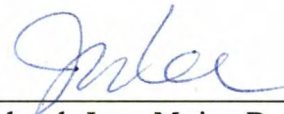


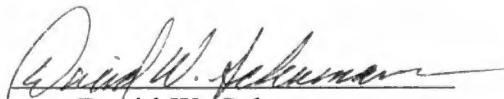
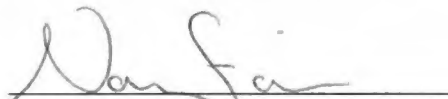
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I am submitting herewith a thesis written by Kittichai Watchravesringkan entitled "Ethnic Influence of Endorsers and Receivers on Advertising Effectiveness: A Case of Asian Endorsers and Receivers." I have examined the final copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Retail and Consumer Science.



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Ethnic Influence of Endorsers and Receivers on Advertising
Effectiveness: A Case of Asian Endorsers and Receivers

A Thesis
Presented for the
Master of Science
Degree
The University of Tennessee, Knoxville

Kittichai Watchravesringkan

May 1999

DEDICATION

This thesis is dedicated to my lovely parents:

Mr. Suvit Watchravesringkan

and

Mrs. Puong-Kaew Watchravesrignkan

who have loved, encouraged, and given me opportunities to reach my
educational dreams.

Thank you forever for your everlasting unconditional love and support.

I love you all.

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ABSTRACT

As the American society has been facing more and more culturally diverse, ethnic minorities have indeed received more and more attention by many marketers and advertisers, particularly Asian-Americans. Because of their affluence and high educational attainment, the Asian-American market has become one of the most attractive and valuable markets since 1990. While Asian-Americans in the US has emerged as an important market, little has been investigated the impact of ethnicity on advertising effectiveness as measured of awareness, attitude toward the ad, attitude toward the brand, and purchase intention with the focus on Asian-Americans. This study also further investigated whether this impact will be mediated by Asian-Americans' level of acculturation which was identified as either low- or high-acculturated individual in this study. In addition, Asian-Americans are composed of many different nationality group, the differences in the ethnicity among Asian heritages are explored in this study as well.

The three ethnic Asian-American groups chosen in this study were Chinese-, Japanese-, and Korean-Americans. An experimental study using self-administrative questionnaire, including attitude and purchase intention, acculturation, and demographic measures, was conducted in Knoxville and Maryville, Tennessee among three ethnic Asian-American subgroups (N=197), directed equally across ethnic subgroups.

The results of interaction effect of individuals' acculturation level and the ethnicity of endorsers indicated that low-acculturated Asian-Americans were more likely to recognized the advertised brand when the advertisement was endorsed by their own ethnic (Asian) models.

When furthered investigated the impact of the ethnicity of endorsers and receivers, and their interaction effect in each ethnic Asian-American group, results indicated distinct findings across the three ethnic Asian-American groups. The findings also suggested some implications for the areas of marketing and advertising to better understand these three ethnic Asian-American markets and the directions for future research are provided.

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CHAPTER 1

INTRODUCTION

A continually changing external environment, particularly that of consumer behavior, constantly creates new challenges and opportunities for both marketers and advertisers in the world of business. The excitement in the competitive market today is caused by the demands of buyers, advancing in technology, intense competition, deregulation, social change (i.e. culture differences, demographic differences), and economic variation. These factors have been received more and more attention by many marketers and advertisers for years. Marketers and advertisers are drastically altering their business strategies to support their competitive advantage.

To overcome these challenges, an appropriate communication strategy should be developed. Besides sales promotion, advertising is one of the marketing communication strategies that has been widely and effectively used by many marketers and advertisers to inform, remind, or persuade potential buyers. Indeed, advertising is all around us and has contributed to today's economic prosperity (Advertising Age, 1998). As the environment changes, advertising must change to survive and prosper. Advertising practitioners have always had to respond to these challenges. One of the greatest challenges is how to produce effective advertising. Due to the numbers of varied media, overwhelming ad clutter, increasingly fragmented audiences, and more skeptical consumers, making an effective advertisement aimed at the right

market segment has become more of a challenge than ever for marketers and/or advertisers.

Accordingly, marketers and advertising practitioners are constantly looking for more effective ways to overcome those challenges. Selecting the appropriate appeal, that is, consumer motive at which the advertisement is directed to match up with some of the consumers' characteristics, is another strategy that can help enhance the effectiveness of advertising. For such strategy to work, the appropriate appeal must be in a strong position that will get consumers' attention and interest and will persuade them ultimately to buy a particular product.

There have been substantial research interests in investigating advertising effectiveness. Advertising influence is accumulated over time and affects feelings, attitudes, and behavior (Wright-Isak, Faber, and Horner, 1997). Depending on its goals, advertising effectiveness can be measured in terms of the changes in consumers' awareness, attitudes, and behavior, which all lead to short-run and/or long-run contributions to a brand or a company. Lavidge and Steiner (1961) have proposed a hierarchical structure of advertising effectiveness based on the consumer decision making process. At the stage of problem recognition, for example, advertising can contribute to consumer awareness of a certain brand or a company. Advertising can also influence consumers' attitude formation toward a brand or a company, which ultimately leads directly to purchase decision.

For years physical attractiveness, one of the effective appeals, has gained much attention from marketers and advertisers to use as an effective tool of

persuading. Numerous studies have reported that using attractive spokespersons and models in advertising and promotion creates more effective impact than using unattractive spokespersons and models (i.e. Baker and Churchill, 1977; Bloch and Richins, 1992; Joseph, 1982; Solomon, Ashmore, and Longo, 1992). This can be explained by the notion that in the absence of sufficient product information, individuals will make extensive inferences and compare themselves by inference with others' idealized images and lifestyles that are portrayed in advertisements (Richins, 1991; Wackman, 1973). Likewise, an in-depth investigation on how beautiful models in advertisements affect female children reported that young girls like to compare themselves with advertising models and their self-perception may subsequently be affected (Martin and Gentry, 1997). That is, the use of attractive individuals in advertisements with whom consumers can identify could increase the promotional effectiveness of an ad (i.e. Baker and Churchill, 1977; Bloch and Richins, 1992; Joseph, 1982).

Ethnicity of the model, on the other hand, has received only limited research attention up to now. The empirical study by Cohen in 1992, for example, provided results supporting the notion that when associated with Asian models, high-technology engineering products gain more favorable attention from Caucasian-American consumers. Conversely, when associated with Asian models, home or family-oriented products receive less favorable attention. Taylor and Stern (1997) also found that Asian-American models are overrepresented with respect to their proportion in the population in ads with business settings, but underrepresented in home settings and presentations of

family or social relationship. Although Asian-American models are ubiquitously seen in both print and TV commercials (Taylor and Stern, 1997), there has been no research conducted on the effect of ethnicity of physically attractive Asian models on Asian-American consumers. This issue will be addressed in this study.

Ethnic minorities are becoming increasingly important markets, particularly Asian-Americans. According to Bureau of the Census (1997), 83% of all Asian-Americans who are 25 years old have at least a high school education and about 42% of that number have at least a Bachelor's degree. In addition, Asian families have higher median income than all families, partly because more family members participate in labor force and higher educational attainment. Because of their affluence and high level of education, the Asian-American market has become one of the most attractive new markets since 1990. This segment has been described by the media as the "superminority," "the fastest growing minority," and "the next hot market" (Lee and Um, 1992). According to statistics from the University of Georgia and Research Company Market Segment Research and Consulting, Asian-Americans represent 2.7% of the total U.S. population with spending power of \$110 billion (African-Americans represent 12.7% with spending power of \$469 billion, and Hispanic consumers represent 10.82% with spending power of \$348 billion) (Advertising Age, 1997). Asian-Americans are also strive for excellence to achieve a middle-class lifestyle (Shao, Powen, and Zinn, 1991) so that they are an attractive and valuable market for marketers and advertisers.

Language, religion, culture, and value systems vary widely among Asian-Americans. Fost (1990) and Henricks (1992) suggested that in order to succeed in achieving the loyalty of Asian-Americans, marketers and advertisers have to market them by their nationalities, not market to them as a homogeneous group. So far, marketers/advertisers are somewhat confused about how to handle these ethnic groups that are composed of many different nationality groups.

Currently, the Asian-American population (primarily Chinese, Filipinos, Japanese, Koreans, Asian-Indians, and Vietnamese) is estimated to comprised of more than nine million people (Bureau of the Census, 1997). Notably the three largest subgroups are Chinese-, Japanese-, and Korean-Americans. The Asian-American population is also the fastest-growing American minority group in the U.S. with a 24.8% increase between 1990 and 1995 (Francese, 1995). By the year 2010, the Asian-American population is projected to account for 6% of the total U.S. population (Miller, 1993). The dramatic increase of Asian-Americans is due to the increasing numbers of immigration coming from China, India, Korea, and other Asian countries following with the adoption of the Immigration Act of 1965 (Bureau of the Census, 1997). Asian-Americans tend to congregate together in cities, particularly in five major states which are California, Hawaii, New York, Illinois, and Texas (Statistical Abstract of the United States, 1993). Being clustered in metropolitan areas, print and broadcast media might be the most effective way to reach the large number of these ethnic groups (Henrick, 1992). Mass media, particularly television, offer a

significant opportunity for Asian-Americans to acculturate quickly into the host culture (Lee, 1993).

As the American society is increasingly experiencing ethnic diversity, the study of acculturation and its relationship to consumer behavior has started to gain more attention. As individuals become acculturated into American culture, their attitudes and values change (Lee and Um, 1992). Acculturation describes the changes in beliefs, attitudes, values, norms, and/or behaviors of members of one cultural group toward the standard of the other cultural group (O'Guinn, Lee, and Faber, 1986; Lee and Um, 1992). Among Asian-Americans, there is diversity in acculturation levels, both of which reflects how strongly they perceive themselves as belonging to a specific ethnic group and how acculturation can influence consumers' perceptions of different ethnic endorsers.

The purpose of this study is to investigate the impact of ethnicity on advertising effectiveness. The focus of the study is Asian-Americans. Specifically, the following research questions are investigated in this study. First, does the ethnicity of the endorser (Asian-American versus Caucasian-American), influence advertising effectiveness as measured by Asian-Americans' attitude toward the ad, attitude toward the brand, and purchase intention? Secondly, will this impact be mediated by Asian-Americans' level of acculturation?

This study will provide useful information for marketers/advertisers to better understand this target market group and to know how their ethnic identification might influence the effectiveness of ethnic endorser. The

appropriate and effective advertising strategy, therefore, can be directed toward the satisfaction of this segment. More importantly as the competition intensified, utilizing that information will give opportunities for both marketers and advertisers to position new and/or existing products/services in this market by communicating with them through the appropriate advertisement more efficiently.

ORGANIZATION OF THE THESIS

This study is presented here in five chapters. An introduction involving the advertising effectiveness related to advertising stimuli (ethnicity of the model), the emerging of Asian-American market in the United States, the purpose of the study, and organization of the thesis are included in this First Chapter.

Chapter Two contains a review of literature on the theoretical background for the study including the discussion of advertising effectiveness measurement and influencing factors of advertising effectiveness. The research hypotheses are also found in chapter two.

The procedure and methodology used in this study are discussed in Chapter Three.

Chapter Four contains of the analysis and the research findings.

The discussions, limitations and future research, and managerial implications for marketers and advertisers are represented in Chapter Five.

CHAPTER 2

REVIEW OF LITERATURE

This chapter consists of three major sections. The hierarchy of advertising effects and the function of advertising are discussed first. Then, the most popular measures of advertising effectiveness, awareness of the ad and brand, attitude toward the advertisement, attitude toward the brand, and purchase intention, are more specifically discussed. Finally, as potential influencing factors of advertising effectiveness, the characteristics of advertising stimuli and receivers, particularly focused on the ethnicity of endorsers and the ethnicity of receivers, are discussed.

ADVERTISING EFFECTIVENESS

Theoretical Framework

Historically, many researchers have attempted to understand the process of how persuasive communications influence consumer behavior. Several theories have been developed to describe this process. A popular approach to consumer behavior was introduced in 1961, which was later named as the model of "hierarchy of effects" by Robert Lavidge and Gary Steiner. This model describes how an individual makes his/her purchasing decisions for a particular brand by going through a logical six-stage process toward the

purchase. Each step provides a foundation for the next step. The hierarchy of effects model is comprised of six steps, which are as follows (Figure 1):

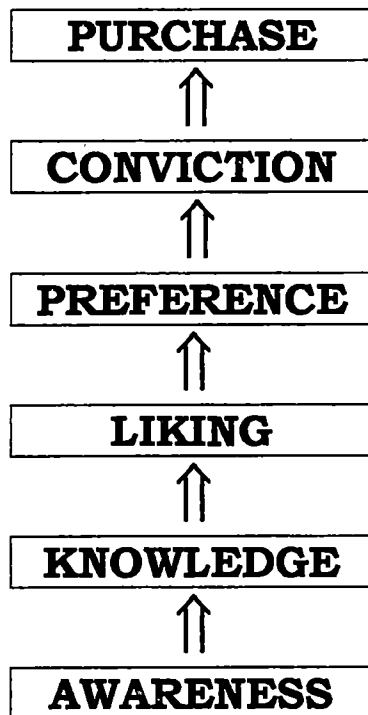
1. Awareness: occurs when the consumer is exposed to the advertisements.
2. Knowledge: occurs when the consumer goes one step further and acknowledges the usefulness of the information and considers the product as a potential solution.
3. Liking:
4. Preference:

Liking and preference are very closely related. They mean that the consumer evaluates the product and finds it, first, to be a satisfactory solution and second, to be the preferred solution.

5. Conviction: represents the outcome of the decision. After the decision, the consumer has the conviction to purchase the product or the consumer is motivated to buy the product.
6. Purchase: is the final step that corresponds directly to the response variable in the consumer decision process model.

The hierarchy of the effect model employs two assumptions. First, the consumer begins the process with a low level of conviction. By moving step-by-step through the entire process, the consumers become increasingly knowledgeable about the product and motivated to purchase a particular product. The final step is the consumer's action is the purchase of the particular product. The purpose of advertising is; then, to move consumers along the steps of the decision process, and of course, finally to produce sales.

**Consumer Decision
Making Process**



**Function of
Advertising**

- **Conative**
 - the realm of motive.
Ads stimulate or direct desire.
 - :
 - :
- **Affective**
 - the realm of emotions.
Ad change attitudes and feelings.
 - :
 - :
- **Cognitive**
 - the realm of thought.
Ad provide information and facts.

Figure1: Hierarchy of Effects & Function of Advertising

Three Functions of Advertising

According to the hierarchical model, Lavidge and Steiner (1961) suggested that people go through a hierarchical process when purchasing products, beginning with product awareness, then moving sequentially through knowledge, liking, preference, and conviction, to purchase. These six steps indicate three major functions of advertising:

1. Information or ideas – this refers to the first two stages, awareness and knowledge.
2. Favorable attitudes or feelings toward the product – this refers to the second two steps, liking and preference.
3. The acquisition of the product – this refers to the final two steps, conviction and purchase, that produce the action.

With relation to a classical psychology model, furthermore, the implicit purpose of these three advertising functions is to divide behavior into three components or dimensions:

1. The cognitive component – denotes the intellectual, mental, or “rational” states.
2. The affective component – denotes the “emotional” or “feeling” states.
3. The conative or motivational component – denotes the “striving” states, relating to the tendency to treat objects as positive or negative goals.

As Ray (1982) pointed out, this model cannot always reflect exactly how consumers will proceed in every situation. The usefulness of the model depends upon the level of involvement which consumers are involved with the purchasing decision. The study in 1983 by Petty, Cacioppo, and Schumann

demonstrated the moderating effect of involvement. They suggested that exposing-time to an advertisement and time period for making decision are to be taken into the consideration as well. Despite the cautions noted, the hierarchy of effect model still remains the most accepted model in understanding advertising effectiveness.

Measures of Advertising Effectiveness

Generally speaking, the term "advertising effectiveness" seems to have a variety of different meanings to different individuals. Advertising practitioners often define the term "advertising effectiveness" in terms of whether the cost of advertising is returned to the advertisers in the form of current or potential sales revenue (Wright-Isak, Faber, and Horber, 1997). Customarily, advertising practitioners tend to look at the impact on purchase behavior of such features as the length of an ad, the psycholinguistic structure of the language used in the copy, how illustrations relate to copy prints, or the numbers of nouns in the headline. That is, advertising practitioners want to know whether ads create enough impact to warrant their costs. Finally, the advertisers are also looking for the effectiveness of both profitability and accountability, that is, the explanation of how consumers go through the decision making process (Cook and Kover, 1997).

Since advertising is not the only variable influencing sales, it is very difficult to isolate advertising effectiveness on sales. Instead, academicians have interpreted the term "advertising effectiveness" within the structure of consumer decision making, such as understanding of attitude - attitude

change, and purchase intention. Addressing these differences in perspective, Cook and Kover (1997) suggested that these two groups, industrial and academician, should get together to better understand what advertising effectiveness really means.

Previous researchers employed several criteria simultaneously, such as awareness, memory, attitude, changes in attitude, and purchase intention to assess the effectiveness of advertising. The relative importance of each phase of these effects varies according to the objectives of the advertisement, the situation in which it is executed. Moreover, the effectiveness is cumulated over time and affects feelings, attitudes, and behaviors (Wright-Isak, Faber, and Horner, 1997).

Based on Lavidge and Steiner's (1961) three functions of advertising, the following measures of advertising effectiveness have been widely used in the literature. First, in measuring cognitive function of advertising, consumers' awareness and knowledge of brand and/or product have been studied. Regarding the affective function, the attitude toward advertising (Aad) and the attitude toward brand (Abrand) have been studied, while purchase intention has been studied in conative dimension.

Awareness and Knowledge

Many researchers have accepted that memory plays an important factor in consumer decision making process (i.e. Bettman, 1979; Duke, 1995). As the hierarchy-of-effect model tries to explain the specific assumption about how the consumers' transition from memory-defined awareness leads to purchasing

behavior. When consumers receive information from the advertisement, it means that they are starting to create an awareness of the product/service. Consumer awareness has already been established, but yet they have not made a judgement about whether it will fulfill a need. As a result, consumers will retain and store that information (i.e. price, product/service features, performance etc.). At this point, consumers become knowledgeable. Therefore, they can utilize that information to go toward another stage, the so-called the "affective function."

The hierarchy-of-effect model suggests that advertisement should first generate the effect by increasing awareness, that is, the consumer who can remember and recall the ads. This should precede any effects on brand awareness, that is, the consumer's ability to recall or recognize the brand, within the product category, in sufficient detail to make a purchase (Percy and Rossiter, 1992). Then, affective response toward the ad and/or advertised brand will be developed. These responses would lead to changes in brand purchase intention (Duke, 1995; Percy and Rossiter, 1992). These researchers also pointed out that ad effects on both ad awareness and brand awareness would create a high correlation with sales.

Regarding brand awareness, Percy and Rossiter (1992) also noted that brand awareness is a "cued memory" and it also divides into two types depending upon the consumer's decision process: brand recall, where the brand name is to be remembered prior to the point of purchase, and brand recognition, where the brand name is to be recognized at the point of purchase.

Most importantly, when the need arises, these different types of brand awareness mean that different measures must be executed.

As Bettman (1979) and Krugman (1986) stated that the most common measurement of awareness for marketing analysis is "recall." More than likely, recall is the in same level in the hierarchy-of-effect as does recognition (cognitive stage), but it involves more rigor.

However, only the measurement of awareness may not "justify the conclusion about affect, behavior, or behavioral intent" (Henke, 1995). Thus, this study also employs the affective dimension in order to justify consumers' purchase intention.

The Attitude Toward the Advertisement (Aad)

The growing body of empirical studies in marketing and advertising today has paid much attention to the attitude towards the advertisement. As Percy and Rossiter stated in 1992, "Probably no other topic has stimulated as much research interest as the concept of attitude toward the ad" (p.5).

In 1968, Bauer and Greyser were the first two researchers to examine the attitude towards advertising in a systematic manner. In their study, *Advertising in America: The Consumer View*, they found that 41% of the American people had a favorable attitude toward advertising, 14% had an unfavorable attitude towards advertising, and 42% were either "mixed" or indifferent.

Later on, in 1975, Fishbein and Ajzen proposed their idea that attitudes consisted of a unidimensional affect, based on component beliefs using an "expectancy-value" measure. However, many studies by Lutz and his colleagues

(i.e. Lutz, 1985; MacKenzie, Lutz, and Belch, 1986) have argued that attitudes are not unidimensional, but they consist of two different components, an "affective" and a "cognitive" (multidimensional) one. Consistent with the study of Petty et al. (1983), these researchers have viewed Aad as potentially influenced through both central and peripheral processing mechanisms.

The underlying assumption discussed above is supported by Percy and Rossiter (1992) and Shimp (1981). They noted that Aad is comprised of two relatively distinct dimensions, cognitive (non-emotional) and emotional. In the cognitive dimension, consumers form attitudes toward the advertisements by consciously processing executional elements. For example, a consumer may like a particular ad because it employs a humorous execution, like another ad because it uses an attractive endorser, but dislike the third ad because "it is perceived as too clever." Alternatively, an attitude toward the ad may result merely because the ad evokes an emotional response, such as a feeling of boredom, anxiety, joy, or sorrow, without any conscious processing of executional elements. These two differences are more likely to appear to generate different impact on consumers due to the different underlying mechanism, "one a conscious process and the other non-volitional". To this extent, researchers need to better understand these two differential effects.

Some of the important issues that relate to Aad are: the concept of attitude towards the ad, factors influencing the Aad, and the consequences/effects of Aad, including attitude toward the brand (Abrand) and purchase intention.

Specific to the framework provided by many researchers, the attitude towards the advertisement in this study was defined as:

A predisposition to respond in a favorable or unfavorable manner to a particular advertising stimulus during a particular exposure occasion. Under this conceptual definition, attitude towards advertising is comprised solely of affective response to the advertisement stimulus...
(Lutz 1985, p.46)

Consistent with the study of Madden, Allen, and Twible (1988), their suggestions are focused on the affective dimension where they stated that "affective reactions are more spontaneous and are the dominant response evoked by ads in nature setting" (p.249).

Aad can be developed based on various components of the advertising stimuli, including the contents of the ad copy (brand attribute information), the headline, the use of appeals (the creative part), and image of the ad or pictures (Bichal, Stephens, and Curlo, 1992). Some researchers found that the advertised brand could be influenced by using visual (i.e. pictures) (Batra and Ray, 1986; Gresham and Shimp 1985; Mitchell and Olson, 1981; Rossiter and Percy, 1980), where Mitchell (1986) has argued that Aad should be based on the entire ad, not just on the picture.

Aad may be influenced by one or more factors inherent in the ad processor. These factors may include credibility – that is, how truthful or believable the receiver perceives the ad's claims to be (Lutz, 1985), or the use of communicator attractiveness. Bloch and Richins (1992) and Solomon, Ashmore, and Longo (1992), for example, observed the relationship between communicator attractiveness and Aad. They found that the more attractive the

communicators are, the better the Aad will be influenced (Baker and Churchill, 1977; Joseph, 1982). Other important characteristics are ad content (Batra and Ray 1986) and the relationship between role portrayals and individuals' role orientation. For example, the study in 1987 on role portrayals related to individuals' role orientation by Leigh, Rethans, and Whitney stated that when role portrayals and individuals' role orientation are consistent, Aad tends to be more positive.

In particular, the consistency between endorser race and receiver race has been shown to influence Aad. Pitts, Whalen, O'Keefe, and Murray (1989) and Qualls and Moore (1990) found that ads featuring blacks were evaluated more positively by blacks while whites responded more favorably to ads featuring whites.

Addition to "overall liking" of the ad, Aad has been also defined in terms of liking of specific aspects of the ad (i.e. its executional elements, verbal copy claims, nonclaim-related material). Thus, the common measures of Aad typically rest upon the individuals' conscious self-reports of affect and/or cognition toward overall ad or toward specific ad elements. Numerous studies (i.e. Burke and Edell, 1989; Gresham and Shimp, 1985; Mitchell, 1986; Percy and Rossiter, 1992) have reported that "liking" an ad can be used as a strong predictor for evaluating the effectiveness of advertising. Therefore, interest in Aad has increased because advertisers believe that a "likable" ad can create a favorable consumer impression that may be result in a long-term competitive advantage for the advertised brand (Gresham and Shimp, 1985; Mitchell, 1986). Some researchers have proposed that attitude toward the ad (Aad), an affective

construct representing consumers' feelings of favorability/unfavorability toward the ad itself, is a mediating influence on brand attitude and purchase intention (Mitchell and Olson, 1981; Shimp, 1981; Tsal, 1985). The more likable an ad is, the more likely the audiences is to have favorable attitude toward the brand and to buy the advertised products.

The Attitude Toward the Brand (Abrand)

Shimp (1981) pointed that once the receivers have the appropriate degree of attention devoted to an advertisement, the processing strategy will be formed and used by those receivers in order to actively process advertising information so as to form an overall evaluation of the advertising brand. In addition, a work of Batra and Ray (1986) claims that affective response to ads contributes to the effect of the ad on Abrand. To date, many researchers have studied the influence of attitude toward ad (Aad) on the formation of brand attitude (Abrand) (i.e. Gardner, 1985; Mitchell and Olson 1981; Shimp, 1981). Rossiter and Percy (1997) defined the term attitude toward the brand as an outcome of the perceived benefits conferred by the brand, and benefits are the satisfaction of needs/wants. Simply said, attitude toward the brand is the extent to which buyers expect the brand to satisfy their particular needs. To the extent that buyers do have such expectations, attitude spurs their intention to buy the brand.

Many empirical studies support the idea that the attitude toward the ad can influence the attitude toward the brand and then lead to purchase intention. MacKenzie, Lutz, and Belch (1986) found that Aad could work as a

"mediator" in influencing the attitude toward the brand and purchase intention. It is commonly known that most advertisements contain verbal and visual elements. Thus, the main objective of the advertisements seems to be designed to either trigger an emotional reaction or portray visually the typical users of the brand (Mitchell, 1986). A study in 1985 by Gresham and Shimp investigated how television commercials for supermarket products (such as soft drink) influenced the audiences' attitude toward the ad. They found that a favorable attitude toward the ad does influence attitude toward the advertised brands. As an extension of Gresham and Shimp's (1985) research, Mitchell (1986) also supported the idea mentioned above that affect laden-photographs evaluated positively gave more likable attitudes toward the advertisements and brand attitude than any that were evaluated negatively.

Purchase Intention (PI)

As discussed previously, there is a link between purchase intention and attitude. Evidently, various studies (i.e. MacKenzie, Lutz, and Belch, 1986; Mitchell and Olson, 1981; Shimp, 1981; Tsal, 1985) have found that individuals' attitudes towards an ad may have a strongly direct effect on behavioral/purchase intentions: positive Aad tends to generate a strong motivation to buy the advertised product (Muehling and McCann, 1993).

A 1975 study of the attitude-behavioral relationship by Ryan and Bonfield noted that purchase intention is highly related with product attitudes. Therefore, the intention to buy can be defined as a mental state, which occurs right after ones' attitude toward the ad has been established, and attitude

toward the brand has already been judged. This intention then influences the buyers' plan to buy some specified or unspecified number of units of a particular brand in some specific or unspecific time period. The Moore and Hutchinson's (1983) research noted that advertising effectiveness was significantly related to increase the likelihood of purchasing brands. Rossiter and Percy (1997) contend that advertising should encourage people to instruct themselves to buy. For direct response advertising, it is essential to generate a purchase intention. The supporting reason could be explained by the study of Batra and Ray in 1986 which suggests that affective reactions from exposure to the ad context could happen very fast and those reactions are highly spontaneous so that they can influence subsequent processing (Gardner, 1985). Advertisement triggered those feelings; therefore, they can potentially influence the evaluation of both advertisement and the advertised brand (Burke and Edell, 1989) and finally can cause the action - the intention to buy the advertised product.

In sum, applying the hierarchy of effect in this study, the primary focus is based upon the relationship between the affective response, which has been measured in terms of the consumers' attitudes toward an ad and a brand, and the conative response, which has been measured in terms of the purchase intention.

According to the hierarchy of effects, affective response moves forward after the cognitive response has already been established. Simply said, these individual responses will move forward to the affective stages, the liking and preference stages in the hierarchy of effects. The response measured here is the

consumer's attitude toward the advertisement and the product. The rationale behind these measurements is that a favorable attitude toward the ad and product means that a person will be more likely to buy the advertised product. Up to this point, these individuals are already in the so-called conative stage, which involves the conviction and purchase stages in the hierarchy of effects. The response measured in this stage is the action that people take as a result of advertising. However, the actual purchase of the product is very hard to measure, and instead, purchase intention will be employed in this study.

INFLUENCING FACTORS

Both advertising stimuli and characteristics of the receivers can influence advertising effectiveness. The message, media (i.e. television, newspaper, etc.), and other characteristics of the advertising stimuli influence its effectiveness. Since advertisement is designed to persuade a target audience to act in a desired way, the individual can be influenced by the message contained in the ad (Mitchell, 1986). Media is another influencing factor of advertising effectiveness. Thus, advertisers often try to measure the advertising effectiveness of their messages by conducting audience research to find out which media are read and which television programs are viewed.

More interestingly, it is evident that marketers and advertisers have utilized the basic strategy, that is, choosing the product endorsers who share their similarity to the target audience (i.e. same race, same age etc.). This practice has been continued over years and has warranted the attention of both marketing and advertising practitioners in order to share their belief that a

communicator's character has a significant effect on the persuasiveness of the advertisement. The primary focus in this research is to investigate the impact of endorsers, especially the ethnicity of endorsers on advertising effectiveness in particular.

Ethnic Endorsers

The majority of research today on ethnic endorsers has been intensively studied on African-Americans (Cohen, 1992). Over the past two decades, a few researchers (i.e. Tolley and Goett, 1971; Schlinger and Plummer, 1972) have investigated African-Americans' and Caucasian-Americans' perceptions of advertisements that employed an all-black cast, and all-white cast, and a so-called "integrated" cast (blacks and white appearing together). Tolley and Goett (1971), for instance, studied white as well as black reactions to the use of black models, particularly in print (newspaper) advertisements. They found that black consumers reacted more favorably to advertisement with all-black models and to "integrated" advertisement. Surprisingly, most whites' responses were neutral to blacks appearing in the newspaper advertisement. Until now, their implication has been widely used by many retail newspaper advertisers to utilize more of black models in the print ad. Prior research also found that the percentage of television commercials with black models increased from 5% to 11% between 1967 and 1969. Since then, researchers have continued to use black models on television and pay more attention on black portrayal in print media (Pitts, Whalen, O'Keefe, and Murray, 1989; Qualls and Moore, 1990; Schlinger and Plummer, 1972; Tolley and Goett, 1971). Consistent with the

study of Wilkes and Valencia (1989), they found that television commercials featuring black models continue to grow and are more likely to be "integrated."

The portrayal of Hispanics in the mass media has been the focus of many studies. The analysis of Hispanics in print advertising in 1983 by Czepiec and Kelly found only three in a sample of 206 ads featuring live Hispanic models. In a more recent analysis, Wilkes and Valencia (1989) reported that only 6% of television commercials included Hispanics, but mainly in background roles.

While African-Americans and Hispanics certainly form important minority segments, another racial minority group is becoming an increasingly attractive market segment in the United States – the Asian-American market. As the fastest growing minority group, Asian-American models have been widely used in mass media advertising. In a 1992 study on ethnic-representation related to product category, Cohen reported that white consumers reacted favorably to Asian models in ads promoting high-technology engineering products and those associated with Asian manufacturers. In addition, Asian models appear regularly in business settings, but are seldom appeared in other settings, and Asian models are depicted frequently as coworkers of other models in the ad but are seldom seen in family or social settings. These findings are consistent with Taylor and Lee's (1994) recent research. Taylor and Stern (1997) also found that Asian models are overrepresented in terms of population (3.6%), appearing in 8.4% of the commercials. Although a vast empirical study related to this issue has been conducted intensively in the past decade, the true understanding is still far from complete.

Consumer Characteristics

The United States is becoming more ethnically heterogeneous. This is due, in the most part, to high level of Asian and Hispanic immigration. Both of these ethnic groups have brought their own languages other than English, as well as culturally bound attitudes, values, norms, and behaviors. Some of these cultural differences may be expressing in terms of purchasing behavior (O'Guinn, Lee, and Faber, 1986). As can be seen, the three major ethnic minorities in the United States are African-Americans, Hispanics, and Asian-Americans. One of the most important factors which differentiate ethnic minorities is their acculturation. Another consumer characteristic which may affect consumers' attitude toward the advertisements is the consumers' skepticism of advertising.

Acculturation

During the 20th century, the term "acculturation" has been used as a reference to what may be considered one of the "most elusive, albeit ubiquitous, constructs in the behavioral sciences" (Olmedo, 1979, p. 1061). Olmedo also pointed out that the majority of the previous studies on acculturation in the United States involved with the acculturation of American Indians to European culture. For example, Siegel (1955) collected and abstracted "all the major empirical studies reported by anthropologists in the setting of North America which are of importance in analyzing the process of sociocultural change under conditions of cultures in contact." The objectives of acculturation research have

gradually but continually moved from pure anthropological perspectives (Keesing, 1953) toward establishing valid indices of the levels of acculturation, its antecedents, and its consequences. In 1954, the members of the Social Science Research Council's Seminar (SSRC) described the phenomenon of acculturation related to its terms and concepts as

...the culture exchange that is initiated by the conjunction of two or more autonomous cultural systems. Acculturative change may be the consequences of direct cultural transmission; it may be derived from noncultural causes...it may be delayed ...or it may be a reactive adaptation of traditional models of life. Its dynamics can be seen as the selective adaptation of value systems, the process of integration and differentiation, the generation of developmental sequences...

(p. 974)

More explicitly, referring to the context of acculturation in the United States, acculturation is a process that deals with changes in cultural patterns of the ethnic group to those of American society (Gordon, 1964). In other words, the process of acculturation is the process of having more of American manners (Weinstock, 1964). A study in 1997 by Ownbey and Horridge, the term "acculturation" was defined as the "process of learning and adopting culture traits, different from ones with which the person was originally reared" (p.3). The previous study in 1980 by Cueller, Harris, and Jasso noted that acculturation may be considered as "a multifaceted phenomenon." They also noted that acculturation is composed of various dimensions, factors, constructs, or subcomponents. Not only cognitive and behavior characteristics such as languages, cultural customs, and practices but values, ideologies, beliefs, and attitudes are also fundamental components of acculturation.

In sum, acculturation has been defined using primarily two perspectives: as the process of "acquiring the customs of an alternate (non-native) society" or as the process of "incorporating the customs from alternate and native societies" (Mendoza, 1989, p.372). Lee (1993) mentions that the process of acculturation is basically dealt with three fundamental components: culture, contact, and change.

The important aspect of culture when dealing with acculturated individuals is simply noted as dichotomies. That is, these acculturated individuals are beginning to adopt of both the subjective and objective aspects of culture of the host group (Triandis, Kashima, Hui, Lisansky and Marin, 1982). Subjective culture refers to the nonmaterial elements such as norms, roles, belief systems, laws, and values; objective culture refers to the material aspects of the culture such as tools, foods, and material products. When discussing the acquisition of the acculturation process, one has to keep in mind that, during the combining process, "one culture is held or considered constant for observing the progress of cultural change, even though we know that immigrants affect the mainstream as well as vice versa" (Lee, 1993, p. 384-385).

The process of acculturation involves the interaction of two or more cultures. In addition to the contact between cultural groups, which can be either physical or symbolic, the nature and the duration of contact will, of course, determine the amount of impact contact has on acculturation. In a general sense, it can be said that the greater the duration the greater the impact. Regardless of types of contact, either consciousness or unconsciousness, some changing aspects in cultural pattern are more likely to

occur. It may be confrontation, adaptation, or a combination of both (Lee, 1993). Due to the differences in the culture of origin, the impact of acculturation on ethnic groups is different. Differences in culture of origin mean that people are more likely to experience different aspects of American society, see them in different ways, and use these interpretations of their own experiences for different ends (Glazer and Moynihan, 1970, 1975).

Based on the definition of acculturation as discussed previously, it indicates that adaptation to the host culture is the key to acculturation regardless of the individuals' acculturation level. Contrary to general thought, however, the process of acculturation is multidirectional (i.e. toward the culture of residence). Various elements of the subjective culture undertake different dimensions of acculturation. In 1986, Triandis, Kashima, Shimada, and Villareal proposed the theoretical framework of acculturation for understanding the process of acculturation. The theory postulates three main routes by which the acculturation may exert influence on individuals:

1. *Accommodation*: As the individuals move from the culture of origin to the host culture, they are assumed to adopt some cultural patterns of the host culture because they want to be part of new culture and/or regard new country as their permanent home (Berry, 1986). This new home country may offer better opportunities and/or interesting lifestyle. Thus, these acculturating individuals tend to move toward the norms of majority to become more and more like their "counterparts in the host country." This is the most used route postulated by most acculturation scholars.

2. *Overshooting*: This occurs when acculturating individuals extremely involve and adopt so many cultural patterns of the host culture. Situations that require readily observable actions are most likely to induce this type of consequence (Lee, 1993). These acculturating individuals tend to disassociate themselves from their culture of origins (Berry, 1980) and immediately adopt the host culture. This phenomenon is likely to occur in the second generation.

3. *Ethnic Affirmation*: This occurs when the acculturating individual still wants to maintain their own languages and heritages rather than to meld into a host cultural mainstream. Possibly, ethnic affirmation takes place with elements of the subjective culture reflecting on either attitudinal or perceptual dimensions. Simply said, these acculturating individuals are likely to retain their original culture's values and reject host culture's values, norms, and behaviors. Empirical evidence in support of the model has found by Stayman and Deshpande (1989), the result indicating that the situational context in which behavior takes place might be an important factor affecting the concept of ethnicity. Lee (1993) suggested that "in order to draw a complete picture for the process of acculturation, it is necessary to include both the culture of origin and the culture of residence in the study of acculturation" (p. 385).

Factors Affecting Acculturation

It has been widely accepted that the acculturation factor is very important to understand the concept of ethnicity. There is no major finding indicating the standardized method by which to define or assign levels of acculturation. It is insufficient to measure acculturation with a single variable,

such as language, food, or even "with a cluster of highly correlated variables." The reason is that acculturation is multidimensional. Instead, it is important to incorporate multiple items that sample and measure relatively orthogonal dimensions of acculturation (Mendoza, 1989).

There is common agreement among researchers of acculturation that generation is an important variable affecting the acculturation level. Partially, the second and the third generation of the minority groups who were born in the United States have greater opportunity to learn the American way of life than their parents did. However, this approach does not take into account the length of enculturation in the original ethnic culture. More specifically, Penaloza (1994) indicates that the first generation who came to the United States as adults were more likely to accustom to their original culture and typically resisted assimilation of their own cultures into American society than those who came to the United States at an earlier age. In summary, the age and length of stay in the United States should be considered when measuring the acculturation level, particularly, the individual's length of residence in the United States.

Many studies report that language use for different situations (i.e. at home, at work, among friends) is another strong factor contributing to the individual's level of acculturation. Deshpande, Hoyer, and Donthu (1986) state that immigrants who speak their native language at all times are more likely to retain and to interactively reinforce their own culture. Evidently, new immigrants of a different language of origin usually have difficulty in speaking a

host language in order to communicate with others either at work or in social interaction.

Mass media, especially advertising, is also served as another factor, which is highly related to acculturation level. Past research indicates that immigrants spend more time on television as a knowledgeable source to learn how people live, to provide some perspectives on how important issues and events relate to them as individuals, and to offer explanations on things already experienced (Choi and Tamborini, 1988). Lee (1993) also pointed out that advertising not only conveys most images, but also provides much about values for multiple types of consumption activities. Without advertising, it would be impossible for any consumers to receive information about products when making decisions. She also stated that the advertising goal is to "portray for the audience a desirable way of life that is mainly consumption based. The focus is usually on consumer products and what they can do for the individual, either functionally or symbolically" (p. 386).

In addition, the language use in media is also expected to have an influence on the individual's acculturation level. When immigrating consumers first come to a new country, they may exhibit either poor or rich consumers of new country media. Specific to the context of acculturation in the United States, for example, these new immigrants may be initially attracted to ethnic media. As they stay longer, however, their language ability is likely to improve and they tend to be less restricted to consuming only ethnic media (Lee and Tse, 1994), and they may exhibit a stronger media preference through English (host media). Furthermore, since individuals may have different media

preferences (i.e. some consumers may or may not like watching TV., whether it is American or ethnic), the amount of exposure to different American media sources versus ethnic media source also warrants consideration in understanding the acculturation level.

Understanding that the emphasis on either the social image or individual image associated with products to assert self-identity and satisfy role performance is a consumer phenomenon (Lee, 1993); however, a study to date of the relationship between levels of acculturation and attitudes toward the use of advertising stimuli, especially the ethnic endorser, has not yet received much attention by researchers.

HYPOTHESIS

As discussed in the literature review, the consistency between the ethnicity of endorser and receiver has been proposed to influence advertising effectiveness (Pitts, Whalen, O' Keefe, and Murray, 1989; Qualls and Moore, 1990; Tolley and Goett, 1971; and Schlmgger and Plummer, 1972). The following hypotheses are developed:

H1.1: Asian-Americans (i.e. Chinese-, Japanese-, and Korean-American) are more aware of the advertisement endorsed by their own ethnic (Asian) models than Caucasian models.

H1.2: Asian-Americans (i.e. Chinese-, Japanese-, and Korean-American) have a more favorable Aad toward their own ethnic (Asian) models than Caucasian models.

H1.3: Asian-Americans (i.e. Chinese-, Japanese-, and Korean-American) have a more favorable Abrand toward their own ethnic (Asian) models than Caucasian models.

H1.4: Asian-Americans (i.e. Chinese-, Japanese-, and Korean-American) are more likely to buy the advertised products that feature their own ethnic (Asian) models than advertised products that feature Caucasian models.

Among Asian Americans, there is a diversity in the level of acculturation, which mediates how strongly they perceive themselves to belong to a specific ethnic group, and the level of acculturation is expected to mediate the impact of the ethnicity of endorser on advertising effectiveness. The following hypotheses are developed:

H2.1: Asian-American who are less acculturated are more aware of advertisement endorsed by their own ethnic (Asian) models than Caucasian models compared to Asian-American who are more acculturated.

H2.2: Asian-American who are less acculturated have a more favorable Aad toward their own ethnic (Asian) models than Caucasian models compared to Asian-Americans who are more acculturated.

H2.3: Asian-American who are less acculturated have a more favorable Abrand toward their own ethnic (Asian) models than Caucasian models compared to Asian-Americans who are more acculturated.

H2.4: Asian-American who are less acculturated are more likely to buy the advertised products that feature their own ethnic (Asian) models than advertised products that feature Caucasian models compared to Asian-Americans who are more acculturated.

Due to the differences in culture and value systems which lead to distinct consumer behavior among them, the differences in the ethnicity among Asians (Chinese vs. Japanese vs. Korean) are also explored in this study. It is further hypothesized that:

H3.1a: Chinese-Americans are more aware of advertisement endorsed by their own ethnic (Chinese) models than Caucasian models.

H.3.2a: Less acculturated Chinese-Americans are more aware of advertisement endorsed by their own ethnic (Chinese) models than Caucasian models.

H3.1b: Chinese-Americans have a more favorable Aad toward their own ethnic (Chinese) models than Caucasian models.

H3.2b: Less acculturated Chinese-Americans have a more favorable Aad toward their own ethnic (Chinese) models than Caucasian models.

H3.1c: Chinese-Americans have a more favorable Abrand toward their own ethnic (Chinese) models than Caucasian models.

H3.2c: Less acculturated Chinese-Americans have a more favorable Abrand toward their own ethnic (Chinese) models than Caucasian models.

H3.1d: Chinese-Americans have are more likely to buy the advertised products that feature their own ethnic (Chinese) models than advertised products that feature Caucasian models.

H3.2d: Less acculturated Chinese-Americans are more likely to buy the advertised products that feature their own ethnic (Chinese) models than advertised products that feature Caucasian model.

H4.1a: Japanese-Americans are more aware of advertisement endorsed by their own ethnic (Japanese) models than Caucasian models.

H4.2a: Less acculturated Japanese-Americans are more aware of advertisement endorsed by their own ethnic (Japanese) models than Caucasian models.

H4.1b: Japanese-Americans have a more favorable Aad toward their own ethnic (Japanese) models than Caucasian models.

H4.2b: Less acculturated Japanese-Americans have a more favorable Aad toward their own ethnic (Japanese) models than Caucasian models.

H4.1c: Japanese-Americans have a more favorable Abrand toward their own ethnic (Japanese) models than Caucasian models.

H4.2c: Less acculturated Japanese-Americans have a more favorable Abrand toward their own ethnic (Japanese) models than Caucasian models.

H4.1d: Japanese-Americans are more likely to buy the advertised product that features their own ethnic (Japanese) models than the advertised products that feature Caucasian models.

H4.2d: Less acculturated Japanese-Americans are more likely to buy the advertised products that feature their own ethnic (Japanese) models than the advertised products that feature Caucasian models.

H5.1a: Korean-Americans are more aware of advertisement endorsed by their own ethnic (Korean) models than Caucasian models.

H5.2a: Less acculturated Korean-Americans are more aware of advertisement endorsed by their own ethnic (Korean) models than Caucasian models.

H5.1b: Korean-Americans have a more favorable Aad toward their own ethnic (Korean) models than Caucasian models.

H5.2b: Less acculturated Korean-Americans have a more favorable Aad toward their own ethnic (Korean) models than Caucasian models.

H5.1c: Korean-Americans have a more favorable Abrand toward their own ethnic (Korean) models than Caucasian models.

H5.2c: Less acculturated Korean-Americans have a more favorable Abrand toward their own ethnic (Korean) models than Caucasian models.

H5.1d: Korean-Americans are more likely to buy the advertised products that feature their own ethnic (Korean) models than the advertised products that feature Caucasian models.

H5.2d: Less acculturated Korean-Americans are more likely to buy the advertised products that feature their own ethnic (Korean) models than the advertised products that feature Caucasian models.

CHAPTER 3

RESEARCH METHODOLOGY

This chapter discusses the methodology in the following areas: 1). population and sample, 2). research design and procedure, and 3). the selection of advertising stimuli presented. The discussion of variables and measurements are discussed. Finally, the analytical procedure and pretest are presented.

POPULATION AND SAMPLE

Population

The three ethnic subgroups selected for this study were Chinese-, Japanese-, and Korean-Americans who are 18 years and older: (i) born in their country of origin (i.e. first generation) who are now living in the United States, or (ii) born in United States (i.e. second or third generation). These three ethnic subgroups were chosen because they still remain the three largest subgroups; particularly, Korean is one of the three fastest growing subgroups among others (New York Times, 1991). Visitors and travelers who stay in the United States temporarily were not included. Additionally, Filipino and Asian Indians were not chosen because of their long-casting ties with American culture and the common use of English in their home country (Kang, Kim, and Tuan, 1996).

Sample

Although the geographical location was a very important factor in sample design, a convenience sampling procedure was employed in this study. Specifically, Chinese-, Japanese-, and Korean-Americans were approached in several areas in Knoxville, Tennessee where these ethnic groups frequently visited. These areas were oriental groceries, churches, and married student housing. The number of subjects in this study consisted of 197 Asian-Americans in total, directed almost equally across three ethnic groups (66 subjects for Chinese-American, 65 subjects for Japanese-American, and 66 subjects for Korean-American) (Table 1).

RESEARCH DESIGN AND PROCEDURE

Research Design

The study employed a simple experimental design, consisting of experimental advertisements using Asian models and advertisements (the same advertisements) using Caucasian models. This study looked at Asian-American consumer awareness of an ad (recall and recognition of the brand), attitude toward the ad (Aad), attitude toward the brand (Abrand), and purchasing behavior related to levels of acculturation.

To conduct a simple experimental design, the sample was broken down into three different subgroups, Chinese-, Japanese-, and Korean-Americans. Each subgroup was given an advertising booklet consisting of either an ad with

Table 1 Sample Profile

Demographic Variables	All			Chinese			Japanese			Korean		
	Frequency	Percentage		Frequency	Percentage		Frequency	Percentage		Frequency	Percentage	
Gender												
♦ Male	90	45.7%		32	48.5%		29	44.6%		29	43.9%	
♦ Female	107	54.3%		34	51.5%		36	55.4%		37	56.1%	
	197	100.00%		66	100.00%		65	100.00%		66	100.00%	
Marital Status												
♦ Single/ never married	124	63.0%		47	71.2%		42	64.6%		35	53.0%	
♦ Married/ living with partner	68	34.5%		16	24.3%		21	32.3%		31	47.0%	
♦ Divorced/ separated	3	1.5%		1	1.5%		2	3.1%		-	-	
♦ Widowed	-	-		-	-		-	-		-	-	
♦ Did not respond	2	1.0%		2	3.0%		-	-		-	-	
	197	100.00%		66	100.00%		65	100.00%		66	100.00%	
Age												
♦ Under 20	13	6.6%		5	7.6%		5	7.7%		3	4.5%	
♦ 20 -29	115	58.4%		46	69.7%		39	60.0%		30	45.5%	
♦ 30 -39	51	25.9%		10	15.2%		15	23.1%		26	39.4%	
♦ 40 -49	11	5.6%		2	3.0%		5	7.7%		4	6.1%	
♦ 50 -59	6	3.0%		2	3.0%		1	1.5%		3	4.5%	
♦ Over 60	1	0.5%		1	1.5%		-	-		-	-	
	197	100.00%		66	100.00%		65	100.00%		66	100.00%	
Education												
♦ Less than high school	5	2.5%		3	4.5%		1	1.5%		1	1.5%	
♦ High school or equivalent	38	19.3%		13	19.7%		11	16.9%		14	21.2%	
♦ Some college	34	17.3%		9	13.6%		19	29.2%		6	9.1%	
♦ Bachelor's degree	76	38.6%		21	31.8%		28	43.1%		27	40.9%	
♦ Graduate degree	44	22.3%		20	30.3%		6	9.2%		18	27.3%	
	197	100.00%		66	100.00%		65	100.00%		66	100.00%	

Table 1 Sample Profile (Continued)

Demographic Variables	All			Chinese			Japanese			Korean		
	Frequency	Percentage		Frequency	Percentage		Frequency	Percentage		Frequency	Percentage	
Family income												
♦ Less than \$20,000	39	19.8%		19	28.8%		4	6.2%		16	24.2%	
♦ \$20,000 - \$29,999	20	10.2%		10	15.1%		3	4.6%		7	10.6%	
♦ \$30,000 - \$39,999	32	16.2%		18	27.3%		8	12.3%		6	9.1%	
♦ \$40,000 - \$49,999	22	11.2%		5	7.6%		7	10.8%		10	15.2%	
♦ \$50,000 - \$74,999	34	17.3%		4	6.1%		15	23.1%		15	22.7%	
♦ \$75,000 or more	24	12.1%		1	1.5%		17	26.1%		6	9.1%	
♦ Did not respond	26	13.2%		9	13.6%		11	16.9%		6	9.1%	
	197	100.00%		66	100.00%		65	100.00%		66	100.00%	
Occupation												
♦ Student	122	62.0%		44	66.7%		39	60.0%		39	59.1%	
♦ Full -Time employee	51	25.9%		11	16.7%		22	33.8%		18	27.3%	
♦ Part -Time employee	4	2.0%		4	6.1%		-	-		-	-	
♦ Retired	1	0.5%		1	1.5%		-	-		-	-	
♦ Housewife	14	7.1%		3	4.5%		3	4.6%		8	12.1%	
♦ Unemployed	3	1.5%		2	3.0%		1	1.5%		-	-	
♦ Did not respond	2	1.0%		1	1.5%		-	-		1	1.5%	
	197	100.00%		66	100.00%		65	100.00%		66	100.00%	

Asian models (see Appendix A), or an ad with Caucasian models (see Appendix B) as well as unrelated advertisements (see Appendix C). The unrelated advertisements were presented in order to avoid raising respondents' sensitivity regarding the purpose of the experiment, which may have occurred if an advertising booklet consisted entirely of advertisements with Asian and Caucasian models (Cohen, 1992). In addition, the advertisements that showed any political advocacy messages were removed as well. Specifically, the product category in each ad was held the same because some product categories are more likely to lend themselves to acculturation than others.

Specifically, a 2 (ethnicity of endorser) x 2 (acculturation level) research design was used in this study, and approximately 50 subjects were assigned in each cell. The ethnicity of the endorser was operationalized as Asian (included Chinese (see Appendix A-1-1 to A-1-5), Japanese (see Appendix A-2-1 to A-2-5), and Korean (see Appendix A-3-1 to A-3-5)) and American (Caucasian) (see Appendix B). These models were selected based on the result of pretest that these endorsers had the same level of attractiveness as closely as possible. These selected endorsers include two Chinese models (see Appendix E-1-1 and E-1-2), two Japanese models (see Appendix E-2-1 and E-2-2), two Korean models (see Appendix E-3-1 and E-3-2), and two Caucasian models (see Appendix E-4-1 and E-4-2). The level of acculturation was using a median-split method.

Procedure

This experiment was conducted during a month-long time period in Knoxville and Maryville, Tennessee. The data were gathered through self-administered questionnaires given to the respondents in person by the researcher and his assistants. Some of advantages were noted: (i) to acquire better sampling control, (ii) to lower cost in data collection, (iii) to achieve a higher participation rate, and (iv) to have a shorter time period in data collection.

Two booklets were prepared for this study. The first 6-page booklet contains the introduction sheet and the advertising stimuli (advertisements) (see Appendix C & E) and the second 12-page booklet contains the questionnaire (see Appendix D). The advertising booklet was given to the subjects first. After the subjects had already viewed the advertising booklet, the researcher gave them the questionnaire booklet to complete. Each subject in a group was given the same questionnaire and advertisements (booklet).

SELECTION OF ADVERTISING STIMULI

Advertisements were chosen to meet several criteria. As a print medium magazine advertising was selected. Several reasons in selecting magazine advertisements were: (i) Asian-Americans appear to be more likely to be influenced by print advertisements compared to other ethnic groups (Cohen, 1992); (ii) print advertisements have been widely used by many earlier researchers as advertisement stimuli (i.e. Batra and Ray, 1986; Mitchell and Olson, 1981; Rossiter and Percy, 1980); (iii) print advertisements are cost

efficient; and (iv) print advertisements are easy to construct and administer during the data collection periods for this study.

The American advertisement was used in this study, without any culturally specific background, beside the text that is in English. The pictures of each ethnic model, particularly only their faces, appeared in the advertisement. One out of four ethnic models, Chinese, Japanese, Korean, and Caucasian, was selected.

The pictures of Asian models were obtained primarily from Asian-language magazines such as Chinese, Japanese, and Korean magazines. The pictures of Caucasian models were obtained from American magazines. In addition, the age of the models and the facial expressions were matched as closely as possible. Finally, cutting and pasting the pictures of the models, the product, and the copy to make the advertisements closely match each other in terms of visual and verbal context modified these advertisements.

Toothpaste was chosen for the product category. This product category was similar to that used in an earlier study on gender users and found no gender differences (Debevec and Iyer, 1986). More importantly, this product category seems to reflect the least cultural differences.

INSTRUMENT

As stated previously, two booklets were prepared for this study. Details are as follow:

1. The first booklet contains the advertising stimuli or the so-called advertisement booklet. The ad booklet contains four real magazine ads

that present unrelated products without a picture of a human model (see Appendix C). The other experimental ad presents the same product, massage, and format; except the ethnicity of the model was changed.

For the advertising booklet, each respondent in each ethnic group received the same advertising booklet, but different in ethnicity type of model. Chinese-American respondents received either an ad with Chinese models or an ad with Caucasian models. Japanese-American respondents received either an ad with Japanese models or an ad with Caucasian models. And also, Korean-American respondents received either an ad with Korean models or an ad with Caucasian models. None of these three ethnic respondents looked across the ethnic type of models, besides an ad with Caucasian models.

2. The second booklet contains the questionnaire (see Appendix D). First, subjects were asked to respond to the questions developed to measure the advertising effectiveness including awareness (recall and recognition), Aad, Abrand, purchase intention.

Followed by the next page is the questions related to subjects' level of acculturation. Then, subjects were asked to fill out their demographic information which is located on the last page of the questionnaire booklet.

MEASUREMENTS

Advertising Effectiveness

Four dependent variables were included in this study: awareness of the ad, attitude towards the advertisements (Aad), attitude towards the brand (Abrand), and purchase intention. It was manipulated through the use of visual imagery (Asian versus Caucasian models) in print advertisements. Rossiter and Percy (1980) noted that the use of visual content is capable of stimulating visual imagery, which are easier than words or music for the audience to internalize as a basis for personal imagery. The study in 1986 by Batra and Ray also suggested that visual imagery is one of the many ways to evoke affective reactions, the others being music, humor, and story element. Evidently, the use of visual imagery in advertisements can create favorable affective reactions toward the advertisements, and consequently, influence attitude towards the brand and purchase intention (i.e. Batra and Ray, 1986; Mitchell and Olson, 1981; Rossiter and Percy, 1980).

Although many researchers have shown considerable interest in developing multiple-item rating scales to mark immediate initial reactions to advertisements, a generalized instrument has not been developed to measure those reactions yet. Hence, in this study, the measurement scales for the attitude towards the advertisements, attitude towards the brand, and purchase intention were comprised of different individual previous studies.

Awareness

Awareness was measured in three ways: advertising recall, brand recall, and brand recognition. After viewing the last ad, subjects were asked to try to list all of product categories, which they just saw, from the ad booklet as well as the brand name of the product in that category. For a recognition test, the subjects were given descriptions of five product categories and were asked to select the correct brand name among five choices provided. These measures were adopted from previous studies by Petty, Cacioppo, and Schumann (1983) and Schumann (1984). These questions were summarized in Appendix D-1-1 and D-1-2.

Attitude Toward the Advertisement (Aad)

For Aad, the three 7-point semantic differential scales (bad-good, unattractive-attractive, and unpleasant-pleasant) and the three 7-point scales (dislike very much-like very much, not at all interested-very interested, and bored-excited) were used to measure the subjects' feelings toward advertisements. These scales were taken from previous studies by MacKenzie, Lutz, and Belch (1986), Mitchell and Olson (1981), and Schumann (1984).

Attitude Toward the Brand (Abrand)

For Abrand, the three 7-point semantic differential scales (bad-good, unsatisfactory-satisfactory, and unfavorable-favorable) were used to measure subjects' feelings toward the advertised brand. The scales were adopted from

previous studies by Gardner (1985), MacKenzie, Lutz, and Belch (1986), and Petty, Cacioppo, and Schumann (1983).

Purchase Intention (PI)

The measurement of the consumers' intention to purchase a product were measured by using four 7-point scales. Intention to purchase questions attempt to measure the outcome of the consumer's decision process before the purchase act is carried out. For purchase intention, these scales included the potential of "trying" (definitely would not try it-definitely would try it), "buying" (definitely would not buy it-definitely would buy it), and "seeking out" (definitely would not seek it out-definitely would seek it out), and (ii) a 7-point semantic differential scales on how likely the subjects want to use this advertised product if it will be available in that area (not at all likely -very likely). These scales were drawn from previous studies by Mitchell (1986), Baker and Churchill (1977), Petty, Cacioppo, and Schumann (1983), and Schumann (1984).

The reason for using these scales from many previous studies was that each of the studies cited showed high levels of reliability for the multiple-items scales used. Mitchell and Olson (1981) also suggested that using the multiple-scales will enhance the reliability of the important attitude measures. The procedure of evaluating reliability for those researches and this research as well was the estimation of coefficient alpha (Cronbach's alpha). Those previous researches showed high values of alphas indicating a reasonable reliability in

most situations. The questions concerning with Aad, Abrand, and purchase intention were summarized in Appendix D-1-3.

Acculturation

As discussed earlier, the acculturation is not a unidimensional construct, but a multidimensional construct. Thus, the measures of acculturation that rely on one variable of such measures are not enough to evaluate the individual's acculturation level.

In this study, the multiple item scale used to measure acculturation was adopted from the Donthu and Cherian study on the ethnic identification in 1994 and Lee's study on Asians' perception of advertising related to their acculturation level in 1993. According to Donthu and Cherian's (1994) research, the results indicated reasonable reliability and a plot of respondent strength of identification scores revealed two clearly separated modes in the distribution as well as the mean split created two distinct groups. Also, the result from acculturation scale on Lee's (1993) study showed both reasonable reliability and the interval consistency.

Nine major questions in this study were as follow:

- (1) and (2) These two scales were involved with the strength of Ethnic Identification which was operationalized as a self reported two item scale. First, the study asked subjects who identify themselves as Asians (as Hispanics in the case of Deshpande et al.'s Study), and then, to state also how strongly they identify with their self reported ethnic group. This method of identifying Strong or Weak Asians was

found to produce statistically more significant results than traditional methods such as “Hispanic sounding last-names” or “self identification of ethnic group alone” (Deshpande et al., 1986). These two questions were adopted from previous studies by Hirschman (1981) and Deshpande, Hoyer, and Donthu (1986).

- (3) and (4) The subjects were asked “how important was it to assimilate with the dominant (Anglo) culture?” and “how important was it for them to maintain identity with your own ethnic identity?” These two questions were taken from the previous studies by Berry (1980) and Mehta and Belk (1991). They both suggested the use of “need to assimilate the dominant population” and “need to maintain relationship with original culture” to measure the strength of ethnic identification.
- (5) The last question involved “how often they speak their mother language?” This question was borrowed from the previous study by Webster (1990). She noted that a Hispanic (Asian) is classified as a Strong Hispanic (Asian) if he/she speaks Spanish (mother language) all of the time and most of the time, and is classified as a Weak Hispanic (Asian) otherwise.
- (6) to (9) The last four questions in the acculturation scale, question #6 to question #9 were taken from the previous study on acculturation and advertising, in 1993, by Lee. These scales were operationlized and measured in terms of the ethnic composition of their neighborhood, acculturating individuals’ length of stay in the United

States, and their preference of media, specifically music and movie. As discussed earlier, the acculturation in this study was considered as the process where individuals from one cultural origin begin to assimilate both the subjective and objective aspects of their host culture from both direct and indirect contacts with various acculturating factors (i.e. the ethnic composition of their neighborhood, individuals' length of stay in the United States, and individuals' media preferences). The questions used to measure acculturation are presented in Appendix D-2

In order to obtain the acculturation score for each of the respondents, the following procedure was taken. First, the responses from questions #2 and #4 were reversed in order to have a consistent direction with other responses related to acculturation questions. Second, responses to each question were standardized. It was very important to standardize the responses because the acculturation scales employed in this study consist of 7-point and 5-point scales. Third, all standardized responses were summed as a proxy for the respondent's acculturation level.

Then, an acculturating individual was classified into two groups, low or high in acculturation using a median split for subsequent analyses. Those subjects with acculturation scores lower than or equal to the median were considered to be low-accultured Asian consumers, while those subjects with acculturation scores higher than the median were considered to be high-accultured Asian consumers. Ethnic consumers in the low acculturation

stage have retained their country's cultural values and have not yet adopted much of the cultural values of the host country. In contrast, ethnic consumers in the high acculturation stage have adapted to the cultural values of host society and have somewhat abandoned the cultural values of their country of origin.

Demographics

Consumer's demographic variables were also asked (see Appendix D-3). These information included: (i) sex, (ii) marital status (i.e. single/never married, married/living with partner, divorced/separate, and widowed), (iii) age (ranged from under 20 to over 60), (iv) level of education completed (i.e. less than high school, high school/or equivalent, some degree, Bachelor's degree, and graduate degree), (v) last year's total family income (ranged from under \$20,000 to over \$75,000), and (vi) employment status (i.e. student, part-time, full-time, retired, and housewives) (see Appendix D-3). This information was gathered to give an insight in determining how demographic variables influence individuals' level of acculturation.

PRETEST

The pretest was conducted in July of 1998. Twenty Chinese, Japanese, and Korean subjects, with all together 60 subjects, were recruited from church, ethnic groceries, married student housing and International House (I-House) in Knoxville, Tennessee.

The purpose of the pretest is to examine the level of the attractiveness of the endorsers so that the endorsers with the same level of attractiveness can be chosen for the final study. The understandability of the questionnaire is also examined.

On the average, it takes about 10 to 15 minutes for each respondent to finish the study.

The Attractiveness of Models: Manipulation Check

To assess the attractiveness of each endorser, three specific questions (question #2 in Appendix D-1-4) were asked. An average of responses to these three semantic differential scale questions was used as a proxy to the attractiveness of the endorser. An analysis of variance (ANOVA) and t-test were performed in order to compare the attractiveness. Among 20 endorsers, the attractiveness score varied from 2.56 to 5.33 with the standard deviation of 0.986 and the mean of 4.328. The ANOVA result indicates that the attractiveness of models is not significantly different ($F\text{-value}=1.62$, $df=19$, $p\text{-value}=0.0924$). However, the ad-hoc t-tests of the attractiveness of the 20 endorsers showed some statistical differences. Specifically, the attractiveness of endorsers #3, 7, 12, and 14 were found to be different from other models. As a result, the following models were employed in the final study. Caucasian models #1 and #4 were drawn from among five Caucasian models (see Appendix E-4-1 and E-4-2), Chinese models #3 and #4 were chosen from among five Chinese models (see Appendix E-1-1 and E-1-2), Japanese models #3 and #5 were picked from among five Japanese models (see Appendix E-2-1 and E-2-2), and Korean

models #3 and #4 were selected from among five Korean models (see Appendix E-3-1 and E-3-2). These selected models held almost the same level of attractiveness compared to their own ethnic group. The mean attractiveness scores for the models chosen for the final study are as follows:

Caucasian model #1 = 4.400	Caucasian model #4 = 4.44
Chinese model #3 = 4.583	Chinese model #4 = 4.667
Japanese model #3 = 4.222	Japanese model #5 = 4.667
Korean model #3 = 4.556	Korean model #4 = 4.444

These models were chosen from among the models whose attractiveness scores were not statistically different, and their mean attractiveness scores were most close.

The Acculturation Level: Manipulation Check

The respondent's level of acculturation was determined based on all the questions in section #2 (see Appendix D-2), except question #1 and #7. Two responses from question #2 and #4 were opposite in terms of the direction of acculturation, so that the responses to these two questions were reversed. Because both 7-point and 5-point scales are used, all the responses are standardized. The level of acculturation is then the sum of the standardized responses. The distribution of this level of acculturation is then examined.

It was found that the overall individual's acculturation level was normally distributed ($W:Normal = 0.978$) with a range of standardized scores from

-7.6958 through 8.6247 and having a median of -0.285. More specifically, the individual's acculturation level showed a normal distribution in student and non-student with the value of W:Normal of 0.977 and 0.86, respectively.

Then using the median split, the respondents were classified into two groups: low and high acculturated. The difference between student and non-student was examined using chi-square statistics and was found to be insignificant.

STATISTICAL ANALYSIS

In this study, the statistical computer software SAS was used to perform all statistical tests. First, manipulation checks in the final study for both attractiveness of models (using an analysis of variance -ANOVA and t-test) and the acculturation level were performed.

Secondly, to determine whether attitude and purchase intention scale scores were reliable, reliability test were performed in the final study as well.

Finally, awareness hypotheses were tested by using chi-square and Cochran-Mantel-Haenszel (CMH) statistics. The CMH statistics were performed to investigate a 2(the levels of acculturation) x 2(the ethnicity of models) x 2(Yes vs. No on three awareness measures) which test the association between the ethnicity of models (Caucasian vs. Asian) and awareness responses (Yes vs. No) after controlling the levels of acculturation (low vs. high). In order to investigate the differences among three ethnic subject groups (i.e. Chinese, Japanese, and Korean), moreover, the use of a multivariate analysis of variance (MANOVA) procedure was employed on the set of three groups of dependent variables,

attitude toward ad (Aad), attitude toward the brand (Abrand), and purchase intention (PI), with ethnic types of endorsers (i.e. American and Asian - Chinese, Japanese, and Korean) and the level of acculturation (i.e. low and high) as the independent variables. For all statistical tests reported in the next chapter, the .05 level of significance was used as a baseline.

CHAPTER 4

RESULTS

This chapter consists of the results of (i). manipulation check (ii). descriptive statistics and (iii). test of hypotheses. First, the attractiveness of all ethnic models (Caucasian, Chinese, Japanese, and Korean) was examined. Along with it, the normality of the distribution of acculturation for overall and within each ethnic group of respondents were investigated. Secondly, the reliability of the advertising effectiveness, attitude toward the advertisement, attitude toward the brand, and purchase intention, were reported. Finally, the profile of the sample and the results of hypotheses testing are presented.

MANIPULATION CHECKS

The Attractiveness of Models

Measures were taken to ensure that the manipulation of models' attractiveness was successful. The attractiveness of models was tested by having all the respondents respond to three 7-point scales indicating the respondent's perception of the models (see question #2 in Appendix D-1-4). As a proxy, the sum and the mean scores of three-item scales were calculated for the attractiveness of the models. The mean score across eight models varied from 4.00 to 4.73 with standard deviation of 1.16 and the mean of 4.40. Results of

an ANOVA indicated that the attractiveness of models was not significantly different ($F\text{-value}=1.03$, $df=7$, $p\text{-value} = 0.4147$) (Table2).

Based on the Table 2, these eight models held almost the same level of attractiveness (their mean attractiveness scores were close) (see Appendix E).

The Acculturation Level

The acculturation index was constructed based on the eight variables that were used to measure the level of acculturation of Asian respondents (see Appendix D-2). In this study, all variables were used to calculate individuals' level of acculturation (excluding question #1). Two responses from question #2 and #4 were reversed in order for all responses heading to the same direction.

Since the acculturation scale in this study employed different units of measurement (7-point and 5-point scale), the score for each variable (except

Table 2: Manipulation Check for Attractiveness of Model: A Mean Attractiveness of Model Across Ethnicity

Ethnicity of Model	Mean Attractiveness
Caucasian model #1	4.40
Caucasian model #4	4.54
Chinese model #3	4.33
Chinese model #4	4.73
Japanese model #3	4.08
Japanese model #5	4.73
Korean model #3	4.00
Korean model #4	4.14

question #1) was standardized before summing. All standardized scores were then summed together in order to obtain a composite score of acculturation for each respondent.

It was found that the overall individual's acculturation level was normally distributed, so was Chinese, Japanese, and Korean. More specifically, the individual's acculturation level was shown a normal distribution of both student and non-student for the overall sample with the value of W: Normal of 0.95 and 0.98, respectively (Table 3).

RELIABILITY

Attitude and Purchase Intention Scale

To ensure the reliability of the attitude and purchase intention instrument, Cronbach's alpha was calculated. Cronbach's alpha is a widely used measure for assessing the reliability of psychometrically developed scale

Table 3: Acculturation Level Across Ethnicity*

Variable	All	Chinese	Japanese	Korean
Mean	0	0	0	0
Median	-0.11	-0.28	0.12	-0.41
Std.	3.71	3.68	3.17	4.12
Range	-10.15 to 13.68	-7.22 to 11.99	-7.48 to 6.63	-9.87 to 13.33
W: Normality	0.99	0.97	0.97	0.97

*After standardization

(Peter, 1979). The range of the alpha coefficient is between 0 and 1, where 0 would indicate a completely unreliable test and 1 would indicate a completely reliable test. With no improvement possible by deleting any of the items, all respondents in this study had reliable response patterns with Cronbach's alpha of 0.96 on the 15 items, 0.93 on attitude toward the ad and attitude toward the brand scale, and 0.92 on purchase intention scale, respectively. Therefore, the attitude and purchase intention scales indicate an acceptable level of stability for the type of research conducted. Cronbach's alpha also suggests a high level of internal consistency among the items.

HYPOTHESES TESTING

Three major groups of hypotheses were investigated in the final study. The first group of hypotheses was designed to investigate whether the consistency between the ethnicity of endorsers and receivers influenced advertising effectiveness as measured by awareness, Aad, Abrand, and purchase intention.

The second group of hypotheses was to examine whether individuals' acculturation levels have mediated the impact of the ethnicity of endorser on advertising effectiveness as measured by awareness, Aad, Abrand, and purchase intention.

Finally, the impact of ethnicity of endorsers and receivers, and their interaction were further investigated for each ethnic Asian-American group (Chinese vs. Japanese vs. Korean).

Hypothesis H1.1, which states that Asian-Americans (i.e. Chinese, Japanese, and Korean) are more aware of the advertisement endorsed by their own ethnic (Asian) models than Caucasian models.

H1.1 was tested by assessing whether there was a significant difference between type of ethnicity of endorsers and receivers in terms of product recall, brand recall, and brand recognition.

Table 4: Chi-Square on Awareness Measurement (n=197)

Variance Source	Ethnicity of Model		p-value
	Caucasian	Asian	
Product recall	55%	60.8%	0.408
	n=55	n=59	
Brand recall	47%	53.6%	0.354
	n=47	n=52	
Brand recognition	83%	90.7%	0.109
	n=83	n=88	

Although the chi-square statistics (Table 4) indicate that there was no statistically significant difference depending on whether the advertisement was endorsed by Caucasian or their own ethnic (Asian) models on awareness measures (i.e. product category and advertised brand recall, and product recognition), Asian respondents tended to recall both product category and advertised brand when the advertisement was endorsed by their own ethnic (Asian) models than Caucasian models (see Table 4).

Therefore, H1.1 was rejected.

The results of ANOVA and MANOVA are presented in Table A (see Appendix F). The three dependent variables are attitude toward the ad, attitude toward the brand, and purchase intention. The independent variables include the ethnicity of models (Caucasian vs. Asian), acculturation levels (low vs. high), and the ethnicity of receivers (Chinese vs. Japanese vs. Korean). Results in Table A (see Appendix F) indicate that no significant main effects of the ethnicity of models, acculturation levels, and the interaction between the ethnicity of models and acculturation levels were found to enhance advertising effectiveness across three ethnic groups. The only main effect of the ethnicity of receivers was found significant difference (F-value=3.30, Wilks' lamda=0.87, p -value=0.0012).

Hypothesis H1.2 states that Asian-Americans have a more favorable attitude toward their own ethnic (Asian) models than Caucasian models.

The effect of the ethnicity of models was examined using ANOVA and MANOVA to answer hypotheses H1.2 through H1.4. As presented in Table A (see Appendix F), the effects of the ethnicity of models (Caucasian vs. Asian) on attitude toward the ad (Aad) was not significant. The Wilks' lamda also suggests that the effect of the ethnicity of models (i.e. Caucasian vs. Asian) was not significant (F-value=0.67, Wilks' lamda=0.99, p -value=0.6296). Therefore, H1.2 was rejected.

Hypothesis H1.3 states that Asian-Americans have a more favorable Abrand toward their own ethnic (Asian) models than Caucasian models.

Hypothesis H1.3 involved the effect of the ethnicity of models (i.e. Caucasian vs. Asian) on attitude toward the advertised brand (Abrand). Similar to what was found in testing hypothesis H1.2, results in Table A (see Appendix F) report that the effect of the ethnicity of models (Caucasian vs. Asian) on attitude toward the advertised brand (Abrand) was not significant. The Wilks' lamda also suggests that the effect of the ethnicity of models (Caucasian vs. Asian) was not significant. Therefore, H1.3 was rejected.

Hypothesis H1.4 states that Asian-Americans are more likely to buy the advertised products that feature their own ethnic (Asian) models than the advertised products that feature Caucasian models.

Still, hypothesis H1.4 involved the effect of the ethnicity of models (Caucasian vs. Asian) on purchase intention (PI). Similar to what was found in testing hypothesis H1.2 and H1.3, results in Table A (see Appendix F) report that the effect of the ethnicity of models (Caucasian vs. Asian) on purchase intention was not significant. The Wilks' lamda also suggests that the effect of the ethnicity of models (Caucasian vs. Asian) was not significant. Therefore, H1.4 was rejected.

The ethnicity of receivers (Chinese vs. Japanese vs. Korean) had significant effects across three dependent variables; Aad (F-value=7.43, df=1, p -value=0.0008), Abrand (F-value=8.18, df=1, p -value=0.0004), and purchase intention (F-value=11.02, df=1, p -value=0.0001) among the three ethnic Asian groups. Additionally, the Wilks' lambda suggests that the effect of the ethnicity of receivers was significant (F-value=3.30, Wilks' lambda=0.87, p -value=0.0012).

The second group of hypotheses was designed to examine whether individuals' acculturation levels have mediated the impact of the ethnicity of endorsers on advertising effectiveness as measured by awareness, Aad, Abrand, and purchase intention. Results were as follows:

Hypothesis H2.1 states that Asian-Americans who are less acculturated are more aware of the advertisement endorsed by their own ethnic (Asian) models than Caucasian models compared to Asian-Americans who are more acculturated.

Since these measures were dichotomous (0,1) and a 2 (levels of acculturation) x 2 (the ethnicity of models) x 2 (Yes vs. No on awareness measures) factorial design, a Cochran-Mantel-Haenszel (CMH) statistic analysis was employed to determine the effect of the ethnicity of models (Caucasian vs. Asian) and the effect of the acculturation levels (low vs. high) on awareness measurement (i.e. product and brand recall, and brand-name recognition). If any significant differences were found in CMH statistics, the chi-square test

was used to find the association between the ethnicity of models and three awareness measures (product and brand recall, and brand-name recognition) for each level of acculturation.

The CMH statistics (Table 5) report that no associations between the ethnicity of models (Caucasian vs. Asian) and product and brand recall regarding to respondent's acculturation level (low vs. high) were found. However, low-acculturating Asian-American respondents were more likely to recall the product category and brand-name on the advertisement which was endorsed by their own ethnic (Asian) models.

An association between the ethnicity of models and brand-name recognition regarding respondents' acculturation level was further examined.

To conduct further analysis, a chi-square test was employed. The chi-square statistics for each level of acculturation on brand recognition (Table 5.1)

Table 5: CMH-Test on Awareness Measurement (n=197)

Variance Source	Acculturation Level				CMH <i>p</i> -value
	Low-Acculturated		High-Acculturated		
	Caucasian	Asian	Caucasian	Asian	
Product Recall	44.2%	48.9%	66.7%	72%	0.466
	<i>n</i> =23	<i>n</i> =23	<i>n</i> =32	<i>n</i> =36	
Brand Recall	42.3%	46.8%	52%	60%	0.384
	<i>n</i> =22	<i>n</i> =22	<i>n</i> =25	<i>n</i> =30	
Brand Recognition	78.9%	93.6%	87.5%	88%	0.114
	<i>n</i> =41	<i>n</i> =44	<i>n</i> =42	<i>n</i> =44	

indicate that there was statistically significant difference on the association between the ethnicity of models and brand-name recognition among low-acculturated Asian-Americans (p -value=0.035).

Looking at Table 5.1, it appears that low-acculturating Asian-Americans were more likely to recognize the advertised brand when the advertisement was associated with their own ethnic (Asian) models than Caucasian models. Therefore, H2.1 was partially accepted.

Hypothesis H2.2 states that Asian-Americans who are less acculturated have a more favorable Aad toward their own ethnic (Asian) models than Caucasian models compared to Asian-Americans who are more acculturated.

Table 5.1: Chi-Square Test of Brand Recognition
($n=197$)

Variance Source	Acculturation Level					
	Low-Acculturated			High-Acculturated		
	C.	A.	<i>p</i> -value	C.	A.	<i>p</i> -value
Brand Recognition	78.6%	93.6%	0.035	87.5%	88.0%	0.940
	<i>n</i> =41	<i>n</i> =44		<i>n</i> =42	<i>n</i> =44	

Note: C=Caucasian, A=Asian

The interaction effect of the ethnicity of models and the respondent's acculturation level was investigated using ANOVA and MANOVA to answer the hypotheses H2.2 through H2.4. As presented in Table A (see Appendix F), the interaction effect of the ethnicity of models (Caucasian vs. Asian) on attitude toward the ad (Aad) was not significant. The Wilks' lamda also suggests that the interaction effect of the ethnicity of models and respondent's acculturation levels was not significant ($F\text{-value}=0.34$, Wilks' lamda=0.99, $p\text{-value}=0.8545$). Thus, H2.2 was rejected.

However, the nature of the interaction effect on Aad among Asian-American respondents can be explained more specifically in Figure 2.1 (See Appendix G). In terms of how much the ethnicity of models (Caucasian vs. Asian) have influenced for both low- and high-acculturated Asian-American respondents, differences among high-acculturated Asian-American respondents were not as strong as what was found for low-acculturated Asian-American respondents. For both low- and high-acculturated Asian-Americans, the impact of their own ethnic (Asian) models seemed to be stronger than the impact of Caucasian models.

Hypothesis H2.3 states that Asian-Americans who are less accultured have a more favorable Abrand toward their own ethnic (Asian) models than Caucasian models compared to Asian-Americans who are more accultured.

Hypothesis H2.3 involved the interaction effect of the ethnicity of models (Caucasian vs. Asian) and the respondent's acculturation levels (low vs. high) on attitude toward brand (Abrand). Similar to what was found in testing H2.2, results in Table A (see Appendix F) show that the interaction effect of the ethnicity of models and the respondent's acculturation levels on attitude toward brand was not significant. The Wilks' lambda also suggests that the interaction effect of the ethnicity of models and the respondent's acculturation levels was not significant. Therefore, H2.3 was rejected.

However, the nature of the interaction effect on Abrand among Asian-American respondents can be explained more specifically in Figure 2.2 (See Appendix G). In terms of how much the ethnicity of models (Caucasian vs. Asian) have influenced for both low- and high-acculturated Asian-American respondents, the low-acculturating Asian-American respondents were more likely to be influenced by their own ethnic (Asian) models as compared to high-acculturated Asian-American respondents. On the other hand, high-acculturated Asian-American respondents were more likely to be influenced by Caucasian models than their own ethnic (Asian) models.

Hypothesis H2.4 states that Asian-Americans who are less acculturated are more likely to buy the advertised products that feature their own ethnic (Asian) models than the advertised products that feature Caucasian models compared to Asian-Americans who are more acculturated.

Hypothesis H2.4 still involved the interaction effect of the ethnicity of models (Caucasian vs. Asian) and the respondent's acculturation levels (low vs. high) on purchase intention (PI). Similar to what was found in testing H2.2 and H2.3, results in Table A (see Appendix F) indicate that the interaction effect of the ethnicity of models and the respondent's acculturation levels on purchase intention was not significant. The Wilks' lambda also suggests that the interaction effect of the ethnicity of models and the respondent's acculturation levels was not significant. Therefore, H2.4 was rejected.

However, the nature of the interaction effect on purchase intention among Asian-American respondents can be explained more specifically in Figure 2.3 (See Appendix G). In terms of how much the ethnicity of models (Caucasian vs. Asian) have influenced for both low- and high-accultured Asian-American respondents, differences among high-accultured Asian-American respondents were less stronger than what was noticed for low-accultured Asian-American respondents. For both low- and high-accultured Asian-American respondents, the impact of their own ethnic (Asian) models seemed to be stronger than the impact of Caucasian models.

As presented in Table A (see Appendix F), the ethnicity of receivers (Chinese vs. Japanese vs. Korean) was found to significantly influence the advertising effectiveness. Therefore, the impact of the ethnicity of endorsers and receivers, and their interaction were further investigated for each ethnic Asian-American group (Chinese vs. Japanese vs. Korean). It is further hypothesized that:

Hypothesis H3.1a states that Chinese-Americans are more aware of the advertisement endorsed by their own ethnic (Chinese) models than Caucasian models.

The chi-square statistics (Table 6) indicate that there was no statistically significant difference depending on whether the advertisement was endorsed by Caucasian or their own ethnic (Chinese) models on product category and advertised brand recall among Chinese-American respondents. However, it was found that the ethnicity of models (Caucasian vs. Chinese) influenced the Chinese respondent's brand recognition (p -value=0.056). Therefore, these results show a partial support for hypothesis H3.1a.

Table 6: Chi-Square Test of Awareness Measurement Among Chinese-American Receivers (n=66)

Variance Source	Ethnicity of Model		<i>p</i> -value
	Caucasian	Chinese	
Product recall	50.0%	46.9%	0.800
	<i>n</i> =17	<i>n</i> =15	
Brand recall	52.9%	50.0%	0.811
	<i>n</i> =18	<i>n</i> =16	
Brand recognition	82.4%	96.9%	0.056
	<i>n</i> =28	<i>n</i> =31	

Hypothesis H3.2a states that less acculturated Chinese-Americans are more aware of the advertisement endorsed by their own ethnic (Chinese) models than Caucasian models.

The CMH statistics (Table 7) report that no associations between the ethnicity of models (Caucasian vs. Chinese) and product and brand-name recall regarding the respondent's acculturation levels (low vs. high) were found. An association between the ethnicity of models (Caucasian vs. Chinese) and brand recognition regarding the respondent's acculturation levels was found significant (p -value=0.0031).

To further analysis, a chi-square test was employed.

The chi-square statistics for each level of acculturation (Table 7.1) indicate that there was marginally significant difference on the association between the ethnicity of models (Caucasian vs. Chinese) and brand recognition among low-acculturated Chinese-Americans (p -value=0.065).

Table 7: CMH-Test of Awareness Measurement Among Chinese-American Receivers (n=66)

Variance Source	Acculturation Level				CMH <i>p</i> -value
	Low-Acculturated		High-Acculturated		
	Caucasian	Chinese	Caucasian	Chinese	
Product Recall	35.7% <i>n</i> =5	26.3% <i>n</i> =5	60.0% <i>n</i> =12	76.9% <i>n</i> =10	0.760
Brand Recall	35.7% <i>n</i> =5	31.6% <i>n</i> =6	65.0% <i>n</i> =13	76.9% <i>n</i> =10	0.748
Brand Recognition	71.4% <i>n</i> =10	94.7% <i>n</i> =18	90.0% <i>n</i> =18	100% <i>n</i> =13	0.031

Table 7.1: Chi-Square Test of Brand Recognition on Chinese-American Receivers (n=66)

Variance Source	Acculturation Level					
	Low-Acculturated			High-Acculturated		
	Cau.	Chi.	<i>p-value</i>	Cua.	Chi.	<i>p-value</i>
Brand Recognition	71.4%	94.7%	0.065	90.0%	100%	0.239
	<i>n=10</i>	<i>n=18</i>		<i>n=18</i>	<i>n=13</i>	

Note: Cau.=Caucasian, Chi.=Chinese

Looking at Table 7.1, it appears that low-acculturated Chinese-American respondents were more likely to recognize the advertised brand when the advertisement was associated with their own ethnic (Chinese) models than Caucasian models. Therefore, H3.2a was partially supported.

Hypothesis H3.1b states that Chinese-Americans have a more favorable Aad toward their own ethnic (Chinese) models than Caucasian models.

The results of ANOVA and MANOVA among Chinese-American respondents are presented in Table B (see Appendix F). The three dependent variables are attitude toward the ad, attitude toward the brand, and purchase intention. The independent variables include the ethnicity of models (i.e. Caucasian vs. Chinese) and the acculturation levels (low vs. high). Results in Table B (see Appendix F) indicate that no significant main effects of the ethnicity of models, the acculturation levels, and the interaction between the

ethnicity of models and the acculturation levels were found to enhance advertising effectiveness among Chinese respondents.

The effect of the ethnicity of models was examined using ANOVA and MANOVA to answer hypotheses H3.1b, H3.1c, and H3.1d. As presented in Table B (see Appendix F), the effects of the ethnicity of models (Caucasian vs. Chinese) on attitude toward the ad (Aad) was not significant. Also, Wilks' lamda suggests that the effect of the ethnicity of models (Caucasian vs. Chinese) was not significant ($F\text{-value}=0.91$, Wilks' lamda=0.93, $p\text{-value}=0.4672$). Therefore, H3.1b was rejected.

Hypothesis H3.2b states that less acculturated Chinese-Americans have a more favorable Aad toward their own ethnic (Chinese) models than Caucasian models.

The interaction effect of the ethnicity of models and the respondent's acculturation levels was investigated using ANOVA and MANOVA to answer the hypotheses H3.2b, H3.2c, and H3.2d. As presented in Table B (see Appendix F), the interaction effect of the ethnicity of models (Caucasian vs. Chinese) on attitude toward the ad (Aad) was not significant. In addition, Wilks' lamda suggests that the interaction effect of the ethnicity of models and the respondent's acculturation levels was not significant either ($F\text{-value}=0.33$, Wilks' lamda=0.98, $p\text{-value}=0.8551$). Therefore, H3.2b was rejected.

However, the nature of the interaction effect on Aad among Chinese-American respondents can be explained more specifically in Figure 3.1 (see

Appendix G). In terms of how much the ethnicity of models (Caucasian vs. Chinese) have influenced for both low- and high-acculturated Chinese-American respondents, the low-acculturating Chinese-Americans were more likely to be influenced by their own ethnic (Chinese) models as compared to high-acculturated Chinese-Americans. For both low- and high-acculturated Chinese-Americans, the impact of their own ethnic (Chinese) models was much stronger than the impact of Caucasian models.

Hypothesis H3.1c states that Chinese-Americans have a more favorable Abrand toward their own ethnic (Chinese) models than Caucasian models.

Hypothesis H3.1c involved the effect of the ethnicity of models (Caucasian vs. Chinese) on attitude toward the advertised brand (Abrand). Results in Table B (see Appendix F) report that the effect of the ethnicity of models (Caucasian vs. Chinese) on Abrand was marginally significant (p -value=0.0722), even though Wilks' lambda suggests that the effect of the ethnicity of models (Caucasian vs. Chinese) was not significant.

In order to better understand the effect of the ethnicity of models (Caucasian vs. Chinese) on Abrand among Chinese-American respondents, a comparison of means was used. Results in Table 8 report that Chinese-American respondents tended to have a more favorable Abrand toward their own ethnic (Chinese) models than Caucasian models. Thus, H3.1c was accepted.

Hypothesis H3.2c states that less acculturated Chinese-Americans have a more favorable Abrand toward their own ethnic (Chinese) models than Caucasian models.

Table 8: Multiple Comparison of Means of The Ethnicity of Models for Abrand Among Chinese-Americans (n=66)

Variance Source	Ethnicity of Model	
	Caucasian	Chinese
Attitude Toward Brand	4.89	5.39

Note: Means with the same letter are not significantly different at the .05 level

Hypothesis H3.2c involved the interaction effect of the ethnicity of models (Caucasian vs. Chinese) and the respondent's acculturation levels (low vs. high) on attitude toward brand (Abrand). Results in Table B (see Appendix F) show that the interaction effect of the ethnicity of models and Chinese respondent's acculturation levels on Abrand was not significant. Wilks' lamda also suggest that the interaction effect of the ethnicity of models and the respondent's acculturation levels was not significant either. Therefore, H 3.2c was rejected.

However, the nature of the interaction effect of Abrand among Chinese-American respondents can be explained more specifically in Figure 3.2 (see Appendix G). In terms of how much the ethnicity of models (Caucasian vs. Chinese) have influenced for both low- and high-acculturated Chinese-American respondents, differences among low-acculturating Chinese-Americans were not as strong as what was noticed for high-acculturated Chinese-Americans. For both low- and high-acculturated Chinese-Americans, the impact

of their own ethnic (Chinese) models was much stronger than the impact of Caucasian models.

Hypothesis H3.1d states that Chinese-Americans are more likely to buy the advertised products that feature their own ethnic (Chinese) models than the advertised products that feature Caucasian models.

Hypothesis H3.1d involved the effect of the ethnicity of models (Caucasian vs. Chinese) on purchase intention (PI). Results in Table B (see Appendix F) report that the effects of the ethnicity of models (Caucasian vs. Chinese) on purchase intention was not significant. In addition, Wilks' lambda suggests that the effect of the ethnicity of models (Caucasian vs. Chinese) was not significant either. Therefore, H3.1d was rejected.

Hypothesis H3.2d states that less acculturated Chinese-Americans are more likely to buy the advertised products that feature their own ethnic (Chinese) models than the advertised products that feature Caucasian models.

Hypothesis H3.2d involved the interaction effect of the ethnicity of models (Caucasian vs. Chinese) and Chinese respondent's acculturation levels (low vs. high). Results in Table B (see Appendix F) indicate that the interaction effect of the ethnicity of models (Caucasian vs. Chinese) and the respondent's

acculturation levels (low vs. high) on purchase intention was not significant. Wilks' lambda also suggests that the interaction effect of the ethnicity of models and acculturation levels was not significant. Therefore, H3.2d was rejected.

However, the nature of the interaction effect of purchase intention among Chinese-American respondents can be explained more specifically in Figure 3.3 (see Appendix G). In terms of how much the ethnicity of models (Caucasian vs. Chinese) have influenced for both low- and high-acculturated Chinese-American respondents, differences among low-acculturating Chinese-Americans were not as strong as what was noticed for high-acculturated Chinese-Americans. For both low- and high-acculturated Chinese-Americans, the impact of their own ethnic (Chinese) models was still stronger than the impact of Caucasian models.

Hypothesis H4.1a states that Japanese-Americans are more aware of the advertisements endorsed by their own ethnic (Japanese) models than Caucasian models.

The chi-square statistics (Table 9) indicate that there was no statistically significant difference depending on whether the advertisement was endorsed by Caucasian or their own ethnic (Japanese) models on advertised brand recognition among Japanese-American respondents. However, it was found that the ethnicity of models (Caucasian vs. Japanese) influenced Japanese respondent's product category (p -value=0.032) and brand recall (p -

value=0.018). Therefore, these results show some partial support for hypothesis H4.1a.

Table 9: Chi-Square Test of Awareness Measurement on Japanese-American Receivers (n=65)

Variance Source	Ethnicity of Model		p-value
	Caucasian	Japanese	
Product recall	60.6%	84.4%	0.032
	n=20	n=27	
Brand recall	39.4%	68.8%	0.018
	n=13	n=22	
Brand recognition	87.9%	90.6%	0.712
	n=29	n=29	

Hypothesis H4.2a states that less acculturated Japanese-Americans are more aware of the advertisements endorsed by their own ethnic (Japanese) models than Caucasian models.

The CMH statistics (Table 10) report that no associations between the ethnicity of models (Caucasian vs. Japanese) and brand-name recognition regarding the respondent's acculturation levels (low vs. high) was found.

An association between the ethnicity of models (Caucasian vs. Japanese) and product category (p -value=0.032) and brand recall (p -value=0.019) regarding the respondent's acculturation levels were found significant.

To further analysis, a chi-square test was employed.

The chi-square statistics for each level of acculturation (Table 10.1) indicate that there was statistically significant difference on the association between the ethnicity of models (Caucasian vs. Japanese) and product recall (p -value=0.041) and the association between the ethnicity of models and brand recall (p -value=0.049) among high-acculturated Japanese-American respondents.

Table 10: CMH-Test of Awareness Measurement on Japanese-American Receivers (n=65)

Variance Source	Acculturation Level				CMH <i>p</i> -value
	Low-Acculturated		High-Acculturated		
	C.	J.	C.	J.	
Product Recall	56.3%	75.0%	64.7%	93.8%	0.032
	<i>n</i> =9	<i>n</i> =12	<i>n</i> =11	<i>n</i> =15	
Brand Recall	37.5%	62.5%	41.2%	75.0%	0.019
	<i>n</i> =6	<i>n</i> =10	<i>n</i> =7	<i>n</i> =12	
Brand Recognition	87.5%	93.8%	88.2%	87.5%	0.729
	<i>n</i> =14	<i>n</i> =15	<i>n</i> =15	<i>n</i> =14	

Note: C.=Caucasian, J.=Japanese

Looking at Table 10.1, it appears that high-acculturated Japanese-Americans were more likely to recall the product category and advertised brand when the advertisement was associated with their own ethnic (Japanese) models. Therefore, H4.2a was rejected.

Table 10.1: Chi-Square Test of Product and Brand Recall Among Japanese-American Receivers (n=65)

Variance Source	Acculturation Level					
	Low-Acculturated			High-Acculturated		
	C.	J.	<i>p-value</i>	C.	J.	<i>p-value</i>
Product Recall	56.3%	75.0%	0.264	64.7%	93.8%	0.041
	<i>n</i> =9	<i>n</i> =12		<i>n</i> =11	<i>n</i> =15	
Brand Recall	37.5%	62.5%	0.157	41.2%	75.0%	0.049
	<i>n</i> =6	<i>n</i> =10		<i>n</i> =7	<i>n</i> =12	

Note: C.=Caucasian, J.=Japanese

Hypothesis H4.1b states that Japanese-Americans have a more favorable Aad toward their own ethnic (Japanese) models than Caucasian models.

The results of ANOVA and MANOVA among Japanese-American respondents are presented in Table C (see Appendix F). The three dependent variables are attitude toward the ad, attitude toward the brand, and purchase intention. The independent variables include the ethnicity of models (i.e. Caucasian vs. Japanese) and the respondent's acculturation levels (low vs. high). Results in Table C (see Appendix F) indicate that no significant main effects of the ethnicity of models, the acculturation levels, and the interaction between the ethnicity of models and the acculturation levels were found to enhance advertising effectiveness among Japanese respondents.

The effect of the ethnicity of models was examined using ANOVA and MANOVA to answer hypotheses H4.1b, H4.1c, and H4.1d. As presented in Table

C (see Appendix F), the effects of the ethnicity of models (Caucasian vs. Japanese) on attitude toward the ad (Aad) was not significant. Also, Wilks' lamda suggests that the effect of the ethnicity of models (Caucasian vs. Japanese) was not significant (F -value=1.51, Wilks' lamda=0.90, p -value=0.2112). Therefore, H4.1b was rejected.

Hypothesis H4.2b states that less acculturated Japanese-Americans have a more favorable Aad toward their own ethnic (Japanese) models than Caucasian models.

The interaction effect of the ethnicity of models and the respondent's acculturation levels was investigated using ANOVA and MANOVA to answer the hypotheses H4.2b, H4.2c, and H4.2d. As presented in Table C, the interaction effect of the ethnicity of models (Caucasian vs. Japanese) on attitude toward the ad (Aad) was marginally significant.

In order to better understand the interaction effect of the ethnicity of models (Caucasian vs. Japanese) and the respondent's acculturation levels (low vs. high) on Aad among Japanese respondents, a comparison of means was used. Results in Table 11 report that low-acculturated Japanese-American respondents tended to have a more favorable Aad toward Caucasian models than their own ethnic (Japanese) models. Conversely, high-acculturated Japanese-American respondents tended to have a more favorable Aad toward their own ethnic (Japanese) models. Therefore, H4.2b was rejected.

To clearly understand, the nature of the interaction effect of Aad among Japanese-American respondents was depicted in Figure 4.1 (see Appendix G). In terms of how much the ethnicity of models (Caucasian vs. Japanese) have influenced for both low- and high-acculturated Japanese-American respondents, the low-acculturated Japanese-Americans were more likely to be influenced by Caucasian models than their own ethnic (Japanese) models. Contrary to what was predicted, high-acculturated Japanese-Americans were more likely to be influenced by their own ethnic (Japanese) models than Caucasian models.

Table 11: Multiple Comparison of Means of Interaction Between The Ethnicity of Models and Acculturation Level for Aad Among Japanese-American Receivers (n=65)

Variance Source	Acculturation Level			
	Low-Acculturated		High-Acculturated	
	Caucasian	Japanese	Caucasian	Japanese
Attitude Toward Ad	4.89	4.55	3.57	4.34

Note: Means with the same letter are not significantly different at .05 level

Hypothesis H4.1c states that Japanese-Americans have a more favorable Abrand toward their own ethnic (Japanese) models than Caucasian models.

Hypothesis H4.1c involved the effect of the ethnicity of models (Caucasian vs. Japanese) on attitude toward advertised brand (Abrand). Results

in Table C (see Appendix F) report that the effect of the ethnicity of models (Caucasian vs. Japanese) on attitude toward the advertised brand (Abrand) was not significant. Also, Wilks' lamda suggests that the effect of the ethnicity of models (Caucasian vs. Japanese) was not significant. Thus, H4.1c was rejected.

Hypothesis H4.2c states that less acculturated Japanese-Americans have a more favorable Abrand toward their own ethnic (Japanese) models than Caucasian models.

Hypothesis H4.2c involved the interaction effect of the ethnicity of models (Caucasian vs. Japanese) and Japanese respondent's acculturation levels (low vs. high) on attitude toward advertised brand (Abrand). Results in Table C (see Appendix F) report that the interaction effect of the ethnicity of models (Caucasian vs. Japanese) and Japanese respondent's acculturation levels on attitude toward the advertised brand (Abrand) was not significant. Also, Wilks' lamda suggests that the effect of the ethnicity of models (Caucasian vs. Japanese) was not significant either. Thus, H4.2c was rejected.

However, the nature of the interaction effect of Abrand among Japanese-American respondents was depicted in Figure 4.2 (see Appendix G). In terms of how much the ethnicity of models (Caucasian vs. Japanese) have influenced on Abrand for both low- and high-acculturated Japanese-American respondents, no differences could be found based upon the effect of the ethnicity of models (Caucasian vs. Japanese) among high-acculturated Japanese-Americans. For low-acculturated Japanese-Americans, the impact of Caucasian models on

Abrand was much stronger than the impact of their own ethnic (Japanese) models.

Hypothesis H4.1d states that Japanese-Americans are more likely to buy the advertised products that feature their own ethnic (Japanese) models than the advertised products that feature Caucasian models.

Hypothesis H4.1d involved the effect of the ethnicity of models (Caucasian vs. Japanese) on purchase intention (PI). Results in Table C (see Appendix F) report that the effects of the ethnicity of models (Caucasian vs. Japanese) on purchase intention (PI) was not significant. Also, Wilks' lambda suggests that the effect of the ethnicity of models (Caucasian vs. Japanese) was not significant. Thus, H4.1d was rejected.

Hypothesis H4.2d states that less acculturated Japanese-Americans are more likely to buy the advertised products that feature their own ethnic (Japanese) models than the advertised products that feature Caucasian models.

Hypothesis H4.2d involved the interaction effect of the ethnicity of models (Caucasian vs. Japanese) and Japanese respondent's acculturation levels (low vs. high) on purchase intention (PI). Results in Table C (see Appendix F) report that the interaction effect of the ethnicity of models (Caucasian vs.

Japanese) and Japanese respondent's acculturation levels on purchase intention (PI) was marginally significant (p -value=0.0754).

In order to better understand the interaction effect of the ethnicity of models (Caucasian vs. Japanese) and the respondent's acculturation levels (low vs. high) on purchase intention (PI) among Japanese respondents, a comparison of means was used. Results in Table 12 report that low-acculturated Japanese-American respondents tended to buy the advertised products that feature Caucasian models than their own ethnic (Japanese) models. Conversely, high-acculturated Japanese-American respondents tended to buy the advertised products that feature their own ethnic (Japanese) models than Caucasian models. Therefore, H4.2d was rejected.

To clearly understand, the nature of the interaction effect of purchase intention among Japanese-American respondents was depicted in Figure 4.3 (see Appendix G). In terms of how much the ethnicity of models (Caucasian vs. Japanese) have influenced for both low- and high-acculturated Japanese-American respondents on purchase intention, differences among high-acculturated Japanese-Americans were much stronger than what was observed for low-acculturated Japanese-Americans. Figure 4.3 showed that low-acculturated Japanese-Americans were more likely to be influenced by Caucasian models than their own ethnic (Japanese) models. Contrary to what was expected, high-acculturated Japanese-Americans were more likely to be influenced by their own ethnic (Japanese) models than Caucasian models.

Hypothesis H5.1a states that Korean-Americans are more aware of the advertisements endorsed by their own ethnic (Korean) models than Caucasian models.

Table 12: Multiple Comparison of Means of Interaction Between The Ethnicity of Models and Acculturation Level for PI Among Japanese-American Receivers (n=65)

Variance Source	Acculturation Level			
	Low-Acculturated		High-Acculturated	
	Caucasian	Japanese	Caucasian	Japanese
Purchase Intention	4.78	4.48	3.47	4.28

Note: Means with the same letter are not significantly different at .05 level

The chi-square statistics (Table 13) indicate that there were no statistically significant difference depending on whether the advertisement was endorsed by Caucasian or their own ethnic (Korean) models on product category and advertised brand recall, as well as brand recognition among Korean-American respondents. Therefore, H5.1a was rejected.

Hypothesis H5.2a states that less acculturated Korean-Americans are more aware of the advertisements endorsed by their own ethnic (Korean) models than Caucasian models.

**Table 13: Chi-Square Test of Awareness Measurement on
Korean-American Receivers (n=66)**

Variance Source	Ethnicity of Model		p-value
	Caucasian	Korean	
Product recall	54.6% n=18	51.5% n=17	0.805
Brand recall	48.5% n=16	42.4% n=14	0.621
Brand recognition	78.8% n=26	84.9% n=28	0.523

**Table 14: CMH-Test of Awareness Measurement on Korean-American
Receivers (n=66)**

Variance Source	Acculturation Level				CMH <i>p</i> -value
	Low-Acculturated		High-Acculturated		
	Cuacasian	Korean	Cuacasian	Korean	
Product Recall	40.0% <i>n</i> =6	55.6% <i>n</i> =10	66.7% <i>n</i> =12	46.7% <i>n</i> =7	0.859
Brand Recall	40.0% <i>n</i> =6	50.0% <i>n</i> =9	55.6% <i>n</i> =10	33.3% <i>n</i> =5	0.625
Brand Recognition	80.0% <i>n</i> =12	88.9% <i>n</i> =16	77.8% <i>n</i> =14	80.0% <i>n</i> =12	0.565

The CMH statistics (Table 14) report that no associations between the ethnicity of models (Caucasian vs. Korean) and product and brand-name recall, as well as brand-name recognition regarding the respondent's acculturation levels (low vs. high) was found. Thus, H5.2a was rejected.

However, low-acculturated Korean-Americans were more likely to recall product category and brand-name as well as recognize brand-name when the advertisement was associated with their own ethnic (Korean) models.

Hypothesis H5.1b states that Korean-Americans have a more favorable Aad toward their own ethnic (Korean) models than Caucasian models.

The results of ANOVA and MANOVA among Korean-American respondents are presented in Table D (see Appendix F). The three dependent variables are attitude toward the ad, attitude toward the brand, and purchase intention. The independent variables include the ethnicity of models (i.e. Caucasian vs. Korean) and the acculturation level (low vs. high). Results in Table D (see Appendix F) indicate that no significant main effects of the ethnicity of models, the acculturation levels, and the interaction between the ethnicity of models and the respondent's acculturation levels were found to enhance advertising effectiveness among Korean respondents.

The effect of the ethnicity of models was examined using ANOVA and MANOVA to answer hypotheses H5.1b, H5.1c, and H5.1d. As presented in Table D (see Appendix F), the effects of the ethnicity of models (Caucasian vs. Korean) on attitude toward the ad (Aad) was not significant. Also, Wilks' lamda suggests

that the effect of the ethnicity of models (Caucasian vs. Korean) was not significant ($F\text{-value}=0.39$, Wilks' $\lambda=0.97$, $p\text{-value}=0.8131$). Therefore, H5.1b was rejected.

Hypothesis H5.2b states that less acculturated Korean-Americans have a more favorable Aad toward their own ethnic (Korean) models than Caucasian models.

The interaction effect of the ethnicity of models and the respondent's acculturation levels was investigated using ANOVA and MANOVA to answer the hypotheses H5.2b, H5.2c, and H5.2d. As presented in Table D (see Appendix F), the interaction effect of the ethnicity of models (Caucasian vs. Korean) and the respondent's acculturation levels (low vs. high) on attitude toward the ad (Aad) was not significant. In addition, Wilks' λ suggests that the interaction effect of the ethnicity of models and the respondent's acculturation levels was not significant ($F\text{-value}=1.10$, Wilks' $\lambda=0.93$, $p\text{-value}=0.3662$). Therefore, H5.2b was rejected.

However, the nature of the interaction effect on Aad among Korean-American respondents can be explained more specifically in Figure 5.1 (see Appendix G). In terms of how much the ethnicity of models (Caucasian vs. Korean) have influenced for both low- and high-acculturated Korean-American respondents, differences among the low-acculturating Korean-Americans were not as strong as what was observed for the high-acculturated Korean-Americans. As expected, low-acculturated Korean-Americans were more likely

to be influenced by their own ethnic (Korean) models on Aad. On the other hand, high-acculturated Korean-Americans were more likely to be influenced by Caucasian models on Aad.

Hypothesis H5.1c states that Korean-Americans have a more favorable Abrand toward their own ethnic (Korean) models than Caucasian models.

Hypothesis H5.1c involved the effect of the ethnicity of models (Caucasian vs. Korean) on attitude toward advertised brand (Abrand). Results in Table D (see Appendix F) report that the effect of the ethnicity of models (Caucasian vs. Korean) on attitude toward the advertised brand (Abrand) was not significant. Also, Wilks' lambda suggests that the effect of the ethnicity of models (Caucasian vs. Korean) was not significant. Thus, H5.1c was rejected.

Hypothesis H5.2c states that less acculturated Korean-Americans have a more favorable Abrand toward their own ethnic (Korean) models than Caucasian models.

Hypothesis H5.2d involved the interaction effect of the ethnicity of models (Caucasian vs. Korean) and Korean respondent's acculturation levels (low vs. high) on attitude toward the brand (Abrand). Results in Table D (see Appendix F) report that the interaction effect of the ethnicity of models (Caucasian vs. Korean) and Korean respondent's acculturation levels was marginally significant ($p\text{-value}=0.0823$).

In order to better understand the interaction effect of the ethnicity of models (Caucasian vs. Korean) and the respondent's acculturation levels (low vs. high) on attitude toward the brand (Abrand) among Korean respondents, a comparison of means was used. Results in Table 15 report that low-acculturated Korean-American respondents tended to have a more favorable Abrand toward their own ethnic (Korean) models than Caucasian models. Similarly, high-acculturated Korean-American respondents tended to have a more favorable Abrand toward Caucasian models than their own ethnic (Korean) models. Thus, H5.2c was accepted.

To clearly understand, the nature of the interaction effect of Abrand among Korean-American respondents was depicted in Figure 5.2 (see Appendix G). In terms of how much the ethnicity of models (Caucasian vs. Korean) have influenced for both low- and high-acculturated Korean-American respondents on Abrand, low-acculturated Korean-Americans were more likely to be influenced by their own ethnic (Korean) models on Abrand. Conversely, high-acculturated Korean-Americans were more likely to be influenced by Caucasian models.

Table 15: Multiple Comparison of Means of Interaction Between The Ethnicity of Models and Acculturation Level for Abrand Among Korean-American Receivers (n=66)

Variance Source	Acculturation Level			
	Low-Acculturated		High-Acculturated	
	Caucasian	Korean	Caucasian	Korean
Attitude Toward Brand	4.31	4.70	4.46	3.96

Note: Means with the same letter are not significantly different at .05 level

Hypothesis H5.1d states that Korean-Americans are more likely to buy the advertised products that feature their own ethnic (Korean) models than the advertised products that feature Caucasian models.

Hypothesis H5.1d involved the effect of the ethnicity of models (Caucasian vs. Korean) on purchase intention (PI). Results in Table D (see Appendix F) report that the effects of the ethnicity of models (Caucasian vs. Korean) on purchase intention (PI) was not significant. Also, Wilks' lambda suggests that the effect of the ethnicity of models (Caucasian vs. Korean) was not significant either. Thus, H5.1d was rejected.

Hypothesis H5.2d states that less acculturated Korean-Americans are more likely to buy the advertised products that feature their own ethnic (Korean) models than the advertised products that feature Caucasian models.

Hypothesis H5.2d involved the interaction effect of the ethnicity of models (Caucasian vs. Korean) and Korean respondent's acculturation levels (low vs. high) on purchase intention (PI). Results in Table D (see Appendix F) report that the interaction effect of the ethnicity of models (Caucasian vs. Korean) and Korean respondent's acculturation levels on purchase intention (PI) was not significant.

However, the nature of the interaction effect of purchase intention among Korean-American respondents was depicted in Figure 5.3 (see Appendix G). In terms of how much the ethnicity of models (Caucasian vs. Korean) have influenced for both low- and high-acculturated Korean-American respondents on purchase intention, low-acculturated Korean-Americans were more likely to be influenced by their own ethnic (Korean) models. More interestingly, the advertisements that was endorsed by either Caucasian or their own ethnic (Korean) models seemed to have no impact for both low- and high-acculturated Korean-Americans.

CHAPTER 5

DISCUSSION

This study explores the effect of the ethnicity of models (caucasian vs. Asian) and the interaction effect of the ethnicity of models and respondent's acculturation level (low vs. high) on four advertising response variables: awareness (i.e. product recall, brand recall, and brand recognition), attitude toward the advertisement (Aad), attitude toward the brand (Abrand), and purchase intention (PI) among three ethnic Asian-American groups (i.e. Chinese vs. Japanese vs. Korean).

The major findings of this study are organized in the following manner:

MAJOR FINDINGS

Asian-Americans (Chinese vs. Japanese vs. Korean)

The main effect of the ethnicity of receivers (Chinese vs. Japanese vs. Korean) had significant main effect across three dependent variables: Aad (F-value=7.43, df=1, p -value=0.0008), Abrand (F-value=8.18, df=1, p -value=0.0004), and purchase intention (F-value=11.02, df=1, p -value=0.0001) among the three ethnic Asian groups. In addition, the Wilks' lamda suggests that the effect of the ethnicity of receivers was significant (F-value=3.30, Wilks' lamda=0.87, p -value=0.0012).

Regardless of the effects of the ethnicity of models (i.e. Caucasian vs. Asian, Chinese vs. Japanese vs. Korean) and the levels of acculturation (low vs. high), the statistical results in Table 16 report that there were statistically significant differences between Chinese-Americans and Japanese-Americans and between Chinese-Americans and Korean-Americans (p -value=.05). No significant difference was found between Japanese-Americans and Korean-Americans. As a result in Table 16, it reports that Chinese-Americans generated the highest means across three dependent variables.

Table 16: Multiple Comparison of Means of Aad, Abrand, and PI Across Three Ethnic Asian-American Groups (n=197)

Ethnicity of Receivers	Three Dependent Variables		
	Aad	Abrand	PI
Chinese-Americans	4.86	5.14	5.15
Japanese-Americans	4.34	4.53	4.26
Korean-Americans	4.10	4.38	4.33

Note: Aad=Attitude Toward Ad,
Abrand=Attitude Toward Brand,
and PI=Purchase Intention

Although no major findings on the effect of the ethnicity of models (Caucasian vs. Asian) on awareness measure was found, the results in Table 4 seem to suggest that Asian-Americans were more likely to aware of the ad (recall the product category and product brand-name as well as recognize the product name) when the ad was associated with their own ethnic (Asian) models.

In terms of the interaction effect of the ethnicity of models (Caucasian vs. Asian) and the levels of acculturation (low vs. high) on awareness measures, the significant difference was found on brand recognition. It seems to appear that low-acculturated Asian-Americans were more likely to recognize the advertised brand-name when the ad was associated with their own ethnic (Asian) models. However, the results in Table 5 appear to suggest that low-acculturated Asian-Americans were more likely to recall both product category and product brand-name when the ad was associated with their own ethnic (Asian) models.

The other findings in this study suggest that there were no significant differences of the ethnicity of models (Caucasian vs. Asian) on Aad, Abrand, and purchase intention among three ethnic Asian-American groups.

Looking at each means of three dependent variables: Aad, Abrand, and PI (Table 17), it shows that responses toward their own ethnic (Asian) models generated higher means on these three dependent variables (Aad, Abrand, and PI) than responses toward Caucasian models.

In terms of the interaction effect, the other findings in this study suggest that there were no significant differences of the interaction effect of the ethnicity of models (Caucasian vs. Asian) and the respondent's acculturation levels (low vs. high) on Aad, Abrand, and purchase intention among three ethnic Asian-American groups.

**Table 17: Multiple Comparison of Means of The Ethnicity of Models
for Aad, Abrand, and PI Across Three Ethnic Asian-Americans**
(n=197)

Variance Source	Ethnicity of Model	
	Caucasian	Asian
Attitude Toward Ad	4.37	4.47
Attitude Toward Brand	4.64	4.71
Purchase Intention	4.49	4.67

Note: Means with the same letter are not significantly different at the .05 level

Considering the interaction effect in Figures 2.1 through Figure 2.3 (see Appendix G), they showed that using Asian (their own ethnic) models targeting to either low- or high-acculturated Asian-American consumers is still effective for convenience products (i.e. toothpaste), particularly in terms of Aad and purchase intention. For Abrand, using Asian (their own ethnic) models may be appropriate when targeting to low-acculturated Asian-American consumers (i.e. first generation, new immigrants etc.).

The reason that these results came out unexpectedly may be due to the product itself. A previous study in 1992 by Cohen reported that American consumers have neutral attitudes toward American and Asian models when the ad was associated with convenience products (i.e. panty hose, children's vitamin, and pain reliever) that are low-involvement purchasing decisions. This can be explained by the fact that the use of such a product (convenience products) implies neither expertise in the product category nor social standing.

Therefore, these American consumers will associate these products with neither American nor Asian models.

In addition, Asian-American consumers are largely viewed as technology-oriented people, so that the portrayal of Asian models with convenience products in print ads are more likely to receive either neutral or negative responses from American consumers.

The findings and the explanations from this previous research can be applied to explain the situation in this study. Similarly, these Asian-American consumers may have a neutral attitude toward both Caucasian and Asian (their own ethnic) models in this study. Then, these neutral attitudes could be carried on toward Aad, Abrand, and purchase intention of the product.

Chinese-Americans

The first major finding on the effect of the ethnicity of models (Caucasian vs. Chinese) on awareness measures among Chinese-Americans showed a marginally significant on brand recognition. It indicated that Chinese-Americans were more likely to recognize the advertised brand-name when the ad was associated with their own ethnic (Chinese) models.

In terms of the interaction effect of the ethnicity of models (Caucasian vs. Chinese) and the levels of acculturation (low vs. high) on awareness measures among Chinese-Americans, the significant was found on brand recognition. Results in Table 7 and Table 7.1 report that low-accultured Chinese-Americans were more likely to recognize the advertised brand-name when the ad was associated with their own ethnic (Chinese) models.

The second finding on the effect of the ethnicity of models (Caucasian vs. Chinese) was found on Abrand among Chinese-Americans. It showed that Chinese-Americans have a more favorable Abrand toward their own ethnic (Chinese) models.

The other finding in this study suggest that there were no significant differences of the ethnicity of models (Caucasian vs. Chinese) on Aad and purchase intention among Chinese-Americans.

Looking at each means in Aad and purchase intention (Table 18) measures, it showed that responses toward their own ethnic (Chinese) models generated higher means on these two dependent variables than responses toward Caucasian models.

Table 18: Multiple Comparison of Means of The Ethnicity of Models for Aad and PI Among Chinese-Americans (n=66)

Variance Source	Ethnicity of Model	
	Caucasian	Chinese
Attitude Toward Ad	4.72	4.96
Purchase Intention	5.01	5.38

Note: Means with the same letter are not significantly different at the .05 level

In terms of the interaction effect, the other finding in this study suggest that there were no significant differences of the interaction effect of the ethnicity of models (Caucasian vs. Chinese) and the respondent's acculturation levels (low vs. high) on Aad, Abrand, and PI among Chinese-Americans.

Considering at the interaction effect in Figure 3.1 through 3.3 (see Appendix G), they showed that using Asian (Chinese) models targeting to either low- or high-acculturated Chinese-American consumers is still effective for convenience products (toothpaste); particularly in terms of Aad, Abrand, and PI.

Japanese-Americans

The first major finding on the effect of the ethnicity of models (Caucasian vs. Japanese) on awareness measures among Japanese-Americans showed a significant on product and brand-name recall. It indicated that Japanese-Americans were more likely to recall the product and the brand-name of the product when the ad was associated with their own ethnic (Japanese) models.

In term of interaction effect of the ethnicity of models (Caucasian vs. Japanese) and the respondent's level of acculturation (low vs. high) on awareness measures among Japanese-Americans, the significant was also found on product and brand-name recall. Surprisingly, results in Table 10 and Table 10.1 report that high-acculturated Japanese-Americans were more likely to recall the product category and product brand-name when the ad was associated with their own ethnic (Japanese) models. As predicted for low-acculturated Japanese-Americans, they tended to recall product category and product brand-name when the ad was associated with their own ethnic (Japanese) models.

There were no major effects of the ethnicity of models (Caucasian vs. Japanese) on Aad, Abrand, and purchase intention among Japanese-Americans. Looking at each means in Aad, Abrand, and PI (Table 19), it showed

that responses toward their own ethnic (Japanese) models generated higher means on these two dependent variables, which are Aad and purchase intention, than responses toward Caucasian models.

The second finding was found on the interaction effect of the ethnicity of models (Caucasian vs. Japanese) and the respondent's level of acculturation (low vs. high). Differences to what was expected, these high-accultured Japanese-Americans tended to have a more favorable Aad and were more likely to buy the advertised product when the ad was still associated with their own ethnic (Japanese) models. Although no significant was found on Abrand for both low- and high-accultured Japanese-Americans, Figure 4.2 (see Appendix G) also pointed out that low-accultured Japanese-Americans were more likely to have a more favorable Abrand toward Caucasian models than their own ethnic (Japanese) models.

Table 19: Multiple Comparison of Means of The Ethnicity of Models for Aad, Abrand, and PI Among Japanese-Americans (n=65)

Variance Source	Ethnicity of Model	
	Caucasian	Japanese
Attitude Toward Ad	4.21	4.45
Attitude Toward Brand	4.63	4.40
Purchase Intention	4.11	4.38

Note: Means with the same letter are not significantly different at the .05 level

The reason that results came out so surprising may result from the characteristics of Japanese sample itself. Almost 80% of Japanese sample were recruited from Japanese's industry that is located in Maryville, Tennessee. These Japanese respondents tend to cluster in the same Japanese community so that they may have less opportunities to expose to American's culture including social activities. Therefore, their evaluation of Aad, Abrand, and purchase intention were still stronger toward their own ethnic (Japanese) models, even though the acculturation scale indicated that these Japanese-American respondents were high-accultured.

Korean-Americans

The only main effect of the interaction was found on Abrand. As expected, the high-accultured Korean-Americans tended to have a more favorable Abrand toward Caucasian models and low-accultured Korean-Americans tended to have a more favorable Abrand toward their own ethnic (Korean) models.

No major finding for the effect of the ethnicity of models (Caucasian vs. Korean) on awareness measures among Korean-Americans was found. However, results in Table 13 indicated that Korean-Americans were more likely to recognize the brand-name of the product when the ad was associated with their own ethnic (Korean) models.

Moreover, no major finding in term of the interaction effect of the ethnicity of models (Caucasian vs. Korean) and the respondent's level of acculturation (low vs. high) on awareness measures among Korean-Americans

was found. However, looking at results in Table 14, it showed that low-acculturated Korean-Americans were more aware of the ad (product recall, brand-name recall, and brand-name recognition) when the ad was associated with their own ethnic (Korean) models. Conversely, high-acculturated Korean-Americans were more likely to recall the product and product brand-name when the ad was associated with Caucasian models.

The other finding in this study also suggest that there were no significant differences of the ethnicity of models (Caucasian vs. Korean) on Aad, Abrand, and purchase intention among Korean-Americans.

Looking at each means in Aad, Abrand, and purchase intention (Table 20), it shows that responses toward Caucasian models generated higher means on these three dependent variables than responses toward their own ethnic (Korean) models.

Table 20: Multiple Comparison of Means of The Ethnicity of Models for Aad, Abrand, and PI Among Korean-Americans (n=66)

Variance Source	Ethnicity of Model	
	Caucasian	Korean
Attitude Toward Ad	4.39	4.07
Attitude Toward Brand	4.39	4.36
Purchase Intention	4.38	4.27

Note: Means with the same letter are not significantly different at the .05 level

The other findings in this study suggest that there were no significant differences of the interaction effect of the ethnicity of models (Caucasian vs. Korean) and the respondent's level of acculturation (low vs. high) on Aad and purchase intention among Korean-Americans.

Considering at the interaction effect in Figure 5.1 through 5.3 (see Appendix G), they showed that using Korean models targeting to low-acculturated Korean-American consumers is still effective for convenience products (toothpaste); particularly in terms of Aad and purchase intention. On the other hand, using Caucasian models targeting to high-acculturated Korean-Americans is still effective for convenience products (toothpaste) in terms of Aad and purchase intention.

The reason may result from the characteristics of the sample itself. Nearly 62% of respondents in this study were students and about 78% of respondents had at least a college degree, it is more likely to appear that these high-acculturated Korean-American respondents have been exposed to Americans in the classroom, through social activities. Therefore, their evaluations of the advertisement, the product, and purchase intention rating were pretty neutral toward either Caucasian or their own ethnic (Korean) models, regardless of their acculturation level.

LIMITATIONS AND FUTURE RESEARCH

Before describing the implications for future research and marketing practices, it is important to note certain limitations of this study. First, the sample was limited to one geographical area (Knoxville and Maryville,

Tennessee). Due to Asian-American populations clustered in other geographical areas, Asian-American consumer's response to Asian models should be investigated in these regions.

Second, the future study might investigate the differences between Asian-American and American respondents on how they perceive the ethnicity of models (Caucasian vs. Asian). Based on the previous research by Whittler and DiMeo (1991), they found that the use of black models in the advertisements tended to decrease the effectiveness of advertising when targeting to white consumers. Therefore, the future research on white consumer's perception of Asian models should be conducted.

Third is the concern regarding the demographics of the sample. Nearly 62% of the respondents in this study were students and 78% of respondents have at least a college degree. Although acculturation level was not found to differ between the student and non-student sample, the future research should include a broader sample, varying in terms of socio-economic background and ages. Additionally, the concept of acculturation may produce an in-depth understanding of its antecedents and consequences through the use of a non-student sample for the future research.

Fourth, in this study three major ethnic Asian-American (Chinese vs. Japanese vs. Korean) groups were investigated. There are many other Asian groups with different heritages that should be included in the future research as well.

Fifth, another limitation of this study was that only one medium, which was print advertisement, was used. Although it was acknowledged in Chapter 3

that Asian-Americans appear to be more likely to be influenced by print advertisements (Batra and Ray, 1986) than television or radio ads, some marketers and advertisers may want to consider using Asian models in television ads. Hence, the results of this study would not be generalized to television ads, since "verbal and nonverbal communication" by the models is likely to influence the responses of Asian-American consumers to these models.

Sixth, product category and brand-name should be varied. A well-known brand name may be avoided for the future research. The reason is that some respondents may already establish either positive or negative feeling toward the brand regardless of the ethnicity of the models. Also, giving a product a new brand name may help the study by having the respondents pay more attention and time on the advertisement.

Finally, since the text in this research instrument was in English, many of the older Asian-Americans and new immigrants could not participate in this study. To avoid the respondents' ability to understand English, therefore, the future research should include the Asian language versions of questionnaire (i.e. Chinese, Japanese, and/or Korean).

MANAGERIAL IMPLICATIONS

As the limitations noted, the overall findings in this study provide some implications for the areas of marketing and advertising. The study would suggest that the common use of Asian models in print advertising will enhance the effectiveness of advertising when the ad is targeted to Asian-American consumers. Looking at the influences in each ethnicity of the models

(Caucasian vs. Chinese vs. Japanese vs. Korean), in particular ethnic Asian-American consumers (Chinese vs. Japanese vs. Korean), it can be said that the use of Chinese models in print ad will influence advertising effectiveness when targeting to Chinese-American consumers. For Japanese-American consumers, the use of Japanese models in print ads also enhances the effectiveness of advertising when aiming at Japanese market segment. The use of Korean models in print ads can influence the effectiveness of advertising when the ad is targeted to a Korean market.

Besides the differences among the ethnicity of Asian-American consumers, evidence of the differences within ethnic Asian-American groups regarding the acculturation level to American culture also exists. Results in this study will provide implications for developing effective advertising communication strategies in relation to Asian-Americans' level of acculturation. For example, the use of Asian models in print advertising may create more effects when targeting to low-accultured Asian-American consumers (i.e. first generation, new immigrant, older Asian-American consumers). The existence of the interaction effect (low vs. high) on brand recognition may force marketers and advertisers to pay more attention to the portrayal of Asian models in print advertising. Furthermore, considering the influence of the ethnicity of models on the ethnicity of receivers in relation to the levels of acculturation in particular, it found that the use of Chinese models in print ads still influences advertising effectiveness when the ad is targeting to low-accultured Chinese-American market. Conversely, when the ad is aiming at high-accultured Japanese-American consumers, the use of Japanese models may be more

appropriate. Lastly, the use of Korean models in print ads when targeting to low-acculturated Korean-American consumers can create more impact on advertising effectiveness. This means that marketers and advertisers should use different strategies when targeting these Asian-American markets.

As can be seen in this study, the ethnicity of endorsers and receivers can serve as an effective segmentation and targeting criteria. Using their own ethnic models in print ads is still effective when targeting to these specific Asian-American markets (Chinese-, Japanese-, and Korean-American consumers).

As acknowledged in Chapter One Asian-Americans are composed of different languages, religions, cultures, and value systems which lead to distinct consumer behavior among them. Fost (1990) stated that in order to succeed in achieving the loyalty of Asian-American consumers, marketers and advertisers have to segment them as an individual market instead of marketing them as a homogeneous group. Although this study is limited to only three Asian-American groups, the results of this study reveal the clear message that these three ethnic Asian-American (Chinese, Japanese, and Korean) groups exhibit a more complete picture on advertising effectiveness (awareness, Aad, Abrand, and purchase intention) in relation to the ethnicity of endorsers (Caucasian vs. Asian) and the respondent's acculturation level (low vs. high). Therefore, marketers and advertisers should treat these three ethnic Asian-American markets as individual markets instead of broadly grouping them.

So far, it is becoming increasingly clear that the process of acculturation deals with multiple dimensions. Particularly, many researchers in the United States have begun to explore the nature of different cultures that come in

contact with American culture. In addition, it is important to remember that acculturation provides an in-depth in understanding in the context of consumer behavior. Thus, the concept of market segmentation by acculturation level and the ethnicity of models for Asian-American markets will provide interesting and challenging potential for future study because acculturation is a unique phenomenon believed to be composed of and influenced by multiple dimensions (i.e. various demographic and psychographic traits) that are relatively independent with one another.

Bibliography

BIBLIOGRAPHY

- Baker, M. J. and Churchill, G. A. Jr. (1977). The Impact of Physically Attractive Models on Advertising Evaluations. Journal of Marketing Research, 14, (November), 538-555.
- Barringer, F. (1991). Immigration Brings New Diversity to Asian Population in the U.S. New York Times, 12, (June),
- Batra, R. and Ray, M. L. (1986). Affective Responses Mediating Acceptance of Advertising. Journal of consumer Research, 13, (September), 234-249.
- Bauer, R.A. and Greyser, S. A. (1968). Advertising in America: The Consumer View, Boston: Harvard University Press.
- Berry, J. W. (1980). Acculturation as Varieties of Adaptation In A.M. Padilla (ed.), Acculturation: Theory, Models, and Some New Findings, Boulder, CO: Westview Press.
- Berry, J. W. (1986). Multiculturalism and Psychology in Plural Societies. In L. H. Ekstrand, ed., Ethnic Minorities and Immigrations in a Cross-Cultural Perspectives (pp.35-51). Berwyn, Sweden: Swets North America Inc.
- Bettman, J. R. (1979). Memory Factors in Consumer Choice: A Review. Journal of Marketing, 43, (Spring), 37-53.
- Biehal, G., Stephens, D., and Curlo, E. (1992). Attitude Toward the Ad and Brand Choice. Journal of Advertising, 11(3), 19-35.
- Bloch, P. H. and Richins, M. L. (1992). You Look 'Marvelous': the Pursuit of Beauty and The Marketing Concept. Psychology and Marketing, 9, (January), 3-15.

- Bureau of the Census (1997). The Asian and Pacific Islander population in the United States. U.S. Department of Commerce, Economics and Statistics Administration.
- Burke, M. C. and Edell, J. A. (1989). The Impact of Feelings on Ad-Based Affect and Cognition. Journal of Marketing Research, 16, (February), 69-83.
- Choi, J., and Tamborini, R. (1988). Communication-Acculturation and The Cultivation Hypothesis: A Comparative Study between Two Korean Communities in the US. The Harvard Journal of Communications, 1, 57-74.
- Coen, R. J.(1998). Ad revenue growth hits 7% in 1997 to surpass forecasts. Advertising Age, 69(20), (May 18), 50.
- Cohen, J. (1992). White Consumer Response to Asian Models in Advertising. Journal of Consumer Marketing, 9(2), (Spring), 17-27.
- Cook, W. A., and Kover, A. J. (1997). Research and the Meaning of Advertising Effectiveness: Mutual Misunderstanding. In N. J. Mahwah and L. Erlbaum, Associate. Measuring Advertising Effectiveness (pp.13-20).
- Cuellar, I., Harris, L.C., and Jasso, R. (1980). An acculturation scale for Maxican American normal and clinical populations. Hispanic Journal of Behavioral Sciences, 2, (September), 199-217.
- Czepiec, H. and Kelly, J. S. (1983). Analyzing Hispanic Roles in Advertising: A portrait of an Emerging Subculture. In J. H. Leigh and C. R. Martin Jr., eds., Current Issues and Research in Advertising (pp.219-240). Ann Habor, MI: The University of Michigan Press.

- Debevec, K. and Iyer, E. (1986). The Influence of Spokespersons in Altering A Product's Gender Image: Implications For Advertising Effectiveness. Journal of Advertising, 15(4), 12-20.
- Deshpande, R., Hoyer, W. D., and Donthu, N. (1986). The Intensity of Ethnic Affiliation: A Study of The Sociology of Hispanic Consumption. Journal of Consumer Research, 13, 214-220.
- Donthu, N. and Cherian, J. (1994). Impact of Strength of Ethnic Identification on Hispanic Shopping behavior. Journal of Retailing, 70(4), 383-393.
- Duke, C. R. (1995). Exploratory Comparison of Alternative Memory Measures for Brand Name. Psychology and Marketing, 12(1), 19-36.
- Fishbein, M. and Ajzen, I. (1975). Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research. Reading, Massachusetts: Addison-Wesley.
- Fost, D. (1990). California's Asian Market. American Demographics, (October), 34-37.
- Francese, P. (1995). America at mid-decade. American Demographics, (February), 23-31.
- Gardner, M. P. (1985). Does Attitude Toward the Ad Affect Brand Attitude Under a Brand Evaluation Set?. Journal of Marketing Research, 12, (May), 192-198.
- Glazer, N. and Moynihan, D. P. (1970). Beyond the melting pot. Cambridge, MA: The MIT Press.

- , ----- (1975). Introduction in N. Glazer and D.P. Moynihan (Eds.), Ethnicity: Theory and experience (pp.1-26). Cambridge, MA: Harvard University Press.
- Gordon, M. M. (1964). Assimilation in American Life: The Role of Race, Religion, and National Origin, London: Oxford University Press.
- Gresham, L. G. and Shimp, T. A. (1985). Attitude toward the Advertisement and Brand Attitude: A Classical Conditioning Perspective. Journal of Advertising, 14(1), 10-17.
- Henke, L. L. (1995). Young Children's Perception of Cigarette Brand Advertising Symbols Awareness, affect, and target Market Identification. Journal of Advertising, 14(4), (Winter), 13-18.
- Henricks, M. (1992). Marketing to Minorities. Small Business Report, 17 (3), 47-55.
- Hirschman, E. C. (1981). American Jewish Ethnicity: Its Relationship to Some Selected Aspects of Consumer behavior. Journal of Marketing, 45, (Summer), 102-110.
- Joseph, W. B. (1982). The Credibility of Physically Attractive Communicators: A Review. Journal of Advertising, 11(3), 15-24.
- Kang, J., Kim, Y-K., and Tuan, W-J. (1996). Motivational Factors of Mall Shoppers: Effects of Ethnicity and Age. Journal of Shopping Center Research, 3(1), 7-31.
- Keesing, F. M. (1953). Culture Change: An Analysis and Bibliography of Anthropological Source to 1952. Stanford, CA: Stanford University Press.

- Krugman, H. E. (1986). Low Recall and High Recognition of Advertising. Journal of Advertising Research, (February/March), 79-86.
- Lavidge, R. J. and Steiner, G. A. (1961). A Model For Predictive Measurements of Advertising Effectiveness. Journal of Marketing, 25(6), 59-62.
- Lee, W-N. (1993). Acculturation and Advertising Communication Strategies: A Cross-Cultural Study of Chinese and Americans. Psychology and Marketing, 10, 381-397.
- and Tse, D. (1994). Changing Media Consumption in a New Home: Acculturation Patterns Among Hong Kong Immigrants to Canada. Journal of Advertising, 23(1), 57-70.
- and Um, K-H. R. (1992). Ethnicity and Consumer Product Evaluation: A Cross-Cultural Comparison of Korean Immigrants and Americans. In J. Sherry and B. Sternthal, eds., Advances in Consumer Research (Vol.19, pp.429-436). Provo, UT: Association for Consumer Research.
- Leigh, T. W., Rethans, A. J., and Whitney, T. (1987). Role Portrayals of Women in Advertising: Cognitive Responses and Advertising Effectiveness. Journal of Advertising Research, 27, (October/November), 54-63.
- Lutz, R. (1985). Affective and Cognitive Antecedents of Attitude Toward the Ad: A Conceptual Framework. In L. Alwitt and A. A. Mitchell, eds., Psychology Process and Advertising Effects: theory, Research, and Application, Hillsdale(pp.45-63). NJ: Lawrence Erlbaum Associates.

- MacKenzie, S. B., Lutz, R. J., and Belch, G. E. (1986). The Role of Attitude Toward the Ad as Mediator of Advertising Effectiveness: A Test of Competing Explanations. Journal of Marketing Research, 23, (May), 130-143.
- Madden, T. J., Allen, C. T., and Twible, J. L. (1988). Attitude Toward the Ad: An Assessment of Diverse Measurement Indices Under Different Processing Sets. Journal of Marketing Research, 25, (August), 242-252.
- Martin, M. C. and Gentry, J. W. (1997). Stuck in The Model Trap: The Effects of Beautiful Models in Ads on Female Pre-adolescents and Adolescents. Journal of Advertising, 26(2), (Summer), 19-33.
- Mehta, R. and Belk, R. W. (1991). Artifacts, Identity, and Transition: favorite Possessions of Indians and Indian Immigrants to the United States. Journal of Consumer Research, 17(4), 398-411.
- Mendoza, R.H. (1989). An Empirical Scale to Measure Type and Degree of Acculturation in Mexican-American Adolescents and Adults. Journal of Cross-Cultural Psychology, 20, 372-385.
- Miller, C. (1993). Researcher Says U.S. is More Than a Pot. Marketing News, 27, (May), 6.
- Mitchell, A. A. (1986). The Effects of Verbal and Visual Components of Advertisements on Brand Attitudes and Attitude Toward the Ad. Journal of Consumer Research, 13, (June), 12-24.
- , and Olson, J. C. (1981). Are Product Attribute Beliefs the Only Mediator of Advertising Effects On Brand Attitude?. Journal of Marketing Research, 18, (August), 318-332.

- Moore, D. L. and Hutchison, J. W. (1983). The Effects of Ad Affect on Advertising effectiveness. In R. P. Bagozzi and M. T. Tybout, eds., Advances in Consumer Research(pp.25-58). Ann Arbor, MI: Association for Consumer Research.
- Muehling, D. D. and McCann, M. (1993). Attitude Toward the Ad: A Review. Journal of Current Issues and Research in Advertising, 15(2), (Fall), 25-58.
- James H. Leigh and Claude P. Martin Jr.
- Olmedo, E. L. (1979). Acculturation: A Psychometric Perspective. American Psychologist, 34, (November), 1061-1070.
- Ownbey, S. F. and Horridge, P. E. (1997). Acculturation Levels and Shopping Orientations of Asian-American Consumers. Psychology and Marketing, 14(1), (January), 1-18.
- O'Guinn, T. C., Lee, W-N., and Faber, R. J. (1986). Acculturation: The Impact of Divergent Path on Buyer Behavior. In R. J. Lutz, ed., Advances in Consumer Research, (Vol. 13, pp.579-583). Provo, Utah: Association for Consumer Research.
- Penazola, L. (1994). Atravensando Fronteras/Border Crossing: A Critical Ethnographic Explanation of the Consumer Acculturation of Mexican immigrants. Journal of Consumer Research, 21, 32-54.
- Percy, L. and Rossiter, J. R. (1992). Advertising Stimuli Effects: A Review. In J. H. Leigh and C. P. Martin Jr., eds., Current Issues and Research in Advertising(pp. 75-90). Ann Harbor, MI: The Univeristy of Michigan Press.

- , ----- (1992). A Model of Brand Awareness and Brand Attitude: Advertising Strategies. Psychology and Marketing, 9(4), 263-274.
- Peter, P. J. (1979). Reliability: A Review of Psychometric. Journal of Marketing Research, 16, (February), 6-17.
- Petty, R. E., Cacioppo, J. T., and Schumann, D. W. (1983). Central and Peripheral Routes to Advertising Effectiveness: The Moderating Role of Involvement. Journal of Consumer Research, 10, (September), 135-146.
- Pitts, R. E., Whalen, D. J., O'Keefe, R., and Murray, V. (1989). Black and White Response to Culturally Targeted Television Commercials: A Value-Based Approach. Psychology and Marketing, 6(4), 311-328.
- Qualls, W. J. and Moore, D. J. (1990). Stereotyping Effects on Consumers' Evaluation of Advertising: Impact of Racial Differences Between Actors and Viewers. Psychology and Marketing, 17(2), 135-151.
- Richins, M. L. (1991). Social Comparison and the Idealized Images of Advertising. Journal of Advertising, 18(1), (June), 71-83.
- Ray, M.L. (1982). Advertising and Communication Management. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Rossiter, J. R. and Percy, L. (1980). Attitude Change through Visual Imagery in Advertising. Journal of Advertising, 9(2), 10-16.
- , ----- (1997). Advertising Communications and Promotion Management, New York, McGraw-Hill.
- Ryan, M. J. and Bonfield, E. H. (1975). The Fishbein Extended Model and Consumer Behavior. Journal of Consumer Research, 2, 118-136.

- Schlinger, M. J. and Plummer, J. T. (1972). Advertising in Black and White. Journal of Marketing Research, 9, (May), 149-153.
- Schumann, D. W. (1984). Explaining Advertising Repetition Effects on Attitudes: The Influence of Consumer involvement and Advertising variation. Unpublished master's Thesis, University of Missouri-Columbia.
- Shimp, T. A. (1981). Attitude Toward The Ad As a Mediator of Consumer Brand Choice. Journal of Advertising, 10(2), 9-15.
- Sho, M., Powen, C., and Zinn, L. (1991). Suddenly, Asian-Americans are a marketer's dream. Business Week, (June 17), 54-55.
- Siegel, B. J. (1955). Acculturation. Stanford, California: Stanford University Press.
- Social Science Research Council Summer Seminar on Acculturation (1954). Acculturation: An exploratory formation. American Anthropologist, 56, 973-1002.
- Solomon, M. R., Ashmore, R. D., and Longo, L. C. (1992). The Beauty Match-Up Hypothesis: Congruence Between Types of Beauty and Product Images in Advertising. Journal of Advertising, 11(4), (December), 23-34.
- Stayman, D.M. and Deshpande, R. (1989). Situational ethnicity and consumer behavior. Journal of Consumer Research, 16, 361-371.
- Statistical Abstract of the United States, 1993: The National Data Book, 113th ed. U.S. Department of Commerce, Economics and Statistics Administration, Bureau of the Census, Government Printing.
- Taylor, C. R. and Stern, B. B. (1997). Asian-Americans: Television Advertising and the "Model Minority" Stereotype. Journal of Advertising, 14 (2), 47-61.

- , Lee, J. Y. (1994). Not in Vogue: Portrayals of Asian-Americans in U.S. Advertising. Journal of Public Policy and Marketing, 13, (Fall), 239-245.
- Tolley, S. B. and Goett, J. J. (1971). Reactions to Blacks in Newspaper Ads. Journal of Advertising Research, 11(2), (April), 11-18.
- Triandis, H. C., Kashima, Y., Shimada, E., and Villareal, M. (1986). Acculturating indices as a means of confirming cultural differences. Unpublished manuscript. University of Illinois, Department of Psychology, Urbana.
- , -----, Hui, C. H., Lisansky, J., and Marin, G. (1982). Acculturation and biculturalism indices among relatively acculturated Hispanic young adults. Interamerican Journal of Psychology, 16, 140-149.
- Tsal, Y. (1985). On the Relationship Between Cognitive and Affective Processes: A Critique of Zajonc and Markus. Journal of Consumer Research, 12, (December), 358-362.
- Wackman, D. B. (1973). Theories in Interpersonal Perception. In S. Ward and T. Robertson, eds., Consumer Behavior: Theoretical Sources. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 200-229.
- Webster, C. (1990). Reaching the Burgeoning Hispanic Market. Business Forum, 15(2), 18-23.
- Webster, C. N. (1997). Multicultural. Advertising Age, 68 (46), (November 17), S1-S2.

- Weinstock, S.A. (1964). Some factors that retard or accelerate the rate of acculturation with specific reference to Hungarian immigrants. Human Relations, 17, 321-342.
- Whitter, T. E. and DiMeo, J. (1991). Viewers' Reactions to Racial Cues in Advertising Stimuli. Journal of Advertising Research, (December), 37-46.
- Wilkes, R. E. and Valencia, H. (1989). Hispanics and Blacks in Television Commercials. Journal of Advertising, 18(1), 19-25.
- Wright-Isak, C., Faber, R. J., and Horner, L. R. (1997). Comprehensive Measurement of Advertising Effectiveness: Notes from the Marketplace. In N. J. Mahwah and L. Erlbaum, Associate. Measuring Advertising Effectiveness (pp.3-12).

Appendices

Appendix A

(Experimental Ads: Asian Models)

Appendix A-1-1



MANY DENTISTS RECOMMEND
BAKING SODA FOR
WHITER TEETH.

YOU'LL RECOMMEND
THE TASTE.



INTRODUCING **Colgate Baking Soda** TOOTHPASTE.

**BETTER TASTE
WHITER TEETH**

Appendix A-1-2



MANY DENTISTS RECOMMEND
BAKING SODA FOR
WHITER TEETH.

YOU'LL RECOMMEND
THE TASTE.



INTRODUCING **Colgate Baking Soda** TOOTHPASTE.

**BETTER TASTE
WHITER TEETH**



MANY DENTISTS RECOMMEND
BAKING SODA FOR
WHITER TEETH.

YOU'LL RECOMMEND
THE TASTE.



INTRODUCING **Colgate Baking Soda** TOOTHPASTE.

**BETTER TASTE
WHITER TEETH**

Appendix A-1-4



MANY DENTISTS RECOMMEND
BAKING SODA FOR
WHITER TEETH.

YOU'LL RECOMMEND
THE TASTE.



INTRODUCING **Colgate Baking Soda** TOOTHPASTE.

**BETTER TASTE
WHITER TEETH**



MANY DENTISTS RECOMMEND
BAKING SODA FOR
WHITER TEETH.

YOU'LL RECOMMEND
THE TASTE.



INTRODUCING **Colgate Baking Soda** TOOTHPASTE.

BETTER TASTE
WHITER TEETH

Appendix A-2-1



MANY DENTISTS RECOMMEND
BAKING SODA FOR
WHITER TEETH.

YOU'LL RECOMMEND
THE TASTE.



INTRODUCING **Colgate Baking Soda** TOOTHPASTE.

BETTER TASTE
WHITER TEETH

Appendix A-2-2



MANY DENTISTS RECOMMEND
BAKING SODA FOR
WHITER TEETH.

YOU'LL RECOMMEND
THE TASTE.



INTRODUCING **Colgate Baking Soda** TOOTHPASTE.

BETTER TASTE
WHITER TEETH



MANY DENTISTS RECOMMEND
BAKING SODA FOR
WHITER TEETH.

YOU'LL RECOMMEND
THE TASTE.



INTRODUCING **Colgate Baking Soda** TOOTHPASTE.

**BETTER TASTE
WHITER TEETH**

Appendix A-2-4



MANY DENTISTS RECOMMEND
BAKING SODA FOR
WHITER TEETH.

YOU'LL RECOMMEND
THE TASTE.



INTRODUCING **Colgate Baking Soda** TOOTHPASTE.

**BETTER TASTE
WHITER TEETH**



MANY DENTISTS RECOMMEND
BAKING SODA FOR
WHITER TEETH.

YOU'LL RECOMMEND
THE TASTE.



INTRODUCING **Colgate Baking Soda** TOOTHPASTE.

BETTER TASTE
WHITER TEETH

Appendix A-3-1



MANY DENTISTS RECOMMEND
BAKING SODA FOR
WHITER TEETH.

YOU'LL RECOMMEND
THE TASTE.



INTRODUCING **Colgate Baking Soda** TOOTHPASTE.

BETTER TASTE
WHITER TEETH



MANY DENTISTS RECOMMEND
BAKING SODA FOR
WHITER TEETH.

YOU'LL RECOMMEND
THE TASTE.



INTRODUCING **Colgate Baking Soda** TOOTHPASTE.

**BETTER TASTE
WHITER TEETH**

Appendix A-3-3



MANY DENTISTS RECOMMEND
BAKING SODA FOR
WHITER TEETH.

YOU'LL RECOMMEND
THE TASTE.



INTRODUCING **Colgate Baking Soda** TOOTHPASTE.

**BETTER TASTE
WHITER TEETH**

Appendix A-3-4



MANY DENTISTS RECOMMEND
BAKING SODA FOR
WHITER TEETH.

YOU'LL RECOMMEND
THE TASTE.



INTRODUCING **Colgate Baking Soda** TOOTHPASTE.

**BETTER TASTE
WHITER TEETH**

Appendix A-3-5



MANY DENTISTS RECOMMEND
BAKING SODA FOR
WHITER TEETH.

YOU'LL RECOMMEND
THE TASTE.



INTRODUCING **Colgate Baking Soda** TOOTHPASTE.

**BETTER TASTE
WHITER TEETH**

Appendix B

(Experimental Ads: Caucasian Models)



*M*ANY DENTISTS RECOMMEND
BAKING SODA FOR
WHITER TEETH.

*Y*OU'LL RECOMMEND
THE TASTE.



INTRODUCING **Colgate Baking Soda** TOOTHPASTE.

BETTER TASTE
WHITER TEETH



*M*ANY DENTISTS RECOMMEND
BAKING SODA FOR
WHITER TEETH.

*Y*OU'LL RECOMMEND
THE TASTE.



INTRODUCING *Colgate Baking Soda* TOOTHPASTE.

BETTER TASTE
WHITER TEETH



*M*ANY DENTISTS RECOMMEND
BAKING SODA FOR
WHITER TEETH.

*Y*OU'LL RECOMMEND
THE TASTE.



INTRODUCING **Colgate Baking Soda** TOOTHPASTE.

BETTER TASTE
WHITER TEETH



MANY DENTISTS RECOMMEND
BAKING SODA FOR
WHITER TEETH.

YOU'LL RECOMMEND
THE TASTE.



INTRODUCING **Colgate Baking Soda** TOOTHPASTE.

**BETTER TASTE
WHITER TEETH**



*M*ANY DENTISTS RECOMMEND
BAKING SODA FOR
WHITER TEETH.

*Y*OU'LL RECOMMEND
THE TASTE.



INTRODUCING **Colgate Baking Soda** TOOTHPASTE.

BETTER TASTE
WHITER TEETH

Appendix C

(Unrelated Ads)



Chicken Taco



Meatball Hero



Hot Dog



BBQ Roast Beef Sandwich



Hamburger



Cheese Pizza



Chicken Nuggets

FAT FREE DRESSING.



Fast food can quickly turn into greasy stains. But Tide® with Bleach Ultra 2 can help keep your clothes fat free. It helps clean away even stubborn stains while its Activated Bleaching System helps keep colors bright. Discover more concentrated Tide with Bleach Ultra 2, and watch fat disappear.



Fruit of the Loom®
trusts Tide with Bleach

IF IT'S GOT TO BE CLEAN, IT'S GOT TO BE TIDE.

Visit us on the World Wide Web at <http://www.clothesline.com>



Stop by and click the tires. Hi. Welcome to Saturn. Feel free to look

around and surf the lot.  If you're so inclined, you can pick

out your coupe, sedan or wagon, add any options you want, and—*click*—we'll go ahead and calculate your window sticker for you.

Should you like what you see (and we're pretty sure



you will), we'll even help you figure out your monthly payments, weigh financing options and apply for credit preapproval. Right here, right now.

monthly payment Just let us know if you have any questions. We'll have

a retailer in your area get in touch with you to set up a test-drive. Thanks

for stopping in. And not to worry. This is the only

web you'll ever encounter shopping for a Saturn.



The 1995
Black Edition

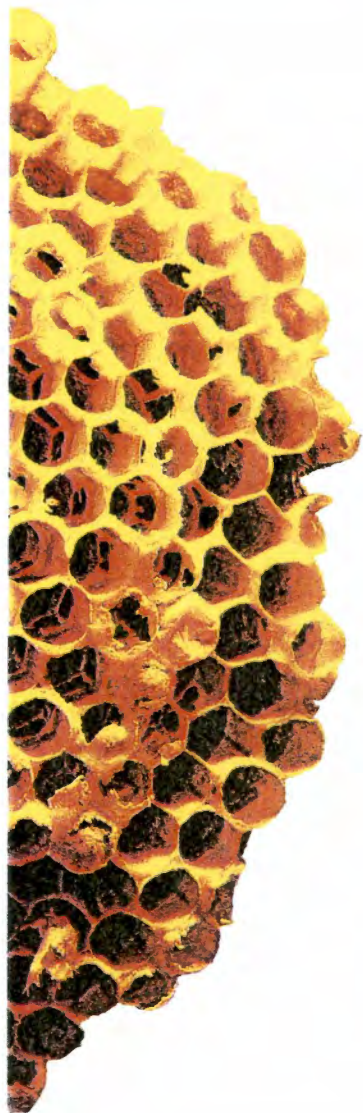
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—ON TOP OF THE WORLD™



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Charleston, SC
*Up to 100% occupancy, yellow
 hangers on every door*



Norfolk, VA
*Up to 100% occupancy, white hangers
 with black ends on all doors*



Altoona, PA
*Up to 100% occupancy, white
 hangers on every door*

Where to sleep is one business decision you never have to lose any sleep over.

There's enough to think about each business day without wasting a moment's thought on where you'll spend the night. Fortunately, with over 1800 Days Inn hotels out there, where to stay is a done deal. So rest easy. You can always call **1-800-DAYS INN®** for a reservation or visit us at www.daysinn.com. Because no matter where you go,  **there you go.**

MetLife

Days Inn and MetLife would like to offer you a brochure from MetLife's "Dear Life Advice" series. To receive a free copy of the Life Advice Directory on Topics, call 1-800-MetLife or 1-888-Days Inn of America, Inc.

NOW IN CHINA, SOUTH AFRICA AND THE PHILIPPINES

Appendix D

(Questionnaire Booklet)

Appendix D

Code _____

Introduction

This is an experimental study that is designed to measure the impact of advertising effectiveness on Asian-American consumers. In this study, you will receive a package that contains two booklets. The first one is the advertising booklet and the second is the questionnaire booklet.

Three steps are involved in this study. First, you are asked to read the introduction sheet. Second, you will view the ad booklet, page-by-page. Finally, upon finishing the ad booklet, you are asked to put the ad booklet down and start working on the questionnaire booklet. Once you have started the questionnaire booklet, please do not refer to the advertising booklet again.

Please feel free to ask questions. The researcher and his assistants will assist you.

Your answers will be kept confidential and will be used only for this study. Your answers are essential to my study. Thank you for your participation.

Now please review the ad booklet.

Please **do not** spend more than 5 minutes on this activity.

Thank you.

Appendix D-1-1

Section #1

Directions: Before you go on to the more specific questions, we would like for you to list in Column A all the products you remember being advertised (i.e. a car, insurance etc.). In Column B, besides the product, we would like for you to list all the brand names or companies manufacturing the product you can remember (i.e. Honda, Ceigo etc.). Please try to list as many products and brand (or company) names as you can recall **before** turning to the next page.

PLEASE DO NOT SPEND MORE THAN 3 MINUTES ON THIS TASK.

	<u>COLUMN A</u> (Product type)	<u>COLUMN B</u> (Brand or company)
(Example)	Car Insurance	Geigo
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____

IMPORTANT: ONCE YOU HAVE TURNED THIS PAGE, PLEASE DO NOT TURN BACK TO IT TO ADD ANY ADDITIONAL PRODUCTS OR BRANDS.

Appendix D-1-2

Recognition Test: (Check one for each question)

1. The brand of detergent you saw was

☐ Era	☐ Fab
☐ Tide	☐ Arm & Hammer
☐ Cheer	

2. The name of airline you saw was

☐ American Airline	☐ US. Air
☐ Northwest	☐ United Airline
☐ Delta	

3. The brand of toothpaste you saw was

☐ Listerine	☐ Colgate
☐ Mantedance	☐ Pepsodent
☐ Crest	

4. The brand of hotel you saw was

☐ Holiday Inn	☐ Red Roof Inn
☐ Comfort Inn	☐ Sleep Inn
☐ Days Inn	

5. The brand of car you saw was?

☐ Honda	☐ Pontiac
☐ Toyota	☐ Volvo
☐ Saturn	

Appendix D-1-3

The following pages contain a variety of additional question about the product and ads you saw. The questions from product to product may vary.

Please try to answer all questions.

Tide Detergent

1. After viewing the ad booklet, how interested were you in the Tide detergent advertising? (circle one)

Not at all									Very
Interested	1	2	3	4	5	6	7	interested	

2. What do you recall most about the Tide detergent ad you saw? (circle one)

A. Illustration	D. Headline
B. Product	E. Human Model
C. Copy	F. None of the above

3. How likely do you think you would try this brand the next time you need a product of this nature? (circle one)

Definitely								Definitely
would not	1	2	3	4	5	6	7	would try
try								

4. How likely do you think you would buy this brand the next time you need a product of this nature? (circle one)

Definitely								Definitely
would not	1	2	3	4	5	6	7	would buy
buy it								it

5. How likely do you think you would actively seek out this brand the next time you need a product of this nature? (circle one)

Definitely								Definitely
would not	1	2	3	4	5	6	7	would actively
actively seek								seek

6. Please record you feeling about the advertisement. (circle one of each line)

Bad	1	2	3	4	5	6	7	Good
Unattractive	1	2	3	4	5	6	7	Attractive
Unpleasant	1	2	3	4	5	6	7	Pleasant

7. How did you feel about Tide detergent? (circle one)

Unfavorable	1	2	3	4	5	6	7	Favorable
-------------	---	---	---	---	---	---	---	-----------

Saturn Car

1. After viewing the ad booklet, how interested were you in the Saturn car advertising? (circle one)

Not at all Interested	1	2	3	4	5	6	7	Very interested
--------------------------	---	---	---	---	---	---	---	--------------------

- 2.What do you recall most about the Saturn car ad you saw? (circle one)

A. Illustration
B. Product
C. Copy
D. Headline
E. Human Model
F. None of the above

3. Please record your feeling about Saturn car. (circle one of each line)

Bad	1	2	3	4	5	6	7	Good
Unsatisfactory	1	2	3	4	5	6	7	Satisfactory
Unfavorable	1	2	3	4	5	6	7	Favorable

4. How likely do you think you would buy this brand the next time you need a product of this nature? (circle one)

Definitely would not buy it	1	2	3	4	5	6	7	Definitely would buy it
-----------------------------------	---	---	---	---	---	---	---	-------------------------------

5. How likely do you think you would actively seek out this brand the next time you need a product of this nature? (circle one)

Definitely would not actively seek	1	2	3	4	5	6	7	Definitely would actively seek
--	---	---	---	---	---	---	---	--------------------------------------

6. What characteristics about cars are most influential in your buying? (circle one).

A. Appearance
B. Price
C. Performance
D. Gas mileage

7. To what socio-economic level do you think this product would most appeal?
(circle one).

- | | |
|-----------------|-----------------|
| A. Lower | D. Middle Upper |
| B. Lower Middle | E. Upper |
| C. Middle | |

Colgate Baking Soda

1. After viewing the ad booklet, how interested were you in the Colgate Baking Soda advertising? (circle one)

Not at all								Very
Interested	1	2	3	4	5	6	7	interested

2. What do you recall most about the Colgate Baking Soda ad you saw? (circle one)

- | | |
|-----------------|----------------------|
| A. Illustration | D. Headline |
| B. Product | E. Human Model |
| C. Copy | F. None of the above |

3. Please record your feeling about Colgate baking Soda toothpaste. (circle one of each line)

Bad	1	2	3	4	5	6	7	Good
Unsatisfactory	1	2	3	4	5	6	7	Satisfactory
Unfavorable	1	2	3	4	5	6	7	Favorable

4. How much did you like the Colgate Baking Soda toothpaste advertising? (circle one)

Dislike								Like
Very much	1	2	3	4	5	6	7	very much

5. How likely do you think you would try this brand the next time you need a product of this nature? (circle one)

Definitely								Definitely
would not	1	2	3	4	5	6	7	would try
try								

6. How likely do you think you would buy this brand the next time you need a product of this nature? (circle one)

Definitely would not buy it	1	2	3	4	5	6	7	Definitely would buy it
-----------------------------------	----------	----------	----------	----------	----------	----------	----------	-------------------------------

7. How likely do you think you would actively seek out this brand the next time you need a product of this nature? (circle one)

Definitely would not actively seek	1	2	3	4	5	6	7	Definitely would actively seek
--	----------	----------	----------	----------	----------	----------	----------	--------------------------------------

8. If Colgate Baking Soda toothpaste were to be available in your area, how likely would you be to use this product? (circle one)

Not at all likely	1	2	3	4	5	6	7	Very likely
----------------------	----------	----------	----------	----------	----------	----------	----------	-------------

9. Please record you overall feeling about the advertisement. (circle one of each line)

Bad	1	2	3	4	5	6	7	Good
Unattractive	1	2	3	4	5	6	7	Attractive
Unpleasant	1	2	3	4	5	6	7	Pleasant

10. To what degree were you bored or excited by the Colgate Baking Soda toothpaste advertising? (circle one)

Bored	1	2	3	4	5	6	7	Excited
-------	----------	----------	----------	----------	----------	----------	----------	---------

Delta Airlines

1. After viewing the ad booklet, how interested were you in the Delta airline advertising? (circle one)

Not at all Interested	1	2	3	4	5	6	7	Very interested
--------------------------	----------	----------	----------	----------	----------	----------	----------	--------------------

2. Please record your feeling about Delta airline (circle one of each line)

Bad	1	2	3	4	5	6	7	Good
Unsatisfactory	1	2	3	4	5	6	7	Satisfactory
Unfavorable	1	2	3	4	5	6	7	Favorable

3. How likely do you think you would buy this brand the next time you need a product of this nature? (circle one)

Definitely would not buy it	1	2	3	4	5	6	7	Definitely would buy it
-----------------------------------	---	---	---	---	---	---	---	-------------------------------

4. How likely do you think you would try this brand the next time you need a product of this nature? (circle one)

Definitely would not try	1	2	3	4	5	6	7	Definitely would try
--------------------------------	---	---	---	---	---	---	---	-------------------------

Days Inn Hotel

1. After viewing the ad booklet, how interested were you in the Days Inn hotel advertising? (circle one)

Not at all Interested	1	2	3	4	5	6	7	Very interested
--------------------------	---	---	---	---	---	---	---	--------------------

2. Please record your feeling about the advertisement. (circle one of each line)

Bad	1	2	3	4	5	6	7	Good
Unattractive	1	2	3	4	5	6	7	Attractive
Unpleasant	1	2	3	4	5	6	7	Pleasant

3. How likely do you think you would pay to stay in this hotel the next time you need a product of this nature? (circle one)

Definitely
would not
pay for it

1

2

3

4

5

6

7

Definitely
would pay
for it

4. How likely do you think you would actively seek out this hotel the next time you need a product of this nature? (circle one)

Definitely
would not
actively seek

1

2

3

4

5

6

7

Definitely
would actively
seek

General Questions About The Advertising

1. As you recall, what kind of ethnicity of the endorser appearing in the advertising? (circle one)

- | | | |
|-------------|-------------------------|-----------|
| 1. Chinese | 4. Caucasian (American) | 7. Others |
| 2. Hispanic | 5. African-American | |
| 3. Korean | 6. Japanese | |

2. Please rate your impression of the endorser that you just mentioned above?
(circle one of each line)

- | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|------------|
| Unattractive | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Attractive |
| Ugly | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Beautiful |
| Not sexy | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Sexy |

3. How did you feel about toothpaste advertising that featuring human model?
(circle one of each line)

- | | | | | | | | | |
|------------------|---|---|---|---|---|---|---|--------------|
| Dull | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Interesting |
| Not eye catching | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Eye catching |
| Unimpressive | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Impressive |

4. Overall, which ad was the best in the entire ad booklet? (circle one)

- | | |
|-------------------------|---------------------|
| A. Tide - Detergent | D. Delta - Airline |
| B. Saturn - Car | E. Days Inn - Hotel |
| C. Colgate - Toothpaste | |

5. Overall, which ad was the worst in the entire ad booklet?

- | | |
|-------------------------|---------------------|
| A. Tide - Detergent | D. Delta - Airline |
| B. Saturn - Car | E. Days Inn - Hotel |
| C. Colgate - Toothpaste | |

Appendix D-2

Section # 2

Directions: For the following questions, please mark/circle the number that best describe yourself/behavior.

Please answer all questions.

1. What is your ethnic origin?

_____ Chinese
_____ Japanese
_____ Korean
_____ Others

2. How strongly do you identify with your ethnic group?

Not Very	1	2	3	4	5	6	7	Very
Strongly								Strongly

3. How important is it for you to assimilate with the dominant (Anglo) culture?

Not Very	1	2	3	4	5	6	7	Very
Important								Important

4. How important is it for you to maintain identity with your ethnic culture?

Not Very	1	2	3	4	5	6	7	Very
Important								Important

5. How often do you speak your mother language (Chinese, Japanese, and/or Korean)?

_____ 81% - 100% of the time
_____ 61% - 80% of the time
_____ 41% - 60% of the time
_____ 21% - 40% of the time
_____ 0% - 20% of the time

6. Approximately what percentage of the people in your neighborhood would you say are the same ethnic of origin as you are? (Chinese, Japanese, or Korean)

_____ 81% - 100% are the same ethnic of origin

_____ 61% - 80% are the same ethnic of origin

_____ 41% - 60% are the same ethnic of origin

_____ 21% - 40% are the same ethnic of origin

_____ 0% - 20% are the same ethnic of origin

7. How long have you lived in the United States? _____ years _____ months

8. What type of music do you prefer?

1. Only music in my mother language

2. Mostly music in my mother language

3. Equally music in English and my mother language

4. Mostly music in English

5. Only music in English

9. If you have a choice, what type of movies do you prefer?

1. Only movie in my mother language

2. Mostly movie in my mother language

3. Equally movie in English and my mother language

4. Mostly movie in English

5. Only movie in English

Appendix D-3

Section #3

Directions: For the following questions, please mark/circle the number that best describe yourself/behavior.

Please answer all questions.

- | | | | |
|---|--------------------------|--------------------------------|---------------|
| 1. What is your sex: | 1. Male | 2. Female | |
| 2. What is your marital status: | 1. Single/never married | 2. Married/living with partner | |
| | 3. Divorced/separated | 4. Widowed | |
| 3. What is your age group: | 1. Under 20 | 2. 20-29 | |
| | 3. 30-39 | 4. 40-49 | |
| | 5. 50-59 | 6. Over 60 | |
| 4. Last level of education completed: | 1. Less than high school | 2. High school or equivalent | |
| | 3. some college | 4. Bachelor's degree | |
| | 5. Graduate degree | | |
| 5. Last year's approximate total family income: | 1. Less than \$20,000 | 2. \$20,000-\$29,999 | |
| | 3. \$30,000-\$39,999 | 4. \$40,000-\$49,999 | |
| | 5. \$50,000-\$74,999 | 6. \$75,000 or more | |
| 6. Employment status: | 1. Student | 2. Full-time | 3. Part-time |
| | 4. Retired | 5. Housewife | 6. Unemployed |

Thank you for your participation!

Appendix E

(Selected Models: Asian and Caucasian)

Appendix E-1-1



MANY DENTISTS RECOMMEND
BAKING SODA FOR
WHITER TEETH.

YOU'LL RECOMMEND
THE TASTE.



INTRODUCING **Colgate Baking Soda** TOOTHPASTE.

BETTER TASTE
WHITER TEETH

Appendix E-1-2



MANY DENTISTS RECOMMEND
BAKING SODA FOR
WHITER TEETH.

YOU'LL RECOMMEND
THE TASTE.



INTRODUCING **Colgate Baking Soda** TOOTHPASTE.

**BETTER TASTE
WHITER TEETH**



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THE TASTE.



INTRODUCING **Colgate Baking Soda** TOOTHPASTE.

**BETTER TASTE
WHITER TEETH**

Appendix E-3-1



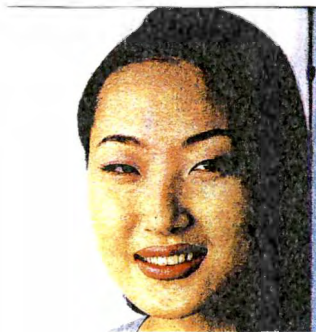
MANY DENTISTS RECOMMEND
BAKING SODA FOR
WHITER TEETH.

YOU'LL RECOMMEND
THE TASTE.



INTRODUCING **Colgate Baking Soda** TOOTHPASTE.

**BETTER TASTE
WHITER TEETH**



MANY DENTISTS RECOMMEND
BAKING SODA FOR
WHITER TEETH.

YOU'LL RECOMMEND
THE TASTE.



INTRODUCING **Colgate Baking Soda** TOOTHPASTE.

**BETTER TASTE
WHITER TEETH**

Appendix E-4-1



MANY DENTISTS RECOMMEND
BAKING SODA FOR
WHITER TEETH.

YOU'LL RECOMMEND
THE TASTE.



INTRODUCING **Colgate Baking Soda** TOOTHPASTE.

**BETTER TASTE
WHITER TEETH**



MANY DENTISTS RECOMMEND
BAKING SODA FOR
WHITER TEETH.

YOU'LL RECOMMEND
THE TASTE.



INTRODUCING **Colgate Baking Soda** TOOTHPASTE.

**BETTER TASTE
WHITER TEETH**

Appendix F

**Table A: MANOVA and ANOVA Results of Advertising Effectiveness
Across Three Ethnic Asian-American Groups (n=197)**

Multivariate Analysis of Variance

	<u>Wilks' Lamda</u>	<u>F-Value</u>	<u>p-value</u>
Model Type (M)	0.99	0.67	0.6296
Acculturation Level (A)	0.99	0.64	0.6361
Ethnicity of Receiver (E)	0.87	3.30	0.0012
M * E	0.99	0.34	0.8545

Univariate Analysis of Variance

	<u>Df</u>	<u>F-Value</u>	<u>p-value</u>
Attitude Toward Ad*			
Model Type (M)	1	0.61	0.4371
Acculturation Level (A)	1	1.12	0.2907
Ethnicity of Receiver (E)	1	7.43	0.0008
M * A	1	0.03	0.8533

Attitude Toward Brand*

Model Type (M)	1	0.15	0.6948
Acculturation Level (A)	1	0.29	0.5877
Ethnicity of Receiver (E)	1	8.18	0.0004
M * A	1	0.66	0.4160

Purchase Intention*

Model Type (M)	1	0.84	0.3599
Acculturation Level (A)	1	3.64	0.0581
Ethnicity of Receiver (E)	1	11.02	0.0001
M * A	1	0.00	0.9828

* $p < 0.01$

**Table B: MANOVA and ANOVA Results of Advertising Effectiveness
Among Chinese-Americans (n=66)**

Multivariate Analysis of Variance

	<u>Wilks' Lamda</u>	<u>F-Value</u>	<u>p-value</u>
Model Type (M)	0.93	0.91	0.4672
Acculturation Level (A)	0.95	0.72	0.5832
M * E	0.98	0.33	0.8551

Univariate Analysis of Variance

	<u>Df</u>	<u>F-Value</u>	<u>p-value</u>
Attitude Toward Ad			
Model Type (M)	1	1.08	0.3037
Acculturation Level (A)	1	0.17	0.6791
M * A	1	0.06	0.8076
Attitude Toward Brand			
Model Type (M)	1	3.35	0.0722
Acculturation Level (A)	1	0.18	0.6720
M * A	1	0.45	0.5063
Purchase Intention			
Model Type (M)	1	1.60	0.2109
Acculturation Level (A)	1	0.39	0.5342
M * A	1	0.20	0.6603

**Table C: MANOVA and ANOVA Results of Advertising Effectiveness
Among Japanese-Americans (n=65)**

Multivariate Analysis of Variance

	<u>Wilks' Lamda</u>	<u>F-Value</u>	<u>p-value</u>
Model Type (M)	0.90	1.51	0.2112
Acculturation Level (A)	0.87	2.04	0.1013
M * E	0.88	1.96	0.1126

Univariate Analysis of Variance

	<u>Df</u>	<u>F-Value</u>	<u>p-value</u>
Attitude Toward Ad*			
Model Type (M)	1	0.56	0.4554
Acculturation Level (A)	1	5.64	0.0208
M * A	1	3.05	0.0859
Attitude Toward Brand**			
Model Type (M)	1	0.72	0.4011
Acculturation Level (A)	1	6.30	0.0148
M * A	1	0.81	0.3714
Purchase Intention*			
Model Type (M)	1	0.82	0.3688
Acculturation Level (A)	1	5.97	0.0176
M * A	1	3.28	0.0754

*p-value<0.05, **p-value<0.10

**Table D: MANOVA and ANOVA Results of Advertising Effectiveness
Among Korean-Americans (n=66)**

Multivariate Analysis of Variance

	<u>Wilks' Lamda</u>	<u>F-Value</u>	<u>p-value</u>
Model Type (M)	0.97	0.39	0.8131
Acculturation Level (A)	0.95	0.78	0.5427
M * E	0.93	1.10	0.3662

Univariate Analysis of Variance

	<u>Df</u>	<u>F-Value</u>	<u>p-value</u>
Attitude Toward Ad			
Model Type (M)	1	0.08	0.7742
Acculturation Level (A)	1	0.32	0.5750
M * A	1	2.24	0.1398
Attitude Toward Brand			
Model Type (M)	1	0.01	0.9053
Acculturation Level (A)	1	1.37	0.2464
M * A	1	3.12	0.0823
Purchase Intention			
Model Type (M)	1	0.15	0.7022
Acculturation Level (A)	1	2.32	0.1328
M * A	1	2.23	0.1405

Appendix G

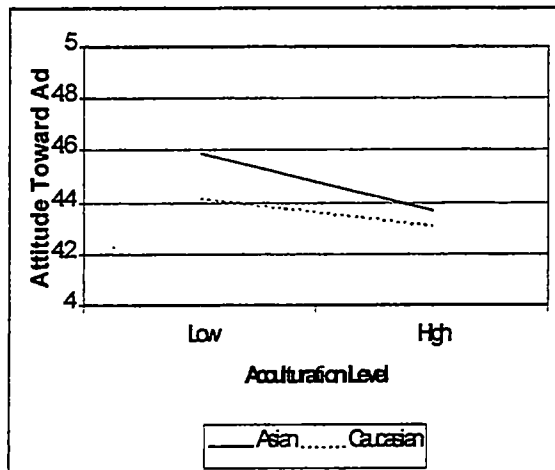


Figure 2.1

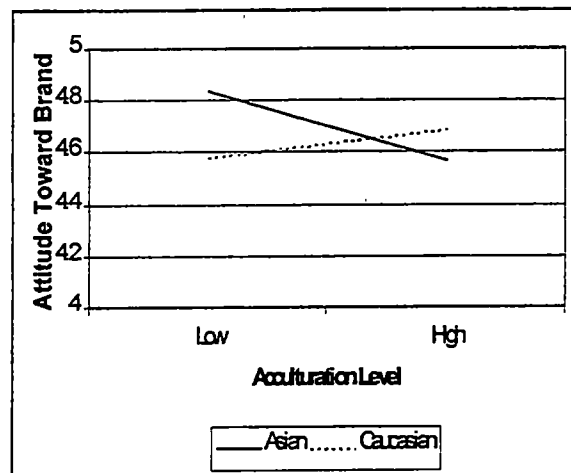


Figure 2.2

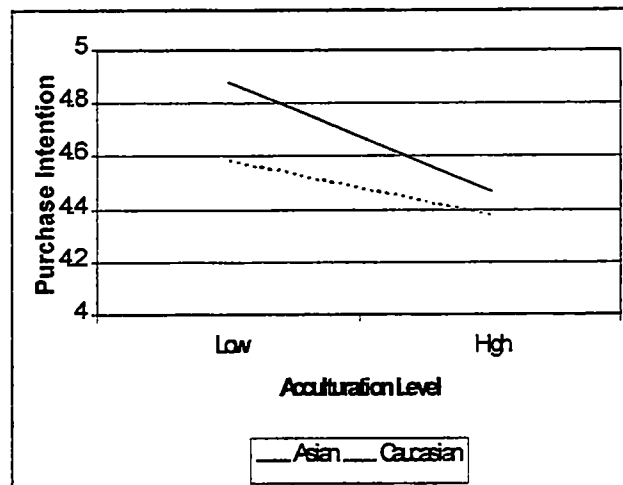


Figure 2.3

Figure 2: The Interaction Effect of The Ethnicity of Models & The Acculturation Level Across Three Ethnic Asian-American Groups

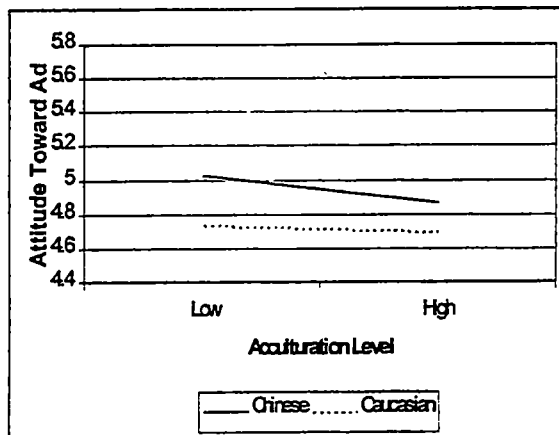


Figure 3.1

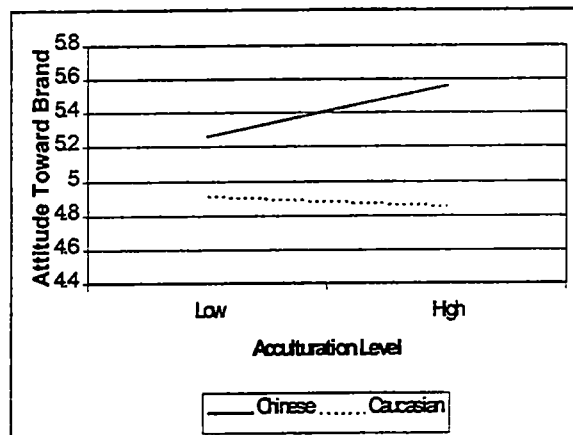


Figure 3.2

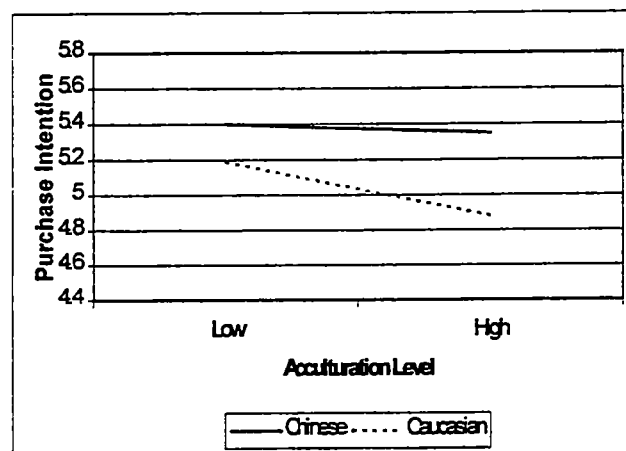


Figure 3.3

Figure 3: The Interaction Effect of The Ethnicity of Models & The Acculturation Level Among Chinese-Americans

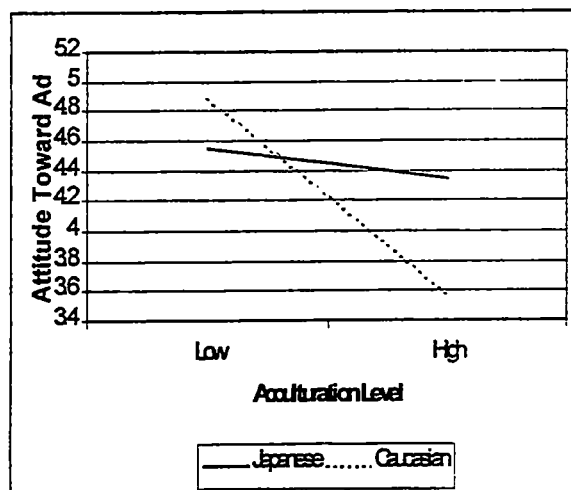


Figure 4.1

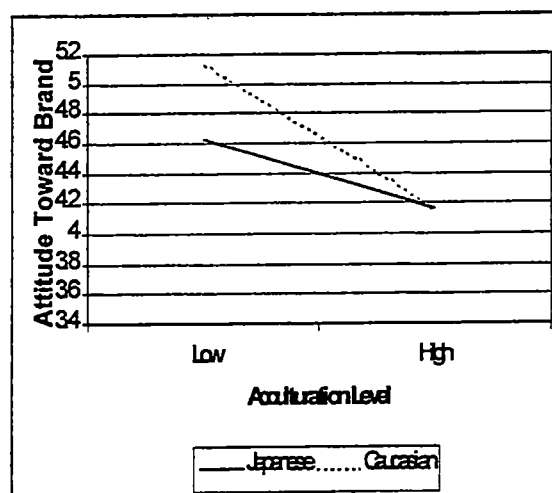


Figure 4.2

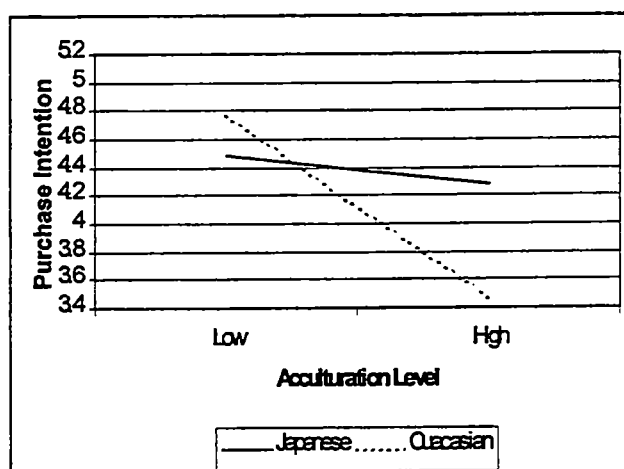


Figure 4.3

Figure 4: The Interaction Effect of The Ethnicity of Model & The Acculturation Level Among Japanese-Americans

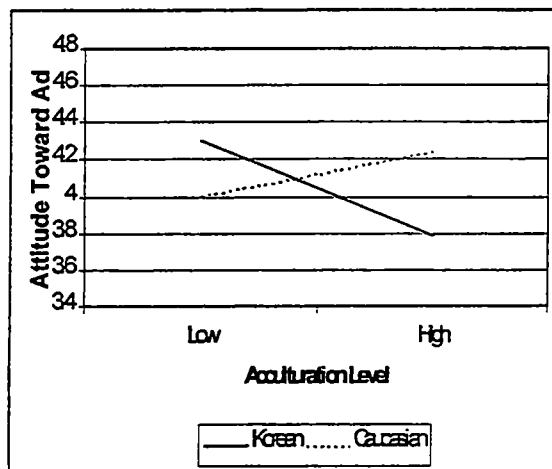


Figure 5.1

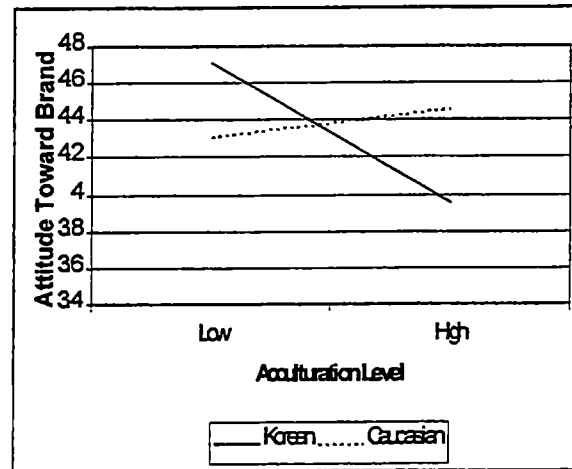


Figure 5.2

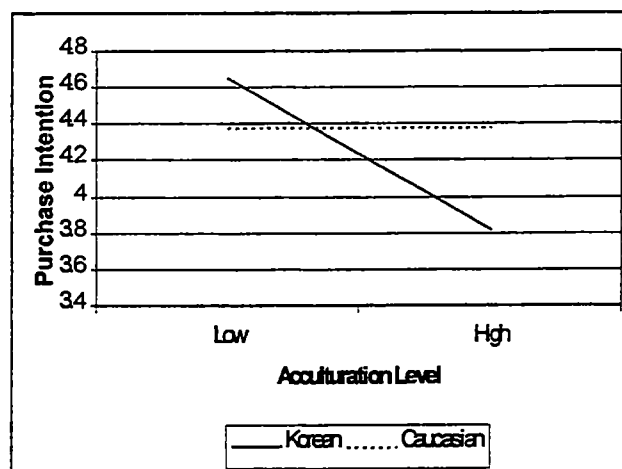


Figure 5.3

Figure 5: The Interaction Effect of The Ethnicity of Models & The Acculturation Level Among Korean-Americans

VITA

Kittichai Watchravesringkan was born in Songkhla, Thailand on November 13, 1967. He attended elementary school through junior high school in his hometown, Songkhla, Thailand. He then moved to Bangkok to attend Triam Udom Suksa School where he received his high school diploma in 1985. The following August of 1985, he entered King Mongkut's Institute of Technology, Ladkrabang and received his Bachelor of Science degree with the concentration on Biotechnology in November of 1989.

Having been involved with his parent's retail business for years, he started developing his in-depth interest in retail. In June, 1994 he attended the University of Tennessee, Knoxville as an undergraduate student and received his Bachelor of Science degree in Retail and Consumer Science in December of 1997. As an undergraduate student at the University of Tennessee, Knoxville, he attained many honors, including the first place prize of the College of Human Ecology Undergraduate Research Fair at the University of Tennessee, Knoxville, the first place prize of the Marketing Plan Contest for Exxon Chemical Company, and the Dean's honor list.

The following January of 1998 he was accepted as a graduate student at the University of Tennessee, Knoxville. He also accepted a research assistantship for the Fall 1998 semester. He will receive his Master of Science degree in Retail and Consumer Science in May of 1999.