LOCAL FOOD PURCHASE BEHAVIOR OF U.S. CONSUMERS: APPLICATION OF AN EXTENDED THEORY OF PLANNED BEHAVIOR AND SELF-CONGRUITY THEORY

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Abstract: The primary purpose of this study is to investigate the antecedents to the behavior to purchase local food by using the extended theory of planned behavior with additional considerations of moral aspects and self-congruity theory. Structural equation modeling was conducted and all hypothesized paths were analyzed. Although hypotheses were constructed based on direct correlations between variables, the study also looked into indirect and total effects on actual local food purchase in order to explain the model more comprehensively. Overall, the purchase of local food was found to be a multifaceted and dynamic decision-making process. In addition to the TPB variables, moral norm and self-congruity were found to influence consumers' local food purchase directly and indirectly, indicating that they were meaningful additions to the TPB model.

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CHAPTER I

INTRODUCTION

Background

People started to realize that agricultural food resources were limited in the late 1960s and early 1970s, and began to think beyond the modern conventional agriculture system (Harwood, 1990). As people try to initiate many pro-environmental activities with sustainability movements, buying local products has become a national trend in the U.S. food service industry. USDA's estimation of the total sales of local food was approximately $4.8 billion in 2008 (Low & Vogel, 2011). To be more specific, the sales volume of direct-to-consumer outlets such as farmers' markets was $877 million with 71,200 farms' involvements, whereas the sales through intermediated marketing channels such as grocers, restaurants, and regional distributors, were $2.7 billion with 13,400 farms' involvement. Also, 22,600 farms used both direct and intermediated marketing channels and it accounted for $1.2 billion in potential sales.

The benefits of buying local products include support for local economy, better freshness, less food travel time, and less fuel use for delivery and so on (Merrigan & Bailey, 2008). A new word, "locavore", was added into the Oxford dictionary in 2007 because of this trend. A locavore refers to anyone who eats food grown locally or within a certain radius (Oxford University Press, 2007).

Several food programs or organizations have also been established to promote locally grown food. For instance, Farm to School is a national program that promotes serving local meals in schools. Buy Fresh Buy Local, which is a national campaign for promoting local produce, has established chapters in many states. Many state governments also provide great support for these types of programs by forming a dedicated team or giving monetary benefits.

Along with the local food boom in the U.S, there have been multiple studies regarding consumer behaviors toward local food in academia (e.g. Kim, Eves, & Scarles, 2009; Nurse, Onozaka, & Thilmary, 2010; Onozaka, Nurse, & McFadden, 2010; Rainbolt, Onozaka, & McFadden, 2012; Robinson & Smith, 2002). Among them, the theory of planned behavior (Azjen, 1991), which is a key theory used in this study, has successfully been applied in local food choice behavior research, and was proved as a statistically acceptable model for explaining consumer behaviors for sustainable food (Han & Hansen, 2012).

The theory of planned behavior (Ajzen, 1991) is an extension model of the theory of reasoned action (TRA) which was developed to investigate human behavior (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975), and has strongly been supported by many

empirical studies (Godin & Kok, 1996; Kim & Hunter, 1993). The basic idea of the theory of planned behavior (TPB) is that a person's behavior is affected by behavioral intention, which consists of attitude, subjective norm, and perceived behavioral control. The behavioral intention is the best predictor of an individual's behavior.

Attitude toward the specific behavior is the degree to which a person has a favorable or unfavorable evaluation of the behavior (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). The attitude is a function of behavioral beliefs, which are the subjective likelihood that the behavior will create a specific result. An individual's intention to enact a certain behavior is affected by her or his attitude toward the behavior, and then the attitude toward the behavior is suggested to be influenced by belief and evaluations of these consequences.

Subjective norm is based on a person's normative beliefs, which are perceived expectations from people around the individual (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). Those referent people, depending on the situation, may refer to parents, friends, partners, etc. Therefore, an individual's beliefs about other people around him/her influence his/her decision. An individual tends to perform the behavior if people important to him/her (referent people) think that he or she should perform that, and vice versa. Subjective norm is also affected by the individual's motivation to comply with the people who are important to him or her.

Perceived behavioral control refers to an individual's perceived difficulty or ease to engage in a certain behavior (Ajzen, 1991). That is, it is frequently considered similar to the self-efficacy concept associated with his/ her confidence level, which depends on how successfully a person performs given behaviors (Bandura, 1982; Zint, 2002). Control

beliefs is a person's perceived presence of opportunities or resources for helping or interrupting performance of behavior, while perceived power is an individual's perceived capability of each control belief. Perceived behavioral control is set as a combination of control beliefs and perceived power.

The TPB would be an appropriate model to investigate individuals' local food purchasing behaviors since the behaviors appear to be largely based on a rational decision. According to Chen (2007), selecting organic foods appeared to be a whole rational decision. Even though there are no absolute evidences for organic foods to be healthier than conventionally grown foods, people perceive that organic foods have less additives, less pesticides, no chemical, and more soil nutrients, thus they choose them based on the precautionary reasons. Accordingly, purchasing local food involves several rational reasons, such as health benefits, mentioned earlier in this chapter. In addition to awareness of health benefits, Albert (2011) stated purchasing local food was a rational behavior because people were more likely to trust and deal with people from their own societies than strangers.

Another theory used in this study is self-congruity theory (Sirgy, 1986). Multiple empirical studies (Armitage, Conner, & Norman, 1999; Dennison & Shepherd, 1995; Sparks & Guthrie, 1998; Sparks, Shepherd, Wieringa, & Zimmermanns, 1995) confirmed the important role of self-identity concept to predict behavioral intentions in the context of food choice behavior. Self-identity is a part of self-concept, which is the essential idea of self-congruity theory. Self-congruity theory was developed to explain self-image congruence notion in consumer behavior (Sirgy, 1986). The definition of self-congruity is the degree of match between the consumer's self-image (actual, ideal, actual social, or

ideal social self) and brand image, store image, product image, or user image (Lindquist & Sirgy, 2009). According to Sirgy (1986), individuals use brands or products to express themselves and frequently choose brands or products that could improve perceptions of their own self-image. Consequently, people tend to choose products that have similar personality traits to their own.

Statement of Problem

One of the strengths of the theory of planned behavior model is its parsimony, yet the original model has not been enough to fully capture complex individual's behavior in many cases. Consequently, numerous researchers tried to increase explanatory power of the TPB by including various variables. Among many additional variables, the TPB is quite often criticized for not taking normative or moral influences on behaviors into its consideration (Armitage & Conner, 2001; Gorsuch & Ortberg, 1983; Sparks & Shepherd, 2002).

In the food context, moral norm was also found out to be a meaningful addition of the TPB (Leeuw, Valois, & Houssemand, 2011; Rivis, Sheeran, & Armitage, 2009; Shaw & Shiu, 2003; Shepherd, Magnusson, & Sjödén, 2005; Sparks & Shepherd, 2002). Shepherd et al. (2005) mentioned that the TPB model should include moral aspects to capture consumers' sustainable food purchasing behaviors. Therefore, moral norm was added to the original TPB in order to help increase explanatory power in this study.

The theory of planned behavior is an expectancy-value theory, and has an assumption that people are rational and intentional when they perform a behavior and try

to maximize their satisfaction in exchange. However, consumer behaviors cannot be explained only by practical outcomes. Consumers also purchase products in order to express their self-images with the symbols of the products (Dittmar & Drury, 2000). Levy (1999) also stated that the symbolic purchase behavior might be more vital than other functional benefits of the products. Therefore, a study model incorporating the self-congruity concept into the TPB model is expected to explain both utilitarian and symbolic local food purchase behaviors. Moreover, self-congruity might be able to explain some variance of impulsive behavior as well (Hagger, Anderson, Kyriakaki, & Darkings, 2007). Identity was more of dispositional construct in some previous studies (e.g., Leary, Wheeler, & Jenkins, 1986; Leary & Jones, 1993) and it tends to represent more impulsive ways to behavioral engagement (Strack & Deutsch, 2004). Churchill, Jessop, and Sparks (2008) argued that impulsivity may be a great predictor in behavior. Consequently, the predictive utility of the TPB may be improved by including measures of impulsivity along with typical TPB variables when attempting to predict human behavior (Churchill et al., 2008).

Purpose and Objectives of the Study

The primary purpose of this study is to investigate the antecedents to the behavior to purchase local food by using the extended theory of planned behavior with additional considerations of moral aspects and self-congruity theory. The specific objectives for this study are as following:

1. To test the relationship between the TPB predictor variables of intention (attitude, subjective norm, and perceived behavioral control) and purchase intention for local food.
2. To investigate the effect of individuals' perceived behavioral control and purchase intention on their actual local food purchase.
3. To examine if subjective norm influences attitude.
4. To examine the effect of moral norm on attitude, subjective norm, perceived behavioral control, and intention.
5. To examine the effect of self-congruity on attitude, subjective norm, perceived behavioral control, purchase intention, and actual local food purchase.
6. To investigate indirect and total effects of each variable on consumers' actual local food purchase.
7. To propose an alternative model that incorporates both rational and symbolic purchase to explain local food purchase.

Significance of the Study

Theoretical Significance

This study has several theoretical implications. First of all, a theoretical significance of this study is its inclusion of moral aspect and self-congruity concept as additional constructs into the TPB model. According to Oh and Hsu (2001), a simultaneous inclusion of additional variables links to modern theoretical development in

human behavior. Accordingly, this study contributes to the current body of the theory of planned behavior research.

Secondly, even though previous research found the importance of self-identity as an additional variable of the TRA/TPB within the food choice behavior, the studies had serious limitations. In the researcher's knowledge, no empirical research has been investigated regarding the relationship of TRA/TPB model to self-congruity theory; rather all research has utilized the concept of self-identity, which is a subset of self-congruity theory. These studies (e.g. Dennison & Shepherd, 1995; Sparks & Shepherd, 1992) rather limited the range of self-identification to a specific behavior, for example, health consciousness. Therefore, including self-congruity theory instead of self-identity into the TPB might be a better way since it is not limited to the specific behavior of self-concept when it is measured. Conner and Armitage (1998) reported that self-identity only explains one percent of the total variance of behavioral intention. Although a marginal contribution to explain a variance is still valuable in social science research (Conner & Armitage, 1998), it is expected for self-congruity theory to fill the possible gap coming from a preset limited scope in the previous research and to capture the broader picture. In addition, self-congruity is also hypothesized as an antecedent of the TPB variables to see the indirect effect on the purchase intention.

A person's identity was found to be a dispositional construct in some previous studies (e.g., Leary et al., 1986; Leary & Jones, 1993) and it tends to represent more impulsive ways to behavioral engagement (Strack & Deutsch, 2004). Sometimes people are likely to engage in behavior because it is consistent with their identity, but they do not make a plan to do so (Hagger et al., 2007). Thus, the symbolic purchase (self-congruity)

is also posited as a direct influential factor, which bypasses all the planned behavior variables, on actual local food purchase. By investigating the impulsive route from self-congruity, as well as deliberative route from intention and perceived behavioral control, more of total variance of actual local food purchase behavior is expected to be clarified.

Next, a new link between subjective norm and attitude is added and tested in the original TPB model. Multiple researchers (e.g. Fulk, 1993; Schmitz & Fulk, 1991; Ryan, 1982) supported the notion that social influence processes could have a vital influence on attitude, even though Fishbein and Ajzen (1975) constantly supported that there was usefulness in separating attitudinal and normative variables. The stronger the motivation of an individual to conform to group norms, the more group behavior impacts his/ her attitude (Lewis, Agarwal, & Sambamurthy, 2003).

It would not be sufficient for a model explaining intention to be based solely on expected utility. The TPB model is conceptualized based on utilitarian values. By incorporating self-congruity theory into the TPB model, to predict intention together, the study is expected to explain that symbolic benefits might be another type of motivator of individuals' behavior.

Practical Significance

The study results provide useful information to farmers, marketers, state-government administrators, and food retailers by describing which factors influence consumers' purchase intentions toward locally grown food products. In other words,

information of antecedents of consumers' purchase intentions on local food will enable them to develop more effective marketing strategies or policies.

Definition of Terms

Actual self-image: how an individual (consumer) perceives himself or herself, that is his/her personal identity (Sirgy, 1982).

Actual social self-image: what an individual (consumer) believes others think of him or her (Sirgy, 1982).

Attitude: The degree to which a person has a favorable or unfavorable evaluation of the behavior (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975).

Behavioral beliefs: The subjective likelihood that the behavior will create a specific result (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975).

Control beliefs: A person's perceived presence of opportunities or resources for helping or interrupting performance of behavior (Ajzen, 1991).

Ideal self-image: how an individual (consumer) wants to become. In other words, it is how consumers would like to see themselves (Sirgy, 1982).

Ideal social self-image: what an individual (consumer) would like others to think of him or her (Sirgy, 1982).

Intention: What an individual say they do, plan to do, or would do under certain conditions (Ajzen, 1991).

Local food: Food grown within the state.

Normative beliefs: An individual's beliefs about whether significant groups or individuals think the person should do a specific behavior. (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975).

Perceived behavioral control: An individual's perceived difficulty or easiness to engage in certain behavior (Ajzen, 1991).

Self-concept: The totality of an individual's thoughts and feelings as an object (Rosenberg, 1979). Self-concept consist of multidimensional concept with four self-image components (Sirgy, 1982).

Self-congruity: the degree of match between the consumer's self-image (actual, ideal, social, or ideal social self-image) and brand image, store image, product image, or user image (Lindquist & Sirgy, 2009).

Subjective norm: A person's perceptions of social pressure in doing or not doing a specific behavior (Ajzen & Fishbein, 1980; Fishbein& Ajzen, 1975).

Theory of planned behavior (TPB): An extension theory based on the theory of reasoned action. Perceived behavioral control was added as a new construct to explain individual's intention in non-volitional situation (Ajzen, 1991).

Theory of reasoned action (TRA): An expectancy value model to predict and understand an individual's behavior. The key assumption of the theory is human beings are rational. An individual's behavior is determined by his/ her intention to perform the behavior and the intention is a function of attitude toward the behavior and subjective norm. (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975).

CHAPTER II

REVIEW OF LITERATURE

The primary purpose of this study is to investigate the antecedents to the behavior to purchase local food by using the extended theory of planned behavior with additional considerations of moral aspects and self-congruity theory. Therefore, this chapter reviews related literature on local food, the theory of planned behavior (TPB), moral norm, and self-congruity theory. In addition, research hypotheses and a conceptual model are developed and explained in this chapter.

Sustainability and Local Food Movement

In order to explain local food movement, it would be important to address briefly the concept of sustainability. There is no single definition of sustainability. According to Sustainable Measures (2010), different groups have tried to define sustainability with the following three fundamentals: "living within the limits," "understanding the interconnections among economy, society, and environment," and "equitable distribution of resources and opportunities."

While there are many different definitions of sustainability, one of the most popular definitions of sustainability was derived from a United Nations (UN) conference in 1987, and the definition is to “meet present needs without compromising the ability of future generations to meet their needs."

Harwood (1990) defined sustainability in regards to food and agriculture. According to Harwood (1990), the definition of sustainability in a food and agricultural perspective could be “an agriculture that can evolve indefinitely toward greater human utility, greater efficiency of resource use and a balance with the environment that is favorable both to humans and to most other species” (p. 4). After becoming aware that agricultural food resources were limited in the late 1960s and early 1970s, people started to think beyond the modern conventional agriculture system (Harwood, 1990). There were two major points to explain the trend of sustainability. Appearance of regenerative agriculture (Rodale, 1983) and the articulation of a sustainable agriculture (Jackson, 1980) were the first major point. At that time, sustainability was based on ecological aspects. The second major point occurred in 1987 when the concept started to be referred as a stable agriculture in the universal sense, which includes not only the ecological aspects but also the relations with society (Harwood, 1990).

Among various sustainability efforts, using local products has been an important trend in the United State. As a result, ‘locavore’, which refers to anyone who eats food grown locally or within a certain radius, was even added as the Word of the Year in 2007.

Local Food

Definition of Local Food

The definition of "local food" may vary depending on the situation. Namely, there is no legal or common definition of local food in contrast with organic food or non-genetically modified organisms.

Local food is often defined based on the distance from the residence area. Even though the New Oxford Dictionary defined locavore as a local resident who strives to eat food grown or produced within a 100 mile radius of their city or county residence, there are still consumers who argue about the distance criteria (Durham, King, & Roheim, 2009). This perceived distance for being qualified as local food could be different based on population of the area because people in rural areas and urban areas consider the distance quite differently (Martinez, Hand, Da Pra, Pollack, Ralson, Smith, Vogel, Clark, Lohr, Low, & Newman, 2010). In addition, the Value-Added Agricultural Market Development program of USDA Rural Development defined as a product grown "within 400 miles from its origin" or the state where it was produced. Additionally, Sustainable Endowments Institute (2011), which is a survey institute for college sustainability, defines local as "within 150 miles of campus." Moreover, perception on defining local could be different by races as well (Zepeda & Leviten-Reid, 2004). As mentioned above, distances can vary from 100 miles up to 400 miles.

Meanwhile, geographic distance is frequently ignored when defining local as long as the food product is produced within the state. This case often goes in line with state governments' efforts. After the Farmer-to-Consumer Direct Marketing Act of 1976, state

governments have established their own state brands for locally grown food (Halloran & Martin, 1989). The main purpose of the state-funded branding programs is to protect local producers from interstate or international competition and the programs have grown since then- e.g. "OKGrown," "Jersey Fresh," and "Virginia's Finest" (Jekanowski, Williams, & Schiek, 2000).

In the Consolidated Farm and Rural Development Act amended in 2008, "locally" and "regionally" are gathered together and defined as following:

''(I) the locality or region in which the final product is marketed, so that the total distance that the product is transported is less than 400 miles from the origin of the product."; or ''(II) the State in which the product is produced."

While retailers might still use different definitions for local food (for example, 50 miles radius, 100 mile radius, etc.) when they promote them, those state brands help people to describe what is meant by "local" more clearly (Lee, Nganje, & Hughner, 2010). Therefore, "the state in which the product is produced" is adopted as the definition of "local" in this research.

Local Food Market Share in the U.S

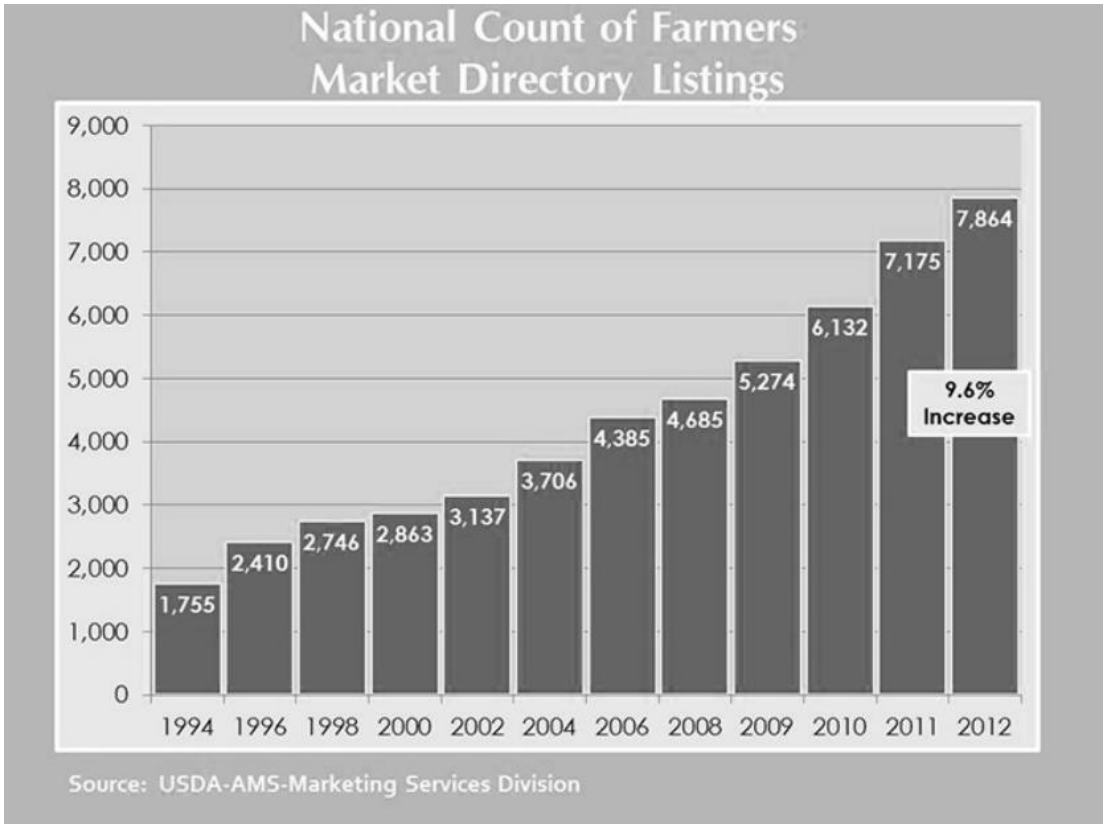
USDA's estimation of the total sales of local food was nearly $4.8 billion in 2008 (Low & Vogel, 2011). More specifically, the sales volume of direct-to-consumer outlets such as farmers' market was $877 million with 71,200 farms' involvements. Intermediated marketing channels, for example, grocers, restaurants, and regional

distributors, were $2.7 billion with 13,400 farms' involvement. In addition, 22,600 farms also used both direct and intermediated marketing channels and they accounted for $1.2 billion.

Where People Purchase Local Food

Consumers can purchase local food in various ways. According to Martinez et al. (2010), local food channels can be categorized into two basic types based on the transaction type: direct and indirect. Direct-consumer channel includes farmers' markets, community supported agriculture, farm stands, on farm sales, and "pick your own" farms. Indirect channels mean that consumers purchase local food through restaurants, retail stores and institutions who buy from local farmers. Among them, farmers' markets are considered one of the most typical places for local food resources. A farmers' market is where several farmers gather on a regular basis and sell their fruits, vegetables, and other farm products to consumers (Martinez et al., 2010). The number of markets has increased constantly with the local food booming (Figure 1). In 1994, there were only 1,755 markets in the U.S but the number grew to 7,864 in 2012. The growth is also a 10% increase from the previous year. While farmers' markets are an important hub for local food systems, not all products at farmers' markets are locally sourced (Martinez et al., 2010). As a result, many markets require vendors to display the origin of the products. Some markets even prohibit vendors selling non-local food. For example, Oklahoma State University Stillwater campus farmers' market only allows vendors who sell products grown or produced in Oklahoma. Per the farmers market survey conducted by

USDA in 2006, 64 percent of the farmers' markets allowed only vendors who sold products that they produced (Ragland & Tropp, 2009).



Note. From *National Count of Farmers' Market, 2013,* USDA-AMS.

Figure 1. National count of farmers market

Why People Purchase Local Food

There are several reasons that people buy local food. Some of those main reasons include: (a) environment protection, (b) support for local economy, (c) health and nutrition benefits, (d) as well as freshness and flavor.

First of all, consuming locally grown food is good for the environment. Purchasing food from a foreign country poses environmental hazard. For example, by transporting the food, pollution level increases by consuming energy from cars, trains, or airplanes (Sim, Barry, Clift, & Cowell, 2007). Therefore, consuming locally produce food can reduce the pollution level because less energy is used for delivering food. Furthermore, less packing materials for local food are required due to less travel distance (Foodroutes Network, 2011; Locavore, 2012). Pirog (2004), in the researcher's Iowa-based study, discovered that the average travel distance of conventionally sourced produce was 1,518 miles whilst locally grown produce reached to Iowa market with the average distance of 65 miles. People also believe local farmers tend to adopt sustainable farming practices, for example, using less chemicals and pesticides (Robinson & Smith, 2002).

Next, using local food can help the local economy. The money spent on local food stays within the local community and increases the local quality of life as a result. Additionally, local food consumers can make sure that the money goes back to the neighboring farmers. According to Canning (2011), 15.8 cents of each dollar spent on food goes back to producers. However, increasing food costs and supply chain can decrease the amount of profit going back to the producers. Therefore, shorter supply

chain with fewer intermediaries increases profits for the producers. King (2010) also concluded that farmers got more share within local food supply chains compared to dealing with mainstream food suppliers. Moreover, Darby, Batte, Ernst, and Roe (2008) found that consumers had a willingness to pay more for locally grown food. Lastly, several researchers examined the actual economic impact of farmers' markets. Henneberry, Whitacre, and Agustini (2009) investigated the economic impact of Oklahoma farmers' markets and found 113 jobs and $3.3 million were generated with total economic impact of $6 million. Otto and Varner (2005) surveyed both consumers and producers to find the economic impact of Iowa farmers' markets and found out $31.5 million for gross sales and $12.2 million of personal income were associated with farmers' market activities. According to the results of a consumer survey conducted by Gregoire, Arendt, and Strohbehn (2005), support of the local economy was the strongest benefit of purchasing local food. Moreover, U.S. consumers have great intention to join Community Supported Agriculture (CSA) to support local economy and have direct relationships with local farmers (Kolodinsky & Pelch, 1997).

Moreover, local food is better regarding health and nutrition benefits. Nutrition value can decrease as time passes after harvest, but locally grown produce is normally sold within 24 hours from the harvest time. Edwards-Jones (2010) found that people could enjoy higher nutrition benefits right after harvest and the nutrition quality tended to decrease as time went. Also, local food consumers know where the food comes from and how it is grown. Thus, they can safely choose food from farmers who use less or no chemicals, pesticides, hormones, antibiotics, or genetically modified seed (Foodroutes Network, 2011). A study conducted by Thomas and McIntosh (2013) also confirmed that

people believed that eating local food had health and nutrition benefits. The people purchased local food not only for themselves but also for the health of their family.

Lastly, local food is fresher and tastier. Produce in a big-box store or a supermarket has been stored in a truck or a cold storage for several days or weeks after harvest (Foodroutes Network, 2011; Locavore, 2012). In contrast, local produce is picked and eaten much quicker than produce in a big-box store or a supermarket so people can taste the freshness. Moreover, local farms can offer more various produce because they can focus on taste and freshness rather than longer shelf life (Foodroutes Network, 2011; Locavore, 2012).

Why People Do Not Purchase Local Food

Many consumers neither have confidence in their ability to purchase sustainably produced food nor consider buying local food due to several major perceived barriers, such as lack of availability and variety, inconvenience, higher price, and lack of information about local food sources (Gregoire, et al., 2005; Robinson & Smith, 2002; Starr, Card, Benepe, Auld, Lamm, Smith, & Wilken, 2003).

Local food is definitely a seasonal product and the quantity is limited. According to Zumwalt (2003), Chefs Collaborative members would purchase more local products if a greater quantity and larger variety were available. Farmers' markets or stores that carry local food may have limited selections of food. "I don't use markets, because I don't like not finding what I want." (Grace, Grace, Becker, & Lyden, 2007, p. 65). Figure 2 presents an availability calendar of local produce in Oklahoma, and figure 3 presents an

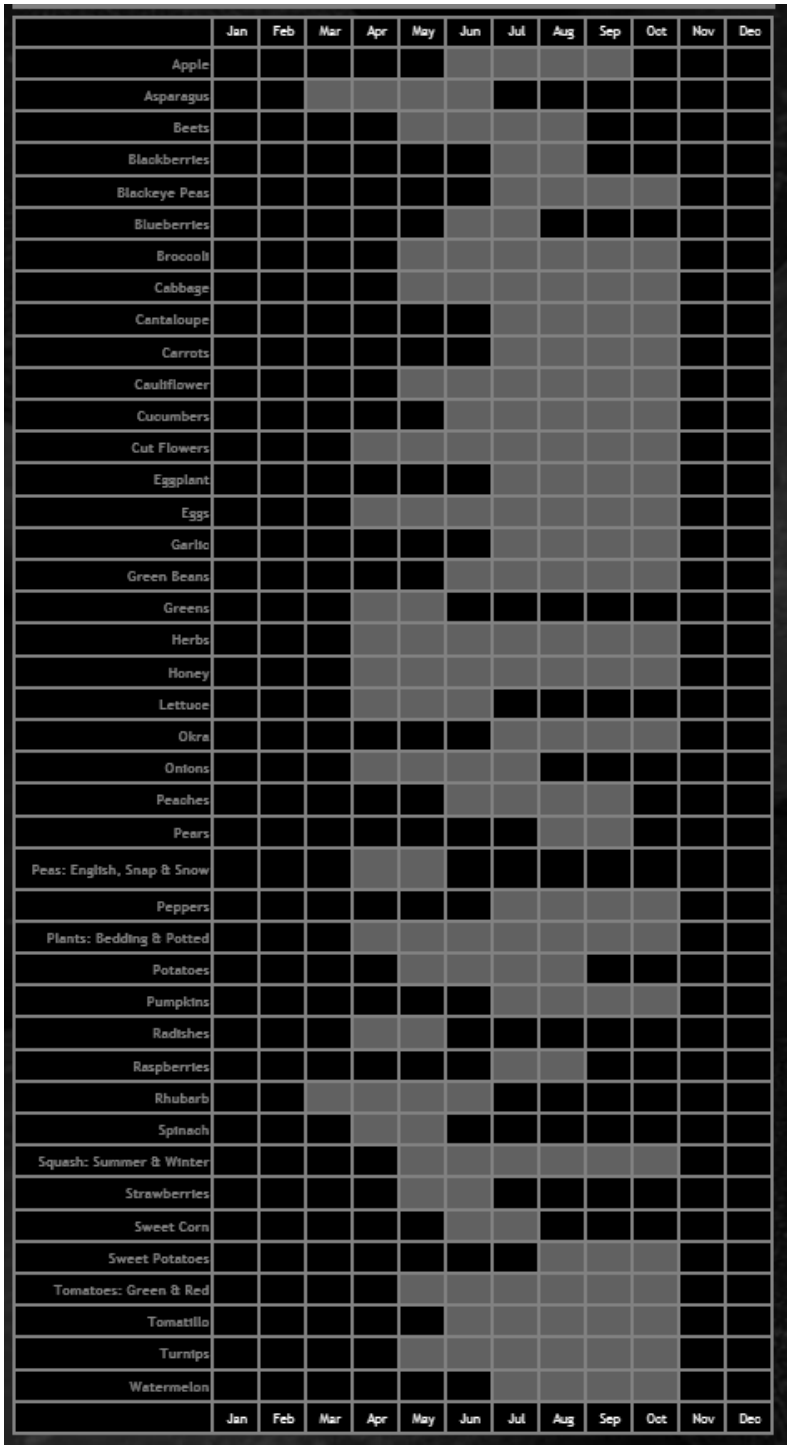
availability calendar of local produce in Southern California. Depending on where consumers live, the variety and availability of local food varies.

Several inconvenience factors related to purchasing local food were found from previous studies. Thomas and McIntosh (2013) found that limited access to local farmers' markets due to limited market hours was one of the obstacles to purchase local food. Moreover, local food was found out to be rarely available in regular grocery stores in some locations (Thomas & McIntosh, 2013). Food service buyers also perceived inconvenient ordering and payment system as one of barriers to use local food (Starr et al., 2003). Due to the inconvinienct system, purcashing local food becomes time consuming and as a result, it limits the actual amont of local food usage (Strohbehn & Gregoire, 2002).

Even though some people admitted that additional expenses for local food is well worth it considering its freshness and taste, higher prices were definitely a barrier for many people to use local food (Robinson & Smith, 2002). For example, consumers described farmers' markets as too expensive considering their grocery budget and at least more expensive than regular grocery stores (Grace et al., 2007). Of the respondents, preferring a particular grocery store was a top reason to visit there. "Farmers markets are for rich people. Markets need to change their organic stress to 'fresh from the farm, top of the line local food is good for you.'" (Grace et al., 2007, p.63).

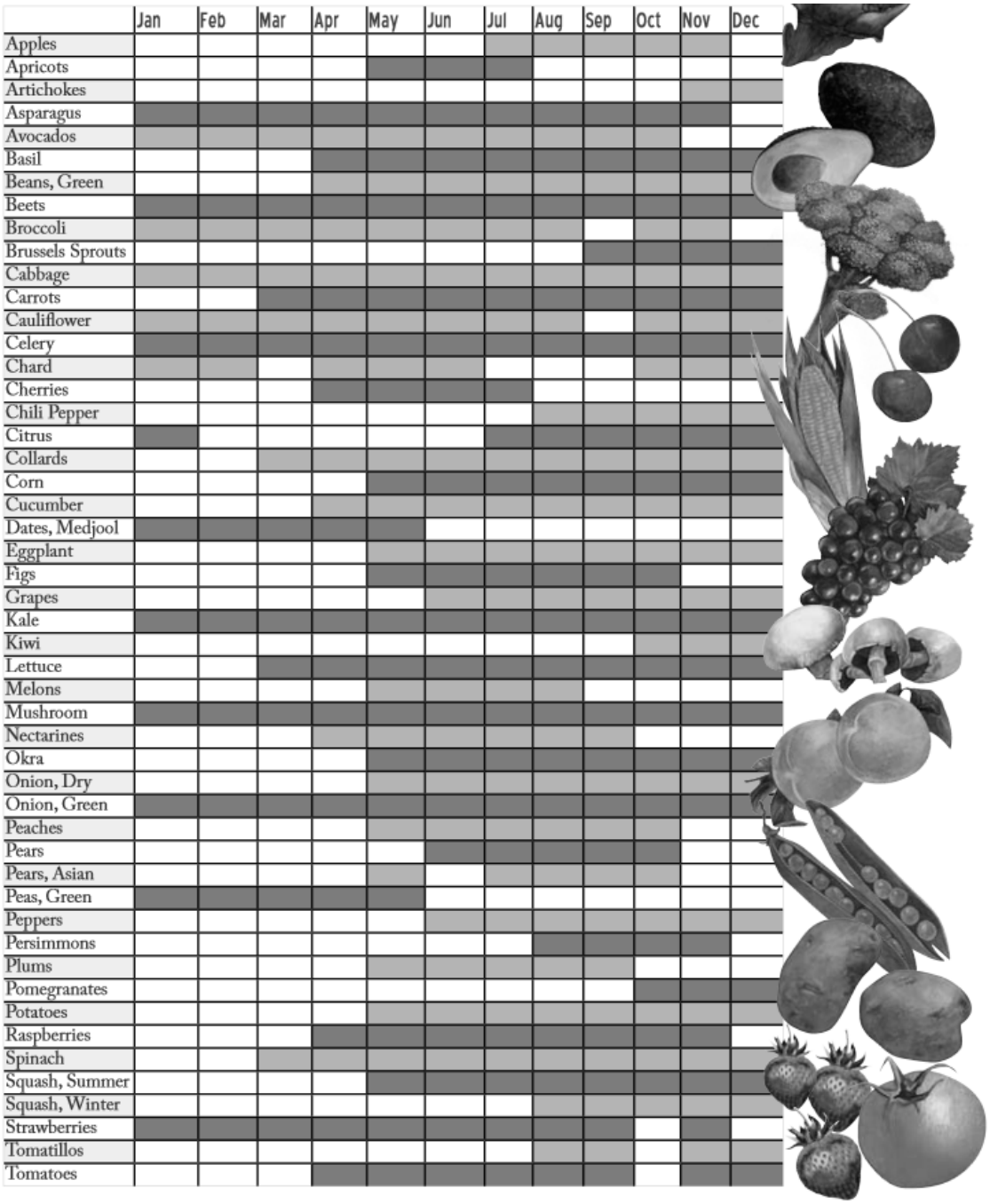
Starr and colleagues (2003) mentioned that a lack of knowledge about how to find local food and its suppliers is one of the major barriers of purchasing local food. Results from multiple focus group studies conducted in Michigan also indicated that many

residents did not know about the farmers' market in town because it was under-advertised (Colasanti, Conner, & Smalley, 2010). The respondents mentioned that the farmers' market must provide more information about the market to the community by making better signage or running various promotions in order to address the issue (Colasanti et al., 2010). Unlike box-stores and major grocery chains, farmers' markets generally open during limited times and days. The lack of information by under-advertising is a major problem for people to access to local food.



Note. From *Availability of Oklahoma Fruits and Vegetables,2013,* Oklahoma Department of Agriculture, Food and Forestry.

Figure 2. Availability of Oklahoma fruits and vegetables



Note. From *What's in store this season…?,2010,* Community Alliance with Family Farmers.

Figure 3. Availability of Southern California fruits and vegetables

Theory of Reasoned Action (TRA)

The major part of this study is investigating consumer behavior for purchasing local food. In order to study this, the theory of planned behavior (TPB), which seeks to explain human behavior and the psychological determinants of behavior was adopted as the theoretical framework. The TPB is an extension model of the theory of reasoned action (TRA). The TPB and the TRA, which are attitude-behavior research, have strongly been supported by many empirical research (Godin & Kok, 1996; Kim & Hunter, 1993).

The theory of reasoned action (TRA) was originally developed by Ajzen and Fishbein (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975), and has extensively been used to investigate human behavior. According to the theory, human beings make rational decisions, and the people consider the consequences of their behavior before they make a decision to take it into an action or not (Ajzen & Fishbein, 1980). The basic prototype of the TRA is that a person's behavior is affected by behavioral intention, which consists of attitude and subjective norm. Intention could be determined by one, the other, or both.

One's attitude toward the specific behavior is the degree to which a person has a favorable or unfavorable evaluation of the behavior. The attitude is a function of behavioral beliefs, which are the subjective likelihood that the behavior will create a certain result. A person's intention to enact a certain behavior is influenced by her or his attitude toward the specific behavior, and then the attitude toward the behavior is proposed to be influenced by beliefs and evaluations of these consequences. Ajzen and Fishbein (1980) proposed that attitude was a sum of each behavioral belief (bb_i) multiplied by the evaluation of each consequence (be_i). Thus, the following equation explains the calculation of attitude:

$$\text{Attitude} = \sum_{i}^{n} bb_i \, be_i$$

Subjective norm is based on a person's normative beliefs, which are perceived expectations from people, including parents, friends, or partners, etc., around the person. Those referent people can vary depending on the situation. Therefore, a person's beliefs about other people around him/her influence his/her decision. A person more likely performs the behavior if people important to him/her think that she or he should perform that, and vice versa. Subjective norm is also influenced by the individual's motivation to comply with the people who are important to him/her. Thus, subjective norm can be explained by a combination of two factors: normative beliefs (nb_i) and each individual's motivation to comply (mc_i). Therefore, the subjective norm can be illustrated as:

$$\text{Subjective Norn} = \sum_{i}^{n} nb_i mc_i$$

Finally, the TRA model sets behavioral intentions, which is a combination of attitude and subjective norm, as the strongest predictor of behavior. The definition of behavioral intention is the probability that an individual will perform the behavior and it is explained by one's attitude toward the specific behavior and subjected norms.

The individual may make a final decision based on situations. In other words, the relative importance of the attitude and subjective norm could be different by situations

and one's intention to perform the behavior could be affected according to the situations. Hence, the TRA model can be illustrated as following:

$B \sim BI = (\text{Attitude})w1 + (\text{Subjective Norm})w2$

where

B: behavior in question

BI: intention to perform the behavior in question

Attitude: $\sum_{i}^{n} bb_i\, be_i$

Subjective Norm: $\sum_{i}^{n} nb_i mc_i$

w1 and w2: weights representing the relative importance of attitude and subjective norm toward the behavioral intention (BI)

Finally, Figure 4 shows the full TRA model.

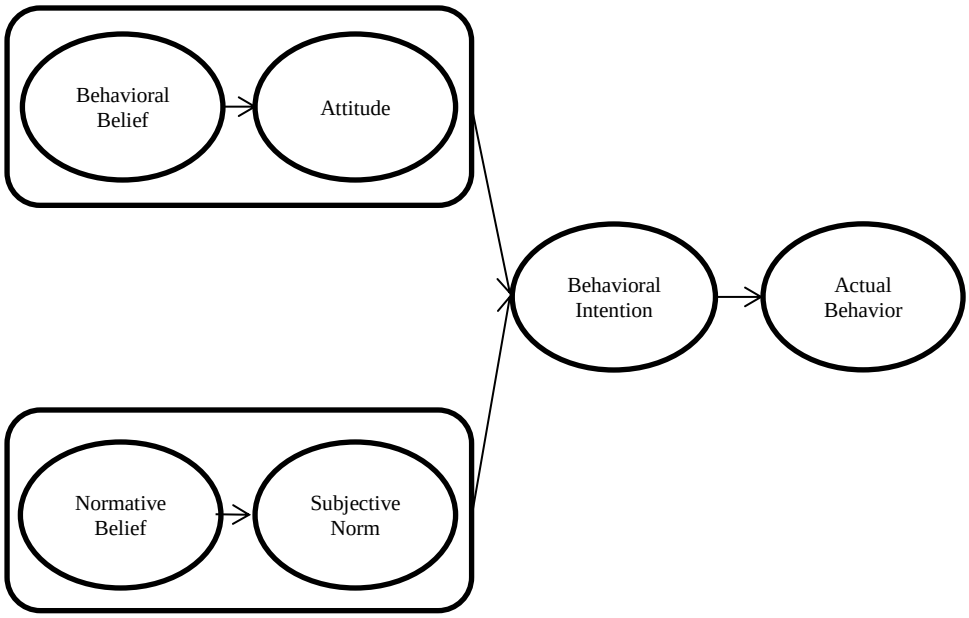


Figure 4. The Theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975)

However, TRA has a limitation because it assumes that behavior is explained as total volitional control. Even though an individual has an intention to perform a certain behavior, she or he may be interrupted to do so due to limited time, inadequate resources, and insufficient opportunities (Ajzen, 1985). Consequently, some researchers criticized TRA for only dealing with volitional behaviors (Ajzen, 1985, 1988, 1991; Ajzen & Fishbein, 1980; Taylor & Todd, 1995; Zint, 2002).

Theory of Planned Behavior

In order to deal with the limitation of TRA, which can only explain an individual's volitional behavior, the theory of planned behavior (TPB) was introduced by Ajzen (1991) and added an additional variable, perceived behavioral control (Figure 2.2) to the original TRA model. In other words, Ajzen (1991) intended to deal with both volitional and non-volitional situations with the TPB by including perceived behavioral control as an additional independent determinant of behavioral intention.

Perceived behavioral control refers to an individual's perceived difficulty or ease to engage in a certain behavior (Ajzen, 1991). In other words, it is often considered similar to the self-efficacy concept associated with his/her confidence level, which depends on how successfully a person performs given behaviors (Bandura, 1982; Zint, 2002). Perceived behavioral control is set as a combination of control beliefs and perceived power. Control beliefs (cb_i) refer to the presence of opportunities or resources for helping or interrupting the performance of behavior. Then, perceived power (pp_i), which is an individual's perceived capability of each control belief, determines the strength of each control belief. Thus, perceived behavioral control can be expressed with the following equation:

$$\text{Perceived Behavioral Control} = \sum_{i}^{n} cb_i pp_i$$

Consequently, the full TPB model can be illustrated as follows:

B~ BI= (Attitude)w1 + (Subjective Norm)w2 + (Perceived Behavioral Control)w3

where

B: behavior in question

BI: intention to perform the behavior in question

Attitude: $\sum_{i}^{n} bb_i\, be_i$

Subjective Norm: $\sum_{i}^{n} nb_i mc_i$

Perceived Behavioral Control=$\sum_{i}^{n} cb_i pp_i$

w1, w2, and w3: weights representing the relative importance of attitude, subjective norm, and perceived behavioral control toward the behavioral intention (BI).

Attitude and subjective norm do not directly affect the actual behavior, but they influence the actual behavior through behavioral intention. Perceived behavioral control directly affects both behavioral intention *and* actual behaviors. However, perceived behavioral control is sometimes not realistic in situations in which a person has insufficient information about the behavior, or there are changes on available resources or requirements. In other words, actual behavioral control acts as a moderator of intentions on individual's behavior (Ajzen, 2011). When perceived behavioral control directly affects actual behavior without going through behavioral intention, there has to be

conformity between an individual's perceptions of control and real control toward the behavior (Ajzen, 1991). In order to assess actual behavioral control, various factors – such as skills, knowledge, stamina, legal barriers, and money – are needed to be measured (Ajzen, 2011). In reality, it is very difficult to assess actual behavioral control. Thus, perceived behavioral control has been used as a proxy for the actual behavioral control in most studies (Ajzen, 2011). Accordingly, perceived behavioral control was also used as a proxy for actual behavioral control in this study. Figure 5 shows the full TPB model.

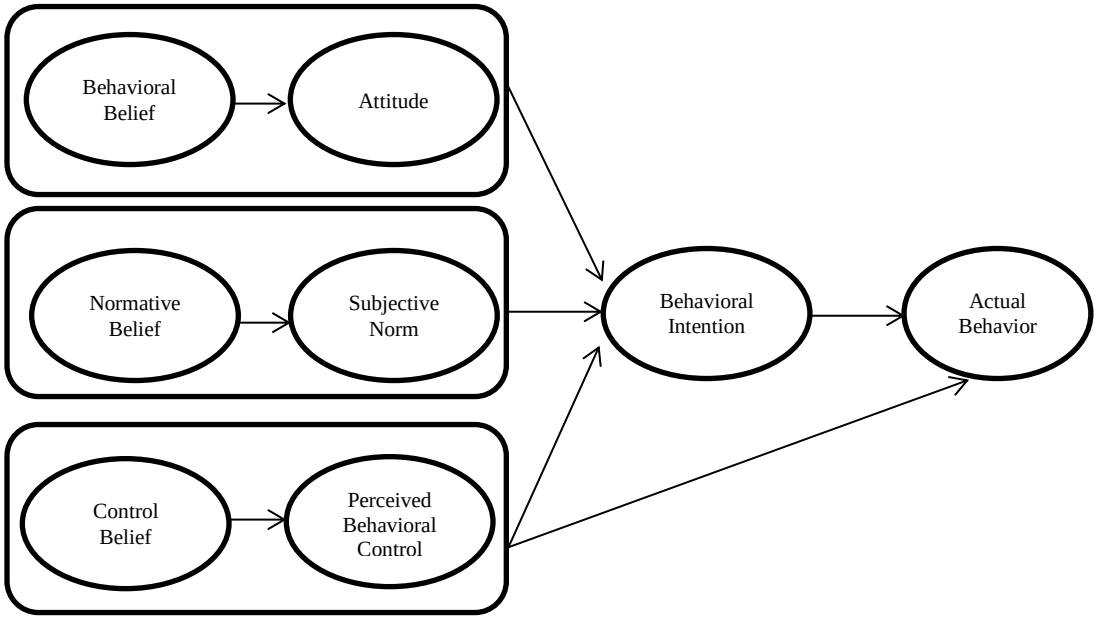


Figure 5. The Theory of planned behavior (Ajzen, 1991)

Theory of planned behavior has successfully been applied to food choice behavior. Cox, Anderson, Lean, and Mela (1998) revealed that the TPB could explain from 33% to 47% of the variance in intentions to increase fruit and vegetable consumption. Nguyen, Otis, and Potvin (1996) investigated intention to do low-fat diet and also supported independent contribution of each predictor variable. In Nguyen et al.'s study (1996), the TPB model could explain 51% of the variance of the intention. Recently, the TPB model has also been applied to investigate sustainable food consumption behavior such as organic food context (Arvola, Vassallo, Dean, Lampila, Saba, Lähteenmäki, & Shepherd, 2008; Chen, 2007; Dean, Raats, & Shepherd, 2008).

While all three original predictors for an intention in the TPB model were found to be significant predictors in the study, attitude was the leading predictor, followed by subjective norm and perceived behavioral control. In Sparks and Shepherd's study (1992), attitudes were found to be strongly correlated with intention to eat organic food and supported this notion. Later, Vermeir and Verbeke (2008) investigated sustainable food consumption behavior and revealed positive correlations between attitudes and intention to purchase sustainable food, supporting the idea. Subjective norm and perceived behavioral control were also revealed as influencing factors on purchasing sustainable food (e.g. Cook, Kerr, & Moore, 2002; Sparks & Shepherd, 1992; Vermeir & Verbeke, 2008). Based on the theory of planned behavior and supporting literature, the following hypotheses were posited:

Hypothesis 1: Consumers' attitude about local food is a significant predictor of their intention to purchase local food.

Hypothesis 2: Consumers' subjective norm about local food is a significant predictor of their intention to purchase local food.

Hypothesis 3: Consumers' perceived behavioral control about local food is a significant predictor of their intention to purchase local food.

Hypothesis 4: Consumers' perceived behavioral control about local food is a significant predictor of their actual local food purchase.

Hypothesis 5: Consumers' behavioral intention to purchase local food is a significant predictor of their actual local food purchase.

Relationship between Subjective Norm and Attitude

Meta-analyses conducted by Sheppard, Hartwick, and Warshaw (1988) and van den Putte's (1991) found that the subjective norm was the weakest predictor of intentions in the TPB model. Later, Armitage and Conner (2001) conducted a meta-analysis on the TPB and also found that subjective norm was the most weakly related factor toward intention. Consequently, subjective norm was intentionally removed from some studies (e.g. Sparks et al., 1995). In contrast, the influential relationship from subjective norm to intention is still supported by many empirical studies and subjective norm is considered a key variable in the TPB model (e.g. Trafimow and Finlay, 1996). The mixed findings regarding the direct influence of subjective norm to intention suggest that subjective norm may influence the intention indirectly via another variable.

Fishbein and Ajzen (1975) constantly support that there is usefulness in separating attitudinal and normative variables even though there is a possibility that they may be highly correlated (Ryan, 1982). Later, multiple researchers (e.g. Fulk, 1993;

Schmitz & Fulk, 1991) supported the notion that social influence processes could have a vital influence on attitude. The stronger the motivation of an individual to conform to group norms, the more group behavior impacts his/her attitude (Lewis et al., 2003).

According to Chang (1998), inclusion a path from subjective norm to attitude was necessary to improve the predictive power of the theory of planned behavior. This idea was also supported by the results from multiple empirical studies (e.g. Chang, 1998; Han & Kim, 2010; Kim, Ham, Yang, & Choi, 2013; Ryu & Jang, 2006). For example, Ryu and Jang (2006) concluded that the influence of significant others such as family on attitude formation should not be overlooked.

According to the two-factor theory of verbal conditioning (Insko & Cialdini, 1969), normative information affects a person's attitudinal norm; it also encourages an individual to hold that attitude due to anticipated social approval. This explains the motivational link between normative structure and attitude (Oliver & Bearden, 1985). Therefore, individual's subjective norm may positively influence attitude, in addition to the direct influence toward intention. Thus, hypothesis 6 was proposed below:

Hypothesis 6: Consumers' subjective norm positively influences attitude.

Extension of the TPB with Moral Norm

As stated in Schwartz's Norm-Activation theory (1977), moral behavior is the result of a personal norm to act in a certain way. When people are aware of the consequences of their actions – and the ability and willingness to take responsibility for the consequences – the moral norm takes place. As mentioned earlier, some of the major reasons for purchasing local food are closely related to social responsibility such as

environment protection (Merrigan & Bailey, 2008). Thus, theoretical justification could be made as the moral norm being an important variable to explain behaviors related to local food purchase.

The TPB model is often criticized because the model does not consider factors such as moral influences, past behaviors, and/or emotions. Based on the aforesaid variables, the TPB is quite often criticized for not considering normative or moral influences on behaviors (Armitage & Conner, 2001; Gorsuch & Ortberg, 1983; Sparks & Shepherd, 2002).

Moral norm refers to individual beliefs about what is right and wrong (Parker, Manstead, & Stradling, 1995). When a person knows his/her behavior could affect others' well-being – and, therefore, has responsibility for his/her behavior – the situation could be referred to as a moral decision situation (Bagozzi, 1981; Davies, Foxall, & Pallister, 2002).

Godin and Kok (1996), Sheppard et al. (1988), and van den Putte (1991) discovered that the subjective norm was the weakest predictor of behavioral intention in the theory of reasoned action and the theory of planned behavior. This result may only reflect the reduced importance of normative factors in the TRA and TPB models. However, other justifications for the effects including measurement errors and failure to address normative influences are possible (Conner & Armitage, 1998). In addition, Ajzen (1991), who developed the TPB, has suggested including moral norm as a behavioral intention predictor in parallel with attitude, subjective norm, and perceived behavioral control. Several empirical researchers also support the notion that including moral norm, moral obligation, or individual norm could help increase TPB's explanatory power

(Conner & Armitage, 1998; Manstead, 2000). For instance, Rivis et al. (2009) mentioned that moral norm captures a major increase in the variance explained in behavioral intention after variables of the TPB have been considered. Furthermore, Rivis et al. (2009) stated that the moral norm enhances the prediction power when the behavior can impact the welfare of others.

In the food context, moral norm was also found to be a meaningful addition of the TPB (Shaw & Shiu, 2003; Shepherd et al., 2005; Sparks & Shepherd, 2002). Specifically, Shepherd et al. (2005) mentioned that the TPB model should include moral aspects to capture consumers' sustainable food purchasing behaviors. Leeuw et al.'s (2011) empirical findings also suggested that the TPB should be extended by moral norm, as a direct predictor, for the intention to purchase fair-trade products. Therefore, the moral norm might be a key influencing factor for local food purchasing intention and may also help increase explanatory power of the TPB.

According to Godin, Conner, and Sheeran (2005), moral norm influences behavior indirectly, through intention, rather than directly. Godin and colleagues (2005) argued that there was lack of support for a direct influence of moral norm on behavior when intention presented. In addition, morality assumes a "practical internalism about reasons" for good-willed moral agents, and such agents must have a thorough deliberative route to their reason to act morally (Gaus, 2010). Based on findings and notions from previous studies, the following hypothesis was developed:

Hypothesis 7: Consumers' moral norm is a significant predictor of their local food purchasing intention.

Even though moral norm was found to be a direct predictor of behavioral intention in many empirical studies, the TPB considered personal values such as moral norm as background factors that are assumed to indirectly affect intentions and behavior (Ajzen, 2011). In other words, moral norm indirectly affects the behavioral intentions and behaviors by being mediated via the TPB variables (Ajzen, 2011; Arvola et al., 2008).

Moreover, according to the economic model of moral motivation (Brekke, Kverndokk, & Nyborg, 2003), individuals want to consider themselves as socially responsible. They also perceive external situations differently. Grounded on the two assumptions, people consider: "What should a person such as I *ideally* do in a situation such as this?" (Brekke et al., 2003, p.1969) Based on the question above, people maximize value by trading the benefits of maintaining an image of socially responsible person based on costs and benefits when they make actual choices (Brekke et al., 2003). Based on this logic, the moral norm could be an antecedent of the TPB, which is based on an value-expectancy theory. Accordingly, the following hypotheses were proposed:

Hypothesis 8-1: Consumers' moral norm is a significant predictor of attitude toward purchasing local food.

Hypothesis 8-2: Consumers' moral norm is a significant predictor of subjective norm toward purchasing local food.

Hypothesis 8-3: Consumers' moral norm is a significant predictor of perceived behavioral control toward purchasing local food.

Self-Congruity Theory

The theory of planned behavior is an expectancy-value theory. This theory has an assumption that people are rational and intentional when they perform a behavior and try to maximize their satisfaction in exchange.

However, consumer behaviors cannot be explained solely by practical outcomes. In other words, symbolic purchase should also be considered since consumers also purchase products in order to express their self-images with the symbols of the products (Dittmar & Drury, 2000). Levy (1999) also mentions that the symbolic purchase behavior might be more vital than other functional benefits of the products.

Self-congruity theory has been used to explain the concept of self-image congruence in consumer behavior (Sirgy, 1986). The definition of self-congruity is the degree of match between the consumer's self-image (actual, ideal, social, or ideal social self) and brand image, store image, product image, or user image (Lindquist & Sirgy, 2009). According to Sirgy (1986), people use brands or products to express themselves and frequently choose brands or products that can improve perceptions of their own self-image. Hence, people tend to choose products that have similar personality traits to their own.

Dimensions of Self-Congruity Theory

The self-congruity involvement is a role of the two major constructs, which are self-image and brand-user image (Sirgy, 1982). Self-concept refers to the totality of an individual's thoughts and feelings as an object (Rosenberg, 1979). Self-concept is a

multidimensional concept with four self-image components (Sirgy, 1982). The components are actual self-image, ideal self-image, actual social self-image, and ideal social self-image. Actual self-image is how an individual (consumer) perceives him or herself – that is, his/her personal identity. Ideal self-image is how consumers would like to see themselves. Actual social self-image is what an individual (consumer) believes others think of him or her, while ideal social self-image is what an individual (consumer) would like others to think of him/her (Sirgy, 1982).

Actual self-image and ideal self-image are private self-images, while social self-image and ideal social self-image are public self-images. If a brand image, store image, product image, or user image matches one or more of the self-image components of an individual, the person is more likely to purchase the product.

In the self-congruity theory, the brand image perception is typically associated with the typical user image of a brand/ product. In other words, self-image congruence in the theory refers to the degree of match between the consumer's self-image and the brand-user image (Sirgy, 1986). It is the psychological comparison that an individual makes between brand/product-user image and his/her self-image perceptions (Sirgy, 1986). If a brand/product has a high self-congruity, it means that the brand/product highly matches the self-image of its customer. Figure 6 is the theoretical model of self-congruity.

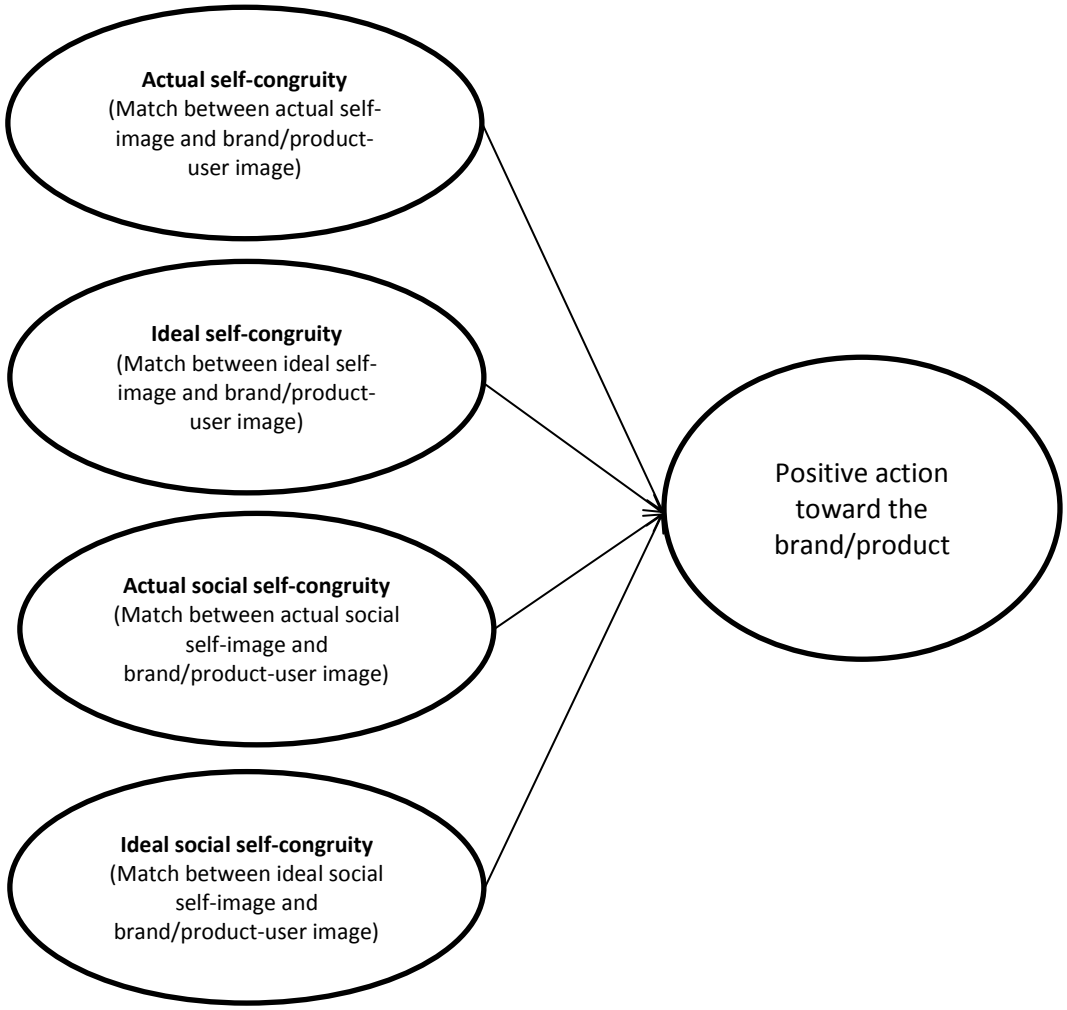


Figure 6. Self-Congruity theory (Sirgy, 1986)

Integration of the TPB and Self-Congruity Theory

As previously mentioned, symbolic purchase should not be neglected when explaining consumer behavior. Theoretically, the link between self-concept and local food purchase behavior can be predicated based on social identity theory (Tajfel, 1982; Tajfel &Turner, 1986). According to social identity theory (Tajfel, 1982; Tajfel &Turner, 1986), membership to specific social groups is an essential aspect for the meaning of the

self-concept. The theory defines relationships between in-groups and out-groups. Individuals achieve and maintain a positive identity by aligning with positively valued in-groups and differentiating from negatively valued out-groups. Individuals perceive themselves and their groups as unique and better ones over other groups. Also, people treat others better when they are perceived to be in the same in-groups. This is called in-group favoritism. Important benefits of local food include the well-being of local community, such as creating local employment and support local economy. This notion can be distinguished from other type of sustainable food products (e.g. fair-trade food, organic food, non-genetically modified food) and appeal to consumers, especially who are community-minded. As identity is built upon regional boundary (Huddy, 2001), local farmers might represent the in-group and foreign farmers might represent the out-group. Consequently, consumers purchase local food in accordance with in-group favoritism. Thus, identity concept would be an important factor to explain behaviors related to local food purchase.

Some academics (Dennison & Shepherd, 1995; Sparks & Guthrie, 1998; Sparks et al., 1995) examined the role of self-concept as an additional variable of the TRA/TPB in the food industry research. Even though Sparks and Shepherd (1992) were uncertain about the potential independent role of self-identity toward behavioral intention, the researchers found an independent effect of self-identity toward the intention to consume organic foods. Later, multiple empirical studies (Dennison & Shepherd, 1995; Sparks & Guthrie, 1998; Sparks et al., 1995) confirmed the role of self-identity concept to predict behavioral intentions in the context of food choice behavior. For example, Armitage et

al. (1999) found very strong effect of self-identity in a food choice context when an individual is in positive mood condition.

While previous research found the importance of self-identity as an additional variable of the TRA/TPB within the food choice behavioral context, the studies had serious drawbacks. In the researcher's knowledge, no empirical research has been investigated regarding the relationship of TRA/TPB model to self-congruity theory; rather all research has been performed the concept of self-identity which is a subset of self-congruity theory. The studies (e.g. Dennison & Shepherd, 1995; Sparks & Shepherd, 1992) rather limited the range of self-identification to a specific behavior – e.g. health consciousness. For instance, Dennison and Shepherd (1995) used two questions to measure self-identity; "I think of myself as a health conscious person" and "I think of myself as someone who is concerned about the effect of what I eat on my health." As seen in those measurements, they limited self-identity to a health-related behavior. As another example, Sparks and Shepherd (1992) investigated the role of self-identity within organic food context and limited self-identity variable to green consumerism. The measures used in that study included "I think of myself as a 'green consumer"; "I think of myself as someone who is very concerned with 'green issues." In short, self-identity measure only captures individual's actual self-image.

Self-identity is a part of self-concept, which is the baseline of self-congruity theory. In particular, self-identity is the 'actual self-image domain' in the theory (Sirgy & Su, 2000). Hence, self-congruity theory is also expected to have a link toward the behavioral intention within the TPB. Furthermore, an inclusion of self-congruity theory instead of self-identity into the TPB might be a better way since it is not limited to the

specific behavior of self-concept when it is measured. Conner and Armitage (1998) reported that self-identity only explained an extra 1% of the total variance of behavioral intention. While a marginal contribution to explain a variance is still valuable in social science research (Conner & Armitage, 1998), it is expected for self-congruity theory to fill the possible gap coming from a preset, limited scope in the previous research and capture a broader picture. In sum, self-identity concept was revealed to be an important independent factor of the TPB by multiple studies. Therefore, self-congruity theory (Sirgy, 1986) is expected to explain the variance of local food purchasing intention in this study, and the overall explanatory power of the TPB model is anticipated to go up by inclusion self-congruity theory.

Based on the previous literature, the following hypothesis was developed:

Hypothesis 9: Self-congruity positively influences consumers' intentions to purchase local food.

According to the TPB, personal values such as self-concept are considered antecedents of attitude, subjective norm, and perceived behavioral control, and mediated by those TPB variables in order to influence behavioral intention (Ajzen, 2011). Several empirical studies (Arvola et al., 2008; Hagger et al., 2007; Kang, Tang, Lee & Bosselman, 2012; Shaw & Shiu, 2002) also supported the notion. For example, Hagger et al. (2007) found that personal and social identity indirectly influenced intentions and behaviors through attitude, subjective norm, and perceived behavioral control in regards to various health behaviors. Hence, self-congruence variables are also expected to indirectly influence the purchase intention and behavior through the TPB model. Thus, the following hypotheses were developed.

Hypothesis 10-1: Self-congruity positively influences consumers' attitude about purchasing local food.

Hypothesis 10-2: Self-congruity positively influences consumers' subjective norm about purchasing local food.

Hypothesis 10-3: Self-congruity positively influences consumers' perceived behavioral control about purchasing local food.

On the other hand, self-congruity might affect behavior directly. For example, in social psychology, personal behavior is often considered a function that is both an impulsive and a deliberative process. According to the MODE model developed by Fazio (1990), individuals' actions are determined by automatic or deliberative processes, or a mixture of the two processes.

Multiple previous studies confirmed that self-identity was a vital direct influence factor on behavioral choice (e.g., Leary et al., 1986; Leary & Jones, 1993). A person's identity was more of dispositional construct in those studies, and it tends to represent more impulsive ways to behavioral engagement (Strack & Deutsch, 2004). Therefore, self-congruity might influence actual behavior directly, reflecting an impulsive direction. When self-identity directly influences actual behavior in a spontaneous way, intention is not a mediator between self-identity and actual behavior (Hagger, et al., 2007). This might be reflected in cases when people are likely to engage in behavior because it is consistent with their identity, but they do not make a plan to do so (Hagger et al., 2007). The planned route includes intention and a consideration of personal tendencies in addition to situational factors when making decisions to engage in behavior (Hagger et al., 2007). Therefore, self-congruity theory (Sirgy, 1986) is expected to explain the

variance of actual local food purchase behavior directly in this study. Accordingly, hypothesis 11was set as below.

Hypothesis 11: Self-congruity positively influences consumers' actual purchase of local food.

Moral Norm and Self-Congruity Theory

According to Schwartz (1977), moral norm is an each individual's own perspective about right and wrong that have been learned during their lifetime. Since the moral is each individual's own views, it is closely tied to one's self-concept (Schwartz, 1977).

An amount of moral effort acts as a determinant of socially responsible self-image according to the economic model of moral motivation (Brekke et al., 2003). In other words, a comparison between a person's moral ideal effort and actual effort is a determining factor of self-image as a socially responsible individual (Brekke et al., 2003).

As mentioned previously, some of the major reasons for purchasing local food are closely related to social responsibility – e.g. environmental protection and also support for a local economy (Merrigan & Bailey, 2008). Thus, the moral norm could be associated with self-congruity theory. Furthermore, it was also suggested by Sparks and Shepherd (1992) that various forms of self-identity might involve a moral factor.

However, self-concept and moral norm are also considered distinct from each other and are also not reducible to the other (Sparks & Guthrie, 1998). Several empirical studies also supported the notion that they are distinct concepts. (e.g. Elliott & Thomson, 2010; Evans & Norman, 2003; Jackson, Smith, & Conner, 2003).

Despite many debates, there has not been a single clear conclusion about the relationship between moral norm and self-concept. In the study, the relationship between self-congruity variables and moral norms are assumed to have some correlation, but are considered distinct concepts based on the previous studies (e.g. Elliott & Thomson, 2010; Evans & Norman, 2003; Jackson et al., 2003).

Hypothesized Model

Figure 7 is the hypothesized model of the study. As shown in the model, the original TPB model including attitude, subjective norm, and perceived behavioral control, intention, and actual behavior were examined to predict U.S. consumers' intention to purchase local food. A new link between subjective norm and attitude was also added. In addition, the moral norm and self-congruity were included as additional variables of the TPB model.

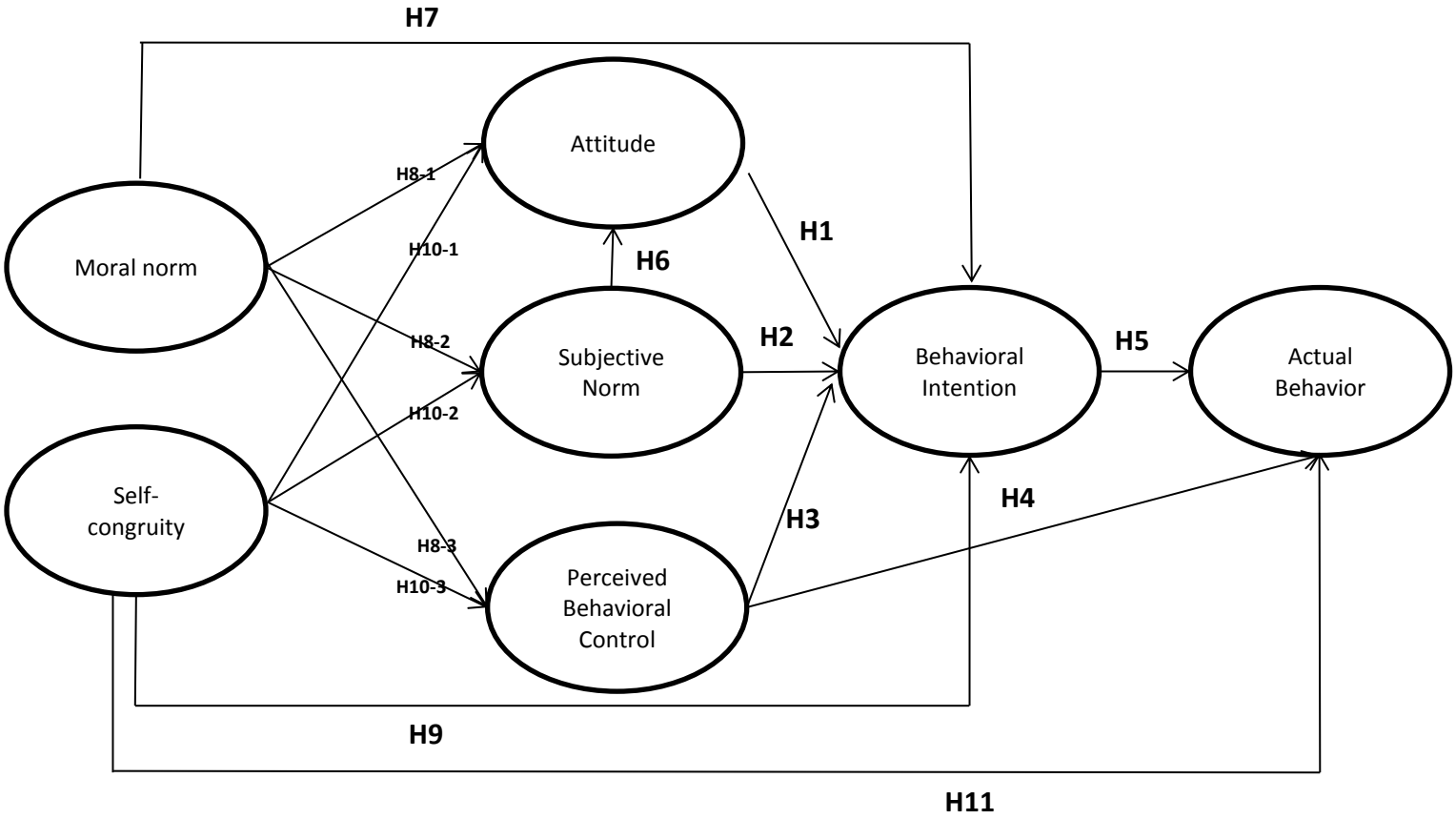


Figure 7. Hypothesized model

CHAPTER III

METHODS

Methods in the quantitative approach refer to techniques and procedures with regards to the practical application of the study (Slevitch, 2011). Therefore, in this chapter, sampling, research instruments, pilot test, and data analysis approaches are presented. The primary purpose of this study is to investigate the antecedents to the behavior to purchase local food by using the extended theory of planned behavior with additional considerations of moral aspects and self-congruity theory. The proposed model in Figure 5 was empirically tested to meet the research objectives with survey data.

Population and Sample

The population of the study is the general U.S. consumers who are 18 years or older. Specifically, the target population is 497,692 U.S. travelers whose email addresses are publicly available through the database purchased by the Center for Hospitality and Tourism Research at Oklahoma State University.

An online survey with email invitations was chosen over the other approaches due to its low cost and high efficiency (Duffy, Smith, Terhanian, & Bremer, 2005). Moreover, broader geographic coverage and larger samples could have been obtained through the online survey. An online survey also enables researchers to expand the scale and scope of the research (Kraut, Olson Banaji, Bruckman, Cohen, & Couper, 2004). Unlike traditional paper-based questionnaires, an online survey is likely to make less error since it does not require human transcription (Kraut et al., 2004).

A total of 497,692 email invitations were sent out to U.S. travelers through the database of The Center for Hospitality and Tourism Research. The invitation contained a description of the study's purpose, the voluntary nature of participation, and the approximate length of time for taking the survey. In addition, incentives were also used to maximize response rate. Originally, six $10, two $20, and one $50 Visa gift cards (total $150) were offered to those who chose to enter the drawing as compensation. However, since $10 and $20 gift cards were discontinued at the store, a total of five Visa gift cards (four $25 and one $50) were rewarded instead.

Even though there is no absolute standard for the minimum sample size required for structural equation modeling, a general rule of thumb is that the minimum sample size should be larger than 200 (Kline, 2011). However, 400 is preferred particularly when observed variables are not multivariate normal distribution (Kline, 2011). Simple random sampling might not always be possible due to time and resource limitations (Randall & Gibson, 1990). Even though this study used convenience sampling technique, larger sample size could reduce sampling bias (Randall & Gibson, 1990). Therefore, the goal is

to receive a minimum of 400 completed surveys in this study but a larger number of responses is preferred.

In order to decrease the bias caused by missing data, the "Force Response" function in Qualtrics was used for the responses involved in structural equation modeling. However, the "Force Response" function was not used for responses not involved in SEM, for example, demographic information.

Research Instruments

Questionnaire for the Theory of Planned Behavior and Moral Norm

In the TPB, attitude, subjective norm, and perceived behavioral control predict if an individual intends to do something. The three predictors can change the chance of the individual's intention to do a desired behavior, which would result in the actual behavior (Francis, Eccles, Johnston, Walker, Grimshaw, Foy, Kaner, Smith, & Bonetti, 2004).

Attitude, subjective norm, and perceived behavioral control can be measured both directly and indirectly (Ajzen, 2002c). Direct assessment is done by asking participants to rate each construct on scales while indirect assessment can be done by asking open-ended questions regarding constructs of beliefs according to the guideline suggested by Ajzen (2002a, 2002c). However, the indirect measures with beliefs assessment may demonstrate inconsistency since different people would have different positive or negative feeling on certain considerations (Ajzen, 2011). According to Ajzen (2002c), direct measures of attitude, subjective norm, and perceived behavioral control are enough if a researcher

desires to predict intentions and behavior. Later, Ajzen (2011) stated that direct measures are more suitable especially when the purpose of study is to predict intentions. Thus, the TPB variables were directly assessed in this study.

Attitude

Four items were used to measure consumers' attitude toward purchasing local food. A seven-point bipolar scale was used to measure their attitude including instrumental (e.g. useful-worthless), experiential (e.g. pleasant-unpleasant), and evaluative (e.g. good-bad) items as suggested by Francis et al. (2004). Examples of the final questionnaire are as follows:

For me, purchasing local food is:

1. Harmful/ Beneficial
2. Bad/Good

Subjective Norm

The items measuring subjective norm were adapted from Francis et al. (2004). A total of three items measure participants' important referents who would approve of their purchasing local food using a seven-point Likert scale (1= strongly disagree; 7= strongly agree). The questions were adapted from the study of Francis et al. (2004) and samples are as follows:

Please rate your level of agreement with the following statements. (1= strongly disagree; 7= strongly agree)

1. Most people who are important to me think that I should purchase local food.
2. It is expected of me that I purchase local food.

Perceived Behavioral Control

Francis et al. (2004) mentioned that self-efficacy and controllability questions should be asked to participants in order to measure the perceived behavioral control. A seven-point Likert scale (1= strongly disagree; 7= strongly agree) was also used and the four questionnaires were adapted from Francis et al.'s study (2004). Sample questions are as follows:

Please rate your ability to purchase local food by indicating your level of agreement with the following statements. (1= strongly disagree; 7= strongly agree)

1. I am confident that I could purchase local food if I want to.
2. For me to purchase local food is easy.

Intention

Three items were adapted from the research of Francis et al. (2004) and measured on a seven-point Likert scale (1= strongly disagree; 7= strongly agree). The specific sample questions are as follows:

Please rate your level of agreement with the following statements. (1= strongly disagree; 7= strongly agree)

1. I expect to purchase local food within one year.
2. I want to purchase local food within one year.

In multiple empirical studies, Cronbach's alpha values of attitude, subjective norm, perceived behavioral control, and intention measures ranged from .72 to .93, indicating that the measures were empirically validated with regards to its reliability (e.g. Chow & Chen, 2009; Kothe, Mullan, & Butow, 2012; Zagata, 2012).

Moral Norm

The following sample statements measured moral norm, and participants were asked four questions to rate their levels of agreement on a seven-point Likert scale (1=strongly disagree; 7= strongly agree) (Armitage & Conner, 2001; Lemmens, Abraham, Hoekstra, Ruiter, De Kort, Brug, & Schaalma, 2005; Robinson, Masser, White, Hyde, & Terry, 2008). Cronbach's alpha value was over .81 in Robinson and colleagues' study (2008), indicating the reliability of the measure was validated with an empirical study. The specific sample questions are as follows:

Please rate your level of agreement with the following statements. (1=strongly disagree; 7= strongly agree)

1. I believe I have a moral obligation to purchase local food.
2. Purchasing local food is consistent with my moral principles.

Actual Behavior

Actual local food purchase behavior was measured with self-report items even though this approach does not assure validity as much as observation methods (Ajzen, 2002b). It was measured with two items and based on the frequency on a seven-point Likert scale (1=never; 7= at every opportunity) (Chan & Lau, 2002; Chow & Chen, 2009; Corbett, 2002; Homer & Kahle, 1988; Li & Huang, 2009; Sinclair, Mazzotti, & Graham,

2003). In Chow and Chen's study (2009), Cronbach's alpha value was .82, indicating that the measure of actual behavior was empirically validated regarding its reliability. A sample question is provided below:

Select which best describes your behavior. (1=never; 7=at every opportunity)

1. In the last year, how often did you buy local food?

Questionnaire for Self-Congruity Theory

There are two major types of measurement commonly used in self-congruity research, which are indirect and direct measure. This study utilized the direct measure (Sirgy, Grewal, Mangleburg, Park, Chon, Claiborne, Johar, & Berkman, 1997).

Indirect measure is the traditional method and calculates the discrepancy score between product user image and self-image which are measured on the same scale. However, consumers are not likely to know about the discrepancy score between product user image and self-image (Sirgy et al., 1997). Furthermore, the traditional method offers predetermined images that could limit the capacity for participants to liberally express their imagination (Sirgy et al., 1997). As a result, the global/direct measure was developed by Sirgy et al. (1997). The global/ direct measure asks a person to imagine the typical user of a product and then specify if the product is consistent with how he/ she sees him-/herself. This method avoids predetermined image while allowing an individual to generate free associated images striking at the time of measurement.

With the global measure, an individual is asked to think about the person who typically uses the brand/ product. Then, the individual is asked how consistent that person is with how he/she sees him-/herself (i.e. actual self-congruity), how he/she would like to see him-/herself (i.e. ideal self-congruity), how other people sees him-/herself (i.e. actual social self-congruity), and how he/she would like to be seen by other people (i.e. ideal social self-congruity). The respondents are then asked to mark their responses on a Likert scale.

The questionnaire for this study was developed based on the global measure developed by Sirgy et al. (1997). First, the respondent read the following scenario developed and modified based on Sirgy et al. (1997).

"Take a moment to think about local food. Think about the kind of person who typically purchases local food. Imagine this person in your mind and then describe this person using one or more personal adjectives such as, traditional versus modern, classy versus folksy, high status versus low status or whatever personal adjectives you can use to describe the typical user of local food."

Next, respondents were asked to rate their levels of agreement on a seven-point Likert scale (e.g., 1 = strongly disagree to 7 = strongly agree) adapted from the previous studies (Helgeson & Supphellen, 2004; Kim & Hyun, 2013; Sirgy et al., 1997). A total of 12 questions (3 items per each dimension of self-congruity) were included, and sample questions are as follows:

Please rate your level of agreement with the following statements. (e.g., 1 = strongly disagree to 7 = strongly agree)

1. Actual self-congruity
    a. People who use local food are more similar to how I see myself.
2. Ideal self-congruity
    a. People who prefer local food are more identifiable with my ideal self-image.
3. Social self-congruity
    a. The image of a typical local food user is highly consistent with how I am seen by others.
4. Ideal social self-congruity
    a. People who use local food are more similar to how I would like to be seen by others.

Three measurement items were used to assess each dimension of self-congruity. All sub-dimensions showed good internal consistency estimates from .83 to .98 in previous research (Helgeson & Supphellen, 2004; Kim & Hyun, 2013). Later during the statistical analysis, the mean value of the summated scales on each factor was used. Not only summated scales represent multiple aspects of a concept but they also reduce measurement error (Hair, Black, Babin, Anderson, & Tatham, 2006).

Demographic Questions

Demographic questions were included in the final part of the survey. Participants were asked to provide the gender, age, marital status, income level, education level, resided state, race, and if they have purchased local food before. Not only does the demographic information provide general background information of the survey

participants, it also helps the researcher find if the collected sample shows a similar pattern to the general U.S. population.

Study Hypotheses

The following hypotheses were developed to examine the research objective based on the research conceptual framework (see Figure 7) using the measures explained above.

Hypothesis 1: Consumers' attitude about local food is a significant predictor of their intention to purchase local food.

Hypothesis 2: Consumers' subjective norm about local food is a significant predictor of their intention to purchase local food.

Hypothesis 3: Consumers' perceived behavioral control about local food is a significant predictor of their intention to purchase local food.

Hypothesis 4: Consumers' perceived behavioral control about local food is a significant predictor of their actual local food purchase.

Hypothesis 5: Consumers' behavioral intention to purchase local food is a significant predictor of their actual local food purchase.

Hypothesis 6: Consumers' subjective norm positively influences attitude.

Hypothesis 7: Consumers' moral norm is a significant predictor of their local food purchasing intention.

Hypothesis 8-1: Consumers' moral norm is a significant predictor of attitude toward purchasing local food.

Hypothesis 8-2: Consumers' moral norm is a significant predictor of subjective norm toward purchasing local food.

Hypothesis 8-3: Consumers' moral norm is a significant predictor of perceived behavioral control toward purchasing local food.

Hypothesis 9: Self-congruity positively influences consumers' intentions to purchase local food.

Hypothesis 10-1: Self-congruity positively influences consumers' attitude about purchasing local food.

Hypothesis 10-2: Self-congruity positively influences consumers' subjective norm about purchasing local food.

Hypothesis 10-3: Self-congruity positively influences consumers' perceived behavioral control about purchasing local food.

Hypothesis 11: Self-congruity positively influences consumers' actual purchase of local food.

Pilot Test

A pilot study was used to recognize any construct flaws regarding the variables and to check for comprehension of the instructions and terminology (Fink, 2009).

The first pilot study using the finalized survey was given to a group of faculty and graduate students to validate content and check reliability. Validity was checked using face validity method. A minor revision was made on some words and statements based on the faculty and graduate students' comments. Overall, they agreed that the instruments were good for measuring local food purchase behavior, indicating no validity issue.

Next, the research instrument was pretested with staff members and students of a large U.S. midwestern university during July 2013. An online survey link as well as a paper survey with the self-administrated questionnaire was distributed to the staff members and students. Eighty individuals completed the survey and their responses were analyzed to check reliability of the measurements. Forty-one responses were collected online while 39 responses were collected using paper and pencil. Commonly, Cronbach's alpha is used to check internal consistency of the instrument when measuring a construct with multiple items (Hair et al., 2006). In order to meet minimum requirement for internal consistency or reliability of the measures, each value should be higher than .70 (Hair et al., 2006). The pilot study results revealed that all values were higher than or close enough to the lower limit of .70 (Lowest= .68, Perceived Behavioral Control). According to Moss, Prosser, Costello, Simpson, Patel, Rowe, Turner, and Hatton (1998), an alpha score of 0.6 is generally acceptable even though this standard is not as stringent as the more commonly known 0.7 threshold (Hair et al., 2006). Therefore, the instrument had adequate internal consistency or reliability overall.

Use of Human Subjects

The researcher completed an online web-based course provided through the Collaborative Institutional Training Initiative (CITI) hosted by the University of Miami. The Institutional Review Board at Oklahoma State University reviewed and approved the research procedure and survey questionnaires of this study.

Data Analysis

Statistical analysis was performed using SPSS 21.0 and M*plus* 7. SPSS was selected due to its easy-to-use interface. M*plus* 7 was also chosen over other multivariate analysis programs due to its easy-to-use interface and its ability to produce p-values for all indirect paths.

First of all, multivariate assumptions were checked. While a univariate outlier indicates an unusual value for a single variable, a multivariate outlier is a combination of values for multiple variables. The central tendency and the dispersion of items were inspected to see the distributional shape. Scatterplot matrix and histograms were also examined to detect linear relationships, outliers, and normality. For detecting multivariate outliers, the Mahalanobis *D*2 test, which can measure the distance of a case from the multidimensional mean of a distribution, was also conducted (Kline, 2011). Kolmogorov-Smirnov test was performed and the values of skewness and kurtosis were also checked to ensure the normality of the data. Other assumptions required for multivariate analysis are the linear relationship between metric variables and the homogeneity of variance throughout the range of both metric variables. To check these assumptions, a scatterplot matrix was produced and checked.

Cronbach's alpha and composite reliability of a construct values were analyzed to check the reliability of attributes representing each construct in the model. The minimum Cronbach's alpha of .70 or composite reliability of .70 of each construct was considered an evidence for construct reliability (Nunnally& Bernstein, 1994).

Correlation analysis was done to assess the relationships between variables to check the correlation coefficient. An item-correlation coefficient value between .10 and .30 is weak, between .31 and .70 is moderate, and .71 and above shows a high positive relationship (McMillan & Schumacher, 2000). Tolerance values and Variance Inflation Factor (VIF) values was also checked to detect multicollinearity issues. Auto (serial) correlation was checked with Durbin-Watson test (Durbin & Watson, 1971).

According to Podsakoff, MacKensie, Lee, and Podsakoff (2003), common method variance (CMV) is "variance that is attributable to the measurement method rather than to the constructs the measures represent" (p. 879). In other words, the measured difference is due to the study itself rather than the reality of the situation. This is a specific problem in self-reported quantitative survey data because of the systematic bias that questionnaires can cause, thus artificially inflating or deflating correlations. To address the issue, respondents were assured of the anonymity and confidentiality of the study. The respondents were also reminded that there were no right or wrong answers and were asked to respond as honest as they can. Clear and concise language for measurement items used in this study should help solve the CMV problem. Harman's single factor test was also conducted. It is a common method used to detect CMV and examines if the majority of the variance can be explained by a single factor.

A confirmatory factory analysis (CFA) was performed to check the reliability and validity of measurement. Convergent and discriminate validity was examined by calculating average variance extracted (AVE) for each construct. AVE is the overall amount of variance in the indicator accounted for by the latent constructs (Hair et al., 2006). The AVE values for the variables should surpass .50. Descriptive statistics and

correlations for variables were also checked. If the size of correlation within constructs is bigger than between constructs, it is considered to have convergent validity. If the size of correlation between constructs is low to moderate, it is an evidence of discriminant validity (Churchill & Iacobucci, 2009).

Structural equation modeling was used to get simultaneous estimate of path coefficients and to test the significance of each path. Therefore, structural equation modeling (SEM) using M*plus* 7 was conducted to see the causal relationships among constructs.

According to Anderson and Gerbing (1988), SEM is a two-step estimation technique that analyzes the measurement model and structural model. The measurement model estimates the loadings and error variances of observation variables on the hypothesized constructs. Thus, CFA was conducted for the constructs to see how well the observed variables are related to a set of latent variables. Afterward, the overall fit of the model was examined to determine the strength of the hypothesized causal relations among the latent constructs. Several model fit indices such as Chi-square statistics, root mean square error of approximation (RMSEA), standardized root mean square residual (SRMR), comparative fit index (CFI), and Tucker-Lewis index (TLI, also known as Non-Normed Fit Index) were addressed. Table 1 shows a comprehensive list of goodness-of-fit index and brief descriptions of each index.

Finally, in addition to testing hypotheses, the indirect and total effect of each variable on actual local food purchase was examined for a comprehensive understanding of the model.

Table 1

Goodness-of-Fit Index and Descriptions

Category	Name	Descriptions
Absolute fit indices	Chi-square	Traditional measure for evaluating overall model fit. Indicates how well the specified model reproduces the covariance matrix among indicator variables. Null hypothesis is "no difference in the two covariance matrices." Therefore, a researcher hope for an insignificant chi-square (>.05) and want to fail to reject the null hypothesis.
	RMSEA (Root mean square error of approximation)	RMSEA tells how well a model fits a population not just a sample used for estimation. In case of large sample, RMSEA could be the best suited to be used in confirmatory method. One of the most informative fit indices. RMSEA favors parsimony. RMSEA can calculate confidence interval around its value. Upper limited should be less than 0.08.
	Standardized root mean square residual (SRMR)	The square root of the difference between the residuals of the sample covariance matrix and the hypothesized covariance model. Should be .80 or lower.
Incremental (comparative or relative) fit indices	Comparative fit index (CFI)	Revised form of the NFI which considers sample size. Should be .90 or greater.
	Tucker-Lewis index (TLI)	Non-normed fit index. Favors parsimony. Punishes adding parameters. Should be .90 or greater.

Note. Based on Hair et al. (2006)

CHAPTER IV

RESULTS

The primary purpose of this study is to investigate the antecedents to the behavior to purchase local food by using the extended theory of planned behavior with additional considerations of moral aspects and self-congruity theory. This chapter presents the findings of the study and includes seven main sections. The first section addresses initial data screening. The second section reveals the demographic information of the respondents. The third section presents descriptive statistics, and the fourth section shows the results of the measurement model analyses. The fifth section reports the structural model, the sixth section reveals the indirect and total effect of each variable on actual local food purchase behavior, and the final section summarizes the overall findings.

Initial Data Screening

First of all, structural equation modeling assumes no missing value in data. In this study, the "Force Response" function in Qualtrics was used to obtain complete data from each respondent. As a result, a total of 751 responses were collected and used for data analyses.

Before proceeding to further data analyses, several data screening procedures were performed. Univariate and multivariate outliers were checked first. Z-scores for all variables were calculated to detect univariate outliers. The z-score value of 3.0 was used as a cutoff. Therefore, any cases with z-score values of 3.0 or above were removed from the data. Also, scatterplot matrices and histograms were examined to detect linear relationships, outliers, and normalities. For detecting multivariate outliers, the Mahalanobis *D*2 test, which can measure the distances of a case from the multidimensional mean of a distribution, was also conducted (Kline, 2011). After the univariate and multivariate outlier tests, a total of 56 extreme outliers were removed from the data.

The Kolmogorov-Smirnov test is also often used to test normality of samples (Hair et al., 2006). Nevertheless, the Kolmogorov-Smirnov test is sensitive in a large sample case (e.g. n<300), so the values of skewness and kurtosis should be checked as a substitute (Kim, 2013). Since all values of skewness (minimum: -1.85, maximum: -0.24) and kurtosis (minimum: -0.83, maximum: 2.64) were less than 3 and 10 respectively, this indicates normal distribution of data (Kline, 2011).

Other assumptions required for multivariate analysis are the linear relationships between metric variables, and the homogenous variance throughout the range of all the metric variables. A scatterplot matrix with total fit line for each variable was produced and reviewed for the examination of the linearity and homoscedasticity for a set of variables as a diagnostic tool. None of the relationships in this scatterplot matrix shows any serious problem with linearity or heteroscedasticity, showing that linearity and

homoscedasticity assumptions are met. After all the steps of data screening were completed, 695 cases were retained for further analyses.

Demographic Information

Table 2 presents demographic characteristics of the respondents. The percentage of male respondents was 37.6% and female respondents was 62.4%. In terms of age, respondents were evenly distributed over all the age groups except age group 18 to 24 (0.6%). Approximately 31% of respondents was single and 59% of respondents was either engaged or married. Income of the participants was wide-ranging: $80,000 to $89,999 (20.8%), $40,000 to $49,999 (13.3%), $30,000 to $39,999 (12.6%), below $20,000 (12.3%), and $20,000 to $29,999 (11.1%). As to education level, nearly all participants completed high school, which was a little higher than the U.S average (85.4%) (U.S. Census Bureau, 2011). Furthermore, approximately 88% of the respondents at least attended or completed college. The majority of the respondents was White/Caucasian (67.1%), followed by African American (13.4%), and Hispanic (6.9%). The racial composition was somewhat similar to the U.S. population estimates (White- 63%, African American- 13.1%, and Hispanic- 16.9%, U.S. Census Bureau, 2011). In terms of local food purchase experience, 98% of respondents indicated that they had bought local food before.

With the exception of 4 states (Alaska, Montana, New Mexico, and North Dakota), at least one or more participants' responses were obtained from each state according to the place of residence data. In other words, the data was acquired from almost all over the nation. While 18.1% of respondents lived in California (125 respondents), only one respondent lived in Maine.

Table 2

Demographic Characteristics of the Respondents

Characteristics	Frequency	Valid Percent
Gender		
Male	254	37.6
Female	422	62.4
Total	676	100.0
Missing	19	
Age		
18 to 24	4	.6
25 to 34	61	8.9
35 to 44	132	19.2
45 to 54	164	23.8
55 to 64	206	29.9
65 or over	121	17.6
Total	688	100.0
Missing	7	
Marital status		
Single	209	31.1
Married	378	56.3
Engaged	19	2.8
Other	66	9.8
Total	672	100.0
Missing	23	
Annual income		
Below $20,000	82	12.3
$20,000 - $29,999	74	11.1
$30,000 - $39,999	84	12.6
$40,000 - $49,999	89	13.3
$50,000 - $59,999	63	9.4
$60,000 - $69,999	58	8.7
$70,000 - $79,999	34	5.1
$80,000 - $89,999	139	20.8
$90,000 or more	46	6.9
Total	669	100.0
Missing	26	

Table 2

Demographic Characteristics of the Respondents (Continued)

Characteristics	Frequency	Valid Percent
Education		
Less than High School	3	.4
High School / GED	82	11.9
Some College	171	24.9
2-year College Degree	104	15.1
4-year College Degree	172	25.0
Master's Degree	117	17.0
Doctoral Degree	22	3.2
Professional Degree (JD, MD)	17	2.5
Total	688	100.0
Missing	7	
Race		
White/Caucasian	460	67.1
African American	92	13.4
Hispanic	47	6.9
Asian	32	4.7
Native American	7	1.0
Pacific Islander	12	1.7
Other	36	5.2
Total	686	100.0
Missing	9	
Local food purchase experience		
Yes	672	98.0
No	14	2.0
Total	686	100.0
Missing	9	

Table 2

Demographic Characteristics of the Respondents (Continued)

Characteristics	Frequency	Valid Percent
Residence		
Alabama	20	2.9
Alaska	0	0.0
Arizona	26	3.8
Arkansas	11	1.6
California	125	18.2
Colorado	21	3.1
Connecticut	13	1.9
Delaware	3	.4
District of Columbia	4	.6
Florida	51	7.4
Georgia	37	5.4
Hawaii	7	1.0
Idaho	6	.9
Illinois	36	5.2
Indiana	18	2.6
Iowa	6	.9
Kansas	3	.4
Kentucky	7	1.0
Louisiana	6	.9
Maine	1	.1
Maryland	9	1.3
Massachusetts	8	1.2
Michigan	15	2.2
Minnesota	12	1.7
Mississippi	2	.3
Missouri	16	2.3
Montana	0	0.0
Nebraska	3	.4
Nevada	11	1.6
New Hampshire	3	.4
New Jersey	8	1.2
New Mexico	0	0.0
New York	39	5.7
North Carolina	22	3.2

North Dakota	0	0.0
Ohio	25	3.6
Oklahoma	4	.6
Oregon	4	.6
Pennsylvania	23	3.3
Puerto Rico	0	0.0
Rhode Island	1	.1
South Carolina	7	1.0
South Dakota	5	.7
Tennessee	11	1.6
Texas	15	2.2
Utah	7	1.0
Vermont	2	.3
Virginia	7	1.0
Washington	13	1.9
West Virginia	3	.4
Wisconsin	5	.7
Wyoming	3	.4
Total	684	100.0
Missing	11	

Based on the demographic distribution, the obtained data is considered to represent the population at least minimally.

Descriptive Statistics

Descriptive statistics provide simple summaries about the measures by providing minimum, maximum, mean, and standard deviation for each measurement. Descriptive statistics of each measurement are listed in Table 3.

Table 3

Descriptive Statistics of Variables

Variable	Min.	Max.	Mean	Std. Dev.
Attitude				
1. Harmful/ Beneficial	3.00	7.00	6.49	0.90
2. Bad/Good	3.00	7.00	6.51	0.88
3. Unpleasant / Pleasant	2.00	7.00	6.30	1.03
4. Worthless/ Useful	2.00	7.00	6.38	0.98
Subjective Norm				
1. Most people who are important to me think that I should purchase local food.	1.00	7.00	4.76	1.58
2. It is expected of me that I purchase local food.	1.00	7.00	3.93	1.83
3. The people in my life whose opinions I value would approve of my purchasing local food.	1.00	7.00	5.67	1.35
Perceived Behavioral Control				
1. I am confident that I could purchase local food if I want to.	1.00	7.00	5.80	1.34
2. For me to purchase local food is easy.	1.00	7.00	4.91	1.60
3. The decision to purchase local food is not beyond my control.	1.00	7.00	5.29	1.78
4. Whether I purchase local food is entirely up to me.	1.00	7.00	5.95	1.45
Intention				
1. I expect to purchase local food within one year.	1.00	7.00	5.94	1.49
2. I want to purchase local food within one year.	1.00	7.00	6.11	1.28
3. I intend to purchase local food within one year.	1.00	7.00	6.09	1.31
Actual behavior				
1. In the last year, how often did you buy local food?	1.00	7.00	5.09	1.64
2. Currently, how often do you buy local food?	1.00	7.00	5.06	1.64

Table 3

Descriptive Statistics of Variables (Continued)

Variable	Min.	Max.	Mean	Std. Dev.
Moral norm				
1. I believe I have a moral obligation to purchase local food.	1.00	7.00	4.29	1.78
2. Purchasing local food is consistent with my moral principles.	1.00	7.00	4.85	1.64
3. My personal values encourage me to purchase local food.	1.00	7.00	5.13	1.59
4. I have a moral responsibility to purchase local food.	1.00	7.00	4.37	1.78
Self-congruity				
1. Actual self-congruity	1.00	7.00	4.79	1.46
2. Ideal self-congruity	1.00	7.00	4.83	1.53
3. Social actual self-congruity	1.00	7.00	4.56	1.55
4. Social ideal self-congruity	1.00	7.00	4.70	1.54

Note. All statements were measured on a seven-point Likert scale.

The mean values of four attitude items were between 6.30 and 6.51 on a seven-point Likert scale. The results suggested that the respondents' overall feeling toward purchasing local food was very positive.

Subjective norm was measured with three items on a seven-point rating scale as shown in Table 3. The mean scores of subjective norm were from approximately neutral to positive, which indicated that the respondents might be influenced by the individuals who are important to them.

Four items were used to measure perceived behavioral control using a seven-point Likert scale. The mean scores of the items ranged from 4.91 to 5.95. The positive mean

scores of perceived behavioral control proposed that the respondents had confidence in their ability to buy local food.

Mean scores for intention items were 5.94, 6.09, and 6.11 respectively (seven-point Likert scale). Those positive mean scores suggested that the respondents intended to purchase local food in the near future.

Actual behavior was measured with two items on a seven-point Likert scale. Because the mean scores were 5.06 and 5.09, respectively, the results suggested that the respondents actually purchased local food whenever they had opportunities.

The mean values of four moral norm items were between 4.29 and 5.13 on a seven-point Likert scale. The results suggested that the respondents' personal moral values encouraged them to purchase local food.

Lastly, each self-congruity dimension was measured with three items on a seven-point rating scale. The mean scores of each item ranged from 4.56 to 4.83, which was positive. The results proposed that the respondents thought local food users were similar to their self-concepts.

Measurement Model

Reliability Tests

Standardized factor loading of each measurement is presented in Table 4. All standardized factor loadings of the observed variables to the constructs were higher than the minimum value of .5 (Table 5) (Hair et al., 2006).

As shown in Table 5, all constructs except SN (subjective norm, α= .69) had Cronbach's alpha exceeding the minimum value of .70 recommended by Hair et al. (2006). According to Moss et al. (1998), an alpha score of 0.6 is generally acceptable even though this standard is not as stringent as the more commonly known 0.7 threshold (Hair et al., 2006). Furthermore, Cronbach's alpha has been criticized as providing a lower bound estimate for the composite score and as a result, it tends to underestimate reliability (Peterson & Kim, 2013). Therefore, composite reliability, known as a popular alternative to Cronbach's alpha and widely used together with SEM, was calculated to double check the results (Peterson & Kim, 2013). Composite reliability is considered a better choice because it draws on the standardized loadings and measurement errors for each item (Shook, Ketchen, Hult, & Kacmar, 2004). Table 5 shows the composite reliability (CR) for the constructs and all of them surpassed the minimum recommended value of .70. Therefore, the instrument had adequate internal consistency or reliability overall.

Table 4

Standardized Factor Loadings

Construct		Std. factor loading
Attitude		
1.	Harmful/ Beneficial	0.89
2.	Bad/Good	0.89
3.	Unpleasant / Pleasant	0.82
4.	Worthless/ Useful	0.88
Subjective Norm		
1.	Most people who are important to me think that I should purchase local food.	0.78
2.	It is expected of me that I purchase local food.	0.63
3.	The people in my life whose opinions I value would approve of my purchasing local food.	0.62
Perceived Behavioral Control		
1.	I am confident that I could purchase local food if I want to.	0.86
2.	For me to purchase local food is easy.	0.75
3.	The decision to purchase local food is not beyond my control.	0.57
4.	Whether I purchase local food is entirely up to me.	0.70
Intention		
1.	I expect to purchase local food within one year.	0.80
2.	I want to purchase local food within one year.	0.92
3.	I intend to purchase local food within one year.	0.98
Moral norm		
1.	I believe I have a moral obligation to purchase local food.	0.83
2.	Purchasing local food is consistent with my moral principles.	0.87
3.	My personal values encourage me to purchase local food.	0.82
4.	I have a moral responsibility to purchase local food.	0.88
Actual behavior		
1.	In the last year, how often did you buy local food?	
2.	Currently, how often do you buy local food?	0.93 0.97
Self-congruity		
1.	Actual self-congruity	0.88
2.	Ideal self-congruity	0.91
3.	Social actual self-congruity	0.89
4.	Social ideal self-congruity	0.90

Table 5

Reliability and Validity Analyses

	α	CR	AVE	MSV	ASV
Attitude	0.93	0.93	0.76	0.29	0.19
Subjective Norm	0.69	0.72	0.46	0.40	0.28
Perceived Behavioral Control	0.80	0.81	0.53	0.26	0.14
Intention	0.91	0.93	0.82	0.28	0.24
Actual Behavior	0.95	0.95	0.90	0.27	0.22
Self-Congruity	0.94	0.91	0.73	0.44	0.26
Moral Norm	0.92	0.94	0.80	0.44	0.24

Note. α= Cronbach's Alpha, CR= Composite Reliability, AVE= Average Variance Extracted, MSV= Maximum Shared Variance, ASV= Average Shared Variance

Validity Tests

Confirmatory factor analysis (CFA) was performed to evaluate the measurement components of the model. A total of 24 measurement variables were constrained to 7 constructs, including: attitude (att), subjective norm (sbn), perceived behavioral control (pbc), intention (it), actual behavior (acb), self-congruity (self), and moral norm (mor).

Using the maximum likelihood method estimation, the total usable sample of 695 observations was analyzed. The maximum likelihood was chosen because the method has lower variance than other methods (least affected by sampling error), and is most robust to violation of assumptions (Rao, 2009). The measurement model was evaluated by reviewing the overall model fit. First of all, the CFA yielded the following Chi-square index; χ^2=1100.906, df= 231 ($p<.001$) and the result indicated a poor fit. However, Chi-square tends to penalize a model with large samples. In other words, it is very sensitive to sample size and therefore other model fit indices should be reported (Hair et al., 2006). Based on Hair et al.'s (2006) recommendation, at least one absolute fit index and one

incremental fit index were reported besides the Chi-square test. Accordingly, the other goodness-of-fit indices were checked and they were in acceptable ranges (RMSEA= .074, SRMR= .053, CFI= .935, TLI= .923). This indicates the overall measurement model provided an acceptable fit to the data.

Table 6

Fit Indices for the Original Measurement Model

	χ^2	df	χ^2/df	RMSEA	SRMR	CFI	TLI
Original model	1100.906	231	4.765	0.074	0.053	0.935	0.923

Note. χ^2=Chi-square, df= degree of freedom, RMSEA= Root Mean Square Error of Approximation, SRMR= Standardized Root Mean square Residual,
CFI= Comparative Fit Index, TLI= Tucker-Lewis Index

After the measurement model is tested and evaluated, convergent validity and discriminant validity should be inspected (Hair et al., 2006). Convergent validity and discriminant validity were checked with AVE (average variance extracted) values. In order to achieve convergent validity, AVE values should exceed .50 (Hair et al., 2006). If AVE values exceed MSV (maximum shared variance) and ASV (average shared variance), the measurement model has discriminant validity (Hair et al., 2006).

Although the measurement model is considered to have discriminant validity, it did not meet the minimum requirement of convergent validity. That is, AVE of subjective norm (.46) was slightly lower than .50 and it indicates an issue of convergent validity (Table 5).

After examining the factor loadings of measurements for subjective norm as well as the standard residual covariance matrix, one measurement item (the people in my life

whose opinions I value would approve of my purchasing local food) was excluded for the further analyses.

Reliability and Validity Tests for the Revised Measurement Model

After removing a measurement item for subjective norm, another CFA was performed to assess the measurement components of the model. Before conducting the second CFA, reliability was reexamined. Table 7 shows the revised standardized factor loadings and all items were higher than the minimum value of .50. Table 8 shows the Cronbach's Alpha and composite reliability (CR) for the constructs and all of them surpassed the minimum recommended value of .70. Therefore, the instrument had adequate internal consistency or reliability overall.

Table 7

Standardized Factor Loadings for the Revised Measurement Items

Construct	Std. factor loading
Attitude	
1. Harmful/ Beneficial	0.89
2. Bad/Good	0.90
3. Unpleasant / Pleasant	0.82
4. Worthless/ Useful	0.88
Subjective Norm	
1. Most people who are important to me think that I should purchase local food.	0.75
2. It is expected of me that I purchase local food.	0.73
Perceived Behavioral Control	
1. I am confident that I could purchase local food if I want to.	0.86
2. For me to purchase local food is easy.	0.75
3. The decision to purchase local food is not beyond my control.	0.57
4. Whether I purchase local food is entirely up to me.	0.70
Intention	
1. I expect to purchase local food within one year.	0.80
2. I want to purchase local food within one year.	0.92
3. I intend to purchase local food within one year.	0.98
Moral norm	
1. I believe I have a moral obligation to purchase local food.	0.84
2. Purchasing local food is consistent with my moral principles.	0.87
3. My personal values encourage me to purchase local food.	0.82
4. I have a moral responsibility to purchase local food.	0.89
Actual behavior	
1. In the last year, how often did you buy local food?	
2. Currently, how often do you buy local food?	0.93 0.97
Self-congruity	
1. Actual self-congruity	0.88
2. Ideal self-congruity	0.91
3. Social actual self-congruity	0.89
4. Social ideal self-congruity	0.90

Table 8

Reliability and Validity Analyses for the Revised Model

	α	**CR**	**AVE**	**MSV**	**ASV**
Attitude	0.93	0.93	0.76	0.28	0.17
Subjective Norm	0.71	0.71	0.55	0.40	0.24
Perceived Behavioral Control	0.80	0.82	0.53	0.26	0.14
Intention	0.91	0.93	0.82	0.28	0.22
Actual Behavior	0.95	0.95	0.90	0.27	0.21
Self-Congruity	0.94	0.94	0.80	0.44	0.24
Moral Norm	0.92	0.91	0.73	0.44	0.26

Note. α= Cronbach's Alpha, CR= Composite Reliability, AVE= Average Variance Extracted, MSV= Maximum Shared Variance, ASV= Average Shared Variance

Correlation Analysis

Correlation analysis was done to assess the relationships between variables to check the correlation coefficient. An item-correlation coefficient value between .10 and .30 is weak, between .31 and 70 is moderate, and .71 and above shows a high positive relationship (McMillan & Schumacher, 2000).

Correlation analysis shows how constructs in the model are associated, but also inspects if the relationships among the constructs are excessively correlated (multicollinearity). Table 9 reveals that constructs in this study were somewhat correlated with one another. Also, all relationships between variables were positive as expected.

Table 9

Correlations among Variables

	1	2	3	4	5	6	7
1. Attitude	1						
2. Subjective Norms	.442**	1					
3. Perceived Behavioral Control	.257**	.254**	1				
4. Intention	.494**	.437**	.373**	1			
5. Actual Behavior	.390**	.407**	.438**	.504**	1		
6. Self-Congruity	.385**	.543**	.248**	.417**	.411**	1	
7. Moral Norm	.366**	.546**	.275**	.475**	.428**	.621**	1

Note. ** Correlation is significant at the 0.01 level (2-tailed).

Variance Inflation Factor (VIF) values were also checked to detect multicollinearity issues. If multicollinearity is present, it means that independent variables are too highly correlated with each other. To calculate VIF, a series of multiple regression analyses were conducted. The range of VIF value calculated was between minimum 1.189 and maximum 1.937. According to O'Brien (2007), multicollinearity is not likely a problem if VIF value is less than 10. Therefore, the data used in this study does not have a multicollinearity problem.

When error terms from different time periods or cross-section observations are correlated, the error term is serially correlated (Durbin & Watson, 1971). In order to detect auto (serial) correlation, the Durbin-Watson test was conducted. If the value (d) equals 2,

it indicates there is no autocorrelation (Durbin & Watson, 1971). If the Durbin–Watson value is considerably less than 2, there is an indication of positive serial correlation. As a rule of thumb, if Durbin–Watson value is less than 1.0, auto (serial) correlation is likely a problem. The Durbin-Watson value in this study was 1.911, and therefore, no issue regarding auto (serial) correlation was found.

Common Method Variance

In order to examine common method variance (CMV), Harman's single factor test was conducted. It is the most commonly known method for assessing CMV (Podsakoff et al., 2003). The test basically examines if the majority of the variance is explained by a single factor. A single-factor exploratory factor analysis (EFA) was conducted with an unrotated solution. When CMV is an issue, a single factor would account for the majority (50% or more) of the variance in the model or a single factor would appear from an unrotated solution (McFarlin & Sweeney, 1992; Podsakoff & Organ, 1986). The result of the test showed that seven factors were extracted and no single variable explained more than 50% of the total variance, suggesting that common method bias was not a concern in this study.

Validity Tests

The second CFA yielded the following model fit statistics: 1) Chi-square index; χ^2=915.701, df= 209 (p<.001), 2) RMSEA= .070, 3) SRMR= .048, 4) CFI= .945, 5) TLI= .934. Table 10 shows the revised standardized factor loadings, and all items were higher than the minimum value of .50.

The comparison of model fit indices between the original measurement model and revised measurement model is shown in Table 10. Overall, not only do the results indicate an acceptable data-model fit but also showed an overall improvement from the original model. For example, χ^2/df decreased by .384 while CFI increased by .010.

Convergent validity and discriminate validity were also examined a second time and no issues were found (Table 8).

Table 10

Goodness of Fit Indices Comparison for the Measurement Models

	χ^2	df	χ^2/df	RMSEA	SRMR	CFI	TLI
Original model	1100.906	231	4.765	0.074	0.053	0.935	0.923
Revised model	915.701	209	4.381	0.070	0.048	0.945	0.934

Note. χ^2=Chi-square, df= degree of freedom, RMSEA= Root Mean Square Error of Approximation, SRMR= Standardized Root Mean square Residual,
CFI= Comparative Fit Index, TLI= Tucker-Lewis Index

Structural Model

Overall Model Fit

After verifying that the measurement model had an adequate fit, structural equation modeling (SEM) followed to test the hypothesized structural relationship among latent variables. The overall fit of the hypothesized model showed a good fit in all indices except for the Chi-square test; 1) Chi-square index; χ^2=955.918, df= 214 ($p<.001$), 2) RMSEA= .071, 3) SRMR= .058, 4) CFI= .943, 5) TLI= .932. Because the Chi-square test is very sensitive to sample size, four more model-data fit indices were examined (Kline,

2011). RMSEA and SRMR are absolute fit indices and presume that the best fitting model has a fit of zero. The indices determine how far the model is from a perfect fit (Hair et al., 2006). In contrast, CFI and TLI are the incremental fit indices similar to R-square, indicating 0 is the worst possible model and 1 indicates the best possible model (Hair et al., 2006). According to these results, the model was confirmed as a valid one to apply to my population.

Table 11

Model Fit Indices for Hypothesized Structural Model

	χ^2	df	χ^2/df	RMSEA	SRMR	CFI	TLI
Hypothesized model	955.918	214	4.467	0.071	0.058	0.943	0.932

Note. χ^2=Chi-square, df= degree of freedom, RMSEA= Root Mean Square Error of Approximation, SRMR= Standardized Root Mean square Residual,
CFI= Comparative Fit Index, TLI= Tucker-Lewis Index

Hypothesized Paths

Table 12 summarizes the path estimates and their statistical significances. The standardized path coefficients estimate the standardized direct effect of each variable. In other words, they represent the amount of change in the dependent variable that is attributable to a single standard deviation unit's worth of change in the predictor variable. For example, if the path coefficient estimating the standardized direct effect of attitude on intention is .347, it indicates that one standard deviation increase in attitude is associated with a .347 standard deviation increase in intention.

Table 12

Structural Parameter Estimates

Hypothesized path	Estimate	S.E.	Est./ S.E.	Results
H1: Attitude -> Intention	0.347**	0.036	9.535	Supported
H2: Subjective norm -> Intention	0.012	0.060	0.192	Not supported
H3: Perceived behavioral control -> Intention	0.210**	0.036	5.805	Supported
H4: Perceived behavioral control -> Actual behavior	0.331**	0.037	9.028	Supported
H5: Intention -> Actual behavior	0.290**	0.037	7.940	Supported
H6: Subjective norm -> Attitude	0.239*	0.071	3.384	Supported
H7: Moral norm -> Intention	0.250**	0.051	4.897	Supported
H8-1: Moral norm -> Attitude	0.121*	0.060	2.022	Supported
H8-2: Moral norm -> Subjective norm	0.380**	0.054	7.075	Supported
H8-3: Moral norm -> Perceived behavioral control	0.239**	0.058	4.160	Supported
H9: Self-congruity -> Intention	0.060	0.050	1.188	Not supported
H10-1: Self-congruity -> Attitude	0.176*	0.059	2.990	Supported
H10-2: Self-congruity -> Subjective norm	0.378**	0.053	7.141	Supported
H10-3: Self-congruity -> Perceived behavioral control	0.134*	0.057	2.336	Supported
H11: Self-congruity -> Actual behavior	0.221**	0.036	6.190	Supported

*Note. * p<.05, **<p<.001*

Hypotheses 1 through 5

Hypothesis 1 through hypothesis 5 was proposed based on the original TPB model. The estimates of the standardized coefficients presented in Table 12 suggested a positive direct effect of attitude (β =.347, $p < .001$) and perceived behavioral control (β =.210, $p < .001$) on intention to purchase local food, supporting hypotheses 1 and 3. However, the path from subjective norm to intention was not statistically significant (β =.012, p =.847). Therefore, hypothesis 2 was not supported. As predicted, perceived behavioral control also influenced actual behavior directly (β =.331, $p < .001$). Lastly, hypothesis 5, which is a positive direct influence from intention to behavior, was also supported (β =.290, $p < .001$). Overall, all relationships in the original TPB model were supported except for the path from subjective norm to intention.

Among three variables predicting intention in the TPB model, attitude was found to be the major direct determinant of intention, followed by perceived behavioral control. Therefore, attitude turned out to be the major direct determinant of local food purchase intention.

Perceived behavioral control was the second biggest direct predictor to the intention. That is, consumers are willing to buy local food when they feel a sense of control. In contrast, consumers would not intend to purchase local food if they feel a lack of control.

Perceived behavioral control not only influenced intention but also had a direct effect on the actual behavior as hypothesized. In the TPB, actual behavior is a function of intentions and perceptions of behavioral control (Ajzen, 2011). Ajzen (2011, p.184) stated, "for instance, even if two individuals have equally strong intentions to learn to ski,

and both try to do so, the person who is confident that he can master this activity is more likely to persevere than is the person who doubts his ability."

Subjective norm did not illustrate a high relative influence on intention (β =.012, p = .847). The results may explain that purchasing local food is rather a self-decision and has nothing to do with other people.

Finally, intention was a significant predictor of actual behavior (β =.290, p < .001).

Hypothesis 6

The positive direct effect of subjective norm on attitude was statistically significant, supporting hypothesis 6 (β =.239, p < .001). The result from the hypothesis 5 test indicates that subjective norm does not directly influence local food purchase intention. Rather, subjective norm influences a formation of an individual's attitude, and also indirectly influences intention via attitude.

Hypotheses 7 through 8

The results showed that moral norm had significant positive impact on intention (γ =.250, p < .001), attitude (γ =.125, p < .05), subjective norm (γ =.380, p < .001), and perceived behavioral control (γ =.239, p < .001), supporting hypotheses 7, 8-1, 8-2, and 8-3. This finding proposes that moral norm significantly influences consumers' local food purchase intention both indirectly and directly.

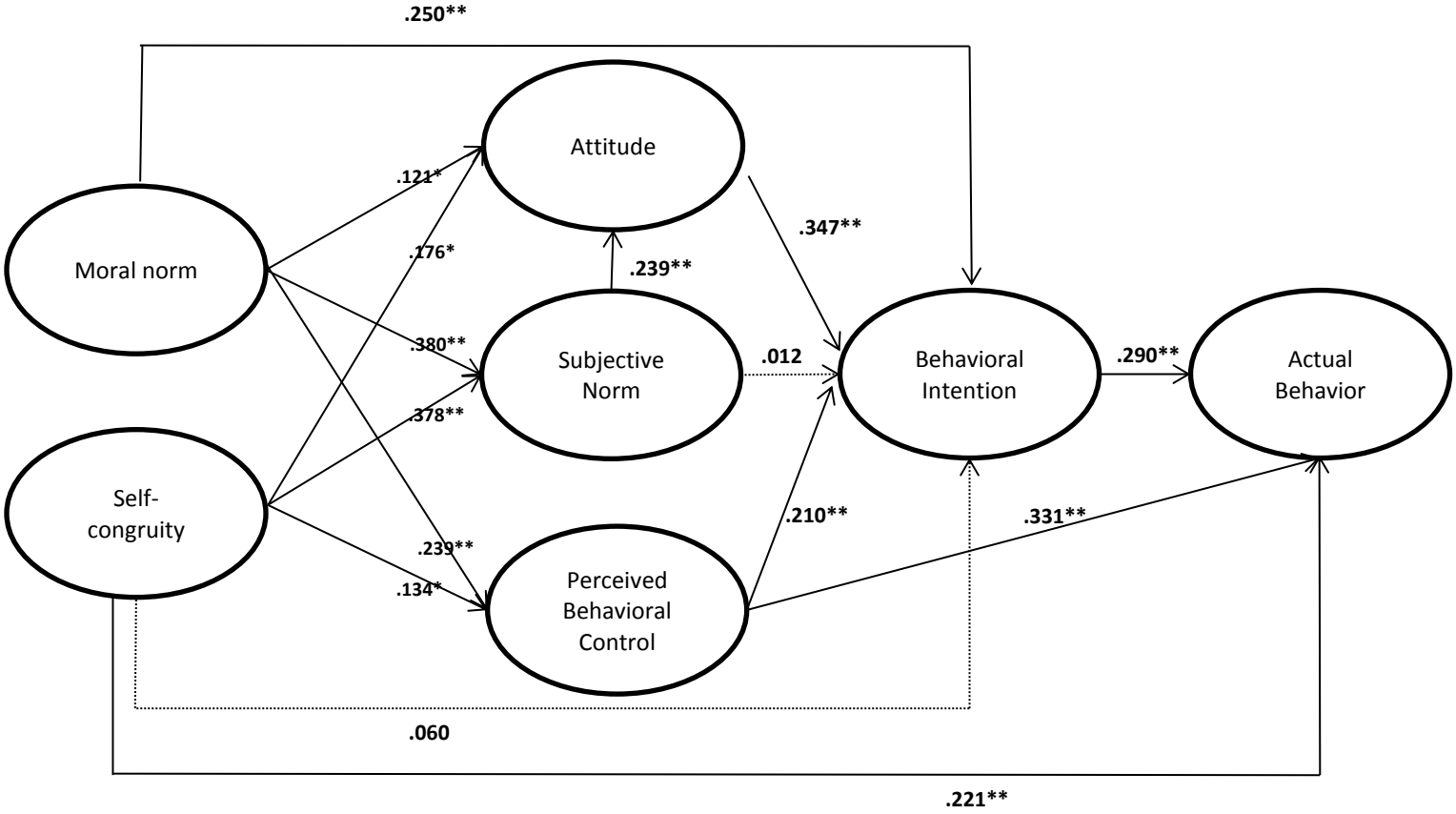
Hypotheses 9 through 11

Even though the link for hypothesis 9 (H9: Self-congruity -> Intention) was not statistically significant (γ =.060, p = .235), the positive direct impact of self-congruity on attitude (γ =.176, p < .05), subjective norm (γ =.378, p < .001), and perceived behavioral

control (γ =.134, $p < .05$) were found, supporting hypotheses 10-1, 10-2, and 10-3. This result suggests that self-congruity influences local food purchase intention indirectly via attitude, subjective norm, and perceived behavioral control.

The positive direct effect of self-congruity on actual behavior was statistically significant, supporting hypothesis 11 (γ =.221, $p < .001$). Thus, the symbolic purchase (self-congruity) is also a direct influential factor that bypasses all the planned behavior variables on actual local food purchase.

Finally, the squared multiple correlations (SMC) for actual behavior was .411, indicating approximately 41% of the variance of actual local food purchase was explained by the model. The results showed a 3% increase from the original TPB model (the squared multiple correlation of the original TPB: .383)



Note. p*<.05, **p<.001

Figure 8. Hypothesized model with path estimates (Standard path coefficient)

Indirect and Total Effects

Indirect effects are often overlooked in most empirical studies (Alwin & Hauser, 1975; Holbert & Stephenson, 2003). However, one construct could also indirectly influence another through intervening variables. Although hypotheses were also proposed based on direct correlations between variables, investigating these indirect and total effects, in addition to the hypotheses, should explain the model more comprehensively. The main purpose of this study is to investigate the antecedents to the behavior to purchase local food by using the extended theory of planned behavior with additional considerations of moral aspects and self-congruity theory. Namely, the main variable of interest is actual purchase behavior. Thus, indirect paths from other variables to actual behavior and total effect of each variable on actual behavior were calculated. The results are presented in Table 13.

Table 13

Standardized Indirect and Total Effects for Predicting Actual Local Food Purchase

Variable	Path	Estimate	Std. Error	Est. / S.E.	p-value	sig.
MOR	**Total indirect effect**	0.194	0.032	6.061	0.000	p<.001
	Detailed path					
	MOR-PBC-ACB	0.079	0.021	3.696	0.000	p<.001
	MOR-IT-ACB	0.073	0.018	4.101	0.000	p<.001
	MOR-ATT-IT-ACB	0.012	0.006	1.921	0.055	p<.10
	MOR-SBN-IT-ACB	0.001	0.007	0.192	0.847	N.S
	MOR-PBC-IT-ACB	0.015	0.005	3.216	0.001	p<.001
	MOR-SBN-ATT-IT-ACB	0.009	0.003	2.696	0.007	p<.05
	Direct effect					
	Total effect	0.194	0.032	6.061	0.000	p<.001
SELF	**Total indirect effect**	0.115	0.032	3.569	0.000	p<.001
	Detailed path					
	SELF-PBC-ACB	0.044	0.020	2.280	0.023	p<.05
	SELF-IT-ACB	0.017	0.015	1.180	0.238	N.S
	SELF-ATT-IT-ACB	0.018	0.007	2.659	0.008	p<.05
	SELF-SBN-IT-ACB	0.001	0.007	0.192	0.848	N.S
	SELF-PBC-IT-ACB	0.008	0.004	2.089	0.037	p<.05
	SELF-SBN-ATT-IT-ACB	0.009	0.003	2.688	0.007	p<.05
	Direct effect	0.221	0.036	6.190	0.000	p<.001
	Total effect	0.319	0.040	7.900	0.000	p<.001
ATT	**Total indirect effect**	0.100	0.017	5.957	0.000	p<.001
	Detailed path					
	ATT-IT-ACB	0.100	0.017	5.957	0.000	p<.001
	Direct effect					
	Total effect	0.100	0.017	5.957	0.000	p<.001

Table 13

Standardized Indirect and Total Effects for Predicting Actual Local Food Purchase (Continued)

Variable	Path	Estimate	Std. Error	Est. / S.E.	p-value	sig.
SBN	**Total indirect effect**	0.027	0.019	1.442	0.149	N.S
	Detailed path					
	SBN-IT-ACB	0.003	0.017	0.192	0.848	N.S
	SBN-ATT-IT-ACB	0.024	0.008	2.928	0.003	p<.05
	Direct effect					
	Total effect	0.027	0.019	1.442	0.149	N.S
PBC	**Total indirect effect**	0.061	0.012	4.887	0.000	p<.001
	Detailed path					
	PBC-IT-ACB	0.061	0.012	4.887	0.000	p<.001
	Direct effect	0.331	0.037	9.028	0.000	p<.001
	Total effect	0.392	0.035	11.066	0.000	p<.001
IT	**Total indirect effect**					
	Direct effect	0.290	0.037	7.940	0.000	p<.001
	Total effect	0.290	0.037	7.940	0.000	p<.001

Note. MOR= Moral Norm, SELF= Self-Congruity, ATT= Attitude, SBN= Subjective Norm, PBC= Perceived Behavioral Control, IT= Intention, ACB= Actual Behavior

Perceived Behavioral Control

Perceived behavioral control was the determinant of actual local food purchase with the largest total effect (.392, p<.001). While the larger effect was from the direct effect (.331 (p<.001), the indirect effect passing through intention was also statistically significant (.061, p<.001).

Self-congruity

The total effect of self-congruity on actual local food purchase was .319 (p<.001) and it was due to both direct effect (.221, p<.001) and indirect effect (.115, p<.001).

The most significant indirect path was through perceived behavioral control (.044, $p<.05$) and the next one was through attitude and intention (.018, $p<.05$, respectively). The indirect impact of self-congruity on actual local food purchase through subjective norm, attitude, and intention, was also statistically significant (.009, $p<.05$). Moreover, self-congruity influenced actual local food purchase with the intervening variables of perceived behavioral control and intention (.008, $p<.05$).

Two indirect paths between self-congruity and actual local food purchase behavior (Self-congruity→ Intention→ Actual Behavior, and Self-Congruity→ Subjective Norm→ Intention→ Actual Behavior) were not statically significant at $p<.05$.

Intention

Intention was the third largest determinant of actual local food purchase with a total effect of .290 ($p<.001$). Intention was solely a direct effect onto actual local food purchase.

Moral Norm

The results indicate that the moral norm influenced actual local food purchase indirectly through various intervening variables. The most significant indirect path was through perceived behavioral control and the next one was through intention (.079, $p<.001$ and .073, $p<.001$, respectively). The indirect impact of moral norm on actual local food purchase, through perceived behavioral control and intention, was also statistically significant (.015, $p<.001$). Finally, moral norm was found out to influence actual local food purchase through the intervening variables of subjective norm, attitude, and intention (.009, $p<.05$).

Two indirect paths from moral norm to actual local food purchase behavior (Moral norm→ Attitude→ Intention→ Actual Behavior, and Moral norm→ Subjective Norm→ Intention→ Actual Behavior) were not statistically significant at $p<.05$. However, the path between moral norm and actual local food purchase with intervention of attitude and intention was marginally rejected at $p<.05$ ($p=.055$), indicating the path is still significant at $p<.10$. Total indirect effect of moral norm on actual purchase behavior was .194 ($p<.001$). Because moral norm was hypothesized as influencing actual local food purchase indirectly, the total effect of moral norm on actual local food purchase was also .194, which was fourth largest total effect on actual local food purchase and it was statistically significant ($p<.001$).

Attitude

Attitude was assumed as influencing actual local food purchase via intention. The results show that the indirect path was statistically significant (.100, $p<.001$). Thus, the total effect of attitude on actual local food purchase was .100 ($p<.001$) as well and it was the fifth largest influencing factor for actual local food purchase.

Subjective Norm

Two indirect paths between subjective norm and actual local food purchase were assumed and investigated. First of all, the path from subjective norm to actual local food purchase via intention was not statistically significant (.003, $p=.848$). However, the other indirect path via both attitude and intention was revealed to be statistically significant (.024, $p<.05$). Nevertheless, the total effect of subjective norm on actual local food purchase was not statistically significant (.027, $p=.149$).

Summary of Findings

This study examined fifteen hypotheses based on the literature review. The final results of the hypotheses tests are presented in Table 14. Overall, all hypotheses were supported except for H2 (direct influence of subjective norm on intention) and H9 (direct influence of self-congruity on intention). Overall goodness of fit statistics indicated that the hypothesized model fits data well: 1) Chi-square index; χ^2=955.918, df= 214 ($p<.001$), 2) RMSEA= .071, 3) SRMR= .058, 5) CFI= .943, 6) TLI= .932.

In addition to testing hypotheses, indirect and total effects of each variable on actual local food purchase were examined for comprehensive understanding of the model. Perceived behavioral control had the largest total effect on actual local food purchase, followed by self-congruity, intention, moral norm, and attitude. However, the total effect of subjective norm on actual local food purchase was not statistically significant. The specific magnitude of each indirect path was also examined. The further details and implications of these results are discussed in the next chapter.

Table 14

Results of Hypotheses Testing

Hypothesis and Path	Results
H1: Attitude -> Intention	Supported
H2: Subjective norm -> Intention	Not supported
H3: Perceived behavioral control -> Intention	Supported
H4: Perceived behavioral control -> Actual behavior	Supported
H5: Intention -> Actual behavior	Supported
H6: Subjective norm -> Attitude	Supported
H7: Moral norm -> Intention	Supported
H8-1: Moral norm -> Attitude	Supported
H8-2: Moral norm -> Subjective norm	Supported
H8-3: Moral norm -> Perceived behavioral control	Supported
H9: Self-congruity -> Intention	Not supported
H10-1: Self-congruity -> Attitude	Supported
H10-2: Self-congruity -> Subjective norm	Supported
H10-3: Self-congruity -> Perceived behavioral control	Supported
H11: Self-congruity -> Actual behavior	Supported

CHAPTER V

CONCLUSIONS

The primary purpose of this study was to investigate the antecedents to the behavior to purchase local food by using the extended theory of planned behavior with additional considerations of moral aspects and self-congruity theory. To test the proposed model, an online survey was conducted and the data was analyzed with structural equation modeling. This chapter includes a summary of the findings, theoretical and practical implications, limitations, and suggestions for future research.

Major Findings

The study proposed a hypothesized model built upon the theory of planned behavior and additional dimensions were included, which were moral norm and self-congruity. Structural equation modeling was conducted and all hypothesized paths were analyzed. Although hypotheses were constructed based on direct correlations between variables, the study also looked into indirect and total effects on actual local food purchase to explain the model more comprehensively. The results of specific findings are discussed next.

Perceived Behavioral Control

Perceived behavioral control refers to an individual's perceived difficulty or ease to engage in a certain behavior (Ajzen, 1991). That is, it is often considered similar to the self-efficacy concept associated with his/ her confidence level, which depends on how successfully a person performs given behaviors (Bandura, 1982; Zint, 2002).

According to the results, perceived behavioral control influenced not only intention to purchase local food directly but also actual local food purchase. This finding supports the original notion of the TPB, as well as wide range of TPB studies results. Moreover, perceived behavioral control was the determinant of actual local food purchase with the largest total effect, indicating the most influential factor on actual local food purchase among all variables. The findings support the literature that emphasized the importance of perceived behavioral control in the TPB (Ajzen, 1991; Armitage & Conner, 2001). Perceived behavioral control was also revealed as influencing factors on purchasing sustainable food (e.g. Sparks & Shepherd, 1992; Robinson & Smith, 2002, Vermeir & Verbeke, 2008). Therefore, consumers actually purchase more local food when they have a higher degree of controllability or self-efficacy.

While a larger effect of perceived behavioral control on actual local food purchase was found from the direct effect, an indirect effect on actual local food purchase behavior via intention was also statistically significant. In fact, perceived behavioral control reflects two components, which are the availability of resources needed to engage in the behavior such as money, time, and other resources, and an individual's self-confidence in the ability to conduct the behavior (Ajzen, 1991). When perceived behavioral control directly influences behavior, the rationale would be that behavioral achievement depends

not only on motivation, but also on actual control over the behavior (Sahni, 1995). Thus, the stronger direct link between perceived behavioral control and actual local food purchase could be explained as following: There are two individuals who have the same intention to purchase local food. One lives in an area with easier access to local food, for instance, a big city in Southern California, and the other one lives in a rural area where access to local food is not easy. Even though the two people have the same intention to purchase local food, the former one would actually buy more local food then the latter one. Also season, climate, money, availability, variety, etc. may be other control factors that explain the results. Ajzen (1991) also supports the notion that perceived behavioral control predicts behavior independently without intention when there are problems of volitional control. Next, people would exert extra effort to perform a behavior successfully when they have more feelings of control (Ajzen, 1991). This additional effort may also explain some of the direct relationship between perceived behavioral control and actual local food purchasing behavior.

Self-Congruity

In this study, self-congruity theory (Sirgy, 1986) was applied to explain self-image congruence notion in consumer behavior. The definition of self-congruity is the degree of match between the consumer's self-image (actual, ideal, social, or ideal social self) and product image (Lindquist & Sirgy, 2009). According to Sirgy (1986), individuals use products to express themselves and frequently choose products that can improve perceptions of their own self-image. Accordingly, they tend to choose products that have similar personality traits to their own.

According to the results, self-congruity had a positive effect on attitude toward purchasing local food. This relationship was supported by multiple empirical studies (e.g., Ibrahim & Najjar, 2008; Kang, et al., 2012). Thus, individuals who think their self-image is congruent with local food users' will also have positive attitude toward purchasing local food.

The link between self-congruity and subjective norm could be explained by social identity theory (Tajfel, 1982). According to the theory, an individual's self-concept is inextricably linked with the group norms and, as a result, it tends to impact normatively-endorsed behavior (Tajfel, 1982). Hence, people who think their self-image is congruent with local food users' will feel more social pressure in purchasing local food, and also think their referent group would support their local food purchasing.

Self-congruity also influenced perceived behavioral control. Therefore, people who think their image is similar to that of local food users would have more perceived behavioral control over local food purchase. According to the TPB, personal values such as self-concept are considered antecedents of attitude, subjective norm, and perceived behavioral control, and intervened by those TPB variables (Ajzen, 2011) when influencing intention and behavior. The study findings are also supported by numerous empirical studies (Arvola et al., 2008; Hagger et al., 2007; Kang et al., 2012; Shaw & Shiu, 2002).

As mentioned above, self-congruity affected attitude, subjective norm, and perceived behavioral control directly. Nevertheless, self-congruity did not influence intention directly. By the way, the correlation of self-congruity and intention were found out to be .417 in the correlation analysis, indicating they had moderate correlation

(McMillan & Schumacher, 2000). However, the result from the structural equation modeling was quite different. This may be due to the total effect of self-congruity was diffused to multiple other variables, which were attitude, subjective norm, perceived behavioral control, and actual local food purchase. As a result, an impact from self-congruity on intention might relatively have become weaker. Interestingly, self-congruity had a great effect on actual local food purchase. These results could be explained by a previous study conducted by Hagger et al. (2007). When self-identity directly influences actual behavior in a spontaneous way, intention is not a mediator between self-identity and actual behavior (Hagger et al., 2007). This might reflect cases when people are likely to do something because it is consistent with their identity, but they do not make a plan to do so (Hagger et al., 2007). The planned route includes intention and a consideration of personal tendencies in addition to situational factors when making decisions to engage in behavior (Hagger et al., 2007).

Therefore, individuals whose self-image is congruent with local food users will actually purchase local food both in planned and impulsive way. Since the direct effect of self-congruity on actual local food purchase was much larger than indirect effect in the results, self-congruity affects local food purchase more in an impulsive way.

When people, who felt their self-image was similar to the users of local food, purchase local food in a planned manner, they would have positive attitude, feel more social pressure, and/ or perceive that buying local food is easy for them. Then, the attitude, subjective norm, and perceived behavioral control will influence their actual local food purchase, either directly, or indirectly through intention. Among those indirect effects, the path intervening by perceived behavioral control was found out to be the most

significant path. To explain this path, people who think they have self-image matching with local food users might have more confidence in their abilities or perceived more control over actual local food purchase, and this directly leads to their actual purchase of local food.

Finally, self-congruity was the determinant of actual local food purchase with the second largest total effect, indicating the second most influential factor on actual local food purchase among all variables.

Intention

Intention, as a direct predictor of actual local food purchase, was the third largest determinant of actual local food purchase when its total effect on it was considered. This is in line with a previous local food research by Bissonnette and Contento (2001) as they found intention and actual local food choice had a significant positive relationship. This finding also supports the original notion of the TPB. Thus, it was revealed that people who had intention to purchase local food would actually buy local food.

Moral Norm

Moral norm refers to individual beliefs about what is right and wrong (Parker et al., 1995). When an individual knows his or her behavior could affect others' well-being and therefore, has responsibility for his or her behavior, the situation could be referred to as a moral decision situation (Bagozzi, 1981; Davies et al., 2002). The results indicated that moral norm was the fourth largest determinant of actual local food purchase reflected by total effect magnitude. According to Ajzen (1991), moral obligations influence

intentions, in parallel with attitude, subjective norm, and perceived behavioral control. In other words, moral norm is a direct predictor of behavioral intention. Empirical findings from multiple studies (e.g., Leeuw et al., 2011; Parker et al., 1995) also revealed that moral norm was a direct predictor of intention. In contrast, the TPB considered personal values such as moral norm as background factors that are assumed to indirectly affect intentions and behavior (Ajzen, 2011). In other words, moral norm indirectly affects the behavioral intention and behavior by being mediated via the TPB variables (Ajzen, 2011; Arvola et al., 2008). The results of this study supported both ideas. Moral norm had direct effects on intention. Furthermore, moral norm indirectly affects the behavioral intention and behavior through attitude, subjective norm, and perceived behavioral control. These results are also consistent with previous research conducted by Bamberg and Möser (2007).

The results indicate that people who consider purchasing local food as their moral responsibility are likely to: 1) have a positive attitude toward purchasing local food, 2) feel social pressure on buying local food, 3) perceive control over purchasing local food, and/or 4) have intention to purchase local food, 5) purchase local food through the attitude, subjective norm, perceived behavioral control, and/or intention. A possible reason for this finding is that people consider buying local food as a pro-environmental activity. While transporting the food, pollution level increases by consuming energy from the transportation methods (Sim et al., 2007). Therefore, consuming locally produced food can reduce the pollution level since less energy is used for delivering food, and it was one of reasons that people buy local food (Foodroutes Network, 2011; Locavore, 2012).

Attitude

Attitude is the degree to which a person has a favorable or unfavorable evaluation of the behavior (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). According to the TPB, attitude is assumed to directly influence behavioral intention and, in turn, the behavioral intention influences actual behavior. In results, attitude was a significant predictor of intention to purchase local food. In turn, intention was found out to be a significant predictor of actual local food purchase. The total effect of attitude on actual local food purchase was statistically significant and it was the fifth largest determinant of that. Without a doubt, attitude was proved as an important predictor of behavioral intention and behavior in numerous studies in the food context (e.g. Cox et al., 1998; Arvola et al., 2008; Nguyen et al., 1996). When an individual has favorable evaluation of purchasing local food, the person will plan to buy local food and, in turn, this intention will lead to an actual local food purchase.

Subjective Norm

A person's perception of social pressure in doing or not doing a specific behavior was the definition of subjective norm in this study (Ajzen & Fishbein, 1980; Fishbein& Ajzen, 1975). The direct effect of subjective norm on intention was not statistically significant. The results were consistent neither with the Vermeir and Vereke (2008) empirical research, which actually found a significant impact of subjective norm on intention to purchase sustainable food, nor with the relationships proposed in the TPB models. However, meta-analyses conducted by Sheppard et al. (1988), van den Putte

(1991), and Armitage and Conner (2001) found that subjective norm was the most weakly related factor toward intention. One possible reason for these results would be that grocery shopping behavior might be less influenced by normative factors, but rather influenced by other factors, such as time or money. Furthermore, Ajzen (1991) concluded that behavioral decisions in western culture are mainly based on personal factors, such as attitude and perceived behavioral control.

However, a path from subjective norm to attitude was added based on the previous empirical findings (e.g. Chang, 1998; Han & Kim, 2010; Kim et al., 2013; Ryu & Jang, 2006) in this study, and the path was statistically significant. Therefore, even though subjective norm would not directly influence local food purchase intention, it will influence on attitude formation. In other words, people who feel more pressure from significant others or referent people regarding purchasing local food will have a positive attitude toward buying it.

The total effect of subjective norm on actual local food purchase behavior was not statistically significant overall. Nevertheless, the importance of subjective norm should not be neglected. Not only subjective norm was found out to influence the formation of attitude, but also it acts as an intervening variable in multiple indirect paths toward actual local food purchase.

Explanatory Power of the Hypothesized Model

A meta-analysis conducted by Armitage and Conner (2001) showed that the TPB model explained an average of 27% of the variance in behavior. In this study, the squared multiple correlations (SMC) for actual local food purchase was .411, indicating

approximately 41% of the variance of actual local food purchase was explained by the hypothesized model. Meanwhile, the SMC for actual behavior in the original TPB was also calculated and reported as .383. Therefore, the hypothesized model was found out to explain an additional 3% of the variance of actual local food purchase over the original TPB, indicating the explanatory power has been improved.

Implications

Theoretical Implications

A number of theoretical implications were drawn from the study. First of all, a theoretical significance of this study is its inclusion of moral aspect and self-congruity concept as additional constructs into the TPB model. The study results revealed that the inclusions of moral aspect and self-congruity to the original TPB model were a meaningful addition in the local food context. The proposed model explained more variance in behavior than the original TPB model. Moreover, multiple significant direct and indirect paths from self-congruity and moral norm to the other variables were found. A simultaneous inclusion of additional variables is associated with modern theoretical development in human behavior (Oh & Hsu, 2001). Accordingly, this study contributes to the current body of the theory of planned behavior research.

In the researcher's knowledge, this is the first study that incorporated self-congruity concept into the TPB model in the local food context. Previous research has only used the concept of self-identity which is a subset of self-congruity theory. For example, the studies (e.g. Dennison & Shepherd, 1995; Sparks & Shepherd, 1992) rather

limited the range of self-identification to a specific behavior. By using self-congruity instead, the study did not limit the scope of self-concept when it was measured. According to the results, self-congruity concept was revealed as an important variable, which influenced attitude, subjective norm, perceived behavioral control, and actual local food purchase, directly and indirectly.

Interestingly, the symbolic purchase (self-congruity) was also found out to be a direct influential factor, which bypasses all the planned behavior variables, on actual local food purchase. The magnitude of the direct effect was much larger than that of the indirect effect. This result implies that self-congruity would be more dispositional construct in nature and might represent more impulsive ways to behavioral engagement (Strack & Deutsch, 2004). The investigation of the impulsive route from self-congruity as well as deliberative route from intention and perceived behavioral control could represent more total variance of actual local food purchase overall. The effort of adding this kind of impulsive ways would not only enrich the TPB study, but also countervail the weakness of the TPB, which only explains planned behaviors.

As hypothesized, the subjective norm had a significant influence on attitude toward purchasing local food. The finding indicated that attitudinal and normative constructs were not separated as was found in the previous research (e.g. Fulk, 1993; Schmitz & Fulk, 1991; Ryan, 1982). The stronger the motivation of an individual to conform to group norms, the more group behavior impacts his/her attitude (Lewis et al., 2003). Thus, researchers should carefully look at the relationship between attitudinal and normative factors when s/he investigates the decision making process, especially in the local food context.

The hypothesized model explained the importance of symbolic purchase. The TPB, strictly conceptualized based on utilitarian values, may be too limited to explain complex human behavior. The study added symbolic perspective into the TPB by incorporating self-congruity theory, and looked at diversified effects. The result confirmed that symbolic benefits were another type of motivator of individuals' local food purchase.

Finally, the investigation of path decompositions in this study should provide researchers clearer and more comprehensive information about the relationships among attitude, subjective norm, intention, moral norm, self-congruity, and intention to purchase local food. The conceptual model may be useful to examine the causal relationships among attitude, subjective norm, intention, moral norm, self-congruity, and intention to purchase in other types of food context.

Practical Implications

The results of the study deliver useful information to farmers, marketers, state-government administrators, and food retailers by providing information about which factors influence consumers' purchase intentions toward locally grown food products.

The findings suggest that perceived behavioral control and attitude are determinant of consumers' local food purchase. Thus, marketing campaigns or current local food programs should access consumers' perceived behavioral control and attitude.

Although the total effect of subjective norm on actual local food purchase was not statistically significant, the importance of subjective norm should not be ignored, as it influences the formation of attitude. It also acts as an intervening variable in multiple indirect paths toward actual local food purchase.

While attitude, subjective norm, and perceived behavioral control are considered important antecedents for local food purchase, those are revealed to be influenced by moral norm and self-congruity. Therefore, farmers, marketers, state-government administrators, and food retailers should formulate ideas that can approach consumers' moral norm and self-concept, in order to radically influence their behaviors regarding local food purchase.

The following sections offer insights into practical implications. More specifically, it acts as a guide for accessing perceived behavioral control, self-congruity, moral norm, attitude, and subjective norm.

Perceived Behavioral Control

Marketers should be aware that perceived behavioral control is a major determinant of consumers' local food purchase. Perceived behavirol control can be accessed by examining barriers or facilitors for the behavior of interest (Ajzen, 1991). According to some previous studies (Gregoire et al., 2005; Robinson & Smith, 2002; Starr et al., 2003), major perceived barriers for purchasing local food were: lack of availability and variety, inconvenience, higher price, and lack of information about local food sources.

To overcome the customers' perceptions about limited availability and variety, marketers should highlight the seasonality of local food, and encourage seasonal eating when they advertise local food. Rather than just accepting what is unavailable, they should advertise local food by emphasizing what is available in season. For example, marketers can highlight watermelon during the summer months and set up a "sampling table" of local watermelon at the stores or markets. During the promotion period, information posters can be hung up at multiple places and information flyers can also be given out to customers. Also, marketers can give out cookbooks/recipe cards that highlight seasonal local ingredients, and, furthermore, marketers can even invite a chef and do a cooking demonstration with seasonal ingredients. Local farmers who have greenhouses may be able to research what items are still in high demand when it is not in season, and grow the items strategically.

As previously mentioned, the demand of local food is rapidly increasing, and it is not a niche market anymore. However, local food is still rarely available in regular grocery stores in some locations (Thomas & McIntosh, 2013). Major grocery chains should be aware of this and make an effort to feature more local food in the stores. It may be difficult for some stores to purchase local food from multiple small farmers due to procurement policies (Pirog, Van Pelt, Enshayan, & Cook, 2001). They might need to start to buy from a larger scale local farm with variety of products and go from there.

Smaller farmers are often neither technology savvy nor reluctant to have a credit card system on their own. Accordingly, limited payment systems at farmers' markets are still an ongoing problem in many of the venues. Thus, a central kiosk that can handle all credit card transactions could be installed at a market.

Although higher prices were one of the major drawbacks of local food, Darby et al. (2008) found that consumers were willing to pay up to 30% more for locally produced food. Grocery stores and farmers' markets can run a weekly discount promotion on local food items so that more people can try them. Highlighting local food on sale in their weekly ads may attract those who are willing to pay more for local food or customers who are interested in local food.

Farmers' markets need to consider conducting more aggressive marketing about the market. Starr and colleagues (2003) found that lack of knowledge about how to find local food and local food suppliers is one of major barriers of purchasing local food. Farmers' market managers should consider applying for marketing grant, such as USDA Specialty Crop Block Grant Program (USDA, 2013), in order to increase the marketing budget of the market. Policy-makers should also try to make farmers' market marketers aware of available funds for advertising.

Self-Congruity

Marketers should understand the importance of symbolic purchasing. Advertising or promotions should not be made based only on functional benefits of local food. Marketers should understand the images of target consumers in order to make effective and dependable marketing strategies. For example, marketers can consider using a spokesperson, as a local food model, who has an image similar to their own self-image or desired self-image of target consumers. Also, they may also use a local resident as a model. According to Kollat and Willett (1969), impulsive purchase largely comes from in-store stimuli. Thus, relocation of local food in stores, the construction of a point-of-

purchase display, and design of marketing posters featuring the local food model can additionally encourage consumers' spontaneous purchase.

Moral Norm

Some moral issues related to local food are, for example, local community's well-being and environmental health (Enticott, 2003). For instance, marketers could convey messages such as how consuming local food helps the local community or how food miles affect our environment. The message may need to include some evidence like economic impact or scientific facts to be more persuasive. Meanwhile, an individual's moral norm starts to be developed from childhood (Kohlberg, 1971). Providing school activities and educations to children regarding the benefits of consuming local food would also be a good idea in the long-run.

Attitude

Marketers should emphasize a number of advantages of local food. According to Fishbein and Ajzen (1975), attitude is a function of the subjective likelihood that the behavior will create a specific result. In turn, the subjective likelihood can be accessed from investigating advantages or disadvantages.

Marketers should consider campaigns with convincing messages in order to access to consumers' attitudes about local food. The campaigns should be designed to influence consumers' opinions about local food by providing information about various advantages and benefits of purchasing local food. For example, information booths can be set up at a market or at a grocery store with various flyers and posters explaining the reasons why people need to consume local food. The flyers and posters may highlight

information about key benefits of local food in regards to the environment, local economy, health and nutrition benefits, and/or freshness.

Trust building often requires face-to-face interaction (Penker, 2006). While consumers can meet local farmers when they shop for food at a farmers' market, this is not the case with a grocery store that sells local food. However, grocery stores can still invite local farmers to the store occasionally and give consumers a chance to meet the farmers in view of relationship marketing (Hinrichs, 2000). By doing this, consumers will have an opportunity to create a meaningful relationship with the local farmers even without going to a local farmers' market. As a result, this interaction between consumers and farmers will help develop consumers' positive attitudes about local food.

Subjective Norm

Marketers and farmers should be aware of the importance of significant reference groups, such as family and/or friends, for decision-making of U.S. consumers on local food purchase. Marketers and farmers should increase efforts on building good relationships with the significant referent groups of target consumers as an effective marketing strategy. The word-of-mouth from referent people will help target consumers develop positive attitudes about local food purchase and, eventually, this will indirectly stimulate target consumers' local food purchase. Therefore, marketers and farmers should carefully examine who are the significant referent groups for their target consumers. For example, people might bring their friends and/or family when they visit farmers' markets or grocery stores that carry local food. When those family members or friends of the local food shoppers visit the stores, farmers' market mangers or local food retailers may want

to try to give a positive experience to those additional customers. A local food sampling, a cooking show, or a live music concert could also make their store/market experience more pleasant. As a result, those people would help promote the store through word-of-mouth.

Conclusion

Incorporating self-congruity and moral norm into the TPB enhanced the model's ability to predict consumers' actual local food purchase behavior. Structural equation modeling was conducted and all hypothesized paths were analyzed. Although hypotheses were constructed based on direct correlations between variables, the study also looked into indirect and total effects on actual local food purchase in order to explain the model more comprehensively. Overall, the purchase of local food was found to be a multifaceted and dynamic decision-making process. In addition to the TPB variables, moral norm and self-congruity were found to influence consumers' local food purchase directly and indirectly, indicating that they were meaningful additions to the TPB model.

Limitations and Future Research

This study could not be free from limitations. Firstly, survey participants were U.S travelers through the database of The Center for Hospitality and Tourism Research and the samples were drawn with convenience sampling. This is only a small subset of the data needed to validate the use of the models for the general U.S consumer. Thus, although the sample collected was nationally represented, this may raise a question if this

group can represent general U.S. consumers. Future studies would benefit if they could use broader and more comprehensive databases representing general U.S. consumers.

Secondly, even though the number of survey participants was relatively large and adequate for the analysis, the response rate was extremely low at approximately 0.1%. Since a low response rate is related to nonresponse error, it may be questionable if the non-respondents have the same opinions as the respondents.

Thirdly, the hypothesized model proposed in this research was limited to local food and general U.S. consumers. Therefore, the model cannot be generalized to other products and the population in other countries. Future research would be able to test the model in different countries or with different products to test if the model works. Also, yt would be interesting to apply the model in several different countries or different cultural contexts (i.e., Western culture and Eastern culture) and conduct a comparison study.

Fourthly, the self-report method was used to measure variables in this study. Especially the result from the self-report on actual local food purchase may not be as representative as one from observation or field study. It may be necessary for researchers to use a different way to measure actual local food purchase in future studies.

Fifthly, this study included additional paths and variables, but approximately 60% of actual local food purchase remained unexplained. Thus, future research would benefit from including different external variables or paths in order to increase the explanatory power of the model.

Sixthly, self-congruity was found to influence actual local food purchase directly and indirectly. In this study, self-congruity was measured using global measurement

developed by Sirgy and colleagues (1997). However, there was no discovery about what specific image traits were typical of local food user's image. Therefore, future research can investigate it by using a list of personality traits.

Lastly, the theory of planned behavior itself has some limitations from a behavioral economist point of view. This theory is considered to present a picture of decision-making processes that is too rational and calculated, without considering that people often act based on habit and automatic or unconscious processes. People do make mistakes. People sometimes make irrational decisions. Emotions and instinct are definitely a part of the decision-making process but they are neglected in the TPB. Additional factors are often integrated into the TPB model- e.g. self-congruity in this study. However, it may not be feasible for researchers to consider including too many variables at a time. For a future study, behavioral-economics laboratory type research may be able to be conducted. By doing behavioral-economics laboratory research, the researcher can find out what is the actual causality for a specific behavior. Moreover, the researcher can develop efficient and effective methods if they eventually want to modify some behavior- e.g. eating behaviors. Thus, the study results from behavioral studies might be able to provide more valuable and practical results that can be used in the real world.

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APPENDICES

A. QUESTIONNAIRE

Attitude

For me, purchasing local food is;

1. Harmful/ Beneficial
2. Bad/Good
3. Unpleasant / Pleasant
4. Worthless/ Useful

Subjective Norm

Please rate your level of agreement with the following statements. (1= strongly disagree; 7= strongly agree)

1. Most people who are important to me think that I should purchase local food.
2. It is expected of me that I purchase local food.
3. The people in my life whose opinions I value would approve of my purchasing local food.

Perceived Behavioral Control

Please rate your ability to purchase local food by indicating your level of agreement with the following statements. (1= strongly disagree; 7= strongly agree)

1. I am confident that I could purchase local food if I want to.
2. For me to purchase local food is easy.
3. The decision to purchase local food is not beyond my control.
4. Whether I purchase local food is entirely up to me.

Intention

Please rate your level of agreement with the following statements. (1= strongly disagree; 7= strongly agree)

1. I expect to purchase local food within one year.
2. I want to purchase local food within one year.
3. I intend to purchase local food within one year.

Moral norm

Please rate your level of agreement with the following statements. (1=strongly disagree; 7= strongly agree)

1. I believe I have a moral obligation to purchase local food.
2. Purchasing local food is consistent with my moral principles.
3. My personal values encourage me to purchase local food.
4. I have a moral responsibility to purchase local food.

Actual behavior

Select which best describes your behavior. (1=never; 7=at every opportunity)

1. In the last year, how often did you buy local food?
2. Currently, how often do you buy local food?

Self-congruity

"Take a moment to think about local food. Think about the kind of person who typically purchases local food. Imagine this person in your mind and then describe this person using one or more personal adjectives such as, traditional versus modern, classy versus folksy, high status versus low status or whatever personal adjectives you can use to describe the typical user of local food."

Please rate your level of agreement with the following statements. (e.g., 1 = strongly disagree to 7 = strongly agree)

1. People who use local food are more similar to how I see myself.
2. People who prefer local food are more identifiable with myself at present.
3. The image of a typical local food user is highly consistent with how I see myself.

Please rate your level of agreement with the following statements. (e.g., 1 = strongly disagree to 7 = strongly agree)

1. People who use local food are more similar to how I would like to see myself.
2. People who prefer local food are more identifiable with my ideal self-image.
3. The image of a typical local food user is highly consistent with how I would like to see myself.

Please rate your level of agreement with the following statements. (e.g., 1 = strongly disagree to 7 = strongly agree)

1. People who use local food are more similar to how I am seen by others.

2. People who prefer local food are more identifiable with myself as I am seen by others.
3. The image of a typical local food user is highly consistent with how I am seen by others.

Please rate your level of agreement with the following statements. (e.g., 1 = strongly disagree to 7 = strongly agree)

1. People who use local food are more similar to how I would like to be seen by others.
2. People who prefer local food are more identifiable with my ideal image as seen by others.
3. The image of a typical local food user is highly consistent with how I would like to be seen by others.

B. IRB APPROVAL

Oklahoma State University Institutional Review Board

Date:	Monday, July 22, 2013	Protocol Expires:	4/29/2014
IRB Application No:	HE1336		
Proposal Title:	Local Food Purchase Behavior of U.S. Consumers: Application of an Extended Theory of Planned Behavior and Self-Congruity Theory		
Reviewed and Processed as:	Exempt **Modification**		

Status Recommended by Reviewer(s) **Approved**

Principal Investigator(s):

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The requested modification to this IRB protocol has been approved. Please note that the original expiration date of the protocol has not changed. The IRB office MUST be notified in writing when a project is complete. All approved projects are subject to monitoring by the IRB.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

The reviewer(s) had these comments:

Mod to submit survey for phase 2, add random drawing as compensation and minor wording revisions on email

Signature :

Shelia H. Kennison

Shelia Kennison, Chair, Institutional Review Board

Monday, July 22, 2013
Date

C. PARTICIPANT INFORMATION

PARTICIPANT INFORMATION
OKLAHOMA STATE UNIVERSITY

(Phase 2 Study)
Title: LOCAL FOOD PURCHASE BEHAVIOR OF U.S. CONSUMERS: APPLICATION OF AN EXTENDED THEORY OF PLANNED BEHAVIOR AND SELF-CONGRUITY THEORY

Investigator(s): Yeon Ho Shin, M.S., & Murat Hancer, Ph.D., Oklahoma State University.

Purpose: The primary purpose of this study is to find the antecedents to the intention to purchase local food by using the extended theory of planned behavior with additional considerations of moral aspects and self-congruity theory. You must be 18 years or older to participate.

What to Expect: You will complete questionnaires regarding your perceptions on local food. This research study is designed to last approximately 10 minutes.

Risks: There are no risks associated with this research project which are expected to be greater than those ordinarily encountered in daily life

Benefits: It would be very important to understand consumers' perceptions regarding local food in order to support and develop a sustainable food chain system. Moreover, the results can also provide insights and implications to local food companies, farmers, marketers, and administrators in the state.

Compensation: Upon completion of the survey you have the option of entering in a drawing for 9 Visa gift cards ($10, $20, and $50)! The survey will ask you for your e-mail address if you choose to enter.

Your Rights: Your participation in this research is voluntary. There is no penalty for refusal to participate, and you are free to withdraw your consent and participation in this project at any time, without penalty.

Confidentiality: All of your information will be anonymous as no names or identification numbers will be recorded on the survey. This means that no information can be directly traced to your identity. Once you reply the survey, the survey will be coded as number. Moreover, questions related to personal identification as well as privacy related questions will not be asked to minimize potential risks. The collected data will be analyzed using the Qualtrics software which is an online survey design, distribution, analysis and reporting software. Research records will be stored securely and only researchers and individuals responsible for research oversight will have access to the records. Once all data has been collected, the on-line survey link will be closed and the collected data will be stored securely at a computer which is located in The Oklahoma State University Center for Hospitality and Tourism Research (CHTR) (Room: 210, Building: Human Environmental Sciences-West (HESW), Campus: Stillwater campus, Postal Code: OK 74087) for a year. After a year, stored data will be erased from the computer which is located in The Oklahoma State University Center for Hospitality and Tourism Research (CHTR), and any printed materials relate to this survey will be shredded.

Contacts: You may contact any of the researchers at the following addresses and phone numbers, should you desire to discuss your participation in the study and/or request information about the results of the study: Yeon Ho Shin, M.S., Human Sciences West 210, Dept. of Hotel& Restaurant Administration, Oklahoma State University, Stillwater, OK 74078, (405) 744-5053 or Murat Hancer, Ph.D., Human Sciences West 210, Dept. of Hotel& Restaurant Administration, Oklahoma State University, Stillwater, OK 74078, (405) 744-8645. If you have questions about your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, 219 Cordell North, Stillwater, OK 74078, 405-744-3377 or irb@okstate.edu

If you choose to participate: If you wish to participate in our survey, please click the "yes" box below. By choosing "yes" you are indicating that you freely and voluntarily and agree to participate in this study and you also acknowledge that you are at least 18 years of age. If you do not wish to take the survey, please click "no" and you will be exited from the program. You may wish to print a copy of this page for your records.

- o Yes, I consent to participate in this survey
- o No, I am not willing to participate in this survey

D. COVER LETTER EMAIL

Greetings,

I am Yeon Ho Shin, a doctoral candidate in Hotel and Restaurant Administration at Oklahoma State University, Stillwater, OK. I am writing to invite you to take part in my survey about the purchasing of local food. If you are 18 years or older, you can participate in this survey.

The primary purpose of this study is to understand consumer behaviors for local food consumption. For example, local food means food grown within the state you live.

This study is important for understanding consumers' behaviors regarding local food in order to support and develop a sustainable food chain. Moreover, the results can also provide insights and implications for local food companies, farmers, marketers, and administrators in your state.

The link below will lead you to a brief survey that will take approximately 10 minutes to complete. Moreover, **upon completion of the survey you have the option of entering in a drawing for 9 Visa gift cards ($10, $20, and $50)!** The survey will ask you for your e-mail address if you choose to enter.

Thank you in advance for your contribution! Your participation will help improve local food management.

Please click here to get started:

${l://SurveyLink?d=Take the Survey}
Or copy and paste the URL below into your internet browser:

https://okstateches.qualtrics.com/SE/?SID=SV_3OBLxfG1zyHIcDz

Sincerely,

Yeon Ho Shin, PhD Candidate
Oklahoma State University, School of Hotel & Restaurant Administration
210 HSCIW, Stillwater, OK 74078

Your participation is 100% voluntary and you can discontinue the survey at any time without reprisal or penalty.
If you have any problems or concerns with the survey link, or if you would like to receive an information consent form regarding this study, please contact chtr03@okstate.edu
All responses will remain anonymous and be used solely for the academic research study purpose. Your email address was obtained from a public available database purchased by the Center for Hospitality and Tourism Research at Oklahoma State University. If you wish to be removed from the list, please reply to chtr03@okstate.edu with "REMOVE" in subject and you will not receive email from us anymore.

E. COVER LETTER EMAIL (REMINDER)

Hello,

Last week you should have received an email inviting you to participate in an online survey about the purchasing local food. For those of you who have already responded to the survey, I would like to thank you for your participation.

If you have not had a chance to respond, I hope you will consider doing so.

This study is important for understanding consumers' perceptions regarding local food in order to support and develop a sustainable food chain. Moreover, the results can also provide insights and implications for local food companies, farmers, marketers, and administrators in your state.

The link below will lead you to a brief survey that will take less than10 minutes to complete. Moreover, **upon completion of the survey you have the option of entering in a drawing for 9 Visa gift cards ($10, $20, and $50)!** The survey will ask you for your e-mail address if you choose to enter.

Your participation will help improve local food management.

Please click here to get started:

${l://SurveyLink?d=Take the Survey}
Or copy and paste the URL below into your internet browser:

https://okstateches.qualtrics.com/SE/?SID=SV_3OBLxfG1zyHIcDz

Sincerely,

Yeon Ho Shin, PhD Candidate
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Your participation is 100% voluntary and you can discontinue the survey at any time without reprisal or penalty.
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All responses will remain anonymous and be used solely for the academic research study purpose. Your email address was obtained from a public available database purchased by the Center for Hospitality and Tourism Research at Oklahoma State University. If you wish to be removed from the list, please reply to chtr03@okstate.edu with "REMOVE" in subject and you will not receive email from us anymore.

F. ONLINE SURVEY

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Human Sciences

Definition of local food in this study is food grown within your state.

For me, purchasing local food is;

Harmful	○ ○ ○ ○ ○ ○ ○	Beneficial
Bad	○ ○ ○ ○ ○ ○ ○	Good
Unpleasant	○ ○ ○ ○ ○ ○ ○	Pleasant
Worthless	○ ○ ○ ○ ○ ○ ○	Useful

Please rate your level of agreement with the following statements. (1= strongly disagree; 7= strongly agree)

	Strongly disagree						Strongly agree
	1	2	3	4	5	6	7
1. Most people who are important to me think that I should purchase local food.	○	○	○	○	○	○	○
2. It is expected of me that I purchase local food.	○	○	○	○	○	○	○
3. The people in my life whose opinions I value would approve of my purchasing local food.	○	○	○	○	○	○	○

Survey Completion
0% 100%

Next>>

COLLEGE OF
Human Sciences

Please rate your ability to purchase local food by indicating your level of agreement with the following statements. (1= strongly disagree; 7= strongly agree)

	Strongly disagree						Strongly agree
	1	2	3	4	5	6	7
1. I am confident that I could purchase local food if I want to.	○	○	○	○	○	○	○
2. For me to purchase local food is easy.	○	○	○	○	○	○	○
3. The decision to purchase local food is not beyond my control.	○	○	○	○	○	○	○
4. Whether I purchase local food is entirely up to me.	○	○	○	○	○	○	○

Please rate your level of agreement with the following statements. (1=strongly disagree; 7= strongly agree)

	Strongly disagree						Strongly agree
	1	2	3	4	5	6	7
1. I believe I have a moral obligation to purchase local food.	○	○	○	○	○	○	○
2. Purchasing local food is consistent with my moral principles.	○	○	○	○	○	○	○
3. My personal values encourage me to purchase local food.	○	○	○	○	○	○	○
4. I have a moral responsibility to purchase local food.	○	○	○	○	○	○	○

Please rate your level of agreement with the following statements. (1= strongly disagree; 7= strongly agree)

	Strongly disagree						Strongly agree
	1	2	3	4	5	6	7
1. I expect to purchase local food within one year.	○	○	○	○	○	○	○
2. I want to purchase local food within one year.	○	○	○	○	○	○	○
3. I intend to purchase local food within one year.	○	○	○	○	○	○	○

Survey Completion
0% 100%

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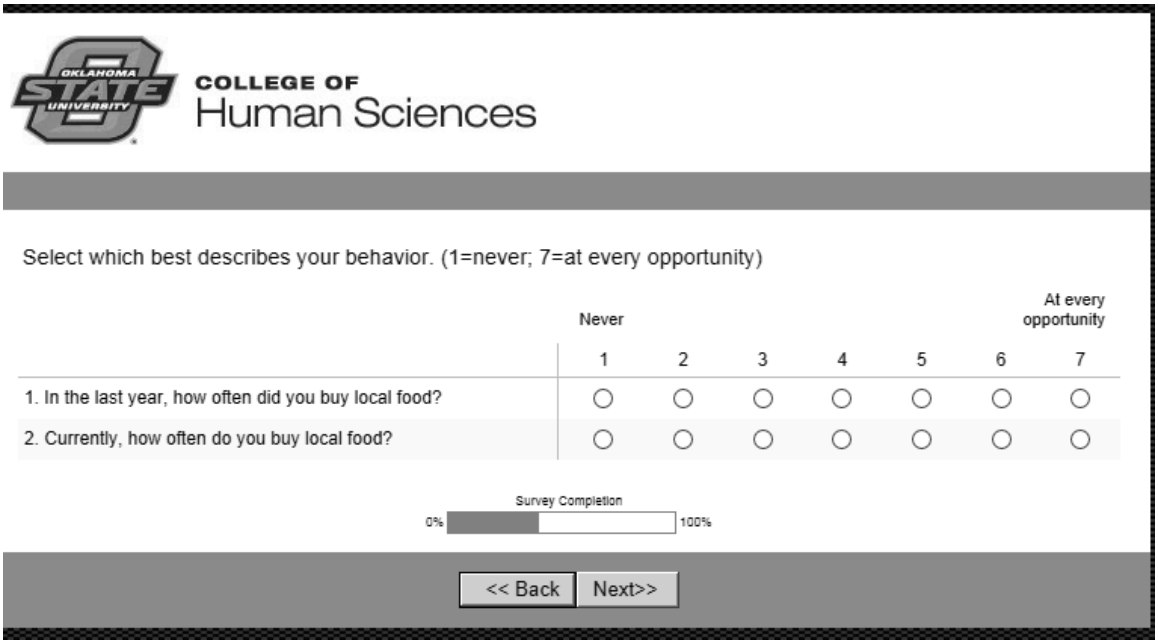
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Select which best describes your behavior. (1=never; 7=at every opportunity)
Never
At every opportunity
1 2 3 4 5 6 7
1. In the last year, how often did you buy local food?
2. Currently, how often do you buy local food?
Survey Completion
0%
100%
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Take a moment to think about local food.
Think about the kind of person who typically purchases local food.
Imagine this person in your mind and then describe this person using one or more personal adjectives such as, traditional versus modern, classy versus folksy, high status versus low status or whatever personal adjectives you can use to describe the typical user of local food.

Please rate your level of agreement with the following statements. (e.g., 1 = strongly disagree to 7 = strongly agree)

	Strongly disagree						Strongly agree
	1	2	3	4	5	6	7
1. People who use local food are more similar to how I see myself.	○	○	○	○	○	○	○
2. People who prefer local food are more identifiable with myself at present.	○	○	○	○	○	○	○
3. The image of a typical local food user is highly consistent with how I see myself.	○	○	○	○	○	○	○

Please rate your level of agreement with the following statements. (e.g., 1 = strongly disagree to 7 = strongly agree)

	Strongly disagree						Strongly agree
	1	2	3	4	5	6	7
1. People who use local food are more similar to how I would like to see myself.	○	○	○	○	○	○	○
2. People who prefer local food are more identifiable with my ideal self-image.	○	○	○	○	○	○	○
3. The image of a typical local food user is highly consistent with how I would like to see myself.	○	○	○	○	○	○	○

Please rate your level of agreement with the following statements. (e.g., 1 = strongly disagree to 7 = strongly agree)

	Strongly disagree						Strongly agree
	1	2	3	4	5	6	7
1. People who use local food are more similar to how I am seen by others.	○	○	○	○	○	○	○
2. People who prefer local food are more identifiable with myself as I am seen by others.	○	○	○	○	○	○	○
3. The image of a typical local food user is highly consistent with how I am seen by others.	○	○	○	○	○	○	○

Please rate your level of agreement with the following statements. (e.g., 1 = strongly disagree to 7 = strongly agree)

	Strongly disagree						Strongly agree
	1	2	3	4	5	6	7
1. People who use local food are more similar to how I would like to be seen by others.	○	○	○	○	○	○	○
2. People who prefer local food are more identifiable with my ideal image as seen by others.	○	○	○	○	○	○	○
3. The image of a typical local food user is highly consistent with how I would like to be seen by others.	○	○	○	○	○	○	○

Survey Completion
0% 100%

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Have you ever bought local food?

- ◯ Yes
- ◯ No

How often do you normally consume local food?

- ◯ Never
- ◯ Once a month or less
- ◯ 2-3 times a month
- ◯ 1 time per week
- ◯ 2 times per week
- ◯ 3 times per week
- ◯ 4 times per week
- ◯ 5 times or more per week

What is your gender?

- ◯ Male
- ◯ Female

What is your current age?

- ◯ 18 to 24
- ◯ 25 to 34
- ◯ 35 to 44
- ◯ 45 to 54
- ◯ 55 to 64
- ◯ 65 or over

Marital status:

- ◯ Single
- ◯ Married
- ◯ Engaged
- ◯ Other

What is your annual income range?

- ◯ Below $20,000
- ◯ $20,000 - $29,999
- ◯ $30,000 - $39,999
- ◯ $40,000 - $49,999
- ◯ $50,000 - $59,999
- ◯ $60,000 - $69,999
- ◯ $70,000 - $79,999
- ◯ $80,000 - $89,999
- ◯ $90,000 or more

In which state do you currently reside?

What is your race?

- ◯ White/Caucasian
- ◯ African American
- ◯ Hispanic
- ◯ Asian
- ◯ Native American
- ◯ Pacific Islander
- ◯ Other

What is the highest level of education you have completed?

- ◯ Less than High School
- ◯ High School / GED
- ◯ Some College
- ◯ 2-year College Degree
- ◯ 4-year College Degree
- ◯ Masters Degree
- ◯ Doctoral Degree
- ◯ Professional Degree (JD, MD)

Survey Completion

0% 100%

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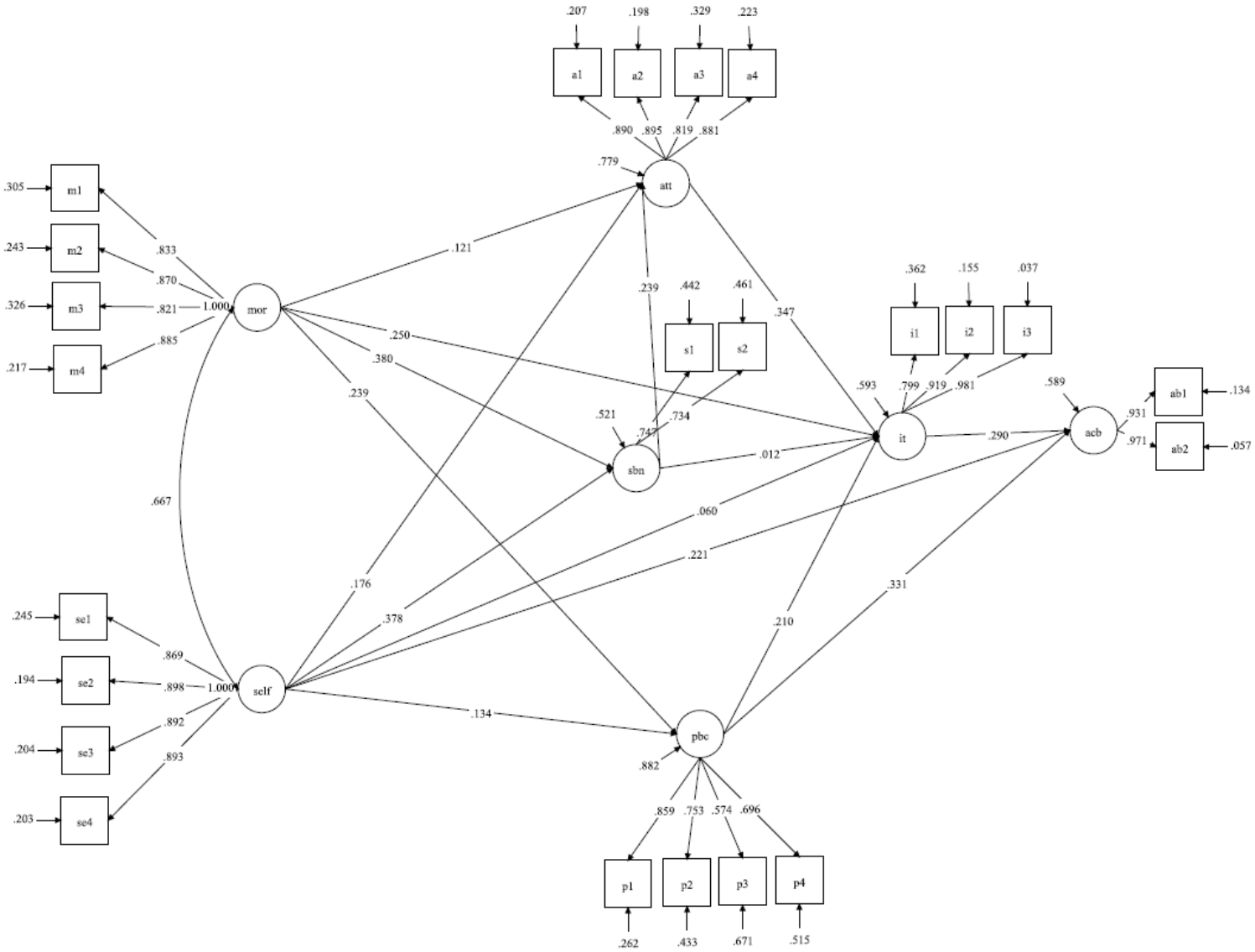
G. M*Plus* DIAGRAM FOR SEM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VITA

Yeon Ho Shin

Candidate for the Degree of

Doctor of Philosophy

Thesis: LOCAL FOOD PURCHASE BEHAVIOR OF U.S. CONSUMERS: APPLICATION OF AN EXTENDED THEORY OF PLANNED BEHAVIOR AND SELF-CONGRUITY THEORY

Major Field: Human Sciences with a Specialization in Hospitality Administration

Biographical:

Education:
Completed the requirements for the Doctor of Philosophy in Human Sciences with a Specialization in Hospitality Administration at Oklahoma State University, Stillwater, Oklahoma in May, 2014.

Completed the requirements for the Master of Science in Hospitality Administration at Oklahoma State University, Stillwater, Oklahoma in May, 2009.

Completed the requirements for the Bachelor of Science in Hotel and Restaurant Administration at Oklahoma State University, Stillwater, Oklahoma in December, 2005.

Experience:

2009 – 2014 Graduate Research Associate for University Dining Services Administration
- *Farm Fresh Program Coordinator*
- *Made in Oklahoma Program Coordinator*
- *OSU Stillwater Farmers' Market Manager*
- *Sustainability Coordinator*
- *Produce Bids Coordinator*

University Dining Services
Oklahoma State University, Stillwater, OK.

2007 – 2009 Graduate Assistant for Student Union Dining Services
- *Café Libro at Edmon Low Library Manager*
- *Java Dave's Coffee at Student Union Manager*
- *Trainer for Student Union Dining Food Court*

University Dining Services
Oklahoma State University, Stillwater, OK.