REACHING MID-MILLENNIAL PRODUCE SHOPPERS AT WHOLE FOODS MARKET, INC. IN TEXAS

A Thesis

by

JACQUELYN SARIAH HILL

Submitted to the Office of Graduate and Professional Studies of Texas A&M University in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

Chair of Committee, Billy McKim Committee Members, Holli Leggette

Srividya Ramasubramanian

Head of Department, John Elliot

May 2016

Major Subject: Agricultural Leadership, Education, and Communications

Copyright 2016 Jacquelyn Sariah Hill

ABSTRACT

Mid-Millennials are placing an increasing amount of importance on their health and aim to consume more fresh fruits and vegetables. However, little is known about what mid-Millennials desire when shopping for fresh produce. The purpose of this study was to develop early stage buyer personas that can be further developed to guide message development and advertisements tailored to mid-Millennial produce shoppers at Whole Foods Market, Inc. Thirty mid-Millennial produce shoppers were sampled at three WFM Texas locations. Data were collected using three data collection methods: participant observation, semi-structured interviews, and quantitative questionnaire. The buyer personas developed in this study can serve as a source of reference for WFM to use when creating produce related messages to communicate to the public. In addition, the personas developed in this study can help WFM better understand its produce shoppers and, as a result, improve their customers' produce shopping experience. Although the buyer personas developed are not representative of the entire mid-Millennials population, personas developed in this study are meant to act as a foundation for future research.

NOMENCLATURE

DMP Digital media platform

PBC Planned behavioral control

SCT Social cognitive theory

TPB Theory of planned behavior

WFM Whole Foods Market, Inc.

TABLE OF CONTENTS

	Page
ABSTRACT	ii
NOMENCLATURE	iii
LIST OF FIGURES	vi
LIST OF TABLES	vii
CHAPTER I INTRODUCTION	1
CHAPTER II LITERATURE REVIEW	3
Using Personas to Improve Communications	4
Influential Factors on Purchasing Organic Produce	
Relationship of Demographic Factors with Purchasing Decisions	
Theoretical Framework	
Conceptual Framework	18
Purpose of the Study	21
Context of the Study	
CHAPTER III METHODS	24
Research Design	24
Sample Size, Power, and Precision	26
Participant Characteristics	26
Sampling Procedures	31
Data Collection	33
Trustworthiness	42
CHAPTER IV FINDINGS	44
Research Objective One	44
Research Objective Two	
CHAPTER V CONCLUSIONS	77
Research Objective One	77
Research Objective Two	
Recommendations	
Conclusion	
REFERENCES	90

APPENDIX A	97
APPENDIX B	98
APPENDIX C	99
APPENDIX D	101
APPENDIX E	138

LIST OF FIGURES

	Page
Figure 1. Theoretical model used to guide the process and findings	11
Figure 2. Theoretical model used to guide data interpretation	13
Figure 3. Conceptual model used to guide the persona development process	20
Figure 4. Conceptual model used to guide data analysis	25
Figure 5. Importance of each persona skeleton as identified by the participants	46
Figure 6. Importance of each ad hoc persona as identified by the participants	49
Figure 7. Persona profile for the Clean Eater or Health Nut	54
Figure 8. Persona profile for the Socially Concerned on Tree Hugger	56
Figure 9. Persona profile for the Thrifty or Cheapskate	58
Figure 10. Persona profile for the Particular or Picky	61
Figure 11. Recommended stages for future development of buyer personas	83

LIST OF TABLES

	Page
Table 1. The Persona Lifecycle	19
Table 2. Participants' Sex	27
Table 3. Participants' Age	27
Table 4. Participants' Race and Ethnicity	28
Table 5. Participants' Income	28
Table 6. Participants' Education	29
Table 7. Participants' Occupation	29
Table 8. Participants' Marital Status	30
Table 9. Participants' Number of Children	30
Table 10. Participants' Living Status	31
Table 11. Descriptions of the 14 Persona Skeletons	44
Table 12. Distribution of Participants by Persona Type	51
Table 13. Demographics of the Clean Eater or Health Nut	63
Table 14. Demographics of the Socially Concerned or Tree Hugger	65
Table 15. Demographics of the Thrifty or Cheapskate	67
Table 16. Demographics of the Particular or Picky	69
Table 17. Social Media Use and Credibility for the Clean Eater or Health Nut	71
Table 18. Social Media Use and Credibility for the Socially Concerned or Tree Hugger	72
Table 19. Social Media Use and Credibility for the Thrifty or Cheapskate	74

CHAPTER I

INTRODUCTION

According to the Centers for Disease Control and Prevention (CDC) one of every three people in America were obese and a devastating 69% of adults in America were overweight in 2015. Obesity is associated with heart disease, diabetes, stroke, and some types of cancer—leading causes of death in the US (Odgen et al., 2015). Many factors contribute to obesity including genetics and individual behaviors, such as physical activity, dietary patterns, and medication use. Obesity is most commonly caused by excess energy consumption or dietary intake in comparison to energy expenditure or loss from metabolic and physical activity (Wright & Aronne, 2012). Additionally, high calorie and processed foods are easily accessible and more affordable than non-processed foods with high nutritional value, such as fresh fruits and vegetables. Thus, the increasing number of Americans who are overweight and/or obese comes by little surprise.

Prevention is arguably the best strategy for combating obesity. Thus, the development of healthy dietary habits must begin at an early age. According to Savage, Fisher, and Birch (2007), eating behaviors during the first five years of life influence future eating patterns. Therefore, as Millennials represent the next generation of parents, it is important they set healthy dietary guidelines for themselves so their beliefs and behaviors will reflect on their children's health. Perhaps if Millennials introduce positive dietary patterns to their children during the first few years of their life, those beliefs and

patterns will be instilled in their children and have a greater influence on their future health.

Millennials commonly seek out information about their food ingredients and strive for a healthy lifestyle (Fromm, Butler, & Dickey, 2015). While the definition of *health* varies, Millennials have been noted to link their consumption of fresh fruits and vegetables to improved health (Detre, Mark, & Clark, 2010). Among the thousands of grocery retailers that offer organic and sustainable food, the marketing team for Whole Foods Market, Inc. (WFM) position the company as the world's leader in natural and organic foods. Perhaps that is why the Millennial generation is attracted to WFM and the healthy food options it has to offer. However, little is known about Millennial shoppers at WFM and why they shop there. Additionally, little is known about Millennial fresh produce shoppers and what factors are important to them when shopping for fruits and vegetables.

Part of WFM's mission is to offer the highest quality, least processed, most flavorful and naturally preserved foods. According to a Nielsen report (2014), those who understand Millennials and how to best reach and engage them, will be in the best position to *capitalize* on the opportunity or mission they present. Perhaps if WFM can reach the Millennial generation with targeted fresh produce messages, they can positively influence their eating behaviors and potential increase of healthy eating trends around the globe.

CHAPTER II

LITERATURE REVIEW

College students in the US are becoming increasingly more health conscious and are realizing they must decrease their fast food intake and consume more fresh fruits and vegetables to be considered *healthy* (Detre et al., 2010). Additionally, according to a National Purchase Diary (NPD) Group article by Kim McLynn (2015), younger adults between the ages of 18 and 34, also known as the Millennial generation, are the main drivers of the shift to fresh foods and beverages. However, little is known about what Millennials expect or desire as part of their produce shopping experience, but they find value in their produce being organic (Detre et al., 2010).

Although the Millennial generation has been defined in several ways, Pew Research Center defined Millennials as those between the ages of 18 and 34 (para. 1, 2015). Because of the wide span of the Millennial generation, the generation can be broken down into several segments based on age. Despite the seemingly common characteristics and stereotypes associated with individuals in the Millennial generation, significant differences existed among Millennials (Pitta, 2012). For example, Kowske, Rasch, and Wiley (2010) stated there are key differences within the Millennial generation. In addition, Bucic, Harris, and Arli (2012) found that the Millennial generation is not a homogeneous group and should be treated as a collection of submarkets versus a single niche market.

Using Personas to Improve Communications

As cited by Bandura (2001), "tailored communications are viewed as more credible, are better remembered, and are more effective in influencing behavior than general messages," (p. 286). Researchers have investigated the effect of tailored communications in health-related messages (Kreuter & Wray, 2003; Hawkins, Kreuter, Resnicow, Fishbein, & Dijkstra, 2008; Lustria, Noar, Cortese, Stee, Glueckauf, & Lee, 2013). In fact, Kreuter and Wray (2003) reported health communication programs that successfully make their information relevant to their intended audience will be more effective than health communication programs that do not. Lustria et al. (2013) investigated the effect web-based tailored intervention programs has on health-promoting behaviors and the improvement of health outcomes across various medical conditions and patient populations. Lustria et al., (2013) reported that their results support the benefits of tailored web-based interventions, as well as non-tailored approaches.

Tailored communications is also referred to as *market segmentation* in the literature. Market segmentation is the process of dividing an overall market into segments or groups based on similar characteristics and needs. Mukiibi and Bukenya (2008) used the cluster analysis technique to create market segments among 500 grocery shoppers in Alabama. Mukiibi and Bukenya (2008) found that a majority of the grocery shoppers in the sample agreed that the most important consideration in choosing a grocery store was if the store was open in the evenings on weekends. Furthermore, the

sample indicated that competitive prices and items produced without hormones were important when choosing a grocery store to shop at, as well.

Although there is a small presence of market segmentation in the literature related to fresh produce, the application of tailored communications in fresh produce-related messages and advertisements could not be found. Therefore, the success of tailored marketing prompted the idea to create buyer persona profiles based on mid-Millennials' perceptions of fresh produce and their shopping habits while shopping at WFM. Furthermore, when fully developed, WFM advertisers will be able to tailor produce-related messages to specific audiences within the mid-Millennial generation, which are represented through personas.

Persona development

The personas method varies among researchers. However, personas are widely known as an approach to gathering information about people to create a single profile representing a group of people who share similar beliefs (Grudin & Pruitt, 2002). The information gathered about peoples' needs, behaviors, and preferences is used to develop vivid descriptions about overtly fictional characters, also known as *personas* (Grudin & Pruitt, 2002). Developing personas has the following advantages: a) ability to engage teams to think about users in a more detailed, personal way, b) ability to extrapolate information to form the personas to make marketing and design decisions, and c) ability to avoid problems that arise when a full spectrum of user data is presented, including paralysis and inappropriate generalization (Chapman & Milham, 2006; Pruitt & Grudin, 2003). Personas may also be useful for providing a shared communication basis and help

marketers focus on their target audience (Pruitt & Grudin, 2003). Broschinsky and Baker (2008) reported personas have guided businesses and organizations to the development of better communication with their customers.

Influential Factors on Purchasing Organic Produce

Hjelmar (2011) found consumers' purchase of organic food products was primarily a matter of convenience and reflexive practices influenced by efficiency, price, quality, health, reflections and principles, joint decisions with family, influence from mass media, and becoming a parent. However, the Consensus of International Research ranks the main reasons for purchasing organic produce in the following order: personal health; product quality; and concern about the degradation of the natural environment (Pearson, Henryks, & Jones, 2010). For the purposes of this study, I focused on narrowing the factors identified in the literature into three main categories presented in WFM's positioning statement—"Quality & Convenience at Everyday Low *Prices*.

Quality

Consumers place an increasing amount of importance on personally experiencing product quality such as taste and freshness prior to purchasing (Hasan, 2010). In a recent study, Roberts (2014) found 92% of participants said *freshness* is *very important* in their decision to purchase food. In addition, Nganje, Hughner, and Lee (2011) found that *taste* was one of the top five rated characteristics among the population when buying fresh produce.

According to Paul and Rana (2012), people who believe in health benefits "can be the potential consumer of organic food" (p. 412). Despite the nutritional facts, organic

food is often described as being healthier than conventional food products (Magkos, Arvaniti, & Zampelas, 2006; Sirieix, Kledal, & Sulitang, 2011). Thus, Millennials who place importance on personal health are more likely to purchase organic food products versus conventional products.

Furthermore, Millennials are considered to be more concerned about the environment than most generations (Harris, Stiles, & Durocher, 2011). In addition, Millennials have great concern for ethical sourcing and environmentally-friendly products (Gustin & Ha, 2014; Smith, 2014). Organic practices are considered to be environmentally-friendly and, therefore, Millennials who are environmentally-conscious are more prone to purchase organic foods.

Convenience

According to Wales (2009), "Convenience has an immense impact on the food choices of today's consumers," (p. 40). Although the practice of purchasing organic produce is growing among the Millennial generation, little academic research has focused attention to understanding the importance of convenience when shopping for organic produce, in particular. Specifically, there is a lack of contemporary research noting the importance Millennials, particularly mid-Millennials, place on the convenience factor when shopping for produce. However, researchers (Ginsberg and Bloom 2004; Lu, Bock, & Joseph, 2013) have reported that convenience, as well as availability, price, and quality, each continue to be important to the general public when considering the intent to purchase green products.

Relationship of Demographic Factors with Purchasing Decisions

Demographics are important. According to Lee (2005), demographic characteristics including gender, education, age, income, and marital status are related to consumers' purchasing decision process. In addition, by the guidelines identified in the Publication Manual by the American Psychological Association (2010), only the major demographic characteristics are required to be collected in every research study that includes human participation. The major demographics include age, sex, ethnic and/or racial group, level of education, and socioeconomic status. In addition, other socioeconomic characteristics are needed for studies that include income, occupation, marital status, number of children, and current living situation. According to Prakash and Yadav (2015), "children play an important role in the consumer market by influencing their parent' purchases," (p. 400). In addition, Wales (2009) reported that respondents who were not responsible for meal preparation for other household members were more convenience oriented when shopping for food. The following subsections help describe the importance of asking topic-specific characteristics to understand the sample under the context of this study.

In a recent study, Roberts (2014) reported females were more likely to purchase organic foods on a regular basis. According to a Havas Worldwide (2010) *Prosumer Report* on gender differences among the Millennial generation, men and women were "full-fledged partners, sharing resources and responsibilities as they work towards common goals" (p. 1). However, Pew Research Center (2013) indicate that only 26% of Millennials get married between the age of 18 and 32. In addition, the median age of

first marriage among females in Texas is reported in the U.S. Census' five-year data (2010-2014) as 25.7 years old and 27.5 years old for males. The data presented by Pew Research Center and the U.S. Census illustrated the possible relationship between an individuals' marital status, specifically Millennials, and the influence from spouses on purchasing decisions.

Researchers have noted a significant relationship between income levels and purchasing habits (Herman, Harrison, & Jenks, 2006; Guthrie, Lin, Reed, & Stewart, 2005). In regard to produce purchasing habits, Webber, Sobal, and Dollahite (2010) reported income plays a significant role. In addition, Roberts (2014) found income had the most significant relationship with the preference to buy organic foods. Thus, individuals with higher incomes preferred to purchase organic foods. As Roberts (2014) mentioned, "those with higher income levels have greater purchasing powers than those with less income" (p. 36). In addition, those with higher incomes could typically afford to put less focus on the price of a product and more focus on factors like product quality.

Taylor and Keeter (2010) found that as Millennials begin making more money and increasing their education level, they are more likely to engage in green/sustainable practices, including purchasing organic and/or fresh produce. According to a SymphonyIRI Group Consumer Network Report (2012), 86.3% of Millennials reported that low prices were a first or second attribute choice when deciding where to shop. However, Millennials' produce shopping habits and their perspectives on the production and retail practices of fresh produce are not overtly noted in the literature. Moreover, according to Fromm and Garton (2013), "Millennials are not a homogeneous cohort, and

applying the new rules is not a one-size-fits-all solution," (p. 169). However, there is not an obvious resource for identifying the best practices for reaching mid-Millennials with fresh produce-related messages.

Theoretical Framework

Social cognitive theory

Bandura's (2001) social cognitive theory (SCT) was used as theoretical guidance for the design and interpretation of this study. SCT was not tested in this study, but instead, it *guided* the process and findings of the study. According to Bandura (2001), "social cognitive theory analyzes social diffusion of new styles of behavior in terms of the psychosocial factors governing their acquisition and adoption and the social networks through which they spread and are supported" (p. 265). The concept of SCT was references to help interpret what factors played into the decisions mid-Millennials made when purchasing produce.

SCT has three components arranged in a triadic reciprocal relationship of determinism: personal determinants, behavioral determinants, and environmental determinants. Data was collected *independently* for each component of SCT and used to develop the personas. An illustration of how "behavior, cognition and other personal factors, and environmental influences all operate as interacting determinants that influence each other bi-directionally" (Bandura, 1998, p. 2) is presented in Figure 1.

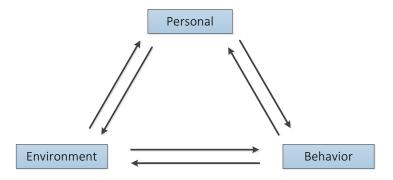


Figure 1. Theoretical model used to guide the process and findings

Bandura's SCT (1986) was referenced to conceptualize the design, data collection, analyses, and interpretation of data for this study. The following equation was used to divide and relate data in this study: Personal Determinants (P) + Environmental Determinants (E) = Behavioral Determinants (B).

Personal determinants. A person's beliefs, attitudes, and thoughts (psychographics), including how a person thinks (cognition) and/or feels (affection), and the internal processing of a person's thoughts are components of personal determinants. By understanding the personal determinants of a person, one can better understand, or in some cases, predict a person's behavior when placed in a specific environment (Bandura, 1986). Data on the participants' personal characteristics was collected using a quantitative survey and in-depth interviews.

Environmental determinants. The environmental component can be conceptualized as how people function, think, and exist. Many things can influence a person's environment, including geographical location, culture, and setting, which is why this information should be included when developing personas. The physical

environment of the data collection process for this study was WFM. Specifically, WFM grocery stores in three geographic locations: Austin, Houston, and Dallas, Texas.

Additionally, an environment is more than where a person physically exists (Bandura, 1986); it can also include a virtual place or mindset of a person. By understanding the specific environment in which people exists, marketers can better understand, or in some cases, predict how people may behave based on their personal characteristics. For example, if a marketer or advertiser wants a specific audience to react or behave a certain way, they can reach the audience in a specific environment the audience uses most frequently. Therefore, one of the objectives of this study was to describe the media consumption habits of mid-Millennial participants to better understand which media platform is the most effective approach to reaching mid-Millennials.

Behavioral determinants. The behavior component of SCT is the outward expression of what a person is thinking when placed in a particular environment (Bandura, 1986). In this study, behavioral characteristics refer to the participants' behavior of purchasing organic produce. Behavioral data was collected in the quantitative questionnaire and in-depth interview phases of this study. As previously mentioned, data representing each of the three SCT components, including behavioral characteristics, was analyzed independently and used to develop buyer personas.

Theory of planned behavior

Understanding consumers is complex. For the interpretation needs of this study, I drew on one theoretical assumption—theory of planned behavior (Ajzen, 1985)—to link

the personal, behavioral, and environmental characteristics identified by SCT to the behavioral intentions associated with attitudes, subjective norms, and perceived behavioral control (Figure 2). TPB is an extension of the theory of reasoned activity made necessary by the original model's limitations in dealing with behaviors over which people have incomplete decision-making control (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975).

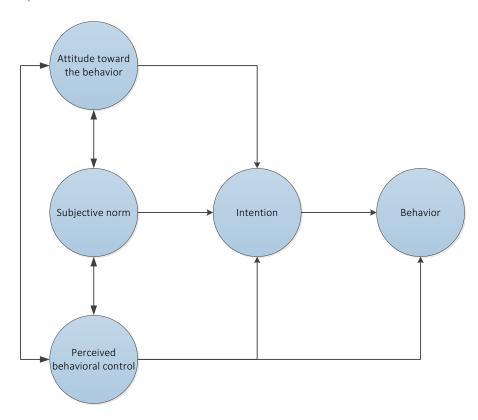


Figure 2. Theoretical model used to guide data interpretation

Intention to perform a given behavior is the central factor in the TPB diagram. A person's intentions are assumed to capture the motivational factors that influence his or her behavior. In addition, three factors effect a person's intentions and, in result, their behavior: 1) Attitude toward the behavior, 2) subjective norms, and 3) PBC.

Attitude is defined as the degree to which a person has a favorable or unfavorable evaluation or opinion on a certain behavior (Ajzen, 1991). In addition, attitude is the consideration of the outcomes that will come of a specific behavior of interest.

Furthermore, subjective norm is defined as the belief of whether a person approves or disapproves of a specific behavior (Ajzen, 1991). Lastly, PBC is defined as someone's perception of the ease or difficulty of performing a certain behavior of interest (Ajzen, 1991).

According to Ajzen (1991), "the resources and opportunities available to a person must, to some extent, dictate the likelihood of behavioral achievement." Thus, there is greater psychological interest in the *perception* of behavioral control and how it effects intentions and behavior (Ajzen, 1991). In fact, PBC is most closely related to Bandura's (1977, 1982) concept of perceived self-efficacy—"concerned with judgments of how well one can execute courses of action required to deal with prospective situation" (Bandura, 1982, p. 122). TPB includes the basic construct of self-efficacy within a more general framework of the relations among beliefs, attitudes, intentions, and behavior.

TPB is a theoretical rationale WFM can use to positively change customers' shopping behaviors by considering its factors. Moreover, understanding the behavior and attitudes of specific audiences by capitalizing on perceived social norms may help better develop and target in- and out-of-store advertisements to specific customer types.

The primary goal of this study was to understand how mid-Millennials receive (through media) and react to advertisements related to fresh produce. Drawing on the

basic tenants of SCT, how persons think (cognition) and feel (affect or emotion) are personal determinants (Bandura, 1986). Therefore, for the purposes of this study, how persons think and feel about fresh produce will be considered the personal determinants.

Based on the tenants of SJT (Doherty & Kurz, 1996), a person's thoughts may be influenced by messages he or she receives through the media. Although environments are often conceptualized as a person's physical surroundings, in some instances, an environment can be created by environmental influences, including messages delivered through specific mediums. Therefore, for this study, mediums through which people receive messages will be considered the environmental determinant.

Based on the tenants of the TPB (Ajzen, 1991), human behavior can be predicted by understanding a person's intention to perform a given behavior (e.g., tell someone about an idea or belief) and understanding his or her motivational factors (e.g., the amount of effort he or she is willing to exert to perform a behavior, perceived societal norms, and/or perceived control of a behavior). Therefore, for this study, a person's intent to tell someone about an idea or belief related to the advertisements included in this study, the amount of effort he or she is willing to exert to tell someone about an idea or belief, and the person's perceptions of societal norms will be considered the behavioral determinants.

As Bandura (1986) explained, a triadic reciprocal relationship exists among personal, environmental, and behavioral determinants. Therefore, the purposes of this study, if we understand how persons think and feel about advertisements and identify the

mediums through which they receive advertisements, we can more accurately predict a person's behavior.

A conceptual presentation for developing user personas was described by Miaskiewicz (2010) and Adlin and Pruitt (2010), who suggested five phases of the persona lifecycle. They described data are first collected about user needs in the predesign, or *family planning*, phase. This data is generally quantitative data. To better understand quantitative data, however, it is common to collect qualitative data, generally in the form of interviews or observations (Cooper & Reimann, 2003; Goodwin, 2002). Adlin and Pruitt (2010) believed "...the best personas come from a variety of sources, especially those including both quantitative and qualitative data," (p. 14-15). In addition, when both quantitative and qualitative methods are used it allows for a deeper understanding of the sample.

Second, researchers analyze the findings once the data are collected and observations are identified for each participant. Similar observations are then grouped together using a cluster analysis and given a thematic name (Pruitt & Adlin, 2006). These clusters will represent the persona skeletons. Once the skeletons are formed across all participants, they become the basis for a persona (Goodwin, 2002). There is not set number of skeletons or personas to reach; thus, the number of personas may vary greatly depending on the complexity of the subject. There may be as few as three (Broschinsky & Baker, 2008) or as many as eight (Lage, Losoff, & Maness, 2011) personas developed in a study. Third, once the personas are created, the researcher will go back to the data

collected in the pre-phase to build the narrative descriptions for each persona profile.

According to Cooper (2000),

personas are not real people, but they represent them throughout the design process. They are hypothetical archetypes of actual users. Although they are imaginary, they are defined with significant rigor and precision. Actually, we don't so much 'make up' our personas as discover them as a byproduct of the investigation process. (pp. 123-124)

Although there are drawbacks—subjectivity, lack of rigor, time-intensive, and required specialized skills—persona development is a successful method for improving marketing and communication decisions (Junior & Filgueiras, 2005). A recent study by Hendriks and Peelen (2013) investigated the implementation of personas for a charity sporting event. The four personas presented in Hendriks and Peelen's study (2012) were developed based on participants' motivation to participate in charity sporting events.

As previously mentioned, the persona development process used for this study was adapted from Adlin and Pruitt (2010). In contrast to the five stages suggested by Adlin and Pruitt (2010) for product development, a review of persona-related literature in the context of marketing and communications led to the conceptual development of an eight-stage cycle. However, the personas developed in this study only reached the fourth (infant) stage and will require further research and development to reach the toddler stage, and so on.

Similar to the conception, birth, and maturation of a human, personas (and our understanding of each unique persona) evolve over time. Early personas contain the least

amount of information, and may appear to be useless unless they are furthered through additional research. Eventually, personas are developed and tested enough that they will become adult-level personas and have the greatest contribution to society and advertisers.

Because the empirical work related to understanding how mid-Millennials' receive (through media) and react to advertisement messages related to fresh produce is limited, the outcome of this study will be restricted to the earliest developmental stages of personas—essentially, limited hypotheses of how types of people may react to a very specific stimulus. Subsequently, researchers will be able to use the personas developed in this study as sampling guides and hypotheses for future studies to advance the personas.

Conceptual Framework

Developing an understanding of how specific topics are perceived and persons' reactions to specific information exceeds the bounds of one study. Therefore, a conceptual adaptation of Adlin and Pruitt's (2013) framework for developing personas was referenced to subdivide the stages of development and restrict the bounds of this study (Table 1).

Table 1

The Persona Lifecycle (adapted from Adlin & Pruitt (2010))

The Persona Lifecycle (adapted from Adlin & Pruitt (2010))			
Stage	Definition	Steps	
Family planning	Family planning is "the time when you will do some investigation and strategic thinking about your organization and its approach to user-centered design (UCD) and development" (Adlin & Pruitt, 2010).	 Review of the literature Create action plan Collect data Participant observation Semi-structured interviews Questionnaire 	
Conception	The <i>conception</i> stage consists of the initial development of personas by using the data collected in the family planning stage to create skeletons (Adlin & Pruitt, 2010).	 Identify ad hoc personas using WFM positioning statement—"Quality and convenience at everyday low prices." Process the data: Identify themes and relationships Create persona skeletons using participant observation and semi-structured interview data 	
Gestation	The <i>gestation</i> stage consists of prioritizing and grouping the skeletons into personas (Adlin & Pruitt, 2010).	 Prioritize the persona skeletons Develop personas from persona skeleton data 	
Infant	The <i>infant</i> stage was adapted from the maturation stage developed by Adlin and Pruitt (2010). An infant-level persona is made up of small-scale data and is not representative of an entire population.	1. Further develop the personas using demographic and psychographic data	

Stages of persona development have been described in parallel with stages of the human procreation and development lifecycle (Adlin & Pruitt, 2010; see Figure 3).

Some personas are more useful than others, which arguably depends on the need, level

of development (specificity), and accuracy of the persona to describe the target consumer. The concept behind the development for the persona lifecycle for this study was adapted from Adlin & Pruitt (2010), who identified the following five stages in the persona lifecycle when considering product development: 1) family planning, 2) conception and gestation, 3) birth and maturation, 4) adulthood, and 5) lifetime achievement, reuse, and retirement. However, through an in-depth review of personarelated research and the use of personas in marketing and communications, I believe the persona development process is more complex than the five stages used for product development. Therefore, I adapted the persona lifecycle developed by Adlin and Pruitt (2010) and developed an eight-stage persona lifecycle (Figure 3).

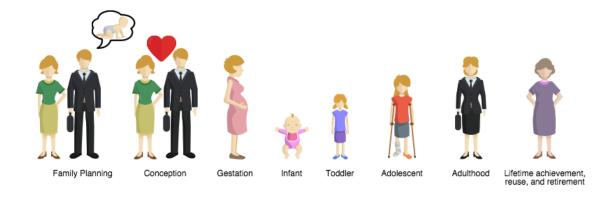


Figure 3. Conceptual model used to guide the persona development process (adapted from Adlin & Pruitt (2010))

According to Adlin and Pruitt (2010), persona development begins in the family planning stage, in which the utility for personas is explored. If a need for personas is determined, the gestation stage begins, which is very similar to the gestation period a human experiences (Adlin & Pruitt, 2010). In the gestation stage, data are collected and

used for persona development, which is referred to as the birth and maturation stage (Adlin & Pruitt, 2010). The birth and maturation stage identified by Adlin and Pruitt (2010) is somewhat vague and therefore, the stage was divided into three specific stages—infant, toddler, and adolescent.

Purpose of the Study

The purpose of this study was to develop early stage, buyer personas that can be further developed to guide message development and advertisements tailored to mid-Millennial produce shoppers at WFM. Thus, specific information was needed to create personas such as buyers' needs, preferences, and behaviors. Research objectives and questions were presented in sequence of analysis, not sequence of data collection. This was necessary because the outcome of some analyses were used as independent variables in subsequent analyses, e.g., persona types has to be determined before describing the demographic characteristics of the individuals in each persona type.

RO1: Develop personas considering mid-Millennials' thoughts and behaviors related to WFM's positioning statement—"Quality and convenience at everyday low prices."

- RQ1.1. When considering fresh produce, what do mid-Millennials believe about **quality**?
- RQ1.2. When considering fresh produce, what do mid-Millennials believe about **convenience**?
- RQ1.3. When considering fresh produce, what do mid-Millennials believe about **price**?

RQ1.4. How do mid-Millennials behave when shopping for fresh produce at WFM?

RO2: Describe the demographics and psychographics for each persona

RQ2.1: What are the demographic characteristics (i.e., age, gender, race, ethnicity, income, education, occupation, marital status, number of children, and living status) of each persona?

RQ2.2: What are the psychographic characteristics (i.e., media use and perceived credibility of food-related messages in the media) of each persona?

Context of the Study

WFM was founded in 1978 with the first location being built in 1980 in Austin, Texas. Company headquarters are located in Austin, Texas above the flagship location on Lamar Blvd. Currently, there are 434 WFM locations in the US, Canada, and the United Kingdom. In addition, WFM is the eight largest food and drug store in the U.S., offering more than 2,600 natural and organic products, as well as *Everyday Value* and *Whole Catch* brands. The US Department of Agriculture identifies WFM as a *certified organic* grocery retailer and is required to follow five compliance points: 1) organic integrity of sources, 2) truth in labeling, 3) prevention of contamination of any kind, 4) prevention of co-mingling, and 5) verification that cleaning and pest control procedures do not leave residues or compromise organic integrity (Whole Foods Market, 2011).

To alter the reputation of high priced products, WFM recently introduced a 365 by Whole Foods MarketTM, a lower-priced grocery chain primarily geared toward the

Millennial generation. According to Fortune Magazine (2015), WFM representatives said the new store format would offer a *curated* selection and would essentially target those who want Whole Foods quality without the Whole Food costs. In addition, the new chain will offer a more convenient layout so that customers can shop at ease. In an interview with Fortune Magazine (2015), Whole Foods co-CEO Walter Robb said the new chain "will deliver a convenient, transparent, and values-oriented experience geared toward Millennial shoppers, while appealing to anyone looking for high-quality fresh food at a great price" (para. 4).

However, in several market research reports, researchers noted data that contrasts the idea of price being the most important factor among Millennial consumers (Harris, Stiles, & Durocher, 2011; Gustin and Ha, 2014; Smith, 2014). Investigating price, quality, and convenience, WFM and *365 by Whole Foods Market*TM can better understand the mid-Millennial consumer segment in Texas.

CHAPTER III

METHODS

Research Design

The purpose of this two-part descriptive study was to develop early stage, buyer personas that can be further developed to guide message development and/or advertisements tailored to mid-Millennial produce shoppers at Whole Foods Market. For this study, I used a cross-sectional design and three data collection methods to collect the data necessary to develop four infant-level personas. A cross-sectional design includes data collection on more than one case during a single period of time (Bryman, 2012). The following methods, in sequential order, were used during a single period of time to collect data for this study: 1) participant observation, 2) semi-structured interview, and 3) questionnaire.

In chapter three, I described the methods used to develop buyer personas, which were used to describe the range of individuals within the mid-Millennial generation based on the following criteria: 1) participants' fresh produce shopping habits, 2) participants' overall perceptions of fresh produce, and 3) participants' demographic and psychographic characteristics. In summary, I first developed personas skeletons using data collected from participant observation and semi-structured interviews. Then, I used the demographic and psychographic data to better describe the persona profiles and develop personas.

Because of the complex nature of this study, I analyzed the data from all three data collection steps using an abductive approach—a conceptually cyclical approach of

inductive and deductive reasoning (Figure 4). According to Morgan (2007) it is common in mixed method studies to use a pragmatic approach to a research design, which is both theory-led and data-led.

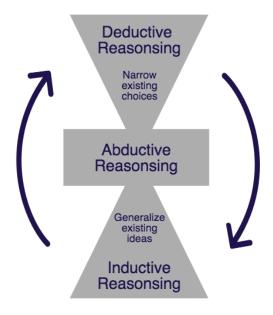


Figure 4. Conceptual model used to guide data analysis

When analyzing data in an abductive approach, researchers begin with ontology – "the starting point of all research" (Grix, 2002, p. 177). Furthermore, Blaikie suggested that ontological claims are "claims and assumptions that are made about the nature of social reality, claims about what exists, what it looks like, what units make it up and how these units interact with each other" (2007, p. 8). Therefore, as members of society we can infer that ontological assumptions are led by conscious decisions and what we believe constitutes as social reality, or what we perceive as reality.

Sample Size, Power, and Precision

This study was exploratory because the outcome of the study resulted in personas, which must be further developed by researchers using data and analyses to reach the higher level personas. The sampling procedures and adequacy of those procedures will be included in the findings of research question three. The descriptive outcome of this study was based on describing participants' characteristics as a group. Therefore, the minimum number of participants necessary for the descriptive analysis was 30 individuals to reach a statistically *large* sample. In reference to the number of participants, a theory originated by Gosset (1908) states that 30 is reaching a statistically *large* number, which will theoretically provide a normal distribution of the data.

Participant Characteristics

Because a single sample of participants were included in this study, participant characteristics were presented before the in-depth description of procedures, measures, and analyses. A purposive sample of individuals was conveniently selected from three WFM locations. Purposive sampling is a form of non-probability sampling (Bryman, 2012). The purposive sampling method was used for this study because I was only looking for customers who were between the ages of 20 and 30. However, we approached customers who looked between the ages of 18 and 35. Admittedly, looks can often times be deceiving and age is difficult to measure when solely relying on physical appearance.

Descriptive statistics (Min, Max, M, SD) were reported to describe the major demographics of the overall sample of participants using IBM® SPSS® Statistics

version 23. The descriptive statistics for each major demographic are subsequently described by characteristic: Sex, age, race and ethnicity, income, education, occupation, marital status, number of children, and living status. Of the thirty participants, 20 were females and the remaining 10 were males (Table 2).

Table 2

Participants' Sex

	n	%
Female	20	66.60
Male	10	33.30

The thirty participants included in this study were born between the years of 1985 and 1995. Although the participants' age range was widely distributed (Table 3), a majority of the participants were between the ages of 24 and 27 (M = 25.34). For this study, age was calculated by taking the year the participant was born and subtracting that number from 2015, the year the data was collected.

Table 3

Participants' Age

1 60 1161 1180		
	n	%
27	6	20.0
25	5	16.7
23	4	13.3
22	3	10.0
26	3	10.0
28	3	10.0
24	2	6.7
29	2	6.7
20	1	3.3
30	1	3.3
21	0	0.0

Of the 30 participants, a majority (n = 22) indicated they were White. These 22 participants represent 73.3% of the overall sample (Table 4).

Table 4

Participants' Race and Ethnicity

	n	%
White	22	73.3
Asian	6	20.0
Hispanic, Latino, or Spanish	4	13.3
Other	3	10.0
Black or African American	1	3.3
Native Hawaiian or other Pacific Islander	1	3.3
American Indian or Alaska Native	0	0.0

Almost 50% of the participants indicated an annual household income between \$50,000 and \$99,999 (Table 5). In Texas, individuals who have an earning that falls within this income range are classified as *middle class* (Kane & Kiersz, 2015). The four participants who had an annual household income of \$100,000 or more were considered *upper class* in Texas. Therefore, more than half of the participants in this study were classified as middle or upper class. Thus, we can assume these participants have more disposable income.

Table 5

Participants' Income

1 drucipants income		
	n	%
Less than \$30,000	6	20.0
\$30,000–\$49,999	7	23.3
\$50,000–\$99,999	13	43.3
\$100,000-\$249,999	3	10.0
More than \$250,000	1	3.3

As shown in Table 6, a majority of the participants (n = 21) had a high school diploma or equivalent. In addition, a majority of the participants (n = 19) have

bachelor's degree, as well. Furthermore, 30% of the participants (n = 9) indicated they were currently pursuing a degree or certification.

Table 6

Participants' Education

	n	%
High school diploma or equivalent	21	70.0
Bachelor's degree	19	63.3
Some college	12	40.0
Associate's degree	4	13.3
Master's degree	4	13.3
Doctoral or professional degree	1	3.3
Postsecondary non-degree award	0	0.0

More than half of the participants identified themselves as a *professional* (n = 11) or *student* (n = 5). Participants who selected *other* as their occupation indicated they were one of the three following occupations: administrative assistant, marketing consultant, or research assistant. A breakdown of the other occupations identified by the participants is illustrated in Table 7.

Table 7

Participants' Occupation

	n	%
Professional	11	36.7
Student	5	16.7
Other	4	13.3
Sales	3	10.0
Management	2	6.7
Service	2	6.7
Not employed	2	6.7
Homemaker	1	3.3
Clerical	0	0.0
Military	0	0.0
Retired	0	0.0

Almost half of the participants (n = 14) indicated they were single and never married (Table 8). Of the 30 participants, seven were in a relationship and seven were married or in a domestic partnership. Two participants selected *other* as their marital status and later identified themselves as *engaged*.

Table 8

Participants' Marital Status

	n	%
Single, never married	14	46.7
In a relationship	7	23.3
Married or domestic partnership	7	23.3
Other	2	6.7
Widowed	0	0.0
Divorced	0	0.0
Separated	0	0.0

Of the 30 participants, only one indicated she has children (Table 9). The participant was pregnant with her second child at the time of data collection and, therefore, will soon have two children. This is important to note because having children has an effect on not only the amount but also the type of fresh produce individuals purchase (Zachary, Palmer, & Beckham, 2013).

Table 9

Participants' Number of Children

	n	%
0	29	96.6
1	1	3.3
2	0	0.0
3	0	0.0
4	0	0.0

Twenty-seven of the 30 participants provided information regarding their living situation. Of the 27 participants, 30% indicated they lived with roommates, and another 30% indicated they lived with their spouse or partner (Table 10). Last, 20% indicated they lived alone.

Table 10

Participants' Living Status

	n	%
I live with my spouse/partner	9	30.0
I live with roommates	9	30.0
I live alone	6	20.0
I live with my family (parents, in-laws, etc.)	2	6.7
Other	1	3.3

Sampling Procedures

Correspondence with WFM

To get permission to collect data in WFM stores, I corresponded with a representative from the consumer insights department at the WFM corporate office in Austin, Texas. Before I was granted permission to collect data, WFM required me to submit a one-page abstract of my study and a brief description of the data collection process. Thus, I was graciously given permission to collect data at three WFM locations in Texas on the dates and times I requested. The only requirement I had upon arrival of the WFM stores for data collection was to check in with guest services at the front of the store. The check-in and check-out process was simple, and I was required to sign the visitor book indicating my name, time of arrival, reason for visiting, and time of departure. The management and staff at every WFM location were helpful in the data collection process and provided my research team and I with tables to use while

collecting data. In addition, my contact in the consumer insight department at WFM was cooperative and patient with me as scheduling numerous data collection trips was often unpredictable and difficult to plan far in advance.

Data collection team training

Prior to data collection, I trained a team of three researchers to assist me. Each member of the team was trained individually; however, they were all trained with the same materials and instruction. The training process began with a brief overview of my study and ended with a step-by-step description of the entire data collection process. In addition, my colleagues shadowed me as I went the through the data collection process with the first participant at each WFM location. Shadowing me ensured that my colleagues knew the data collection process and allowed them to witness the process before doing it themselves.

Sampling method

Data for this study were collected at three WFM Texas locations: 1) the Domain store, in Austin; 2) the Uptown store, in Dallas; and 3) the Kirby store, in Houston.

These three locations were selected based on the high mid-Millennial traffic as well as the convenience of the store locations.

My research team and I setup a table, provided to us by WFM, in the produce section of the store. We stood as close to the front door as possible without being in the way of WFM employees and shoppers so we could see customers as they walked into the store. Participants were selected using an intercept sampling method in which we approached every customer who appeared to be between the ages of 18 and 35. We

introduced ourselves, gave a brief description of the study, and then asked the customer to participate. Specifically, we informed customers we were working on a research project in which we were interested in WFM customers' fresh produce shopping habits. If customers agreed to participate, we confirmed the customer was born between 1985 and 1995 before beginning the data collection process.

Data Collection

The data collection process was guided by the persona lifecycle stages (Table 1).

The definition and steps for each stage were adapted from the persona lifecycle developed by Adlin and Pruitt (2010).

Family planning

The family planning stage is defined as "the time when you will do some investigation and strategic thinking about your organization and its approach to user-centered design (UCD) and development" (Adlin & Pruitt, 2010). Family planning has three basic steps: Review the literature, create the action plan, and collect data.

Step one of the family planning stage includes a review of the literature which was discussed in chapter two of this paper. Second, the action plan for this study included 1) identifying the problem, purpose, goals, and objectives of this study; 2) contacting WFM to set up times for data collection at three locations in Texas; 3) developing data collection tools; and 4) recruiting three fellow researchers to assist in the data collection process. The third and final step of the family planning stage was to collect data, which will be used to develop your personas. Three data collection methods were used for this study: 1) Participant observation, 2) semi-structured interview, and 3)

a questionnaire. Data were collected from each individual at one, single point in time.

On average, the total amount of time spent with each participant was 20 minutes.

The data collection process began by observing the participants as they shopped for fresh produce. Once the participant finished their produce shopping, we proceeded to the second step of the data collection process by conducting a face-to-face, semi-structured interview. During the interview, we asked the participants a series of questions about their produce shopping behaviors and decisions (Appendix C). The third step of the data collection process included asking the participant to complete a short questionnaire in which they answered 10 demographic and 24 psychographic characteristics (Appendix E). Upon completion of all three data collection steps, the participants received \$5 for participating. The following subsections will describe each step of the data collection process in greater detail and why an incentive was used.

Research objective one. In this subsection of the paper, I will describe the data collection methods used to develop personas when considering mid-Millennials' thoughts and behaviors related to WFM's positioning statement—"Quality and convenience at everyday low prices." Furthermore, two data collection methods were used to address research objective one—participant observation and semi-structured interviews.

We observed participants as they shopped for produce and recorded the participants' shopping behaviors (e.g., use of shopping list, organic and conventional produce selection, etc.). This portion of the data collection process typically took 5 to 10 minutes per participant. Both qualitative and quantitative data were collected during the

participant observation step. The quantitative data portion consisted of the type and quantity of each produce item placed in the shopping cart by the participant. The PLU code, when available, and the quantity of each item were recorded on a produce inventory sheet (see Appendix B). The PLU code was found either on a sticker placed on the produce or on a sign in front of or behind each produce item. Produce items that were prepared and/or packaged (e.g., half-pint containers of chopped pineapple or a five-ounce package of baby spinach) did not have a PLU code. In this case, the name, size, and quantity of the produce item was recorded. The qualitative data portion consisted of observed, hand-written notes about the participants' shopping behaviors. See below for a list of example observations:

- a) The participant selected **only** organic produce.
- b) *The participant spent 30 minutes in the produce section.*
- c) The participant referred to his or her shopping list while shopping for produce.
- d) The participant's children influenced what he or she placed in the shopping cart.

Once the participant was finished shopping for produce, we conducted a semi-structured interview. Each interview was recorded on an iPad using RØDE Rec, a voice recording application. Before starting the recording, each participant filled out a media consent form. Transcribing the observation notes enabled me to check my colleagues' notes, which increased the accuracy and consistency of my data interpretation.

Asking questions related to the observations was done to *member check* the observational data and ensure the participants' behaviors and decisions were interpreted accurately and to establish credibility for this study. For example, if we observed the participant selecting only organic produce items, we would more than likely make the assumption that the participant was against eating conventional produce. However, this is primarily an assumption and follow-up conversation is crucial in insuring that the participant's behavior was more than coincidence. If this specific behavior was observed, we member checked the observation with the participant(s) by asking related questions: a) "Why did you select organic produce versus conventional produce?" and b) "What are your thoughts/opinions on organic and conventional produce?"

- 1) When considering social media outlets, how often do you use the following options?
- 2) When considering media outlets, how often do you **use** the following options?
- 3) How **credible** would you believe food-related content to be if presented through the following social media outlets?
- 4) How **credible** would you believe food-related content to be if presented through the following media outlets?

In addition, asking follow-up questions based off their behaviors allowed us to gain a deeper understanding of why the participants behaved and made purchasing decisions. A series of questions (see Appendix C) were used to guide the semi-structured

interview, which ensured each participant was asked the same question, even if not verbatim.

Research objective two. The questionnaire was the third and final step of the data collection process. The questionnaire was developed using Qualtrics, an online survey software. To minimize potential, technological issues during data collection, I downloaded the questionnaire onto two iPads to allow for participants to complete the questionnaire offline. Upon completion of the entire data collection process, all responses were uploaded to my personal Qualtrics account. In addition, creating an electronic questionnaire decreased the time and effort of data entry and analysis.

The questionnaire included a series of demographic (i.e., age, gender, race, ethnicity, income, education, occupation, marital status, number of children, and living status) and psychographic (i.e., media use and perceived credibility of food-related messages in the media) questions. For example, participants were asked to rate the credibility of several social media and media platforms when considering food-related content.

The set of quantitative demographic and media consumption questions included in the electronic questionnaire were developed by researchers in the Digital Media Research and Development Laboratory (DMRDL) at Texas A&M University. DMRDL researchers developed a set of demographic and media consumption (DMC) questions after reviewing communications-industry metrics (i.e., monthly and quarterly reports published by Nielsen Audio), demographic and media consumption reports by Nielsen (2013, 2014), and Pew (Pew Research Center, 2010), and empirical research reported by

Pendergast (2010). Several rounds of pilot tests and revisions were conducted to refine the DMC questions, which were subsequently reported in detail by DMRDL researchers (Bishop & Piwonka, 2015; Bosse, 2015; Curbello, 2015; Froebel, 2015; Mobly & Hill, 2014; Svatek, 2015) who reported final estimates of temporal stability (test-retest) ranging from .79 to .96 (Bishop & Piwonka, 2015; Bosse, 2015; Curbello, 2015; Froebel, 2015; Svatek, 2015).

Because the DMC questions were developed to be reflective of industry-standard metrics and empirical works, the DMC were considered to be content valid for the purposes of this study. Further, because the coefficients of temporal stability reported by DMRDL researchers were approaching or exceeding the .80 threshold of metric adequacy for estimates of reliability (Field, 2009), the DMC questions were considered to be reliable for the purposes of this study.

Upon data collection, the participants were given \$5 as a token of my appreciation for participating. Over the past few decades, researchers have found that monetary incentives improve response/participation rates (Dillman et al., 2009; Lesser et al., 2001; James & Bolstein, 1990). Considering the fairly long amount of time required to spend with each participant and the very specific sampling frame of mid-Millennials, I believed an incentive would only help increase my chances of customer participation.

The incentive was mentioned to the customer only if they said no to the initial request to participate with the hopes of convincing them to change their mind. However, we found that offering customers \$5 if they agreed to participate did not appear to affect their decision or change their mind. Although using an incentive did not increase response

rates for this study, I do not believe using an incentive negatively affected the results or findings of this study in any way.

Conception

The first step of the *conception* stage is identifying ad hoc personas. *Ad hoc personas* are identified as persona sketches used to "articulate your organization's existing assumptions about the user population" (Adlin & Pruitt, 2010). Ad hoc personas are also known as *assumption personas* and can be used for the following reasons: 1) help stakeholders understand the need for the persona effort; 2) streamline product-related communication; 3) help target field research to validate (or contradict) current impressions of who users are; and 4) provide some practice with persona conception and gestation methods before creating "real" personas (Adlin & Pruitt, 2010).

"Quality and convenience at everyday low prices" is one of WFM's positioning statements and guided the assumptions made to develop the ad hoc personas for this study. Because WFM positions its company as having convenient, quality products at low prices, we can assume WFM attracts customers who place importance on those three factors. Solely based on assumption, I hypothesized that the most important factors to WFM produce shoppers would be *quality*, *convenience*, and *price*. Each of these factors represented the ad hoc personas—hypothetical personas based on intuition and unconnected bits of market research—for this study.

The second step of the conception stage is to process the data, which includes identifying themes and relationships among the data. I initially began by noting patterns and themes as suggested by Miles, Huberman, and Saldana (2013) among the

observational data and the statements from each interview using the themes identified in the literature review: a) *quality*, b) *convenience*, and c) *price*. However, while noting patterns and themes using a cluster analysis technique, sub-themes for quality and convenience began to emerge. Quality and convenience are broad terms when discussing produce shopping habits and perceptions on fresh produce. Therefore, I thought it was important to distinguish the sub-themes that comprise of two main themes.

At the conclusion of analyzing all 30 participants' data using a cluster analysis technique in the previous step of the conception phase, a total of 14 unique themes emerged. In other words, I clustered the data into 14 groups based on similarities among the participants' beliefs and behaviors. The 14 themes were operationally defined based on the shopping behaviors and statements made by participants during data collection.

In addition, it is important to note that each participant could be categorized in to more than one theme, which was often the case. One of the advantages of comparing persona development to the stages of human development is that every stage is vague and the steps depend on the context of the study, especially in the *infant* stage. Too often researchers take the findings of a study and try to force data saturation where it does not exist and in result, the study is put on a shelf and never picked up again. In order for a study to be adopted it must lay the foundation for future research, as well as be applicable to other contexts. More specifically, when further developing personas, sampling for each persona is crucial in ensuring that each persona is representative of the entire population. Therefore, the decision to categorize each participant into more than one skeleton allows future researchers to use the findings of this study as a guideline for

sampling individuals for each persona skeleton, as well as each of the four personas developed in this study.

The third and final step of the conception stage was to develop persona *skeletons*. The themes developed in the second step of the conception stage represent the 14 persona skeletons for this study (Table 9). These skeletons acted as a foundation for developing the infant-stage personas for this study.

Gestation

The first step of the gestation stage included the development of the persona skeletons (Adlin & Pruitt, 2010). Once the 14 persona skeletons were identified across all participant data, I then analyzed the participant data for each theme and compared the data for each theme and looked for similar characteristics among the participants within the themes alone and across multiple themes. As previously mentioned, each participant could and often did appear in more than one thematic category.

The second step of the gestation stage included the development of personas from the persona skeletons developed in the conception stage (Adlin & Pruitt, 2010) by identifying relationships among each and clustering similar themes. Similar to the process I used to develop the 14 persona skeletons, I used a cluster analysis technique to group the 14 skeletons into personas based on similar beliefs and behaviors. For example, the following themes all shared similarities and were directly related to the *quality* and *convenience* of fresh produce: *exclusivity*, *packaged*, *traffic*, *appearance*, *brand*, *freshness*, *selection*, *and taste*. The participant data in which those eight similar themes emerged from were used to develop the *Particular or Picky* persona.

Furthermore, the *price* and *proximity* themes were combined to represent the *Thrifty or Cheapskate* persona; whereas, the *signage, trust, and practices* themes were combined to represent the *Socially Concerned or Tree Hugger* persona. Lastly, the *health* theme was solely used to represent the *Clean Eater or Health Nut* persona. The findings and in-depth description of each persona is discussed in Chapter IV.

Infant

The *infant* stage was adapted from the maturation stage developed by Adlin and Pruitt (2010). An infant-level persona is made up of small-scale data and is not representative of an entire population. After categorizing participants into persona types in the final step of the gestation stage, I added each participant's respective persona type to the quantitative dataset consisting of the demographic and psychographic data collected from the questionnaire.

I used IBM SPSS (version 23) to analyze demographic and psychographic data. I wrote syntax (see Appendix E) to calculate the mean, standard deviation, minimum, and maximum scores for each of the psychographic (e.g., media use and credibility) data from the questionnaire for each of the four personas. In addition, I used the original syntax file developed to run the demographic data for the overall sample to run the demographic frequencies and percentages for each persona (see Appendix E).

Trustworthiness

Lincoln and Guba (1985) established specific criteria for trustworthiness:

Credibility, transferability, dependability, and confirmability. As noted by Lincoln and Guba (1985), researchers that achieve trustworthiness in their studies are more likely to

have "credible findings and interpretations," (p. 301). *Credibility* was achieved in this study by member checking the participant observation data with the participants prior to beginning the semi-structured interview. Member checks were recommended by Lincoln and Guba (1985) as a useful tool in establishing credibility.

As recommended by Merriam (2009), *transferability* was achieved by including a thick description of the data collection methods and findings are included in this manuscript, allowing for researchers to apply this study to various, outside settings. For example, if a future researcher wanted to develop personas of mid-Millennial meat product shoppers at WFM, versus fresh produce shoppers, he or she could do that using the same methods outlined in this study.

According to Lincoln and Guba (1985), *dependability* is achieved by showing that the findings are consistent with the data and could be repeated; whereas, *confirmability* refers to the degree of neutrality of a study (Lincoln & Guba, 1985). To achieve dependability, the data were triangulated among the research team of four individuals by comparing notes in our reflexive journals and having debrief meetings at the conclusion of each data collection trip. Confirmability was achieved by having a colleague of mine, who also served on the research team, audit the findings and confirm that the personas developed in this study accurately represent the data collected.

CHAPTER IV

FINDINGS

Research Objective One

Conception

The purpose of research objective one was to develop personas considering mid-Millennials' thoughts and behaviors related to Whole Foods Market's positioning statement—"Quality and convenience at everyday low prices."

As part of the *conception* stage of the persona lifecycle, persona *skeletons* were developed using the data collected to address research objective one and answer the corresponding research questions mentioned above. As previously mentioned, the 14 skeletons (Table 11) developed in the conception stage of this study represent the various factors important to mid-Millennials and how they behaved when shopping for produce at WFM.

Table 11

Descriptions of the 14 Persona Skeletons

Process Category	Description			
Convenience				
Exclusivity	Specialty produce items only available at specific grocery stores such as ethnic fruit.			
Packaged	Pre-packaged produce (e.g., pineapple chunks, packaged greens, sliced apples, etc.)			
Proximity	Proximity of the grocery store from the participants' home or workplace.			
Signage	Signage with factual information such as farming practices, use of chemicals and/or pesticides, whether or not the produce is <i>locally</i> or <i>responsibly</i> grown, or any other information pertaining to the production and delivery of the product.			

Table 11 Continued

Process Category	Description
Traffic	How busy the store is, specifically the produce section, effecting the ease of shopping for customers without bumping into other people or food displays.
Trust	High standards for organic and sustainability practices that can be trusted by shoppers. For example, Whole Foods Market is a <i>certified organic</i> retailer and therefore, customers can trust that the required standards have been met and the proper practices are in place.
Quality	F
Appearance	Visual appearance includes characteristics that you can <i>see</i> (e.g., bruises, blemishes, color, etc.). Physical appearance includes things that you can <i>feel</i> (e.g., hollow, firm, moisture, etc.).
Brand	People who stop at a certain grocery store for one or more specific brands such as Driscoll's, Dole, Chiquita, and Cripps Pink (Pink Lady apples), to name a few.
Freshness	Freshness can be defined using the following phrases: <i>newly made</i> or obtained, not stale or spoiled, and not preserved. In addition, when referring to produce, an item is <i>fresh</i> if it is known to have to a longer shelf life from the time of purchase.
Health	The definition of <i>health</i> varies from person to person however, <i>health</i> is important to those who want to improve the general condition of their body by consuming specific types of produce.
Practices	The term <i>practice</i> refers to the farming practices used to produce fresh produce items. Specifically, this category includes participants who expressed a concern regarding the use of chemicals, pesticides, genetically modified organisms, human-to-plant contamination, etc.
Selection	Selection refers to the variety (e.g., brand, organic, organic or conventional, prepared and packaged or not packaged, etc.) of produce items at specific grocery store.
Process Category	Description
Taste	Participants who placed importance on taste when purchasing fresh produce commonly prefer a specific brand or farming practice because of the result in better taste.
Price	Participants placed in this category placed some level of importance on the monetary value (or <i>price</i>) of fresh produce (e.g., purchasing items on sale or selecting the cheapest option when more than one price options are available for the same produce type).

More than one half of the participants indicated *price*, *health*, and *practices* were most important to them when shopping for produce at WFM (Figure 5). This information was gathered from the participants during the participant observation phase and/or during the semi-structured interviews.

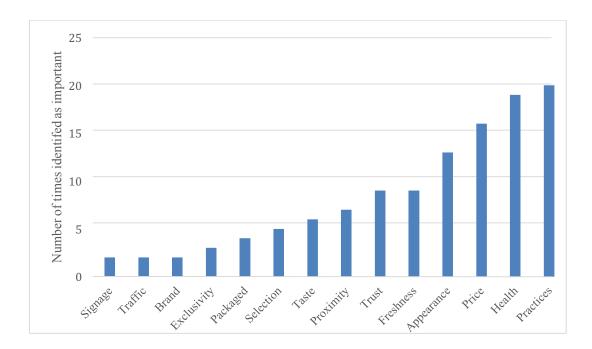


Figure 5. Importance of each persona skeleton as identified by the participants

Of the 30 participants, 66.7% expressed importance of producing, handling, and/or selling fresh produce. Kristina (P02) said her reason for becoming a vegetarian was because she does not "approve of the thought of eating animals." Kristina (P02) also indicated she buys organic food, including produce, because organic farming is safe for the environment and animals, and because organic food products are "chemical-free."

Furthermore, when John (P21) hears the term *conventional*, he automatically thinks "more pesticides and chemicals than organic." Similarily, something interesting and very telling of Sarah's (P22) beliefs happened during the observation stage. While Sarah (P22) was shopping for zucchini, one accidently fell to the ground. Sarah (P22) picked the zucchini up off of the floor and returned it in to a WFM employee. Shortly after this, another shopper (not a participant of the study) dropped a piece of produce on the ground and instead of turning it in to a worker, she placed it back on the shelf. Sarah (P22) seemed very uneasy after seeing another shopper pick produce up from the floor and place it back on the shelf.

Of the 30 participants, 63.3% were categorized as *health* conscious. Although it was difficult to know if health was important to participants by observing their shopping habits, 19 of the participants mentioned the importance of health during their interview. For example, Jennifer (P29) said organic produce is "so much better for me... it's safe and there's no bad stuff in it." She also said that non-organic produce "causes cancer" and that all of her friends who do not eat organic are "unhealthy, eat fast food, and aren't physically active." Additionally, Michael (P10) said he eats organic food because he feels "weak" otherwise and eating organic food helps him maintain homeostasis, provides proper nutrients, and makes him feel more alive.

During the participant observation phase, 53.3% of participants indicated that they were *price* conscious. For example, Sarah (P22) weighed her produce using the scale. Perhaps she wanted to calculate the price according to the amount of produce she selected. Additionally, Sarah (P22) if price mattered to her when shopping for produce.

Sarah (P22) indicated that she tries to buy all organic produce but she definitely has a price threshold and will not purchase organic if it is "too expensive."

On the opposite end of the spectrum, 14 of the 30 participants did not express any concern on the price of produce. In fact, these 14 participants said they are willing to pay higher prices for better produce. Although the definition of "better" varied among these participants, they all had something in common and that was that price did not matter. For example, Kristen (P17) said, "cooking at home versus eating out all of the time saves me money so I don't mind spending more on organic produce." Also, Josh (P26) said, "prices are high at Whole Foods," but he likes the convenience of the products and the pre-cut fruit available.

In addition, 43.3% of the participants indicated the physical appearance of produce was important to them when shopping for produce (n = 13). This theme emerged during the participant observation phase. Many of the participants were visually scanning their produce for bruises or blemishes and feeling for squishy skin or an unappealing feel before selecting an item. For example, Michael (P10) was very observant of the produce, seemingly looking for imperfection as he picked up many pieces of each item before placing produce in his basket. For example, Michael (P10) felt of approximately five avocadoes before deciding he was not buying them. Michael (P10) also spent about 60 seconds picking up several bundles of bananas before selecting one.

As previously mentioned, each participant could be categorized into more than one theme identified in Table 9. Of the 30 participants, there were 63 overreaching thematic entries. Therefore, on average, each participant indicated that two of the three overarching themes (quality, convenience, and price) were important to them while shopping for produce at WFM. Of the 63 thematic entries, 46.03% of those fit under the overarching theme of *quality* (see Figure 6). *Convenience* was the next largest category with a 28.57% representation. Lastly, *price* was the smallest category with a 25.4% representation.

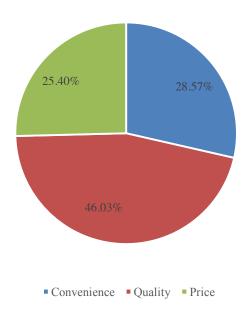


Figure 6. Importance of each ad hoc persona as identified by the participants

Gestation

Similar to developing the persona skeletons, each participant could be categorized into more than one persona (Table 12). One of the advantages of comparing

persona development to the stages of human development is that every stage is vague and the steps depend on the context of the study. Too often researchers take the findings of a study and try to force data saturation where it does not exist and in result, the study is put on a shelf and never picked up again. In order for a study to be adopted, the researchers must lay the foundation for future research and make sure the methods and findings are applicable in other contexts. More specifically, when further developing personas, sampling for each persona is crucial in ensuring that each persona is representative of the entire population. Therefore, the decision to categorize each participant into more than one persona allows future researchers to use the findings of this study as a guideline for sampling individuals for further persona development.

Table 12

Distribution of Participants by Persona Type

Persona Type

Perso			Туре	
Resp. ID	1	2	3	4
01	X			X
02		X	X	X
03		X	X	X
04	X	X		X
05	X	X	X	X
06		X	X	X
07	X		X	X
08	X			X
10	X	X	X	
11		X		X
12	X	X		
13	X			X
14	X			X
15	X	X		X
16		X	X	X
17	X		X	X
18	X	X	X	X

Table 12 Continued

		Persona	Type	
Resp. ID	1	2	3	4
19	X	X	X	_
20	X	X	X	X
21	X	X		
22	X		X	X
23		X	X	X
24	X	X		X
25	X	X		X
26	X	X		X
27	X	X		X
28	X		X	X
29	X	X	X	X
30	X	X		X
31	X		X	X
Total	24	21	16	26

For the purposes of this study, four personas were developed. The 24 participants who were included in the *Clean Eater or Health Nut* persona expressed an importance on health during their semi-structured interview. Although, the data collected during the semi-structure interviews were telling of the importance participants placed on health, it was difficult to measure by observing shopping behaviors.

The participants included in this persona expressed concern with chemicals and pesticides in conventional produce and the harm chemicals and pesticides may cause to their body. For example, Maria (P27) said, "Conventional isn't as healthy for me as organic is. The pesticides and chemicals in conventional produce is bad for my health." In addition, Jennifer (P29) said, "Conventional produce causes cancer," and that organic produce is "so much better for me." Jennifer (P29) also stated that organic produce is safe and there is no bad stuff, such as chemicals and pesticides, in organic produce.

Additionally, the participants included in this persona believed organic produce was healthier for the human body in comparison to conventional produce. For example, Sarah (P22) said, "I'm trying to be healthier and eat more organic because it is good for the body." Although a majority of the participants did not support their decision to eat organic produce with scientific facts, they were confident in saying it was healthier for them. For example, Monica (P14) said she's always known organic to better for her, but she was not sure why.

Some participants who were included in this persona where not as loyal to purchasing organic produce only. In fact, some said they would occasionally purchase conventional produce but only if it had a thick skin or peel. For example, Kristina (P02) said she does not always purchase organic produce because "some products it doesn't matter if they have a thick skin like bananas and oranges." Additionally, some participants expressed concern with their health and chose to eat more fruits and vegetables to improve their health, but they did not put complete trust in the term *organic* and did not have a preference for conventional or organic produce. Some participants also shared their doubts with organic and conventional farming. Justin (P25) said organic produce is a "marketing tool to take advantage of people." In contrast, Robert (P18) argued conventional farming is just a "big business" that does not consider what's good for our bodies or our health.

The *Clean Eater or Health Nut* persona is represented by Kristen (see Figure 7). On average, Kristen shops for groceries two times a week. Kristen typically makes produce purchasing decisions based on the credible information she discovers online or

from articles posted by professionals. However, Kristen works full-time and her social life keeps her busy therefore, she often believes what her peers say to be true about fresh produce and allows those perceptions to influence her purchasing decisions. When it comes to quality, convenience, or price, Kristen is most concerned with the quality of her produce. She placed very little importance, if any at all, on the convenience and price of her produce. Kristen's main focus is on the quality of produce, how it was produced, and whether or not it is healthy for her.



Figure 7. Persona profile for the Clean Eater or Health Nut

The 21 participants who were included in the *Socially Concerned or Tree*Hugger persona behaved in a way that led us to believe they placed importance on factual information provided at WFM and/or expressed an importance on environment and/or animal rights during the semi-structured interviews.

During participant observations, some of the participants included in the *Socially Concerned or Tree Hugger persona* were reading the signage with factual information in front of each produce item or they mentioned in their interview that they trust the organic and sustainability standards at WFM.

For example, Karen (P11) said she uses the signs at WFM to guide her shopping and she loves that the labels and signs explain everything so well. In addition, Karen (P11) said WFM does all of the produce research for her and she "can just come here [WFM] and trust that everything has been produced using good practices." Similarly, Jennifer (P29) said she shops at WFM because organic options are always available and she trusts the store. "They [WFM] does the research for me. I'm too busy to do the research," (P29). In addition, Nick (P30), who claimed to be very loyal to WFM, said he trusts WFM products to be the best.

The *Socially Concerned or Tree Hugger* persona is represented by Trevor (Figure 8). On average, Trevor shops for groceries two times a week. Trevor typically makes his produce purchasing decisions based off his online research on various sites (i.e., PETA, Netflix documentaries, and various social media platforms). In addition, Trevor relies on the information provided by his peers, as well as the farmers he occasionally purchases produce from at the local farmers' market. When it comes to quality, convenience, or price, Trevor places the most importance on quality and also considers convenience when purchasing his produce. However, Trevor places very little importance on price, if any at all.

Socially Concerned or Tree Hugger? almost daily On average, Trevor shops for groceries two times a week. Trevor typically makes his produce purchasing decisions based off his online research on various sites (i.e., PETA, Netflix almost daily http:// documentaries, and various social media platforms). In addition, Trevor relies on the information provided by his peers, somewhat credible as well as the farmers he occasionally purchases produce from at the local farmers market. Trevor credible http:// **Animal Rights** Kaitlyn (P06) was very observant and read the signs and labels of all each "I just don't approve of the thought of eating animals. That's why I became a vegetarian." (P02) "I can just come here [WFM] and trust that everything has been produced using good practices." (P11) produce item before selecting. "The labels and signs explain everything so well." (P11) "I shop at Whole Foods because "I eat organic produce because it is safe for animals and the environment. And it [organic produce] is chemical free." (PO2) organic options are always available and I trust the store." (P29)

Figure 8. Persona profile for the Socially Concerned or Tree Hugger

The 16 participants who were included in the *Thrifty or Cheapskate* persona placed importance on price and/or expressed an importance on price during their semi-structured interview. Although a majority of participants in the *Thrifty or Cheapskate* persona were aware of prices, some of the participants said they would pay extra for organic produce as long the price fell under their *threshold*.

For example, Spencer (P28) said price was not an issue "unless it is really expensive." Thus, Spencer (P28) has a threshold when it comes to the price of the produce he purchases. Similarly, Kristen (P17) said if organic was double the price as conventional, she "probably wouldn't buy it," but if organic produce is only a dollar or two more than conventional, she is willing to purchase organic.

Price was so important to some participants that price determined where they shop for produce and what produce items they purchase. Kevin (P05) said he usually shops at HEB because they have cheaper prices than WFM. Similarly, Robert (P18) said "kiwi is not something I'd usually get but when it's on sale, I'm going to get some." Robert (P18) also said it is safe to say whatever is on sale is what he usually buys. Thus, price of produce is important to Robert (P18).

The *Thrifty of Cheapskate* was represented by Rachel (see Figure 9). On average, Rachel shops for groceries once a week. Rachel typically makes her produce purchasing decisions based off whatever the recipe calls for on PopSugar, a famous women's lifestyle blog. In addition, Rachel's purchasing decisions are influenced by what her peers say and what she sees in the media, specifically on BuzzFeed, Facebook, Pinterest, and Instagram. In addition, Rachel seeks information from farmers at farmers' markets and on various websites such as PETA.org. Although Rachel somewhat cares about the quality of her produce, she places the most importance on the price when purchasing her produce. Convenience is not important to Rachel and in fact, she will visit more than one grocery store in a single day to find the cheapest prices on produce items.



Figure 9. Persona profile for the Thrifty or Cheapskate

The 26 participants who were included in the *Particular or Picky* persona placed importance on the appearance, brand, selection, taste, and freshness of fresh produce and/or expressed an importance on these factors during their semi-structured interview. In addition, proximity of grocery stores and the in-store traffic played an important role in their produce shopping habits.

A particular or picky persona cared about the physical appearance of his or her produce. For example, Michael (P10) was observant while shopping for produce and felt of each produce item before placing it in the basket. Similarly, while shopping, Kristen (P17) glanced at the cauliflower and said "Oh, that doesn't look good." Kristen (P17) chose not to purchase cauliflower and continued shopping for produce. Additionally, participants indicated they were particular, or picky, shoppers. For example, Kevin (P05) said, "I'm very picky. I don't buy anything with blemishes." In addition, Carrie (P08) said, "I know everything at Whole Foods is good so I just pick what *looks* good." Thus, Carrie (P08) cares about the physically appearance of her produce.

Only one participant belonging to this persona expressed preference over a specific brand. Jeff (P03) said he likes the taste of Driscol's produce and he is more concerned with the brand, not if the produce is conventional or organic. Other participants chose to shop at WFM for their produce because of the guaranteed freshness. For example, Josh (P26) said he shops at WFM because, "Whole Foods has high-traffic, which means a higher turnover on produce." Josh (P26) also likes shopping at WFM because of the conveniently packaged, pre-cut fruit available. In addition, Carl (P06) said he is willing to make the 30-minute commute to WFM because Whole Foods' produce lasts longer, they have a great selection.

The proximity of WFM, as well as the in-store traffic, was important to some participants and played a role in their produce shopping behaviors. For example, Rachel (P31) said, "I shop at Whole Foods because it is small, intimate, and has everything I

need. Additionally, Rachel (P31) said WFM is close to her apartment, which is an even bigger plus.

The *Particular or Picky* persona was represented by Allen (see Figure 10). On average, Allen shops for groceries two times a week. Allen grew up watching his mom check produce before placing items in the basket and now, as an adult, he knows what to look for when purchasing produce whether it be physical appearance, taste, or freshness. In addition, Allen makes produce purchasing decisions based on what he sees on social media and credible websites, as well as word-of-mouth information. Quality and convenience are most important to Allen when shopping for produce. Although Allen has a price threshold when shopping for produce, he is willing to pay higher prices for better looking and tasting produce. In addition, Allen is willing to pay high prices for produce items that are conveniently packaged and/or already prepared for him.

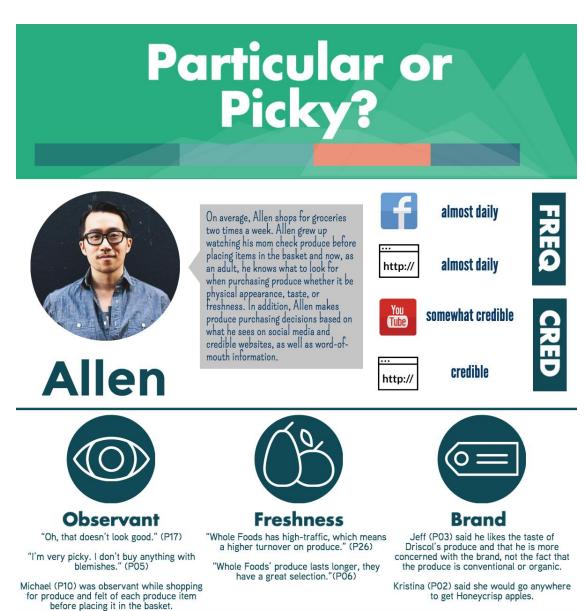


Figure 10. Persona profile for the Particular or Picky

Research Objective Two

The purpose of research objective two was to describe the types of people in each persona developed in the gestation stage of this study. By describing each persona theme using demographic and psychographic data, I was able to validate and describe the personas in greater detail. Specifically, the demographic data made it possible to imagine

each persona as a real person although, the personas represent fictitious people. In addition, the psychographic data (e.g., media use and media credibility), provides insight on how to best reach the individuals who made up each persona developed in this study. Although first and last names were collected from participants during data collection for this study, I used pseudonyms, or fictitious names, to present the data for each participant. In addition, I parenthetically included the participant number (e.g., P21) to ensure the traceability and accuracy of each statement.

The purpose of research question 2.1 was to describe the demographic characteristics (i.e., age, gender, race, ethnicity, income, education, occupation, marital status, number of children, and living status) of each persona.

Of the 30 participants, 24 of them fit into the *Clean Eater or Health Nut* persona type (Table 13). The mean age of the mid-Millennials in this persona was 25.25 (SD = 2.56). Of participants, 70.8% were White; whereas, 20.8% were Asian. More than half of the participants were female (n = 15) and 41.7% of the 24 participants reported an annual household income of \$50,000–\$99,999. More than half of the participants (62.5%) said they had earned a bachelor's degree, and 33.3% were pursuing a degree or certification. In addition, 41.7% of the participants identified themselves as a professional and 50% were single and had never been married. The other 50% were in a relationship, engaged, or married/in a domestic relationship. More than half the participants (n = 17) lived with someone (e.g., roommates, spouse, or family) and 16.7% lived alone.

Table 13

Demographics of the Clean Eater or Health Nut

Demographics of the Clean Eater or Health Nut	70	%
Race/Ethnicity	n	70
White	17	70.8
Asian	5	20.8
Hispanic, Latino, or Spanish	4	16.7
Other	3	12.5
Native Hawaiian or other Pacific Islander	1	4.2
Black or African American	1	4.2
American Indian or Alaska Native	0	0.0
Income	· ·	0.0
\$50,000 - \$99,999	10	41.7
Less than \$30,000	6	25.0
\$30,000 - \$49,999	6	25.0
More than \$250,000	1	4.2
\$100,000 - \$249,999	1	4.2
Education	•	
High school diploma or equivalent	18	75.0
Bachelor's degree	15	
Some college	9	37.5
Postsecondary non-degree award	4	16.7
Master's degree	3	12.5
Associate's degree	3	12.5
Doctoral or professional degree	0	0.0
Occupation		
Professional	10	41.7
Student	4	16.7
Other	4	16.7
Management	2	8.3
Not employed	2	8.3
Sales	1	4.2
Service	1	4.2
Clerical	0	0.0
Homemaker	0	0.0
Military	0	0.0
Retired	0	0.0
Marital Status		
In a relationship	5	20.8
Other	2	8.3
Widowed	0	0.0
Divorced	0	0.0
Separated	0	0.0

63

Table 13 Continued

	n	%
Single, never married	12	50
Married or domestic partnership	5	20.8
Living status		_
I live with my spouse/partner	8	33.3
I live with roommates	7	29.2
I live alone	4	16.7
I live with my family (parents, in-laws, etc.)	2	8.3
Other	1	4.2

Twenty-one participants were included in the *Socially Concerned or Tree* Hugger persona type (Table 14). The mean age of the participants was 25.86 (SD=2.35). Of these participants, 81% were White and 19% were Asian. More than half of the participants were female (n=13) and 42.9% reported an annual household income of \$50,000–\$99,999. Additionally, 71.4% had a bachelor's degree and 23.8% were pursuing a degree or certification. When asked about their occupation, 38.1% of the participants identified themselves as a professional. Almost one-half of the participants in this persona were single and had never been married (n=10); whereas, 52.3% of the participants indicated they were in a relationship, engaged, or married/in a domestic relationship. Additionally, 61.9% were living with someone (e.g., roommates, spouse, or family) and 23.8% lived alone. In addition, one participant included in this persona indicated she had two children.

Table 14

Demographics of the Socially Concerned or Tree Hugger

	n	%
Race/Ethnicity		
White	17	81.0
Asian	4	19.0
Hispanic, Latino, or Spanish	3	14.3
Other	2	9.5
Native Hawaiian or other Pacific Islander	1	4.8
American Indian or Alaska Native	0	0.0
Black or African American	0	0.0
Income		
\$50,000 - \$99,999	9	42.9
\$30,000 - \$49,999	6	28.6
\$100,000 - \$249,999	3	14.3
Less than \$30,000	2	9.5
More than \$250,000	1	4.8
Education		
Bachelor's degree	15	71.4
High school diploma or equivalent	14	66.7
Some college	8	38.1
Associate's degree	3	14.3
Master's degree	3	14.3
Postsecondary non-degree award	2	9.5
Doctoral or professional degree	1	4.8
Occupation		
Professional	8	38.1
Sales	3	14.3
Student	3	14.3
Service	2	9.5
Not employed	2	9.5
Homemaker	1	4.8
Management	1	4.8
Other	1	4.8
Clerical	0	0.0
Military	0	0.0
Retired	0	0.0
Marital Status		
Single, never married	10	47.6
Married or domestic partnership	5	23.8

Table 14 Continued

	n	%
In a relationship	4	19.0
Other	2	9.5
Divorced	0	0.0
Separated	0	0.0
Widowed	0	0.0
Living status		
I live with my spouse/partner	7	33.3
I live alone	5	23.8
I live with roommates	5	23.8
Other	1	4.8
I live with my family (parents, in-laws, etc.)	0	0.0

Sixteen participants were included in the *Thrifty or Cheapskate* persona type (Table 15), resulting in the least represented persona type. The mean age of the participants was 25.86 (SD = 2.35). Additionally, 81% of these participants were White and 19% were Asian. A majority of the participants were female (n = 13), and 42.9% reported an annual household income of \$50,000–\$99,999. Additionally, 68.8% had a bachelor's degree and 31.3% were pursuing a degree or certification. When asked about their occupation, 31.3% of the participants identified themselves as a professional. More than a half of the participants were in a relationship, engaged, or married/in a domestic relationship (n = 10) and 37.5% were single and had never been married. A majority of these participants (n = 11) were living with someone (e.g., roommates, spouse, or family) and 12.5% lived alone. In addition, one participant indicated she had two children.

Table 15

Demographics of the Thrifty or Cheapskate

Demographics of the Thrifty or Cheapskate		
	n	%
Race/Ethnicity		
White	12	75.0
Hispanic, Latino, or Spanish	2	12.5
Asian	1	6.3
Black or African American	1	6.3
Other	1	6.3
American Indian or Alaska Native	0	0.0
Native Hawaiian or other Pacific Islander	0	0.0
Income		
\$50,000 - \$99,999	7	43.3
Less than \$30,000	4	25.0
\$30,000 - \$49,999	3	18.8
\$100,000 - \$249,999	2	12.5
More than \$250,000	0	0.0
Education		
High school diploma or equivalent	12	75.0
Bachelor's degree	11	68.8
Some college	5	35.7
Postsecondary non-degree award	2	12.5
Associate's degree	1	6.3
Master's degree	1	6.3
Doctoral or professional degree	1	6.3
Occupation		
Professional	5	31.3
Sales	2	12.5
Service	2	12.5
Student	2	12.5
Other	2	12.5
Homemaker	1	6.3
Management	1	6.3
Not employed	1	6.3
Clerical	0	0.0
Military	0	0.0
Retired	0	0.0
Marital Status		
Single, never married	6	37.5
Married or domestic partnership	5	31.3
In a relationship	4	25.0

Table 15 Continued

	n	%
Other	1	6.3
Divorced	0	0.0
Separated	0	0.0
Widowed	0	0.0
Living status		
I live with roommates	6	37.5
I live with my spouse/partner	4	25.0
I live alone	2	12.5
I live with my family (parents, in-laws, etc.)	1	6.3
Other	1	6.3

Twenty-six participants were included in the *Particular or Picky* persona type (Table 16). The mean age of the participants was 25.08 (SD=2.38). Of the 26 participants, 76.9% were White and 19.2% were Asian. A majority of the participants were female (n=19) and one half of the participants (n=13) reported an annual household income of \$50,000–\$99,999. Of the 26 participants, 65.4% had a bachelor's degree and 26.9% were pursuing a degree or certification. When asked about their occupation, 38.5% of the participants identified themselves as a professional. One half of the participants were in a relationship or married/in a domestic relationship (n=13), and the other half were single and had never been married. More of than half of these participants (n=17) were living with someone (e.g., roommates, spouse, or family) and 23.1% lived alone. In addition, one participant included in this persona indicated she had two children.

Table 16

Demographic of the Particular or Picky

Demographic of the Particular or Picky		
	n	%
Race/Ethnicity		
White	20	76.9
Asian	5	19.2
Hispanic, Latino, or Spanish	4	15.4
Other	3	11.5
Black or African American	1	3.8
Native Hawaiian or other Pacific Islander	1	3.8
American Indian or Alaska Native	0	0.0
Income		
\$50,000 - \$99,999	13	50.0
\$30,000 - \$49,999	6	23.1
Less than \$30,000	5	19.2
\$100,000 - \$249,999	2	7.7
More than \$250,000	0	0.0
Education		
High school diploma or equivalent	19	73.1
Bachelor's degree	17	65.4
Some college	12	46.2
Postsecondary non-degree award	4	15.4
Associate's degree	3	11.5
Master's degree	3	11.5
Doctoral or professional degree	1	3.8
Occupation		
Professional	10	38.5
Student	5	19.2
Sales	3	11.5
Other	3	11.5
Service	2	7.7
Homemaker	1	3.8
Management	1	3.8
Not employed	1	3.8
Clerical	0	0.0
Military	0	0.0
Retired	0	0.0
Marital Status		
Single, never married	13	50.0
In a relationship	7	26.9
Married or domestic partnership	6	23.1

Table 16 Continued

	n	%
Other	0	0.0
Widowed	0	0.0
Divorced	0	0.0
Separated	0	0.0
Living status		_
I live with roommates	8	30.8
I live with my spouse/partner	7	26.9
I live alone	6	23.1
I live with my family (parents, in-laws, etc.)	2	7.7
Other	0	0.0

The purpose of research question 2.2 was to describe the psychographic characteristics (i.e., media use and perceived credibility of food-related messages in the media) of each persona. Although there were little differences in psychographic characteristics among the persona types, it is important to present the findings for each persona type. In addition, it is important to note that the participants were asked to rate their use and credibility of *digital* media platforms (DMP). DMPs can be defined as the software or hardware of a site. For example, all social media platforms are considered as DMPs, as well as blog sites and internet television (e.g., Netflix, Hulu, Amazon Prime, HBO Go, etc.).

Participants in the *Clean Eater or Health Nut* persona (Table 17) used Facebook more than any other social media platform (M = 6.12, SD = 1.80). In contrast, they used Twitter the least (M = 2.96, SD = 2.46). However, when considering food-related content, the participants reported YouTube was the most credible, (M = 4.90, SD = 3.24) and Snapchat was the least credible (M = 2.53, SD = 2.78). Additionally, participants who were included in this persona reported they used digital media

platforms more than any other media platform (M = 6.46, SD = 0.98). Similarly, participants reported digital media to be the most credible media platform when considering food-related content (M = 6.50, SD = 2.17). In contrast, the participants reported they used newspaper the least (M = 2.46, SD = 1.72) and considered radio to be the least credible when considering food-related content (M = 4.86, SD = 1.93).

Table 17
Social media use and credibility for the Clean Eater or Health Nut

	Min	Max	M	SD
Social media use				
Facebook	1	7	6.12	1.80
Instagram	1	7	5.08	2.32
Pinterest	1	7	3.21	2.13
Snapchat	1	7	4.13	2.82
Twitter	1	7	2.96	2.46
YouTube	1	7	4.92	2.08
Media use				
Digital	4	7	6.46	0.98
Magazine	1	6	3.04	1.69
Newspaper	1	7	2.46	1.72
Radio	1	7	5.67	1.97
Television	1	7	5.62	1.79
Social media credibility				
Facebook	0	10	4.61	2.64
Instagram	0	9	3.79	2.84
Pinterest	0	10	3.75	3.07
Snapchat	0	8	2.53	2.78
Twitter	0	10	4.05	2.89
YouTube	0	10	4.90	3.24
Media credibility				
Digital	2	10	6.50	2.17
Magazine	0	8	5.01	2.37
Newspaper	2	8	5.04	1.90
Radio	1	7	4.86	1.93
Television	0	10	5.26	2.78

Note: 1 = "Never;" 2 = "Less than Once a Month;" 3 = "Once a Month;" 4 = "2-3 Times a Month;" 5 = "Once a Week;" 6 = "2-3 Times a Week;" 7 = "Daily"; 0 = "Not at all Credible;" 10 = "Very Credible"

The participants in the *Socially Concerned or Tree Hugger* persona (Table 18) reported that they use Facebook more than any other social media platform (M=6.79, SD=1.54). In contrast, participants used Twitter the least (M=2.48, SD=2.32). However, when considering food-related content, participants reported Instagram was the most credible (M=4.67, SD=2.56) and Snapchat was the least credible (M=2.28, SD=1.83). Participants in this persona reported they use digital media platforms more than any other media platform (M=6.38, SD=1.82). Similarly, participants reported digital to be the most credible media platform when considering food-related content (M=6.38, SD=1.02). In contrast, the participants reported they used newspaper the least (M=2.48, SD=1.78) and considered radio to be the least credible when considering food-related content (M=4.75, SD=1.83).

Table 18
Social Media Use and Credibility for the Socially Concerned or Tree Hugger

	Min	Max	M	SD
Social media use				
Facebook	2	7	6.79	1.54
Instagram	1	7	4.16	2.28
Pinterest	1	6	2.67	2.06
Snapchat	1	7	4.05	2.92
Twitter	1	7	2.48	2.32
YouTube	1	7	4.67	2.01
Media use				
Digital	4	7	6.38	1.02
Magazine	2	6	3.33	1.35
Newspaper	1	7	2.48	1.78
Radio	1	7	5.48	2.09
Television	1	7	5.19	1.97
Social media credibility				
Facebook	0	10	4.43	2.84
Instagram	0	9	4.67	2.56
Pinterest	0	10	3.84	2.87

Table 18 Continued

	Min	Max	M	SD
Snapchat	0	6	2.28	2.27
Twitter	0	10	4.17	2.64
YouTube	0	9	4.60	2.84
Media credibility				
Digital	3	10	6.38	1.99
Magazine	0	10	5.65	2.21
Newspaper	3	9	5.81	1.72
Radio	1	7	4.75	1.83
Television	1	10	5.15	2.28

Note: Note: 1 = "Never;" 2 = "Less than Once a Month;" 3 = "Once a Month;" 4 = "2-3 Times a Month;" 5 = "Once a Week;" 6 = "2-3 Times a Week;" 7 = "Daily"; 0 = "Not at all Credible;" 10 = "Very Credible"

Participants in the *Thrifty or Cheapskate* persona (Table 19) reported they used Facebook more than any other social media platform (M = 6.19, SD = 1.38). In contrast, participants used Twitter the least (M = 2.31, SD = 2.02). However, when considering food-related content, participants reported that Pinterest was the most credible (M = 5.21, SD = 2.83) and Snapchat was the least credible (M = 3.27, SD = 2.57).

Participants in this persona reported they used digital media platforms more than any other media platform (M = 6.13, SD = 1.20). Similarly, participants reported digital media platforms to be the most credible media platform when considering food-related content (M = 6.08, SD = 2.29). In contrast, participants reported they used newspaper the least (M = 2.31, SD = 1.62) and considered radio to be the least credible, (M = 4.50, SD = 1.74) when considering food-related content.

Table 19
Social Media Use and Credibility for the Thrifty or Cheapskate

	Min	Max	M	SD
Social media use				
Facebook	2	7	6.19	1.38
Instagram	1	7	5.38	2.36
Pinterest	1	7	3.00	2.28
Snapchat	1	7	4.31	2.85
Twitter	1	7	2.31	2.02
YouTube	1	7	4.31	2.60
Media use				
Digital	4	7	6.13	1.20
Magazine	1	6	3.25	1.53
Newspaper	1	6	2.31	1.62
Radio	1	7	5.06	2.24
Television	1	7	5.50	1.63
Social media credibility				
Facebook	1	10	4.81	2.43
Instagram	0	9	4.47	2.45
Pinterest	0	10	5.21	2.83
Snapchat	0	8	3.27	2.57
Twitter	0	10	4.00	2.65
YouTube	0	8	4.43	3.17
Media credibility				
Digital	2	10	5.94	2.29
Magazine	2	10	5.64	2.31
Newspaper	2	9	5.50	2.07
Radio	1	7	4.50	1.74
Television	0	10	4.73	2.55

Note: 1 = "Never;" 2 = "Less than Once a Month;" 3 = "Once a Month;" 4 = "2-3 Times a Month;" 5 = "Once a Week;" 6 = "2-3 Times a Week;" 7 = "Daily"; 0 = "Not at all Credible;" 10 = "Very Credible"

Participants in the *Particular or Picky* (Table 20) reported they used Facebook more than any other social media platform (M = 5.88, SD = 1.93). In contrast, participants used Twitter (M = 2.77, SD = 2.34) and Pinterest (M = 2.77, SD = 2.03) the least. However, when considering food-related content, participants reported YouTube

was the most credible (M = 4.87, SD = 2.93) and Snapchat was the least credible (M = 2.74, SD = 2.66).

Participants in this persona reported they use digital media platforms more than any other media platform (M = 6.42, SD = 1.03). Similarly, participants reported digital media platforms were the most credible media platforms when considering food-related content (M = 6.08, SD = 2.19). In contrast, participants reported they used newspaper the least (M = 2.27, SD = 1.69) and considered radio to be the least credible (M = 4.39, SD = 1.90) when considering food-related content.

Table 20
Social Media Use and Credibility for the Particular or Picky

	Min	Max	M	SD
Social media use				
Facebook	1	7	5.88	1.93
Instagram	1	7	5.23	2.32
Pinterest	1	7	2.77	2.03
Snapchat	1	7	4.69	2.72
Twitter	1	7	2.77	2.34
YouTube	1	7	4.69	2.19
Media use				
Digital	4	7	6.42	1.03
Magazine	1	6	3.19	1.33
Newspaper	1	7	2.27	1.69
Radio	1	7	5.50	2.23
Television	1	7	5.62	1.77
Social media credibility				
Facebook	0	10	4.40	2.52
Instagram	0	9	3.88	2.71
Pinterest	0	10	3.83	2.91
Snapchat	0	8	2.74	2.66
Twitter	0	10	4.00	2.72
YouTube	0	10	4.87	2.93
Media credibility				
Digital	2	10	6.08	2.19

Table 20 Continued

	Min	Max	M	SD
Magazine	2	10	5.38	2.12
Newspaper	2	9	5.19	1.98
Radio	1	7	4.39	1.90
Television	0	10	5.20	2.55

Note: 1 = "Never;" 2 = "Less than Once a Month;" 3 = "Once a Month;" 4 = "2-3 Times a Month;" 5 = "Once a Week;" 6 = "2-3 Times a Week;" 7 = "Daily"; 0 = "Not at all Credible;" 10 = "Very Credible"

Social media credibility was the only category that represents differential data for each persona type. The participants in the *Clean Eater or Health Nut* and *Particular or Picky* personas both reported that YouTube was the most credible social media platform when considering food-related content. In contrast, the participants in the *Socially Concerned or Tree Hugger* persona reported Instagram was the most credible social media platform when considering food-related content; whereas, the participants in the *Thrifty or Cheapskate* persona reported Pinterest was the most credible social media platform.

CHAPTER V

CONCLUSIONS

For this study, I investigated a small sample of mid-Millennials' (n = 30) produce shopping behaviors and perceptions about the production and delivery practices of fresh produce. Therefore, the findings this study and the personas developed cannot be generalized to all mid-Millennial produce shoppers. Thus, grocers and food product marketers should consider the results of this study when developing marketing and communication strategies as the personas justify the need to understand the different audiences within a specific age group.

Research Objective One

To address research question one, participant observation and semi-structured interview data were collected and used to develop 13 persona skeletons (Table 9). The persona skeletons represented various themes that emerged while analyzing the observation and interview data, which all fell under the ad hoc personas developed in the gestation stage (e.g., quality, convenience, and price). Although sub-themes emerged under the three main themes, also referred to as the ad hoc personas, all participant data were categorized in one of the three main themes. Therefore, the factors identified in WFM's positioning statement—"Quality and Convenience at Everyday Low Prices"—were important to the mid-Millennial participants in this study when shopping for fresh produce.

As part of the second step of the gestation stage, the 14 persona skeletons were used to develop four infant-stage; buyer personas: *Clean Eater or Health Nut, Socially Concerned or Tree Hugger, Thrifty or Cheapskate*, and *Particular or Picky*.

The participants in the *Clean Eater or Health Nut* persona placed importance on health when discussing their fresh produce shopping habits and general perceptions of fresh produce, which supports the findings of Detre et al. (2010) as discussed in the literature review.

Participants in the *Socially Concerned or Tree Hugger* persona placed importance on factual information provided at WFM and/or expressed an importance on environment and/or animal rights during their semi-structured interview. Their statements and behaviors led to the development of a specific theme under *quality*—socially and environmentally concerned. The participants in this persona considered production practices and delivery of produce items when making produce purchasing and consumption decisions. Such findings support the findings of Harris et al. (2011), who stated Millennials are concerned about the environment. In addition, findings support (Gustin & Ha, 2014; Smith, 2014) the statement: Millennials have great concern for ethical sourcing and environmentally-friendly products. Therefore, it is important for WFM and marketers to capitalize on the effects, or lack thereof, certain products have on the environment when developing marketing plans and retail practices for fresh produce.

The *Thrifty or Cheapskate* participants placed importance for price. Such findings support the statement that price is considered to be an important factor for Millennials when shopping for produce (Detre et al., 2010; California Green Solutions,

2007; Smith, 2010). Although this persona was the least represented by the participants, more than one half of the participants were identified as price conscious. Furthermore, although price was not as important as the other factors, marketers and grocers should still consider price when selling fresh produce products to mid-Millennials.

The *Particular or Picky* participants placed importance on the appearance, brand, selection, taste, and freshness of fresh produce. The statements and shopping behaviors of the participants supported Hasan's (2010) conclusions. Although the importance placed on positive physical appearance when considering fresh produce was not found in the literature, the findings imply physical appearance of fresh produce was important to the mid-Millennial participants. Therefore, it is important for WFM to consider appearance when selling fresh produce and eliminating produce items that are not physically attractive (e.g., items with blemishes and/or bruises).

Research Objective Two

The initial personas developed in the gestation stage were further developed by applying the demographic and psychographic data of the participants. Demographic characteristics of each persona were closely related to the overall demographic characteristics of the entire sample. Perhaps, this is because each participant in this study was included in at least two personas. The demographic characteristics of each persona had very little variation, as described in chapter four of this paper. The psychographics of each persona differed more than the demographics. Specifically, the social media credibility was the only category that represented differential data for each persona type.

The participants in the Clean Eater or Health Nut and Particular or Picky
personas both reported YouTube was the most credible social media platform when
considering food-related content. In contrast, the participants in the Socially Concerned
or Tree Hugger persona reported Instagram was the most credible social media platform
when considering food-related content. Last, the participants in the Thrifty or
Cheapskate persona reported that Pinterest was the most credible social media platform
when considering food-related content.

When considering TPB, I can make the assumption that the behaviors of the individuals who make up each persona type are in result of their attitudes, subjective norms, and perceived behavioral control to eat what they consider to be healthy. In addition, based on the tenants of the TPB (Ajzen, 1991), human behavior can be predicted by understanding a person's intention to perform a given behavior (e.g., tell someone about an idea or belief) and understanding his or her motivational factors (e.g., the amount of effort he or she is willing to exert to perform a behavior, perceived societal norms, and/or perceived control of a behavior). Perhaps the individuals who were included in each persona type have the intentions of sharing their beliefs with their peers and/or their intentions to perform a specific behavior.

For example, the *Socially Concerned or Tree Hugger* has strong beliefs on fresh produce production and retail practices, as well strong opinions on what is healthy and what is not. When considering TPB, I can assume that the *Socially Concerned or Tree Hugger* has some level of intent to share their beliefs with others and behave in a way

that directly reflects their beliefs and opinions, as well as their media use and perceived credibility.

Recommendations

Recommendations for practice

The mid-Millennial sample considered food-related content to be most credible in digital platform (e.g., Web). However, the perceived credibility of social media platforms varied among participants. Therefore, when reaching the mid-Millennial generation, the marketing team at WFM should consider the social media and mainstream media platforms their audience uses and what platforms they perceive to be most credible. Selecting the most effective platforms for delivering marketing and communications content related to fresh produce will allow WFM to better reach mid-Millennials. In addition, if WFM chooses to use personas for developing marketing strategies, WFM can take advantage of their social media platforms to recruit samples from certain types of personas for research and recruitment.

Personas developed in this study can be used to assist WFM and *365 by Whole*Foods Market™ in better understanding the mid-Millennial generation and their fresh produce shopping habits. Gaining a deeper understanding of mid-Millennials' fresh produce shopping habits and their perceptions on fresh produce will enable WFM to effectively reach the mid-Millennial generation. Also, if WFM dedicates additional research to the personas developed in this study, additional themes may emerge and data collected could be used to provide more detailed descriptions of each persona.

Last, many (n = 21) of the participants indicated they were socially and/or environmentally concerned and said one of the main reasons they shop at WFM was because they trust WFM products, as well as their organic and sustainability standards. In conclusion, grocers may increase consumers' confidence in WFM products by posting clear, easy to read information about each product near the product. Providing information for consumers may help consumers feel more at ease about purchasing fresh produce.

Recommendations for persona development

Adlin and Pruitt's (2010) concept of the persona lifecycle was adapted and used to guide the development of the four personas in this study. The persona lifecycle (Adlin & Pruitt, 2010) was created for product development and although I adapted the basic concept of the persona lifecycle, I adjusted the stages I believed were necessary for buyer personas. However, these stage adjustments were solely based off of hypothetical assumptions and although the stages worked for the purposes of this study, I realized even more stages were needed in order to fully develop a marketing and communications persona. More specifically, the following stages were added: Courting, marriage, birth, and adoption (Figure 11).



Figure 11. Recommended stages for future development of buyer personas

The *courting* and *marriage* stages are believed to be important for future, persona-related research. Specifically, the courting stage represents the introduction chapter of a research article or manuscript; whereas, the marriage stage represents the literature review. Similar to the courting stage in relationship, the purpose of the introduction chapter in a research manuscript is to introduce the purpose of the study (e.g., discuss with your partner why you are interested in them and what your intentions are) and engage the reader (e.g., make the person you are dating interested in getting to know you better and building a deeper relationship with you).

For future research, it is recommended that the *family planning* stage represents the time in which the researcher(s) decide and discuss the procedures to be used for the data collection stage (e.g., *conception*). For the purposes of this study, I used three data collection methods—participant observation, semi-structured interview, and quantitative questionnaire. In order to gain a deep understanding of your sample, especially when developing personas, it is recommended that more than one data collection be used. The semi-structured interview provided the deepest understanding of the sample for this study therefore, although it depends on the context, future researchers shouldconduct

interviews when development personas. In addition, focus groups would be important for future researchers to consider, especially when investigating the social norm and intent components of TPB.

For future research, it is recommended that the purpose of the *gestation* stage be solely for data analysis. The persona lifecycle developed by Adlin and Pruitt (2010) suggests that data analysis should take place across several stages—conception, gestation, and infant. However, this process made the data analysis phase confusing and difficult to translate in written communication. Furthermore, according to Adlin and Pruitt (2010) *birth* is when the personas and the method(s) used to develop the personas are introduced and communicated. However, the *birth* stage was renamed for the purposes of this study. For researchers should use the birth stage in persona development as an opportunity to present the findings and/or results of the study.

For the purposes of this study, the *infant* stage was the stage in which I further developed the personas using the demographic and psychographic data. However, as previously mentioned, this made the data analysis process more difficult than it should have been and therefore, all data analysis should be done in the gestation stage; whereas, the infant stage should include the discussion and recommendations. Once an early stage persona is development and presented, I felt it was important to add an *adoption* stage. The adoption stage allows practitioners and other researchers the opportunity to adopt the persona and use it as a foundation for future research and development. If the early stage persona is adopted, future researchers would repeat the same steps in the suggested persona lifecycle as illustrated in Figure 7 with the chances of reaching a toddler-level

persona. Future researchers should repeat these steps, while adding more data collection methods to gain a deeper understanding of the population each time, until the persona has reached *adulthood*.

As the understanding and further development of the personas described in this study are expanded and deepened, the personas will be more likely to mature into adulthood, which is considered to be the most useful and beneficial level of personas to marketers (Adlin & Pruitt, 2010). Adulthood-level personas enable marketers to efficiently reach and engage target audiences because they accurately describe individuals in a specific audience. If the personas developed in this study reach adulthood, marketers who successfully use the personas will have to consider the possible retirement or reuse of each persona (Adlin & Pruitt, 2010). If at any point the personas developed in this study no longer accurately describe the audience, they must be retired or rejuvenated by returning them to the infant or toddler stages, so that new personas can be developed or refined.

To reach adulthood, the personas described in this study require the collection of more data and on a much larger scale. Future studies should collect data nationwide so the findings (each persona) can be representative of the national consumer base.

Collecting data on a larger scale would increase the likelihood of differences among the demographic and psychographic characteristics for each persona. In addition, the data collected should be more in-depth and explore mid-Millennials perceptions on fresh produce practices compared to the practices of other food items and in other venues and

states. Specifically, investigating the relationship of plant-based food products and animal-based food products.

Researchers should also consider the possibility of exploring what *most* important to mid-Millennials when shopping for fresh produce. For the purposes of this study, each participant was represented in more than one persona type. However, forcing participants to identify what is most important to them when shopping for produce would provide marketers with a deeper understanding of why mid-Millennials make certain decisions and what they expect during their produce shopping experiences.

Recommendations for future research

When investigating the mid-Millennial generation, several possible outcomes to research are dependent on each component of SCT: personal, behavior, and environment. For the purposes of this study, the personal component was investigated by asking demographic and psychographic questions. The psychographic questions were developed to gain an understanding of the participants' use of social media and media platforms and the perceived credibility of these platforms when considering food-related content. However, to gain a deeper understanding of mid-Millennial's media use, future researchers should investigate the possible effect media messages have on mid-Millennials' produce shopping behaviors.

In addition, there was only one environment tested, which did not allow for much variation in the demographic and geographic findings. Researchers should investigate various environments when studying produce shoppers, including other geographical locations and various grocery chains. Specifically, researchers should study more than

three WFM locations, as were done in this study, and expand their research to include other grocery stores, including HEB, Kroger, Randall's, and Central Market. Last, WFM will be able to reach mid-Millennials more effectively with the personas developed in this study once each component of SCT is explored in greater detail.

Furthermore, each component of the theory of planned behavior should be investigated in greater detail to understand how a persons' personal, behavioral, and environmental determinants relate to mid-Millennials' intent and behavior. Therefore, the personas developed in this study cannot be effectively used by marketers to reach specific audiences until each component of TPB is further investigated.

Recommendations for investigating the three components of TPB among mid-Millennials produce shoppers include:

- a) *Attitude*. To address this component, a future researcher could describe participants' perceptions of their produce shopping experience(s) at WFM.
- b) *Subjective norms*. To address this component, a future researcher could pose the following questions: 1) Most people who are important to me approve of my decision to purchase all organic produce, and 2) Most people like me purchase all organic produce.
- c) *Perceived behavioral control*. To address this component, a future researcher could pose the following questions: 1) I am confident in my decision to purchase only organic produce, and 2) My decision to purchase all organic produce is all up to me.

Conclusion

As with any study, there are setbacks and limitations present. To develop higher-level personas, more resources and data are needed than what can be provided in this single study. As more research is dedicated to the infant-level personas developed in this study, it is possible that an increasing number of grocers and food marketers will apply personas to their marketing and communication strategies.

Researchers should use this study as a basis to determine a more accurate representation of the number of factors that are important to mid-Millennials when shopping for fresh produce. Until each factor is identified, and more thoroughly understood, grocers and food product marketers will continue to develop marketing and communication strategies not knowing if it they are effectively reaching their audience through the platform they prefer and with the information they find most important.

For personas to mature to adulthood, future researchers should deepen and expand the data collection process. My recommendations for data expansion include: 1) Sample groups from other grocery chains that offer organic and sustainable food products, 2) Sample groups from grocery chains that offer conventional produce, 3) Expand geographically by sampling groups from grocery chains that span across the US, and 4) Sample groups from the entire Millennial generation.

My recommendations for gaining a deeper understanding of the individuals included in the personas developed in this study include: 1) design interview questions to understand what *motivates* mid-Millennials to purchase organic produce, 2) investigate the possible effect of TPB components and mid-Millennial produce shopping behaviors,

3) explore the possible relationship between PLU codes and attitudes or PBC of mid-Millennial produce shoppers, and 4) investigate why various media platforms are considered to be credible, or not credible, when considering food-related content.

To reach the mid-Millennial customer segment, WFM should consider the importance mid-Millennials place on quality, convenience, and price. Overall, the mid-Millennial participants in this study were concerned about the health and freshness qualities associated with organic produce, and they were willing to pay higher prices for organic produce. However, a majority of the participants indicated they had a *price* threshold and were not willing to exceed their threshold for the sake of their health or desired taste.

Considering the buyer personas in this study were developed for marketing and communication purposes, the birth stage was omitted because at this point in the process, the personas are not developed enough for marketing use. The personas are not usable for marketing use until the *infant* stage, which is what the personas developed in this study can be considered as. The steps necessary to reach toddler and adolescent-level personas may vary from project to project. However, the general steps for the toddler and adolescent stages should include additional data collection and more in-depth investigation of the population.

REFERENCES

- Adlin, T., & Pruitt, J. (2010). The essential persona lifecycle: Your guide to building and using personas. San Francisco, CA.: Morgan Kaufmann.
- Ajzen, I., & Fishbein, M. (1980). Understanding attitudes and predicting social behavior. Englewood Cliffs, NJ.: Prentice-Hall.
- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior (pp. 11–39). Heidenlberg, New York.: Springer Berlin Heidelberg. DOI: 10.1007/978-3-642-69746-3 2.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, *84*(2), 191.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, *37*(2), 122.
- Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology*, 4(3), 359–373.
- Bandura, A. (1998). Health promotion from the perspective of social cognitive theory. *Psychology and Health, 13,* 623–649.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, *52*(1), 1–26.
- Bandura, A. (2011). Social cognitive theory. *Handbook of Social Psychological Theories*, London, UK: Sage, 349–373.
- Bishop, D. M., & Piwonka, M. C. (2015). Millennials and music. (Unpublished undergraduate thesis). Texas A&M University, College Station, TX.
- Blaikie, N. (2000). Designing social research. Cambridge, UK.: Polity Press.
- Bosse, D. (2015). Perceptions of the stereotypes of the Millennial generation. (Unpublished master's thesis). Texas A&M University, College Station, TX.

- Broschinsky, D., & Baker, L. (2008, August). Using persona with XP at LANDesk Software, an Avocent company. In *Agile, 2008. AGILE'08. Conference* (pp. 543–548). Institute of Electrical and Electronics Engineers.
- Chang, Y. N., Lim, Y. K., & Stolterman, E. (2008, October). Personas: from theory to practices. In *Proceedings of the 5th Nordic conference on Human-computer interaction: building bridges* (pp. 439–442). Association for Computing Machinery Digital Library.
- Chapman, C. N., & Milham, R. P. (2006, October). The personas' new clothes: methodological and practical arguments against a popular method. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Vol. 50, No. 5, pp. 634–636). SAGE Publications.
- Cooper, A. (2000). The inmates are running the asylum: Why high-tech products drive us crazy and how to restore the sanity. Indianapolis: Sams.
- Cooper, A., & Reimann, R. (2003). About Face 2.0: The Essentials of Interaction Design. New York, NY.: John Wiley & Sons, Inc.
- Curbello, C. A. (2015). Millennials and live music culture. (Unpublished undergraduate thesis). Texas A&M University, College Station, TX.
- Dillman, D. A., Phelps, G., Tortora, R., Swift, K., Kohrell, J., Berck, J., & Messer, B. L. (2009). Response rate and measurement differences in mixed-mode surveys using mail, telephone, interactive voice response (IVR) and the Internet. *Social Science Research*, *38*(1), 1–18.
- Detre, J. D., Mark, T. B., & Clark, B. M. (2010). Understanding Why College-Educated Millennials Shop at Farmers' Markets: An Analysis of Students at Louisiana State University. *Journal of Food Distribution Research*, 41(3), 14–24.
- De Magistris, T., & Gracia, A. (2012). Do Consumers Pay Attention to the Organic Label When Shopping Organic Food in Italy? Organic Food and Agriculture New Trends and Developments in the Social Sciences. Rijeka, Croatia, Europe.: InTech. doi: 10.5772/28027.
- Field, A. (2009). Discovering statistics using SPSS: And sex and drugs and rock 'n' roll (3rd ed.). Thousand Oaks, CA: Sage.
- Fishbein, M., & Ajzen, I. (1975). Belief, attitude, intention and behavior: An introduction to theory and research. Addison-Wesley Publishing Company, Inc.

- Froebel, L. (2015). Consumers' perceptions of animal-based food products and advertisements. (Unpublished master's thesis). Texas A&M University, College Station, TX.
- Fromm, J., Butler, C., & Dickey, C. (2015). How to engage Millennials: Re-imagining the consumer as a partner, not a target audience, to increase engagement. *Journal of Brand Strategy*, 4(1), 27-36.
- Fry, R. (2015). Millennials Surpass Gen Xers as the Largest Generation in U.S. Labor Force. Retrieved from: http://www.pewresearch.org/ fact-tank/2015/05/11/Millennials-surpass-gen-xers-as-the-largest-generation-in-u-slabor-force/.
- Goodwin, K. (2008, May). Getting from research to personas: Harnessing the power of data. *Cooper*. Retrieved from: http://www.cooper.com/journal/2002/11/getting from research to perso
- Gustin, L., & Ha, Y. (2014) Effect of Environmental Product Information and Ethnicity on Millennials' Brand Attitude and Purchase Intention. *International Journal of Science Commerce and Humanities*, 2(6), 77–88.
- Guthrie, J. F., Lin, B. H., Reed, J., & Stewart, H. (2005). Understanding economic and behavioral influences on fruit and vegetable choices. *Amber Waves*, 3(2), 36–41.
- Grix, J. (2002). Introducing students to the generic terminology of social research. *Politics*, 22(3), 175–186.
- Grudin, J., & Pruitt, J. (2002, January). Personas, participatory design and product development: An infrastructure for engagement. *Participatory Design Conference*. (144–152).
- Harris, K. J., Stiles, J., & Durocher, J. (2011). A preliminary evaluation of the Millennial shopping experience: preferences and plateaus. *Hospitality Review*, 29(1), 2.
- Hendriks, M., & Peelen, E. (2013). Personas in action: Linking event participation motivation to charitable giving and sports. *International Journal of Nonprofit and Voluntary Sector Marketing*, 18(1), 60–72.
- Herman, D. R., Harrison, G. G., & Jenks, E. (2006). Choices made by low-income women provided with an economic supplement for fresh fruit and vegetable purchase. *Journal of the American Dietetic Association*, 106(5), 740–744.
- Hjelmar, U. (2011). Consumers' purchase of organic food products. A matter of convenience and reflexive practices. *Appetite*, 56(2), 336–344.

- James, J. M., & Bolstein, R. (1990). The effect of monetary incentives and follow-up mailings on the response rate and response quality in mail surveys. *Public Opinion Quarterly*, 54(3), 346–361.
- Junior, P. T. A., & Filgueiras, L. V. L. (2005, October). User modeling with personas. In *Proceedings of the 2005 Latin American conference on Human-computer interaction* (pp. 277–282). ACM.
- Kowske, B. J., Rasch, R., & Wiley, J. (2010). Millennials' (lack of) attitude problem: An empirical examination of generational effects on work attitudes. *Journal of Business and Psychology*, 25(2), 265–279.
- Kreuter, M. W., & Wray, R. J. (2003). Tailored and targeted health communication: strategies for enhancing information relevance. *American Journal of Health Behavior*, 27(1), S227–S232.
- Lage, K., Losoff, B., & Maness, J. (2011). Receptivity to library involvement in scientific data curation: a case study at the University of Colorado Boulder. *Portal: Libraries and the Academy*, 11(4), 915–937.
- Lesser, V. M., Dillman, D. A., Carlson, J., Lorenz, F., Mason, R., & Willits, F. (2001). Quantifying the influence of incentives on mail survey response rates and nonresponse bias. *Annual Meeting of the American Statistical Association*. Atlanta, GA.
- Magkos, F., Arvaniti, F., & Zampelas, A. (2006). Organic food: buying more safety or just peace of mind? A critical review of the literature. *Critical Reviews in Food Science and Nutrition*, 46(1), 23–56.
- Miaskiewicz, T. (2010). Bridging the Gap between Designers and Consumers: The Role of Effective and Accurate Personas. ProQuest LLC. Ann Arbor, MI.
- Miles, M. B., Huberman, A. M., & Saldana, J. (2013). *Qualitative data analysis: A methods sourcebook*. Thousand Oaks, CA. SAGE Publications, Inc.
- Mobly, M. L. & Hill, J. S. (2014). Testing the theory of consumer interest. (Unpublished undergraduate thesis). Texas A&M University, College Station, TX.
- Morgan, D. L. (2007). Paradigms lost and pragmatism regained: Methodological implications of combining qualitative and quantitative methods. *Journal of Mixed Methods Research*, 1(1), 48–76.

- Mudge, C. (2011). Your Certified Organic Grocery Store. Retrieved from: http://www.wholefoodsmarket.com/blog/whole-story/your-certified-organic-grocery-store
- Mukiibi, M. L., & Bukenya, J. O. (2008). Segmentation Analysis of Grocery Shoppers in Alabama. In *2008 Annual Meeting, February 2-6, 2008, Dallas, Texas* (No. 6943). Southern Agricultural Economics Association.
- Nielsen. (2013). Nielsen Pop-FactsTM. The Nielsen Company.
- Nielsen. (2014). Millennials Breaking the myths. An uncommon sense of the consumer. Retrieved from http://www.nielsen.com/dz/en/insights/reports/2014/millennials-breaking-the-myths.html
- Nganje, W. E., Shaw Hughner, R., & Lee, N. E. (2011). State-branded programs and consumer preference for locally grown produce. *Agricultural and Resource Economics Review*, 40(1), 20.
- Ogden, C. L., Carroll, M. D., Kit, B. K., & Flegal, K. M. (2014). Prevalence of childhood and adult obesity in the United States, 2011-2012. *The Journal of the American Medical Association*, 311(8), 806-814.
- Paul, J., & Rana, J. (2012). Consumer behavior and purchase intention for organic food. *Journal of Consumer Marketing*, 29(6), 412–422.
- Pendergast, D. (2010). Getting to Know the Y Generation. *Tourism and Generation Y*, CAB International, 1.
- Pew Research Center (2014, March 7). Millennials in Adulthood: Detached from Institutions, Networked with Friends. Retrieved from: http://www.pewsocialtrends.org/2014/03/07/Millennials-in-adulthood/
- Pew Research Center. (2010). The Millennials: Confident. Connected. Open to change. *Millennials: A Portrait of Generation Next*. The Pew Research Center.
- Pitta, D. (2012). The challenges and opportunities of marketing to Millennials. *Journal of Consumer Marketing*, 29(2).
- Prosumer Report (2010). Gender Shift: Are Women the New Men? *Euro RSCG Worldwide*, *9*(1). Retrieved from: http://www.havasww.de/fileadmin/user_upload/multimedia/strategie/prosumer_r eport gender shift.pdf

- Pruitt, J., & Adlin, T. (2006). The persona lifecycle: Keeping people in mind throughout the design process. Burlington, MA.: Morgan Kaufmann Publishers, Inc.
- Pruitt, J., and Jonathan G. (2003). Personas: practice and theory. *Proceedings of the* 2003 Conference on Designing for User Experiences. Association for Computing Portal Digital Library, 2003.
- Roberts, A. P. (2014). Organic and Locally Grown Food Preferences of Adults in Kentucky. *Theses and Dissertations—Community and Leadership Development*. Paper 12. Retrieved from: http://uknowledge.uky.edu/cld etds/12
- Sangkumchaliang, P., & Huang, W. (2012). Consumers' perceptions and attitudes of organic food products in Northern Thailand. *International Food and Agribusiness Management Review*, 15(1), 87–102.
- Savage, J. S., Fisher, J. O., & Birch, L. L. (2007). Parental influence on eating behavior: Conception to adolescence. The Journal of Law, Medicine & Ethics: A Journal of the American Society of Law, Medicine & Ethics, *35*(1), 22–34.
- Sirieix, L., Kledal, P. R., & Sulitang, T. (2011). Organic food consumers' trade-offs between local or imported, conventional or organic products: a qualitative study in Shanghai. *International Journal of Consumer Studies*, *35*(6), 670–678.
- Smith, K. T. (2014). Millennials'interpretations of Green Terminology. *Academy of Marketing Studies Journal*, 18(1), 55.
- Svatek, S. (2015). "Dialed-in or disconnected:" Millennials' perceptions of radio. (Unpublished master's thesis). Texas A&M University, College Station, TX.
- Tarkiainen, A., & Sundqvist, S. (2005). Subjective norms, attitudes and intentions of Finnish consumers in buying organic food. *British food journal*, 107(11), 808–822.
- Taylor, P., & Keeter, S. (2010). Millennials: A portrait of generation next. *Pew Internet & American Life Project. Washington DC: Pew Research Center*.
- Webber, C. B., Sobal, J., & Dollahite, J. S. (2010). Shopping for fruits and vegetables. Food and retail qualities of importance to low-income households at the grocery store. *Appetite*, *54*(2), 297–303.
- Wright, S. M., & Aronne, L. J. (2012). Causes of obesity. *Abdominal imaging*, *37*(5), 730-732.

Zachary, D. A., Palmer, A. M., Beckham, S. W., & Surkan, P. J. (2013). A framework for understanding grocery purchasing in a low-income urban environment. *Qualitative health research*, 23(5), 665–678.

APPENDIX A

Data Collection Materials: Observation Data Sheet

	Respondent ID: Interviewer:		
	Interviewer:		
Observation Data Sheet			

APPENDIX B

Data Collection Materials: Produce Inventory Sheet

Respondent ID:	
Interviewer:	

PLU#	Quantity	PLU#	Quantity

APPENDIX C

Data Collection Materials: Observation Reference Sheet and Semi-Structured Interview Script

Semi-Structured Interview (approximately 10 minutes)

"My name is, I am a Master's student in the Department of Agricultural Leadership, Education, and Communications working on my thesis project. You were asked to participate in my project because I am interested in your organic produce shopping and eating habits, as well as your opinions on organic versus conventional produce. Please feel free to share your thoughts
I will record our conversation. However, your name will not be used in my research project, and all information will remain confidential. Please speak up during this discussion, so the recorder can capture our conversation.
Prior to beginning our conversation, I ask that you sign the consent form." [Sign consent form]
[Start recording on iPad]

Member check (5 minutes)

Begin by discussing your observations with the subject and *member checking* the information you recorded. Use this time to gain a better understanding of the subject's produce shopping decisions. See below a list of example observations and questions:

- 1. **Observation:** The subject selected a majority of organic produce **Ouestions:**
 - Why did you select organic produce versus conventional produce?
 - What are your thoughts/opinions on organic and conventional produce?
- 2. **Observation:** *The subject spent thirty minutes in the produce section* Questions:
 - How much time do you typically spend in the produce section of the store?
 - Which section of the store do you usually spend the most time in?
- 3. **Observation:** The subject referred to his or her shopping list while shopping for produce

Questions:

- How often do you bring a shopping list with you to the grocery store?
- How closely do you follow your shopping list when you are in the produce section of the store?

- How would you compare that to how closely you follow your list when you're shopping in other areas of the store?
- What are the produce items you buy most frequently?
- What influences what is on your list?
- What influences what produce you purchase?

Interview (10 minutes)

Once you have *member checked* your observations with the subject, you will spend approximately 10 minutes asking him or her questions to gain an understanding of their produce shopping habits, eating habits, and general thoughts on organic produce. See below a list of questions to help guide this portion of the interview:

- 1. Who typically does the grocery shopping for your household?
 - a. If no, who does?
- 2. How often do you go grocery shopping?
- 3. How often do you shop for produce?
- 4. Where do you usually go grocery shopping?
 - a. If no, where else do you shop? How often?
 - b. If yes, why do you choose Whole Foods over other grocery stores or farmers' markets?

Organic vs. conventional or non-organic produce

- 5. When you hear the terms organic produce, what typically comes to mind?
- 6. When you hear the term conventional produce, what comes to mind?
 - a. If he or she is not familiar with the term conventional produce, you may probe for *non-organic* produce?
- 7. How would you compare organic and conventional or non-organic produce?
 - a. What parts of that are most important to you?
- 8. Is organic produce better than conventional produce? If so, how?
- 9. What are your go-to sources of information about organic produce?
 - a. If a friend or family member were to ask you to suggest a source of information about organic produce, what would you suggest to him or her?
 - b. What source of information do you trust the most?

If he or she has organic produce in his or her cart...

- 10. How long have you been purchasing organic produce?
- 11. Of the produce you purchase, what percentage would you estimate to be organic?
 - a. If he or she says or suggests the percent varies, ask for a range.
 - b. Also, ask why it varies.
- 12. Why do you choose to purchase organic produce?

APPENDIX D

Data Collection Materials: Demographic and Media Consumption Questionnaire for Research Objective 2

```
* Encoding: UTF-8.
************Hill Questionnaire Syntax*************
******Compute Age*****
COMPUTE D001 RC=2015-D001.
VARIABLE LABELS D001 RC 'Age [2015 – D001]'.
VARIABLE LEVEL D001 RC (SCALE).
FORMATS D001 RC (F3.0).
EXECUTE.
*******Method - Subject Characteristics******
******Demographic Descriptives********
********Age Descriptives*******
DESCRIPTIVES VARIABLES = D001 RC
/STATISTICS = MEAN STDDEV MIN MAX.
*******Demographics Frequencies*******
********Age Frequency*******
FREQUENCIES VARIABLES = D001 RC
/ORDER = ANALYSIS.
*****Gender Frequencies*******
FREQUENCIES VARIABLES = D002
 /ORDER=ANALYSIS.
EXECUTE.
*********Race Frequencies********
FREQUENCIES VARIABLES=D003 1
/ORDER=ANALYSIS.
```

EXECUTE.

FREQUENCIES VARIABLES=D003_2 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D003_3 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D003_4 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D003_5 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D003_6 /ORDER=ANALYSIS. EXECUTE.

*******Spanish Decent Frequencies*******

FREQUENCIES VARIABLES=D005 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D006 /ORDER=ANALYSIS. EXECUTE.

********Level of Education*******

FREQUENCIES VARIABLES=D007_2 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D007_3 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D007_4 /ORDER=ANALYSIS.

EXECUTE.

FREQUENCIES VARIABLES=D007_5 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D007_6 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D007_7 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D007_13 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D008 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D009 /ORDER=ANALYSIS. EXECUTE.

*******Occupation Frequencies*******

FREQUENCIES VARIABLES=D010 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D010_TEXT /ORDER=ANALYSIS. EXECUTE.

******Marital Status Frequencies*******

FREQUENCIES VARIABLES=D011 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D011_TEXT /ORDER=ANALYSIS.

```
EXECUTE.
*******Children Frequencies*******
FREQUENCIES VARIABLES=D012
 /ORDER=ANALYSIS.
EXECUTE.
FREQUENCIES VARIABLES=D013
/ORDER=ANALYSIS.
EXECUTE.
******Living Situation Frequencies*******
FREQUENCIES VARIABLES=D014
/ORDER=ANALYSIS.
EXECUTE.
USE ALL.
SORT CASES BY PTYPE01.
SPLIT FILE BY PTYPE01.
***RO2: Describe the demographics and psychographics of each infant-stage
persona******
***RQ2.1: What are the demographic characteristics of each infant-stage
persona?******
******Demographic Descriptives********
*******Age Descriptives*******
DESCRIPTIVES VARIABLES=D001 RC
/STATISTICS=MEAN STDDEV MIN MAX.
*******Demographics Frequencies*******
******Gender Frequencies*******
FREQUENCIES VARIABLES=D002
/ORDER=ANALYSIS.
EXECUTE.
```

FREQUENCIES VARIABLES=D003_1 /ORDER=ANALYSIS. EXECUTE. FREQUENCIES VARIABLES=D003 2 /ORDER=ANALYSIS. EXECUTE. FREQUENCIES VARIABLES=D003 3 /ORDER=ANALYSIS. EXECUTE. FREQUENCIES VARIABLES=D003 4 /ORDER=ANALYSIS. EXECUTE. FREQUENCIES VARIABLES=D003 5 /ORDER=ANALYSIS. EXECUTE. FREQUENCIES VARIABLES=D003 6 /ORDER=ANALYSIS. EXECUTE. ******Spanish Decent Frequencies******* FREQUENCIES VARIABLES=D005 /ORDER=ANALYSIS. EXECUTE. *******Combined Annual Income Frequencies******** FREQUENCIES VARIABLES=D006 /ORDER=ANALYSIS. EXECUTE. ********Level of Education******* FREQUENCIES VARIABLES=D007_2 /ORDER=ANALYSIS. EXECUTE.

*********Race Frequencies********

FREQUENCIES VARIABLES=D007_3 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D007_4 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D007_5 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D007_6 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D007_7 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D007_13 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D008 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D009 /ORDER=ANALYSIS. EXECUTE.

******Occupation Frequencies*******

FREQUENCIES VARIABLES=D010 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D010_TEXT /ORDER=ANALYSIS. EXECUTE.

*******Marital Status Frequencies*******

FREQUENCIES VARIABLES=D011 /ORDER=ANALYSIS. EXECUTE. FREQUENCIES VARIABLES=D011 TEXT /ORDER=ANALYSIS. EXECUTE. *******Children Frequencies******* FREQUENCIES VARIABLES=D012 /ORDER=ANALYSIS. EXECUTE. FREQUENCIES VARIABLES=D013 /ORDER=ANALYSIS. EXECUTE. ******Living Situation Frequencies******* FREQUENCIES VARIABLES=D014 /ORDER=ANALYSIS. EXECUTE. *******Media Consumption Descriptives******** *******Use-Social Media-Facebook Descriptives******* DESCRIPTIVES VARIABLES=MU001 1 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Social Media-Twitter Descriptives******* DESCRIPTIVES VARIABLES=MU001 2 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Social Media-Instagram Descriptives******* DESCRIPTIVES VARIABLES=MU001_3 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Social Media-Pinterest Descriptives*******

DESCRIPTIVES VARIABLES=MU001_4 /STATISTICS = MEAN STDDEV MIN MAX.

*******Use-Social Media-YouTube Descriptives*******
DESCRIPTIVES VARIABLES = MU001_6 /STATISTICS = MEAN STDDEV MIN MAX.
*******Use-Social Media-Snapchat Descriptives*******
DESCRIPTIVES VARIABLES = MU001_7 /STATISTICS = MEAN STDDEV MIN MAX.
*******Use-Media-Radio Descriptives*******
DESCRIPTIVES VARIABLES=MU002_1 /STATISTICS = MEAN STDDEV MIN MAX.
*******Use-Media-Television Descriptives*******
DESCRIPTIVES VARIABLES=MU002_2 /STATISTICS = MEAN STDDEV MIN MAX.
*******Use-Media-Magazines Descriptives*******
DESCRIPTIVES VARIABLES=MU002_3 /STATISTICS = MEAN STDDEV MIN MAX.
*******Use-Media-Newspaper Descriptives*******
DESCRIPTIVES VARIABLES=MU002_4 /STATISTICS = MEAN STDDEV MIN MAX.
*******Use-Media-Digital Descriptives*******
DESCRIPTIVES VARIABLES=MU002_5 /STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Social Media-Facebook Descriptives*******
DESCRIPTIVES VARIABLES=MC001_1 /STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Social Media-Twitter Descriptives*******
DESCRIPTIVES VARIABLES=MC001_2

/STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Social Media-Instagram Descriptives*******
DESCRIPTIVES VARIABLES=MC001_3 /STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Social Media-Pinterest Descriptives*******
DESCRIPTIVES VARIABLES=MC001_4 /STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Social Media-YouTube Descriptives*******
DESCRIPTIVES VARIABLES=MC001_5 /STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Social Media-Snapchat Descriptives*******
DESCRIPTIVES VARIABLES=MC001_6 /STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Media-Radio Descriptives******
DESCRIPTIVES VARIABLES=MC002_1 /STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Media-Television Descriptives******
DESCRIPTIVES VARIABLES=MC002_7 /STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Media-Magazine Descriptives*******
DESCRIPTIVES VARIABLES=MC002_8 /STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Media-Newspaper Descriptives*******
DESCRIPTIVES VARIABLES=MC002_9 /STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Media-Digital Descriptives******

DESCRIPTIVES VARIABLES=MC002_10 /STATISTICS = MEAN STDDEV MIN MAX.

RQ2.2: What are the psychographic characteristics of each infant-stage persona?*** USE ALL. SORT CASES BY PType01. SPLIT FILE LAYERED BY PType01. *******Media Consumption Descriptives******** *******Use-Social Media-Facebook Descriptives****** DESCRIPTIVES VARIABLES=MU001 1 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Social Media-Twitter Descriptives******* DESCRIPTIVES VARIABLES=MU001 2 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Social Media-Instagram Descriptives******* DESCRIPTIVES VARIABLES=MU001_3 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Social Media-Pinterest Descriptives******* DESCRIPTIVES VARIABLES=MU001 4 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Social Media-YouTube Descriptives******* DESCRIPTIVES VARIABLES=MU001 6 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Social Media-Snapchat Descriptives******* DESCRIPTIVES VARIABLES=MU001 7 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Media-Radio Descriptives*******

DESCRIPTIVES VARIABLES=MU002_1
/STATISTICS = MEAN STDDEV MIN MAX.
*******Use-Media-Television Descriptives*******
DESCRIPTIVES VARIABLES=MU002 2
/STATISTICS = MEAN STDDEV MIN MAX.
*******Use-Media-Magazines Descriptives*******
DESCRIPTIVES VARIABLES=MU002_3
/STATISTICS = MEAN STDDEV MIN MAX.
*******Use-Media-Newspaper Descriptives*******
DESCRIPTIVES VARIABLES=MU002_4
/STATISTICS = MEAN STDDEV MIN MAX.
*******Use-Media-Digital Descriptives*******
DESCRIPTIVES VARIABLES=MU002_5
/STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Social Media-Facebook Descriptives*******
DESCRIPTIVES VARIABLES=MC001_1
/STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Social Media-Twitter Descriptives*******
DESCRIPTIVES VARIABLES=MC001_2
/STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Social Media-Instagram Descriptives*******
DESCRIPTIVES VARIABLES=MC001_3
/STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Social Media-Pinterest Descriptives*******
DESCRIPTIVES VARIABLES=MC001_4
/STATISTICS = MEAN STDDEV MIN MAX.

*******Credible-Social Media-YouTube Descriptives******* DESCRIPTIVES VARIABLES=MC001 5 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Social Media-Snapchat Descriptives******* DESCRIPTIVES VARIABLES=MC001 6 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Media-Radio Descriptives******* DESCRIPTIVES VARIABLES=MC002 1 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Media-Television Descriptives******* DESCRIPTIVES VARIABLES=MC002 7 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Media-Magazine Descriptives******* DESCRIPTIVES VARIABLES=MC002 8 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Media-Newspaper Descriptives******* DESCRIPTIVES VARIABLES=MC002 9 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Media-Digital Descriptives******* DESCRIPTIVES VARIABLES=MC002 10 /STATISTICS = MEAN STDDEV MIN MAX. ****************************** USE FIRST. SORT CASES BY PTYPE02. SPLIT FILE BY PTYPE02. ***RO2: Describe the demographics and psychographics of each infant-stage persona******

RQ2.1: What are the demographic characteristics of each infant-stage persona?*** ******Demographic Descriptives******** *******Age Descriptives******* DESCRIPTIVES VARIABLES=D001 RC /STATISTICS=MEAN STDDEV MIN MAX. ******Demographics Frequencies******* ******Gender Frequencies****** FREQUENCIES VARIABLES = D002 /ORDER=ANALYSIS. EXECUTE. *********Race Frequencies******* FREQUENCIES VARIABLES=D003 1 /ORDER=ANALYSIS. EXECUTE. FREQUENCIES VARIABLES=D003 2 /ORDER=ANALYSIS. EXECUTE. FREQUENCIES VARIABLES=D003 3 /ORDER=ANALYSIS. EXECUTE. FREQUENCIES VARIABLES=D003 4 /ORDER=ANALYSIS. EXECUTE. FREQUENCIES VARIABLES=D003 5 /ORDER=ANALYSIS. EXECUTE. FREQUENCIES VARIABLES=D003 6 /ORDER=ANALYSIS. EXECUTE.

*******Spanish Decent Frequencies*******

FREQUENCIES VARIABLES=D005 /ORDER=ANALYSIS. EXECUTE.

********Combined Annual Income Frequencies*******

FREQUENCIES VARIABLES=D006 /ORDER=ANALYSIS. EXECUTE.

********Level of Education*******

FREQUENCIES VARIABLES=D007_2 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D007_3 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D007_4 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D007_5 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D007_6 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D007_7 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D007_13 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D008 /ORDER=ANALYSIS. EXECUTE. FREQUENCIES VARIABLES=D009 /ORDER=ANALYSIS. EXECUTE. *******Occupation Frequencies******* FREQUENCIES VARIABLES=D010 /ORDER=ANALYSIS. EXECUTE. FREQUENCIES VARIABLES=D010 TEXT /ORDER=ANALYSIS. EXECUTE. ******Marital Status Frequencies******* FREQUENCIES VARIABLES=D011 /ORDER=ANALYSIS. EXECUTE. FREQUENCIES VARIABLES=D011 TEXT /ORDER=ANALYSIS. EXECUTE. *******Children Frequencies******* FREQUENCIES VARIABLES=D012 /ORDER=ANALYSIS. EXECUTE. FREQUENCIES VARIABLES=D013 /ORDER=ANALYSIS. EXECUTE. ******Living Situation Frequencies******* FREQUENCIES VARIABLES=D014 /ORDER=ANALYSIS. EXECUTE. *******Media Consumption Descriptives********* *******Use-Social Media-Facebook Descriptives******

DESCRIPTIVES VARIABLES = MU001_1

/STATISTICS = MEAN STDDEV MIN MAX.
*******Use-Social Media-Twitter Descriptives*******
DESCRIPTIVES VARIABLES = MU001_2 /STATISTICS = MEAN STDDEV MIN MAX.
*******Use-Social Media-Instagram Descriptives*******
DESCRIPTIVES VARIABLES = MU001_3 /STATISTICS = MEAN STDDEV MIN MAX.
*******Use-Social Media-Pinterest Descriptives*******
DESCRIPTIVES VARIABLES = MU001_4 /STATISTICS = MEAN STDDEV MIN MAX.
*******Use-Social Media-YouTube Descriptives*******
DESCRIPTIVES VARIABLES = MU001_6 /STATISTICS = MEAN STDDEV MIN MAX.
*******Use-Social Media-Snapchat Descriptives*******
DESCRIPTIVES VARIABLES = MU001_7 /STATISTICS = MEAN STDDEV MIN MAX.
*******Use-Media-Radio Descriptives*******
DESCRIPTIVES VARIABLES = MU002_1 /STATISTICS = MEAN STDDEV MIN MAX.
*******Use-Media-Television Descriptives*******
DESCRIPTIVES VARIABLES = MU002_2 /STATISTICS = MEAN STDDEV MIN MAX.
*******Use-Media-Magazines Descriptives*******
DESCRIPTIVES VARIABLES = MU002_3 /STATISTICS = MEAN STDDEV MIN MAX.
*******Use-Media-Newspaper Descriptives******

DESCRIPTIVES VARIABLES = MU002 4 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Media-Digital Descriptives******* DESCRIPTIVES VARIABLES = MU002 5 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Social Media-Facebook Descriptives******* DESCRIPTIVES VARIABLES = MC001 1 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Social Media-Twitter Descriptives****** DESCRIPTIVES VARIABLES = MC001 2 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Social Media-Instagram Descriptives******* DESCRIPTIVES VARIABLES = MC001 3 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Social Media-Pinterest Descriptives******* DESCRIPTIVES VARIABLES = MC001 4 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Social Media-YouTube Descriptives******* DESCRIPTIVES VARIABLES = MC001 5 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Social Media-Snapchat Descriptives******* DESCRIPTIVES VARIABLES = MC001 6 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Media-Radio Descriptives******* DESCRIPTIVES VARIABLES = MC002 1

/STATISTICS = MEAN STDDEV MIN MAX.

*******Credible-Media-Television Descriptives******* DESCRIPTIVES VARIABLES = MC002 7 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Media-Magazine Descriptives******* DESCRIPTIVES VARIABLES = MC002 8 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Media-Newspaper Descriptives******* DESCRIPTIVES VARIABLES = MC002 9 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Media-Digital Descriptives****** DESCRIPTIVES VARIABLES = MC002 10 /STATISTICS = MEAN STDDEV MIN MAX. ***RQ2.2: What are the psychographic characteristics of each infant-stage persona?****** USE ALL. SORT CASES BY PType02. SPLIT FILE LAYERED BY PType02. *******Media Consumption Descriptives********* *******Use-Social Media-Facebook Descriptives******* DESCRIPTIVES VARIABLES = MU001 1 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Social Media-Twitter Descriptives******* DESCRIPTIVES VARIABLES = MU001 2 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Social Media-Instagram Descriptives****** DESCRIPTIVES VARIABLES = MU001 3 /STATISTICS = MEAN STDDEV MIN MAX.

*******Use-Social Media-Pinterest Descriptives******* DESCRIPTIVES VARIABLES = MU001 4 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Social Media-YouTube Descriptives******* DESCRIPTIVES VARIABLES = MU001_6 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Social Media-Snapchat Descriptives******* DESCRIPTIVES VARIABLES = MU001 7 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Media-Radio Descriptives******* DESCRIPTIVES VARIABLES = MU002 1 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Media-Television Descriptives******* DESCRIPTIVES VARIABLES = MU002 2 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Media-Magazines Descriptives******* DESCRIPTIVES VARIABLES = MU002 3 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Media-Newspaper Descriptives******* DESCRIPTIVES VARIABLES = MU002 4 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Media-Digital Descriptives******* DESCRIPTIVES VARIABLES = MU002 5 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Social Media-Facebook Descriptives******* DESCRIPTIVES VARIABLES = MC001 1

/STATISTICS = MEAN STDDEV MIN MAX.

*******Credible-Social Media-Twitter Descriptives****** DESCRIPTIVES VARIABLES = MC001 2 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Social Media-Instagram Descriptives******* DESCRIPTIVES VARIABLES = MC001 3 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Social Media-Pinterest Descriptives******* DESCRIPTIVES VARIABLES = MC001 4 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Social Media-YouTube Descriptives******* DESCRIPTIVES VARIABLES = MC001 5 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Social Media-Snapchat Descriptives******* DESCRIPTIVES VARIABLES = MC001 6 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Media-Radio Descriptives******* DESCRIPTIVES VARIABLES = MC002 1 $/STATISTICS = MEAN STDDEV MIN \overline{MAX}$. *******Credible-Media-Television Descriptives******* DESCRIPTIVES VARIABLES = MC002 7 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Media-Magazine Descriptives****** DESCRIPTIVES VARIABLES = MC002 8 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Media-Newspaper Descriptives*******

```
DESCRIPTIVES VARIABLES = MC002 9
/STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Media-Digital Descriptives*******
DESCRIPTIVES VARIABLES = MC002 10
/STATISTICS = MEAN STDDEV MIN MAX.
****************************
USE ALL.
SORT CASES BY PTYPE03.
SPLIT FILE BY PTYPE03.
***RO2: Describe the demographics and psychographics of each infant-stage
persona******
***RQ2.1: What are the demographic characteristics of each infant-stage
persona?******
******Demographic Descriptives*********
********Age Descriptives*******
DESCRIPTIVES VARIABLES = D001 RC
/STATISTICS = MEAN STDDEV MIN MAX.
*******Demographics Frequencies*******
******Gender Frequencies*******
FREQUENCIES VARIABLES = D002
 /ORDER=ANALYSIS.
EXECUTE.
FREQUENCIES VARIABLES=D003 1
 /ORDER=ANALYSIS.
EXECUTE.
FREQUENCIES VARIABLES=D003 2
 /ORDER=ANALYSIS.
EXECUTE.
FREQUENCIES VARIABLES=D003_3
```

/ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D003_4 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D003_5 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D003_6 /ORDER=ANALYSIS. EXECUTE.

*******Spanish Decent Frequencies*******

FREQUENCIES VARIABLES=D005 /ORDER=ANALYSIS. EXECUTE.

********Combined Annual Income Frequencies********

FREQUENCIES VARIABLES=D006 /ORDER=ANALYSIS. EXECUTE.

********Level of Education********

FREQUENCIES VARIABLES=D007_2 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D007_3 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D007_4 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D007_5 /ORDER=ANALYSIS. EXECUTE. FREQUENCIES VARIABLES=D007_6 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D007_7 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D007_13 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D008 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D009 /ORDER=ANALYSIS. EXECUTE.

*******Occupation Frequencies*******

FREQUENCIES VARIABLES=D010 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D010_TEXT /ORDER=ANALYSIS. EXECUTE.

******Marital Status Frequencies*******

FREQUENCIES VARIABLES=D011 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D011_TEXT /ORDER=ANALYSIS. EXECUTE.

*******Children Frequencies*******

FREQUENCIES VARIABLES=D012

/ORDER=ANALYSIS. EXECUTE. FREQUENCIES VARIABLES=D013 /ORDER=ANALYSIS. EXECUTE. ******Living Situation Frequencies****** FREQUENCIES VARIABLES=D014 /ORDER=ANALYSIS. EXECUTE. *******Media Consumption Descriptives********* *******Use-Social Media-Facebook Descriptives******* DESCRIPTIVES VARIABLES = MU001 1 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Social Media-Twitter Descriptives******* DESCRIPTIVES VARIABLES = MU001 2 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Social Media-Instagram Descriptives******** DESCRIPTIVES VARIABLES = MU001 3 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Social Media-Pinterest Descriptives******* DESCRIPTIVES VARIABLES = MU001 4 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Social Media-YouTube Descriptives******* DESCRIPTIVES VARIABLES = MU001 6 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Social Media-Snapchat Descriptives******* DESCRIPTIVES VARIABLES = MU001 7

/STATISTICS = MEAN STDDEV MIN MAX.

*******Use-Media-Radio Descriptives******* DESCRIPTIVES VARIABLES = MU002 1 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Media-Television Descriptives******* DESCRIPTIVES VARIABLES = MU002_2 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Media-Magazines Descriptives****** DESCRIPTIVES VARIABLES = MU002 3 $/STATISTICS = MEAN STDDEV MIN \overline{MAX}$. *******Use-Media-Newspaper Descriptives******* DESCRIPTIVES VARIABLES = MU002 4 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Media-Digital Descriptives******* DESCRIPTIVES VARIABLES = MU002 5 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Social Media-Facebook Descriptives******* DESCRIPTIVES VARIABLES = MC001 1 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Social Media-Twitter Descriptives******* DESCRIPTIVES VARIABLES = MC001 2 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Social Media-Instagram Descriptives******* DESCRIPTIVES VARIABLES = MC001 3 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Social Media-Pinterest Descriptives******* DESCRIPTIVES VARIABLES = MC001 4

/STATISTICS = MEAN STDDEV MIN MAX.

*******Credible-Social Media-YouTube Descriptives******* DESCRIPTIVES VARIABLES = MC001 5 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Social Media-Snapchat Descriptives******* DESCRIPTIVES VARIABLES = MC001 6 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Media-Radio Descriptives******* DESCRIPTIVES VARIABLES = MC002 1 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Media-Television Descriptives******* DESCRIPTIVES VARIABLES = MC002 7 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Media-Magazine Descriptives******* DESCRIPTIVES VARIABLES = MC002 8 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Media-Newspaper Descriptives******* DESCRIPTIVES VARIABLES = MC002 9 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Media-Digital Descriptives****** DESCRIPTIVES VARIABLES = MC002 10 /STATISTICS = MEAN STDDEV MIN MAX.***RQ2.2: What are the psychographic characteristics of each infant-stage persona?****** USE ALL.

SORT CASES BY PType03.

SPLIT FILE LAYERED BY PType03.

*******Media Consumption Descriptives********* *******Use-Social Media-Facebook Descriptives******* DESCRIPTIVES VARIABLES = MU001 1 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Social Media-Twitter Descriptives******* DESCRIPTIVES VARIABLES = MU001 2 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Social Media-Instagram Descriptives******* DESCRIPTIVES VARIABLES = MU001 3 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Social Media-Pinterest Descriptives******* DESCRIPTIVES VARIABLES = MU001 4 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Social Media-YouTube Descriptives******* DESCRIPTIVES VARIABLES = MU001 6 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Social Media-Snapchat Descriptives******* DESCRIPTIVES VARIABLES = MU001 7 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Media-Radio Descriptives******* DESCRIPTIVES VARIABLES = MU002 1 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Media-Television Descriptives****** DESCRIPTIVES VARIABLES = MU002 2 /STATISTICS = MEAN STDDEV MIN MAX.

*******Use-Media-Magazines Descriptives*******

DESCRIPTIVES VARIABLES = MU002 3 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Media-Newspaper Descriptives******* DESCRIPTIVES VARIABLES = MU002 4 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Media-Digital Descriptives******* DESCRIPTIVES VARIABLES = MU002 5 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Social Media-Facebook Descriptives******* DESCRIPTIVES VARIABLES = MC001 1 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Social Media-Twitter Descriptives******* DESCRIPTIVES VARIABLES = MC001 2 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Social Media-Instagram Descriptives******* DESCRIPTIVES VARIABLES = MC001 3 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Social Media-Pinterest Descriptives******* DESCRIPTIVES VARIABLES = MC001 4 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Social Media-YouTube Descriptives******* DESCRIPTIVES VARIABLES = MC001 5 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Social Media-Snapchat Descriptives******* DESCRIPTIVES VARIABLES = MC001 6

/STATISTICS = MEAN STDDEV MIN MAX.

```
*******Credible-Media-Radio Descriptives*******
DESCRIPTIVES VARIABLES = MC002 1
/STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Media-Television Descriptives*******
DESCRIPTIVES VARIABLES = MC002 7
/STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Media-Magazine Descriptives*******
DESCRIPTIVES VARIABLES = MC002 8
/STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Media-Newspaper Descriptives*******
DESCRIPTIVES VARIABLES = MC002 9
/STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Media-Digital Descriptives*******
DESCRIPTIVES VARIABLES = MC002 10
/STATISTICS = MEAN STDDEV MIN MAX.
******************************
USE ALL.
SORT CASES BY PTYPE04.
SPLIT FILE BY PTYPE04.
***RO2: Describe the demographics and psychographics of each infant-stage
persona******
***RQ2.1: What are the demographic characteristics of each infant-stage
persona?******
*****Demographic Descriptives********
********Age Descriptives******
DESCRIPTIVES VARIABLES = D001 RC
/STATISTICS = MEAN STDDEV MIN MAX.
******Demographics Frequencies*******
*****Gender Frequencies*******
```

/ORDER=ANALYSIS. EXECUTE. *********Race Frequencies******** FREQUENCIES VARIABLES=D003_1 /ORDER=ANALYSIS. EXECUTE. FREQUENCIES VARIABLES=D003_2 /ORDER=ANALYSIS. EXECUTE. FREQUENCIES VARIABLES=D003_3 /ORDER=ANALYSIS. EXECUTE. FREQUENCIES VARIABLES=D003 4 /ORDER=ANALYSIS. EXECUTE. FREQUENCIES VARIABLES=D003 5 /ORDER=ANALYSIS. EXECUTE. FREQUENCIES VARIABLES=D003 6 /ORDER=ANALYSIS. EXECUTE. *******Spanish Decent Frequencies******* FREQUENCIES VARIABLES=D005 /ORDER=ANALYSIS. EXECUTE. *******Combined Annual Income Frequencies******** FREQUENCIES VARIABLES=D006 /ORDER=ANALYSIS. EXECUTE. ********Level of Education*******

FREQUENCIES VARIABLES = D002

FREQUENCIES VARIABLES=D007_2 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D007_3 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D007_4 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D007_5 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D007_6 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D007_7 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D007_13 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D008 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D009 /ORDER=ANALYSIS. EXECUTE.

*******Occupation Frequencies*******

FREQUENCIES VARIABLES=D010 /ORDER=ANALYSIS. EXECUTE.

FREQUENCIES VARIABLES=D010_TEXT

/ORDER=ANALYSIS. EXECUTE.
******Marital Status Frequencies******
FREQUENCIES VARIABLES=D011 /ORDER=ANALYSIS. EXECUTE.
FREQUENCIES VARIABLES=D011_TEXT /ORDER=ANALYSIS. EXECUTE.
*******Children Frequencies*******
FREQUENCIES VARIABLES=D012 /ORDER=ANALYSIS. EXECUTE.
FREQUENCIES VARIABLES=D013 /ORDER=ANALYSIS. EXECUTE.
*******Living Situation Frequencies******
FREQUENCIES VARIABLES=D014 /ORDER=ANALYSIS. EXECUTE.
*******Media Consumption Descriptives*********** ************************
DESCRIPTIVES VARIABLES = MU001_1 /STATISTICS = MEAN STDDEV MIN MAX.
*******Use-Social Media-Twitter Descriptives*******
DESCRIPTIVES VARIABLES = MU001_2 /STATISTICS = MEAN STDDEV MIN MAX.
*******Use-Social Media-Instagram Descriptives*******
DESCRIPTIVES VARIABLES = MU001_3 /STATISTICS = MEAN STDDEV MIN MAX.

*******Use-Social Media-Pinterest Descriptives****** DESCRIPTIVES VARIABLES = MU001 4 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Social Media-YouTube Descriptives******* DESCRIPTIVES VARIABLES = MU001 6 /STATISTICS = MEAN STDDEV MIN MAX.*******Use-Social Media-Snapchat Descriptives******* DESCRIPTIVES VARIABLES = MU001_7 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Media-Radio Descriptives******* DESCRIPTIVES VARIABLES = MU002 1 /STATISTICS = MEAN STDDEV MIN MAX.*******Use-Media-Television Descriptives******* DESCRIPTIVES VARIABLES = MU002 2 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Media-Magazines Descriptives******* DESCRIPTIVES VARIABLES = MU002 3 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Media-Newspaper Descriptives******* DESCRIPTIVES VARIABLES = MU002 4 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Media-Digital Descriptives******* DESCRIPTIVES VARIABLES = MU002 5 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Social Media-Facebook Descriptives*******

DESCRIPTIVES VARIABLES = MC001 1

/STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Social Media-Twitter Descriptives*******
DESCRIPTIVES VARIABLES = MC001_2 /STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Social Media-Instagram Descriptives*******
DESCRIPTIVES VARIABLES = MC001_3 /STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Social Media-Pinterest Descriptives*******
DESCRIPTIVES VARIABLES = MC001_4 /STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Social Media-YouTube Descriptives*******
DESCRIPTIVES VARIABLES = MC001_5 /STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Social Media-Snapchat Descriptives*******
DESCRIPTIVES VARIABLES = MC001_6 /STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Media-Radio Descriptives******
DESCRIPTIVES VARIABLES = MC002_1 /STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Media-Television Descriptives*******
DESCRIPTIVES VARIABLES = MC002_7 /STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Media-Magazine Descriptives******
DESCRIPTIVES VARIABLES = MC002_8 /STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Media-Newspaper Descriptives******

DESCRIPTIVES VARIABLES = MC002 9 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Media-Digital Descriptives******* DESCRIPTIVES VARIABLES = MC002 10 /STATISTICS = MEAN STDDEV MIN MAX. ***RQ2.2: What are the psychographic characteristics of each infant-stage persona?****** USE ALL. SORT CASES BY PType04. SPLIT FILE LAYERED BY PType04. *******Media Consumption Descriptives********* *******Use-Social Media-Facebook Descriptives****** DESCRIPTIVES VARIABLES = MU001 1 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Social Media-Twitter Descriptives****** DESCRIPTIVES VARIABLES = MU001 2 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Social Media-Instagram Descriptives******* DESCRIPTIVES VARIABLES = MU001 3 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Social Media-Pinterest Descriptives******* DESCRIPTIVES VARIABLES = MU001 4 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Social Media-YouTube Descriptives******* DESCRIPTIVES VARIABLES = MU001 6 /STATISTICS = MEAN STDDEV MIN MAX. *******Use-Social Media-Snapchat Descriptives*******

DESCRIPTIVES VARIABLES = MU001_7 /STATISTICS = MEAN STDDEV MIN MAX.
*******Use-Media-Radio Descriptives*******
DESCRIPTIVES VARIABLES = MU002_1 /STATISTICS = MEAN STDDEV MIN MAX.
*******Use-Media-Television Descriptives*******
DESCRIPTIVES VARIABLES = MU002_2 /STATISTICS = MEAN STDDEV MIN MAX.
*******Use-Media-Magazines Descriptives*******
DESCRIPTIVES VARIABLES = MU002_3 /STATISTICS = MEAN STDDEV MIN MAX.
*******Use-Media-Newspaper Descriptives*******
DESCRIPTIVES VARIABLES = MU002_4 /STATISTICS = MEAN STDDEV MIN MAX.
*******Use-Media-Digital Descriptives*******
DESCRIPTIVES VARIABLES = MU002_5 /STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Social Media-Facebook Descriptives*******
DESCRIPTIVES VARIABLES = MC001_1 /STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Social Media-Twitter Descriptives*******
DESCRIPTIVES VARIABLES = MC001_2 /STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Social Media-Instagram Descriptives*******
DESCRIPTIVES VARIABLES = MC001_3 /STATISTICS = MEAN STDDEV MIN MAX.
*******Credible-Social Media-Pinterest Descriptives******

DESCRIPTIVES VARIABLES = MC001 4 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Social Media-YouTube Descriptives******* DESCRIPTIVES VARIABLES = MC001 5 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Social Media-Snapchat Descriptives******* DESCRIPTIVES VARIABLES = MC001 6 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Media-Radio Descriptives******* DESCRIPTIVES VARIABLES = MC002 1 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Media-Television Descriptives******* DESCRIPTIVES VARIABLES = MC002 7 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Media-Magazine Descriptives****** DESCRIPTIVES VARIABLES = MC002 8 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Media-Newspaper Descriptives******* DESCRIPTIVES VARIABLES = MC002 9 /STATISTICS = MEAN STDDEV MIN MAX. *******Credible-Media-Digital Descriptives******* DESCRIPTIVES VARIABLES = MC002 10

/STATISTICS = MEAN STDDEV MIN MAX.

APPENDIX E

SPSS Syntax for Research Objectives One and Two

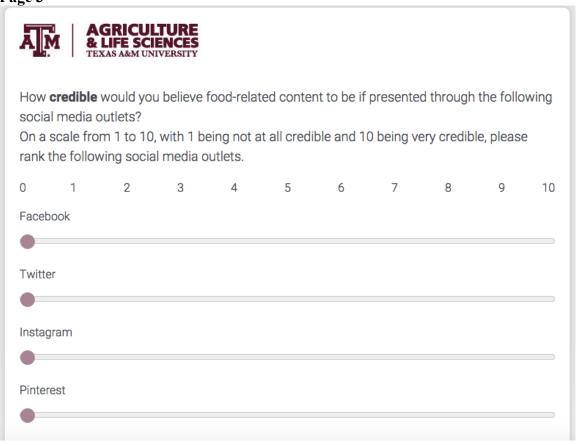
Page 1

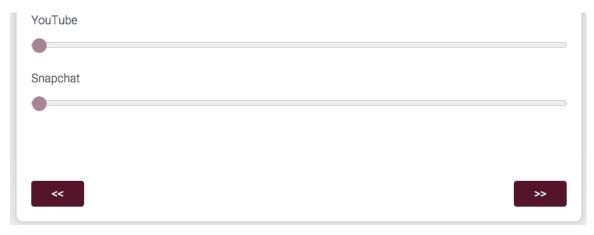
When considering	SCIENCES MUNIVERSITY social media o	utlets, hov	v often do	you use th	ne followir	ng options?	1
	Never	Less than Once a Month	Once a Month	2-3 Times a Month	Once a Week	2-3 Times a Week	Daily
Facebook	0	0	0	0	0	0	0
Twitter	0	0	0	0	0	0	0
Instagram	0	0	0	0	0	0	0
Pinterest	0	0	0	0	0	0	0
YouTube	0	0	0	0	0	0	0
Snapchat	0	0	0	0	0	0	0
<<							>>

Page 2

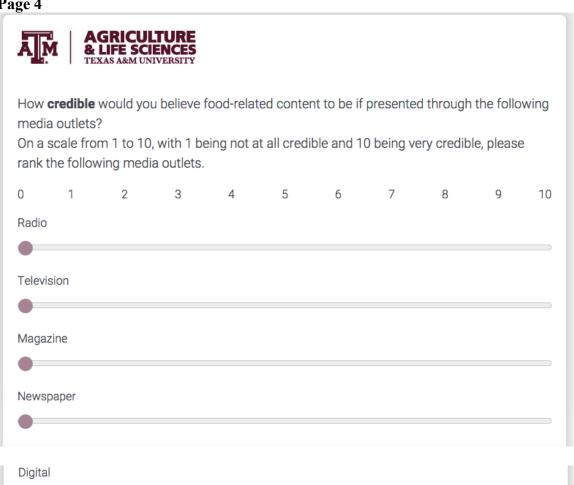
AIM & LIFE	CULTURE SCIENCES M UNIVERSITY	how often	do you us	se the follo	wing opti	ons?	
	Never	Less than Once a Month	Once a Month	2-3 Times a Month	Once a Week	2-3 Times a Week	Daily
Radio	0	0	0	0	0	0	0
Television	0	0	0	0	0	0	0
Magazines	0	0	0	0	0	0	0
Newspaper	0	0	0	0	0	0	0
Digital	0	0	0	0	0	0	0
« <							>>

Page 3



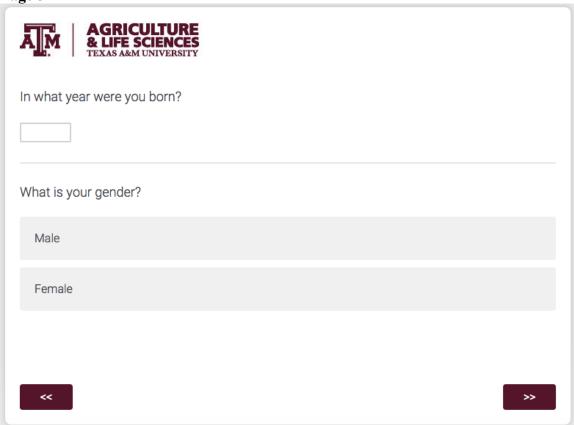


Page 4





Page 5

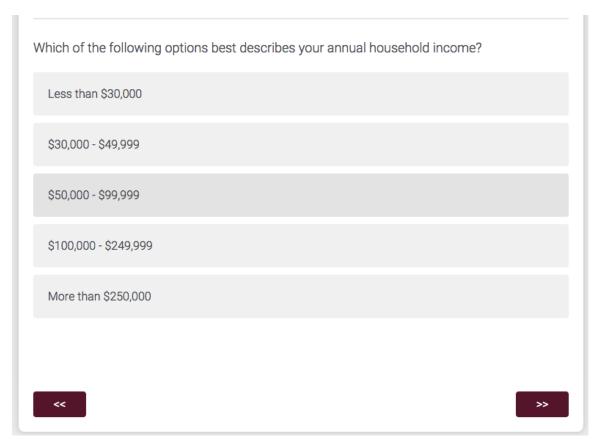


Page 6

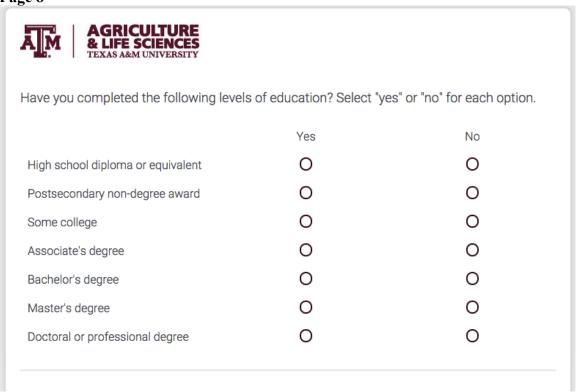
AGRICULTURE & LIFE SCIENCES TEXAS A&M UNIVERSITY		
What is your race? Please select "yes" or	"no" for each.	
	Yes	No
American Indian or Alaska Native	0	0
Asian	0	0
Black or African American	0	0
Native Hawaiian or other Pacific Islander	0	0
White	0	0
Other	0	0
«<		>>

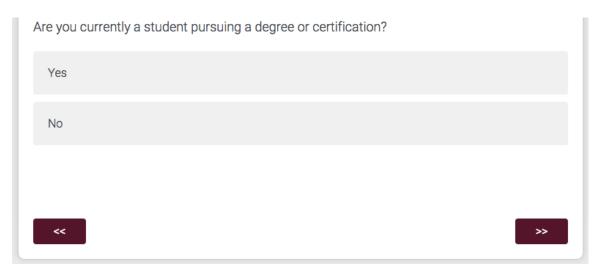
Page 7



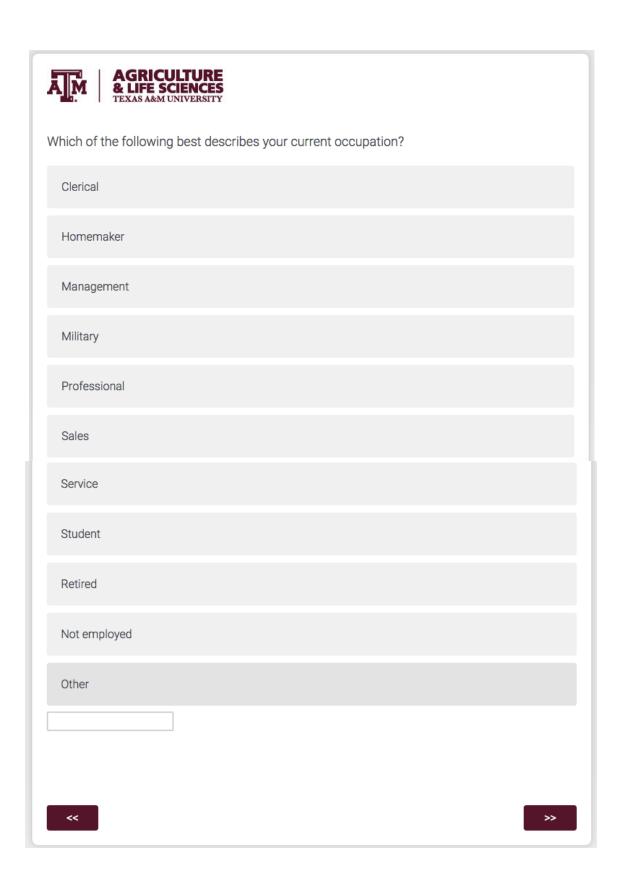


Page 8





Page 9



Page 10

1 450 10
AGRICULTURE & LIFE SCIENCES TEXAS ARM UNIVERSITY
What is your marital status?
In a relationship
Single, never married
Married or domestic partnership
Widowed
Divorced
Seperated
Other
Do you have any children?
Yes
No

Page 11

