Politis, 2005). In the exploration phase, individuals choose new pathways that are very different than previous experiences. The individuals learn from experiences by exploring new opportunities. In the exploitation phase, individuals use previous pathways to gain further knowledge. While these phases are very different from each other, one is not more important than the other. It is most optimal to have a mix of each distinct phase.

*Factors Influencing the Transformation Process*

There are three aspects that need to be considered when evaluating factors influencing the transformation process (Politis, 2005). The first aspect is how the outcomes of previous events influence the future success or failure of entrepreneurs. Successful experiences are likely to have long lasting effects on business strategies and create tendencies for entrepreneurs to become path dependent. Path dependence is when an individual becomes successful changing his or her strategies in certain situations and the old successful strategies are thrown out. Entrepreneurs may change their strategies when facing competition, regulations and technology.

The predominant logic or reasoning of individual entrepreneurs also has influence over the transformation process. Predominant logic uses “techniques of analysis and estimation to explore
and exploit existing and latent markets” (Politis, 2005, p. 412). Predominant reasoning “calls for synthesis and imagination to create a new markets that do not already exist” (Politis, 2005, p. 412). However, predominant logic and reasoning overlap to shape the actions and decisions of entrepreneurs.

Career orientation is a third influential factor of the transformation process. Careers can be explained by looking at linear, expert, spiral and transitory occupations. Linear career orientation is meant to include individuals with a career with progressive steps in hierarchy. Expert career orientation is defined as individuals that have a lifetime commitment to a specific occupation. Spiral career orientation is defined as individuals that explore new opportunities that are related to previous opportunities. The motive for individuals with spiral career orientation is creativity and professional development. Transitory career orientation is defined as individuals that have frequent changes in field, organization and job. The motive for these individuals is variety and independence. Entrepreneurs will seek out different types of entrepreneurial events and learning conditions depending on their individual career interests and goals.

**Related Research**

*Farmers’ Markets History*

As a rural nation born in part out of an agrarian economy, the United States has a deep history of farmers’ market enterprise. However, farmers’ markets began to decrease in the 1920’s due to the opening of modern supermarkets across the by-then industrialized nation (Lyson, Gillespie, & Hilchey, 1995). Although farmers’ markets declined, they did not disappear altogether. The passing of the Farmer-to-Consumer Direct Marketing Act of 1976 recognized, formalized and largely re-vitalized the American farmers’ market movement (Thilmany &
Watson, 2004). Since this legislation, the farmers market landscape has continued to expand across the country as evidenced by a 150 percent increase in the number of active markets between 1994 to 2006 (AMS, 2014). More recently, according to the USDA, the number of farmers’ markets in the United States have increased from 3,706 markets in 2004 to 8,268 markets in 2014 (AMS, 2014). Currently, farmers’ markets offer consumers the outlet for fresh produce and products with on-farm processing before modern supermarkets (Lyson, Gillespie, & Hilchey, 1995).

Farmers’ Markets and Social Learning

Hinrichs, Gillespie and Feenstra (2004) conducted a study with the objective to identify the role of social learning in vendor innovation. A mail questionnaire was sent to farmers’ market vendors in California, New York and Iowa examined vendor strategies specific to marketing and enterprise expansion. The two dependent variables were the intensity of innovative marketing practices and expansion of vendor activities beyond farmers’ markets. The independent variables for the study include regional and community contexts, individual characteristics, enterprise characteristics and social learning at farmers’ markets.

Social learning at farmers’ markets is particularly relevant to the current study. According to Hinrichs, Gillespie and Feenstra (2004), farmers’ markets can provide a platform for social learning and the stimulation of innovation through vendor and customer interactions and information exchanges. More specifically, “social learning through engagement with customers contributed to more innovative marketing by vendors, while social learning through engagement with customers and fellow vendors increased the likelihood of vendors diversifying to additional markets beyond the farmers’ market” (Hinrichs, Gillespie, & Feenstra, 2004, p. 31). Farmers’ markets can also offer a low-risk, supportive and social context for developing small businesses,
as well as help small-scale agricultural producers exchange knowledge at the relatively low costs of participation.
Chapter 3: Procedures/Methodology

Research Design

This study will use a qualitative research design. Creswell (2013) describes qualitative research as “the use of interpretive/theoretical frameworks that inform the study of research problems addressing the meaning individuals or group ascribe to social or human problem” (p 44). Specifically, a single case study design focused on the entrepreneurial learning environment relevant to small-scale agricultural producers in Cochise County, Arizona was developed and implemented. The purpose of this study was to explore and describe how such small-scale producers who participate in farmers’ markets gain and develop business-related information and business skills. This study strictly focused on small-scale producers who reside in Cochise County, Arizona and participate in farmers’ markets.

Subject Selection

Population

The target population of this study is composed of small-scale agricultural producers who reside in Cochise County, Arizona and are vendors in Southern Arizona farmers’ markets.

Recruitment Methods

The target population from which the sample was drawn from is small-scale agricultural producers who reside in Cochise County, Arizona and participate in farmers’ markets within Southern Arizona. The goal for qualitative sampling is to achieve saturation. Saturation is the point when enough information is gathered and no new information emerges from the ongoing data
collection (Creswell, 2005). The sample size for this study is composed of ten small-scale agricultural producers in Cochise County, Arizona who participate in Southern Arizona farmers’ markets. The study participants were recruited using the following purposeful sampling strategies:

- Homogeneous and theoretical-based sampling
  - Homogeneous sampling is the selection of the participants through a narrow set of criteria that is directly matched to the purpose of the particular study (Onweuegbuzie & Leech, 2007).
  - Theoretical-based sampling focuses on the participants and/or conditions that directly relate back to the conceptual constructs that bring focus to the study (Onweuegbuzie & Leech, 2007).
  - Participants were recruited through individual visits to farmers’ markets in Southern Arizona where small-scale agricultural producers who reside in Cochise County, Arizona were selling their products.

- Snowball or chain method
  - The snowball or chain method identifies cases of interest through the referrals of participants to other individuals who are also likely to provide relevant information on the topic or phenomenon being study (Creswell, 2005).
  - In the case of the current study, small-scale agricultural producers who were interviewed were asked for referrals to other similar producers who participate in Southern Arizona farmers’ markets and believed to be potentially valuable informants.

- Criterion
  - Criterion sampling methods is when “all cases meet some criterion” and are “useful for quality assurance” (Creswell, 2005, p. 158).
Participants were required to meet pre-determined criterion in order to be selected for participation in the study. Specifically, eligible participants had to both be small-scale farmers or ranchers in Cochise County, Arizona and be active in selling their products at Southern Arizona farmers’ markets. Also, the participants were required to speak English fluently.

Participants were recruited through direct contact at Southern Arizona farmers’ markets, as well as through snowball sampling. An invitation to participate (see Appendix A) was shared with those individuals determined to be eligible to participate in the study based on the aforementioned sampling guidelines. The recruitment process occurred at farmers’ markets in Cochise and Pima County in the state of Arizona (i.e., Bisbee Farmers’ Market, Sierra Vista Farmers’ Market, Heirloom Farmers’ Market). The recruitment process began in December 2014 and ended in March 2015.

**Consenting Process**

The participants were informed of the study process orally and provided with a Disclosure Form for Research Participation (see Appendix B). The participants were informed that participation was voluntary and could be stopped at any time without penalty. Also, the participants were informed that they did not have to answer particular questions if they were uncomfortable in doing so. The study purpose and procedures were individually reviewed with each participant at the beginning of each interview. These reviews were audio recorded. Participants were also provided the opportunity to remove themselves from the study at any point prior to its completion and publication. This study was determined to be exempt from human subjects protection by The University of Arizona Institutional Review Board.
Data Collection

Primary Data Collection Procedures

The primary data collection strategy centered on semi-structured individual interviews with small-scale agricultural producers who reside in Cochise County, Arizona and participate in Southern Arizona farmers’ markets. Initially, the interviews took place at the participants’ homes. However, over time it became difficult to schedule interview times with the participants during the week due to their busy schedules and otherwise limited availability. Accordingly, a majority (60%) of the participants were interviewed at the farmers’ markets in between customer interactions. This on-site interview approach allowed the researcher to observe the participants engaged in their farmers’ market activities. Observations were recorded in detail immediately following the interactions with the participants. All interviews were audio recorded and lasted between 15 minutes and one hour in length. The participants were informed of procedures before proceeding with the interview and were able to stop the interview at any time. An Interview Protocol was used during the interview process (see Appendix C). The protocol involved recording the time, setting, and participant’s background information (e.g., production activities and farm or ranch location) and consisted of 13 questions reflective of the entrepreneurial learning model developed by Politis (2005) (see Appendix D). Each participant received a debriefing sheet that included the researcher’s contact information, as well as expressed gratitude for the willingness to participate in the study (see Appendix E).

Secondary Data Collection Procedures

Secondary data included within relevant documents were also collected over the course of the study. In particular, entrepreneurship and small business operations course descriptions and
curricula, as well as informational pamphlets, marketing information, and other materials specific to workshops and seminars relevant to local agriculture and food enterprise were collected from the Cochise County Cooperative Extension and Cochise Community College. Relevant documents were also collected from the interview participants. Examples of such documents included business cards, marketing materials and knowledge resources relevant to the study (e.g., entrepreneurship manuals, business plan models) that were being used by the interviewees. An extensive journal was also kept, which involved recording the steps being taken by the researcher, as well as her observations of the activities and behaviors of the small-scale agricultural producers at the farmers’ markets.

**Data Analysis**

The data collected from the study were transcribed by a third party vendor (rev.com) and organized through a series of idiographic and nomothetic tables (see Appendix G, Appendix H, Appendix I). The transcription vendor was also informed that the interview contents were confidential. Additionally, the researcher informed the participants that pseudonyms would be used in the final report and in any presentations at academic and/or professional meetings in order to protect their anonymity. A separate list connecting each participant with the corresponding pseudonym was created and stored in a locked file located in Saguaro Hall, Room 219A. This list was destroyed immediately following transcription and analysis. The researcher stored all digital audio recordings in a secure file on a secure research drive. This drive is password protected and security firewalls are in place to protect files stored here from unwanted access. The audio recording files were destroyed immediately following transcription completion. Pseudonyms were used in all transcriptions and labels for digital recording files. Only anonymized transcript data are centrally stored within the investigator’s secure research drive. Transcription data that includes no
unique identifying information will be stored for six years on a secure, password protected Dropbox after conference presentations and the publication of results in academic journals have concluded.

The data were analyzed using Creswell’s (2007) recommendations for qualitative data analysis and representation procedures. Deductively, structured codes were developed based on guidelines provided by Miles and Huberman (1994) and according to the theoretical constructs composing Politis’s (2005) entrepreneurial learning model (see Appendix F). Each transcript was thoroughly read and codes and corresponding notes were recorded in the margins. Next, the data was described, classified into codes and organized into tables for each interview (see Appendix G). Idiographically, each table for each interview was analyzed for themes using categorical aggregation (see Appendix H, Appendix I). In categorical aggregation, issue-relevant themes and patterns were revealed through nomothetic (sample-wide) analysis (Creswell, 2007; Mick & Buhl, 1992; Thompson, Locander, & Pollio, 1990).

**Trustworthiness of Analysis**

The researcher has positionality within the study through previous involvement with farmers’ market. Specifically, the researcher’s family actively participates in farmers’ markets. However, no family members were interviewed during the process. The researcher’s positionality provided unique insight on the Cochise County small-scale agriculture community, as well as on the opportunities and challenges confronting those producers who participate in Southern Arizona farmers’ markets.

However, as a participant in the Cochise County small-scale agriculture community, the researcher had some level of interaction with four of the study participants prior to the start of this
study. Accordingly, steps were taken to eliminate bias and enhance the overall trustworthiness of the data. First, triangulation was established through multiple sources including primary sources, observations and secondary sources. The data were cross-referenced by the primary and secondary data collection procedures. This entails the interview and document analysis. Member checking was used and provides summary of the data, analyses, interpretations and conclusions that were shared with the interviewee to check for clarity and accuracy. An audit trail was developed to provide dependability and confirmability of the study. Audit trail is the physical and mental systematic organization of notes, instrument development, raw data collection and procedures of analysis (Lincoln & Guba, 1985).

**Limitation of the Design**

Consistent with all qualitative research, the findings of the current study cannot be generalized to the broader population. The study specifically focusses on Cochise County and its unique culture, border situation and Cooperative Extension program. However, the findings can contribute to the overall understanding of how small-scale agricultural producers who participate in direct-to-consumer market activities obtain entrepreneurial and small business development knowledge. Other limitations of the study include access to subjects and resources available. Limited access to resources and the confined availability of participants also presented this study with limitations.
Chapter Four:

Research Findings

The small-scale agricultural producers who participated in the current study, all of whom resided in Cochise County, Arizona, engaged in the constructs of entrepreneurial learning as identified and described by Politis (2005) by accessing formal, non-formal and informal learning channels. Two specific themes emerged out of the analysis of the data that frame the overall findings of this study. These themes are economic viability and lifestyle. Small-scale agricultural producers who participate in Southern Arizona farmers’ markets as sole income and/or to preserve agricultural activities were categorized under the economic viability theme. Small-scale agricultural producers that participate in Southern Arizona farmers’ market for social interaction and knowledge exchange were categorized under the lifestyle theme. The two themes will be described under individual and community motives, opportunities and challenges.

Individual Motives, Opportunities and Challenges: Economic Viability

Motives

The economic motives that drove some of the small-scale agricultural producers to participate in Southern Arizona farmers’ markets included the need for a primary (or single) income and/or the goal of preserving the financial viability of an existing agricultural enterprise (e.g., generationally owned family farm or ranch). When analyzing the data, five out of the 10 small-scale agricultural producers indicated that they participate in farmers market as their main source of income. These five small-scale agricultural producers have a strong agricultural background, which is consistent with the career experience construct included in Politis’s (2005) entrepreneurial learning model.
One small-scale agricultural producer who participates in farmers’ market as her family’s sole income is from Hereford, Arizona. She is referred to by the pseudonym Heather. Heather participates in both the Bisbee and Sierra Vista Farmers’ Markets. She started selling at these farmers’ markets in April 2014. She sells organic and cage free chicken, duck and geese eggs at both farmers’ markets. She became heavily involved in farmers’ markets after she was laid off from her job in the defense industry, which has a strong presence in Cochise County. Heather’s farm began with just a few chickens that produced about twenty dozen of eggs per week. Since then, she has increased her flock and is now gathering over hundred dozen per week. She expects to double her current production in the future. She shared her insight about participating in the farmers’ markets when stating:

The thing about farmer's market is that most of them [vendors] are not business people. They're mom and pops that have some extras [product] or something. They, it's usually somebody that's either retired or just needs a little boost to their income or do it just for fun. This is a business for us. This pays our bills. There's a big difference. We sell probably 90% of our business here on Thursday. The other 10%, we do the Bisbee market on Saturday. (personal communication, 2015)

Another small-scale agricultural producer who participated in this study is referred to by the pseudonym Jack. Jack sells a range of vegetables that vary by season. He has been participating in farmers’ markets in Pima County, Arizona for approximately 11 years. Currently, he sells at three farmers’ markets in Tucson, three days a week. He was raised in Cochise County and has co-owned the farm for 11 years. His business partner is referred to in this study by the pseudonym Tucker. Tucker has been involved in farmers’ market for 35 years.
Another small-scale agricultural producer included in this study, who is referred to by the pseudonym Wayne, was also driven to participate in farmers’ markets by financial goals. Wayne and his father manage a small farm outside Bisbee that produces pecans, lettuce, eggs and other seasonal produce. Wayne originally did not participate at the farmers’ markets. His father recently had a stroke and needed some additional help with managing the farmers’ market activities, as well as the 160 acre farm in general. However, this dad and son duo has to varying degrees been participating in the farmers’ market for five years. His father would work on the farm after work. Then, after his father retired, farming became full-time for Wayne. Wayne credits learning his farming practices from his father who also learned to farm by working with his own father. Thus, there is a three generation legacy underpinning this family agriculture enterprise.

Another small-scale agricultural producer with a similar motive is referred to in this study by the pseudonym Andrew. On his farm, which is located in Double Adobe, Arizona, Andrew grows a variety of produce throughout the various seasons including watercress, green chili, corn, spinach and kale. Andrew is a third generation farmer and learned his farming practices from experimentation and working with and observing his parents. He has been participating at the Bisbee and Sierra Vista Farmers’ Market since 2010. The farmers’ markets for Andrew, is his first biggest entrepreneurial experience and commented:

> I think I'm very entrepreneurial, but this, I would say, is like the first one that I'm actually making money off of and now I'm probably doing it full time, like, actually living off of

(personal communication, 2015).

Andrew has recently started getting involved in other business avenues such as a restaurant and county co-ops. Andrew’s experimentation was his primary approach to coping with the liabilities of newness that often accompanying an entrepreneur’s early endeavors.
The last small-scale agricultural producer with the financial goal motive is referred to in this study by the pseudonym John. John is one of seven members in his cooperative farm on a 40 acres outside of Douglas. The seven members work together to maintain the farm and support the group financially. They have sold a variety of produce such as a salad mix, beans, beets, broccoli, kale, spinach and leafy greens at the Bisbee Farmers’ Market for the past five years. However, John has industry-specific career experience because of his long history of farmers’ markets. He started selling at farmers’ markets in his early twenties and this is where he was learned to run his business. The revenue that is generated from the farmers’ market is used to support John and the other six members of the community. John shared “We’re bringing in ten grand a year, and that’s supporting seven people and we live well” (personal communications, 2015). Unlike Andrew, John is coping with the liabilities of newness associated with entrepreneurial activities by drawing on his extensive experience participating in farmers’ markets.

However, not all the small-scale agricultural producers’ motive is the same. For instance, an individual, who is referred to by the pseudonym Andrea, participates in farmers’ market to support her passion for engaging in both agricultural activities and, more generally, small scale food production. Andrea is a small-scale agricultural producer that sells through Southern Arizona farmers’ markets cheese, milk, soap, candies and pastries made out of the milk of her goats. She first started selling at farmers’ markets about 16 years ago. However, she decided to leave the farmers’ markets to get licensed and build her business. She returned to the farmers’ markets in 2006. She had previous experience selling at the Bisbee, Sierra Vista and Heirloom Farmers’ Market, but made the decision to focus her efforts on the Heirloom Farmers’ Market. She said “it’s too much to do, too many” (personal communications, 2015). Returning to Politis’s (2005)
entrepreneurial learning model, Andrea has learned the limits of her own ability (or lack thereof) to manage participating in multiple markets through start-up experience.

Andrea has been raising milk goats since she first started at four years of age through the 4-H program in Marana, Arizona. Her sister got involved in 4-H and naturally, she followed her sister’s actions. She was actively involved in 4-H until she graduated high school. She reported that she has learned most of what she knows about farming through her involvement in 4-H. She described herself as the “animal type person” when stating, “Yeah, I like working with the goats and I start[ed] selling this stuff so I could have the goats. Because feed prices were going up and that is the motivation” (personal communication, 2015). In this regard, participating in farmers’ markets provide Andrea with the money needed to support her raising of goats.

The financial motives of these small-scale agricultural producers, albeit varied in nature from one participant to another, illustrates how their participation in farmers’ markets is shaped by the pursuit of economic viability.

Opportunities

Another common trend to emerge from the data were opportunities for improving the economic viability of small-scale agricultural enterprise involving participation in farmers’ markets through the establishment of social relations, marketing activities, and the promotion agricultural literacy.

Social relations and marketing are closely related skill sets that Politis (2005) argued were the strongest among individuals with previous entrepreneurial experience. Social relations are the relationships between two or more individuals. These individuals are expected to be able to adequately cope with the liabilities of newness based on having well-developed business skills,
networking channels and a professional reputation (Politis, 2005). Also, having prior entrepreneurial knowledge will enhance the capacity of an individual entrepreneur to recognize and value viable business opportunities (Politis, 2005). Wayne and Jack had relevant experience working in farmers’ market that allowed them to recognize and value the opportunities to build and maintain social relations in support of their business. For example, Wayne commented on the value of social relations when stating, “You have to have some social skills to be able to talk to people. You can’t just stand there and expect people to understand. You have to talk to people” (personal communications, 2015). Wayne also argued that establishing and maintaining social relations between customers is the biggest need in terms of learning about business practices. Similarly, Jack identified that marketing is also an essential method of learning about business practices. Jack, who has a history of working in the marketing industry stated:

We're fortunate actually in being in the business that we're in, the whole local food, organic movement. We get a lot of free advertisement. We have newspapers, television, people like yourself always coming around, wanting to know, because it's a public interest thing. So we don't really have to pay for advertising. That's a good thing, part of what we do. So that's a plus. (personal communication, 2015)

His recognition of opportunities using prior knowledge relates back to the Politis’s conceptual framework.

Another opportunity of small-scale agricultural producers who participate in farmers’ markets to increase the likelihood of economic viability is agricultural literacy. Consistent with Politis’s (2005) entrepreneurial learning mode, the promotion of agricultural literacy is another opportunity that is most likely to be understood by individuals with existing entrepreneurial
knowledge. Three of the small-scale agricultural producers reported seeing opportunity for enhancing the economic viability of their businesses through the promotion of agricultural literacy.

Jack talked about how he is asked numerous of questions from his farmers’ market customers. The customers often ask questions on how the produce is grown and produced. Jack stated, “it’s actually a really good thing because more and more people are becoming aware of the food supply.” He talked about how he has invited customers to his farm on numerous occasions. He added:

I just invite them out. And I generally tell them bring your gloves with you because I'll probably put you to work while you're here. You can help us do things. And that's been kinda our practice for a long time. (personal communication, 2015)

Jack seizes the opportunity to educate customers through active participation in the growing of the produce he in turns sells to them. His ability to view agricultural literacy as a means of sustaining and growing his customer base is likely in part due to his entrepreneurial experience.

Andrea also expressed an appreciation for the strategic value of increasing the agricultural literacy of farmers’ market customers. However, Andrea faces difficulties trying to meet the high expectations that customers hold her accountable to. She commented:

Our customers expect a lot. They don’t understand how difficult to get all non-GMO organic type food and actually being able to sell a product for a price that they want to pay.

That gets really hard, so they expect everything from you. And it’s not possible, so.

(personal communication, 2015)

Andrea expressed how uneducated customers are one of her biggest challenges she faces when participating in the farmers’ markets. Thus, increasing customer understanding of her growing practices and associated business model is critical to reaching and sustaining her customer base.
Heather also described similar viewpoints on the strategic importance of customer agricultural literacy levels. Heather indicated that uneducated customers and vendors are the biggest challenge she faces when participating at farmers’ markets. She stated:

People that go, “Well, if I can buy a dozen eggs at Fry's for ninety-nine cents, why should I spend seven dollars for our top of the line dozen?” They have no comprehension about how the chickens are raised or how the eggs are treated. How old they are. We try to do a lot of education, both on our Facebook site, as well as, as our customers are here, I live to talk, so that works out good. We really just educate our customers. (personal communications, 2015)

Heather also discussed how her educating her customers has boosted her duck eggs sales. She stated, “When we first started, we would bring one dozen of the duck eggs and we would practically have to give them away. Now we go through eleven dozen or more” (personal communications, 2015). Heather has previous education experience including her earning a masters’ degree in Career and Technical Education and teaching sewing classes.

The small-scale agricultural producers displayed opportunity recognition based on having particular levels and types of experiences, which is consistent with Politis’s (2005) entrepreneurial learning model. To summarize, the opportunities the producers identified and worked to capitalize based on the entrepreneurial experiences and/or agricultural background were the establishment of social relations, creating and utilizing unconventional marketing channels, and promoting the agricultural literacy rates of customers. The opportunities were all directed at supporting and enhancing the economic viability of the small-scale agricultural producers who participate in Southern Arizona farmers’ markets.
Counter-Productive Traits and Challenges

When analyzing the data, it was revealed that small-scale agricultural producers share a number of counter-productive traits and challenges. In terms of counter-productive traits, the participants in the study overwhelmingly reported they have little motivation to seek out business training despite having little to no formal training in entrepreneurship, small business management, food processing, and food production regulations. These topical areas are associated with small business success and as indicated by the participants’ topics with which small-scale agricultural producers have minimum experience. According to Politis (2005), having limited knowledge and experience in these areas make coping with the liabilities of new difficult during the entrepreneurial process.

Three of the small-scale agricultural producers that are driven to participate in farmers’ markets for economic reasons indicated they have little motivation to seek out business training. Andrea, who has no training in the areas of entrepreneurship and small business development, admitted, “I’m not. I know I should be, and everyone tells me that, but I am not really. I am more of an animal type person I am really bad about it” (personal communications, date of interview). The bulk of her business knowledge has been gained through active participation in the launching of new companies. Politis (2005) argued such start-up experience is a common way to learn entrepreneurial principles and practice “by doing the work” and through experimentation that is inherent to such activities. As such, informal learning through practice overrides formal and non-formal business training.

Wayne also reported having little motivation to seek out formal business training and has no previous training of entrepreneurship or small business management. He said that there is no
need for business training because he knows that basic skills. Like Andrea, his knowledge base stems from start-up career experiences and experimentation.

Andrew is also another small-scale agricultural producer who has little motivation to seek out formal or non-formal business training despite having no previous entrepreneurship or small business management training. Andrew talked about how he is aware that Cochise College has business trainings through the Small Business Development Center. However, he is not compelled to participate in these trainings. He stated, “I'd like to think that I'm getting a little bit better than a lot of people around here, trying to make it business-like. But, I really do need help. I'm probably not compelled to go look for it.” (personal communications, 2015).” Andrew has also learned to run this business through experimentation. Experimentation is consistent with the exploration construct that Politis (2005) included in his entrepreneurial learning model.

Jack was yet another small-scale agricultural producer that indicated no interest in seeking out business training. Jack has had no formal or non-formal trainings in the areas of entrepreneurship and small business management. He stated:

I'm the youngest one of our group of owners here. I'm 50. Everybody else is considerably older. It's kinda like teaching an old dog new tricks now. We're not really, I mean we're pretty comfortable with our operation. Not that we don't have things to learn, but we're not out actively seeking new ways of doing things basically. (personal communications, 2015)

However, his partner has had formal business training through university college degrees that he earned in Arizona and North Carolina.

Overall, the small-scale agricultural producers engaged in farmers’ market activities have minimum to no training in the areas of entrepreneurial or small business management. However, they report being content with developing small business management and entrepreneurial skills
through the informal learning opportunities that come through experience and experimentation. In this regard, the emphasis Politis (2005) places on career experience as an avenue for learning entrepreneurial principles and practices is particularly relevant to small-scale agricultural producers in Cochise County, Arizona who participate in Southern Arizona farmers’ markets.

Another challenge that two out of the ten small-scale agricultural producers who participate in farmers’ markets for economic reasons is processing and regulations. Jack indicated that government rules and regulations are their biggest challenges that warrant some additional business training. He stated:

I know that as far as like government rules and regulations go they specify a lot of times what you have and can't do, and that's a huge obstacle, when government comes into play. It's like they create these huge bills in congress that everybody's supposed to know and even congress generally doesn't know, even though they pass them. But we are expected to know all of that stuff and to abide by those rules and regulations whether we agree with them or not. So government is a huge obstacle as far as business practices because they dictate to you what your practices are going to be and that's, I think, that's probably the biggest issue for us. (personal communication, 2015)

Another small-scale agricultural producer that faces similar challenges related to processing and regulation is John. Processing is a particularly challenging task confronting John. He talked about how they minimally process their products because it is hard for him to have access to a certified commercial kitchen. He commented:

If I had to sit down and process all this through certified kitchens, I would have to harvest a day early, take it somewhere else, pay somebody for the privilege of using their kitchen, which 9 times out of 10, 20 other people have used it so it's not clean. Then I've got to buy
licenses and all sorts of other stuff and it really affects the local market in a big way because at best I make 150 bucks a week here. If I had to go through [a] certified kitchen that would drop my ... It would increase my overhead to the point where I probably wouldn't be able to be in business. (personal communication, 2015)

John also talked about an opportunity that would better serve himself and other agricultural producers is an accessible state-ran certified kitchen, which too costly for individual small-scale agriculture business to build and maintain. More specifically, he had concluded that the expenses of a certified kitchen would outweigh the revenue it would generate. He also talked about how he could add more dried and canned goods to his selection at the farmers’ market if such a kitchen existed in Cochise County.

**Individual Motives, Opportunities and Challenges: Lifestyle**

*Motives*

The lifestyle motives that drove some small-scale agricultural producers to participate in Southern Arizona farmers’ markets is social in nature and aimed at knowledge exchange. Three out of the ten small-scale agricultural producers confessed they are motived through the social interactions available at farmers’ markets and the overall enjoyment of participate in these at least in part community events. Overall, these small-scale agricultural producers learn about business practices (as well as growing/production technique) through informal learning channels created and sustained through the network created through their participation in farmers’ markets.

One small-scale agricultural producer who participates in several farmers’ markets for mostly social reasons is referred to in this study by the pseudonym Nick. Nick sells, beef and pork that he raises on his farm in McNeal, Arizona. Nick has a long history with farmers’ markets and
has been participating in the Bisbee and Sierra Vista Farmers’ Market for over ten years. Nick shared how he has learned his business and farming practices through experimentation, talking with other producers, attending training conferences and some college training. Experimentation is related to the start-up career experience construct included Politis’s (2005) entrepreneurial learning model. Nick has his associate’s degree in electronic engineering and has learned accounting skills through courses in college. A non-formal conference that he annually attends is the New Mexico Organic Conference. The conference offers various workshops and visits to small-scale farmers located in the region. Nick reported enjoying the workshops for both the socialization and non-formal learning. Overall, Nick’s motive for participating in farmers’ market is both socially-oriented and aimed at exchanging knowledge with colleagues and other community members. In describing the social aspects of the farmers’ markets, he stated:

Sometimes when you sit at a farmers’ market for four hours ... okay, you're there for four hours, but you had so many hours' prep, and then so many hours when you get home and stuff, doing stuff, that sometimes it's not worth ... if you break it down at an hourly wage, it's nothing. Yeah, I wouldn't say we do it for the money. That's our social outlet. (personal communication, 2015)

Nick also talked about how he sometimes acquires skills through non-formal lectures, but he feels he learns the most through networking with other individuals at the farmers’ markets. The knowledge exchange with other individuals has directly affected his business practices. When he first started at farmers’ markets, he followed another producer’s price list as a guideline for own pricing. Nick first started raising sheep after discussing sheep production with another producer at a non-formal conference in New Mexico. Knowledge exchange is one way in which nascent entrepreneurs cope with the liabilities of newness associated with entrepreneurial endeavors.
Another small-scale agricultural producer who participates in farmers’ markets for lifestyle reasons is referred to in this study by the pseudonym David. David’s motive for participating in farmers’ markets is purely social in nature. David lives in McNeal, Arizona and sells beef, goat and lamb at the Bisbee and Sierra Vista Farmers’ Market. David started in 2003 at the Sierra Vista Farmers’ Market based on Nick’s recommendation. David tried to get into the Bisbee Farmers’ Market, but the market managers did not want to let in new vendors. Eventually, the marketing managers permitted David to participate in this market. He also participated at the farmers’ market at the University of Arizona for three to four years. Ultimately, he left this market because he was not making the revenue that he desired. However, he reported participating in this market for as long as he did despite the lack of revenue based on the opportunity to socialize with those on the campus. He stated:

Then we did the one at U of A for three or four years, but it never really was profitable for us because we had a lot of people that would buy jerky and peanut butter or one pound of ground beef. They were going to class, or they work there but they're not really grocery shopping. They're on their lunch break. So socially, it was fabulous. I would see all my old professor friends and all kinds of other people you know. Students that I knew and this and that. So from a social standpoint it was great but from a business standpoint it wasn't so good. (personal communication, 2015)

David displays opportunity recognition on Politis’s (2005) conceptual framework (see Appendix F). His “lifelong quest for continued growth and acquisition of new knowledge and trying new things” (personal communication, 2015) has developed and refined his ability recognize opportunities. David has learned his farming practices from his time in school, learning by doing, experimentation, and knowledge exchange. His various experiences in his lifelong learning
process has also included working as a vocational-agricultural instructor for eleven years, a community college agricultural instructor for twenty years, a paper routing boy as a young child and being a horse farrier. These various experiences are external to the farmers’ market business and relate back to the management and industry-specific career experience constructs included in Politis’s (2005) entrepreneurial learning model. He also learns from his experiences by exploring new opportunities, which is consistent with the notion of exploration learning as included in Politis’s (2005) model.

Another small-scale agricultural producer that participates in Southern Arizona farmers’ markets for lifestyle reasons is referred to in this study by the pseudonym Brandon. Brandon sells lamb, pork, chicken and fruit. He had a cattle herd of Piedmontese and sold some at the auction. However, the price of beef was so low that he decided to get involved in the farmers’ market and starting sell his beef through this more community-based venue. He thought that it was fun and thus started also selling lamb, chicken and pork. He stated:

Then I had some lambs, so I started selling lambs along there and I had some eggs and it was so much fun, I couldn’t stop. It was just ... You know, what would you do? Sit on a ranch and do nothing? (personal communication, 2015)

Brandon’s motive for participating in farmers markets is to develop social relationships and exchange knowledge with his peers and customers. He has now been participating in farmers’ markets for approximately fifteen years. He sells his meat products at the Heirloom Farmers’ Market in Tucson, Arizona. Brandon’s family has a deep history working as contractors. He himself is a retired contractor and has been an active owner of some type of business for over fifty years. He has learned his farming practices through the experiences he gained through his participation in the FFA. His various experiences are external to the farmers’ markets and are
related to the management career experiences as described in Politis’s (2005) entrepreneurial learning model. Brandon also mentioned that he participates in informal knowledge exchange involving talking to and learning from other producers. He stated:

I paid forty bucks for a book that I should have never ... You know, it does everything except answer questions that I want to ask. That's why I'll drive to Northern California to one of the tree growers and watch him graft. I'll go wherever I have to go to see somebody and talk to them. I don't want to talk to a college graduate, I want to talk to the people that do the work, the ones that have the common sense that do it. Then I know how to do it once I see them do it. (personal communication, 2015)

Brandon also, enjoys reading the Livestock Weekly and Stockman’s Grass Farmer. He likes the various stories about producers featured in the magazine. Despite his interest in learning, he has no intent of pursuing formal or non-formal training.

Another small-scale agricultural producer who participates in farmers’ markets for lifestyle reasons is referred to in this study by the pseudonym Whitney. Whitney started at the Sierra Vista Farmers’ Market in 2008. Whitney and her husband were growing onions and zucchini. They had a surplus of zucchini and someone suggested they sell the produce at the farmers’ market. Beyond distributing her excess produce, Whitney’s motive for participating in farmers’ markets are opportunities to socialize and simply enjoy herself. She has been involved in her husband’s plumbing business for twenty years. This experience with the plumbing is external to the farmers markets and is related to management career experience described in Politis’s (2005) entrepreneurial learning model. She has also learned her business practices and skills through experimentation, which is an aspect of the start-up career experience construct included in Politis’s (2005) entrepreneurial learning model.
The preceding small-scale agricultural producers displayed various constructs of Politis’s entrepreneurial learning model, but their primary motives for participating in Southern Arizona farmers’ markets was for lifestyle reasons that centered on socialization and collegial knowledge exchange.

**Opportunities**

Small-scale agricultural producers have recognized opportunities for enhancing their marketing strategies and promoting the agricultural literacy of their customers through their participation in Southern Arizona farmers’ markets. For example, David stated he has learned that online marketing is one of his biggest needs he faces in terms of developing his entrepreneurial skills and improving his business practices. He stated:

> The area that is the most mysterious is online marketing and sort of indirect sales. So in other words, people ask us all the time, "Do you ship?" All I think about when they ask that question is some soggy box sitting on a dock at UPS with a puddle around it and the label has come off and we get a call saying, "Hey, there's this box here. It's been here three days and it's got your return address on it but we don't know who it goes to." Those kinds of things. So how to make that leap into the internet or not, you know? So far we've not, but we talk about it and think about it a fair amount. (personal communication, 2015)

Davis feels comfortable with learning from his experiences and how to apply the skills he currently possesses. However, he does not have previous experience with online marketing and feels uncomfortable about it. David also believes online marketing would benefit his business, because he could reach a broader consumer population. David’s online marketing situation relates back Politis’s (2005) concept of coping with the liabilities of newness. Individual experience is
positively associated with the ability to cope with the liabilities of newness (Politis, 2005). Similarly, Whitney recognized that marketing is her biggest need in terms of learning about business practices and thus an opportunity for professional growth.

Another opportunity that small-scale producers who participate in farmers’ markets for lifestyle reasons is the promotion of agricultural literacy. For example, Brandon described how he explains to his customers why a federally inspected product matters. He stated, “If somebody wants to buy something out of the backyard, especially chicken, that hasn't had any inspection for cleanliness, for an e-Coli test or a salmonella test, that's up to them, but I'll explain to them why.” (personal communication, 2015) His agricultural literacy opportunity relates back to Politis’s (2005) conceptual framework in the opportunity recognition construct. Nick also recognizes the opportunity to educate the customers as a value-added component of his small-scale agricultural enterprise. He commented on how he must educate customers on the seasonal dimensions of produce and more specifically that some produce cannot be grown year around. He stated:

People also ... not so much for the meat, because ours is frozen, but on your vegetables, well, they're still wanting cantaloupe, watermelon, corn, all year long, so it's an educating of the customer that cantaloupe's not grown in the middle of the winter, no, I don't have cantaloupe. If there's someone that's selling cantaloupe at the market, you know it's not locally-grown. (personal communications, 2015)

Nick’s knowledge and experience with agricultural literacy relates back to opportunity recognition construct of Politis’s (2005) entrepreneurial learning model.

To recap, the small-scale agricultural producers display experiences that relate to the opportunity recognition and coping with the liabilities of newness constructs on Politis’s (2005)
entrepreneurial learning model. These opportunity experiences are specific to recognizing the need for marketing skill development and the promotion of agricultural literacy.

Challenges

The main challenge small-scale agricultural producers’ face when participating in farmers’ markets for lifestyle reasons is little motivation to seek out training in the areas of entrepreneurship or small business management. More specifically, three of the small-scale agricultural producers indicated they have little motivation to seek out training in the areas of entrepreneurship or small business management. These three small-scale agricultural producers have all been participating in farmers’ markets for over ten years.

Nick indicated that he has little motivation to seek out training in the areas of entrepreneurship or small business management because of time. He indicated that he is busy with other tasks that need to be completed on the farm. David also indicated that he has little motivation to seek out training in the areas of entrepreneurship or small business management. However, he said that his farmers’ market assistant referred to in this study by the pseudonym Valerie, would be interested in training. Valerie has been helping David at the farmers’ markets for a little over a year. Brandon simply stated that he is not compelled to seek out training and would not go anywhere for business training. The lack of commitment toward seeking training in areas of entrepreneurship or small business management is related back to the coping with the liabilities of newness construct of Politis’s (2005) conceptual framework.
Learning Environments

The learning environments that the small-scale agricultural producers partake in is formal, non-formal and informal learning settings. On one hand, formal learning settings were the least common environment that the small-scale agricultural producers participated in or were interested in. On the other hand, informal learning settings were the most common settings in which small-scale agricultural producers engage in. Each learning setting is individually explored next.

Formal Learning Settings

Formal learning settings was the least compelling environment for entrepreneurial and business management knowledge and skill development to the participants of this study. Some of the small-scale agricultural producers that considered taking college courses to obtain more information on the business side of farmers’ markets were Nick, Whitney, David and Heather. However, they indicated that the college courses would have to be close, in the evening or at a time convenient to their production and farmers’ market schedule. Overall, the formal education that small-scale agricultural producers have obtained is high school, bachelors, masters and doctorate.

Non-Formal Learning Settings

Non-formal learning settings were of moderate interest to the participants. Some small-scale agricultural producers that considered taking workshops to obtain more information on the business side of farmers’ markets were John, Heather, Nick, Whitney and David. However, some stipulations that would make the workshops a viable option were the topics to be covered, cost
(i.e., free), and convenience in terms of location and time. Recall that two small-scale agricultural producers reported having attended non-formal conference are Nick and Andrew.

Andrew indicated that he attended a non-formal conference “that changed the way he looked his farming practices” (personal communication, 2015). This conference was the New Mexico Farmer-to-Farmer Training Program. This conference is a free year program that educates participants about all aspects of sustainable farming.

Another small-scale agricultural producer that engages in non-formal learning settling is Nick. Nick has attended numerous conferences across the Western areas of the United States. He has also attended workshops in Cochise County, which included a workshop that Baja Arizona Sustainable Agriculture (BASA) and University of Arizona Cooperative Extension co-taught together. A non-formal conference that he attends annually is the New Mexico Organic Conference. He stated, “We go to the New Mexico Organic Farming Conference every year, and if they have business classes or something, yeah, I'll go to that, if something else doesn't pique my interest more.” (personal communication, 2015)

However, Nick indicated that the Arizona Cooperative Extension does not focus enough efforts in food safety or agricultural business programs. Specifically, he stated,

Yeah, and there's a need there, but maybe enough people haven't expressed the desire. That could be something I bring up at the next Extension meeting. They're spread so thin, and that's ... again, New Mexico, I think supports extension a whole lot more than Arizona does. (personal communication, 2015)
Informal Learning Setting

All the small-scale agricultural producers engage in informal learning. Informal learning settings are how small-scale agricultural producers are currently learning the most about farming and business practices and skills. The informal learning settings that small-scale agricultural producers engage in consist of knowledge exchange with other producers, experimentation, and educating customers through agricultural literacy efforts. Small-scale agricultural producers such as Brandon will not participate in any other type of learning setting. However, a concern that emerges is that the majority of the small-scale agricultural producers have no training in entrepreneurship or small business management. The expertise that the small-scale agricultural producers are offering is through start-up career experiences or through experimentation and thus the knowledge and skills being developed and shared may not be trustworthy.
Chapter Five:

Conclusions/ Recommendations

The findings of this study indicate that some small-scale agricultural producers who reside in Cochise County, Arizona participate in Southern Arizona farmers’ markets for economic viability and/or lifestyle reasons. Small-scale agricultural producers who participate in Southern Arizona farmers’ markets as their sole means of generating income and/or to continue to be able to afford their engagement in agricultural activities were categorized under the economic viability theme. Small-scale agricultural producers residing in Cochise County who participate in Southern Arizona farmers’ market primarily to socialize and to exchange knowledge with community members and other farmers or ranchers were categorized under the lifestyle theme.

The small-scale agricultural producers who participated in the current study demonstrated to varying degrees the constructs that compose Politis’s (2005) entrepreneurial learning model. The data revealed that the participants engaged in entrepreneurial learning within formal, non-formal and informal learning settings and through corresponding channels. Formal learning settings and channels were rarely accessed by the small-scale agricultural producers regardless of whether they engaged in farmers’ markets through economic or lifestyle motives.

Non-formal learning settings and channels were identified by a few of the participants as useful sources of information and/or skills specific to business management and entrepreneurship, as well as farming practices. However, the workshops and seminars associated with non-formal learning were mostly viewed as inconvenient in terms of time and location, irrelevant in terms of topic and content, and overall not viewed as an essential resource to the participants’ success in participating in Southern Arizona farmers’ markets. Also, the participants expressed a general lack
of awareness of what opportunities for non-formal learning in the areas of business management and entrepreneurship within their communities.

All of the small-scale agricultural producers who participated in this study indicated accessing knowledge and developing skills relevant to their farmers’ market activities within informal learning settings. More specifically, participants indicated they often learn new practices and pick up tips by simply talking to or observing the approaches of other farmers’ market vendors. Recall how Nick determined the amount to sell his meat products for based on the price other vendors were placing on similar products. The participants also reported learning a great deal about both their production practices, whether these be growing produce or raising livestock, through observing the work of their family members and/or self-experimentation. In general, the participants appeared to prefer informal learning based on convenience and familiarity both in terms of environment (i.e., learning on the job) and interpersonal connections (i.e., learning from family and/or business partners).

However, informal learning channels present some concerns. First, small-scale agricultural producers could potentially provide inaccurate information. Recall that Nick determined his initial prices for his products by following another small-scale agricultural producers. How does one know the price a competitor is selling their products for is both feasible in the eyes of customers and viable in terms of financially sustaining the business? Another concern is the access to informal learning channels. Small-scale agricultural producers have to know someone to learn from them. Also serendipitous learning, which occurs depending upon who shows up at the market and what network you are able to enter. Another concern is the agricultural literacy that occurs between vendors and customers. What is passed on to customers in an effort to promote agricultural literacy and thereby customer loyalty could be inaccurate and incomplete considering
knowledge and skills are not being developed and passed on in non-formal settings. Whereas, individuals with proven expertise (i.e., extension specialists) and diverse perspectives (growers, vendors, customers) come together to learn and exchange information in an organized fashion. The last concern is using experimentation. The small-scale agricultural producers use experimentation to solve problems and improve performance. However, it will remain unclear if there is not a “better” alternative.

Similarly, small-scale agricultural producers are depending on developing knowledge and skills in the areas of entrepreneurship and small business development and management through informal learning channels. Accordingly, and as described in the previous paragraph, small-scale agricultural producers are by default serving as community-based trainers. In order to bring greater consistency and quality to such community-based learning and knowledge sharing, it is recommended that Cochise County Cooperative Extension develop new approaches and models that would make non-formal workshops and seminars relevant to small agriculture enterprise more accessible to those small-scale agricultural producers who are supplying (and thus sustaining) Southern Arizona farmers’ markets.

Non-formal learning facilitated by the Cooperative Extension should not be viewed as a substitute for informal learning. Indeed, informal learning is likely to remain the primary method of knowledge sharing across the small-scale agricultural producer community. However, by providing those producers interested and willing with greater opportunities to develop deeper and more robust knowledge and skills specific to entrepreneurship and small business development and management, the number of producers with enhanced training capacities and cutting edge knowledge will increase across Cochise County.
Consistent with the preceding recommendation, Cochise County Cooperative Extension would in part by establishing a “train the trainer” model that would productively bridge the non-formal and informal learning divide that currently exists. A possible suggestion for Cochise County Cooperative Extension is the development of online modules and training on how small-scale agricultural producers can better educate their customers. This would provide small-scale agricultural producers the tools to successfully educate their customers with the knowledge and research from the university.

The more successful the small-scale agricultural producers are, the more they will contribute to the Cochise County economy. This is critical considering the importance of agricultural enterprise within and across Cochise County. Robert Carreira, Director of Center for Economic Research in Cochise County, released a document in 2006 outlining the composition of the Cochise County economy. Carreira (2006) identified the two largest sectors of Cochise County economy is agriculture and the government. In 2005, there were 15,875 agriculture jobs across the County, which accounted for 27.1 percent of all the jobs in the area. Of course, the County’s agriculture sector is susceptible to the negative effects of extreme weather conditions, falls in commodity prices within national and global markets, foreign competition and government policies and regulations. In general, however, the economic stability of agriculture provides a firm foundation upon which local agriculture enterprise, which in the context of this study has been represented by farmers’ markets, can provide Cochise County with a relatively reliable (albeit modest) economic stimulant, forum for community-wide dialogue, and overall source of community wellness and quality of life. However, the viability of farmers’ markets depends on the capacities of local farmers and ranchers to continue to sustain their enterprises, regardless of
whether they are motivated by economic necessity or the pursuit of a contemporary agrarian lifestyle.

**Recommendations for Further Research**

This current study focuses on small-scale agricultural producers who reside in Cochise County. A recommendation would be to present the same study in multiple counties. Also, the study could be replicated using a quantitative design to reach a larger study population. Another recommendation is the examination of learning outcomes associated with any non-formal entrepreneurship or small business management curricula.
Appendices:

Appendix A: Invitation to Participate

Dear Cochise County Local Agricultural Producers:

I am writing to invite you to participate in a research study that aims to explore how local agricultural producers in Cochise County who participate in farmers’ markets gain information and skills specific to entrepreneurship and small business operations. This study is housed at the University of Arizona and I am the sole investigator.

I would like to speak to local agricultural producers who participate in Southern Arizona farmers’ markets. Specifically, I am interested in conducting individual interviews with Cochise County agricultural producers with various levels of engagement in local entrepreneurial practices that involve direct to consumer sales.

Participation entails a one-on-one interview that will take approximately 1 to 1.5 hours to complete, and will not take more than 2 hours in length. The interview is designed to explore your experiences and perceptions as an entrepreneur in the local agriculture marketplace. The findings of the project will contribute to the literature on entrepreneurial learning and local agricultural environments.

You will not be compensated for your participation in the one-on-one interview.

If you would like to be interviewed, the information you share will be kept confidential and your name and other personally identifying information will not be associated with your comments or perceptions. Also, please be assured that participation in this study is completely voluntary.

An Institutional Review Board responsible for human subjects’ research at the University of Arizona reviewed this research project and found it to be acceptable, according to applicable state and federal regulations and University policies designed to protect the rights and welfare of participants in research.

If you would like to participate in this research study, please email (Jessica Zamudio) at jmzamudio1@email.arizona.edu

Thank you for your consideration,

Jessica Zamudio
Graduate Student, Department of Agricultural Education
College of Agriculture and Life Sciences
The University of Arizona
205 Saguaro Hall
Tucson, AZ 85721
(520)221-1992
Appendix B: Disclosure Form for Research Participation

A Qualitative Exploration of Entrepreneurial Learning among Local Farmers in Cochise County

This is a disclosure form for research participation. It contains important information about this study and what to expect if you decide to participate. Please consider the information carefully.

You are being asked to participate voluntarily in the above-titled research project. The aim of the study is to identify how producers who apply farmers’ markets gain information and skills specific to entrepreneurship and small business operations. No more than 1.5 hours of your time will be needed to complete this study. Your participation in the study will involve participation in a one on one interview. The interview will be audio recorded.

Your participation is voluntary and you may refuse to participate in this study. If you begin the study, you may leave at any time. There are no known risks involved. There is no direct benefit but personal insight into your own interests in agricultural entrepreneurial learning. We anticipate no costs apart from the time you spend completing the research.

Efforts will be made to keep your study-related information confidential. However, there may be circumstances where this information must be released. For example, personal information regarding your participation regarding your participation in this study may be disclosed if required by state law.

Also, your records may be reviewed by the following groups (as applicable to the research):
  - Office for Human Protections or other federal, state, or international regulatory agencies
  - The University of Arizona institutional Review Board or Office of Responsible Research Practices

If you agree to participate in this study, you will not give up any personal legal rights you may have as a participants in this study.

For questions, concerns, or complaints about the study you may contact Jessica Zamudio, Graduate Student, via email at jmzamudio1@email.arizona.edu, by phone at (520) 221-1992, or in person at the Department of Agriculture Education, University of Arizona, 219A Saguaro Hall, 1110 S. Campus Drive, Tucson 85721.

For questions about your rights as a participant in this study or to discuss other study-related concerns or complaints with someone who is not part of the research team, you may contact the Human Subjects Protection Program at (520) 626-6721 or online at http://orcr.arizona.edu/hspp.
Appendix C: Interview Questions

1. What is your highest level of education?

2. Please describe any training in the areas of entrepreneurship and small business management.

3. Please describe any entrepreneurial experience you may have.

4. Please describe your history participating in farmers markets.

5. How have you learned to run your business?

6. How have you learned your farming practices?

7. What are your biggest challenges you face when participating in farmers’ markets?

8. Where do (would) you go to obtain information on the business side of participating in farmers’ markets?

9. What do you sell at farmers’ markets?

10. How do you sell your product at farmers’ markets?

11. What are your biggest needs in terms of learning about business practices?

12. How compelled are you to seek out business training?

13. Where would you go for business training?
Appendix D: Interview Protocol

*Interview Protocol Project: A Qualitative Exploration of Entrepreneurial Learning among Local Farmers in Cochise County*

*Time of interview:*

*Date:*

*Place:*

*Interviewer:*

*Interviewee:*

*Study Purpose and Objective*

The aim of this current study is to explore how local agricultural producers in Cochise County who participate in Southern Arizona farmers’ markets gain information and skills specific to entrepreneurship and small business operations. The current study objective is to describe the formal, informal and non-formal learning channels through which such producers gain entrepreneurial knowledge business information and skills.

*Questions*

1. What is your highest level of education?
2. Please describe any training in the areas of entrepreneurship and small business management.
3. Please describe any entrepreneurial experience you may have.
4. Please describe your history participating in farmers markets.
5. How have you learned to run your business?
6. How have you learned your farming practices?
7. What are your biggest challenges you face when participating in farmers’ markets?
8. Where do (would) you go to obtain information on the business side of participating in farmers’ markets?
9. What do you sell at farmers’ markets?
10. How do you sell your product at farmers’ markets?
11. What are your biggest needs in terms of learning about business practices?
12. How compelled are you to seek out business training?
13. Where would you go for business training?
Appendix E: Debriefing Sheet

Dear Cochise County Local Agricultural Producer:

Thank you for participating in this study.

Your generosity and willingness to participate in this study is greatly appreciated. Your input will help contribute to the researchers’ knowledge of how local producers in Cochise County who participate in Southern Arizona farmers’ markets gain entrepreneurial knowledge and develop business skills.

If you would like more information, or have any further questions about any aspect of this study, then feel free to contact Jessica Zamudio.

Thank you, again for participating and helping me with this study.

Jessica Zamudio
Graduate Student, Department of Agricultural Education
College of Agriculture and Life Sciences
The University of Arizona
205 Saguaro Hall
Tucson, AZ 85721
(520)221-1992
Email: jmzamudio1@email.arizona.edu
Appendix F: Conceptual Framework

A conceptual framework of entrepreneurial learning as an experiential process (Politis, 2005)
## Appendix G: Table 1

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Appendix I: Table 3

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References


