



BACHELOR
THESIS Spring
2011

Kristianstad University
Bachelor of Science in Business Administration and Economics / China

A Melting Pot of Bagels and Tofu

A study of Acculturation and Food Consumption

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Abstract

Today's globalization enables people to move across borders for various reasons. When people move there are consequences they need to face; local customs that need to be taken into consideration. As individuals undergo the process of adapting to a new culture, acculturation occurs. The purpose of this study is to investigate the relationship between the degree of acculturation and preference for American food.

The study is applied on East Asian students residing in Texas, USA. Length of residence in the U.S. and sex are two demographic factors that are used to measure the influence on the degree of acculturation. The results show that these two factors are not statistically significant to explain the degree of acculturation. However, it was observed that there is a tendency that a longer length of residence indicates a higher degree of acculturation. The results also show that marginalization and integration are the two most frequent degrees of acculturation. Finally, even though there is a slight relationship between the degree of acculturation and preference for American food, it was not statistically significant.

This thesis fills the gap of limited research of acculturation among East Asians and contributes to the theoretical explanation of how the degree of acculturation affects food consumption. It also helps businesses and market practitioners to better understand the East Asians as a target group.

Keywords: Acculturation, consumer behavior, culture, East Asians, food, consumption, globalization

Acknowledgement

This thesis completes our studies at Kristianstad University. It has been three rewarding years of studies where valuable knowledge and great experiences have been acquired.

We would like to show our gratitude to those who made this thesis possible. First of all we would like to thank our supervisor, Timurs Umans who has been with us from the beginning to the final stage of this project and encouraged and given us valuable advice. A big thank you goes to Dr. Lou E. Pelton for his genuine kindness and help with the distribution of our surveys in the United States. Thank you, Annika Fjelkner for helping us with the language editing and Pierre Carbonnier for your explicit statistical skills. Finally, we would like to show our appreciation for the support of our family and friends.

Kristianstad, June 2011

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1 Introduction

This chapter consists of the background and the problem of the research as well as the purpose and the research question. Theoretical limitations are presented and the chapter concludes with an outline of the remaining chapters of the thesis.

1.1 Background

Much attention has been given to the economic globalization defined by Hill (2009) as:

A world in which barriers to cross-border trade and investment are declining [...]; culture is starting to look similar the world over; and national economies are merging into an interdependent, integrated global economic system (p. 4).

The emergence of globalization is a continuous practical issue and still a very ambiguous matter. It is easy to spot the positive effects of globalization; the prosperity following the world economic growth and the integration of people (Rothenberg, 2002-2003). However, the downside is that some see globalization as the United States' way of dominating the world and eventually Americanizing world culture (*ibid*).

Since the mid-1800s, Asians have immigrated to the United States. Between 1990 and 2000 the Asian-American population grew by 63 percent and made up 4.2 percent of the U.S. population (Le, 2011; Barnes & Bennett, 2002). Still, immigration is an ongoing process where the Asian American population along with Hispanics are the two dominant groups immigrating to the United States (Berry & Sam, 2006) The U.S. Bureau of Census shows that by 2050, the United States will transform considerably in terms of its ethnic and racial structure. It is estimated that Hispanics, Native Americans, African Americans and Asians will constitute of 47 percent of the total U.S. population (Chattaraman & Lennon, 2006; Berry & Sam, 2006; Kang & Kim, 1998)

As people constantly move to other countries (Kim, 2001), cultures become integrated and knowledge and technology emerge. As a result, consumer needs become more sophisticated through demand of high quality products (Hill, 2009) and eventually

lead to a homogenous standardized market (de Mooij & de Mooij, 2011). The same reasoning is supported by Sharma (2007) who explains that people's assimilation across nations and integration of people's lifestyles imply that markets are becoming more homogenous. However, other research argues that global movement does not explain people's preferences or tastes. Ethnic culture is still a factor that determines people's identity and, thus, also their consumption behavior (de Mooij & de Mooij, 2011; Liu, 2000). The process of changes that arise when different cultural groups encounter each other is referred to as acculturation (Berry & Sam, 2006; Malcarne, Chavira, Fernandez, & Liu, 2006; Berry, Poortinga, Segall, & Dasen, 2002). As cultures become integrated, people's personalities are affected (Triandis & Suh, 2002). Hence, it is fundamental to understand the importance of culture of individuals and how it affects their consumption. The most relevant way to study the degree of acculturation would be through food as it is a culture-bound product (de Bortoli & Maroto, 2003). With a rapid rate of growing minority groups, companies are able to target new potential markets (Liu, 2000). This growth highlights the importance to focus on potentially new emerging segments (Kang & Kim, 1998).

1.2 Problem

Acculturation has been around for years but has recently developed into a significant focus within the research field. Numerous research investigating acculturation and consumption have been done in areas such as apparel (Chattaraman & Lennon, 2006; Rajagopalan & Heitmeyer, 2005; Kang & Kim, 1998), automobiles (Quester, Karunaratna, & Chong, 2000) and food (Nenci, Carrus, Caddeo, & Meloni, 2008). The results indicate that acculturation influence customers and the cultural product they prefer (Rajagopalan & Heitmeyer, 2005). Some articles state that there is a relationship between the degree of acculturation and age regarding food consumption (Bojanic & Xu, 2006). However, other articles state that the degree of acculturation is not related to age and gender concerning consumption behavior (Verbeke & López, 2005; Wang, 2004). It is assumed that culture dominates ethnic groups' consumption pattern (Bojanic & Xu, 2006), but Wang (2004) argues that ethnic identity is the dominant reason for people's consumption. Previous studies have mainly been conducted on Asian Indians and Hispanics, whereas studies on East Asians are limited

(Rajagopalan & Heitmeyer, 2005; Verbeke & López, 2005). East Asians are considered important to investigate because of their strong cultural ties and their association to collectivism (McKay, 2011; D'Rozario & Choudhury, 2000). With strong family values and traditions (Luo, 2009; Brown, 2011), East Asians tend to use family as their main reference group when purchasing goods. In contrast, western culture is more individualistic and less likely to be influenced by family (Sekhon, 2007; Hofstede, 2009). Due to conflicting results of previous studies and limited research on East Asians, this thesis intend to fill the gap of ethnic consumption of East Asians in the United States. Consumption pattern will be studied through food as it is a culture-bound product (de Bortoli & Maroto, 2003), especially in the East Asian society. Food identifies Asian culture and the understanding of family and social relations (Cheung & Chee-Beng, 2007). Cultural environment may determine “what, how and why people choose to eat or drink” (Bojanic & Xu, 2006, p. 212). Thus, in this thesis food serves as an empirical object to study consumption pattern and the degree to which East Asian Americans acculturate to the American culture.

1.3 Research Question

The purpose of this thesis is to study the degree of acculturation and its impact on consumption. Hence, this purpose leads to the research question addressed in this thesis:

How does the degree of acculturation affect food consumption among East Asian Americans?

1.4 Purpose

The purpose of this thesis is to explain how the degree of acculturation affects food consumption among East Asian Americans. This paper examines how demographic factors influence the degree of acculturation and in turn the consumption of food.

1.5 Theoretical Limitations

Theories and models within the field of acculturation are applied in this thesis. Limited research has been conducted on East Asians in the U.S. Therefore, the focus of this

thesis lies on this ethnic group. The study is also limited to investigate the relationship between the degree of acculturation and preference for American food. However, the research does not consider specific type of American food individuals consume. Food only serves as an empirical object in the study.

The measurement of degree of acculturation is mainly based on one of several models. This thesis is limited to Berry's acculturation strategies which look at acculturation on both the individual and the society level. This research aims to investigate acculturation on an individual level. Regarding the factors determining and influencing the degree of acculturation, this thesis includes factors such as ethnic identification, language, social interaction, media preferences and holiday celebrations as they are found to be most influential. Previous research have also included some of these factors.

1.6 Outline

This thesis consists of six chapters. The first chapter presents the background, problem of the research, the purpose, the research question and the theoretical limitations. The second chapter consists of the choice of methodology, the research philosophy, the research approach and the choice of theory. Following is the third chapter which provides the literature review and the hypotheses. In the fourth chapter the research strategy, time horizon, data collection, operationalization, data analysis, reliability, validity and generalizability are discussed. The fifth chapter consists of analyzing the empirical findings. The final chapter provides the thesis conclusion, practical business implications and suggestions to future research.

2 Methodology

This section provides an outline of the methods chosen for this thesis. Research philosophy, research approach, choice of theory and choice of methodology are presented.

2.1 Introduction

In order to answer questions established in a research, it is important to have a clear understanding of the steps that one needs to take before the questions can be answered. The different stages of research methodology are introduced in the ‘research onion’ by Saunders, Lewis, & Thornhill (2009). The model consists of six layers that will help both the researcher and the reader gain a better understanding of how the research will be approached and designed. The first layer is made up of *research philosophy*, followed by *research approach* and the *choice of strategy* that is applied. In the subsequent layers, *research choices*, *time horizons* and *techniques and procedures of data collection and analysis* are found. The research methodology in this thesis is based on the research onion.

2.2 Research Philosophy

When conducting research it is important to first build a strong foundation as it plays a vital role in understanding the research itself. A good base of a research begins with the research philosophy which concerns the way researchers view the world through assumptions. As the research goes on, new knowledge will be developed and the assumptions made in the research philosophy will support the choice of research strategy and research methods. *Positivism*, *realism*, *interpretivism* and *pragmatism* are the four most commonly used philosophies in the research field.

By adopting a *positivistic philosophy*, the final result of the research can end in “law-like generalisations” (Saunders *et al.*, 2009, p. 113). With the help of existing theory, researchers develop hypotheses and test them by collecting quantifiable data through a highly structured methodology (Saunders *et al.*, 2009). Similar to positivism, the

development of knowledge within *realism* also takes on a scientific approach. The essence of the philosophy lies in the senses in which our experiences tell us what reality really is. Independent of the human mind, views and opinions of individuals, objects exist regardless of our knowledge. Depending on the subject of the research, either a quantitative or qualitative method should be applied (*ibid*). According to Saunders *et al.* (2009), the positivistic philosophy is criticized by *interpretivism* due to the complex world of businesses and managements. Interpretivistic researchers emphasize the importance to understand how humans as social actors differ from each other. Thus, instead of generalizations, there is a need for a deeper understanding of humans' role in the social context (*ibid*). In contrast to positivism, the interpretivistic way of collecting data is through in-depth and qualitative means. In these types of investigations, the researchers are often involved or a part of the research (*ibid*). The last research philosophy, *pragmatism* is related to the view that it is unrealistic in practice to only adopt one philosophy. In this aspect, it is significant to refer back to the research question which may suggest which kind of philosophy is more appropriate to adopt. In the case where it is unclear which philosophy to adopt, pragmatists argue that it is possible to mix philosophies and methods. Hence, using the pragmatic philosophy, researchers collect data through a combination of quantitative and qualitative methods (*ibid*).

Based on previous research that have empirically proven that acculturation exists (Chattaraman & Lennon, 2006; Rajagopalan & Heitmeyer, 2005), this thesis applies a positivistic philosophy. Culture is a set of values, beliefs and customs which are difficult to identify. Thus, by measuring ethnicity through demographic factors, this paper provides an understanding of people's culture. The results are generalized through a quantitative research method. One or several hypotheses constructed from existing theories are tested.

2.3 Research Approach

There are two different research approaches presented by Saunders *et al.* (2009); *the deductive* and *the inductive approach*. Both methods can be labeled as either being more positivistic (deduction) or interpretivistic (induction). The deductive approach emphasizes the idea of starting from a general to a specific view. It also emphasizes

the possible relationships between variables. As can be seen in figure 2.1, hypotheses are developed from existing theories and a research strategy is developed to test these hypotheses with the help of quantitative data. After analyzing collected data, hypotheses can be either supported or rejected (*ibid*). On the contrary, the inductive approach moves from a specific to a general view. In other words, theories are formulated through observable events by collecting and analyzing qualitative data (*ibid*; Trochim, 2006)

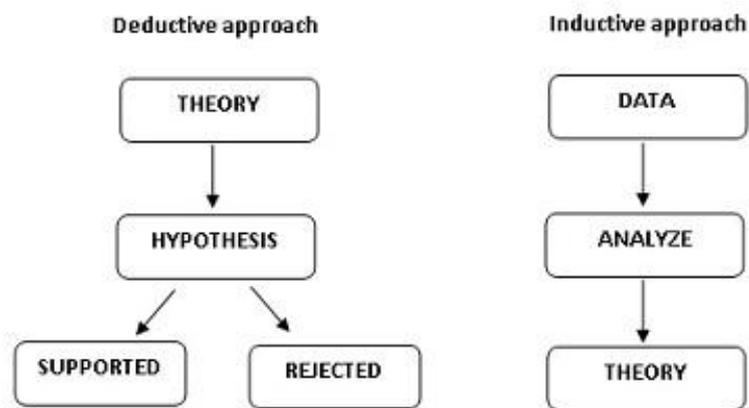


Figure 2.1 *Illustration of the Characteristics of the Deductive and Inductive Approach* (Based on: Saunders, Lewis, & Thornhill, 2009).

Seeing that literature within the acculturation and consumption field already exists to a large extent, this research develops one or several hypotheses based on this literature. A quantitative study is conducted and the data is used to test the hypotheses. Hence, a deductive approach is applied.

2.4 Choice of Theory

To give the reader a stronger foundation of the topic, established theories and models are used. Initially, the thesis explains the concept of acculturation and the role culture plays on people’s ethnicities and consumption behavior. The aim is to look at factors influencing both acculturation and consumption which leads to a discussion concerning the causality between the degree of acculturation and consumption behavior. This paper discusses ethnic differences and people’s relation to consumption

pattern. With the findings drawn from existing theories and models, a modified model and hypotheses are formed to evaluate the degree of acculturation and consumption among East Asians residing in the United States.

2.5 Choice of Methodology

The aim of this thesis is to explain the relationship between the degree of acculturation and consumption behavior quantitatively. With a positivistic research philosophy and a deductive research approach this thesis creates hypotheses derived from existing theories. This thesis is based on a quantitative research in order to meet the purpose of generalizing the results. This would not be possible if a qualitative method was chosen because of the inability to reach out to a larger group of participants. Also, this paper aims to explain relationships between the degree of acculturation and consumption which can be achieved through quantitative means.

3 Literature Review

This chapter provides a description of the main concepts of the topic addressed in this thesis. Several factors influencing acculturation are discussed. Derived from these discussions, hypotheses are constructed at the end of the chapter.

3.1 Culture

There are several definitions of culture. According to Schiffman and Kanuk (2009) culture is defined as "the sum total of learned beliefs, values, and customs that serve to regulate the consumer behavior of members of a particular society" (p. 394). Similarly, Tylor defines culture using the same components such as values, beliefs and customs (Berry *et al.*, 2002). Culture is categorized into six definitions: descriptive, historical, normative, psychological, structural and genetic definitions (*ibid*). This thesis means to study cultural influence on consumer behavior. The psychological definition features the learning and the habits of a culture. By collecting psychological data from individuals, it is possible to characterize these samples to a whole culture or nation (*ibid*). Hence, it is appropriate to apply the psychological definition to this thesis. A society's personality can also be characterized and identified by its culture through factors such as language, laws, religions, food customs, arts and products (*ibid*; Berry *et al.*, 2002). This definition can provide a better understanding of consumer behavior since values and beliefs are two components that influence the behavior of a person in a certain situation (Schiffman & Kanuk, 2009). Furthermore, every person is unique with different characteristics and is incorporated into one culture differently from others. As this is said, individuals perceive culture differently and can influence each other. Ferraro interpreted culture as a concept including possessions, ideas, values and expected pattern of behavior (Ferraro, 2006). For the purpose of studying the degree of acculturation and consumption, Ferraro's definition is found to be the most suitable for this thesis because of its combination of two main components culture and consumption.

3.1.1 Culture and Consumer Behavior

Culture serves as a daily guideline that influences choices of what, when, where and why people dress or eat the way they do. As mentioned above, values, beliefs and

customs give insights into what is suitable to do and what is not. These components work as routines as long as they satisfy people's need and will eventually be standardized into their lives (Schiffman & Kanuk, 2009). Gronhaug, Gilly and Penazola (1993) define consumer behavior as a need to fulfill specific consumption goals. Through "observation, imitation and interactions with socializing agents" (*ibid*, p. 280), people are able to experience cultures and learn the ways of becoming consumers of new cultures. People are exposed to formal and informal stimuli such as family, friends and mass media which influence consumers' perceptions of products. Lee and Um state that consumers' product choices depend on the price or the emotional benefits they experience through the stimuli (Rajagopalan & Heitmeyer, 2005; Schiffman & Kanuk, 2009). It has also been argued that consumers base their product choices on the needs and values people hold. As people encounter new cultures, new values will appear and product choices may change (Rajagopalan & Heitmeyer, 2005). This phenomenon is mainly known as acculturation and is discussed in section 3.4.

3.2 Ethnic Identification

In discussions about culture, *ethnic identification* and *ethnicity* are important concepts to understand people's backgrounds. In its simplest sense, ethnic identification can be described as people's connection to a specific origin (Berry & Sam, 2006). Chattaraman and Verbeke (2006) include history and knowledge of nationality, religion and language as determinants of ethnic identity. Although people cannot choose which ethnic identity they belong to, as a result of acculturation, ethnic identity is changeable. However, Liebkind argues that ancestors' values and beliefs are still important in the identification of ethnicity (Berry & Sam, 2006). The main difference between acculturation and ethnic identification is that the former concerns how people acquire host cultures, whereas the latter emphasizes the maintenance of original cultures (Chattaraman & Lennon, 2006).

3.3 Ethnic Consumption Pattern

Along with ethnic identification, come differences in people's consumption. As globalization continues to increase, it contributes to integration of people and cultures.

It is important to keep in mind that culture and traditions form people's ethnicities. Seeing that people come into contact with new cultures, their own values and lifestyle changes, particularly in how they consume (Triandis & Suh, 2002; Nitto & Shiozaki, 2001). According to Fan (1998), discrimination can also explain people's ethnic identification and consumption. Places that are less receptive to new ethnic groups can influence people so that they feel confused on which ethnicity they belong to. Consequently, consumption patterns are affected. Ethnic identification has been widely used in research of consumer behavior to explore how people with different ethnic backgrounds consume. It is shown that ethnic background plays an important role in people's consumption patterns. Decision-making issues such as why, what and where to buy, as well as whom influences the actual consumption are affected by ethnicity (Rexha & Kingshott, 2001; Mueller, 2008). Consumption differences among different ethnic groups are discussed in the next section.

3.3.1 The Why, What and Where of Ethnic Consumption

All consumption begins with needs that people desire to fulfill. These needs become tensions which drive people to take action to accomplish set goals. Depending on who the people are, the choice of action varies (Schiffman & Kanuk, 2009). This is also supported by Mueller (2008) who explains people's consumption through Maslow's hierarchy of needs. Because of cultural differences, people can be found at different levels of need. However, these levels are not permanent as no need can be fully satisfied at a given time (Schiffman & Kanuk, 2009). In conclusion, as long as there are needs, consumption will occur.

What people choose to consume can be traced back to both culture and non-cultural factors. On the basis of household income, past research has pointed out that ethnic groups differ in their expenditure patterns (Fan, 1998). In her research, Fan (1998) identified five expenditure patterns; *shelter-dominated*, *food-and-utilities-dominated*, *healthcare-dominated*, *transportation-dominated* and *service-dominated*. Each category is characterized by different budget levels for different products. People who consume in line with the shelter-dominated pattern tend to spend more on education, apparel and shelter, while food-and-utilities-dominated consumers place higher value on food products. The healthcare-dominated pattern involves purchasing of personal products, whereas, transportation- and service- dominated pattern emphasizes transportation and service respectively. Results showed that Asian American and

Hispanic households have a higher probability to belong in the shelter-dominated pattern and avoid service of others. This finding can be explained by the affection both groups have towards their families. Asians in particular, place a high value on extended families that can also be considered as reference groups (Fan, 1998; Schiffman & Kanuk, 2009). This opinion was also shared by Sekhon (2007) who studied the influence of family members among Asian Indians. It was found that people's purchasing decisions were influenced by family to meet its expectations. Saving one's face is a belief and cultural value Chinese people strongly hold on to (Wang & Mallinckrodt, 2006). This belief can be explained by Jung and Kau (2004) who posit that according to Hofstede's cultural dimension model, Chinese people have high uncertainty avoidance and therefore, are the most brand conscious consumers (Mueller, 2008) compared to other ethnic cultures. Schiffman and Kanuk (2009) also claim that Asian Americans are quality oriented and choose to purchase well-known brands.

Subcultures have both similarities and differences. One factor that distinguishes ethnic groups is the degree of collectivism. Asians are highly regarded as being collectivistic. For example, Japanese people commit themselves to the workplace as if it was their own family (Mueller, 2008). Furthermore, Asians in general are highly family oriented which can be seen in their consumption behavior. Because immediate and extended family function as reference groups it is important for people to respect them as the groups' opinion matter in a buying decision (Sekhon, 2007). However, differences within subcultures are also discussed due to the diverse background of each ethnicity within a group. For example, Vietnamese people are the most traditional group within the Asian subculture. Comparing Vietnamese Americans to Korean families in the U.S., it has been found that Koreans are more acceptable to the American way of purchasing items on credit. The reason for this behavior is because owing money is regarded as something negative in Vietnamese culture (Schiffman & Kanuk, 2009). Moreover, in Vietnamese American families, husbands tend to make most decisions while for Chinese Americans, both husbands and wives take part in buying decisions (Mueller, 2008; Schiffman & Kanuk, 2009). Similarly, in Caucasian families, the main decision makers consist of not only adults but also children and teens. For Hispanic and African American households, women have greater influence on decisionmaking of expensive products (Mueller, 2008). Hispanics also rather cook

and prepare food at home due to their large family size which can be related to strong family ties Hispanics hold. Cultural connections to family can also be seen when Hispanics buy products similar to their parents or when shopping becomes a family activity (Mueller, 2008). Similar to Asians, Hispanics are also characterized by being brand and fashion conscious due to the adaptation to the U.S. culture.

Where consumers choose to buy their products is influenced by ethnicity and the level of acculturation. Studies found that Asians have a higher price sensitivity towards food and entertainment products (Levin, 2002; Wong & Dean, 2009). This finding can explain why Asian consumers prefer shopping low priced products mainly in warehouses. Also, Hispanics' main priority for choosing where to buy is low prices. Another similarity between Hispanics' and Asians' choice of shopping location are connections the store has to their ethnicity, respectively. Wang (2004) identified that Chinese consumers with strong ethnic identity prefer to shop at Chinese supermarkets. The same can be said about Hispanics' preferences for Hispanic retailers (Mueller, 2008).

3.4 Acculturation

As previously mentioned, a central part of culture concerns the learning of a new culture which is known as acculturation (Schiffman & Kanuk, 2009). The terminology *acculturation* has been used in a wide variety of meanings by researchers, often misused for *assimilation* (Padilla & Perez, 2003; Berry & Sam, 2006). In the field of consumer behavior, it has been assumed that assimilation and acculturation have the same meaning. Cultural change goes only in one direction where people eventually give up their cultural heritage for a new culture (Jamal, 1996). Due to the unidimensional perspective of assimilation, it is also assumed that people either do not culturally change at all or they fully acquire the new culture. However, other researchers argue that it is possible to obtain new cultures without necessarily losing original values and beliefs. This view on assimilation changed with Redfield, Linton and Herskovits' definition and introduction of acculturation. In their meaning, acculturation concerns:

Those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original culture patterns of either or both groups” (Berry & Sam, 2006, p. 11).

Rajagopalan and Heitmeyer (2005) also hold that acculturation occurs when individuals experience a new culture through first-hand contact. The essence in the two definitions lays in the fact that when individuals come across new cultures, changes are not unidirectional and unidimensional, as in the case of assimilation. The authors argue that cultural changes could occur in both groups involved (Jamal, 1996; Berry & Sam, 2006).

Based on this discussion, this study will use the term acculturation and its definition stated by Redfield, Linton and Herskovits. However, the term ethnic identification will be used as a complement to determine the degree of acculturation. The aim is to explore to which degree people acquire host cultures and categorize them into different degrees of acculturation in accordance with Berry’s four acculturation strategies discussed next.

3.4.1 Acculturation Strategies

When people move across nations, they constantly undergo the acculturation phenomenon and are influenced by a new culture. Berry *et al.* (2002) suggest a model constituting of four different approaches of acculturation; *assimilation*, *integration*, *separation* and *marginalization*. As can be seen in figure 3.1, maintenance of heritage, culture and identity (issue 1) and relationships sought among groups (issue 2) are two cultural dimensions that determine which orientation and subsequently, which strategy acculturating individuals belongs. Assimilation occur when people are more host culture oriented and less home culture oriented. On the contrary, when individuals wish to maintain their ethnic culture and reject host culture, separation takes place. Due to the difficulty to maintain ethnic culture in a new context, people experience stress. Similarly, people undergoing marginalization also need to cope with stress because both cultures are rejected. Berry *et al.* (2002) explain this by host cultures being less receptive to other cultures. Songco (2009) states that when there is a great difference between host and home cultures, acculturative stress is more likely to occur. Finally, integration involves orientation towards both host and home cultures (*ibid*; Wang & Mallinckrodt, 2006).

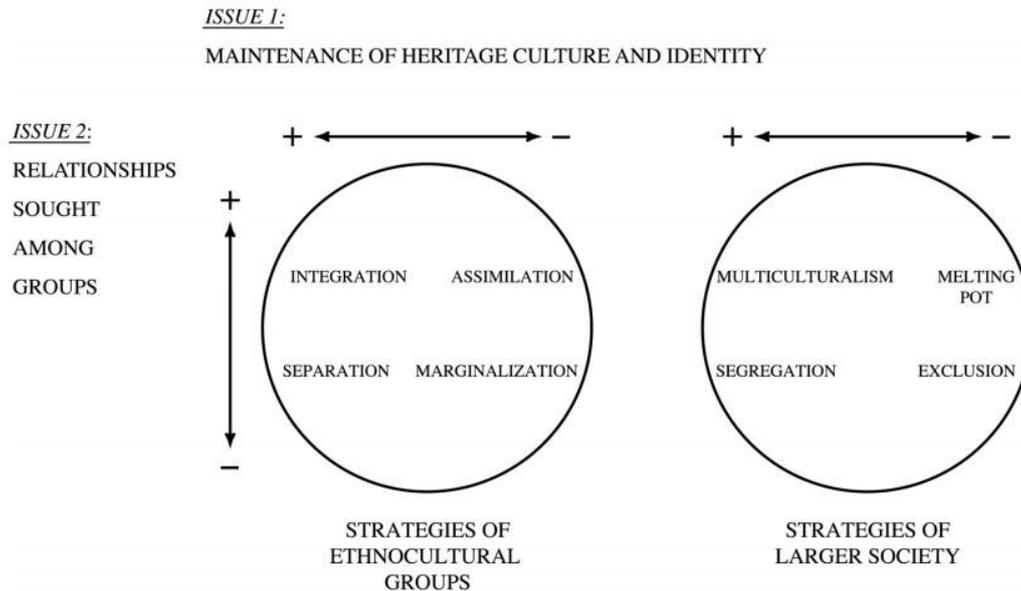


Figure 3.1 *Acculturation Strategies* (Berry *et. al*, 2002, p. 354).

There are a number of factors that can influence acculturation. Whether host cultures are receptive or not to new cultural groups, people's will to maintain, reject or combine host and home cultures plays a crucial role in the choice of strategy, and thus the level of acculturation. However, the process of acculturation is continuously changing as people are able to circulate around the four strategies. The change of strategy may be a result of stages people go through in life (Berry *et al.*, 2002; Harrolle & Trail, 2007). Wang and Mallinckrodt (2006) state that demographic factors also affect the level of acculturation. These factors are discussed in the following section.

3.4.2 Assessing the Degree of Acculturation

When studying acculturation it cannot be assumed that the phenomenon only has two outcomes; total rejection or total acceptance of a host culture. As discussed in chapter 3.2, acculturation is a multidimensional concept where individuals are acculturated to a host culture to different degrees. These degrees can also be referred to Berry's acculturation strategies. This thesis will assess the degree of acculturation based on factors that influence acculturation which will be interpreted with the help of Berry's acculturation strategies. As can be seen in figure 3.2, Berry's model is interpreted on a low-to-high basis where assimilation has the highest degree of acculturation and separation the lowest. Marginalization and integration can be found in between the two extremes. Acculturation can be assessed through *demographics, language and*

interaction, media and finally, cultural distance. These factors can be recognized as both incentives and barriers for the degree of acculturation and are discussed below.



Figure 3.2 *The Degree of Acculturation Strategies*

The first factor that influences the degree of acculturation is *demographics*. Research shows that length of residence, spouse’s ethnicity, level of education, rural or urban origins, residential status and gender matter in assessing the degree of acculturation. Kim (2001) and Lee (1994) argue that immigrants residing in a new country for a long time have a higher will to adapt to new cultures and consequently consume new products. Those who stay in the country temporarily are less likely to adapt to new cultures (Rajagopalan & Heitmeyer, 2005; Khairullah & Khairullah, 1999). Furthermore, it is proven that males tend to acculturate faster than females (Rajagopalan & Heitmeyer, 2005). In the Hispanic culture, *marianismo* (females obedient to men and caring) and *machismo* (independent and dominant males) are two cultural values that Hispanics identify themselves with. Depending on how strongly identified Hispanics are towards *machismo* and *marianismo*, it is assumed that the level of acculturation will be higher for females. This idea is related to the fact that women nowadays want to express individualism which may be possible through adapting new cultures (Edwards, Fehring, Jarett, & Haglund, 2008). The same reasoning can be applied to Asian women who, according to Confucianism, are considered to be responsible for the upbringing of children (Huang & Charter, 1996). In a study by Lv and Brown (2010), it was found that Chinese people are resistant to change their food habits. However, it is stated that men are particularly unwilling to adapt to Western culture. Derived from this discussion the following hypotheses are constructed:

Hypothesis 1. East Asians with longer time of residence in the United States have a high degree of acculturation.

Hypothesis 2. East Asian women have a higher degree of acculturation than East Asian men.

Secondly, *language and interaction* are also important to assess the degree of acculturation. Language is a bridge to understand cultures. A mother language connects people to their ethnic culture, while new languages are the building blocks for a new culture (Chirkov, 2009). Communication plays a fundamental role in the interaction between people and indirectly influences the extent to which people acculturate to host cultures. The usage and transferring of ethnic languages to children indicate people's maintenance of ethnic cultures (Luque, Fernández, & Tejada, 2006). Depending on which degree host languages are adopted and used among host culture groups, such as friends, people are exposed to host cultures in various degrees. Knowledge of host languages can ease the adjustment of a new culture and thus, indicate a higher degree of acculturation. However, language can also be a barrier to acculturate due to limitations in learning new cultures (Gronhaug *et al.*, 1993).

The third factor involves *media preferences*. Music, newspapers and movies have been widely used as traditional instruments in determining the degree of acculturation (Khairullah & Khairullah, 1999; Laroche, Pons, & Richard, 2009; Satia, Patterson, Kristal, Hislop, Yasui, & Taylor, 2001). As Lee (1994) found in her research about media consumption on Hong Kong immigrants in Canada, the level of acculturation was related to the type of media used. This result can be linked to the previous discussion on language. Higher language ability leads to greater use of host culture media and hence, a higher degree of acculturation (*ibid*).

The fourth factor, *cultural distance* indicates the difficulties ethnic groups are challenged with when acculturating. For example, there is a huge gap between Chinese and Western culture. As mentioned before, Chinese culture is collectivistic and features conformity, obedience and family value. On the contrary, Western culture is described as individualistic and independent (Feldman, Mont-Reynaud, & Rosenthal, 1992). Traditions and family ties are stronger in Asian societies compared to Western societies. Research noted that these differences have an effect on the degree of acculturation (*ibid*; Gronhaug *et al.* 1993). It has also been noted that people always experience stress to different degrees when encountering a new culture. This stress is

related to difficulties to adjust to new cultures. According to Gronhaug *et al.* (1993), the learning and acquiring of a new culture may be so difficult that they can be perceived as barriers to acculturate.

3.4.3 Acculturation and Consumption Pattern

As previously discussed, culture has an influence on consumption patterns and choices of products. Consumption patterns and types of products and services bought can express people's cultures. Consumption patterns can also be a sign of how much people have adopted new cultures (Gronhaug *et al.*, 1993). Depending on the strength of values and beliefs people hold, preferences for what products to buy and where to buy them, varies (Mueller, 2008). Hence, people acculturated to different degrees may also show differences in consumption pattern. Gronhaug *et al.* (1993) postulate that higher cultural pride towards own ethnicity could impact the will to retain specific elements from original cultures. Changes in consumption patterns could also be influenced by cultural contexts. Low accessibility of ethnic products and services in new cultures can lead to an increase of substituting products from new cultures (*ibid*). This idea is also supported by Nenci *et al.* (2008) who claim that "low perceived availability can be a barrier to the purchasing of ethnic food" (*ibid*, p. 510).

Based on the previous discussion it is assumed that East Asians will most likely only acculturate to a certain degree. According to Seitz (1998), Asians is the group with the lowest degree of acculturation compared to Hispanics and African Americans. Research shows that the integration strategy is the most common degree of acculturation (Luque, Fernández, & Tejada, 2006). Because of the cultural distance between Asian culture and Western culture, where language barriers are high and values and beliefs differ to a large extent, it is suggested that East Asians acculturate to an integrated degree at most. However, it is also suggested that marginalization is common among East Asians. This idea is based on the fact that Chinese people place high importance on consuming traditional Chinese food (Lv & Brown, 2010). As mentioned above, limited accessibility of ethnic products forces Chinese people to purchase "Westernized" Asian food products such as semi-processed food and frozen dumplings (Wong & Dean, 2009). To further explain this consumption behavior, it is worth pointing out that using semi-processed food is very different from the traditional way of Asian cooking, which is mainly done with fresh ingredients. Hence, this

implies that East Asians must learn to adapt to Western culture, whether they like it or not (Lv & Brown, 2010). This discussion leads to the third hypothesis below:

Hypothesis 3. Integration and marginalization are the most common degrees of acculturation that East Asians are found in.

3.4.4 The Degree of Acculturation and Food Consumption

Referring back to previous sections, *assimilation*, *integration*, *marginalization* and *separation* (3.4.1 and 3.4.3), are four degrees of acculturation affecting consumption patterns. Depending on the degree of acculturation, it is assumed that people will consume certain products to different degrees (Wong & Dean, 2009). Food consumption is a habit people bring with them early in life (Cervellon & Dubé, 2005). As values and beliefs change due to encountering new cultures, people's behavior and consequently, food habits change.

One degree of acculturation is known as *assimilation*. According to Dato-on, Burns, Manolis and Hanvanich (2007), people with higher degree of acculturation do not prioritize ethnic products and stores as those with lower degree of acculturation. Furthermore, assimilated people do not value cultural customs (Luque, Fernández, & Tejada, 2006). Applying this strategy on food consumption, it is assumed that assimilated people prefer to consume host culture food.

Integration and *marginalization* involve the balance between ethnic culture and host culture. However, the difference is that marginalized people are forced to find a balance against their own will. Integrated people accept both ethnic culture and host culture in which they try to find a balance (Berry & Sam, 2006). Hence, integrated people can be found to purchase products from both host culture stores and traditional stores. This consumption pattern can also be applied to marginalized people where limitations in ethnic products lead them to select host culture products (Dato-on, Burns, Manolis, & Hanvanich, 2007).

Finally, *separation* occurs when people choose to stay with their ethnic culture. A study conducted among Chinese people showed that those with strong ethnic identification preferred to purchase products in ethnic stores (Wang, 2004). Similarly, it was found that ethnic identification is related to the consumption of cultural apparel

and ethnic food. Higher ethnic identification resulted in stronger preference for ethnic food (Chattaraman & Lennon, 2006).

Derived from the discussion above and with regards to the third hypothesis, this thesis focuses on the two main degrees of acculturation among East Asians; integration and marginalization (see hypothesis three). Relating these degrees of acculturation to food, the following hypothesis is developed:

Hypothesis 4. East Asians with low degree of acculturation prefer to consume ethnic food while East Asians with high degree of acculturation prefer to consume American food.

3.5 Summary and Hypotheses

In order to understand acculturation and its impact on consumption pattern, it is necessary to first understand culture. There are various definitions of what culture is, ranging from a set of values and beliefs to a psychological aspect emphasizing learning habits of new cultures. The literature review also points out that cultural environments influence people's lifestyles and in turn changes their consumption patterns. In the literature review, it is stated that Asian culture features collectivism, saving one's face and family values. These characteristics influence Asian's buying behavior. For example, due to the value of saving one's face, Asians are more brand conscious than other cultures. Western culture on the other hand, is characterized by individualism, alienation and passivity. This contrast indicates that people consume differently due to differences in ethnic identifications. The literature review also identifies *demographics, language and interaction, media and cultural distance* as factors influencing the degree of acculturation. Research also identifies other factors such as cultural pride and accessibility of ethnic products to influence the degree of acculturation. Considering these factors along with Berry's four acculturation strategies model, the change in consumption pattern can be revealed.

Based on the discussion in the literature review, the following hypotheses have been constructed:

Hypothesis 1. East Asians with longer time of residence in the United States have a high degree of acculturation.

Hypothesis 2. East Asian women have a higher degree of acculturation than East Asian men.

Hypothesis 3. Integration and marginalization are the most common degrees of acculturation that East Asians are found in.

Hypothesis 4. East Asians with low degree of acculturation prefer to consume ethnic food while East Asians with high degree of acculturation prefer to consume American food.

A summary of the literature review is illustrated in the Acculturation and Food Preference Model (see figure. 3.2). People encountering a new culture are challenged to cope with their ethnic culture along with the new one. The figure depicts barriers and incentives as influences on people's degree of acculturation. The model suggests that there is a relation between the degree of acculturation and preference for American food.

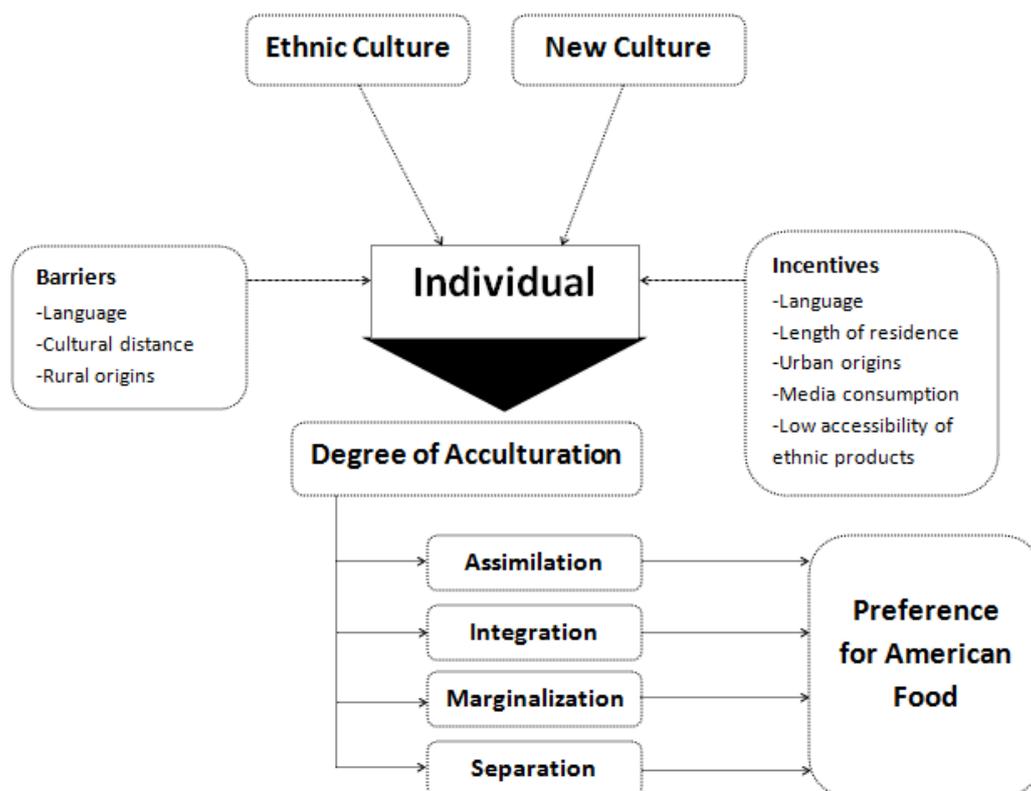


Figure 3.3 *The Acculturation and Food Preference Model*

4 Empirical Method

This chapter presents the research design and strategy, time horizon, data collection, sample selection and operationalization. Reliability, validity and generalizability are also discussed at the end of the chapter.

4.1 Research Design and Strategy

Research design decisions are based on research questions and research objectives and are consistent with the research philosophy chosen. It is possible for a research to have more than one purpose. Three types of research designs are developed; *exploratory study*, *descriptive study* and *explanatory study* (Saunders *et al.*, 2009).

An *exploratory study* seeks new insights and findings to better understand a certain problem. Exploratory studies are characterized by being flexible and adaptable to changes when new findings occur. A *descriptive study* identifies specific events, persons or situations. This type of study can be a part of an explanatory and an exploratory research or it could be an independent research. It is important to have knowledge of the research intended to study before the collection of data. An *explanatory study* seeks to explain relationships between variables. Both quantitative and qualitative data can help to explain the purpose of the research and to statistically see if there is any correlation between variables (*ibid.*). The purpose of this thesis is to see if there is any relation between the degrees of acculturation and change in food consumption among East Asians. Thus, an explanatory research design is applied.

According to Saunders *et al.* (2009), there are several strategies that can be employed and used for exploratory, descriptive and explanatory research. Seven strategies are discussed: *experiment*, *survey*, *case-study*, *action research*, *grounded theory*, *ethnography* and *archival research*.

This thesis employs a *survey* as a research strategy. One purpose of this thesis is to generalize the results which are possible by collecting a large amount of data. Using the survey strategy, quantitative data can be collected and analyzed to see if there is

any correlation between the degree of acculturation and the change in food consumption.

4.2 Time Horizon

One important aspect to consider when planning for the research is time horizon. There are two different types of studies that can be conducted: *the cross-sectional* and *the longitudinal*. Cross-sectional studies are chosen when the aim of the research is to study a phenomenon at a certain time and in cases where causal relationships between different factors are to be identified. This type of study is also characterized by the use of surveys and by the time constraints of the research. In contrast, when studying a phenomenon over a period of time, the longitudinal study is appropriate. By using this type of time horizon, one is able to identify changes of a phenomenon over time (Saunders *et al.*, 2009).

The purpose of this thesis is to identify the relationship between the degree of acculturation and food consumption at a given point in time. Hence, this thesis uses the cross-sectional time horizon. Another reason for the use of this type of study is because of the time constraints this research has.

4.3 Data Collection

When choosing the technique of collecting data for research, it is necessary to once again go back to the research question and research objectives set for a study. Primary data involves the collection of new data while secondary data consists of previously collected data by other researchers (Saunders *et al.*, 2009). Primary data can be obtained through observations, interviews and questionnaires (*ibid.*). Secondary data can be divided into documentary, multiple source data and survey based data (*ibid.*).

As an explanatory research design is chosen for this thesis and because the aim of this thesis is to look at the relationship between the degree of acculturation and food consumption, a primary data collection is used. The data is collected quantitatively through surveys handed out to students at University of North Texas, USA (see appendix 1). The surveys are distributed in hard copies to ensure a high response rate.

Surveys allow for easier analysis of relationships between variables as well as better control over the process (Saunders *et al.*, 2009). Compared to other research strategies, collection of data through surveys with limited number of questions related to the purpose of the research also allows for findings to be less wide-ranged.

4.4 Sample Selection

The need for sampling must also be considered when conducting research. In cases where it is possible, sampling is not necessary as the whole population in a research could be targeted (Saunders *et al.*, 2009). However, Saunders *et al.* (2009) point out that sampling techniques are required for some research questions and objectives in order to generalize a whole population. Sampling is also needed due to time and budget constraints as well as impracticability of reaching a whole population (*ibid.*). Hence, through sampling, “data from a sub-group rather than all possible cases” (*ibid.*, p. 210) would be collected. There are two types of sampling techniques: (1) probability or representative sampling and (2) non-probability or judgmental sampling. In the former type, a complete list of all cases in a population is needed and each case has an equal chance to be selected. The probability of selecting a case using the non-probability technique is, however unknown (*ibid.*, 2009)

The population in this thesis consists of East Asian individuals residing in Texas, USA. However, it would be difficult to obtain a complete list of all East Asians in the state due to budget and time constraints. Hence, a combination of purposive and convenience sampling (non-probability techniques) are chosen to meet the objectives of this thesis. Purposive sampling involves the selection of cases that best meet a research question while convenience sampling involves the gathering of surveys until the chosen sample size has been filled (Saunders *et al.*, 2009). The sample in this thesis consists of Asian students of University of North Texas. Previous researchers have included students in their research when studying acculturation and consumption (Bojanic & Xu, 2006; Wang & Mallinckrodt, 2006; Lv & Cason, 2004). Another argument for the choice of students as a sample group is explained by Peterson (2001). In his research, Peterson did not find any “systematic pattern to the differences observed” (Peterson, 2001, p. 450) between college students and nonstudents (adults) as subjects in social science research.

4.5 Operationalization

Operationalization involves defining concepts and ideas as specific measuring variables for research and hypotheses. Operationalization also includes the defining of independent and dependent variables which will increase validity and reliability. As in previous research, the independent variables are identified as (1) ethnic self-identification, (2) language, (3) social interaction, (4) media preferences and (5) holidays and traditions. The dependent variables are identified as the degrees of acculturation: assimilation, integration, marginalization and separation, as well as change in food consumption. The control variables in this thesis are age and rural or urban origin which can influence the degree of acculturation.

In this thesis culture is defined according to the psychological definition where culture is measured through factors such as language, laws, religions, food customs, arts and products (Berry *et al.*, 2002). Culture is also operationalized as a concept including possessions, ideas, values and expected pattern of behavior (Ferraro, 2006). Hence, culture is measured through a survey consisting of three parts that are related to these factors. The first part is referred to as *identification* which is included to identify the characteristics of respondents. *Sex* is operationalized as male and female while respondents' age is measured as the number of years lived since their birth year. Ethnicity is operationalized as nationality of respondents' country of origin and place of birth is measured through which country respondents were born in. Depending on respondents' origins in terms of rural or urban areas, the degree of acculturation may be influenced. Hence, respondents are asked to answer whether they come from a rural or urban area in their home country. Length of residence and residential status in the U.S. have the purpose to show individuals' incentives to adapt to the American culture. Length of residence is measured as the number of years lived in the U.S. while residential status is referred to as respondents holding a U.S. citizenship, a permanent residency status or a student visa. A longer residence and intention to remain in the country could be related to a high degree of acculturation.

The following two sections operationalization of independent and dependent variables are discussed. One variable that needs to be highlighted is the degree of acculturation. Depending on the structure of the hypotheses, this variable is considered both independent and dependent. In hypotheses one and two, the degree of acculturation is

a dependent variable while in hypothesis four the degree of acculturation is an independent variable. Finally, since hypothesis three is not testing a relationship between variables it is neither independent nor dependent. The reason why the degree of acculturation is both independent and dependent is because it can be viewed in two different perspectives:

One, the degree of acculturation can influence factors such as preference for American food.

Two, the degree of acculturation can also be influenced by factors such as length of residence and sex.

The degree of acculturation can be viewed as a common linkage between two factors where one factor indirectly influences another factor. For example, Length of residence is hypothesized to influence the degree of acculturation (hypothesis one) which in turn is hypothesized to influence preference for American food (hypothesis four). Thereby, length of residence might indirectly influence preference for American food.

4.5.1 Independent Variables

There are several ways of operationalizing acculturation as there is not a correct way to measure it (Berry & Sam, 2006). In this thesis, the independent variables are measured through four different statements based on *the four-statement method* suggested by Berry and Sam (2006). The degree of acculturation as an independent variable is defined as low and high degree of acculturation where separation and marginalization is included in low degree of acculturation. In the higher group, integration and assimilation can be found. The advantage of using this method is that it can directly assess the degree of acculturation (*ibid*). Each statement refers to a specific degree of acculturation where respondents are able to mark one answer. An operationalization of acculturation includes a scale consisting of the five factors discussed below.

1. *Ethnic self-identification* is operationalized as individuals' self-perception of ethnic identity (Quester *et al.*, 2000). This self-perception indicates how strongly they relate themselves to their ethnic culture. The underlying meaning of this assessment is that respondents must reflect over their values, beliefs and behavior

(Chattaraman & Lennon, 2006). It is through ethnicity that these cultural factors can be measured and subsequently, the degree of acculturation can be identified.

2. *Language* is operationalized as the level of English usage (Bojanic & Xu, 2006; Winter, 2000; Khairullah & Khairullah, 1999). It is also the building blocks for the remaining factors (3 and 4) used to assess the degree of acculturation. A high level of English usage indicates a greater degree of acculturation. It is assumed that when individuals interact with a host society, they are more likely to adapt to new lifestyles in the host country.

3. *Social interaction* involves the social circle individuals find themselves to belong in. Questions regarding friends' ethnicities are included (Bojanic & Xu, 2006) where respondents choose one out of four alternatives that state preferences for ethnic and/or American friends. A larger amount of American friends indicates a higher degree of acculturation.

4. *Media preferences* are operationalized as preferences for ethnic or American movies and music (Quester *et al.*, 2000). Preference for movies and music from individuals' home countries show that they are strongly related to their ethnic culture, even in a new country. On the other hand, preference for American media consumption indicates that they aim to improve their English (Lee, 1994) and have high motivation to adapt into American society (Seitz, 1998).

5. *Holidays and traditions* are operationalized as the importance individuals' place on the celebration of ethnic traditions. Individuals who celebrate American holidays and traditions show that the American way of living is important. Respondents are asked to choose one out of four statements which indicate their preference for ethnic and/or American traditions.

4.5.2 Dependent Variables

Dependent variables are outcomes of the acculturation scale. Assimilation, integration, marginalization and separation are operationalized through the five factors discussed above. Each statement of a question refers to a certain degree of acculturation. Adding all the statements together indicates a total degree of acculturation (Berry's four acculturation strategies) for one individual. However, food consumption needs to be

operationalized independently. Food consumption includes eating and dietary behaviors in terms of ingredients preferred when cooking and also the types of dishes chosen for meals (Verbeke & López, 2005; Bojanic & Xu, 2006). It also includes the preference for ethnic or non-ethnic grocery stores (Wang, 2004) or types of restaurants chosen when dining-out (Bojanic & Xu, 2006). In this thesis, food consumption is operationalized as the strength of preference for American food. Breakfast, lunch and dinner, as well as dining-out and product preferences will give a better indication of when individuals might prefer American food over ethnic food.

4.5.3 Control Variables

To see if other factors can better explain the results two control variables are used in this thesis. The first control variable is age and has been used in previous research (Verbeke & López, 2005). It is operationalized as the total number of years individuals have lived. The second control variable intends to measure people's familiarity with western cultures in their home country. This variable is operationalized as individual's origin in terms of rural or urban areas in their home country. People coming from urban areas are more exposed to western cultures while those living in rural areas tend to have more difficulties adapting to western cultures (Smith & Tarallo, 1993).

4.6 Reliability

Reliability is an important aspect of research and needs to be considered as it measures the consistency of data findings. It answers the question of whether the same research conducted at different times would result in the same findings. Saunders *et al.* (2009) present four threats related to reliability. *Subject or participant error* is the first threat and it highlights the importance of the point of time when respondents are asked questions. Depending on when during the week or day respondents are asked questions, different results are given. This threat can be reduced by asking respondents questions during a "neutral" time (*ibid.*, 2009). The second threat is *subject or participant bias* which means that respondents might be influenced by researchers and give answers according to what they think researchers want. Similarly, when analyzing data collected, researchers themselves might interpret answers according to what they are looking for and not what the answers are actually telling. To control for this threat, researchers should ensure the anonymity of

respondents and be careful when analyzing data (*ibid.*, 2009). *Observer error* can also influence reliability of research negatively. Different observers of research may conduct studies in different ways. This error can be controlled through the use of structured interviews or through the use of only one interviewer (*ibid.*, 2009). The final threat is known as *observer bias* and refers to conflicting results of research as observers interpret respondents' answers differently (*ibid.*, 2009).

The reliability of research can also be measured according to three different factors presented by Bryman and Bell (2007). *Stability* refers to whether findings are stable over time with little or no fluctuations between tests conducted. *Internal reliability* looks at whether the use of multiple indicators to measure an outcome is related and consistent to each other (*ibid.*, 2007). *Inter-observer consistency* is the final factor discussed by Bryman and Bell and it is similar to *observer bias* presented by Saunders *et al.* (2009). Reliability of research might be reduced when there is a lack of subjective judgment and consistency when using many observers to conduct research.

This thesis collects data through the use of surveys. Indicators to measure the degree of acculturation (see 4.5.) have also been included in previous research. Hence, these measurements indicate high reliability of this research. The Cronbach Alpha coefficient is used to control for internal reliability. The survey has also been pilot tested prior to distribution to respondents in order to ensure that questions are understood as intended. By pilot testing the survey, reliability as well as validity of a research can increase (Saunders *et al.*, 2009).

4.7 Validity

Whether research variables in a study actually measure the correct concepts or not is a matter of validity (Bryman & Bell 2007; Saunders *et al.* 2009). High validity of research indicates that they are relevant to the area of investigation while low validity shows that research is irrelevant to the area of study (Bryman & Bell, 2007). Bryman and Bell (2007) distinguish four different kinds of validities. The first one is *measurement validity* which is commonly used in quantitative research. This validity concerns whether indicators in fact measure the concepts they intend to measure. *Internal validity* is the second kind of validity and involves how strongly conclusions

drawn from relationships between variables are. The issue of generalizing the results of a study is referred to as *external validity*. Finally, *ecological validity* concerns whether or not findings of a research can be applied to the natural social setting of people (*ibid.*). Bryman and Bell also introduce five ways to establish validity of research. *Face validity* is the minimum level of validity that research should meet. This validity means that people perceive the measures of a research to actually measure the concept in focus. With *concurrent validity*, researchers employ current criteria to study cases. In contrast, *predictive validity* allows researchers to use future criteria to investigate. By constructing hypotheses from theory relevant to concepts of research, *construct validity* is used. The last way to establish validity is through *convergent validity* which means that researchers utilize different methods to measure concepts. This way, researchers are able to ensure high validity of research if there is a strong relationship between the different methods used.

For this thesis, it is important to take into account measurement validity, internal validity and external validity. Based on established theories relevant to the area of study in this thesis, several hypotheses have been constructed. Hence, construct validity is used to create validity. The concepts employed in this thesis are operationalized and clearly defined to be able to test the hypotheses.

4.8 Generalizability

Saunders *et al.*, (2009) refer to generalizability as external validity and concerns the extent to which findings of a study are applicable to other studies (Bryman & Bell, 2007). If generalization is possible, researchers can contribute their results to the scientific world. If not, findings are not relevant to other settings apart from your own specific sample, and therefore results are unable to be generalized (Saunders *et al.*, 2009).

As mentioned before, this thesis is based on a quantitative study with a deductive approach and has the aim to generalize the results. The use of a non-probability sample technique reduces the possibility to generalize the results. The intention of this thesis is to select a representative sample of East Asians residing in the U.S. and generalize the findings to the entire East Asian population. If the findings of this thesis can be generalized, it can have a significant relevance to other studies concerning East Asians.

5 Empirical Findings and Analysis

This chapter consists of the empirical findings which presents the data collected. The hypotheses are tested and finally discussed and analyzed.

5.1 Empirical Findings

This section presents the final sample of the research as well as statistical data of the data collected.

5.1.1 Sample

The sample in this thesis consists of 163 students at University of North Texas, USA. The surveys were sent in two sets in which 113 were received in the first set. Due to postal complications, the remaining surveys were not received in time. Hence, this research is based on the first set of the survey. As this thesis focuses on East Asian Americans, 63 respondents of American and Hispanic origins were excluded. This resulted in our final sample consisting of 50 East Asian respondents. Three of the surveys are incomplete as some questions were left unanswered. Hence, the descriptive statistics show a different sample size depending on the test performed.

5.1.2 Type of Data

Two types of data are used in this study; numeric and categorical. According to Saunders *et. al* (2009), numeric data are measures of quantitative characteristics. Categorical data are variables that cannot be measured quantitatively. Below is a description of the variables and the type of data employed in this study (see table 5.1).

Table 5.1 *Type of data*

Variable	Operationalization	Type
Independent	Male or Female	Categorical
Independent	Nationality of respondents' country of origin	Categorical
Independent	Country in which respondents were born	Categorical
Independent	Visa held in the U.S.	Categorical
Independent	Number of years lived in the U.S.	Numeric
Independent	Self-perception of ethnic identity	Categorical
Independent	Level of English usage	Categorical
Independent	Friends' ethnicities	Categorical
Independent	Preference for ethnic and/or American movies	Categorical
Independent	Preference for ethnic and/or American music	Categorical
Independent	Preference for ethnic and/or American traditions	Categorical
Dependent	Preference for American or ethnic food	Numeric
Dependent	Preference for American food for breakfast	Numeric
Dependent	Preference for American food for lunch	Numeric
Dependent	Preference for American food for dinner	Numeric
Dependent	Preference for American restaurants when dining out	Numeric
Dependent	Preference for American grocery stores	Numeric
Dependent	Preference for American grocery stores due to limited access to ethnic food products	Numeric
Dependent	Preference to cook processed food	Numeric
Dependent	Preference for American food, likert scale 1-5	Numeric
Control	Number of years lived since birth year	Numeric
Control	Rural or urban area	Categorical

5.1.3 Descriptive statistics of Independent variables

The data collected varies and are distinguished through descriptive statistics. An appropriate way to better understand the data and check for possible errors is to use frequency tables for categorical variables and descriptive tables for numeric variables.

As can be seen in table 5.2, there is a total of 50 respondents. A majority of the respondents were females with a total number of 30. The remaining 20 respondents were males.

Table 5.2 *Frequency statistics (sex)*

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	20	40.0	40.0	40.0
Female	30	60.0	60.0	100.0
Total	50	100.0	100.0	

In table 5.3 below, it is observed that 50 percent of the respondents are of Korean origin. The next largest group is Chinese with 26 percent. As presented, 12 percent of the sample makes up a group of *others*. This group has individuals with origins from Laos, Indonesia, Thailand and one individual with mixed origins of the Philippines, Japan and China.

Table 5.3 *Frequency statistics (ethnicity)*

	Frequency	Percent	Valid Percent	Cumulative Percent
Chinese	13	26.0	26.0	26.0
Taiwanese	3	6.0	6.0	32.0
Japanese	2	4.0	4.0	36.0
Korean	25	50.0	50.0	86.0
Vietnamese	1	2.0	2.0	88.0
Other	6	12.0	12.0	100.0
Total	50	100.0	100.0	

The frequency statistics table 5.4 below shows that most of the respondents are born in their home country when comparing to table 5.3.

Table 5.4 *Frequency statistics (place of birth)*

	Frequency	Percent	Valid Percent	Cumulative Percent
China	10	20.0	20.0	20.0
Taiwan	5	10.0	10.0	30.0
Japan	2	4.0	4.0	34.0
Korea	25	50.0	50.0	84.0
USA	3	6.0	6.0	90.0
Other	5	10.0	10.0	100.0
Total	50	100.0	100.0	

One of the independent variables, length of residence, is measured with numerical data. In table 5.5 a total number of 48 respondents answered the question. The mean length of residence is shown to be 10.6 years. Two respondents left this question unanswered. Hence, the missing values refer to these two respondents.

Table 5.5 *Descriptive statistics (length of residence)*

	N	Minimum	Maximum	Mean	Std. Deviation
Length of residence	48	.10	38.00	10.5937	10.32651
Valid N (listwise)	48				

In table 5.6 below, the frequency statistics shows that most of the respondents are staying in the U.S as international students (52%). Only 26 percent are U.S. citizens.

Table 5.6 *Frequency statistics (residential status)*

	Frequency	Percent	Valid Percent	Cumulative Percent
U.S. citizen	13	26.0	26.0	26.0
Permanent resident	11	22.0	22.0	48.0
Student visa	26	52.0	52.0	100.0
Total	50	100.0	100.0	

The following six tables (see table 5.7 – 5.13) measure respondents’ degree of acculturation. The majority of the respondents identify themselves to belong to their own ethnic group (60%). Hence, for this factor separation is found to be the most common degree of acculturation with a total number of 30 respondents. None of the East Asian American respondents identify themselves to be American only.

Table 5.7 *Frequency statistics (ethnic identification)*

	Frequency	Percent	Valid Percent	Cumulative Percent
Separation	30	60.0	60.0	60.0
Marginalization	2	4.0	4.0	64.0
Integration	18	36.0	36.0	100.0
Total	50	100.0	100.0	

The level of English usage is shown to be quite high (see table 5.8). 37 out of 50 respondents prefer to speak both their home language and English. Thus, 74 percent of the sample belongs to integration. However, 22 percent of the respondents are separated as they prefer to only speak their home language.

Table 5.8 *Frequency statistics (language)*

	Frequency	Percent	Valid Percent	Cumulative Percent
Separation	11	22.0	22.0	22.0
Marginalization	1	2.0	2.0	24.0
Integration	37	74.0	74.0	98.0
Assimilation	1	2.0	2.0	100.0
Total	50	100.0	100.0	

In table 5.9 below, a clear cut between the groups is observed. Only 12 percent of the respondents find it important to only have friends with the same ethnicity as themselves or American friends. The remaining 88 percent of the respondents are integrated.

Table 5.9 *Frequency statistics (social interaction)*

	Frequency	Percent	Valid Percent	Cumulative Percent
Separation	4	8.0	8.0	8.0
Marginalization	1	2.0	2.0	10.0
Integration	44	88.0	88.0	98.0
Assimilation	1	2.0	2.0	100.0
Total	50	100.0	100.0	

Regarding music and movie preferences, a vast majority prefers to interact with both ethnic and American media culture. This is observed in table 5.10 and 5.11. In both cases, approximately 80 percent of the respondents are found to be integrated.

Table 5.10 *Frequency statistics (movie preferences)*

	Frequency	Percent	Valid Percent	Cumulative Percent
Separation	3	6.0	6.0	6.0
Marginalization	2	4.0	4.0	10.0
Integration	40	80.0	80.0	90.0
Assimilation	5	10.0	10.0	100.0
Total	50	100.0	100.0	

Table 5.11 *Frequency statistics (music preferences)*

	Frequency	Percent	Valid Percent	Cumulative Percent
Separation	1	2.0	2.0	2.0
Marginalization	3	6.0	6.0	8.0
Integration	41	82.0	82.0	90.0
Assimilation	5	10.0	10.0	100.0
Total	50	100.0	100.0	

Finally, the degree of acculturation is also measured by East Asian Americans' involvement with American holidays. 88 percent of the respondents celebrate both ethnic and American holidays. Hence, they are integrated (see table 5.12).

Table 5.12 *Frequency statistics (holiday celebrations)*

	Frequency	Percent	Valid Percent	Cumulative Percent
Separation	3	6.0	6.0	6.0
Marginalization	1	2.0	2.0	8.0
Integration	44	88.0	88.0	96.0
Assimilation	2	4.0	4.0	100.0
Total	50	100.0	100.0	

Combining the six factors measuring the degree of acculturation above, it is clear that integration is the most common degree of acculturation among East Asian Americans. This is also observed in table 5.13 below. This is developed by accumulating each respondent's answer to each of the factors. Each factor has a value between one and four. Thus, based on the six factors above, the minimum value of the degree of acculturation is six and the maximum value is 24. Based on this scale, 70 percent of the respondents are found to be integrated.

Table 5.13 *Frequency statistics (degree of acculturation)*

	Frequency	Percent	Valid Percent	Cumulative Percent
Separation	2	4.0	4.0	4.0
Marginalization	12	24.0	24.0	28.0
Integration	35	70.0	70.0	98.0
Assimilation	1	2.0	2.0	100.0
Total	50	100.0	100.0	

5.1.4 Descriptive statistics of Dependent variables

Table 5.14 below measures East Asian Americans' preference for American food. There is a missing value of one as one respondent left out to answer the questions. The preference for American food is measured with a Likert scale ranging from 1-5. The selected answers are added and ranges from 8-40, where eight indicates low preference for American food and 40 indicates a high preference for American food. The mean preference for American food is observed to be 21 which can indicate a non-specific preference of either ethnic or American food consumption.

Table 5.14 *Descriptive statistics (preference for American food)*

	N	Minimum	Maximum	Mean	Std. Deviation
I prefer to eat American food rather than my ethnic food	49	1,00	5,00	2,0000	,97895
I prefer to eat American food for breakfast	49	1,00	5,00	3,1429	1,35401
I prefer to eat American food for lunch	49	1,00	5,00	2,7551	,99017
I prefer to eat American food for dinner	49	1,00	5,00	2,3673	1,13089
When I dine out I prefer American restaurants	49	1,00	5,00	2,4286	,97895
I prefer to shop in American grocery stores	49	1,00	5,00	3,3061	,98328
I prefer to shop in American grocery stores because of limited access to ethnic food products	49	1,00	5,00	2,7347	,97416
I prefer to cook semi-processed and processed food	49	1,00	5,00	2,4490	1,10040
Preference for American food	49	8,00	33,00	21,0612	5,05968
Valid N (listwise)	49				

5.1.5 Descriptive statistics of Control variables

Statistics for the first control variable age is shown in table 5.15. The youngest respondent is 21 years old and the oldest is 69 years old. The mean age of the sample size is 32 years. In the next table (5.16), a majority of the respondents originated from an urban area (82%).

Table 5.15 *Descriptive statistics (age)*

	N	Minimum	Maximum	Mean	Std. Deviation
Age	50	21	69	31.62	9.934
Valid N (listwise)	50				

Table 5.16 *Frequency statistics (rural or urban origins)*

	Frequency	Percent	Valid Percent	Cumulative Percent
An urban area	41	82.0	82.0	82.0
A rural area	6	12.0	12.0	94.0
I do not know	3	6.0	6.0	100.0
Total	50	100.0	100.0	

5.1.6 Analysis of Internal Reliability and Normal Distribution

An internal reliability test is conducted to check whether questions that make up a scale measure the same concept (Pallant, 2005). The Cronbach alpha coefficient is used to measure the internal reliability of a scale. According to Pallant (2005), the coefficient for the scale tested should be above 0.7 to be considered reliable. An internal reliability test of preference for American food shows a good internal consistency as the Cronbach alpha coefficient has a value of 0.754 (see table 5.17).

Table 5.17 *Reliability statistics
(preference for American food)*

Cronbach's Alpha	N of Items
.754	8

To be able to conduct different statistical tests, a normal distribution of variables is sometimes required. To check for normality of variables, the Kolmogorov-Smirnov

test is applied. A normally distributed sample has a significant value of more than 0.05. Tests for normal distribution are only performed on continuous variables (Pallant, 2005). An alternative way to check for normal distribution of samples is to look at histograms which can also detect possible outliers in the sample. Two outliers are found in the sample (see figure 1, appendix 2) with the lowest preference for American food. According to Pallant (2005), outliers are cases with values that differ greatly from the majority of other cases. The result of the Kolmogorov-Smirnov test for *preference for American food* is shown in table 5.18 below.

Table 5.18 *Kolmogorov-Smirnov test (preference for American food)*

		Preference for American food
N		49
Normal Parameters^{a,b}	Mean	21.0612
	Std. Deviation	5.05968
Most Extreme Differences	Absolute	.097
	Positive	.097
	Negative	-.087
Kolmogorov-Smirnov Z		.679
Asymp. Sig. (2-tailed)		.746

a. Test distribution is Normal.

b. Calculated from data.

5.2 Testing the Hypotheses

5.2.1 Hypothesis 1

The first hypothesis states that East Asians with longer time of residence in the United States have a high degree of acculturation. *Length of residence* is a continuous variable measured in years. Together with the categorical variable, *degree of acculturation*; an independent samples t-test is performed. This test is used to compare scores between two independent groups (Pallant, 2005); in this research these groups are low acculturated individuals and high acculturated individuals. The independent samples t-test in table 1a and 1b (see appendix 4.1) shows that the significance level of Levene's test is above 0.05. Hence, the significance value for the independent samples t-test is

found in the *equal variances assumed* row. The requirement of a statistically significant difference must be equal to or below the Sig. (2-tailed) value of 0.05. The test shows a significance value of 0.512 (see table 5.19 below) which does not verify a significant difference in scores for low acculturated individuals and high acculturated individuals. Thus, the first hypothesis is rejected. However, in the table a connection between length of residence and degree of acculturation can be observed. The degree of acculturation increases with the number of years lived in the U.S. Those individuals with a high degree of acculturation have a mean length of residence of 11.2 years compared to those individuals with a low degree of acculturation (9.0 years).

Table 5.19 *Independent Samples T-test (length of residence, degree of acculturation)*

	Degree of acculturation	N	Mean	Sig. (2-tailed)
Length of residence	Low degree of acculturation	13	8.9692	0.512
	High degree of acculturation	35	11.1971	

5.2.2 Hypothesis 2

The second hypothesis states that East Asian women have a higher degree of acculturation than East Asian men. In order to test whether there is a relationship between degree of acculturation and sex, a Chi-square test for independence is performed. However, when performing the test on two categorical variables consisting of only two categories each, there could be an overestimation of the chi-square value (Pallant, 2005). To compensate for this issue, Pallant (2005) suggests that the Chi-square independence test can still be applied by looking at Yates' correction for continuity which can be found in the second row in table 5.20b. The continuity correction value should be equal to or below the significance level of 0.05. As presented in table 5.20b below, the significance value is 0.949. Hence, the test does not show a statistical significant difference between the two groups. It is concluded that females are not significantly different from males' degree of acculturation. This result is also shown in table 5.20a where the proportion of high acculturated males and females does not differ to a large extent. 75 percent (15/20) of males have a high degree of acculturation compared to females in which 70 percent (21/30) are found in the same degree of acculturation. Derived from this result, hypothesis two is rejected.

Table 5.20a *Crosstabulation (sex, degree of acculturation)*

		Degree of acculturation		Total
		Low degree of acculturation	High degree of acculturation	
Sex	Male	5	15	20
	Female	9	21	30
Total		14	36	50

Table 5.20b *Chi-Square Test (sex, degree of acculturation)*

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.149 ^a	1	.700		
Continuity Correction^b	.004	1	.949		
Likelihood Ratio	.150	1	.698		
Fisher's Exact Test				.758	.478
Linear-by-Linear Association	.146	1	.703		
N of Valid Cases	50				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5,60.

b. Computed only for a 2x2 table

5.2.3 Hypothesis 3

The third hypothesis states that integration and marginalization are the most common degrees of acculturation that East Asians are found in. To show which degrees of acculturation that are most common, a nonparametric Chi-square test is the most suitable approach. In table 5.21a it is clearly presented that marginalization and integration are the two most frequent degrees of acculturation where the majority is found in the latter. A total of 35 individuals of the sample identify themselves as integrated followed by 12 marginalized individuals. In table 5.21b, a significant value of 0.000 is reported. Hence, hypothesis three is accepted ($p=0.000<0.05$). The minority are assimilation and separation with 1 and 2 individuals respectively. The result is also illustrated in percentage in a bar chart (see appendix 3).

Table 5.21a *Observed statistics (degree of acculturation)*

	Observed N	Expected N	Residual
Separation	2	12.5	-10.5
Marginalization	12	12.5	-.5
Integration	35	12.5	22.5
Assimilation	1	12.5	-11.5
Total	50		

Table 5.21b *Chi-Square test (degree of acculturation)*

	Degree of Acculturation
Chi-Square	59.920 ^a
Df	3
Asymp. Sig.	.000

a. 0 cells (.0%) have expected frequencies less than 5.

The minimum expected cell frequency is 12.5.

5.2.4 Hypothesis 4

The final hypothesis states that East Asians with low degree of acculturation prefer to consume ethnic food while East Asians with high degree of acculturation prefer to consume American food. To compare the preference for American food scores for low acculturated individuals and high acculturated individuals, an independent samples t-test is conducted (for full details of the test, see appendix 4.2). In this test, the continuous variable is *preference for American food* and the categorical variable consists of *degree of acculturation*. There is not a significant difference in preference of American food for the groups as the significance value ($p=0.765$) is above the required value of 0.05 (see table 5.22). The result is also reflected in the table where the degree of acculturation does not have a great effect on preference for American food as both groups have a similar mean score (low degree: 20.7; high degree: 21.2). However, there is an indication between the two variables with regards to the slightly higher mean score of high acculturated individuals. Still, the statistically insignificant result rejects the fourth hypothesis.

Table 5.22 *Independent Samples T-test (preference for American food, degree of acculturation)*

	Degree of acculturation	N	Mean	Sig. (2-tailed)
Preference for American food	Low degree of acculturation	14	20.7143	0.765
	High degree of acculturation	35	21.2000	

5.2.5 Control Variables

As mentioned in chapter four, the control variables *age* and *rural or urban origin* can also influence the degree of acculturation. To test the relationship between these variables and the degree of acculturation, an independent samples t-test is conducted for age (for full details, see appendix 4.3). Presented in table 5.23, the test reports a significance value of 0.700 which indicate that there is not a statistically significant difference between the two variables. Hence, age does not influence which degree of acculturation an individual has. Regardless of the degree of acculturation, the mean age is around 30 years old.

Table 5.23 *Independent Samples T-test (age, degree of acculturation)*

	Degree of acculturation	N	Mean	Sig. (2-tailed)
Age	Low degree of acculturation	14	32.50	0.700
	High degree of acculturation	36	31.28	

The second control variable: rural or urban area is tested through a Chi-Square test to show whether the variable has an influence on the degree of acculturation. As a result of two cells having expected count less than five (see appendix 4.4 for further details), Fisher's Exact test is used. Table 5.24 reports a two-sided significance value of 1.0 which exceeds the required value of 0.05 or below. Hence, there is not a statically significant difference between the degree of acculturation and individuals originating from rural or urban area.

Table 5.24 *Chi-Square test (rural or urban area, degree of acculturation)*

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.111 ^a	1	.739		
Continuity Correction^b	.000	1	1.000		
Likelihood Ratio	.107	1	.743		
Fisher's Exact Test				1.000	.538
Linear-by-Linear Association	.108	1	.742		
N of Valid Cases	47				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 1.66.

b. Computed only for a 2x2 table

5.2.6 Summary of Hypotheses

The outcomes of the hypotheses are summarized in table 5.24 below. Three of the hypotheses are rejected, and one is accepted.

Table 5.25 *Summary of hypotheses*

Hypothesis	Outcome
1 <i>East Asians with longer time of residence in the United States have a high degree of acculturation.</i>	Rejected
2 <i>East Asian women have a higher degree of acculturation than East Asian men.</i>	Rejected
3 <i>Integration and marginalization are the most common degrees of acculturation that East Asians are found in.</i>	Accepted
4 <i>East Asians with low degree of acculturation prefer to consume ethnic food while East Asians with high degree of acculturation prefer to consume American food.</i>	Rejected

5.3 Analysis of Hypotheses

The outcomes of the empirical findings are discussed and analyzed in this section. Possible explanations to the outcomes of each hypothesis are discussed.

5.3.1 Analysis of Hypothesis 1

In chapter three, several demographic factors concerning the assessment of the degree of acculturation were discussed. Derived from this discussion, hypothesis one was constructed and it was assumed that length of residence has an impact on the degree of acculturation. The independent one samples t-test does not show a statistically

significant difference between length of residence and degree of acculturation. Consequently, the first hypothesis is rejected and the results cannot be generalized. However, as mentioned earlier there is a tendency that individuals with longer length of residence have a higher degree of acculturation. The tendency observed, supports Kim's (2001) and Lee's (1994) theory of immigrants' adaptation to new cultures.

Another explanation to why the outcome did not match the expected result could be related to the residential status of the respondents. As seen in table 5.26, the majority of the respondents hold a student visa. This observation indicates that these individuals might not have the intention to stay in the U.S. for a longer time. Hence, they would not engage into adapting to the American culture (Kim, 2001).

A methodological reason to the result could be because of the way the degree of acculturation is assessed in this study. Regarding the degree of acculturation, the survey consisted of six questions where each of the four alternatives given reflects one degree of acculturation. However, to receive a more accurate result from this part, more questions could be included. The dimensions (language, social interaction, media preferences and holiday celebrations) stated in the survey could be develop into different situations that individuals find themselves in their daily life. Respondents were not given the possibility to answer a question by choosing "no opinion". This decision was made because it was assumed that each individual is acculturated to some degree. Therefore, respondents must find themselves to agree with at least one of the statements.

Table 5.26 *Frequency statistics (residential status)*

	Frequency	Percent	Valid Percent	Cumulative Percent
U.S. citizen	13	26.0	26.0	26.0
Permanent resident	11	22.0	22.0	48.0
Student visa	26	52.0	52.0	100.0
Total	50	100.0	100.0	

5.3.2 Analysis of Hypothesis 2

Theory states that females are more likely to adapt to western culture and that men's willingness to acculturate is lower (Lv & Brown, 2010). The Chi-square independence test conducted for this hypothesis shows that males and females do not differ in the degree of acculturation. A possible explanation is that the theory that this hypothesis is based on, focused mainly on Hispanic and Chinese individuals. On the contrary, most of the respondents in this sample are Korean. Also, table 5.27 and 5.28 show that all Korean respondents are born in Korea which can indicate that they are strongly tied to the Korean culture and Confucianism (Asia Pacific Connections, 2008). As previously mentioned, researchers have shown that sex does not have any relation to the degree of acculturation (Verbeke & López, 2005; Wang, 2004). Thus, the rejection of hypothesis two supports this conclusion.

Table 5.27 Frequency statistics (ethnicity)

	Frequency	Percent	Valid Percent	Cumulative Percent
Chinese	13	26.0	26.0	26.0
Taiwanese	3	6.0	6.0	32.0
Japanese	2	4.0	4.0	36.0
Korean	25	50.0	50.0	86.0
Vietnamese	1	2.0	2.0	88.0
Other	6	12.0	12.0	100.0
Total	50	100.0	100.0	

Table 5.28 Frequency statistics (place of birth)

	Frequency	Percent	Valid Percent	Cumulative Percent
China	10	20.0	20.0	20.0
Taiwan	5	10.0	10.0	30.0
Japan	2	4.0	4.0	34.0
Korea	25	50.0	50.0	84.0
USA	3	6.0	6.0	90.0
Other	5	10.0	10.0	100.0
Total	50	100.0	100.0	

However, when interpreting the result one should look at it from different perspectives. Females are not found to be more acculturated but the result does not show the opposite either; females are not less acculturated than men. Confucianism encourages females to stay home and bring up the children (Huang & Charter, 1996) which can indicate a lower degree of acculturation due to their inability to socialize with the new culture. The outcome of this study shows a disagreement to fundamentals of Confucianism as females in today's society might be more individualistic. Nevertheless, an important consideration must be taken into account since this thesis does not include respondents' family relations. The survey does not include questions regarding individuals' relationship status or family structure. Because most of the respondents are young international females, it is assumed that they do not plan to settle down and focus on education instead. However, if the factors mentioned would be included in the survey, it could be possible to see an indication of individuals' willingness to stay. Furthermore, other factors such as education level and religion could also influence the degree of acculturation. It is assumed that individuals with higher level of education, both in their home country and in the host country, might have a higher degree of acculturation. In conclusion, due to the statistically insignificant result of the test, the relationship cannot be generalized.

5.3.3 Analysis of Hypothesis 3

Based on theories in differences between Western and Asian culture, the third hypothesis was created. It is believed that East Asians only acculturate to two certain degrees: marginalization and integration. Through the use of nonparametric Chi-Square test, it is statistically significant that the most common degrees of acculturation among East Asians are marginalization and integration (see table 5.29a and 5.29b for more details). This outcome supports previous work (Luque, Fernández, & Tejada, 2006) which state that integration is most common.

Table 5.29a *Observed statistics (degree of acculturation)*

	Observed N	Expected N	Residual
Separation	2	12.5	-10.5
Marginalization	12	12.5	-.5
Integration	35	12.5	22.5
Assimilation	1	12.5	-11.5
Total	50		

Table 5.29b *Chi-Square test (degree of acculturation)*

	Degree of Acculturation
Chi-Square	59.920 ^a
Df	3
Asymp. Sig.	.000

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 12.5.

According to Gronhaug *et al.* (1993), low accessibility of ethnic products may influence people's adaptation to a new culture. Due to this limitation, individuals may be perceived as if they are forced to involve themselves with a new culture. As a result, individuals are marginalized and therefore, the third hypothesis is supported. However, other data imply this idea to only be true to a certain extent. In table 5.30 the mean score of respondents' *preference to shop in American grocery stores because of limited access to ethnic food products* is 2.7 (2="disagree", 3="neither agree nor disagree"). By comparing this to the mean score (3.3) of *preference to shop in American grocery stores* it seems like the respondents prefer to shop in American grocery but not because of limited access to ethnic products. With this said, hypothesis three is accepted.

Table 5.30 *Descriptive statistics (preference for American food)*

	N	Minimum	Maximum	Mean	Std. Deviation
I prefer to shop in American grocery stores	49	1.00	5.00	3.3061	.98328
I prefer to shop in American grocery stores because of limited access to ethnic food products	49	1.00	5.00	2.7347	.97416
Valid N (listwise)	49				

A plausible explanation to why respondents are not found to be assimilated might be because of the cultural distance between Asian culture and Western culture (Lv & Brown, 2010). Also, because of the high rate of respondents being international students, most are born in their home country with short length of residence in the U.S. (see table 5.31). It is assumed that they have not yet experienced the American culture to the degree of acculturation that they could possibly have. Hence, it is understandable that East Asians only acculturate to a certain degree. This reasoning is also based on the fact that maybe the individuals are forced to adapt to the new culture because people wants to fit in. As mentioned in analysis one, the methodological reason can also be applied in this case. For example, to find out individuals' usage of English it would be more accurate to ask in what context respondents prefer to use English; among friends, family or co-workers. Since there was only one question of each factor, the variation in the answers was limited and general. If more situational questions were asked, individuals could find themselves to belong in different degrees of acculturation. As a result, the total degree of acculturation could be more accurate.

Table 5.31 *Descriptive statistics (length of residence)*

	N	Minimum	Maximum	Mean	Std. Deviation
Length of residence	48	.10	38.00	10.5937	10.32651
Valid N (listwise)	48				

5.3.4 Analysis of Hypothesis 4

The final hypothesis is based on the acculturation strategies by Berry and Sam (2006). It is suggested that higher acculturated individuals consume more of a host culture's products and services than lower acculturated individuals (Dato-on *et al.*, 2007). However this hypothesis is not supported as the independent samples t-test shows that there is not a statistically significant difference in the relationship between the degree of acculturation and preference for American food. A possible explanation to the outcome can be explained by respondents' self-interpretation of the questions asked to assess preference for American food. This issue of misinterpretation can lead to unreliable results and be a cause to the insignificant statistical test. Even though examples of American food products were provided in the surveys, each individual has his or her own perception of what American food is. Also, as the U.S. is a multicultural country, it is difficult to say what American food really is. Although the fourth hypothesis is rejected, it is observed that the degree of acculturation could influence preference for American food. As the third hypothesis is accepted there is an indication that the higher degree of acculturation, the higher the preference for American food is. A comparison of means in the degree of acculturation and preference for American food is conducted to further observe this idea. Table 5.32 shows that the mean preference for American food for marginalized and integrated individuals is both 21.4. Hence, this observation supports the idea. Though, the results can be misleading because assimilation shows a lower preference (16.0) than the remaining three groups. This might be because there is only one individual identified as assimilated. Despite this, the relationship set out in the hypothesis cannot be generalized due to the insignificant result.

To receive better results, further improvements of the survey could be made. The third part concerning preference for American food could include background questions of individuals' dietary behavior. For example, frequency of dining out or cooking at home could affect the preference for American food. An individual, who prefers to cook at home, may do it for the reason of limited access to ethnic restaurants. However, there could also be other underlying factors such as financial situation to why individuals cook at home.

Overall, what the analyses of the hypotheses have in common which could influence the statistical results, are the small sample size and the construction of the survey. With a larger sample size, the data could be more accurate and better represent the targeted population.

Table 5.32 Report (degree of acculturation, preference for American food)

Degree of ACC			
groups	Mean	N	Std. Deviation
Separation	16.5000	2	3.53553
Marginalization	21.4167	12	4.03301
Integration	21.3529	34	5.40977
Assimilation	16.0000	1	
Total	21.0612	49	5.05968

5.4 Summary of Analysis

Derived from the analysis of the study, results show that only one hypothesis is accepted while the remaining three are rejected. The third hypothesis which is supported shows that the two most common degrees of acculturation are integration and marginalization. The remaining three hypotheses report statistically insignificant results. Thus, it cannot be said that the degree of acculturation influence preference for American food. Consequently, the relationships stated in the hypotheses cannot be generalized. Even though hypothesis one is rejected, it is observed that there is a tendency in length of residence and the degree of acculturation; a longer stay in the U.S. results in a higher degree of acculturation. Finally, a pattern regarding East Asians adaptation to a new culture indicates that this ethnic group holds strong ties to their ethnic culture, especially with regards to food.

6 Conclusion

In this final chapter, a summary as well as conclusions of the thesis are presented followed by a critical review and practical implications. Finally, recommendations for future research are presented.

6.1 Summary of Thesis

Societies today are becoming more integrated as people move across borders. Globalization is an ambiguous matter as there are two sides to it. First, the world economy can benefit from globalization as technology and knowledge are exchanged between nations (Kim, 2001). On the other hand, there is also a negative aspect where it is believed that globalization will Americanize the world as cultures are lost (Rothenberg, 2002-2003).

When individuals encounter new cultures they adapt themselves to this culture to different degrees. This adaptation is known as acculturation. Previous research shows that there is a relationship between the degree of acculturation and consumption. However, most research has been conducted on Hispanics and Indians within the apparel industry (Chattaraman & Lennon, 2006; Rajagopalan & Heitmeyer, 2005). Research is also inconclusive as there are different results on which factors influence the degree of acculturation. The U.S. Bureau of Census reports an increase in ethnic groups in the United States with the Asian American population along with Hispanics being the two dominating immigrant groups (Berry & Sam, 2006). Hence, it would be interesting to investigate whether previous results regarding acculturation and consumption is true for Asians as well. This thesis intended to extend the research field of acculturation and consumption by investigating the degree of acculturation among East Asians residing in the U.S. and its impact on their preference for American food.

The literature that this thesis is based upon consists of theories regarding culture, ethnic consumption and acculturation. Determining the degree of acculturation was based on Berry's Acculturation Strategies (Berry, Poortinga, Segall, & Dasen, 2002). Derived from the literature, four hypotheses were constructed to test the relationship

between the degree of acculturation and preference for American food. The data was collected through surveys distributed to students at University of North Texas, USA. Statistical tests were conducted and the results were analyzed.

6.2 Conclusion

The ongoing process of acculturation and its possible impact on consumption is important for businesses. The limited research conducted on East Asians' acculturation and food consumption led to the purpose of this thesis; to study whether the degree of acculturation influence preference for American food. Thus, the following research question was stated:

How does the degree of acculturation affect food consumption among East Asian Americans?

Theories and models within the field of acculturation and consumption enabled this research to determine the degree of acculturation. Hence, the following four hypotheses were created:

Hypothesis 1 East Asians with longer time of residence in the United States have a high degree of acculturation.

Hypothesis 2 East Asian women have a higher degree of acculturation than East Asian men.

Hypothesis 3 Integration and marginalization are the most common degrees of acculturation that East Asians are found in.

Hypothesis 4 East Asians with low degree of acculturation prefer to consume ethnic food while East Asians with high degree of acculturation prefer to consume American food.

The hypotheses were tested and only one was accepted by the statistical significance value. The third hypothesis was supported while the remaining three were rejected. It was reported that marginalization and integration were the two most common degrees of acculturation (hypothesis 3). The tests showed that the degree of acculturation is not

influenced by length of residence and sex (hypothesis 1 and 2). The analysis of hypothesis four reported that the degree of acculturation does not affect preference for American food. The reason why only one hypothesis is accepted could be because of the small sample size and the way the degree of acculturation is assessed. This is important to consider because it could provide a more accurate and realistic aspect of acculturation.

To conclude, although three hypotheses are rejected it is observed that there is a slight relationship between the degree of acculturation and length of residence and preference for American food respectively. It is also found that East Asians strongly hold onto their ethnic culture. As expected and stated in chapter 1.2, food is proven to be a cultural bound product concerning East Asians. Despite the degree of acculturation an individual hold, preference for American food remains more or less unaffected. Hence, in the case of East Asians, American food is not culturally connected to this ethnic group. Finally, as acculturation is still developing and there is not an accurate way of assessing it, this study can serve as a foundation for further research. Thus, the theoretical contribution of this thesis lays in the explanation of how the degree of acculturation affects food consumption among East Asians.

6.3 Critical Review

This thesis was set out to investigate the degree of acculturation and preference for American food as well as if selected demographic factors influence the degree of acculturation. One out of four hypotheses was accepted. However, the end result is that no relationship was found and therefore cannot be generalized.

Due to the small sample in this research, the whole East Asian population in the U.S. cannot be represented. This could influence the results of this study. Furthermore, all of the respondents were students which increases the likelihood that they are all more or less of the same characteristics. This issue decreases the variety in the answers given which makes it difficult to tell whether the results are realistic or not. Another critical reflection is the choice of investigating East Asians in the state of Texas, USA. This choice could also have an effect on individuals' degree of acculturation because it is assumed that different states in the U.S are "Asian" to a different extent. Another

important issue concerns the interpretation of the questions asked in the survey. Some of the questions could be improved by including specific examples of what each statement in the survey aims to study. Finally, the construction of the survey could be improved to provide a more accurate aspect of acculturation. As this research can lie as a foundation to further studies it is possible to claim these results as indications of East Asians' acculturation and consumption.

6.4 Practical Implications

As previous research focuses on Hispanics and Indians in the apparel industry, the purpose of this study is to fill a gap within the research field of acculturation and food consumption among East Asians residing in the United States. Hence, this research is significant for academic purposes.

Drawn from the results, this research has practical value for businesses. It is reported that there is not a statistically significant relationship between the degree of acculturation and preference for American food. East Asians are found to be strongly tied to their ethnic culture regarding food consumption. A tendency which is also found indicates that East Asians with longer length of residence have a higher degree of acculturation. However, regardless of their degree of acculturation, the preference for American food is the same. Furthermore, it is reported that marginalization and integration are the two most common degrees of acculturation. This outcome implies that individuals found in these groups are integrated to both their ethnic culture and host culture. Marketers can use this result as guidelines when targeting the East Asian population in the U.S. and be aware of the preference of each individual's ethnic food. This idea indicates that marketers should consider the fact that East Asians have the possibility to adapt to the American culture. Therefore, it is suggested that businesses can integrate ethnic features when offering new products to reach out to a large group of customers as possible.

6.5 Future Research

During the process of writing this thesis, new ideas for future research occurred. Since acculturation concerns everyone to different degrees, both on individual level and business level, it is interesting to study this phenomenon. Results in this thesis shows

that some demographic factors do not have any influence in the degree of acculturation. Hence, other factors such as spouse's ethnicity, level of education or income can be included to see if these have a relationship to the degree of acculturation. First, this thesis investigated acculturation in one ethnic group. However, it would be interesting to study the phenomenon within subgroups. This idea is based on the assumption that there could be cultural differences within one ethnic group. Secondly, conducting a study with a different time horizon there is a possibility to better grasp more realistic results of acculturation as it is a phenomenon that stretches over time. In this case, it would be possible to study the process of acculturation. Also, to have a deeper understanding of acculturation a qualitative study can be approached.

Another suggestion is to look at how quickly people adapt and acculturate to a new culture. The sample group in this thesis consisted mainly of international students which raises the question of how fast these individuals acculturate. To measure the speed of acculturation, perhaps it could indicate individuals' willingness to acculturate to another culture. The suggested research might be extended by looking at underlying reasons for a high or a low speed of acculturation. The bottom line is that no matter where one comes from, where one moves to or when it happens, people will most likely encounter and acculturate to a new culture and eventually become an ingredient of the "world's melting pot".

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- 6. Length of residence in the U.S.** I was born in the U.S. ₁
 I was not born in the U.S., I have lived here for _____years.
- 7. Residential status in the U.S.** U.S. citizen ₁ Permanent Resident ₂
 Student visa ₃

Part 2: Acculturation Scale

Please mark one of the alternatives that you find the most appropriate with an “X”.

1. Ethnic identification

- ₁ I identify myself to only belong to my own ethnic group
₂ I do not identify myself to belong to my own ethnic group and I also do not identify myself as American
₃ I identify myself to belong to my own ethnic group and I also identify myself as American
₄ I identify myself as American only

2. Language

- ₁ I prefer to only speak my home language
₂ I do not prefer to speak my home language and I also do not prefer to speak English
₃ I prefer to speak both my home language and English
₄ I prefer to only speak English

3. Social interaction

- ₁ I find it important to only have friends from the same ethnicity as myself
₂ I do not find it important to have friends with the same ethnicity as myself and I also do not find it important to have American friends
₃ I find it important to both have friends with the same ethnicity as myself and American friends
₄ I find it important to only have American friends

4. Movie preferences

- ₁ I prefer to only watch movies from my home country
- ₂ I do not prefer to watch movies from my home country and I also do not prefer to watch American movies
- ₃ I prefer to watch movies from both my home country and America
- ₄ I prefer to only watch American movies

5. Music preferences

- ₁ I prefer to only listen to music from my home country
- ₂ I do not prefer to listen to music from my home country and I also do not prefer to listen to American music
- ₃ I prefer to listen to music from both my home country and America
- ₄ I prefer to only listen to American music

6. Holiday celebrations

- ₁ I only celebrate holidays from my home culture
- ₂ I do not celebrate holidays from my home culture and I also do not celebrate American holidays
- ₃ I celebrate both holidays from my home culture and America
- ₄ I only celebrate American holidays

Part 3: Food Consumption

Please mark the level of agreement to each statement with an “X”.

1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree and 5=strongly agree.

1. I prefer to eat American food rather than my ethnic food	1	2	3	4	5
2. I prefer to eat American food for breakfast (e.g bread, bagels, cereal, milk etc.)	1	2	3	4	5
3. I prefer to eat American food for lunch	1	2	3	4	5
4. I prefer to eat American food for dinner	1	2	3	4	5
5. When I dine out I prefer American restaurants	1	2	3	4	5
6. I prefer to shop in American grocery stores	1	2	3	4	5
7. I prefer to shop in American grocery stores because of limited access to ethnic food products	1	2	3	4	5
8. I prefer to cook semi-processed and processed food (e.g frozen and packaged food)	1	2	3	4	5

Thank you for your participation!

Appendix 2: Kolmogorov-Smirnov test (normal distribution)

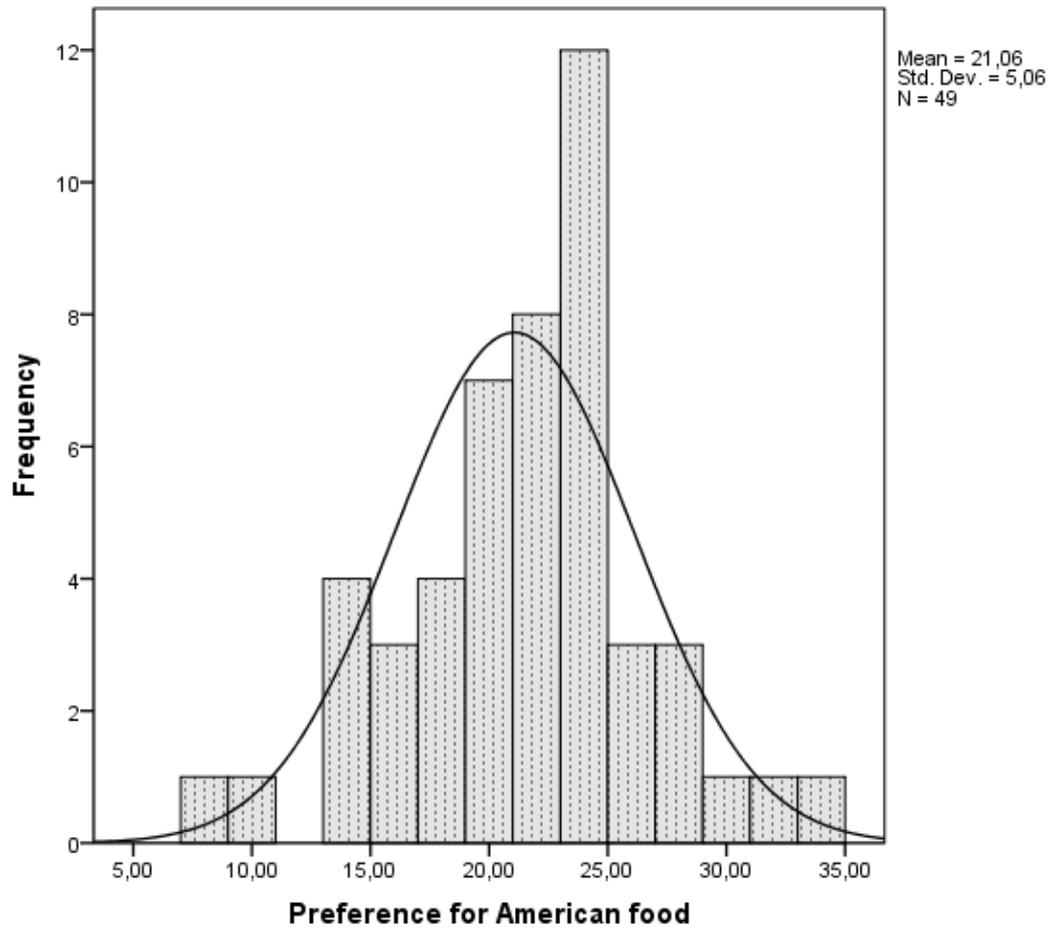


Figure 1. Normal distribution of preference for American food

Appendix 3: Degree of acculturation (bar chart)

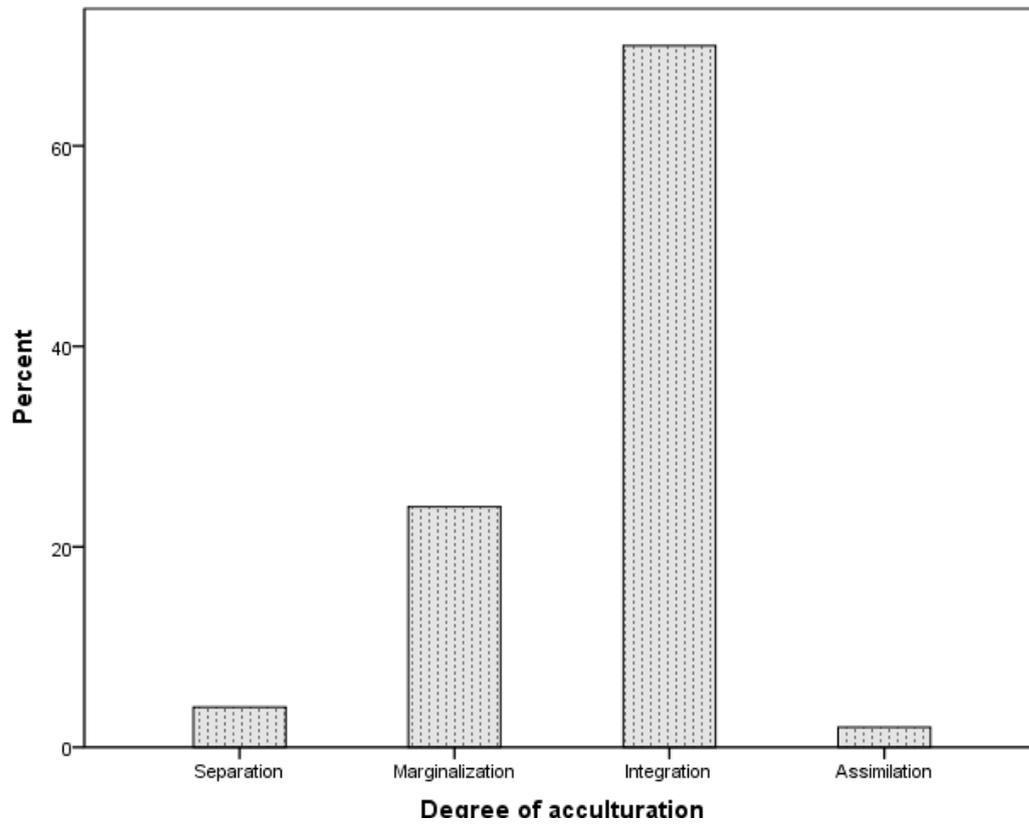


Figure 2. Bar chart of degree of acculturation

Appendix 4: Independent Samples T-test

4.1 Independent variable: Length of residence

Table 1a *Group statistics (degree of acculturation, length of residence)*

	Degree of acculturation	N	Mean	Std. Deviation	Std. Error
					Mean
Length of residence	Low degree of acculturation	13	8.9692	8.61417	2.38914
	High degree of acculturation	35	11.1971	10.94697	1.85038

Table 1b *Independent samples (degree of acculturation, length of residence)*

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Length of residence	Equal variances assumed	2.119	.152	-.660	46	.512	-2.22791	3.37435	-9.02013	4.56430
	Equal variances not assumed			-.737	27.253	.467	-2.22791	3.02190	-8.42565	3.96983

4.2 Preference for American food and degree of acculturation

Table 2a *Group statistics (degree of acculturation, preference for American food)*

	Degree of acculturation	N	Mean	Std. Deviation	Std. Error Mean
Preference for American food	Low degree of acculturation	14	20.7143	4.23227	1.13112
	High degree of acculturation	35	21.2000	5.40588	.91376

Table 2b *Independent Samples T-test (degree of acculturation, preference for American food)*

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Preference for American food	Equal variances assumed	.692	.410	-.301	47	.765	-.48571	1.61539	-3.73546	2.76403
	Equal variances not assumed			-.334	30.532	.741	-.48571	1.45410	-3.45320	2.48177

4.3 Control variable: Age

Table 3a *Group statistics (degree of acculturation, age)*

	Degree of acculturation	N	Mean	Std. Deviation	Std. Error Mean
Age	Low degree of acculturation	14	32.50	8.410	2.248
	High degree of acculturation	36	31.28	10.558	1.760

Table 3b *Independent Samples T-test (degree of acculturation, age)*

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Age	Equal variances assumed	1.151	.289	.387	48	.700	1.222	3.156	-5.124	7.569
	Equal variances not assumed			.428	29.677	.672	1.222	2.855	-4.610	7.055

4.4 Control variable: Rural or urban area

Table 4a *Chi-Square test (rural or urban area, degree of acculturation)*

		Degree of acculturation		Total	
		Low degree of acculturation	High degree of acculturation		
In my home country I come from	An urban area	Count	11	30	41
		Expected Count	11.3	29.7	41.0
		% within In my home country I come from	26.8%	73.2%	100.0%
	A rural area	Count	2	4	6
		Expected Count	1.7	4.3	6.0
		% within In my home country I come from	33.3%	66.7%	100.0%
Total	Count	13	34	47	
	Expected Count	13.0	34.0	47.0	
	% within In my home country I come from	27.7%	72.3%	100.0%	

Table 4b *Chi-Square test (rural or urban area, degree of acculturation)*

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1- sided)
Pearson Chi-Square	.111 ^a	1	.739		
Continuity Correction^b	.000	1	1.000		
Likelihood Ratio	.107	1	.743		
Fisher's Exact Test				1.000	.538
Linear-by-Linear Association	.108	1	.742		
N of Valid Cases	47				

a. 2 cells (50,0%) have expected count less than 5. The minimum expected count is 1,66.

b. Computed only for a 2x2 table