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INTERNATIONAL MARKETING STANDARDIZATION VERSUS ADAPTATION FROM THE CONSUMER'S PERSPECTIVE

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INTERNATIONAL MARKETING STANDARDIZATION VERSUS ADAPTATION FROM THE CONSUMER'S PERSPECTIVE

By

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ABSTRACT

INTERNATIONAL MARKETING STANDARDIZATION VERSUS ADAPTATION FROM THE CONSUMER'S PERSPECTIVE

By

Jyh-shen Chiou

Based on an extensive literature review, this thesis first argues that "product concept" should be the unit of analysis for decisions in international marketing standardization/adaptation. Different product concepts can fulfil different attitude functions, and the functional theory of attitude was used to derive the hypotheses. As experimental stimuli, product concepts were developed whose underlying functions were social, non-social or ambivalent. The key research questions focus on untangling the effects on attitudes and purchase intentions of : (1) functionally derived product concepts (as described above); (2) collectivistic versus individualistic culture (Taiwan versus the U.S.A., respectively); (3) consumer personality as reflected in the degree of attention to social comparison information; and (4) social versus ambivalent attitude function product (gift service versus computer printer).

The results showed that, for the product underlying ambivalent attitude functions, culture and personality have a role in affecting consumers' attitudes toward product concepts. Consumers in a collectivistic culture and consumers who are more attentive to social comparison information had more favorable attitudes associated with a social oriented product concept than with a non-social oriented product concept, while consumers in an individualistic culture and consumers who are less attentive to social comparison

information exhibited the opposite pattern in attitude order. However, for products engaging only social oriented attitude functions, consumers had more favorable attitudes associated with social oriented product concepts than with a non-social oriented product concept regardless of culture and of the degree of attention to social comparison information.

The results also show that personality can fully mediate the relationship between culture and the persuasiveness of the product concept (i.e., attitude and purchase intention). For product engaging social oriented attitude functions, a social oriented product concept created a stronger relationship between attitude and purchase intention than did a non-social oriented product concept. Finally, both the effects of the uniqueness, believability, and comprehensibility of a product concept, as covariates and as dependent variables in the model were also explored. This thesis demonstrated that the feasibility of international marketing standardization is product specific and that personality can be a base for international marketing segmentation.

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There are many people to thank for their support and help during the process of the research. First of all, I would like to express my thank to my Dissertation Committee for their suggestions, support and patience that they have throughout the completion of this research. Dr. Cornelia Dröge, my committee chairperson, not only has been a mentor, motivator, and critic of this dissertation, she has also be my major backup for the entire research. She always provide me with the just-in-time assistance. More importantly, she is the one who is disciplined-minded, yet very open to any kind of creativity. I feel fortunate to have this wonderful committee chairperson.

I would also like to extend my thank to other committee members. Dr. S. Tamer Cavusgil not only help me develop a stronger foundation of international marketing theories, but assist me in refining this research to be more managerial related. Dr. Robert W. Nason help me a lot both professionally and personally through out my stay at Michigan State. He is always there when I need his help in spite of his very busy schedule. The advise I received from Dr. Richard A. Spreng in consumer research was invaluable to the completion of this study. He always provide me with astute and candid comments on this research project from the beginning to the end.

This research would not have been possible without the financial support from the Center for International Business and Education Research and the help from Viewpoint

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Chapter 1

INTRODUCTION

OVERVIEW

Whether a firm should adopt an adaptation or a standardization marketing strategy in international markets is still debated in the marketing field. Supporters of a standardization strategy believe that world markets are becoming more homogeneous. Marketers should thus explore the advantages of economies of scale and increased efficiency by standardizing marketing activities across national boundaries (Elinder 1961; Fatt 1967; Levitt 1983). Followers of an adaptation strategy, however, caution that cultural, political, and economic differences among nations may require marketing programs and processes tailored for individual markets (Boddewyn, Soehl and Picard 1986; Douglas and Wind 1987; Hill and Still 1984; Wind 1986).

In order to resolve the argument, several researchers proposed contingency models to identify factors that influence the degree of marketing standardization (Buzzell 1968; Cavusgil, Zou, and Naidu 1993; Jain 1989; Kreutzer 1988; Quelch and Hoff 1986; Rau and Preble 1987; Samiee and Roth 1992). This group of researchers asserts that the degree of marketing standardization is contingent on a variety of internal and external factors. For example, Jain (1989) proposed that the degree of marketing program standardization is determined by factors such as organizational factors, market position,

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target market, environment, and the nature of product.

Although progress has been made in this research stream, there are several issues that need to be clarified before a general framework for standardization/adaptation decisions can be proposed. The first issue concerns the definition of marketing standardization and adaptation. Standardization can be strategic or executional, or it can involve minor or major modifications (Harris 1994; Kernan and Damzel 1993; Peebles, Ryans, and Vernon 1977; Sorenson and Weichmann 1975; Walters 1986). Previous literature has not agreed on definitions of the degree and formation of marketing standardization. The debate will be futile if there is no agreement on clear definitions of these concepts (Harris 1994; Onkvist and Shaw 1987; Walters 1986).

After the concept of standardization is defined, the second issue is whether consumers in different cultures will accept global marketing standardization. If standardization is defined at an executional level, then marketers need to know whether consumers in different cultures can accept the same marketing execution. On the other hand, if standardization is defined at a strategic level, then marketers need to understand whether consumers in different cultures perceive the single global marketing strategy in the same way. The third issue is: if consumers in different cultures perceive the marketing executions or strategies differently, are the differences caused by culture, personality, or market situation? If the differences are caused by culture, then cultural segmentation strategies will be more effective. If the differences are caused by personality, then cross cultural segmentation will be a better basis for international marketing strategy. Finally, if the differences are caused by marketing situations, then marketers can either influence the market situation themselves and standardize their

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marketing strategies, or temporally adjust their marketing strategies and scan for changes in the marketing situation.

These issues need to be tackled before a solid and useable theory can be constructed. In this thesis, it is proposed that international marketing standardization be defined at the *"product concept"* level. A product concept is the central idea of a brand, a general proposal for satisfying the targeted consumer needs, and a strategic guideline for a brand's marketing activities (Dillon, Madden, and Firtle 1994; Haley and Gatty 1971; Moore 1982; Schwartz 1987). Marketers need to know whether consumers in different cultures will accept a standardized product concept before dealing with the executional aspects of international marketing. The executional aspects should not obscure the central idea of a global brand.

In order to test how culture, personality, product types, and other situational variables affect a consumer's attitude and purchase intention toward a product concept, this study's experiment was conducted in two countries (Taiwan as representative of collectivistic cultures and the United States as representative of individualistic cultures) and tested different product types. Product concepts served experimental stimuli. The personalities of the consumers and other situational variables were also be measured to determine their effects on their attitudes and purchase intentions.

In the following sections, the three problem areas of current research are discussed in more detail. The section is followed by a brief discussion about the research purpose, design, and contributions.

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PROBLEMS

The Definition of Marketing Standardization/Adaptation

The definition of marketing standardization/adaptation is not well developed (Harris 1994; Sandler and Shani 1992; Walters 1986). Researchers can easily disagree by eliciting different definitions of marketing standardization. For example, Jain (1989) proposed that marketing standardization has two aspects; i.e., the marketing program and the marketing process. The marketing program refers to various aspects of the marketing mix, while the marketing process refers to tools that aid in program development and implementation. Empirical work tends to use psychological latent constructs (e.g., Samiee and Roth 1992) or single indicators (e.g., Boddewyn, Soehl, and Picard 1986; Dunn 1966; Sandler and Shani 1992; Sorenson and Wiechmann 1975) to capture the idea of standardization. There is no consistent definition or operationalization of marketing standardization among conceptual or empirical studies. Based on a stringent definition, researchers who favor adaptation can easily argue that there is no such thing as marketing standardization. One can hardly find a product that does not have to have a local brand name, follow local regulations, or adapt to dissimilar channel system (Blackwell, Ajami, and Stephen 1991; Harris 1994; Wind 1986). For example, the marketing strategy that Coca Cola adopts can be said to be very standard around the world, yet the brand name, Coca Cola, has to be translated into different languages. The company may be required to attach different nutrition labels on its packages for different local markets. Can these minor and technical changes be considered symptomatic of an adaptation strategy?

On the other hand, suppose a company uses standard marketing programs and processes except that it positions its product for different consumer needs (e.g., image

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product vs. quality product) for different countries. Is this a case of marketing standardization? Are the above two cases representative of similar standardization levels? Can the criteria for deciding the level of marketing standardization may have different weights in different situations?

The problem has to be solved from the consumer's perspective. For example, consumers in different cultures may have different preferences for various aspects of advertising execution. As several researchers claimed, Japanese like soft-sell ads, while Americans like informational ads (Johansson 1994; Mueller 1987). If these assertions are true, then the standardization of ad executions across the two countries will not be a good option. However, that consumers in different cultures prefer different execution formations does not mean that their basic needs for buying the product are different (Friedmann 1986). If their motivations for buying a certain product are the same across cultures, then brand or product positioning can be standardized across cultures by focusing on certain global needs. Therefore, the consumers' perspectives can enrich the definition of marketing standardization.

The Role of Culture

Culture is, in essence, a collective mental programming as defined by Hofstede (1983). This mental programming is shared by the members within a nation, region, or group, but not by members of other nation, regions, or groups. Different cultures have different socialization processes for their generations (Triandis 1994). Different socialization processes may cause people living in different cultural contexts to have dramatic differences in cognition, emotion and/or social behavior (Douglas and Dubois 1977; Markus and Kitayama 1991). Culture having a role in influencing consumer

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behavior has been discussed in several studies (e.g., Childers and Rao 1992; Hall 1976; Johansson 1986, 1994; Lazer 1985; Lee and Green 1990; Yau 1988; Zandpour et al. 1994). The major task is to find a marketing relevant cultural dimension to classify cultures into different groups. The cultural dimension chosen should be able to explain why consumers in a certain culture systematically bias their preference either for certain aspects of a product or for a certain marketing activity. In addition, the cultural dimension may be related to personality and possible to other variables. What is the nature of the relationship between culture and these variables? Until now, there have not been many thorough empirical studies on these issues.

The Role of Consumer Personality

It may be too broad to claim that people living in one type of culture will definitely possess dramatically different characteristics from those in other cultures (Clark 1990; Triandis 1994). A macro approach can only suggest a modal distribution of characteristics or patterns within each culture. That is, researchers can only claim that most people in a certain culture possess certain characteristics, while most people in another culture possess different characteristics. This does not mean however that there is little variance regarding specific characteristics among the people within each culture. Some people in a certain culture may possess particular characteristics which are shared by most of the people in other cultures instead of pervasively within their own culture. For example, some people in an individualistic society may need to conform to group pressures as much as those in a collectivistic society (Figure 1-1). Therefore, in order to explain fully the behavior variances, researchers need to take individual characteristics into account.

Individualism   Collectivism
Culture   Culture

Individualistic   Collectivistic
Orientation   Orientation
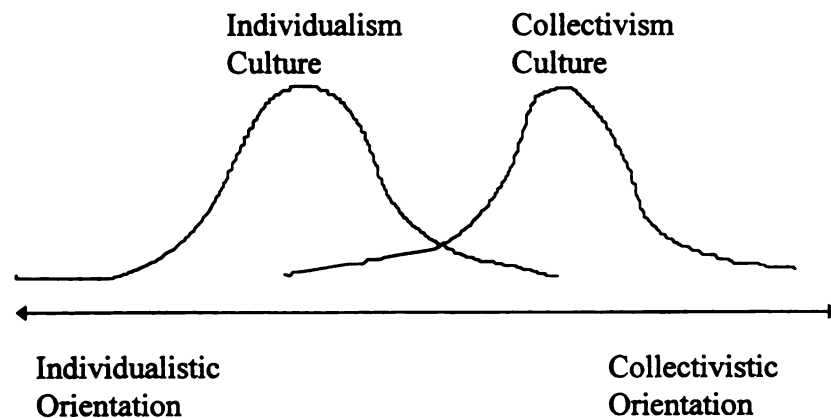
Figure 1-1 The Distribution of Personal Orientation

As Triandis (1994) explained, culture will influence the socialization process. Socialization processes in turn affect a person's personality. In other words, personality is the intervening variable between culture and behaviors. If this assertion is correct, then actually personality may better predict behavior than does culture. But then, why do model of behavior need the cultural dimension? Does culture have a direct effect on consumer behavior in addition to the effect through personality? This is a question that needs to be resolved.

The Role of Product Situation

Same products may be perceived differently in different cultures. The function that a product serves not only stems from its physical features or attributes(e.g., taste, size, durability), but also from culturally defined functions (Douglas and Dubois 1977; Shavitt 1989). Some products serving mostly utilitarian functions in one culture may serve value expressive functions in other cultures. For example, coffee may serve a utilitarian function because of the awards and punishments intrinsically associated with it in Western

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cultures (e.g., taste, nervousness; Shavitt 1989), while it may serve as a value-expressive function in Eastern cultures (e.g., Westernized image). Therefore, consumers in different cultures may use products for different reasons. Their motivations for buying certain kinds of products may be totally different. In an international marketing setting, marketers need to know whether the function a product serves is the same across cultures. If there are striking differences regarding the function served, a standardization strategy will be very difficult.

Other Variables

In order to determine whether culture or personality can affect a person's product concept preference, several covariates need to be controlled in the research. For example, it may be important whether consumers really understand the product concept or advertising we are going to deliver, whether they believe claims for the product, and whether the product is unique enough to attract their interest. Researchers need to control those variables in order to clarify the effects from cultural, personal, and object-related variables.

OBJECTIVES AND FRAMEWORK

The purpose of this study is to examine whether consumers in different cultures have different attitudes and intentions engendered by a certain product concept. How strongly are attitudes and purchase intentions affected by culture, consumer personalities, product characteristics, and other situational variables? The thesis first documents why these questions are important for an international marketer and how these questions relate to the core issues underlying the debate between marketing standardization and marketing

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adaptation. Most importantly, this research links the arguments into a systematic framework.

In this study, "product concepts" are the unit of analysis for the arguments regarding the international marketing standardization/ adaptation issues. Defining international marketing standardization at the product concept level is fruitful and relevant for practitioners and researchers alike. The detailed argument for this assertion will be developed in Chapter 2.

Using product concepts as experimental stimuli, this study experimentally tested whether product concepts emphasizing different attitude functions (concepts that focus on social oriented functions versus concepts that focus on non-social oriented functions) are different in persuasiveness (attitudes and purchase intentions) for consumers in individualistic versus collectivistic cultures. The United States and Taiwan were chosen to represent the individualistic and collectivistic culture respectively (Hofstede 1983). Social oriented and non-social oriented functions are the two major attitude functions in theories of attitude functions (Katz 1960; Smith et al. 1956), and this distinction underlies the differences among the experimental stumili. Attitudes serving the social oriented function facilitate and maintain a person's social relationship (Smith et al. 1956), while attitudes serving the non-social oriented function provide a person chances to express his/her underlying values (Katz 1960). These two functions represent the two major reasons for purchasing and consuming products. That is, some consumers care more about the social implications of their purchasing and consumption behaviors, while other consumers pay more attention to what they can gain from the product than what other people think about their purchasing and consumption behaviors.

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In addition, this study simultaneously modeled consumer personality, product type, and other situational variables in the experiment. The experiment demonstrated the individual effects of culture, personality, product type, and other situational variables on a consumer's preference for different product concepts, as well as the interacting effects among those variables (Figure 1-2).

EXPECTED CONTRIBUTIONS

This study made several contributions to the marketing literature and has various practical applications. First, the study presented a systematic framework of the international marketing standardization issue based on an extensive review of international standardization/adaptation studies. It clarified the definition, domains, and implications of the international marketing standardization strategy, and showed how consumer perspectives can complement this research stream. Second, this study incorporated a number of important variables into one study. It covered culture, personality, object, and other situational variables. The comprehensive coverage enabled exploration of the effects of individual factors, and also of the moderating, intervening, and masking effects of the independent variables. Third, by focusing on product concept manipulations instead of on the executional aspects of marketing, the confounding effect of the executional aspects with the core product concept were eliminated. This provides a good basis for future research. Fourth, this study integrated the theories of attitude functions, self-concept, and symbolic consumption into the cross-cultural consumer behavior. It demonstrated that theories of attitude functions can form a fruitful research stream in cross-cultural consumer behaviors. Finally, the study is one of the few studies that uses the consumer
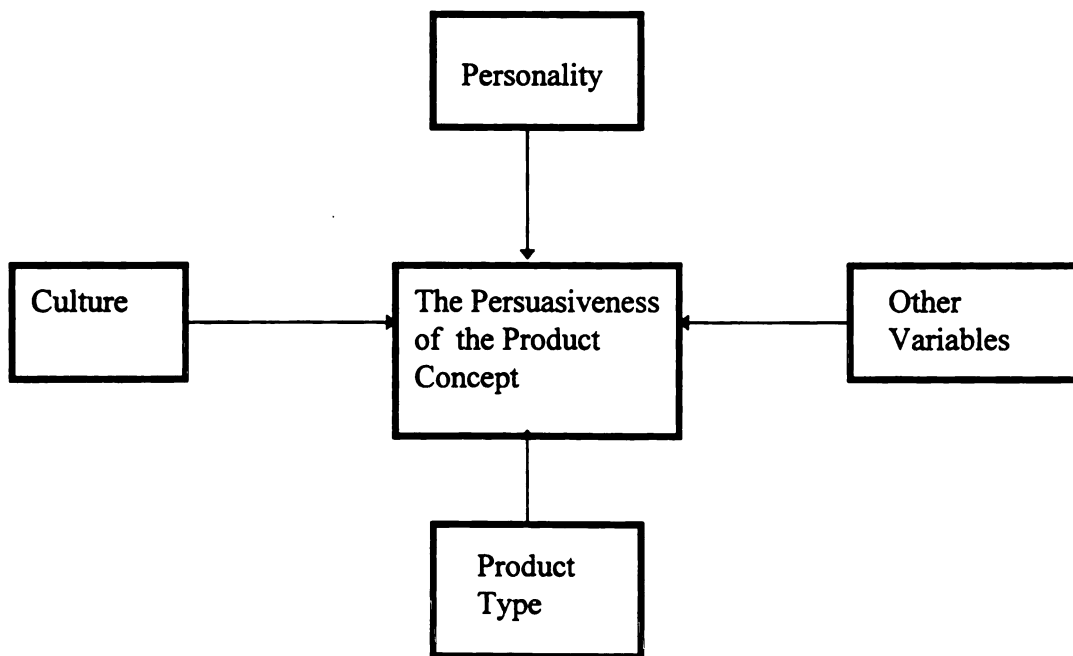
Figue 1-2 The Conceptual Framework

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Chapter 2

LITERATURE REVIEWS AND RESEARCH FRAMEWORK

In the following pages, the concept of marketing standardization and adaptation is first clarified. The terms, *product concept*, is linked to define and clarify the marketing standardization/adaptation concept. This review and discussion will provide a strong rational for the use of "product concept" as a core construct for the international marketing standardization/ adaptation debate.

After the issues of the standardization/ adaptation are clarified, this chapter will explain how culture, personality, product type, and other variables may affect a consumer's preferences toward different product concepts. The theories of attitude functions and self-concepts will be applied to integrate the proposed relationships. The research hypothesis for each main and interacting effect in the experimental research will be presented at the end of each section.

MARKETING STANDARDIZATION AND ADAPTATION

Scope of the Review

If a more liberal criteria is applied, there will be a tremendous amount of studies related to some degrees of the topics of international marketing standardization/adaptation. In addition to numerous trade articles, one can easily contend that any study regarding the

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similarities and differences between domestic and foreign markets can be the target for the review. For the purpose of this study, the literature review is necessarily limited both with regard to concepts addressed and to sources reviewed. The review of theoretical and empirical contributions to the international marketing standardization is delimited as followed.

First, the review will focus on articles that directly argue the pros and cons of international marketing standardization/adaptation. Articles dealing solely with how to do international marketing, how environmental factors affect the international marketing strategy, or how similar and dissimilar between domestic and foreign markets, are not included in this review. Occasional references to these papers will be made when appropriate, but the extensive nature of these literatures precludes comprehensive coverage in this review.

Second, the review will include articles that are intended to clarify the definition and domain of international marketing standardization/adaptation. This inclusion can help establish the framework of this thesis. Finally, the review will center on conceptual and empirical works appearing in marketing and strategy related academic publications. The review articles primarily come from *Journal of Marketing, Journal of Marketing Research, European Journal of Marketing, Journal of International Business Studies, International Marketing Review, Journal of International Marketing, Journal of International Consumer Marketing, Journal of Consumer Research, Journal of Consumer Marketing, Journal of Advertising Research, International Journal of Advertising, Harvard Business Review, Columbia Journal of World Business, MSU Business Topics,* and *Business Horizon.* Significant contributions from other sources which have been

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referenced in the works listed above will also be included.

Domain of International Marketing Standardization/Adaptation

When reviewing the literature, one can easily find that the domain of marketing standardization are different from a study to another (Walters 1986). Different emphasized domains may render different research results and conclusions. In fact, certain domains of marketing are easier than others to be standardized across borders. For example, Sorenson and Wiechmann (1975) found that an extremely high degree of standardization appears to exist in brand name and the physical characteristics of products and packages, while price can hardly be standardized because of currency fluctuations and different tariff systems. Therefore, the domain of international marketing standardization needs to be clearly defined before a productive result of the international marketing standardization versus adaptation debate can be achieved (Harries 1994; Walters 1986).

Early studies of international marketing standardization centered on the advertising dimension (Jain 1989; Walters 1986). Elinder (1961) is frequently cited as the pioneer advocate for the concept of international marketing standardization. He proposed that uniform advertising in Europe was becoming more feasible and desirable for international firms. Similarly, Fatt (1967) emphasized that it is desirable to have uniform international advertising campaigns based on universal appeals. Although these propositions drew much attention in the practical and academic field, some researchers were more cautious about the proposition. For example, Roostal (1963) and Miracle (1968) concerned about the barriers of international advertising standardization. Fournis (1962) commented that European consumers were not ready to give up customs, traditions, languages, and literatures. It might take several generations to be able to observe the change.

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In addition to the above articles, the reviewed articles emphasizing solely on the advertising aspect include Britt (1974), Dunn (1966), Fatt (1967), Harris (1994), Hite and Fraser (1988), Kanso (1992), Killough (1978), Kirpalani et al. (1988), Miracle (1968), Onkvist and Shaw (1987), Peebles (1988), Peebles et al. (1977), Ricks et al. (1974), Roostal (1963), Ryans and Donnelly (1969), Shao et al. (1992), Whitelock and Chung (1989), and Zandpour et al. (1994) (Table 2-1). The articles focusing solely on advertising represent around forty percent of the reviewed articles.

The second most explored domain of international marketing standardization is product strategy. Studies focused solely on this dimension are related very much to the global competitive strategy literature. One of the most provocative articles was written by Levitt (1983). In the article, he claimed that markets in different parts of the world are becoming more and more similar because of the advance in the communication technology and transportation systems. He stressed that the economies of scale obtained by standardizing products are very important for a firm's global success. Other articles focusing exclusively on the product aspect include: Hout, Porter, and Rudden (1982) who discussed the concept of world products; Ohmae (1989) who examined the feasibility of lead-country models; and Hill and Still (1984) who addressed issues related to product adaptation in low developed countries. Basically, the above articles (except Hill and Still (1984)) are strategically-oriented (Rau and Preble 1987) and did not comprehensively discuss the standardization issue in detail.

Instead of focusing on only one aspect of marketing, there are increasingly more studies emphasizing a broader domain of international marketing standardization. The article by Buzzell (1968) and Terpstra (1967) can be identified as the pioneers in this

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approach. They covered several domains of international marketing standardization including product design, pricing, distribution, sales forces, ads and promotion, branding, packaging, and other marketing dimensions. Later research which discussed a broader standardization domain include Blackwell, Ajami, and Stephen (1991), Jain (1989), Martenson (1987), Quelch and Hoff (1986), Rau and Preble (1987), Sheth (1986), Sorenson and Weichmann (1975), Walters (1986), and Wind (1986). The rest of the reviewed articles focused two or three dimensions of international marketing standardization. The focus of each reviewed article is shown in Table 2-1.

In conclusion, there is no consistent domain of international marketing standardization in the past literature. Different research may emphasize different domains of marketing standardization. The different focuses of the past research may render different conclusions about international marketing standardization. Therefore, it is very important that the domain of the study must be clearly specified first.

Table 2-1 The Domain of International Marketing Standardization

Author(s)	Advertising/ Promotion	Product/Brand'g package	Distrib.	Pricing	Strategy	Others
Baalbaki & Malhotra (1995)	X	X		X	X	X	X
Blackwell et al. (1991)	X	X	X	X	X	X
Boddewyn et al. (1986)	X	X	X			
Britt (1974)	X					
Buzzell (1968)	X	X	X	X	X	X
Cavusgil et al. (1993)	X	X				
Dunn (1966)	X					
Elinder (1961)	X					
Fatt (1967)	X					
Friedmann (1986)						X
Harris (1994)	X					
Hill & Still (1984)		X				
Hite & Fraser (1988)	X					
Hout et al. (1982)		X				
Jain (1989)	X	X	X	X	X	X
Kanso (1992)	X					
Kernan & Damzel (1993)	X					
Killough (1978)	X					
Kirpalani et al. (1988)	X					
Levitt (1983)		X				
Martenson (1987)	X	X	X	X	X	X
Miracle (1968)	X					
Ohmae (1989)		X				

Table 2-1 (cont'd)

Author(s)	Advertising/ Promotion	Product/ package	Brand'g	Distrib.	Pricing	Strategy	Others
Onkvisit & Shaw (1989)		X					
Onkvisit & Shaw (1987)	X						
Peebles (1988)	X						
Peebles et al. (1977)	X						
Porter (1986)						X	
Quelch & Hoff (1986)	X	X	X	X	X	X	X
Rau & Preble (1987)	X	X	X	X	X	X	X
Ricks et al. (1974)	X						
Roostal (1963)	X						
Rosen et al. (1989)				X			
Ryans & Donnelly (1969)	X						
Samiee & Roth (1992)	X	X	X				X
Sandler & Shani (1992)	X		X				
Shao et al. (1992)	X						
Sheth (1986)	X	X	X	X	X	X	
Sorenson & Weichmann (1975)	X	X	X	X	X	X	X
Szymanski et al. (1993)						X	X
Terpstra (1967)	X	X	X	X	X	X	
Walters (1986)	X	X	X	X	X	X	X
Whitelock & Chung (1989)	X						
Wind (1986)	X	X	X	X	X		
Zandpour et al. (1994)	X						

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The Definition of Marketing Standardization

Another disturbing issue regarding the debate about international marketing standardization versus adaptation is the definition of standardization itself. Only about 75 percent of the reviewed articles explicitly defined standardization. Among them, almost every study uses a different definition or a different operationalization. Later researchers also did not really incorporate the definition/operationalization of the earlier works into their studies. Table 2-2 displays the definition or operationalization adopted by the studies which explicitly defined standardization. The articles were listed by year to reveal how little the later works adopted the definition/ operationalization of the earlier works into their studies.

The stringency of the definition of international marketing standardization is another issue needed to be tackled. In the reviewed articles, some studies employed a rather strict interpretation, while others applied a very loose definition. A strict definition of international marketing standardization may count the language translation as an example of adaptation. For example, Roostal (1963) claimed that language translation causes the standardization strategy to be unfeasible in Europe. Boddewyn, Soehl, and Picard (1986) operationalized product standardization by asking whether the products sold in the EEC are identical to the U.S. product. Ryans and Donnelly (1969) and Kanso (1992) operationalized advertising standardization by asking the estimated percentage of non-domestic ads developed using a standardized campaign. Based on the strict definition (or operationalization) of international marketing standardization, one can hardly find a true case of international marketing standardization (Walters 1986; Onkvisit and Shaw 1987).

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On the other hand, some studies proposed a somewhat more flexible definition of standardization (Fatt 1967; Hout, Porter, and Rudden 1982; Kanso 1992; Kirpalani, Laroche, and Darmon 1988; Martenson 1987; Ohmae 1989; Sanler and Shani 1992). For example, Sandler and Shani (1992) operationalized advertising standardization by asking whether the same basic campaign with minor modification was used in all foreign markets. Ohmae (1989) claimed that a true global strategy consists of using lead-country models and letting local managers make adjustment for local situations. Hout, Porter and Rudden (1982) asserted that global strategy is not using a world product, but accommodating local differences without sacrificing production costs.

Because of these different definitions, several researchers began to propose that the real difference between standardization and adaptation is in degree rather than in kind (Onkvist and Shaw 1987). One can only claim the degree of standardization instead total standardization or total adaptation. Therefore, most of the later empirical and conceptual research considered standardization strategy as a continuum (Cavusgil, Zou, and Naidu 1993, Jain 1989; Rau and Preble 1987; Samiee and Roth 1992; Sorenson and Wiechmann 1975). They normally used 5- or 7-point scales to measure the degree of standardization (Table 2-2).

Table 2-2 The Definitions of Marketing Standardization

Author(s)	Conceptual/Empirical	Definition/ Operationalization
Elinder (1961)	Conceptual	NA
Roostal (1963)	Conceptual	NA
Dunn (1966)	Empirical: Case studies of 30 U.S. international firms	Advertising transferability (four levels) 1) Translated and used as in U.S. 2) Copy and head rewritten 3) Copy and illustrations changed 4) All changed except theme 5) No particular similarity.
Fatt (1967)	Conceptual	Universal appeals.
Miracle (1968)	Conceptual	NA
Buzzell (1968)	Conceptual	NA
Ryans and Donnelly (1969)	Empirical	Estimated frequency of use of standardized campaigns or an individual advertising for the non-domestic market.
Britt (1974)	Conceptual	One basic advertising theme vs. several advertising themes.
Rick, Arpan, and Fu (1974)	Conceptual	NA
Sorenson and Wiechmann (1975)	Empirical: 100 executives from 27 major MNCs (packaged goods) in U.S.	Compare two countries at a time and tell how similar or different they thought the decisions regarding factors such as product formulation, packaging, and advertising on seven-point scale ranging from quite similar to quite different.

Table 2-2 (cont'd)

Author(s)	Conceptual/Empirical	Definition/Operationalization
Peebles, Ryans and Vernon (1977)	Conceptual	Prototype standardization: The same advertising with only differences being appropriate translations and possibly a few idiomatic change. Pattern standardization: the campaign, including its overall theme and its individual components, is designed originally for use in multiple markets and is developed to provide a uniformity in direction, but not necessarily in detail.
Killough (1978)	Empirical: 65 executives in MNCs and advertising agencies	Buying proposal standardization vs. Creative presentation standardization.
Hout, Porter and Rudden (1982)	Conceptual: with three cases (Caterpillar, Ericsson, and Honda)	General products with local difference accommodations.
Hill and Still (1984)	Empirical: U.S. MNCs in LDC	Whether the following characteristics had been adapted--brand name, packaging aesthetics, packaging protection, measurement units, constituents, product features, labeling, usage instruction, and package size.
Boddewyn, Soehl, Picard (1986)	Empirical: 60 (1973) and 71 (1983) U.S. companies which do business in European Common market.	Product: products offered in the EEC (1) are identical to U.S. products, (2) are 1-25% of product adapted to the EEC, (3) all product adapted to the EEC. Advertising and branding: Very substantial standardization/ very substantial adaptation of advertising/branding.
Friedmann (1986)	Conceptual	NA
Porter (1986)	Conceptual	NA

Table 2-2 (cont'd)

Author(s)	Conceptual/Empirical	Definition/ Operationalization
Quelch and Hoff (1986)	Conceptual	No explicit definition. But discussed full and partial standardization and adaptation.
Sheth (1986)	Conceptual	NA
Walters (1986)	Conceptual (literature review)	Three levels of standardization: Policy level, geographic area, and marketing element.
Wind (1986)	Conceptual	NA
Martenson (1987)	Empirical: case study of IKEA	Concept standardization.
Onkvist and Shaw (1987)	Conceptual (review)	The degree of standardization.
Rau and Preble (1987)	Conceptual	The degree of standardization.
Hite and Fraser (1988)	Empirical: 150 firms from Fortune 500	Use all standardized advertising, use all localized advertising, and a combination.
Kirplani, Laroche, and Darmon (1988)	Empirical: MNCs from U.S., Canada, and Japan	Three levels: 1) The same campaign with minor changes 2) Allowing subsidiaries some flexibility in adapting the overall campaign to local conditions. 3) Allowing subsidiaries to develop their own campaign.
Jain (1989)	Conceptual	The degree of marketing program standardization.
Ohmae (1989)	Conceptual	Adopt Lead-country models and let local managers make adjustment for local situations.
Peebles (1989)	Conceptual	NA
Rosen, Boddewyn and Louis (1989)	Empirical: 65 firms (651 brands) including the ten most heavily advertised U.S. brands in different product categories	In how many other countries is the same product sold using the same/ other brand names.

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Table 2-2 (cont'd)

Author(s)	Conceptual/Empirical	Definition/ Operationalization
Whitelock and Chang (1989)	Empirical: compare the advertising of perfume and beauty categories in two magazines, one in U.K and the other in France	Compare the advertising of a same brand in U.K. and France to see whether the pictures, sizes, colors, layouts, captions, text, meaning etc. are the same or not.
Blackwell, Ajami, and Stephan (1991)	Conceptual	NA
Shao, Shao, and Shao (1992)	Empirical: 344 affiliates of U.S. advertising agencies	Respondents were asked to state the percentages of their client's campaigns they were able to standardize concerning both the sales platform and creative context.
Samiee and Roth (1992)	Empirical: CEOs or presidents in global industries	Five item latent construct 1) Customer needs are standardized worldwide 2) Product awareness and information exists worldwide 3) Standardized product technology exists worldwide 4) Competitors market a standardized product worldwide 5) Standardized purchasing practices exist worldwide
Kanso (1992)	Empirical: 96 firms from Fortune 500	Managers were asked to indicate the percentage of advertising message for which their firms used a standardized approach. Used 50% as the break point between standardization and localization.
Sandler and Shani (1992)	Empirical: Canadian firms	The same basic campaign (with minor modifications) used in all foreign markets.

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Table 2-2 (cont'd)

Author(s)	Conceptual/Empirical	Definition/ Operationalization
Cavusgil, Zou, and Naidu (1993)	Empirical: 202 product-market export venture cases, across seventy-nine firms, and over a dozen manufacturing industries in the United States	Measured the degree of product adaptation (upon and after entry) and promotion adaptation (positioning, packaging/labeling, and promotion approach) on 5-point bipolar scales (1=no adaptation, 5=subtantial adaptation).
Szymanski et al. (1993)	Empirical: Firms having 90% or more of their service markets located in one Western market; either U.S., U.K., Canada, or Western Europe from PIMS four-year average data	No measurement for the degree of standardization.
Harries (1994)	Empirical: Major U.S. and European consumer products	The respondents were asked to describe their practices in their own words. These are summarized by the interviewers, who assessed whether for each element the level of standardization was very limited, limited, etc.
Zandpourt et al. (1994)	Empirical: Advertising from U.S., Mexico, France, U.K., Spain, Germany. South Korea, and Taiwan	Content analysis on advertising creative strategy, informativeness, and style.
Baalbaki & Malhotra (1993, 1995)	Empirical: 74 U.S.-based firms with international operation and orientation	7-point scale from completely standardization to completely customization.

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The Limitations of Current Definitions

Although it is conceptually and operationally appealing to consider standardization as a continuum, this kind of definition has its own limitations. As Harries (1994) stated, standardization strategy can take many forms. A more important issue is identifying the detailed forms of standardization. Therefore, defining standardization involves considering two dimensions. The first dimension focuses on what aspects of marketing are to be standardized. The second dimension focuses on how standard is each of the aspects of the marketing program (Figure 2-1). These two dimensions of standardization can make the debate about standardization become more complicated. Opponents of standardization can easily build their cases by pointing to an insignificant and hardly standardized aspect of marketing (e.g., language translation). Supporters of standardization may argue that the challenged aspect is not important enough to matter. Therefore, the question of what aspect of marketing is more important for a firm and how standard of these various aspects are intertwined.

Researchers need to go back to the basic reasons for international marketing standardization. Firms need to assess how the standardization of certain marketing aspects affect the benefits and costs of the total marketing program. If the degree of standardization of a certain marketing aspect under no circumstance will have any major impact on the cost and benefit structure of a firm's marketing program, researchers should save their energy in arguing whether the aspects should be standardized or not. In other words, researchers may need to find out a key aspect of marketing that will affect the pros and cons of marketing standardization most. Managers can then use this aspect of

	Level of Standardization
Adverstising & Promotion	
Product & Packaging	
Distribution	
Pricing	
Other Markeitng Programs	

Figure 2-1: The Dimensions of Marketing Standardization
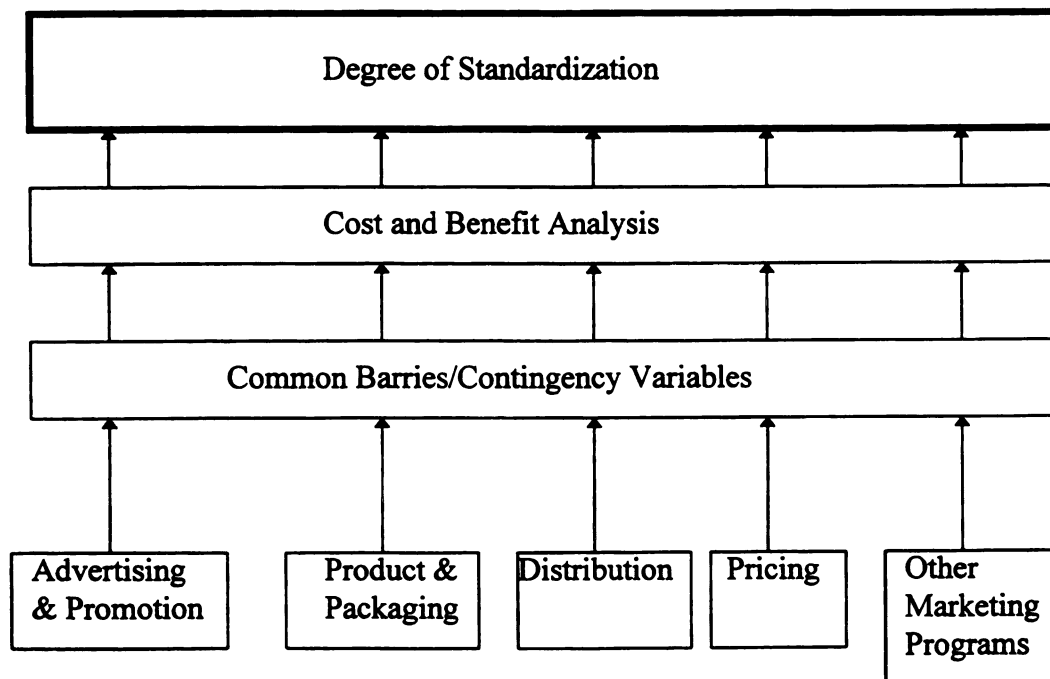
Figure 2-2 The Effects of Common Barries

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marketing as the center of the marketing programs. The program for other marketing domains can also be systematically developed based on the relationship between these domains and the centered domain of marketing.

In order to decide which aspects of marketing are important, one needs to discuss what the pros and cons of marketing standardization are and how the marketing aspect affect the pros and cons.

The Pros and Cons of Marketing Standardization

What are the benefits and costs of international marketing standardization? Based on the reviewed literature, there are at least three major reasons for international marketing standardization. The first reason is cost (Buzzell 1968; Elinder 1961; Levitt 1983). Cost saving comes mostly from economies of scale of the standardized activities. If a firm has to develop an individual product, advertisement, package, etc. for each individual market, the total cost of the international marketing activities will definitely be higher than that resulting from a standardized strategy.

The second reason is the consistent image issue (Blackwell, Ajami, and Stephan 1991; Buzzell 1968; Peebles 1989; Peebles, Ryans, and Vernon 1977). Because of the advances in transportation and communication systems around the world, the flows of people and information across national boundaries are becoming more and more prevalent. People in different countries have more chances to acquire information from other countries, either voluntarily or involuntarily. An inconsistent brand image can make consumers confused about the brand's core benefits.

The final reason is the management efficiency issue (Buzzell 1968; Quelch and Hoff 1986). A standardized strategy can provide headquarters with strong control over

marketing activities in each country. It can also improve the execution efficiency by asking every subdivision to follow the standardized strategy. Especially when there is an excellent marketing idea, the firm will want to implement the idea into the world market immediately. However, standardization also can cause the conflict between headquarter and subsidiaries (Peebles 1989; Quelch and Hoff 1986; Wiechmann and Pringle 1979). As Peebles (1989) stated, global standardization can be perceived by subsidiaries as denial of opportunities to involve and take credit for any marketing success.

The first reason for standardization/adaptation decisions discussed above will affect the cost of the global strategy, while the second will affect the revenue. The final one may affect both the revenue and cost of a global strategy. The actual realization of the pros and cons of standardization (versus the potential) are decided by several contingency variables. In other words, to know whether standardization can actually accrue the expected benefits or drawbacks, one needs to know the effects of barriers and other contingency variables.

Contingency Variables or Barriers for Marketing Standardization

Researchers begin to believe that whether to adopt a standardization strategy is dependent on the several contingency variables (Buzzell 1968; Cavusgil, Zou, and Naidu 1993; Harries 1994; Jain 1989; Walters 1986). Buzzell (1968) is one of the pioneer authors who listed a comprehensive list of contingency variables (which is termed common barriers in his article) for international marketing standardization. He classified the common barriers of international marketing to standardization into four major categories; i.e., market characteristics, industry conditions, market institutions, and legal restrictions. Later researchers also identified several other contingency variables for

marketing standardization, but most of them are quite similar to the variables identified by Buzzell (1968). Two variables, however, are unique to the variables identified by Buzzell (1968). They are: (1) product type (Boddewyn, Soehl and Picard 1986; Dunn 1966; Ohmae 1989; Roostal 1963; Rau and Preble 1987; Samiee and Roth 1992); and (2) organization issues (Martenson 1987; Rau and Preble 1987; Roostal 1963; Samiee and Roth 1992). Two other important summaries of the contingency variables to date are Onkvist and Shaw's (1987) and Jain's (1989) articles. Onkvist and Shaw's (1987) article extensively reviewed the advertising standardization issue. Jain's (1989) article, however, focused on the review of the marketing program standardization issues.

Table 2-3 shows the detailed contingency variables in various reviewed articles since 1963. To organize the contingency variables systemically, the table groups the variables into eight categories. They are: (1) product type; (2) consumer characteristics, which includes consumer needs, usage pattern, and psychosocial characteristics; (3) firm's position, which includes market share, competitive position, and competitive environment; (4) marketing environment, which includes media environment, distribution system, and agency availability; (5) industrial environment, which includes the stage of PLC, technology maturity, and the speed of technology change; (6) organizational issues, which includes organization setup, organization resources, and the importance of foreign markets; (7) culture; (8) political and economic environment, which includes legal, political, economic, and other general environment.

Among them, political and economic environment is the most mentioned contingency variable, followed by product type, consumer characteristics, marketing environment, organizational issues, culture, industrial environment, and firm's position.

One thing must be mentioned is that the above contingency variables are not independent from each other. For example, culture will affect consumer characteristics, while different product categories will have different consumer, industrial, marketing environment characteristics.

The inclusion of contingency variables makes the debate of standardization more complicated. As discussed, now we have three dimensions of the debate--the aspect of marketing programs, the degree of standardization, and the barriers to standardization. What will be the most efficient way to organize these considerations into a manageable framework? It is a big challenge for marketing researchers as well as marketing practitioners.

How to Standardize Marketing Activities

Based on the discussion above, the object of marketing standardization is to achieve the highest long term profit, while the constraints are the common barriers to standardization within each aspect of marketing programs (Figure 2-2). Different barriers may affect different aspects of marketing programs. The degree of standardization within each aspect and the moderating effect of the common barriers decide the total benefit and cost of the global marketing program. There is more than one way a marketer can approach this issue. However, as stated, one of the ways is to find out the most important aspect of marketing standardization (i.e., the aspect can affect most benefits and drawbacks) (Blackwell, Ajami, and Stephan 1991; Walters 1986; Wind 1986). One can take the common barriers of the key marketing aspect into consideration and decide the best degree of standardization for it. After the degree of standardization of the most

Table 2-3: The Contingency Variables of International Marketing Standardization

Author(s)	Product type	Consumer profile	Firm position	Market environ.	Indust. environ.	Orgt'n issues	Culture	Political & economic
Baalbaki & Malhotra (1995)	X	X	X	X	X		X	X
Blackwell et al. (1991)		X		X			X	X
Boddewyn et al. (1986)	X							
Britt (1974)		X					X	
Buzzell (1968)	X	X	X	X	X		X	X
Cavusgil et al. (1993)	X	X	X		X	X	X	X
Dunn (1966)	X	X		X	X		X	X
Friedmann (1986)		X					X	
Hill & Still (1984)								X
Hite & Fraser (1988)		X		X		X		X
Hout et al. (1982)	X	X		X	X			X
Jain (1989)	X		X	X	X	X		X
Kirpalani et al. (1988)								X
Martenson (1987)	X	X		X		X		
Miracle (1968)	X	X		X		X	X	
Ohmae (1989)	X							
Onkvisit & Shaw (1989)	X	X				X		X
Onkvisit & Shaw (1987)	X	X	X	X	X	X	X	X
Quelch & Hoff (1986)	X	X				X	X	X
Rau & Preble (1987)	X	X		X	X	X		X
Roostal (1963)	X				X	X		X
Rosen et al. (1989)		X					X	
Samiee & Roth (1992)	X			X	X			X

Table 2-3 (cont'd)

Author(s)	Product type	Consumer profile	Firm position	Market environ.	Indust. environ.	Orgt'n issues	Culture	Political & economic
Sandler & Shani (1992)	X					X		
Shao et al. (1992)				X			X	X
Sheth (1986)		X				X		
Sorenson & Weichmann (1975)	X	X	X	X	X			X
Szymanski et al. (1993)			X	X	X	X	X	
Terpstra (1967)	X	X	X	X	X	X	X	X
Zandpour et al. (1994)				X			X	

important marketing aspect has been decided, the other aspects can be decided.

The trend of the past conceptual literature may provide supports for this assertion (Table 2-4). In 1970's, some researchers began to propose that basic appeal instead of executional aspects of marketing should be standardized around the world (Killough 1978; Peebles 1977; Ricks et al. 1974). For example, Killough (1978) distinguished between buying proposals and creative presentations of an advertising. Buying proposals represent the selling points, or those elements of the seller's product or service judged by him/her to be most persuasive and most relevant to the prospective consumers. Creative presentations, on the other hand, include headline ideas and all visual and verbal elements which surround the central statement. According to Killough's empirical survey, a buying proposal is not only the most important aspect for standardization, but also has a higher chance of acceptance across borders than a creative presentation (i.e., less common barriers). Therefore, a firm should focus on the standardization of a buying proposal in the international markets instead of the creative presentations.

Table 2-4 Key Results of the Marketing Standardization Literature

Author (s)	Key Points
Elinder (1961)	An uniform advertising in Europe is becoming feasible and desirable for international firms
Roostal (1963)	1) Because of the insufficient marketing planning, diversity of language, and media and government regulations, there are still great hindrances to more internationally standardized advertising in Western Europe. 2) Firm may need be experimental to find out whether standardization can be payoff.
Dunn (1966)	1) The campaign that have been most successful are those where marketers have managed to work out a balance between complete internationalization and complete localization. 2) One method of allowing for flexibility is to employ a "prototype" campaign. 3) Well educated are less influenced by cultural variables than mass audiences.
Fatt (1967)	1) To market products around the world, we must think universally. 2) People are basically the same. Therefore, an international advertising campaign with a truly universal appeal can be effective in any market.
Buzzell (1968)	Both the pros and cons of standardization in multinational marketing programs should be considered. Company should base on estimated overall revenues and costs to make decisions.
Miracle (1968)	The issue is not whether advertising message and media strategy should be uniform among markets, the real issue has to do with uniformity of procedure and criteria.
Ryans and Donnelly (1969)	1) Most advertisers feel that their non-domestic advertising must be adjusted for each local situation 2) More advertising managers agree with the statement, "basic human nature is the same everywhere," than the statement, "standardized ads can be readily applied throughout the world."
Britt (1974)	Products or services which are culturally or psychosocially specific to a given country or group will be the poor candidate for standardized advertising campaign.
Rick, Arpan, and Fu (1974)	1) International advertising should translate the basic appeals, not the literal meaning. 2) Basic appeals can be successfully employed everywhere in the world.

Table 2-4 (cont'd)

Author(s)	Key Points
Sorenson and Wiechmann (1975)	1) An extreme high degree of standardization appears to exist in brand names, physical characteristics of products, and packaging. 2) While subsidiaries are expected to adopt the basic advertising theme, they have a high degree of autonomy as to vary the creative expression of the theme. 3) Pricing decisions tend to be the most dissimilar from country to country. 4) Oftenly marketing programs cannot be standardized. What can be standardized is the process of making marketing decisions. 5) Discretionary custom-tailoring is less common than obligatory custom-tailoring. 6) The major benefits of standardization include better marketing performances and lower marketing cost.
Peebles, Ryans and Vernon (1977)	1) The major benefits of standardization include a world-wide corporate image, cost reduction, message confusion reduction. 2) The term standardized advertising has been used too simplistically and thus, has produced a high degree of polarity in the positions on whether firms should standardize their advertising or not. 3) Pattern standardization can have most of the benefit of standardization, while permitting flexibility in response to individual market differences.
Killough (1978)	Buying proposal and creative presentation are distinctive from each other. Buying proposals generally have a good chances of acceptance across broad chunks of geography, while creative presentations do not.
Hout, Porter and Rudden (1982)	To succeed, an international company may need to change from multi-domestic competitors to a global organization.
Hill and Still (1984)	Changes in transferred products usually fall into two groups. The first consists of mandatory changes, which account for less than one in four of all product changes. The second group is made up of adaption that improve an MNC's position in the market place, which account for about seven out of ten product changes in the studies.
Friedmann (1986)	1) Psychological meaning of products can help in determining the suitable degree of standardization. 2) Psychological meaning is culturally bounded and representatives of the most relevant variables.

Table 2-4 (cont'd)

Author(s)	Key Points
Porter (1986)	1) The largest role of marketing in international strategy is to help other functions of business get advantages of scale and learning. 2) Opportunities for centralized marketing are rare because many marketing activities must inherently be performed where the buyers are located.
Boddewyn, Soehl, Picard (1986)	1) Compared to 1973, product standardization in 1983 is generally up. 2) Advertising is more resistant to standardization. 3) Industrial goods manufactures have standardized the most. However, they anticipate moving toward product adaptation.
Quelch and Hoff (1986)	1) Some functional areas (e.g., manufacturing, finance, and R&D) have greater program standardization than other functions. 2)Products that enjoy high scale economies and are not highly culture-bound are easier to be marketed globally than others. 3) Strategic elements like product positioning are more easily standardized than execution-sensitive elements like sales promotion.
Sheth (1986)	1) True global mass marketing is possible only if worldwide needs and resources are homogeneous. In other cases, it is still possible to do business globally through product, market, or specialty segmentation strategies. 2) If and only if, both market needs and market resources are highly similar across nations, should we expect the emergence of true global markets.
Walters (1986)	1) Total uniformity, is defined as detailed marketing programs and procedures for international markets, are relatively rare. 2) The propensity of management to adopt standardization of marketing output seems to be greatest for product policy. The evidence of standardization on advertising and other promotional programs is mixed.
Wind (1986)	1) Positioning is the starting point for global standardization. 2) A standardized strategy takes the initiative and entrepreneurial spirit away from the local managers. 3)Managers have to think globally, and act locally. Overall design follows worldwide perspectives but every details of the marketing strategy takes into account of the idiosyncratic country characteristics and cultural differences.
Martenson (1987)	1) IKEA offers the same products worldwide. 2) IKEA have same price position worldwide. 3) IKEA use prototype communication model. 4) It is still possible to succeed with a standardized marketing concept in a culture-bound industry.

Table 2-4 (cont'd)

Author(s)	Key Points
Onkvist and Shaw (1987)	1) In general, the arguments regarding advertising standardization have been based on individual impressions which are subjective and highly judgmental. 2) Standardization can be seen from two angles. The first is feasibility, the second is desirability. 3) Three major criteria that determine the degree of desirability are cost, communication effectiveness, and consumer homogeneity. 4) The difference between standardization and adaptation is in degree rather than in kind.
Rau and Preble (1987)	1) We should distinguish what degree of standardization is actively sought by a multinational firm and what degree of standardization is attainable. 2) The lower the internal organizational costs and the more similar the overseas market to the home market the greater the degree of standardization. 3) Firms selling a single product in a foreign market which is at the same stage in the life cycle as the home market would be expected to have a higher level of standardization. 4) For multi-product firms, those organized on product division lines internationally would achieve a lower level of standardization than firms which have an international division at headquarters. 5) The more similar the foreign and home markets and the greater the degree of headquarter/subsidiary communications the more standardized will be the marketing techniques.
Hite and Fraser (1988)	1) Over half of the firms used combination strategy. Only 8% of them use all standardized advertising. 2)Most of the respondents agreed that it is important to change the language to blend with the individual culture. 3) Firms which utilized a totally standardized advertising are more likely to be involved in capital goods industries and are more likely to select a single U.S. advertising agency.
Kirplani, Laroche, and Darmon (1988)	1) Canadian firms have the highest incidence of transferring their campaign to their export countries (mostly U.S.). 2) U.S. firms have the highest incidence of local adaptation. 3) Japanese firms plan the basic strategy at headquarter and allow considerable flexibility for adapting their campaigns to local situations. 4) Firms indicate that the major benefits of standardization are cost reduction (46%) and consistent corporate image (15%).

Table 2-4 (cont'd)

Author(s)

Jain (1989)	Standardization is more practical when 1) Market are economically alike, 2) Worldwide customer as the base, 3) High cultural compatibility, 4) High similarity of customer behavior and lifestyle, 5) Greater degree of similarity in a firm's competitive position in different markets, 6) High technology products, 7) Higher physical, political and legal environment, 8) Mangers share a common world view and centralization of authority.
Ohmae (1989)	1) For high frequency and low cost products, companies has to establish the infrastructure to be successful. 2) For low frequency and high cost product, the ready flow of information around the world stimulates concentrated demand for a product in the top-bracket segment.
Peebles (1989)	1) Brand image is company's most important asset. If brand logo has a different image in different markets, marketers will have problems in planing product improvement, or creating new products under the brand. 2) Consumers of any nationality cannot know the technical details of most products. Rather, consumers choose products on their perceptions of a brand gained through experiences and recommendations by the brand's advertising. 3) An overseas subsidiary can perceive the global campaign as denying its opportunity to take credit for any sales success.
Rosen, Boddewyn and Louis (1989)	1) A high degree of brand standardization exists. 2) Standardized brands do not tend to be newer than non-standardized brands.
Whitelock and Chang (1989)	The finding shows that complete standardization of copy and layout is possible in only very few cases. In most cases, modifications are observed.
Blackwell, Ajami, and Stephan (1991)	1) The challenge is to build the core of the marketing strategy on the universals. 2) A realistic approach to the issue of standardization is that some elements must be localized and some can be standardized. 3) If the brand is truly a global brand, inconsistency of brand image may create problems and confusions in the minds of consumers.
Shao, Shao, and Shao (1992)	1) Environments were too different to capitalize on the advertising standardization. 2) Less than 10 percent of the respondents standardized both the sales platform and the creative context.

Table 2-4 (cont'd)

Author(s)	Key Points
Samiee and Roth (1992)	1) Market coverage and capacity utilization are important considerations for firms' emphasizing global standardization. 2) Emphasis on specialty products and the development of high priced products for market niches are also important reasons for standardization. 3) There is no differences in performance between firms stressing global standardization and others.
Kanso (1992)	Most of the respondent (75%) followed a localized approach.
Sandler and Shani (1992)	1) Branding and advertising are two independent decisions. 2) It is more difficult to standardize advertising than brand names when advertising relates to local cultures and local policies. 3) Standardized strategies are used more for durable than non-durable.
Cavusgil, Zou, and Naidu (1993)	The empirical results support the contingency perspective. The degree of the various aspects of product and promotion adaptation are significantly influenced by company, product/industry, and export market characteristics. However, the profile of the correlates varies across the various aspects of product and promotion adaptation.
Szymanski et al. (1993)	A multinational business that employed a similar pattern of resource allocation among marketing mix variables when serving the U.S., U.K., Canadian, and Western European markets would find that, on average, the standardized approach evokes similar performance responses in those markets.
Harries (1994)	1) Standardization is a flexible and adaptive policy that can take many forms. To use the term "modified" to describe the practices of all those companies who neither totally adapt, nor totally standardized is of limited descriptive value. 2) About 76 percent companies which are not practicing standardization reported that they only standardized strategies, not executions.
Zandpourt et al. (1994)	1) The study demonstrated that cultural traits such as individualism-collectivism, uncertainty avoidance, power distance, and perception of time independently affect the creative approach, substance, and styles of television advertising. 2) Advertising environment characteristics such as types of products and services, advertising expenditures per capita, presence of U.S. advertisers, government control of advertising, availability of commercial breaks during programs, shortage of advertising personnel, and presences of U.S. advertising agencies were also shown to independently impact the nature of television advertising message.

Table 2-4 (cont'd)

Author(s)	Key Points
Baalbaki and Malhotra (1995)	1) Competitive environment was consistently regarded as the most important variables affecting the extent of standardization of international marketing strategy. 2) A fully standardized marketing strategy may not be appropriate based on the research results.

In a similar vein, Peebles, Ryans and Vernon (1977) differentiated between prototype and pattern standardization. The prototype standardization results when the real adaptation lies in changes to copy to avoid any problems in translation. The pattern standardization results when a same basic creative theme is used in international markets but other executional elements are adapted to the local situation when necessary. They believed that pattern standardization is not only a more feasible way to achieve the most effective standardization strategy, but also can achieve most of the benefits of standardization. Similar view points were also addressed by Sorenson and Weichmann (1975), Boddewyn et al. (1986), and Kernon and Damzel (1993).

These studies believe that basic advertising themes or objectives are easy and practical to form the base for international advertising standardization. That is, by standardizing the basic theme or objective, a firm can maximize the difference between benefits and costs. Standardizing all elements of advertising may generate more costs than benefits. Several articles regarding product strategy also addressed similar points. For example, Ohmae (1989) stressed that the global firm can use a lead-country model to achieve a global competitive advantage, while allowing local managers make minor adjustments for local customers. The key focus should be on the lead-country model for it is most related to the final costs and benefits. Local adjustments are used to serve

customers better. Hout, Porter, and Rudden (1982) used case studies to emphasize a similar point. They stated that "In none of the cases did success result from a 'world product,'...... Caterpillar's design similarities and central component facilities allowed each market to contribute to its already favorable cost structure. Ericsson's shared modules led to falling costs each time a system was sold in a new country. Honda drew on scale economies from the centralized production of units sold in each market" (p. 104).

Finally, more recent marketing researchers also proposed the similar view point. Wind (1986) and Blackwell et al. (1991) both advocated that a firm should think globally and act locally. The overall design follows worldwide perspectives, but the detailed execution should take local situations into consideration.

The above articles all believe that the key to solving the argument regarding marketing standardization is to distinguish the key aspect of marketing from the minor and executional aspects. Implicitly, this approach assumes that different aspect's standardization has different weights in generating benefits and costs. Marketing managers should focus on standardizing either advertising strategy, buying proposal, or lead product model, while still allowing local subsidiaries to make executional changes for different local situations. Counting what percent of the executions are standardized, like most of the reviewed articles did, is not so relevant to the key purpose of marketing standardization. Strategy and execution have different importance in this respect.

For example, different countries have different media environments. The purpose of the media plan is to reach the right person at the right time. It is the responsibility of local managers to find out the best schedule for the media plan. Standardization of the media plan around the world may cause more cost than benefit. Another example is the

distribution. Countries can have dramatically different distribution systems. If a firm insists on distribution standardization, it may not only cost more, but also generate no standardization benefits. If a firm standardizes its marketing programs at the strategic level, local marketing execution can follow the strategy while making executional adjustments if necessary. As Colgate-Palmolive's senior associate director, Maureen R. Marston (1992) claimed, global marketing may mean consistent positioning, but not necessarily the same brand name, the same package, or the same advertisement. Local constraints need to be considered for a local marketing execution.

A Proposition for the Definition of International Marketing Standardization

The above arguments provide a base for the proposition of the present study. The key to solving the confusion over the definition of marketing standardization is to find and define the key component of marketing activities. However, the definitions in the above studies can still be improved in two ways. First, the aspect of standardization can be extended into a broader perspective. Although the clarifications and classifications by Killough (1978), Peebles, Ryans, and Vernon (1977), Ohmae (1989), and Hout, Porter, and Rudden (1982), Blackwell et al. (1991), Wind (1986), etc. are helpful, they all are limited to certain aspects of marketing. A more general framework which incorporates different aspects of marketing needs to be proposed. One needs to find a generic term which is accepted by both practitioners and academic researchers for this integration. Second, after the degree of standardization of the key marketing component is decided, what is the practical guideline for the level of standardization for other marketing elements? This issue is not really touched by the past studies. A systematic approach is urgently needed.

In this study, it is proposed that the term, "*product concept*" can be used as the basic unit for international marketing standardization. There are at least four major reasons for this proposition. First, the term "product concept" is not only well received among marketing practitioners, but also is one of the most important aspect of a brand or product (Dillon, Madden, and Firtle 1994; Haley and Gatty 1971; Moore 1982; Schwartz 1987). As defined by Dillon, Madden and Firtle (1994), "a concept is an idea on its way to becoming a marketing strategy. A marketing strategy attempts to convince a target segment of consumers that a particular brand possesses those end benefits that they desire and presents evidence to support the claim" (p.558). A consumer buys a product for its end benefits (Friedmann 1986). A product concept can not only show the product's end benefits, but also point to the direction the product will take for the corporate team (Haley and Gatty 1971; Schwartz 1987). The product concept will be the base for guiding marketing programs and processes such as advertising, channel distribution, product formation, and pricing (Schwartz 1987) (Figure 2-3). Most importantly, a product concept is not an advertising strategy. A product concept is designed to communicate information realistically, while an advertisement is designed to attract attention and be memorable in addition to communicating information (Dillon, Madden, and Firtle 1994; Schwartz 1987).

One of the most important aspects of a product concept is the consumer element (Schwartz 1987). Consumers demonstrate objections or approvals for a product concept in a concept test. Concept tests have become one of the most important marketing activities in major firms (whether a durable or non durable goods company) in introducing new product or brand (Acito and Hustad 1981; Dillon et al. 1994; Kotler 1988; Marston

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                    ┌─────────────────────┐
                    │   Product Concept   │
                    └─────────────────────┘
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| Advertising & Promotion | Product & Packaging | Distribution | Pricing | Other Marketing Programs |
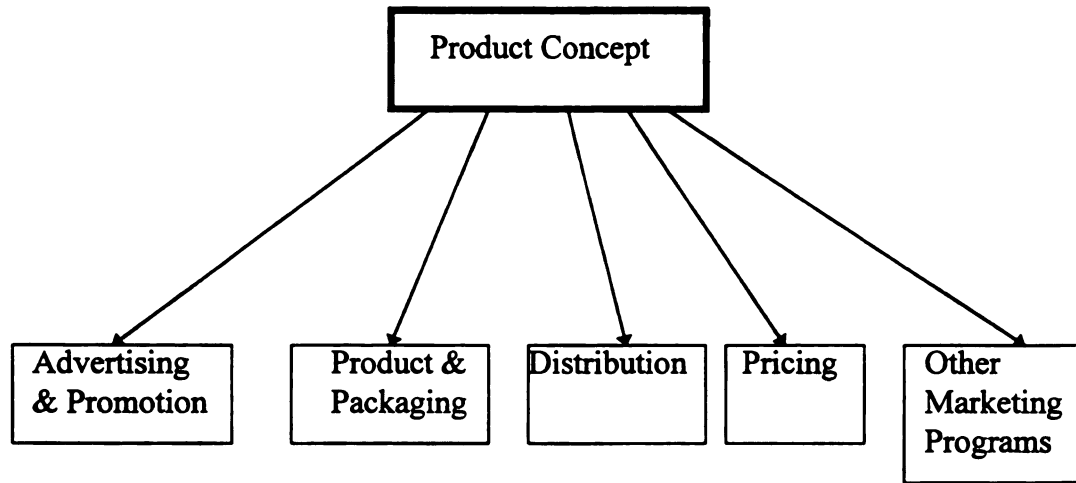
Figuire 2-3 Product Concept

1992; Moore 1982; Schwartz 1987). Levitt (1981) even claimed that marketers sell product concepts instead of products. Therefore, using the product concept to distinguish marketing strategies from marketing execution not only possesses the consumer element, but also has practical usefulness.

Second, the term "product concept" also has a strong linkage to the concept of *brand equity* (Figure 2-4). Recently, much attention has been given to this particular concept in the marketing field (Aaker 1991; Aaker and Biel 1992; Keller 1993). Keller's (1993) definition of brand equity is especially related to the linkage that this thesis is proposing. In Keller's (1993) article, customer-based brand equity is defined as "the differential effect of brand knowledge on consumer response to the marketing of the brand" (p.8). Customer-based brand equity occurs when a consumer is familiar with the brand and holds some favorable, strong, and unique brand associations in memory. Generally speaking, the term "product concept" is a static expression, while the term "brand equity" is a cumulative and dynamic phrase. The product concept is what marketers want consumers to know about the brand, while brand equity represents how much consumers already know about the brand. If an international marketer uses different product concepts for a brand in different countries, the brand knowledge built in the consumer's mind will be totally different among people in different countries even if the same brand name is used (Blackwell, Ajami, and Stephen 1991).

Another important concept related to brand equity is the congruence of brand associations (Keller 1993). The congruence among brand associations can affect how easily an existing brand association can be recalled and how easily additional brand associations can be linked to the brain node in the memory. A strong congruence among

a brand's associations can create a cohesive brand image. If the image of a brand is diffuse, consumers may confuse the meaning a brand wants to deliver, and/or the associations of the focal brand may easily be changed by competitive actions (Keller 1993). A consistent product concept can help establish this congruence effect. A product concept is the base for a brand's marketing strategy. After the product concept for a brand is decided, all elements of the marketing program can base on the product concept to create consistent and cohesive brand associations.

Third, the product concept can be used as the base for tackling issues regarding barriers of standardization. The barriers for marketing standardization can be mandatory or voluntary (Hill and Still 1984; Onkvist and Shaw 1987; Rau and Preble 1987; Sorenson and Wiechmann 1975). For voluntary marketing decisions, it is the firm's discretion to make its own decision on whether it wants to have a consistent global brand. A firm has to estimate the benefit and cost of these voluntary marketing decisions based on the common barriers. One of the most important barriers for marketing standardization are consumers' different needs. Product concepts can be directly tested in consumer research to see whether the concept is acceptable to the consumers in different regions or cultures. On the other hand, for mandatory marketing decision, a firm has to adjust its marketing plan as long as it want to enter the market. The discretionary issue involves the guideline for all other adjustments in the marketing program. As stated, in order to create cohesive brand associations for a brand, the product concept can and should be the base for the guideline. As long as a firm has a clear product concept for the brand, it won't be difficult to develop a specific marketing execution that can adapt to the local situation
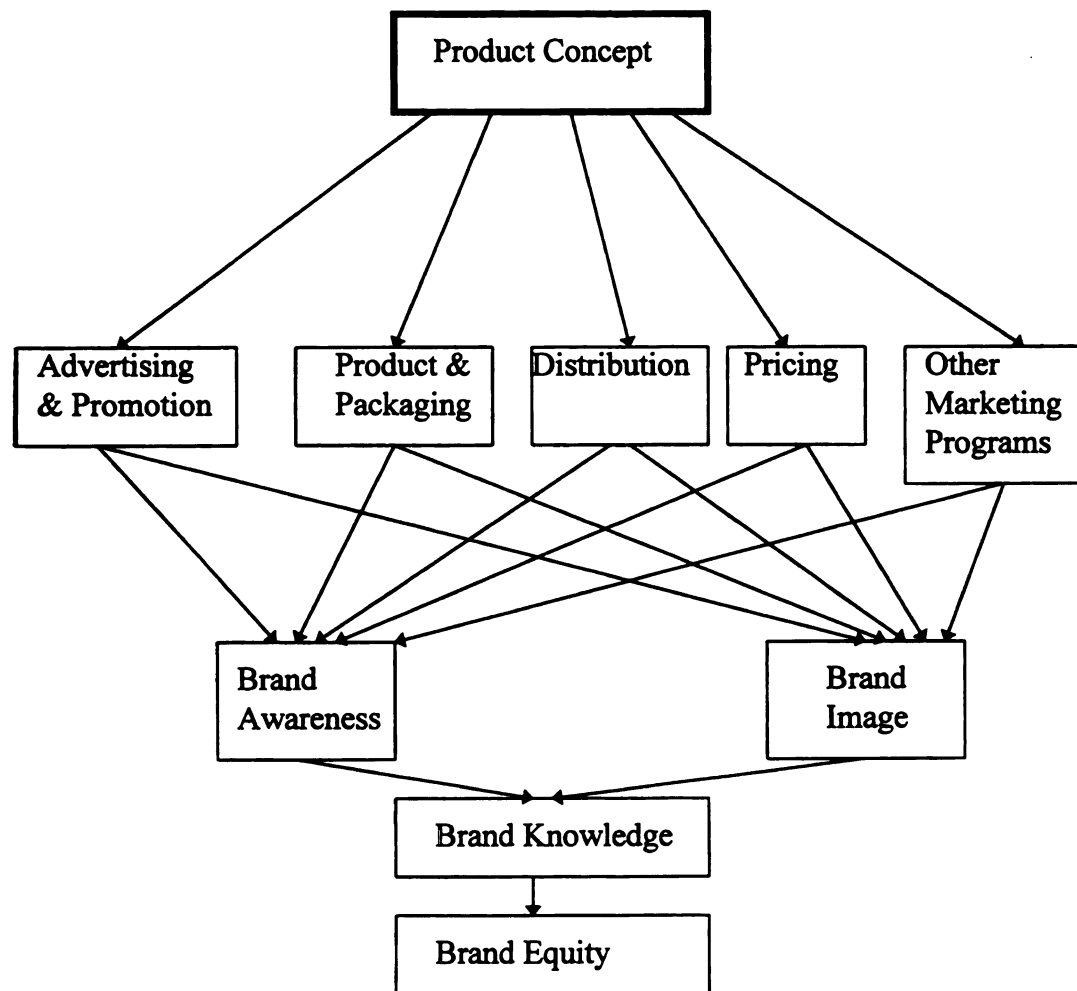
Figure 2-4 Product Concept and Brand Equaity

without hurting the brand equity. For example, suppose a firm wants to introduce a shampoo and conditioner to the world market. Suppose the key concept of the product is to make hair easy to manage. Because consumers' hair textures are very different in different countries or regions, people in different countries/regions have different conditioning needs. For example, the hair textures of Japanese are harder than those of consumers in other southern Asian countries. If the firm wants to deliver the same product concept to all the countries in Asia, it cannot use the same formula to sell the same concept. If it uses the formula sold in Japan in other South Asian countries, the conditioning effect of the shampoo will be too much for the people in those countries. The concept of "easy management" cannot be delivered under the same product formula in every country. In this case, the product concept is the guideline for the local product execution. A product concept also can be the guideline for all other marketing programs like package decisions. If a firm cannot find the same package material in a specific country, it can use the local material to produce the package while maintaining the same product concept. In both cases, the product concept is the base for all marketing activities. The purpose of all marketing activities is to deliver the product concept to the consumers at a reasonable cost. When consumers acquire the meaning of the brand concept, it becomes the equity of the brand.

Finally, as stated, one major drawback of marketing standardization is the lack of involvement of overseas subsidiaries in international marketing (Gates and Egelhoff 1986; Hulbert, Brandt, and Richers 1980; Peebles 1989; Wiechmann and Pringle 1979; Wills and Ryans 1977). Managers in overseas subsidiaries may perceive that the standardized campaign is the denial of their opportunity to take part in the decision process.

Standardization at the product concept level can give local managers the responsibility of developing the most suitable executional plan to achieve the best marketing results. In addition, the local manger can also have input in developing the product concept during the new product concept generation stage (Peebles 1989; Peebles, Ryans and Vernon 1977).

Therefore, conceptually using the product concept as the core for marketing standardization can not only have the highest impact on a firm's cost and revenue structure, but can also link other aspects of marketing into it systematically.

The Definition of International Marketing Standardization in this Thesis

Based on the above discussion, the focus of current study will be on the product concept level. The experimental design will use product concept as the experimental stimulus. Therefore, in this study, a marketing standardization strategy is one that uses same product concept in every international market. On the other hand, an adaptation strategy is defined as the adaptation of the product concept to fit into different local markets. The empirical work conducted in this level can have two major benefits in additional to the conceptual benefits discussed above. First, as stated in Chapter one, there are countless executional adjustments a firm may need to make in global markets. Instead of focusing on the executional level, researchers should focus on the strategic level standardization first. If we can demonstrate that people in different cultures prefer different product concepts (i.e., they may have different needs), then there is little argument about whether we need to standardize the executional aspect. Because the executional aspects of marketing have to follow strategy, different strategies should generate specific executions in different markets. If we focus on the executional aspects

of marketing, we may lose sight of the strategic issues.

Second, focusing on the product concept level can reduce the confounding effects between the executional level and the conceptual level in experimental studies. As stated, a concept is designed to communicate information realistically, while an advertising is designed to attract attention and be memorable in addition to communicating information (Schwartz 1987). Research using advertising as the stimulus may easily create confounding results between the effect of the ad content and the executional manipulation. That is, a consumer may like an advertising because of the ad content or because of the executional part of the ad. Using the product concept as the experimental stimulus instead of advertising can ensure that the concept is liked because of the content instead of the execution.

Therefore, the product concept will be used as the basic unit for the experimental stimulus. The next task is to see whether there are persistent cultural and other variables that may cause consumers to have different needs for a certain product. The functional approach to attitudes is proposed to integrate the culture, personality, object, and other variables. Therefore, in the following section, the key concepts of the attitude functions and other related theories will be discussed.

AN INTEGRATED MODEL OF CROSS-CULTURAL CONSUMER BEHAVIOR

In this section, an integrated model of attitude functions, self-concept, and consumption symbolism for explaining cross-cultural consumer behavior will be presented. To fulfill this task, theories of attitude functions, culture and personality, self-concept , and consumption symbolism will be discussed respectively. Specific hypotheses will be

addressed at the end of each section.

The Functions of Attitude

Theories of attitude functions maintain that in order to persuade a person, one needs to know why that person holds a certain attitude; i.e., what is the motivational bases for the attitude? The functional approach asserts that people maintain their attitudes for specific reasons. A certain individual's needs are being met by their attitude. The same attitude may not serve the same function for different people (Katz 1960; Smith et al. 1956). For example, people may be against a social project because of ego-defense, value expressive, or knowledge purposes. In order to persuade people to accept the social project, one must first know what psychological function(s) that attitude serves. It has been more than thirty years since the theory was first proposed. Although the theory sounds intriguing, the theory remains empirically impoverished (Eagly and Chaiken 1993; Kiesler, Collins, and Miller 1969). This is because this school of thought did not frame hypotheses in testable terms and did not propose a comprehensive methodology for identifying the functions of attitude (Shavitt 1989). Different researchers proposed different classifications of attitude functions. In order to generate consistent empirical results, one needs to define clearly the proposed functions first.

Among different definitions, the two most referenced functional taxonomies were developed by Smith et al. (1956) and Katz (1960). Smith et al. (1956) derived a three-function taxonomy inductively, through clinical interviews that explored the personality styles and attitudes toward Russia of 10 adult males. On the other hand, Katz (1960) proposed a four-function taxonomy by drawing from the insights about a person's motivational processes. These two taxonomies share several points. Katz's (1960)

taxonomy is elaborated here for it is more detailed. The taxonomy of Smith et al. (1956) will be compared to Katz's (1960) definition. In addition, several recent development of functional theories also will be discussed here.

Katz (1960) proposed that any given attitude held by any given individual serves one or more attitude functions. Specifically, he suggested four different attitude functions; i.e., a utilitarian function, a knowledge function, an ego-defensive function, and a value-expressive function. The utilitarian function, also termed as instrumental or adjustive function, describes the behaviorist principle that people are motivated to avoid punishment and gain reward from their environment. The knowledge function presumes a person's basic need to attain a meaningful, stable, and organized view of his/her environment. The ego-defense function enables people to cope with emotional conflict and defend their self-prejudices. Finally, the value-expressive function provides a person chances to express his/her inner most values.

The classification of attitude functions by Smith et al. (1956) share several similarities with Katz's definitions. The externalization function proposed by Smith et al. (1956) is similar to ego-defensive function proposed by Katz. The object-appraisal function (Smith et al. 1956) is frequently considered as a combination of Katz's knowledge and utilitarian function (Herek 1986; Eagly and Chaiken 1993). Attitudes serving this function not only provide guidelines for sizing up objects and events in terms of a person's major interest and concerns, but also spare the person from a painful process of figuring out how to relate objects and events in their environment. Finally, Katz's value expressive function emphasizes only the need for self-expression and self-actualization. It does not consider the attitude which can express one's values to

important reference groups. The <u>social directed function</u> defined by Smith et al. (1956) addresses this limitation. Attitudes serving this function facilitate, maintain, and at times, disrupt a person's social relationship.

It has long been assumed that any given attitude may serve multiple functions for an individual in this school of thought (Eagly and Chaiken 1993). Contemporary researchers even argue that regardless of what other functions attitudes serve, almost every attitude serves the knowledge and utilitarian functions (or object appraisal function) (Eagly and Chaiken 1993; Greenwald 1989; Shavitt 1990). That is, almost every attitude facilitates a person's transactions with environmental stimuli and are instrumental to that person. There is high overlap between these two functions with other functions. Therefore, researchers focused more on the value expressive function, the social adjustment function, and the ego-defense function because they are conceptual more distinct and empirically more executable.

This study will focus on the first two functions (i.e., value expressive and social adjustment functions) because of two reasons. First, these two functions are more related to consumption issues. The past studies regarding consumer behavior are more related to these two functions (DeBono 1987; DeBono and Packer 1991; Han and Shavitt 1994; Shavitt 1990). Second, these two functions are also more associated with the variables (i.e., culture, personality, and product type) this study intends to explore.

However, there is a confusion in the definition of the value expressive function in the past research. As stated, the value expressive function was first proposed by Katz (1960). Katz defined this attitude function as the means for expressing personal values and other core aspects of the self concept. He did not explicitly consider how this attitude

function can mediate a person's relations with others (Eagly and Chaiken 1993). This ambiguous definition leads to different explanations by different researchers. For example, Snyder and DeBono (1985) considered the value expressive function as a product attribute and function oriented attitude function. However, later researchers defined the value expressive function as more of a social oriented function. For example, Shavitt (1992) and Johar and Sirgy (1991) both defined an ad with an image appeal as a value expressive ad and an ad with a quality appeal as a utilitarian ad.

To clarify the confusion of the definition, it is proposed that an object attribute and quality oriented attitude function be termed non-social oriented function, while social oriented attitude function be termed social oriented function.

Table 2-5 provides a summary definitions of the key variables in this study. The first row of definition are the two attitude functions. These definitions are followed by the definitions of product concepts, cultures, personalities, and product types. The non-social oriented product concept is used to express non-social oriented attitude functions, while the social oriented product concept is utilized to communicate the social oriented attitude functions. As will be defined in the next section, people in an individualistic culture focus mostly on their personal gain and are less susceptible to social influences. On the other hand, people in a collectivistic culture emphasize group conformity and social relationship enhancement. Similarly, an individual with high ATSCI acore cares more about others' opinions and how to fit into a group than a low ATSCI individual.

If a product is used mainly for social oriented purposes, it is termed social oriented product. On the other hand, if a product is utilized mostly for non-social oriented objectives, it is termed non-social oriented product. Finally, when the attitude function a

Table 2-5 The Definitions of Key Constructs

	Non-Social Oriented Attitude Function	Social Oriented Attitude Function
Attitude Function Definition	Attitude functions which emphasize and express personal underlying values and dispositions.	Attitude functions which focus on facilitating and maintaining a person's social relationship.
Product concept Definition	Non-Social Oriented Product Concept	Social Oriented Product Concept
	Product concepts which focus on attributes and non-social benefits that express a person's values and dispositions.	Product concepts which emphasize the social relationship enhancement and maintenance.
	Individualism	Collectivism
Culture Definition	*Individuals decide and act on the basis of whether an action leads to personal gains. *Less susceptible to social influences. *Depend on many groups and is less conforming to a specific group's opinion. *Being accepted by a certain group is not a major purpose of life.	*Consider the implication of their decisions and/or actions toward others. *More susceptible to social influences. *Depend on a limited groups, therefore, they are more conforming to a specific group's opinion. *Very concerned about the approval from their collective.
	Low Attention to Social Comparison Information	High Attention to Social Comparison Information
Personality Definition	*Care less about others' opinions about them. *It's not important to fit into a group. *Do not follow the crowd.	*Actively pay attention to others' opinions about them. *It's important to fit into a group. *Be harmonious with the group and follow the crowd.

	Non-Social Oriented Product	Social Oriented Product	Ambivalent Attitude Function Product
Product Type Definition	*The major purpose of using the product is for benefits intrinsically associated with the product attributes.	*The purchasing and consumption behavior is conspicuous to others and the consumption behavior delivers symbolic meaning to others.	*The attitude function a product engages is perceived differently by different people in different cultures or different individuals with different personalities.

product engages is perceived differently by different people in different cultures or different people with different personalities, it is termed ambivalent attitude function product. The definition of an ambivalent attitude function product will discussed more in the next section.

In the next section, the article will discuss how culture and personality can influence a product concept's persuasiveness and their relationship with self-concept.

Culture and Personality

Culture

As stated by Clark (1990), the job of developing a marketing-relevant national character (which is defined as the pattern of enduring personality characteristics found among population of nations) is a very complex one, and so is developing a marketing-relevant cultural dimension. Because of theoretical and methodological difficulties, there is no completely satisfactory solution. One dimension, however, the individualism-collectivism continuum, has recently received very much attention in both the cross-cultural psychology and the marketing fields (Bagozzi 1994; Han and Shavitt 1994; Hofstede 1983; Hui 1988; Hui & Triandis 1986; Markus and Kitayama 1991; Park 1994; Triandis 1994). Researchers in cross-cultural consumer behavior are also becoming gradually interested in this dimension and are empirically testing the dimension in the consumer behavior situation (Han and Shavitt 1994; Park 1994; Bagozzi 1994).

The individualistic and collectivistic culture context is traditionally considered as a continuum (Hofstede 1980; Hui 1988; Hui and Triandis 1986). A collectivistic society is said to have a close-knit social structure, where people neatly distinguish between

members of the in-group and members of the out-group. Everybody in the group is expected to look after group interests and hold group beliefs and opinions. Several countries in the Eastern societies represent this kind of culture. For example, Yoshino (1972) states that "in traditional Japan one belonged to a number of different collectivities, such as one's family, neighborhood groups, occupational groups, the village" (p.69). In an individualistic society, however, the social fabric is much looser. People are basically supposed to care for themselves and their immediate family. Individuals are allowed a large degree of freedom in making their own decisions. People are motivated by self-interest. In Hofstede's study, he found that the United States, Great Britain, Canada, and other Western countries rank high on the individualistic dimension, while Hong Kong, South Korea, Taiwan, Japan, and other Asia countries rank high on the collectivistic dimension.

In an empirical study, Han and Shavitt (1994) found that in the U.S. (an individualistic society), advertisements emphasizing individualistic benefits were more persuasive, and ads emphasizing family or in-group benefits were less persuasive than they were in Korea (a collectivistic society). Several advertising content analyses also indirectly support this view point (Belk and Pollay 1985; Johansson 1994; Mueller 1987; Zandpour, Chang, and Catalano 1992; Zandpour et al 1994). The major finding of these studies is that the advertising in individualistic cultures uses a more informational approach, while the advertising in collectivistic cultures adopts a more image-based approach.

The Relationship between Cultural Dimension , Self, and Personality

Markus and Kitayama's (1991) article further integrates cultures, self-concepts, and motivational bases. Similar to Greenwald's (1982) conception about self-concept, they believed that an individual is an active, constructive information processor (Markus 1977; Markus and Katayama 1991; Markus and Wurf 1987). When people attempt to organize, summarize, or explain their behavior in a particular domain, the process will result in the formation of a cognitive structure about the self. Some inner-private aspects of the self may be quite universal, while other aspects of the self may be very specific to particular cultures (Markus and Katayama 1991). People from different cultures may have dramatically different construals of the self, of others, and of the interdependence of the two. The authors then distinguished two major types of selves; i.e., the independent self (which represents people in Western cultures) and the interdependent self (which represents people in Eastern cultures).

People with different types of the self may have different types of experience, cognition, emotion, and motivation. The basic definitions of the two construals are very similar to the definitions of individualism and collectivism. For example, people classified as independent believe that they are separated from the social context. They want to be unique and can express self. They use others for social comparison and reflected appraisal. On the other hand, people classified as interdependent think that they are connected to the social context. They want to belong to a group and promote others' goals. They consider that relationships with others in specific contexts define the self.

These definitions can not only enrich and supplement the individual psychological base for the individualism--collectivism dimension, but also provide a linkage between the

culture dimension and personality. That is, we can not only study culture to infer individual behaviors, but can also study individuals to see the effect of cultural influences.

In fact, another fruitful research stream in the attitude function school is dealing with the relationship between personality and attitude functions. Personality factors instead of the culture environment can be the central reason for affecting a person's attitude functions for a certain object. Several studies in the attitude function school demonstrated that personality variation can create significant different requirements of attitude functions even within a same cultural environment (Bearden and Rose 1990; DeBono 1987; DeBono and Packer 1991; Snyder and DeBono 1985). For example, Snyder and DeBono (1985) used personality assessment to operationalize attitude functions. They argued that high self-monitoring individuals, who strive to fit into various social situations, should tend to form attitudes that serve the social adjustment function. In contrast, low self-monitoring individuals, who strive to remain true to their inner values and attributes, will tend to form attitudes that serve the value expressive function. To investigate these hypotheses, they create ads that, in pictures and words, represented image oriented and quality oriented messages to consumers. The results showed that high self-monitoring consumers thought the image oriented ad was better, more appealing, and more effective. By contrast, low self-monitoring consumers prefers the quality oriented ads. Similarly, in a persuasion study regarding deinstitutionalization of the mentally ill, DeBono (1987) demonstrated that high self-monitoring subjects expressed attitudes that were more opposed to deinstitutionalization when they heard the social adjustment messages opposing deinstitutionalization than when they heard the attribute evaluative messages. On the other hand, low self-monitoring subjects displayed higher negative attitudes toward

deinstitutionalization after hearing the attribute evaluative message.

DeBono and Packer (1991) also found that high self-monitoring subjects rated the quality of a product higher than low self-monitoring subjects after seeing image-oriented ads, and low self-monitoring subject rated the quality of a product higher than high self-monitoring subjects after seeing quality-oriented ads. Using a different methodological approach, DeBono and Edmonds (1989) showed that the basic theory of personality influences still holds. They induced high and low self-monitoring subjects to write counterattitudinal essays. One group of subjects was led to believe that their positions was opposed to the majority, while the other group of subjects was led to believe that their position was contrary to their personal values. The result showed that high self-monitoring subjects modified their attitudes in the direction of their essays more in the social adjustive situation than in the value expressive situation. On the other hand, low self-monitoring subjects modified their attitudes in the direction of their essays more in the value expressive situation than in the social adjustive situation. Finally, using the Attention-To-Social-Comparison-Information (ATSCI) scale (a revised scale from self-monitoring), Bearden and Rose (1990) found that persons scoring high in ATSCI were more aware of the reactions of others to their behaviors and are more concerned about the nature of those reactions than persons low in ATSCI.

The Role of Material Goods

To argue that culture or personality will affect an individual's product concept preference, one needs to address the role of goods in serving the attitude function for an individual. In other words, a product must be able to be served as a vehicle for the attitude function fulfillment to motivate a person to possess it. A summary work by

Grubb and Grathwohl (1967) provides the basic relationship between product and self. Applying self-concept theory, they asserted that goods can serve as social symbols and internal communication devices and devices for furtherance and enhancement of an individual's self-concept. Belk and Pollay (1985), Belk, Bahn, and Mayer (1982) and Hirshman and Holbrook (1981) among others also stressed that consumption represents certain symbolic meaning.

The symbolic self-completion theory provided by Wicklund and Gollwitzer (1982) is especially related to the argument of this thesis. They contended that a person is committed to self-defining goals instead of non-self defining goals. The self-defining goal can be assessed through multiple possible indices or symbols, whereas the non-self-defining goal can be reduced to a single indicator of its attainment. Progress toward a self-defining goal is normally not deliberate or measured, and most importantly an individual will adopt more accessible and quicker modes of self-symbolizing. Consumption is one of these easy accessing routes. For example, a sudden rich person may first try to drive luxury cars or dress like a upper class person instead of engaging other more time consuming activities to symbolize his/her newly acquired status. The acquisition of material goods is the quicker and easier way to fulfill his/her self-defining external or internal goal.

An Integration

Similar to Higgins's (1983) classification of three selves, it is believed that there are at least three dimensions of self concept; (1) actual self: a person's representation of the attributes that someone (self or other) believes the person actually possesses, (2) ideal self: a person's representation of the attributes that s/he would like to possesses, (3) ought

self: a person's representation of the attributes that others believe the person should possess. There is always discrepancies among three self concepts. The discrepancy between any two of these self concepts can create a state of discomfort. Therefore, a person will be motivate to reduce the discrepancy. Figure 3-1 provides the basic relationship among three self conceptions.

Using Markus and Katayama's (1991) definition of interdependent and independent self, one can argue that people with interdependent self will focus more on reducing the discrepancy between ought self and actual self (gap A), while people with independent self will focus more on reducing the discrepancy between ideal self and actual self (gap B). Also based on the definitions of attitude functions, one can claim that a product concept that focuses on the social oriented function will be more effective in reducing gap A than gap B. On the other hand, a product concept that emphasizes the non-social oriented function will be more preferable to narrow gap B than gap A.

However, this assertion is product situation specific. When products are mainly used to serve non-social purposes, a person with interdependent self does not need to consider any social meaning when evaluate or purchasing this kind of product. There is no need to reduce the gap between ought self and actual self. Han and Shavitt's (1994) study provided some support for this argument. In their study, they found that both U.S. and Korean subjects favored individualistic appeals for personal product (which is defined as one for which the purchase decision and product usage are usually done by an individual). Culture or personality apparently has no effect on this kind of product.

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A General Model
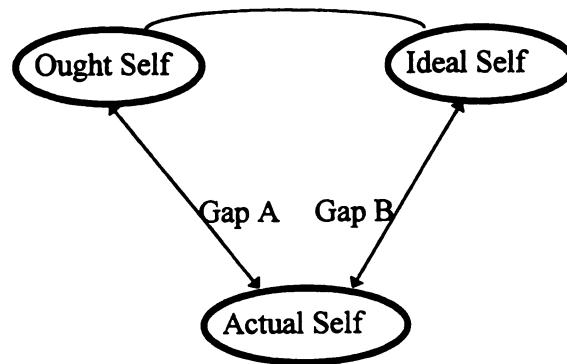
B. For Social Oriented Products
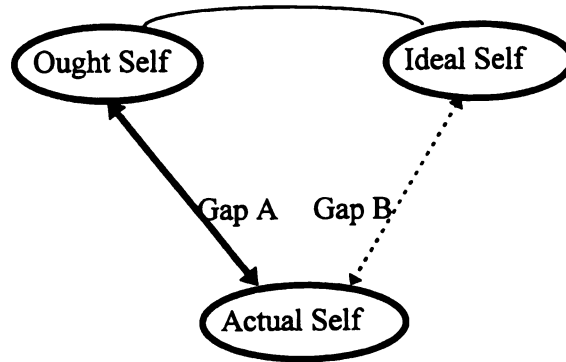
C. For Non-Social Oriented Products
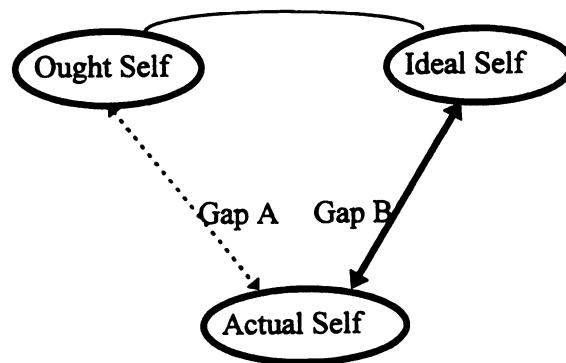
Figure 2-5 The Relationships Among Three Selves

On the other hand, when a products is used mainly for social oriented purposes, a person with independent self may still need to consider the social meaning of using the product/service. For example, when people give gifts, the major function of the behavior is related to social relationships. A person with independent self will still need to weigh the social meaning behind the behavior. Therefore, the gap between actual and ought self becomes more salient under this situation. Past research regarding conspicuousness of a product consumption may provide some supports for this assertion. Bourne (1956), Burnkrant and Cousineau (1975), Childers and Rao (1992), and Lessig and Park (1982) all suggested that a product's conspicuousness is one of the most important factors relating the degree of reference groups' influences. People will care more about social implication of the product consumption behaviors when the consumption behavior is conspicuous. One thing must be emphasized here is that conspicuousness is only one of the dimensions of the social oriented product. The definition of social oriented product covers more than the conspicuousness of a product consumption. People must also consider the product can serve their social oriented attitude functions to be called social oriented products. Conspicuousness of the product consumption alone may not be able to serve social oriented attitude functions. In summary, for products that engage entirely on one purpose (either social or non-social), consumers will tend to focus on how well the product fulfills the purpose (Shavitt 1992; Shavitt and Lowrey 1992) regardless their personalities or cultures.

When the attitude function a product engages is perceived differently by different people, the personality and culture factors on the persuasiveness of social or non-social oriented product concepts is more likely to be manifested. For example, a computer

printer can be considered as a purely non-social oriented product by persons with independent self, while it may be regarded as a highly social oriented product by persons with interdependent self. Persons with independent self focus on the printer's attributes and psychical functions. They use it to reduce the gap between actual and ideal self. Interdependent self persons, on the other hand, emphasize whether the printing quality can please or impress others. They use it to reduce the gap between actual self and ought self. For simplicity, this product is termed <u>ambivalent attitude function product</u> in the following sections of this thesis.

To test the above theory empirically, one need to find subjects who can represent interdependence selves as well as subjects who can represent independent selves. As discussed in above sections, subjects from a collectivistic culture or who score high in the ATSCI score can portray interdependent self, while subjects from a individualistic culture or who score low in the ATSCI score can illustrate independent selves. One of them depicts the culture factor and the other describes the personality factor.

Therefore, it is hypothesized that (Figure 2-6 & Figure 2-7) :

Culture Effect:

H1a: For products engaging ambivalent attitude functions, persuasive product concepts that emphasize social oriented attitude functions will be more effective in persuading consumers in collectivistic versus individualistic cultures

H1b: For products engaging ambivalent attitude functions, persuasive product concepts that emphasize non-social oriented attitude functions will be more effective in persuading consumers in individualistic versus collectivistic cultures

H1c: For products engaging ambivalent attitude functions, social oriented product concepts and non-social oriented product concepts will be more effective in persuading consumers in collectivistic and individualistic cultures respectively than in persuading consumers in individualistic and collectivistic cultures respectively (Interaction Effect)

H2: For products that primarily engage only social oriented attitude functions, persuasive product concepts that emphasize social oriented attitude functions will be more effective than persuasive product concepts that emphasize non-social orientation either in collectivistic or individualistic cultures

Attitude/
Intention

Individualism
Culture

Collectivism
Culture

Non-Social   Social
Oriented   Oriented
Concept   Concept

Attitude/
Intention

Low ATSC

High ATSC

Non-Social   Social
Oriented   Oriented
Concept   Concept
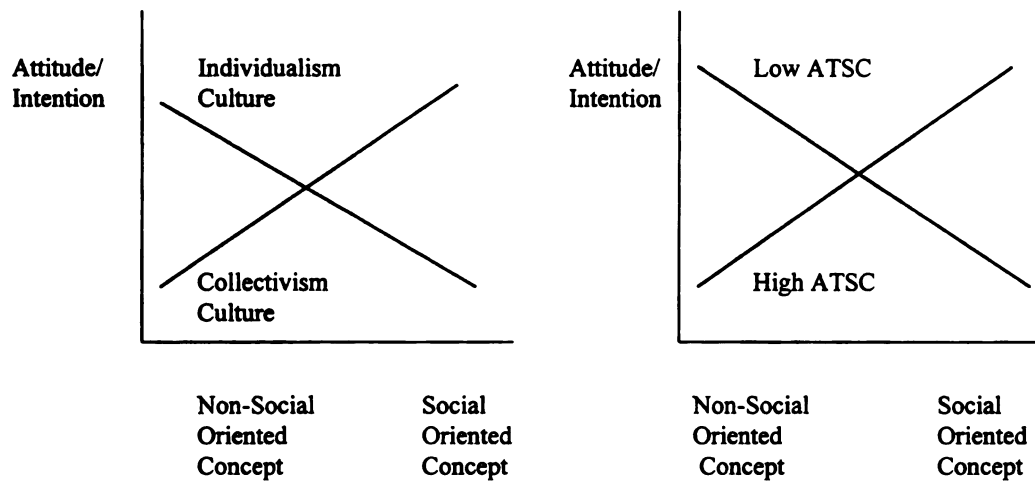
Table 2-6 The Interaction Effects for Product Engaging Ambivalent Attitude Functions

Attitude/
Intention

Individualistic
& Collectivism
Culture

Non-Social   Social
Oriented   Oriented
Concept   Concept

Attitude/
Intention

Low & High
ATSC Culture

Non-Social   Social
Oriented   Oriented
Concept   Concept
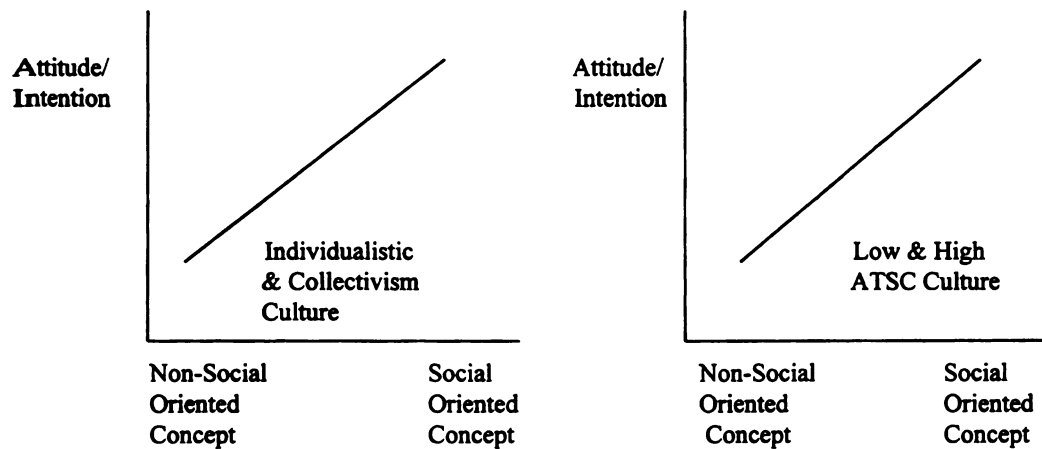
Table 2-7 The Main Effects for Products Engaging Social Oriented Attitude Functions

Personality Effect

H3a: For products engaging ambivalent attitude functions, persuasive product concepts that emphasize social oriented attitude functions will be more effective in persuading consumers who are more attentive to social comparison information

H3b: For products engaging ambivalent attitude functions, persuasive product concepts that emphasize non-social oriented attitude functions will be more effective in persuading consumers who are less attentive to social comparison information

H3c: For products engaging ambivalent attitude functions, social oriented product concepts and non-social oriented product concepts will be more effective in persuading consumers who are more attentive to social comparison information and who are less attentive to social comparison information respectively than in persuading consumers who are less attentive to social comparison information and who are more attentive to social comparison information respectively (Interaction Effect)

H4:   For products that primarily engage only social oriented attitude function, persuasive product concepts that emphasize social oriented attitude functions will be more effective than persuasive product concepts that emphasize non-social oriented product concept in persuading consumers who are either more or less attentive to social comparison information.

The Mediation Effect of the Personality Factor

The main effects of culture and personality on the persuasiveness of a product concept have been hypothesized.   The relationship between culture and personality deserves further exploration however. As stated at the beginning of this thesis, personality may mediate the effect of culture on the persuasiveness of a product concept. Culture will influence the socialization process.   The socialization process affects a person's personality. Personalities will in turn influence a person's cognition, emotion, and social behavior (Douglas and Dubois 1977; Markus and Kitayama 1991; Triandis 1994). The question is: how much of the effect of culture on the persuasiveness of a product concept occurs via personality? As Markus and Kitayama (1991) stated, researchers still don't know how deeply culture affects people's behavior.   Is the culture norm completely internalized into a person's mind? Or is culture norm partially internalized?

The argument of the distinction of cultural and personality influences actually can be very philosophical (Shweder and Sullivan 1993). Early research in psychology strived to find universal psychic structures. On the other hand, early research in anthropology focused mostly on the collective differences between cultures. Gradually researchers came
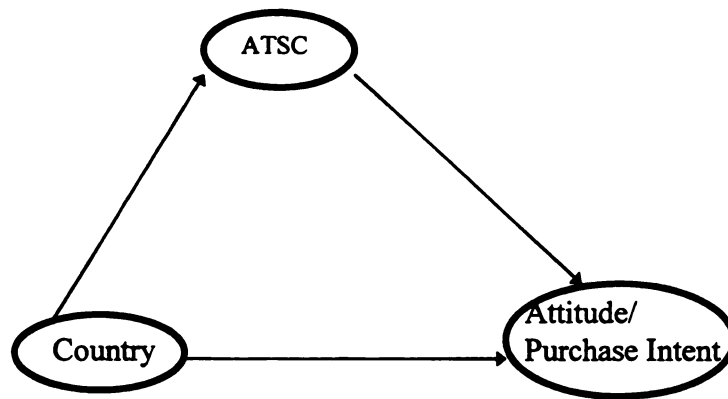
Figure 2-8 The Mediation Effects of Personality

to believe that there is a relationship between culture and personality issues. The relationship between culture and personality may be far more complicated than a pure mediating or moderating effect of the two variables. For marketers the most important thing is to estimate the relative influences by both factors on consumer behavior. If we adopt Greenwald (1982) and Markus and Kitayama's (1991) explanation, culture may affect mostly the relationship between of the self and its collective. People still have the private aspects of the self in addition to the facet of the collective self. These aspects may not be influenced by culture. Therefore, one may predict that the effect of culture on the persuasiveness of a product concept will be only partially mediated by the personality of the subjects. Figure 2-8 can be used to explain this relationship. Culture may influence consumers' attitudes and intentions toward a product concept directly and through personality.

H5:   The effect of culture on the persuasiveness of a product concept

will be partially mediated by personality factors.

The Relationship between Attitude and Intention

Until now, the above hypotheses focused on persuasiveness of the product concept, which will be tested by using attitudes and intentions as the dependent variables. However, the relationship between attitudes and intentions is another important issue that needs to be explored (Chaiken and Stangor 1987). According to the Elaboration Likelihood Model (ELM; Petty and Cacioppo 1986), if a person processes the incoming information via the central route, the attitude-conation relationship will be stronger than when s/he processes the information via the peripheral route.

Two major categories of variables were identified by Petty and Cacioppo (1986) which may influence the route a person may adopt in processing incoming information: motivation and ability to process. People must have motivation and ability to process the incoming information through the central route; otherwise they will process the information via the peripheral route.

The question is: when will people have more motivation and/ or ability to process the incoming information? The functional approach of attitude can be used to explain the motivational base issues. If the statement of a product concept fit in an individual's attitude functional needs, the individual should have higher motivation to process the incoming information. On the other hand, if the statement of a product concept doesn't correspond to an individual's pursuing attitude functions, then the individual will have less motivation to process the information (DeBono 1987).

It can also be asserted that people will have higher ability to process a product concept that depicts the attitude function they are pursuing than a product concept that does not. If a person cares about a specific attitude function, s/he will pay more attention to the information relating to that function. Gradually, they should have accumulated more knowledge about how to process that kind of information. For example, Triandis (1994) stated, people in collectivistic culture have better abilities in linking objects to a context, while people in individualistic culture have higher abilities in processing information logically.

Therefore, a person in a collectivistic culture will more likely to process a social oriented product concept through central routes than peripheral routes, while a person in an individualistic culture will more likely to process a non-social oriented product concept

through central routes than peripheral routes. Similarly, a high ATSCI person will more likely to process a social oriented product concept through central routes than peripheral routes, while a low ATSCI person will more likely to process a non-social oriented product concept through central routes than peripheral routes.

The above assertion, however, also will be moderated by product type. When the function of a product is ambivalent, the above assertion is more likely to occur. However, when a product is used solely for social oriented purposes, a social oriented product concept will more likely to be processed through central routes than peripheral routes by all persons in different cultures and persons with different personality since social oriented function is the major motivated function for this kind of product. Thus, the sixth group of hypotheses are:

H6a: For products engaging ambivalent attitude functions, attitude toward the product concept is a more significant predictor of purchase intention when a social oriented product concept is presented than is a non-social oriented product concept in a collectivistic culture

H6b: For products engaging ambivalent attitude functions, attitude toward the product concept is a more significant predictor of purchase intention when a non-social oriented product concept is presented than is a social oriented product concept in an individualistic culture

H6c: For products engaging ambivalent attitude functions, attitude toward the product concept is a more significant predictor of purchase intention when a social oriented product concept is presented than is a non-social oriented product concept for a high ATSCI consumer

H6d: For products engaging ambivalent attitude functions, attitude toward the product concept is a more significant predictor of purchase intention when a non-social oriented product concept is presented than is a social oriented product concept for a low ATSCI consumer

H6e: For social oriented products, the attitude toward the product concept is a more significant predictor of behavior intention when the product concept is social oriented than the product concept is non-social oriented.

Covariate Variables

In addition to the above factors, there are several others that may influence a consumer's preference for a product. Consumers may be interested in a new product/brand concept because of the uniqueness of the product, the believability of the information , or the comprehensibility of the description (Schwartz 1987; Twedt 1969). These variables may affect the acceptance of a product concept.

Especially when conducting cross-cultural research, the market situation (e.g., competition and market development) in different national markets may be dramatically different from one other (Buzzell 1968; Jain 1989). As discussed in the previous section,

these market situational factors may affect the pool of marketing strategies a firm can adopt. From consumers' perspectives, these situational factors may affect their perceptions of a new product. For example, consumers in a collectivistic culture may prefer a social oriented product concept to a non-social oriented concept. However, several brands in the market may have already positioned themselves as fulfilling social oriented needs. A me-too product concept may not have the same favorable evaluation as existing brands. Similarly, if a product concept is too good to be believed or too difficult to understand, consumers may lower their evaluation. Therefore, the uniqueness, believability, comprehensibility of the tested product concepts need to be controlled.

Chapter 3

RESEARCH METHODOLOGY

The research was divided into two stages; i.e., preliminary studies and confirmatory studies. Both the preliminary and confirmatory studies were conducted in the U.S. and in Taiwan. The United States was chosen to represent the individualistic culture, while Taiwan was selected to illustrate the collectivistic culture. According to Hofstede (1983), the U.S. ranks almost as the highest individualistic country. On the other hand, Taiwan has a very high score in the collectivism direction. All the questionnaires were written in English and tested in the United States first, then translated into Chinese for the field work in Taiwan. The translation procedures followed back translation process as suggested by Brislin (1980).

PRELIMINARY STUDY

The preliminary study served three purposes. First, it was used to explore whether consumers in different cultures have different activated goals and pursuing attributes when purchasing products. Second, the most important means and ends for each product or service in the preliminary study can be the basis for creating social oriented and non-social oriented product concepts. Finally, the preliminary study permits pretesting translation adequacy, and thus the conceptual equivalence of the personality constructs

between two cultures can be verified. If there is inequivalence in the conceptual constructs between the two cultures, the scales have to be revised to ensure concept equivalence before the confirmatory studies can take place.

Research Stimuli

Six types of product or situation-- buying a gift for a close friend, buying a gift for a social acquaintance, toothpaste, computer printer, clothes for casual occasions, and clothes for special occasions-- were chosen to be the objects of the experiment. Gift-giving and clothes were used to represent social oriented product situations, while the computer printer and toothpaste were used to represent possible candidates for ambivalent attitude function products.

Procedures

127 student subjects from the U.S. and 120 student subjects from Taiwan were randomly given two out of the six product situations. The studies were conducted during their regular class sections. Subjects completed a questionnaire that required them to identify the four most important attributes they look for in purchasing or selecting the products. They then ranked the four attributes from the most important to the least important. A paper and pencil laddering task was undertaken to elicit subjects' means-end structures after the first two questions. Subjects were asked to describe, in writing, why each of their four most important product attributes are important to them.

The laddering process is similar to Walker and Olson's (1991) procedure. The pursued attributes are the means and the reasons are the goals (Gutman 1982). This approach is also consistent with Breckler and Greenwald's (1986) ego-task analysis. The purpose of an ego task is to achieve favorable self-evaluations. In purchasing decisions,

the goal is to choose the best product or service to establish self-worth by achieving either a significant audience's or self's favorable evaluation. Like means-end analysis, there are two components of an ego task. The first one is the cognitive representation of what is to be accomplished (i.e., the goals). The second one is the strategy for achieving the goals (i.e., the means). Both the goal and strategy are determined jointly by incentives in the situation and by personal goal preferences. Therefore, the preliminary study can not only solicit the means (strategies), but also the goals for each purchasing situation. At the end of the questionnaire, the subjects are asked to fill out Lennox and Wolfe's (1984) Attention-To-Social-Comparison-Information scale.

The answers of the subjects were analyzed by content analysis. The content were classified into two major categories: either social oriented or non-social oriented. The similarities and differences between the two cultures were compared.

The Decision of the Coding Scheme

After reviewing the verbatim, it was found that the social oriented classification can further be divided into two sub-categories; i.e., social adjustment and social expressive. The social expressive category is associated with attitudes motivated by a need to affirm one's sense of self by expressing important values and aligning oneself with important reference groups; on the other hand, the social adjustment category is dealing with the rewards and punishments from conforming to group relationships and social contexts. Both have social implications, however: the social expressive category focuses more on expressing self to others, while the social adjustment category emphasizes group and social conformity.

This distinction may have theoretical importance. It can be argued that there is

difference between them. In a social situation, people in collective societies concern their relationship to the context first and then think about how to behave to fit into the context and be accepted by one's own social environment (Markus and Kitayama 1991; Triandis 1994). Therefore, they may prefer social adjustment related product concept. People in individualistic society, on the other hand, will consider themselves first and then think about how to express the social identity that is consistent with their self-concept and value. Therefore, they will prefer social expressive product concept to other product concepts.

This further division for social oriented category, however, is considered exploratory. No formal hypotheses will be provided for the different effects of these two social oriented product concepts.

Coding Scheme

The respondents' verbatim were coded according to the coding scheme as shown on Table 3-1 to Table 3-4. Three major categories in the scheme are social adjustment, social expression, and non-social oriented. A social oriented category is also calculated by combining the social adjustment function and the social expressive function without duplication. These key categories are defined in the following.

Social Oriented

When the verbatim mentioned any social meaning, social relation, social attention, social implication, and other social related issues, it was coded into social directed category.

Social Adjustment

When the social issues mentioned involved the following concerns:

1) Fit into a certain context.

2) Maintain/improve relationship with others/groups

3) Other-directed thinking

4) Recognized by important others

Social Expression

When the social issues mentioned involved the following concerns:

1) Express self meaning

2) Be unique, better, superior to others

3) Get attention/remembrance

4) Improve self-confidence in a social context

Non-Social Oriented

When the verbatim only focused on the attributes and functions of the attitude object's pros and cons without mentioning any social related issues, it was coded into this category.

Key Results

Culture main effects

For the case regarding casual clothes (Table 3-1), Taiwan respondents mentioned more social oriented statements than the U.S. counterparts. Among the mentioned social oriented statements, Taiwanese subjects cared more about whether the clothes fit their images, while U.S. subjects concerned more about whether the clothes follow fashion. For the cases regarding clothes for special occasions, Taiwanese subject reported more social

adjustment statements, while U.S. respondents described more social expressive statements. Taiwanese subject cared more about whether the clothes fit in the occasion and whether others think good on them, while US respondents were concerned more about whether they look good on the dress and whether the dresses fit their figures.

For both cases regarding gift giving (Table 3-2), Taiwanese subjects reported more social adjustment statements, while U.S. subjects mentioned more social expressive statements. Specifically, Taiwan respondents mentioned more about whether the gift is appropriate, whether the receivers like it and use it, and other relationship related issues than the US counterparts. On the other hand, US respondents were concerned more about whether the gift accurately represents their meaning or value than the Taiwan counterparts.

For the computer printer and toothpaste case (Table 3-3 and Table 3-4), there is no overall difference in the social and non-social oriented statements between the U.S. and Taiwanese subjects. However, there are differences in some sub-categorical items. For example, the U.S. subjects were concerned more about whether the printer can print professional looking output, Taiwanese subjects cared more about the speed and feature of the printer.

Product type main effect

Significantly more respondents reported more social oriented issues and less non-social oriented concerns for more social oriented products (clothes and gifts) than non-social oriented products (computer printer and toothpaste) (Table 3-5). The results are similar in both countries. Almost all respondents in both countries mentioned social oriented statements in the both gift-giving cases (97.5% in the gift for casual friends case

Table 3-1 Preliminary Study: Casual Clothes and Clothes for Special Occasions

	Casual Clothes		Special Clothes	
	US [49] % a	Taiwan [40] % b	US [42] % c	Taiwan [40] % d
Social Oriented	87.8b*	72.5	95.2b	97.5b
Social Adjustment	46.9	52.5	59.5	85.0 abc
Fit my image	2.0	20.0a	9.5	17.5a
Follow fashion	40.8d	30.0	31.0	17.5
Fit occasion	6.1	5.0	28.6ab	67.5abc
Fit my friend	0.0	2.5	2.4	5.0
Other think good on me	2.0	2.5	7.1	22.5abc
Be conservative	0.0	2.5	2.4	2.5
Follow other's recomm.	0.0	2.5	0.0	2.5
Social Expression	51.0	42.5	66.7bd	42.5
Reflect myself	16.3	20.0	9.5	30.0c
Look good on me	28.6	25.0	54.8ab	15.0
No follow the fashion	4.1	0.0	0.0	2.5
Attention drawing	2.0	0.0	4.8	5.0
High prestige	2.0	0.0	2.4	0.0
Confident	0.0	0.0	7.1	0.0
Non-Social Oriented	100.0	100.0	97.6	90.0
Quality	32.7bd	15.0	26.2d	5.0
Material comfort	14.3	32.5ac	7.1	25.0c
Feature/color/style	26.5	42.5cd	23.8	22.5
Cost/price issues	79.6	92.5cd	69.0	72.5
Fit comfort	73.5b	37.5	54.8d	27.5
Design	2.0	0.0	0.0	0.0
Brand related	26.5bd	5.0	14.3	2.5
Convenience	6.1	5.0	2.4	0.0
Versatile	4.1	35.0acd	14.3	12.5
Others	2.0	7.5	9.5	5.0

*: All tests are conducted at two-tailed 5% significant level. The character(s) attached to the numerical value represent significant test(s). For example, if the characters are bc in column a. It means that the value in column a is significantly greater than the value in column b and column c.

Table 3-2 Preliminary Study: Gifts for Casual Acquaintances and Gifts for Close Friends

	Gift for Casual Acq.		Gift for Close Friends	
	US	Taiwan	US	Taiwan
	[40]	[40]	[42]	[39]
	%	%	%	%
	a	b	c	d
Social Oriented	95.0	97.5	97.6	97.4
Social Adjustment	80.0	97.5ac	85.7	97.4ac
They like it	12.5	37.5a	45.2a	48.7a
They will use it	62.5c	65.0c	38.1	64.1c
Fit their style	10.0	22.5a	16.7	33.3a
Not insult	22.5	25.0	16.7	15.4
Appropriateness	10.0	22.5c	7.1	22.5c
Equal value	45cd	32.5d	19.0	10.3
Relationship related	2.5	30.0acd	2.4	7.7
Connect ourselves	2.5	2.5	2.4	5.1
Social Expression	52.5bd	15.0	47.6b	28.2
Something of myself	40.0bd	5.0	35.7bd	10.3
Remember me	15.0	5.0	11.9	12.8
Show my thoughtfulness	12.5	2.5	14.3b	7.7
Non-Social Oriented	65.0	70.0	78.6	76.9
Conven.of purchasing	27.5b	10.0	2.4	2.6
Quality	15.0	5.0	26.2bd	5.1
Unique	0.0	0.0	4.8	2.6
Cost/price issues	45.0	62.5	54.8	64.1a
Brand/store related	22.5bd	2.5	26.2bd	2.6
Appearance/style	2.5	2.5	7.1	17.9ab
I like it	15.0	5.0	9.5	7.7
others	2.5	10.0	2.4	10.3

All tests are conducted at two-tailed 5% significant level.

Table 3-3 Preliminary Study: Computer Printer

	Computer Printer	
	US [40] % a	Taiwan [40] % b
Social Oriented	32.5	25.0
Social Adjustment	10.0	17.5
Don't disturb others	2.5	12.5
Give other good image of	0.0	5.0
Brands that recognized by	7.5	0.0
Social Expression	25.0	10.0
Look professional	25.0b	2.5
Look prestige	2.5	5.0
Look better than others	0.0	2.5
Non-Social Oriented	100.0	100.0
Quality	62.5	65.0
Cost/price issues	42.5	30.0
Brand related	47.5	30.0
Speed	72.5	97.5a
Noise	7.5	2.5
Size	10.0	2.5
User friendly	48.8	32.5
Service	17.5	22.5
Features	35.0	55.0a
Latest model	5.0	5.0
Compatible with soft/hard	17.5b	2.5
Appearance	5.0	10.0
Others	2.5	5.0

All tests are conducted at two-tailed 5% significant level.

Table 3-4 Preliminary Study: Toothpaste

	Toothpaste	
	US [41] % a	Taiwan [40] % b
Social Oriented	19.5	7.5
Social Adjustment	17.1	5.0
Make my mouth kissable	2.4	0.0
Cover my breath	12.2b	0.0
What other use	2.4	2.5
Social requirement	0.0	2.5
Social Expression	2.4	2.5
Look good on me	2.4	0.0
More confident	2.4	2.5
Non-Social Oriented	100.0	100.0
Convenience of purchasing	2.4	5.0
Quality	7.3	20.0
Cost/price related	63.4	50.0
Brand related	51.2	77.5a
Cleaning ability/whitening	24.4	25.0
Tartar control/prevent	36.6b	2.5
Cavity fighting/health of	48.8	32.5
Taste	73.2b	47.5
Texture	22.0b	0.0
Package	29.3	25.0
Safety concerns	0.0	27.5a
Recom.from ADA, etc.	2.4	5.0
Ads	0.0	17.5a
Effectiveness	0.0	25.0a
Others	4.9	10.0

All tests are conducted at two-tailed 5% significant level.

Table 3-5 Preliminary Study: The Relationship between Product Function and Product Type

	Gifts for CF [40] % a	Gifts for Ac [42] % b	Sp'l Clothes [42] % c	Casual Cloth [49] % d	Printer [41] % e	Toothpaste [40] % f
US Data:						
Social Oriented	97.6ef	95.0ef	95.2ef	87.8ef	32.5	19.5
Social Adjust.	85.7cdef	80.0cdef	59.5ef	46.9ef	10.0	17.1
Social Express.	47.6ef	52.5ef	66.7ef	51.0ef	25.0	2.4
Non-Social O'td	78.6	65.0	97.6ab	100ab	100ab	100ab
Taiwan Data						
Social Oriented	97.4def	97.5def	97.5def	72.5ef	25.0f	7.5
Social Adjust.	97.4def	97.5def	85.0def	52.5ef	17.5	5.0
Social Express.	28.2ef	15.0f	42.5bef	42.5bef	10.0	2.5
Non-Social O'td	76.9	70.0	90.0b	100abc	100abc	100abc
Total Data						
Social Oriented	97.5def	96.3def	96.3def	80.9ef	28.8	13.5
Social Adjust.	91.3cdef	88.8cdef	71.9def	49.4ef	13.8	11.1
Social Express.	38.2ef	33.8f	54.9bef	47.2ef	17.5f	2.5
Non-Social O'td	77.8	67.5	93.9ab	100ab	100ab	100ab

and 96.3% in the gift for close friends case). This confirmed that gift-giving behaviors are very social oriented in both countries. Similar results occurred in the clothes for special occasion and clothes for casual occasions. Only a handful (14%) of respondents reported social oriented statements in the toothpaste case. Finally, about 30 percent of the respondents mentioned social oriented statements in the computer printer case. Some of the subjects considered that a computer printer has some social implications, while others didn't. This verified that the computer printer can be a candidate for the ambivalent attitude function product as discussed in the last section.

The marketing activities may influence consumers's reasons of purchasing certain products

Contrary to hypothesis, US respondents mentioned more social adjustment concerns than their Taiwanese counterparts (significant in one-tailed 5%) in the toothpaste case (Table 3-4). There is are some possible reasons for this result. Unlike the toothpaste industry in US, no brand in Taiwan positions itself on social oriented function. Similarly, there is no tartar control toothpaste in the Taiwanese market. Therefore, almost no subject mentioned tartar control in their responses. They, instead, mentioned more general terms; e.g., effectiveness and cleaning ability. Finally, Taiwanese subjects cared more about the safety issues. This might be caused by the effective PR campaign conducted by a toothpaste company in Taiwan about ten years ago. At that time, one local toothpaste company claimed that the ingredient (i.e., fluoride) of the leading brand may cause cancer. The message was very successfully delivered by mass media at that time. This incident has such a strong effect on Taiwanese consumers' mind for so long. This demonstrates how marketing system can affect consumers' consumption behaviors.

CONFIRMATORY STUDY

Experimental Stimuli

<u>Product type</u>

Based on the preliminary study, the gift store and the computer printer were chosen as the product stimuli. The former one represents a purely social oriented product, while the latter one illustrates a ambivalent attitude function product.

<u>Product concept</u>

Three concepts for a gift store and three concepts for a computer printer were developed. Based on the preliminary results, one of the concepts focuses on social adjustment statements, one emphasizes social expressive statements, and yet another features non-social oriented statements (see attached product concepts in the Appendix A). The concepts not only give the reader the benefit, but also the reason why. The three product concepts for each product were kept consistent (especially for reason why) except for the ultimate attitude functions. That is, the physical functions for the product were kept as equal as possible among product concepts, but the ultimate purpose of the product varied depending on the attitude functions the product concept is trying to deliver.

This can make sure that the differences in the experiment results is from attitude function differences instead of physical attribute differences. For example, all three product concepts in the computer printer case used "Neo-Laser" technology as the core reason for fulfilling the three distinct attitude functions. Similarly, all three product concepts in the gift store case used advance computer system as the basic rationality for achieving the three different attitude functions.

Product Concept Pre-test

Three draft product concepts for a gift store and three draft product concepts for a computer printer were pre-tested to see whether the product concepts were distinct from one another and whether they delivered the intended key message. Thirty MBA students at Michigan State University were recruited and randomly given two product concepts for evaluations. One of them was a printer product concept and the other was a gift store product concept. After reading each product concept, the subjects were asked to choose the best description for the product concept in a multiple choice question. Finally, an open ended question was asked to solicit their thoughts about each product concept. The result showed that about 68% of the product concepts are correctly classified, and therefore, a further revision on the product concepts was conducted.

Based on the results and several one-on-one interviews, the product concepts were revised to make them more distinct. A second wave pre-test was conducted for these revised product concepts. Thirty two graduate students taking marketing management course at the same school were recruited. The same procedure was applied. The result showed that about 82% of product concepts were now correctly classified. To make the product concepts even more distinct, the two most mis-classification product concepts (one was a printer product concept and the other was a gift product concept) were revised and tested again on undergraduate students at the same school. About 92% of these two concepts were now correctly classified.

The final product concepts were translated into Chinese and back translated into English to check the translation accuracy. Different translators were used in these two stages. If a major inconsistency occurred in the translation, a discussion between two

translators was conducted to reconcile the difference. The final Chinese version was pre-test on 25 Taiwanese students at the same U.S. University. The same procedure as for the U.S. subjects was applied. About 82% of product concepts were correctly classified. The most misclassified product concepts were revised and qualitative interviews were conducted to make sure the product concepts were distinct and understood.

Subjects

310 student subjects from Michigan State University and 301 student subjects from universities around northern Taiwan were recruited for the study generating 295 and 297 usable samples from each country respectively. To insure sampled subjects are comparative between the two countries, two criteria were set in advance. The subject must be a junior or senior college student and major in business (or other social science related major). Since the average size of Taiwanese universities is around eight thousand students and the student body within a single university is not as diverse as its U.S. counterpart, seven colleges (three of them are public universities and others are private universities) in the northern part of Taiwan were included in the sampling frame. Student subjects were used for two reasons. First, student subjects are suitable for the two products. It is especially true for the computer printer case. It is believed that the usage and ownership of a computer printer will be more similar among college student groups than other generations between the United States and Taiwan. The older generations in Taiwan use less computers than their U.S. counterparts. Second, using student subjects can confirm the result of the preliminary study since the preliminary study used student subjects. The attributes emphasized by college students may be different from those emphasized by other generations within each country.

Table 3-6

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Table 3-6 Basic Characteristics of the Sampled Subjects

Basic Information	Taiwan		U.S.	
	Mean/%	S.D.	Mean	S.D.
Age	21.39	1.60	21.91	2.88
Male (%)	49%	0.50	56%	0.50

Ethnic group (%)
  Caucasian American
  African American
  Asian American
  Others
			83%
			6%
			4%
			7%	

Major (%)
  Business Related
  Other Social Sciences
	76%
	24%
			76%
			24%	

Frequency of Purchasing gifts (Months/time)	2.79	2.34	3.37	3.51
Percentage of Owning a Computer printer	55%	0.50	49%	0.50

The basic information of the subject is presented in Table 3-6. The basic characteristics of the samples from two countries are very similar, with only slight differences in some of the aspects. Most of the subjects (76%) major in business related fields in both countries. The subjects in the U.S. is slightly older and have higher age variances than Taiwanese counterparts. Slightly more males were sampled in U.S. than in Taiwan. The percentage of owning a computer printer is very similar between two countries. Taiwanese subjects have somewhat higher frequencies in purchasing gifts. Finally, about 83% of the subjects in the United States are Caucasian American.

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Procedures

The research were conducted in the students' regular class sections. To reach a broader range of respondents, some of the sections in Taiwan were conducted during the breaks between sections and in dormitories. The participation was voluntary. Each subject read and responded to two product concepts, one gift store product concept and one computer printer product concept. The order of product concepts and product types were randomly assigned. To increase subjects' involvement in the study, all subjects were informed that the product or service would be available in the area in the near future.

After the subjects reviewed each concept, they were asked their overall reactions and some attitudinal questions to the product concept. Some personal experience, knowledge, and personality trait were also assessed (see Appendix B: attached questionnaire).

Measures

Attitude and intention

Attitudes toward the concept were measured by 7-point semantic differential scales reflecting overall favorable/unfavorable, bad/good, foolish/wise, and harmful/beneficial. The four scales were drawn from Petty, Cacioppo, and Schumann's (1983) and Osgood, Suci, and Tannenbaum's (1957) attitude measurement scales. Purchase intentions were measured by asking whether the subject will actually purchase the product when it is available in the market on three 7-point semantic differential scales, unlikely/likely, uncertain/certain, and impossible/possible (Ajzen and Fishbein 1980).

Personality

The Attention-To-Social-Comparison-Information (ATSCI) scale developed by Lennox and Wolfe (1984) were administrated to each subject. The Attention-To-Social-Comparison-Information scale is a result of critique and revision of Snyder's self-monitoring scale. It was demonstrated to be internally consistent, valid, and capable of mediating the relative effects of interpersonal consideration (Bearden and Rose 1990).

Other variables

Most of the articles regarding product concept tests used one item scale to measure the uniqueness, believability, and comprehensibility of a product concept. For the reliability's concern (Churchill 1979), each of these three constructs were measured by three different items by combining different scales from different research as discussed below. The uniqueness of the product concept was measured by asking subjects to rate on seven-point scales reflecting whether they feel the concept is unique, difference (Schwartz 1987), and exclusive (Twedt 1969). The believability of the product concept was measured by asking subject to rate on seven-point scales indicating whether they feel that the concept is believable, true, or bogus/sincere (Dillon, Madden, and Firtle 1994; Page and Rosenbaum 1992; Twedt 1969). The comprehensibility of the product concept was measured by asking subject to rate on seven-point scales representing whether they feel that the concept is comprehensible, understandable, and confusing (Moore 1982; Schwartz 1987).

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Chapter 4

RESULTS

Measurement Equivalence

It is important to establish measurement equivalence before any cross cultural comparison can be conducted (Irvine and Carroll 1980; Singh 1995; Triandis 1994). Without measurement equivalence, researchers do not know whether the numerical values under consideration are on the same measurement scale or not (Reise, Widaman, and Pugh 1993). With the advance of Structural Equation Model, two-group Confirmatory Factory Analysis (CFA) is normally utilized to establish measurement equivalence (Drasgow and Kanfer 1985; Reise, Widaman, and Pugh 1993; Singh 1995) . However, the definition of measurement equivalence is still debatable. Some suggest that one needs to demonstrate that not only factor loadings, but also error variances are identical for each scale item between samples to achieve measurement equivalence (e.g., Singh 1995). Others emphasize that one should focus only on the factor loading equivalence (Byrne, Shavelson, and Muthen 1989; MacCallum and Tucker 1991). Measurement error is normally sample group specific. It is not expected to be equal among different sample groups.

The second approach was adopted for this study. Measuring instruments are often group specific in the way they operate, especially for cross-cultural research. Therefore,

in this thesis, the error matrix of the measurements was allowed to be different between two countries when establishing measurement equivalence.

The first step in two-group CFA analysis for establishing measurement equivalence is to compute the baseline model in which the factor loading are allowed to be freely estimated except for specifying the same factor pattern in both groups. The baseline model must be satisfactory before any further test can be conducted (Reise, Widaman, and Pugh 1993). There are several ways to assess the adequacy of a model fit. In that the most traditional method is the chi-square test. In the multi-groups CFA context, a single chi-square value assessing aggregate fit for the multiple groups is calculated. The likelihood ratio chi-square statistics, however, is very sensitive to trivial discrepancies between the true and the sample models if the sample size is large (Bentler and Bonett 1980). Therefore, some other indices of fit are normally advised to complement the chi-square test. In this study, GFI, AGFI, and RMR proposed by Joreskog and Sorbom (1989) will be used to assess the model fit. A GFI and a AGFI higher than 0.9 are deemed acceptable fit, while the lower the RMR the better. Finally, it is also important to mention that no CFA model should be accepted or rejected on statistics grounds alone (Reise, Widaman, and Pugh 1993). Researchers should base on theory and judgment to find out the adequate fit model.

When the overall fit of the baseline model cannot be establish, the insignificant loading and/or highest correlated error item is withdrawn from the scale. The process is continued until the baseline model reaches a reasonable fit. After a reasonable baseline model is established, the factor loadings are fixed to be equal across countries. The difference of chi-square (her degree of freedom) between the nested models is used to test

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whether the measurement model is invariant between countries. When the difference of chi-square is significant, the most item with the greatest discrepancy between countries is removed from the scale. The process continues until an insignificant chi-square (p< 0.10) is achieved. When comparing nested models, the sequential chi-square difference tests are asymptotically independent (Steiger, Shapiro, and Brown 1985). Therefore, chi-square difference test is the adequate statistics for assessing the model fit in nested models.

In total, three two-group CFA's were run. The first two two-group CFA include attitude, purchase intention, uniqueness, believability, and comprehensibility in the computer printer case and the gift store case respectively. The third CFA deals with the Attention-To-Social-To-Comparison-Information scale (ATSCI). Based on the procedure described above, the final two-group CFA is established when an acceptable fit is found. Two tests were conducted for each two-group CFA. The first test is a measurement equivalence test. It calculated the chi-square difference between the baseline model and a measurement equivalent model ($\Lambda^1_x = \Lambda^2_x$). The second test focuses on measurement and error matrix equivalence. It calculated the chi-square difference between the baseline model and a measurement and error matrix equivalence model ($\Lambda^1_x = \Lambda^2_x$ and $\Theta^1_\delta = \Theta^2_\delta$).

The result of two-group Confirmatory Factor Analysis (CFA) are presented in Table 4-1. For the printer case, although the chi-square for the original model is significant (p<0.000; chi-square=384.27, d.f.=188), GFI and AGFI are acceptable (GFI=0.926 and AGFI=0.892). Therefore, the factor loadings were fixed to be equal across two countries. The chi-square difference test was used to assess the model of the restricted nested model. Since, the chi-square difference between two models is significant

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Table 4-1 Confirmatory Factor Analysis for Establishing Measurement Equivalence

Model	Goodness -of-fit

I. Printer: Attitude, Purchase Intent, Uniqueness, Believability,

and Comprehensibility

A. Original and full model, all parameters free

$\chi^2 (188) = 384.27$ $p \cong 0.000$
GFI=0.926 AGFI=0.892 RMSR=0.073

B. Finalized and full model, all parameters free

$\chi^2 (68) = 125.61$ $p \cong 0.000$
GFI=0.965 AGFI=0.932 RMSR=0.057

C. Measurement equivalent model (finalized model)
    $(\Lambda^1_x = \Lambda^2_x)$

$\chi^2 (74) = 133.51$ $p \cong 0.000$

D. Measurement and error matrix equivalent
    (finalized model) $(\Lambda^1_x = \Lambda^2_x$ and $\Theta^1_\delta = \Theta^2_\delta)$

$\chi^2 (85) = 200.38$ $p \cong 0.000$

Test of :

Measurement Equivalent (C-B) $\chi^2 (6) = 7.90$ $p \cong 0.190$
Measurement and error matrix equivalent (D-B) $\chi^2 (4) = 74.77$ $p \cong 0.001$

II. Gift: Attitude, Purchase Intent, Uniqueness, Believability,

and Comprehensibility

A. Original and full model, all parameters free

$\chi^2 (188) = 365.98$ $p \cong 0.000$
GFI=0.933 AGFI=0.905 RMSR=0.081

B. Finalized and full model, all parameters free

$\chi^2 (68) = 106.51$ $p \cong 0.002$
GFI=0.970 AGFI=0.941 RMSR=0.051

C. Measurement equivalent model (finalized model)
    $(\Lambda^1_x = \Lambda^2_x)$

$\chi^2 (74) = 107.91$ $p \cong 0.006$

D. Measurement and error matrix equivalent
    (finalized model) $(\Lambda^1_x = \Lambda^2_x$ and $\Theta^1_\delta = \Theta^2_\delta)$

$\chi^2 (85) = 206.30$ $p \cong 0.000$

Test of :

Measurement Equivalent (C-B) $\chi^2 (6) = 1.40$ $p \cong 0.960$
Measurement and error matrix equivalent(D-B) $\chi^2 (4) = 99.79$ $p \cong 0.001$

Table 4-1 (

Table 4-1 (cont'd)

III. Attention to Social Comparison Information

A. Original and full model, all parameters free

$\chi^2(130) = 618.50$ $p \cong 0.000$
GFI=0.853   AGFI=0.795   RMSR=0.164

B. Finalized and full model, all parameters free

$\chi^2(40) = 157.60$ $p \cong 0.000$
GFI=0.939   AGFI=0.895   RMSR=0.134

C. Measurement equivalent model (finalized model)
    $(\Lambda^1_x = \Lambda^2_x)$ $\chi^2(47) = 169.29$ $p \cong 0.000$

D. Measurement and error matrix equivalent $\chi^2(55) = 318.47$ $p \cong 0.000$
    (finalized model) $(\Lambda^1_x = \Lambda^2_x$ and $\Theta^1_\delta = \Theta^2_\delta)$

Test of :

Measurement Equivalent (C-B)	$\chi^2(7) = \quad 11.69 \quad p \cong 0.150$
Measurement and error matrix equivalent (D-B)	$\chi^2(15) = 160.87 \quad p \cong 0.001$

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(p<0.000; chi-square=47.3, d.f.= 11), the restricted model was not fit. Therefore, the variables with most unequal loading and correlated error (the unlikely-likely scale in the purchase intention construct) was dropped from further analysis. The loadings of the remainder items, again, was fixed to be equal across countries and the chi-square difference was calculated to test whether measurement equivalence was achieved. If not, the variables with most unequal loading and correlated errors was dropped again. The process continued until a fit model was found. As shown in Table 4-1, the chi-square difference for measurement equivalent test in the final model is not significant (p<0.190; chi-square=7.90, d.f.=6). Therefore, the measurement equivalent model were established. In the final model, eleven out of sixteen items were retained. The retained items and their loadings for the final model is shown in Table 4-2. All of the non-fixed items are significantly different from zero. There are three items (favorable/unfavorable, bad/good, and foolish/wise) for the attitude construct, two items (uncertain/certain and possible/impossible) for the purchase intention construct, two items (not at all different/extremely different and not at all exclusive/extremely exclusive) for the uniqueness construct, two items (not believable/believable and bogus/sincere) for the believability construct, and two items (not comprehensible/ comprehensible and not confusing/confusing) for the comprehensibility construct.

The similar procedure were implemented in the gift store and ATSCI model. To avoid redundancy in descriptions, only the final model are described here. For the gift store model , eleven items were retained in the final model. All the factor loadings for the non-fixed items are significantly different from zero. There are three items (favorable/unfavorable, bad/good, and foolish/wise) for the attitude construct, two items

(uncertain/certain and possible/impossible) for the purchase intention construct, two items (not at all unique/extremely unique and not at all different/extremely different) for the uniqueness construct, two items (not believable/believable and bogus/sincere) for the believability construct, and two items (not confusing/confusing and not understandable/ understandable) for the comprehensibility construct.

For the ATSCI model, eight out of thirteen items were retained in the final model. All the retained and unfixed items are significant different from zero. The retained items possess the major essences of the ATSCI scale. That is, (1) care about others' opinions on the individual's outfits and behaviors, (2) concern about how to fit into a group.

Table 4-3 shows the reliability of each final construct. Most of the scales are very reliable (>0.85) except purchase intent (0.67 to 0.87). To disattentuate the unreliable elements in each construct, the reliability values will be specified in the structure equation model for the hypothesis testing. Table 4-4 presents the basic statistics for each key construct. For the printer model, the overall attitudes and the believability of the product concepts are very similar across countries. However, Taiwan subjects had lower purchase intentions and considered the product concepts less comprehensible, but they regarded the product concepts more unique than did the U.S. counterparts.

For gift store, Taiwan subjects had more favorable attitudes and purchase intentions toward the product concepts than the U.S. subjects. The U.S. subjects, however, thought that the product concepts were more comprehensible than Taiwanese subjects. Taiwanese subjects have significantly higher ATSCI scores than the U.S. counterparts.

Table 4-2

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Table 4-2 The Indicators and Their Unstandardized Loadings for Major Constructs

PRINTER		GIFT STORE	
Attitude		**Attitude**	
Indicator	Loading/ t-value	Indicator	Loading/ t-value
Unfavorable/Favorable	1.00(fixed)	Unfavorable/Favorable	1.00(fixed)
Bad/Good	0.91(37.02)	Bad/Good	0.91(39.56)
Foolish/Wise	0.90(30.08)	Foolish/Wise	0.94(32.78)
Purchase Intention		**Purchase Intention**	
Uncertain/Certain	1.00(fixed)	Uncertain/Certain	1.00(fixed)
Impossible/Possible	1.45(10.29)	Impossible/Possible	1.24(16.16)
Uniqueness		**Uniqueness**	
Not at all different/ Extremely different	1.00(fixed)	Not at all unique/ Extremely unique	1.00(fixed)
Not at all exclusive/ Extremely exclusive	1.07(23.53)	Not at all different/ Extremely different	1.02(22.61)
Believability		**Believability**	
Not Believable/ Believable	1.00(fixed)	Not believable/ Believable	1.00(fixed)
Bogus/Sincere	0.95(25.03)	Bogus/Sincere	0.89(24.81)
Comprehensibility		**Comprehensibility**	
Not Comprehensible/ Comprehensible	1.00(fixed)	Confusing/ Not confusing	1.00(fixed)
Confusing/ Not confusing	0.96(23.82)	Not understandable/ Understandable	1.01(30.21)

Table 4-2 (

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I find that... them as pa...
I tend to pa...
The slighte... whom I am... approach...
It's importa...
If I am the... situation, I...

Table 4-2 (cont'd)

The Retained Items of the Attention To Social Comparison Information Scale	Loading/t-value
I actively avoid wearing clothes that are not in style	1.00 (fixed)
At parties I usually try to behave in a manner that makes me fit in	1.19(10.25)
I try to pay attention to the reactions of others to my behavior in order to avoid being out of place	1.36(10.95)
I find that I tend to pick up slang expressions from others and use them as part of my vocabulary	0.62(6.30)
I tend to pay attention to what others are wearing	1.07(9.55)
The slightest look of disapproval in the eyes of a person with whom I am interacting is enough to make me change my approach	1.13(10.21)
It's important for me to fit into the group I'm with	1.35(10.79)
If I am the least bit uncertain as to how to act in a social situation, I look to the behavior of others for cues	1.24(10.26)

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Table 4-3 The Reliability (Coefficient Alpha) of Major Constructs

Printer			
Construct	Total	Taiwan	U.S.
Attitude	0.92	0.90	0.94
Purchase Intent	0.73	0.80	0.68
Uniqueness	0.91	0.94	0.88
Believability	0.92	0.92	0.91
Comprehensibility	0.93	0.94	0.91
Gift Store			
Construct	Total	Taiwan	U.S.
Attitude	0.93	0.92	0.94
Purchase Intent	0.77	0.87	0.67
Uniqueness	0.91	0.92	0.90
Believability	0.90	0.90	0.90
Comprehensibility	0.95	0.95	0.95
Psychological Measures			
ATSCI	0.85	0.83	0.81

Table 4-4 The Means and Variances of Major Constructs

| Printer						
	Total		Taiwan		U.S.	
Construct	Mean	Var.	Mean	Var.	Mean	Var.
Attitude	4.85	1.77	4.84	1.37	4.86	2.18
Purchase Intent	3.87	2.15	3.71	2.11	4.04	2.14
Uniqueness	4.19	2.14	4.44	2.31	3.94	1.86
Believability	4.17	2.00	4.12	1.58	4.23	2.41
Comprehensibility	4.47	2.63	4.21	2.60	4.74	2.53
Gift Store						
	Total		Taiwan		U.S.	
Construct	Mean	Var.	Mean	Var.	Mean	Var.
Attitude	4.80	2.14	5.08	1.66	4.51	2.47
Purchase Intent	4.77	2.15	5.03	2.10	4.51	2.07
Uniqueness	5.30	1.83	5.34	1.81	5.25	1.85
Believability	4.45	2.13	4.44	1.66	4.47	2.61
Comprehensibility	4.94	2.53	4.82	2.44	5.05	2.60
Psychological Measures						
ATSCI	4.80	1.16	5.31	0.75	4.27	1.03

HYPOTHESES TESTING

Culture: The Main and Interaction Effects (H1a, H1b, H1c, and H2)

Structural equation models instead of the traditional MANOVA procedures were implemented to test the main and interaction effects in this thesis for two reasons. First, one of the major assumptions of MANOVA, equal covariance matrix of dependent variables between cultures, is usually violated in cross-cultural research. Structural equation models can circumvent this limitation (Bagozzi and Yi 1989). Second, the reliability of the scale can be specified for dis-attenuating the actual relationship between treatments and effects.

The score of a construct was calculated by averaging its items. The reliability was calculated for each construct. In each of the LISREL calculations, the reliability for each construct was specified (errors= $(1-\alpha)$ x variances of the construct) in the model. Figure 4-1 is a multiple-group representation of the two-way MANOVA design using the structural equation model. Group 1 represents Taiwanese subjects, whereas group 2 denotes the U.S. subjects. Two dependent variables, attitude and purchase intention, were included in the model. Since there were three product concepts for each country, two dummy variables were used to fully account for the variance in the experiment. In the preliminary analysis, it was found that the two social oriented product concepts were evaluated very similarly in most of the cases by the subjects. The major difference occurred when comparing both social oriented product concepts with the non-social oriented product concept. Therefore, the non-social product concept was used as a base category in the dummy variable coding scheme.

Group 1: Taiwan or the High ATSCI Group
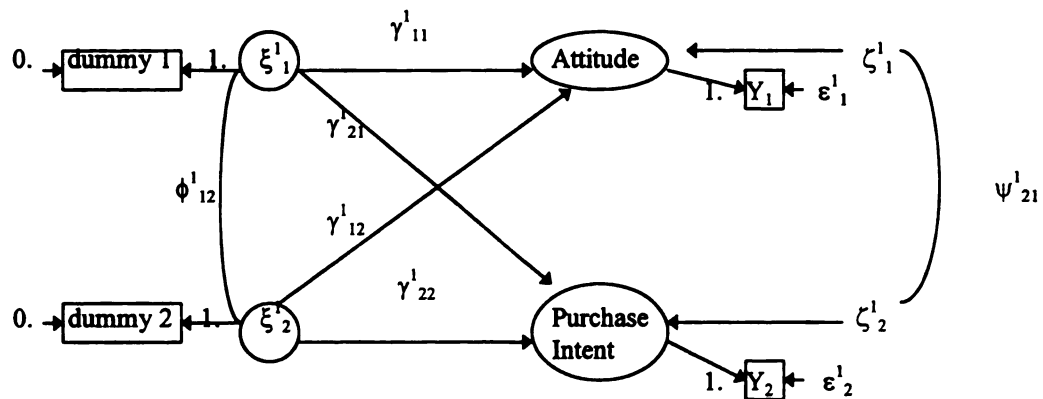
**Group 2: The Unites States or the Low ATSCI Group**
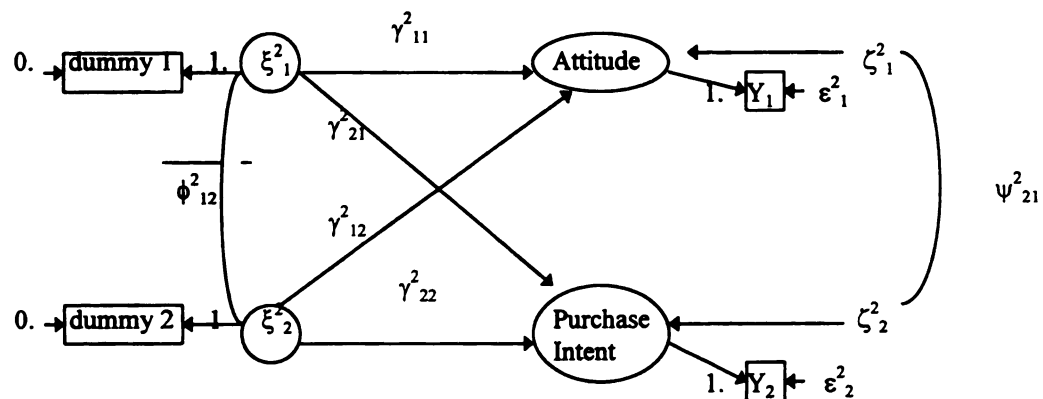
Figure 4-1 The MANOVA Model

Specifically, for the non-social oriented product concept, both dummy variables one and two were coded zero. For the social adjustment product concept, dummy variable one was coded one and dummy variable two was coded zero. For the social expressive product concept, dummy variable one was coded zero and dummy variable two was coded one. Therefore, in both groups, γ_{11} and γ_{21} represents respectively the structural coefficient difference of attitude and purchase intention between the social adjustment product concept and the non-social oriented product concept. Whereas, γ_{12} and γ_{22} represents respectively the structural coefficient difference of attitude and purchase intention between the social expressive product concept and the non-social oriented product concept.

Similar to the procedure proposed by Bagozzi and Yi (1989), the hypothesis of no interaction effect between culture and product concept was tested by comparing the full model (as shown in Figure 4-1) and the restricted model with the following constraints: $\gamma^1_{11} = \gamma^2_{11}$; $\gamma^1_{12} = \gamma^2_{12}$; $\gamma^1_{21} = \gamma^2_{21}$; $\gamma^1_{22} = \gamma^2_{22}$ (1 and 2 superscripts indicate Taiwan sample group and the United States sample group respectively). The difference in chi-square tests between the two models will be distributed chi-square with corresponding degrees of freedom equal to the difference in degrees of freedom for the models. To test the main effects, the model with no interaction ($\gamma^1_{11} = \gamma^2_{11}$; $\gamma^1_{12} = \gamma^2_{12}$; $\gamma^1_{21} = \gamma^2_{21}$; $\gamma^1_{22} = \gamma^2_{22}$) and the model with no main effects and no interaction ($\gamma^1_{11} = \gamma^2_{11} = \gamma^1_{12} = \gamma^2_{12} = \gamma^1_{21} = \gamma^2_{21} = \gamma^1_{22} = \gamma^2_{22} = 0$) were compared. The difference in chi-square for the two models , again, provides the test statistics.

Referring to Table 4-5, one can see that there is an interaction effect between culture and product concept ($p < 0.019$) for the printer case, while there is a main effect

Table 4-5 Culture Model: LISREL Results for the Two-Way MANOVA

Model	Goodness -of-fit

I. Printer without covariate

A Full, all parameters free

$\chi^2(0) = 0.00$ $p \cong 1.00$

B No interaction effects

$(\gamma^1_{11} = \gamma^2_{11} ; \gamma^1_{12} = \gamma^2_{12} ; \gamma^1_{21} = \gamma^2_{21} ; \gamma^1_{22} = \gamma^2_{22})$ $\chi^2(4) = 11.74$ $p \cong 0.019$

C No main effects of concepts and no interaction effects

$(\gamma^1_{11} = \gamma^2_{11} = \gamma^1_{12} = \gamma^2_{12} = \gamma^1_{21} = \gamma^2_{21} = \gamma^1_{22} = \gamma^2_{22} = 0)$ $\chi^2(8) = 13.92$ $p \cong 0.084$

Test of :

Interaction (B-A) $\chi^2(4) = 11.74$ $p \cong 0.019$

Main effects of concepts (C-B) $\chi^2(4) = 2.18$ $p \cong 0.700$

Key Parameter estimates

Parameter	Taiwan	U.S.
$\gamma_{\bullet 11}$	0.26(1.55)[a]	-0.65(-3.11)
$\gamma_{\bullet 12}$	0.24(1.48)	-0.25(-1.18)
$\gamma_{\bullet 21}$	0.06(0.30)	-0.23(-1.09)
γ_{22}	-0.09(-0.44)	-0.18(-0.83)

II. Gift without covariate

A Full, all parameters free

$\chi^2(0) = 0.00$ $p \cong 1.00$

B No interaction effects

$(\gamma^1_{11} = \gamma^2_{11} ; \gamma^1_{12} = \gamma^2_{12} ; \gamma^1_{21} = \gamma^2_{21} ; \gamma^1_{22} = \gamma^2_{22})$ $\chi^2(4) = 3.19$ $p \cong 0.526$

C No main effects of concepts and no interaction effects

$(\gamma^1_{11} = \gamma^2_{11} = \gamma^1_{12} = \gamma^2_{12} = \gamma^1_{21} = \gamma^2_{21} = \gamma^1_{22} = \gamma^2_{22} = 0)$ $\chi^2(8) = 14.79$ $p \cong 0.063$

Test of :

Interaction (B-A) $\chi^2(4) = 3.19$ $p \cong 0.526$

Main effects of concepts (C-B) $\chi^2(4) = 11.60$ $p \cong 0.022$

Key Parameter estimates

Parameter	Taiwan	U.S.
$\gamma_{\bullet 11}$	0.30(1.64)[a]	0.13(0.56)
$\gamma_{\bullet 12}$	0.46(2.57)	-0.04(-0.17)
$\gamma_{\bullet 21}$	0.41(2.01)	0.29(1.42)
γ_{22}	0.62(3.10)	0.27(1.32)

[a] t-values are in parentheses.

for product concept in the gift store case (p < 0.022). For the printer case, Taiwanese subjects have significantly higher attitude scores toward both social oriented product concepts than toward the non-social oriented product concept (t=1.55, p < 0.06 for the social adjustment product concepts; t=1.48, p < 0.08 for the social expressive product concept). On the other hand, U.S. subjects have significantly lower attitude scores toward the social adjustment product concept than the non-social product concept (t=-3.11, p < 0.001). However, there is no significant effect of product concept toward purchase intention for either cultures. Therefore, H1a, H1b, and H1c were partially supported.

For the gift store case, Taiwanese subjects have significantly higher attitude scores toward both social oriented product concepts than toward the non-social oriented product concept (t=1.64, p < 0.05 for the social adjustment product concepts; t=2.57, p < 0.005 for the social expressive product concept) and higher purchase intention scores for both social oriented product concepts than for the non-social oriented product concept (t=2.01, p < 0.02 for the social adjustment product concepts; t=3.10, p < 0.001 for the social expressive product concept). Likewise, U.S. subjects also have significantly higher purchase intention scores for both social oriented product concepts than for the non-social oriented product concepts (t=1.42, p < 0.08 for social adjustment product concepts; t=1.32, p < 0.09 for social expressive product concept). However, there is no significant effect on attitude scores for U.S. subjects in the gift store case. Therefore, H2 were partially supported by the data.

Table 4-6 Personality Model: LISREL Results for the Two-Way MANOVA

Model	Goodness -of-fit

I. Printer without covariate

A Full, all parameters free
$\chi^2(0) = 0.00$ $p \cong 1.00$

B No interaction effects
$(\gamma^1_{11} = \gamma^2_{11} ; \gamma^1_{12} = \gamma^2_{12} ; \gamma^1_{21} = \gamma^2_{21} ; \gamma^1_{22} = \gamma^2_{22})$
$\chi^2(4) = 18.61$ $p \cong 0.001$

C No main effects of concepts and no interaction effects
$(\gamma^1_{11} = \gamma^2_{11} = \gamma^1_{12} = \gamma^2_{12} = \gamma^1_{21} = \gamma^2_{21} = \gamma^1_{22} = \gamma^2_{22} = 0)$
$\chi^2(8) = 20.96$ $p \cong 0.007$

Test of :

Interaction (B-A) $\chi^2_2(4) = 18.61$ $p \cong 0.001$

Main effects of concepts (C-B) $\chi^2_2(4) = 2.35$ $p \cong 0.650$

Key Parameter estimates

Parameter	High ATSC	Low ATSC.
$\gamma_{\bullet 11}$	$0.33(1.83)^a$	$-0.63(-3.25)$
$\gamma_{\bullet 12}$	$0.33(1.84)$	$-0.28(-1.44)$
$\gamma_{\bullet 21}$	$0.42(2.00)$	$-0.50(-2.43)$
γ_{22}	$-0.05(-0.26)$	$-0.20(-0.97)$

II. Gift without covariate

A Full, all parameters free
$\chi^2(0) = 0.00$ $p \cong 1.00$

B No interaction effects
$(\gamma^1_{11} = \gamma^2_{11} ; \gamma^1_{12} = \gamma^2_{12} ; \gamma^1_{21} = \gamma^2_{21} ; \gamma^1_{22} = \gamma^2_{22})$
$\chi^2(4) = 2.71$ $p \cong 0.608$

C No main effects of concepts and no interaction effects
$(\gamma^1_{11} = \gamma^2_{11} = \gamma^1_{12} = \gamma^2_{12} = \gamma^1_{21} = \gamma^2_{21} = \gamma^1_{22} = \gamma^2_{22} = 0)$
$\chi^2(8) = 13.34$ $p \cong 0.101$

Test of :

Interaction (B-A) $\chi^2(4) = 2.71$ $p \cong 0.608$

Main effects of concepts (C-B) $\chi^2(4) = 10.63$ $p \cong 0.035$

Key Parameter estimates

Parameter	High ATSC	Low ATSC.
$\gamma_{\bullet 11}$	$0.30(1.53)^a$	$0.10(0.46)$
$\gamma_{\bullet 12}$	$0.44(2.28)$	$0.02(0.08)$
$\gamma_{\bullet 21}$	$0.46(2.24)$	$0.22(1.07)$
γ_{22}	$0.66(3.14)$	$0.27(1.37)$

[a] t-values are in parentheses.

Personality: The Main and Interaction Effects (H3a, H3b, H3c, and H4)

To test the effect of personality, subjects from both countries were collapsed and divided into high and low ATSCI groups using subjects' ATSCI median scores as the dividing point. The same procedure as described in the last section was applied in testing the main and interaction effects. Based on Table 4-6, one can see that there is an interaction effect between ATSCI and product concept ($p < 0.001$) for the printer case, while there is a main effect of product concepts in the gift store case ($p < 0.030$). For the printer, high ATSCI subjects have significantly higher attitude scores toward both social oriented product concepts than toward the non-social oriented product concept ($t=1.83$, $p < 0.03$ for the social adjustment product concepts; $t=1.84$, $p < 0.03$ for the social expressive product concept). In addition, high ATSCI subjects have higher purchase intention scores toward the social adjustment product concept ($t=2.00$, $p< 0.02$). On the other hand, low ATSCI subjects have significantly lower attitude scores toward both social oriented product concepts than toward the non-social product concept ($t=-3.25$, $p < 0.001$ for the social adjustment product concept; $t=-1.44$, $p< 0.07$ for the social expressive product concept).

For gift store case, high ATSCI subjects have significantly higher attitude scores toward both social oriented product concepts than toward the non-social oriented product concept ($t=1.53$, $p < 0.06$ for the social adjustment product concepts; $t=2.28$, $p < 0.01$ for the social expressive product concept) and higher purchase intention scores toward both social oriented product concepts than toward the non-social oriented product concept ($t=2.24$, $p < 0.01$ for the social adjustment product concepts; $t=3.14$, $p < 0.001$ for the social expressive product concept). Likewise, low ATSCI subjects have significantly

higher purchase intention scores toward the social expressive product concept than toward the non-social oriented product concept (t=1.37, p < 0.09). However, there is no significant effect on attitude scores for both social oriented product concept and no significant effect on purchase intention scores for the social adjustment product concept in the low ATSCI subject group. Therefore, H3 and H4 were partially supported by the data.

The Inclusion of Uniqueness, Believability, and Comprehensibility (Covariate Analyses of H1a to H4)

As stated in the hypotheses section, the persuasiveness of a product concept may be significantly affected by the product concept's uniqueness, believability, and comprehensibility. In order to statistically control these factors, these factors are included into the model. Figure 4-2 describes the framework for statistically controlling those factors. The procedure for testing the main and interaction effects is similar to that in the previous section. The major difference is the inclusion of the three factors. In the model, the meaning of γ_{11} , γ_{12} , γ_{21} , γ_{22} are the same as the former two sections. γ_{31} , γ_{41} , and γ_{51} represent respectively the effect of uniqueness, believability, and comprehensibility on product concept attitudes, whereas γ_{32} , γ_{42} , and γ_{52} represent respectively the effect of uniqueness, believability, and comprehensibility on product concept purchase intentions.

The result are shown in Table 4-7 (cultural effect model) and Table 4-8 (personality effect model). For the culture effect model, all the interaction (product concept x culture) and main effects (product concept) in the previous sections disappeared for either the printer (p<0.296 and p<0.280) or the gift store cases (p<0.290 and 0.310).
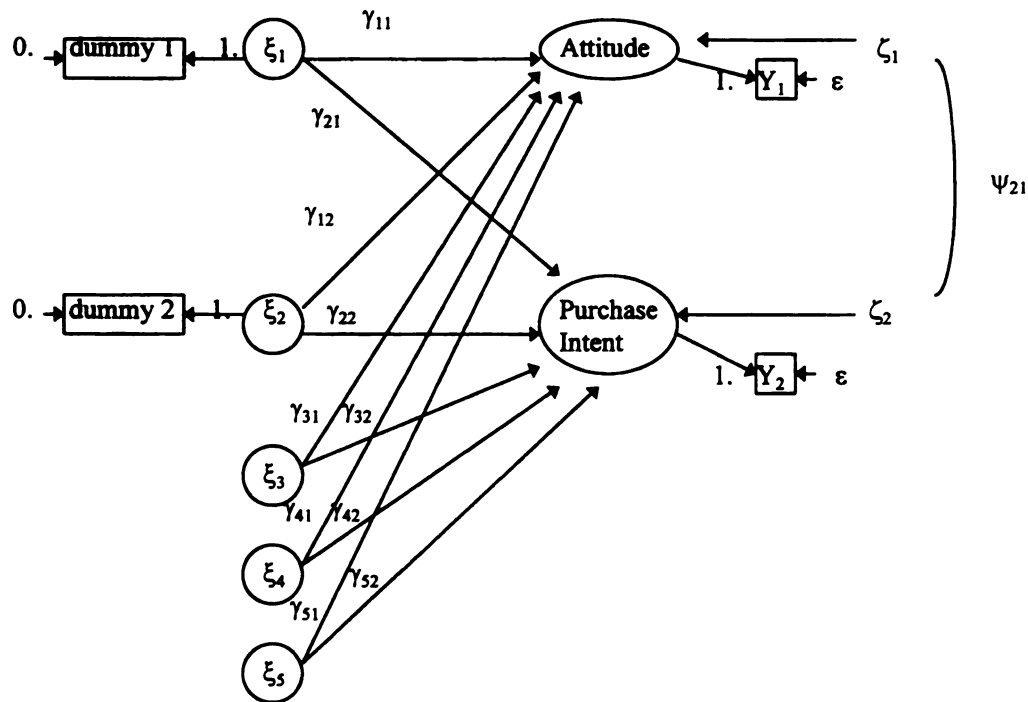
ξ_3: Uniqueness ξ_4: Believability ξ_5: Comprehensiblity

* For simplicity:
(1) Only one group of the model is shown
(2) the links between ξs are not shown in the diagram. The Φ matrix was freed in the model estimation.

Figure 4-2 The MANCOVA Model

Table 4-7 Culture Model: LISREL Results for the Two-Way MANCOVA with Uniqueness, Believability, and Comprehensibility as Covariates

Model	Goodness -of-fit

I. Printer

A Full, all parameters free

$\chi^2(0) = 0.00$ $p \cong 1.00$

B No interaction effects
$(\gamma^1_{11} = \gamma^2_{11} ; \gamma^1_{12} = \gamma^2_{12} ; \gamma^1_{21} = \gamma^2_{21} ; \gamma^1_{22} = \gamma^2_{22})$

$\chi^2(4) = 4.91$ $p \cong 0.296$

C No main effects of concepts and no interaction effects
$(\gamma^1_{11} = \gamma^2_{11} = \gamma^1_{12} = \gamma^2_{12} = \gamma^1_{21} = \gamma^2_{21} = \gamma^1_{22} = \gamma^2_{22} = 0)$

$\chi^2(8) = 10.33$ $p \cong 0.243$

Test of :

Interaction (B-A)

$\chi^2(4) = 4.91$ $p \cong 0.296$

Main effects of concepts (C-B)

$\chi^2(4) = 5.42$ $p \cong 0.280$

Key Parameter estimates

Parameter	Taiwan	U.S.
γ_{11}	-0.06(-0.43)[a]	-0.32(-1.92)
γ_{12}	0.02(0.19)	0.11(0.63)
γ_{13}	0.38(8.95)	0.34(5.75)
γ_{14}	0.14(2.45)	0.37(6.69)
γ_{15}	0.16(3.77)	0.18(3.42)
γ_{21}	-0.22(-1.17)	0.00(0.01)
γ_{22}	-0.28(-1.52)	0.07(0.37)
γ_{23}	0.16(2.51)	0.28(4.05)
γ_{24}	0.17(1.94)	0.24(3.70)
γ_{25}	0.26(4.26)	0.12(1.92)

Table 4-7 (cont'd)

II. Gift

A Full, all parameters free

$\chi^2(0) = 0.00 \qquad p \cong 1.00$

B No interaction effects

$(\gamma^1_{11} = \gamma^2_{11} ; \gamma^1_{12} = \gamma^2_{12} ; \gamma^1_{21} = \gamma^2_{21} ; \gamma^1_{22} = \gamma^2_{22})$

$\chi^2(4) = 4.98 \qquad p \cong 0.290$

C No main effects of concepts and no interaction effects

$(\gamma^1_{11} = \gamma^2_{11} = \gamma^1_{12} = \gamma^2_{12} = \gamma^1_{21} = \gamma^2_{21} = \gamma^1_{22} = \gamma^2_{22} = 0)$

$\chi^2(8) = 9.51 \qquad p \cong 0.301$

Test of :

Interaction (B-A)

$\chi^2(4) = 4.98 \qquad p \cong 0.290$

Main effects of concepts(C-B)

$\chi^2(4) = 4.53 \qquad p \cong 0.310$

Key Parameter estimates

Parameter	Taiwan	U.S.
$\gamma_{\bullet 11}$	-0.02(-0.15)	-0.40(-2.25)
$\gamma_{\bullet 12}$	0.04(0.30)	-0.42(-2.32)
$\gamma_{\bullet 13}$	0.37(6.27)	0.17(2.58)
$\gamma_{\bullet 14}$	0.23(3.66)	0.53(9.33)
$\gamma_{\bullet 15}$	0.20(4.34)	0.23(4.44)
$\gamma_{\bullet 21}$	0.14(0.81)	-0.15(-0.83)
$\gamma_{\bullet 22}$	0.27(1.53)	-0.08(-0.41)
$\gamma_{\bullet 23}$	0.27(3.51)	0.19(2.73)
$\gamma_{\bullet 24}$	0.26(3.13)	0.32(5.39)
$\gamma_{\bullet 25}$	0.18(3.00)	0.20(3.64)

[a] t-values are in parentheses

Table 4-8 Personiality Model: LISREL Results for the Two-Way MANCOVA with Uniqueness, Believability, and Comprehensibility as Covariates

Model	Goodness -of-fit	

L Printer

A Full, all parameters free

$\chi^2(0) = 0.00 \quad p \cong 1.00$

B No interaction effects

$(\gamma^1_{11} = \gamma^2_{11} ; \gamma^1_{12} = \gamma^2_{12} ; \gamma^1_{21} = \gamma^2_{21} ; \gamma^1_{22} = \gamma^2_{22})$

$\chi^2(4) = 6.20 \quad p \cong 0.185$

C No main effects of concepts and no interaction effects

$(\gamma^1_{11} = \gamma^2_{11} = \gamma^1_{12} = \gamma^2_{12} = \gamma^1_{21} = \gamma^2_{21} = \gamma^1_{22} = \gamma^2_{22} = 0)$

$\chi^2(8) = 12.03 \quad p \cong 0.150$

Test of :

Interaction (B-A)	$\chi^2(4) = 6.20$	$p \cong 0.185$
Main effects of concepts (C-B)	$\chi^2(4) = 5.83$	$p \cong 0.220$

Key Parameter estimates

Parameter	High ATSC	Low ATSC
$\gamma_{.11}$	-0.10(-0.74)[a]	-0.29(-1.85)
$\gamma_{.12}$	0.09(0.65)	-0.01(-0.03)
$\gamma_{.13}$	0.37(8.11)	0.30(5.74)
$\gamma_{.14}$	0.21(3.68)	0.33(5.85)
$\gamma_{.15}$	0.17(4.01)	0.19(3.69)
$\gamma_{.21}$	0.15(0.72)	-0.21(-1.15)
$\gamma_{.22}$	-0.24(-1.21)	0.04(0.20)
$\gamma_{.23}$	0.10(1.44)	0.27(4.41)
$\gamma_{.24}$	0.10(1.11)	0.28(4.30)
$\gamma_{.25}$	0.26(4.25)	0.16(2.69)

Table 4-8 (cont'd)

II. Gift

A Full, all parameters free

$\chi^2(0) = 0.00$ $p \cong 1.00$

B No interaction effects
$(\gamma^1_{11} = \gamma^2_{11} ; \gamma^1_{12} = \gamma^2_{12} ; \gamma^1_{21} = \gamma^2_{21} ; \gamma^1_{22} = \gamma^2_{22})$

$\chi^2(4) = 2.88$ $p \cong 0.579$

C No main effects of concepts and no interaction effects
$(\gamma^1_{11} = \gamma^2_{11} = \gamma^1_{12} = \gamma^2_{12} = \gamma^1_{21} = \gamma^2_{21} = \gamma^1_{22} = \gamma^2_{22} = 0)$

$\chi^2(8) = 8.29$ $p \cong 0.405$

Test of :

Interaction (B-A)

$\chi^2(4) = 2.88$ $p \cong 0.579$

Main effects of concepts (C-B)

$\chi^2(4) = 5.41$ $p \cong 0.300$

Key Parameter estimates

Parameter	High ATSC	Low ATSC
γ_{11}	-0.07(-0.42)	-0.27(-1.68)
γ_{12}	-0.04(-0.27)	-0.32(-2.04)
γ_{13}	0.35(5.42)	0.10(1.62)
γ_{14}	0.27(4.15)	0.54(9.67)
γ_{15}	0.19(3.58)	0.22(4.51)
γ_{21}	0.16(0.86)	-0.15(-0.85)
γ_{22}	0.31(1.57)	-0.08(-0.45)
γ_{23}	0.20(2.60)	0.22(3.19)
γ_{24}	0.23(2.97)	0.35(5.57)
γ_{25}	0.20(3.20)	0.16(2.86)

[a] t-values are in parentheses

(Table 4-7). For the personality effect model, the interaction (product concept x ATSCI) and main effects (product concept) were also not significant for either the printer ($p<0.185$ and $p<0.220$) or the gift store cases ($p<0.579$ and 0.250) (Table 4-8). Individual t-values show that all three factors (uniqueness, believability, and comprehensibility) have significantly positive effects on attitude and purchase intention except believability on purchase intention for the printer case in the high ATSCI group ($p<0.14$).

Uniqueness, Believability, and Comprehensibility As Dependent Variables

To test whether a social oriented product concept is perceived to be more unique, believable, and comprehensible for subjects in a collectivistic culture and subjects who have high ATSCI scores than for subjects in an individualistic culture and subject who have low ATSCI scores (or vice versa), the uniqueness, believability, and comprehensibility of the product concept were modeled as dependent variables in the structure equation model.

The structure equation model is shown in Figure 4-3. It is a similar model as Figure 4-1 (except there are three dependent variables instead of two in the model). In the diagram, γ_{11}, γ_{21}, and γ_{31} represent respectively the structural coefficient difference of uniqueness, believability, and comprehensibility between the social adjustment product concept and the non-social oriented product concept. γ_{12}, γ_{22}, and γ_{32} represent respectively the structural coefficient difference of uniqueness, believability, and comprehensibility between the social expressive product concept and the non-social oriented product concept.

The results (Table 4-9 and Table 4-10) showed that there is an interaction effect between culture and product concept ($p < 0.006$) and interaction effect between product

concept and two ATSCI groups (p < 0.003) for the printer case, while there is a main effect for product concept in both the culture and personality models (p < 0.000 in both models) for the gift store case. For the printer case, individual t-tests showed that in most of the situations, subjects in a collectivistic culture and who have high ATSCI scores considered both social oriented concepts more unique, believable, and comprehensible, while subjects in an individualistic culture and who have low ATSCI scores regarded the non-social oriented product concept more unique, believable, and comprehensible. On the other hand, for the gift store case, subjects in either culture or personality groups considered both social oriented product concepts more unique, believable, and comprehensible than the non-social oriented product concept in most of the situations.

More specifically, for the printer case in the culture effect model, Taiwanese subjects considered both social oriented product concepts more unique (t=2.09, p < 0.02 for the social adjustment product concepts; t=1.50, p < 0.07 for the social expressive product concept), more believable (t=2.01, p < 0.02 for the social adjustment product concepts; t=1.84, p < 0.03 for the social expressive product concept), and more comprehensible (t=2.62, p < 0.005 for the social adjustment product concepts; t=1.50, p < 0.07 for the social expressive product concept) than the non-social oriented product concept. On the other hand, U.S. subjects perceived both social oriented product concepts less unique (t=-1.33, p < 0.09 for the social adjustment product concepts; t=-1.69, p < 0.05 for the social expressive product concept) and less believable (t=-2.03, p < 0.02 for the social adjustment product concepts; t=-2.46, p < 0.007 for the social expressive product concept) than the non-social oriented product concept. Finally, the U.S. subjects also considered the social adjustment product concept less comprehensible (t=-1.87, p <

Group 1: Taiwan or the High ATSCI Group
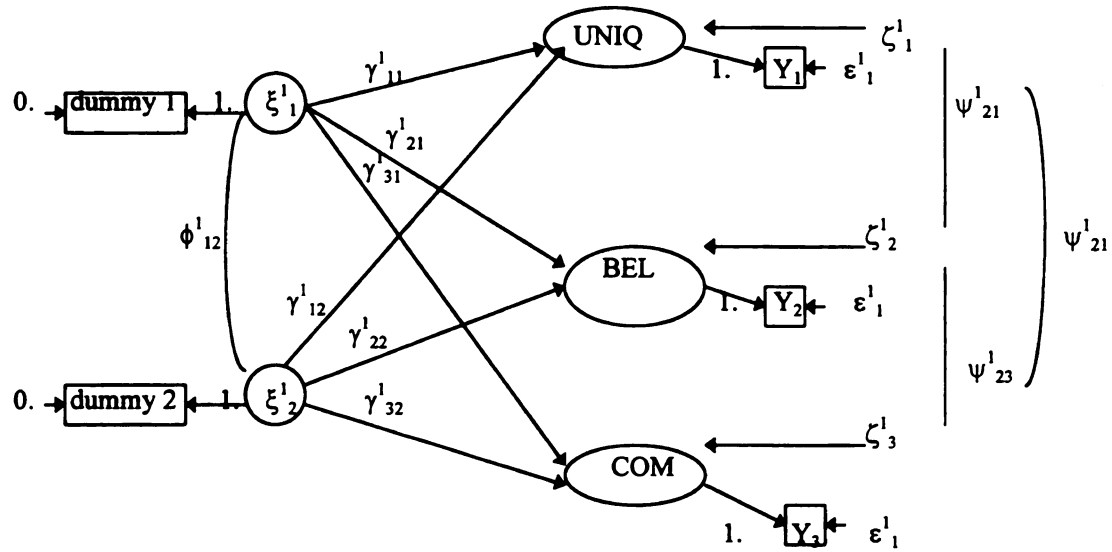
**Group 2: The Unites States or the Low ATSCI Group**
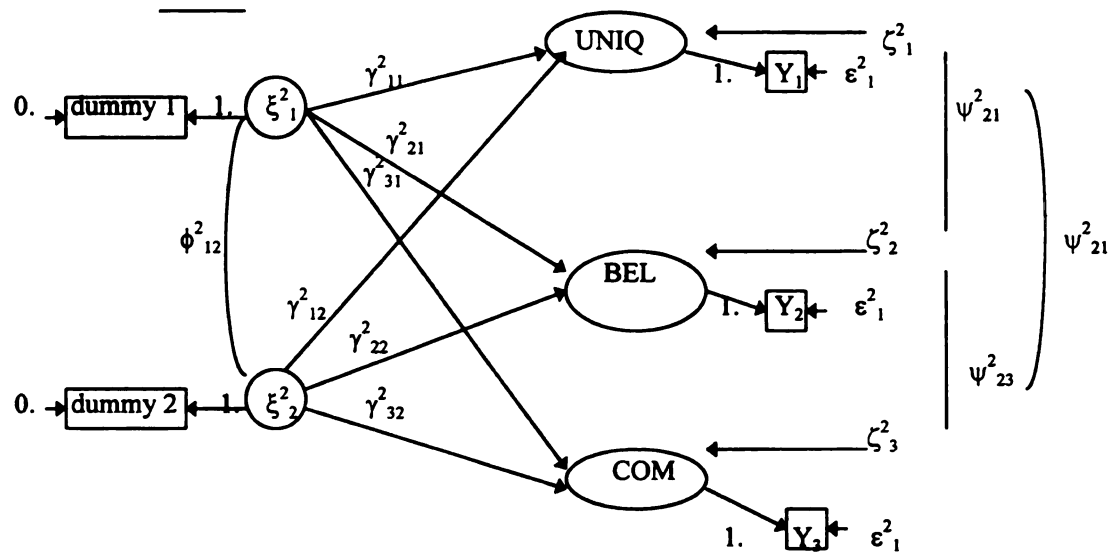
Figure 4-3 Uniqueness, Believability, and Comprehensibility as Dependent Variables

Table 4-9 Culture Model: LISREL Results for the Two-Way MANOVA Using Uniqueness, Believability, and Comprehensibility as Dependent Variables

Model	Goodness -of-fit	
I. Printer without covariate		
A Full, all parameters free	$\chi^2(0) = 0.00$	$p \cong 1.00$
B No interaction effects		
$(\gamma^1_{11} = \gamma^2_{11} ; \gamma^1_{12} = \gamma^2_{12} ; \gamma^1_{21} = \gamma^2_{21} ; \gamma^1_{22} = \gamma^2_{22} ;$		
$\gamma^1_{31} = \gamma^2_{31} ; \gamma^1_{32} = \gamma^2_{32})$	$\chi^2(6) = 18.25$	$p \cong 0.006$
C No main effects of concepts and no interaction effects		
$(\gamma^1_{11} = \gamma^2_{11} = \gamma^1_{12} = \gamma^2_{12} = \gamma^1_{21} = \gamma^2_{21} = \gamma^1_{22} = \gamma^2_{22}$		
$= \gamma^1_{31} = \gamma^2_{31} ; \gamma^1_{32} = \gamma^2_{32} = 0)$	$\chi^2(12) = 19.06$	$p \cong 0.087$

Test of :

Interaction (B-A)	$\chi^2(6) = 18.25$	$p \cong 0.006$
Main effects of concepts (C-B)	$\chi^2(6) = 0.81$	$p \cong 0.990$

Key Parameter estimates

Parameter	Taiwan	U.S.
γ_{11}	0.45(2.09)	-0.26(-1.33)
γ_{12}	0.32(1.50)	-0.33(-1.69)
γ_{21}	0.36(2.01)	-0.45(-2.03)
γ_{22}	0.33(1.84)	-0.55(-2.46)
γ_{31}	0.60(2.62)	-0.43(-1.87)
γ_{32}	0.34(1.50)	-0.19(-0.85)

Model	Goodness -of-fit	
II. Gift without covariate		
A Full, all parameters free	$\chi^2(0) = 0.00$	$p \cong 1.00$
B No interaction effects		
$(\gamma^1_{11} = \gamma^2_{11} ; \gamma^1_{12} = \gamma^2_{12} ; \gamma^1_{21} = \gamma^2_{21} ; \gamma^1_{22} = \gamma^2_{22}$		
$; \gamma^1_{21} = \gamma^2_{21} ; \gamma^1_{22} = \gamma^2_{22}$	$\chi^2(6) = 10.24$	$p \cong 0.115$
C No main effects of concepts and no interaction effects		
$(\gamma^1_{11} = \gamma^2_{11} = \gamma^1_{12} = \gamma^2_{12} = \gamma^1_{21} = \gamma^2_{21} = \gamma^1_{22} = \gamma^2_{22} = ;$		
$\gamma^1_{21} = \gamma^2_{21} ; \gamma^1_{22} = \gamma^2_{22} \ 0)$	$\chi^2(12) = 64.43$	$p \cong 0.000$

Test of :

Interaction (B-A)	$\chi^2(6) = 10.24$	$p \cong 0.115$
Main effects of concepts (C-B)	$\chi^2(6) = 54.19$	$p \cong 0.000$

Key Parameter estimates

Parameter	Taiwan	U.S.
γ_{11}	0.41(2.16)	0.87(4.81)
γ_{12}	0.61(3.23)	1.18(6.52)
γ_{21}	0.13(0.70)	0.32(1.38)
γ_{22}	0.35(1.91)	0.21(0.90)
γ_{31}	0.67(3.08)	0.91(4.07)
γ_{32}	0.58(2.65)	0.33(1.45)

Table 4-10 Personality Model: LISREL Results for the Two-Way MANOVA Using Uniqueness, Believability, and Comprehensibility as Dependent Variables

Model	Goodness -of-fit
I. Printer without covariate	
A Full, all parameters free	$\chi^2(0) = 0.00 \quad p \cong 1.00$
B No interaction effects	
$(\gamma^1_{11} = \gamma^2_{11}; \gamma^1_{12} = \gamma^2_{12}; \gamma^1_{21} = \gamma^2_{21}; \gamma^1_{22} = \gamma^2_{22};$	
$\gamma^1_{31} = \gamma^2_{31}; \gamma^1_{32} = \gamma^2_{32})$	$\chi^2(6) = 19.77 \quad p \cong 0.003$
C No main effects of concepts and no interaction effects	
$(\gamma^1_{11} = \gamma^2_{11} = \gamma^1_{12} = \gamma^2_{12} = \gamma^1_{21} = \gamma^2_{21} = \gamma^1_{22} = \gamma^2_{22}$	
$= \gamma^1_{31} = \gamma^2_{31}; \gamma^1_{32} = \gamma^2_{32} = 0)$	$\chi^2(12) = 20.79 \quad p \cong 0.054$
Test of:	
Interaction (B-A)	$\chi^2(6) = 19.77 \quad p \cong 0.003$
Main effects of concepts (C-B)	$\chi^2(6) = 1.02 \quad p \cong 0.990$

Key Parameter estimates

Parameter	High ATSCI	Low ATSCI
γ_{11}	0.54(2.51)	-0.28(-1.41)
γ_{12}	0.24(1.14)	-0.22(-1.09)
γ_{21}	0.54(2.79)	-0.53(-2.60)
γ_{22}	0.31(1.62)	-0.47(-2.28)
γ_{31}	0.68(2.73)	-0.42(-1.96)
γ_{32}	0.51(2.07)	-0.30(-1.40)

Model	Goodness -of-fit
II. Gift without covariate	
A Full, all parameters free	$\chi^2(0) = 0.00 \quad p \cong 1.00$
B No interaction effects	
$(\gamma^1_{11} = \gamma^2_{11}; \gamma^1_{12} = \gamma^2_{12}; \gamma^1_{21} = \gamma^2_{21}; \gamma^1_{22} = \gamma^2_{22}$	
$; \gamma^1_{21} = \gamma^2_{21}; \gamma^1_{22} = \gamma^2_{22}$	$\chi^2(6) = 4.39 \quad p \cong 0.625$
C No main effects of concepts and no interaction effects	
$(\gamma^1_{11} = \gamma^2_{11} = \gamma^1_{12} = \gamma^2_{12} = \gamma^1_{21} = \gamma^2_{21} = \gamma^1_{22} = \gamma^2_{22} =;$	
$\gamma^1_{21} = \gamma^2_{21}; \gamma^1_{22} = \gamma^2_{22} \ 0)$	$\chi^2(12) = 63.22 \quad p \cong 0.000$
Test of:	
Interaction (B-A)	$\chi^2(6) = 4.39 \quad p \cong 0.625$
Main effects of concepts (C-B)	$\chi^2(6) = 58.83 \quad p \cong 0.000$

Key Parameter estimates

Parameter	High ATSCI	Low ATSCI
γ_{11}	0.43(2.41)	0.80(4.35)
γ_{12}	0.93(5.16)	0.85(4.71)
γ_{21}	0.20(1.01)	0.23(1.06)
γ_{22}	0.25(1.26)	0.30(1.42)
γ_{31}	0.83(3.70)	0.75(3.44)
γ_{32}	0.49(2.16)	0.42(1.96)

0.03) than the non-social oriented product concept.

For the gift store case in the culture effect model, Taiwanese subjects considered both social oriented product concepts more unique (t=2.16, p < 0.02 for the social adjustment product concepts; t=3.23, p < 0.001 for the social expressive product concept), more comprehensible (t=3.08, p < 0.001 for the social adjustment product concepts; t=2.65, p < 0.004 for the social expressive product concept) than the non-social oriented product concept. Taiwanese subjects also considered the social expressive product concept more believable (t=1.91, p < 0.03) than the non-social oriented product concept. Likewise, the U.S. subjects perceived both social oriented product concepts more unique (t=4.81, p < 0.000 for the social adjustment product concepts; t=6.52, p < 0.000 for the social expressive product concept) and more comprehensible (t=4.07, p < 0.000 for the social adjustment product concepts; t=1.45, p < 0.07 for the social expressive product concept) than the non-social oriented product concept. Finally, the U.S. subjects also considered the social adjustment product concept more believable (t=1.38, p < 0.08) than the non-social oriented product concept.

For printer case in the personality effect model, high ATSCI subjects regarded both social oriented product concepts more believable (t=2.79, p < 0.003 for the social adjustment product concepts; t=1.62, p < 0.05 for the social expressive product concept), more comprehensible (t=2.73, p < 0.003 for the social adjustment product concepts; t=2.07, p < 0.02 for the social expressive product concept) than the non-social oriented product concept. High ATSCI also considered the value adjustment product concept more unique (t=2.51, p < 0.006) than the non-social oriented product concept. On the other hand, low ATSCI subjects perceived both social oriented product concepts less believable

(t=-2.60, p < 0.005 for the social adjustment product concepts; t=-2.28, p < 0.02 for the social expressive product concept) and less comprehensible (t=-1.96, p < 0.025 for the social adjustment product concepts; t=-1.40, p < 0.08 for the social expressive product concept) than the non-social oriented product concept. Finally, low ATSCI subjects also considered the social adjustment product concept less unique (t=-1.41, p < 0.08) than the non-social oriented product concept.

For the gift store case in the personality effect model, high ATSCI subjects considered both social oriented product concepts more unique (t=2.41, p < 0.008 for the social adjustment product concepts; t=5.16, p < 0.000 for the social expressive product concept), more comprehensible (t=3.70, p < 0.001 for the social adjustment product concepts; t=2.16, p < 0.015 for the social expressive product concept) than the non-social oriented product concept. Likewise, low ATSCI subjects perceived both social oriented product concepts more unique (t=4.35, p < 0.000 for the social adjustment product concepts; t=4.71, p < 0.000 for the social expressive product concept) and more comprehensible (t=3.44, p < 0.001 for the social adjustment product concepts; t=1.96, p < 0.025 for the social expressive product concept) than the non-social oriented product concept. Finally, low ATSCI subjects also considered the social expressive product concept more believable (t=1.42, p < 0.08) than the non-social oriented product concept.

The Mediation Effect of the Personality Factor (H5)

Figure 4-4 depicts the basic structural model for testing the mediation effect of the personality factor (ATSCI) on the relationship between culture (i.e., country) and the persuasiveness of a product concept. Three steps were implemented to test these hypotheses. In the first step (model A), only culture and persuasiveness (attitude and
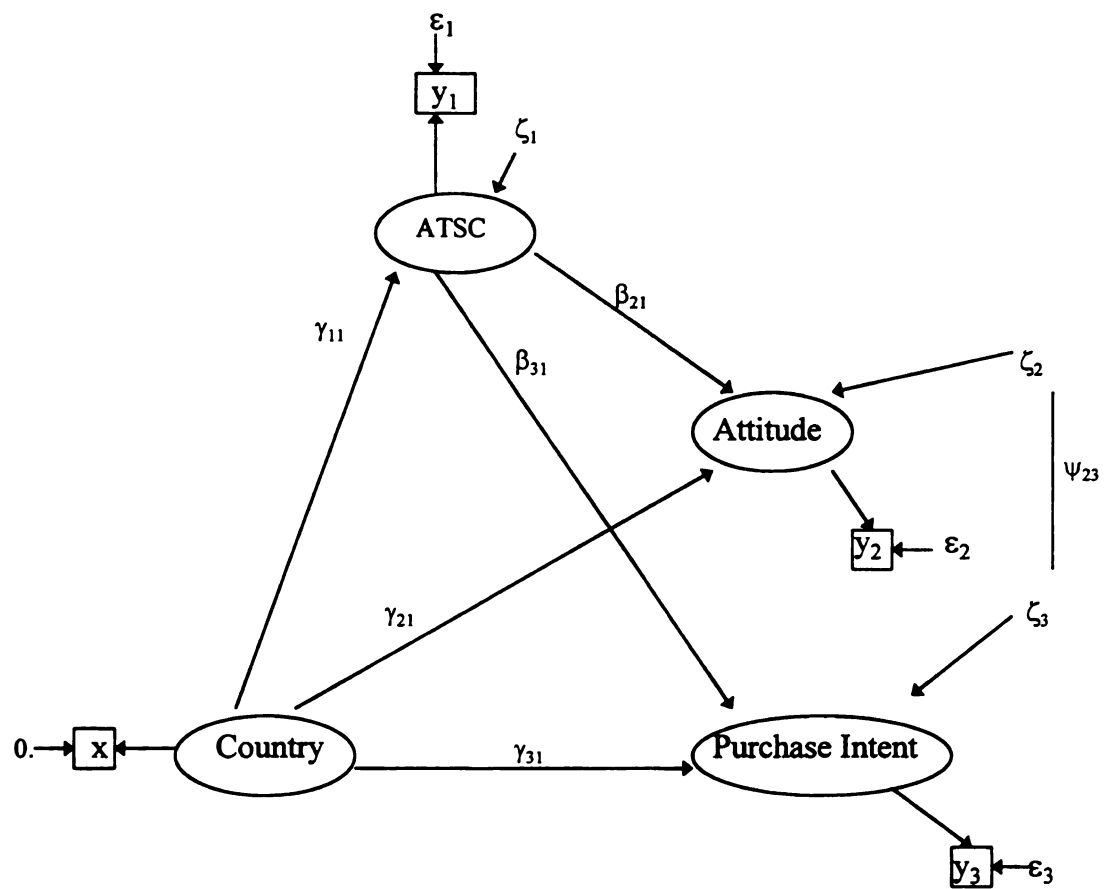
Figure 4-4 LISREL Model: The Mediation Effects of Personality

purchase intention) were included in the model. With all parameters set free, the model was estimated to test whether there are any significant relationships between culture and attitude as well as between culture and purchase intention. If both paths are significant, both paths are kept for the next analysis. If either path is not significant, the insignificant path is dropped from further analyses. If both paths are not significant, the analysis is stopped because there is no significant relationship between culture and the persuasiveness of the product concept, let alone the mediation effect of personality.

In the second step (model B), a full model with all three factors included (as shown in Figure 4-3) was estimated in order to test for the partial mediation effect. In the final step (Model C), the paths between culture and the persuasiveness of product concepts are fixed to be zero to test for complete versus partial mediation of the personality effect. The difference in chi-square tests between model B in the second step and model C in the third step is distributed chi-square with corresponding degrees of freedom equal to the difference in degrees of freedom for the models. If the chi-square is not significantly increased (p >0.10), the personality factor fully mediates the effect between culture and the persuasiveness of the product concept.

There are in total six tests (two product types x three product concepts). The key results are shown in Table 4-11. In step one (model A), all but the path between culture and purchase intent for the social adjustment product concept and the path between culture and attitude for the social expressive product concept in the printer case were significant. For these two groups, the insignificant paths were dropped in further analyses.

The final results show that in five out of the six tests, ATSCI fully mediated the relationships between culture and the persuasiveness of the product concepts. For the

Table 4-11 The Mediation Effect of ATSCI

I. Printer Concept 1 (Social Adjustment Concept)

A. Basic model, all parameters free $\chi^2(0) = 0.$ $p \cong 1..000$

γ_{21} = -0.44(-2.04)[a]

γ_{31} = 0.16(0.76)

— Printer Concept 1 (Social Adjustment Concept) with Attitude as Dependent Var.

A. Basic model, all parameters free $\chi^2(0) = 0.$ $p \cong 1..000$

γ_{21} = -0.41(-2.04)

B. Full model, all parameters free $\chi^2(0) = 0.$ $p \cong 1.000$

γ_{11} = -0.94(-6.93)

γ_{21} = 0.08(0.35)

β_{21} = 0.52(4.22)

C. Reduced model

$(\gamma_{21} = 0)$ $\chi^2(1) = 0.12$ $p \cong 0.724$

γ_{11} = -0.93(-6.92)

β_{21} = 0.50(4.72)

Test of :

Mediation effect of the ATSCI (C - B) $\chi^2(1) = 0.12$ $p \cong 0.724$

Table 4-11 (cont'd)

II. Printer Concept 2 (Social Expressive Concept)

A. Basic model, all parameters free $\quad\quad \chi^2(0) = 0.$ $\quad\quad p \cong 1..000$

$\quad \gamma_{21} \quad = \quad 0.01(0.03)$

$\quad \gamma_{31} \quad = \quad 0.37(1.80)$

— Printer Concept 2 (Social Expressive Concept) with Purchase Intent as Dependent Var.

A. Basic model, all parameters free $\quad\quad \chi^2(0) = 0.$ $\quad\quad p \cong 1..000$

$\quad \gamma_{31} \quad = \quad 0.37(1.80)$

B. Full model, all parameters free $\quad\quad \chi^2(0) = 0.$ $\quad\quad p \cong 1.000$

$\quad \gamma_{11} \quad = \quad -1.21(-8.78)$

$\quad \gamma_{31} \quad = \quad 0.49(1.89)$

$\quad \beta_{31} \quad = \quad 0.10(0.77)$

C. Reduced model

$(\gamma_{21} = 0; \quad \gamma_{31} = 0)$ $\quad\quad \chi^2(1) = 3.56$ $\quad\quad p \cong 0.059$

$\quad \gamma_{11} \quad = \quad -1.21(-8.79)$

$\quad \beta_{31} \quad = \quad -0.05(-0.51)$

Test of :

Mediation effect of the ATSCI(C - B) $\quad\quad \chi^2(1) = 3.56$ $\quad\quad p \cong 0.059$

Table 4-11 (cont'd)

III. Printer Concept 3 (Non-Social Oriented Concept)

A. Basic model, all parameters free			$\chi^2(0) = 0.$	$p \cong 1..000$
γ_{21}	=	0.50(2.72)		
γ_{31}	=	0.45(2.13)		

B. Full model, all parameters free			$\chi^2(0) = 0.$	$p \cong 1.000$
γ_{11}	=	-0.97(-7.35)		
γ_{21}	=	0.40(1.81)		
γ_{31}	=	0.38(1.48)		
β_{21}	=	-0.10(-0.76)		
β_{31}	=	-0.07(-0.47)		

C. Reduced model				
(γ_{21} = 0; γ_{31} = 0)			$\chi^2(2) = 3.54$	$p \cong 0.170$
γ_{11}	=	-1.01(-7.75)		
β_{21}	=	- 0.24(-2.18)		
β_{31}	=	-0.20(-1.61)		

Test of :

Mediation effect of the ATSCI(C - B)	$\chi^2(2) = 3.54$	$p \cong 0.170$

IV. Gift Concept 1 (Social Adjustment Concept)

A. Basic model, all parameters free			$\chi^2(0) = 0.$	$p \cong 1..000$
γ_{21}	=	-0.52(-2.49)		
γ_{31}	=	-0.48(-2.34)		

B. Full model, all parameters free			$\chi^2(0) = 0.$	$p \cong 1.000$
γ_{11}	=	-1.06(-8.23)		
γ_{21}	=	-0.14(-0.54)		
γ_{31}	=	-0.39(-1.54)		
β_{21}	=	0.36(2.45)		
β_{31}	=	0.08(0.55)		

C. Reduced model				
(γ_{21} = 0; γ_{31} = 0)			$\chi^2(2) = 2.55$	$p \cong 0.280$
γ_{11}	=	-1.09(-8.35)		
β_{21}	=	0.41(3.87)		
β_{31}	=	0.22(1.84)		

Test of :

Mediation effect of the ATSCI(C - B)	$\chi^2(2) = 2.55$	$p \cong 0.280$

Table 4-11   (cont'd)

V. Gift Concept 2 (Social Expressive Concept)

A. Basic model, all parameters free $\chi^2(0) = 0.$ $p \cong 1..000$

γ_{21}	=	-0.85(-3.84)
γ_{31}	=	-0.71(-3.44)

B. Full model, all parameters free $\chi^2(0) = 0.$ $p \cong 1.000$

γ_{11}	=	-0.95(-6.89)
γ_{21}	=	-0.36(-1.43)
γ_{31}	=	-0.30(-1.28)
β_{21}	=	0.52(3.75)
β_{31}	=	0.43(3.32)

C. Reduced model

$(\gamma_{21} = 0; \quad \gamma_{31} = 0)$ $\chi^2(2) = 2.21$ $p \cong 0.331$

γ_{11}	=	-0.98(-7.12)
β_{21}	=	0.63(5.24)
β_{31}	=	0.52(4.66)

Test of :

Mediation effect of the ATSCI(C - B) $\chi^2(2) = 2.21$ $p \cong 0.331$

VI. Gift Concept 3 (Non-Social Oriented Concept)

A. Basic model, all parameters free $\chi^2(0) = 0.$ $p \cong 1..000$

γ_{21}	=	-0.35(-1.82)
γ_{31}	=	-0.36(-1.76)

B. Full model, all parameters free $\chi^2(0) = 0.$ $p \cong 1.000$

γ_{11}	=	-1.11()
γ_{21}	=	-0.0.03()
γ_{31}	=	-0.00()
β_{21}	=	0.29()
β_{31}	=	0.33()

C. Reduced model

$(\gamma_{21} = 0; \quad \gamma_{31} = 0)$ $\chi^2(2) = 0.02$ $p \cong 0.985$

γ_{11}	=	-1.11(-8.01)
β_{21}	=	0.30(3.19)
β_{31}	=	0.33(3.11)

Test of :

Mediation effect of the ATSCI(C - B) $\chi^2(2) = 0.02$ $p \cong 0.985$

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[a] t-values are in parentheses

social adjustment printer product concept, ATSCI fully mediated the culture effect on the attitude toward the product concept ($p<0.724$). For the social expressive printer product concept, ATSCI only partially mediated the culture effect on the attitude toward the product concept ($p<0.059$). For the non-social oriented printer product concept, ATSCI fully mediated the culture effect on attitudes and purchase intentions toward the product concept ($p<0.170$).

For the social adjustment gift store product concept, ATSCI fully mediated the culture effect on attitudes and purchase intentions toward the product concept ($p<0.280$). For the social expressive gift store product concept, ATSCI fully mediated the culture effect on attitudes and purchase intentions toward the product concept ($p<0.331$). Finally, for the non-social oriented gift store product concept, ATSCI also fully mediated the culture effect on attitudes and purchase intentions toward the product concept ($p<0.985$). Therefore, the only partial mediation effect occurred in the social expressive printer concept. H5 was partially supported by the data.

The Relationship between Product Concept Attitude and Purchase Intention (H6a, H6b, H6c, H6d, and H6e)

This group of hypotheses were tested by calculating the γ coefficient from attitude to purchase intention using structural equation models for each specified sample group. This hypothesis was tested by comparing the γ coefficient for the three product concepts for total samples, two cultural groups, and two personality groups. The results are shown in Table 4-12. Again, chi-square difference tests were used as the base for testing the hypotheses. The chi-square difference between baseline model (d.f=0, chi-square=0) and nested model A ($\gamma_1 = \gamma_2 = \gamma_3$) was used to test the overall equivalence of the three γ

coefficients. In that, γ_1 represents the structural coefficient between attitude and purchase intention for the social adjustment concept, γ_2 represents the structural coefficient between attitude and purchase intention for the social expressive concept, and γ_3 represents the structural coefficient between attitude and purchase intention for the non-social oriented concept. If the chi-square difference test was significant, then the nested model B (γ_1 = γ_3) and nested model C (γ_2 = γ_3) were calculated to test the pair differences between two social oriented product concepts and the non-social oriented product concept. Referring to Table 4-12, for the printer case, there was no overall difference among the three product concepts (p<0.345) in the total samples. The overall test results were also insignificant when dividing the sample into two cultures (p<0.187 for the Taiwanese group; p<0.912 for the U.S. group) and two personality groups (p<0.378 for the high ATSCI group; p< 0.793 for the low ATSCI group).

For the gift store case, there was an overall significant difference among the three product concepts (p<0.015) in the total sample. The results from paired tests showed that attitude toward product concepts are more significant predictors of purchase intentions when the product concept is social oriented than is non-social oriented (p<0.045 for the social adjustment product concept; p<0.005 for the social expressive product concept). When the data were divided into two culture groups and two personality groups, the overall test showed that there were overall differences among three structural coefficients in the U.S. group (p<0.071) and the low ATSCI group (p<0.031). For the U.S. group, the paired tests showed that attitudes toward product concepts are more significant predictors of purchase intentions when the product concept is social expressive than is non-social oriented (p<0.026). For the low ATSCI group, the paired tests showed that attitudes

toward product concepts are more significant predictors of purchase intentions when the product concept is social oriented than is non-social oriented ($p<0.042$ for the social adjustment product concept; $p<0.011$ for the social expressive product concept). There was no significant difference in the overall test in the Taiwanese group and the high ATSCI group. Therefore, only hypothesis H6e were supported.

Table 4-12 The Relationship between Attitude and Purchase Intention

Printer Concept	Total	Taiwan	U.S	High ATSCI	Low ATSCI
	γ	γ	γ	γ	γ
Social Adjustment	0.38	0.35	0.43	0.22	0.46
Social Expressive	0.34	0.19	0.47	0.29	0.41
Non-Social Oriented	0.46	0.39	0.49	0.40	0.49
Model A: $\gamma_1 = \gamma_2 = \gamma_3$	d.f.=2 χ^2=2.13 p<0.345	d.f.=2 χ^2=3.35 p<0.187	d.f.=2 χ^2 =0.18 p<0.912	d.f.=2 χ^2=1.95 p<0.378	d.f.=2 χ^2=0.46 p<0.793
Model B: $\gamma_1 = \gamma_3$					
Model C: $\gamma_2 = \gamma_3$					

Table 4-12 (cont'd)

Gift Store Concept	Total	Taiwan	U.S	High ATSCI	Low ATSCI
	γ	γ	γ	γ	γ
Social Adjustment	0.68	0.54	0.81	0.53	0.77
Social Expressive	0.76	0.54	0.88	0.57	0.82
Non-Social Oriented	0.51	0.40	0.61	0.47	0.52
Model A: $\gamma_1 = \gamma_2 = \gamma_3$	d.f.=2 χ^2=8.47 p<0.015	d.f.=2 χ^2=1.73 p<0.421	d.f.=2 χ^2=5.30 p<0.071	d.f.=2 χ^2=0.68 p<0.711	d.f.=2 χ^2=6.96 p<0.031
Model B: $\gamma_1 = \gamma_3$	d.f.=1 χ^2=4.02 p<0.045		d.f.=1 χ^2=2.51 p<0.113		d.f.=1 χ^2=4.14 p<0.042
Model C: $\gamma_2 = \gamma_3$	d.f.=1 χ^2=8.04 p<0.005		d.f.=1 χ^2=4.92 p<0.026		d.f.=1 χ^2=6.40 p<0.011

Chapter five

DISCUSSION AND CONCLUSION

In this chapter, the discussion of the experimental results will be presented first. Next, the limitations, contributions, and managerial implications will be addressed. Finally, suggestions for future research will be proposed.

DISCUSSION OF THE RESULTS

The five major themes of this thesis address the following questions:

1) Is there any role of culture regarding consumers' attitudes and purchase intentions toward different product concepts? Is the role of culture moderated by different product situations (Hypothesis 1 and 2)?

2) Is there any role of personality regarding consumers' attitudes and purchase intentions toward different product concepts? Is the role of personality moderated by different product situations (Hypothesis 3 and 4)?

3) Can the effect of culture on consumers' attitudes and purchase intentions be mediated by personality (Hypothesis 5)?

4) If there is a role of culture and/or personality, can this role be managed by marketers (covariate analyses of hypothesis 1 to 4)?

5) Will the strength of the relationship between attitude and purchase intention be the same regardless of culture, personality, and product concept (Hypothesis 6)?

Each of the themes is addressed below.

The Role of Culture in Different Product Situations (Hypothesis 1 and 2)

For ambivalent attitude function products (i.e., printers in this thesis), culture does have a role in affecting consumers' attitudes toward different product concepts. Consumers in a collectivistic culture have more favorable attitudes toward social oriented product concepts than toward the non-social oriented product concepts, while consumers in an individualistic culture have more favorable attitudes toward the non-social oriented product concept than toward social oriented product concepts.

This demonstrates that the attitude function a product serves is perceived differently by consumers in different cultures when that attitude function is ambivalent. Consumers in a collectivistic culture focus more on the social implication than on the non-social attributes of the product Therefore, for these consumers, a product concept depicting social oriented statements is more effective than a product concept depicting non-social oriented statements in narrowing the gap between "actual self" and "ought self" and generating favorable attitudes. On the other hand, because consumers in an individualistic culture focus more on the non-social attributes than on the social implication of the product, a product concept depicting non-social oriented statements is more effective at reducing the gap between "actual self" and "ideal self" and generating favorable attitudes.

In the case of products engaging only social oriented attitude functions (i.e., gift-giving in this thesis), the culture effect is diminished, however. Consumers in either culture have more favorable attitudes and purchase intentions toward the social oriented product concepts than toward the non-social oriented product concept. That is, for a

social oriented product, consumers from both cultures consider the social meaning behind the behavior because the major function the product serve is social oriented. A product concept depicting social oriented statements has higher persuasive power than a product emphasizing non-social oriented statements. Results in the preliminary studies also support this finding. In the preliminary studies, almost all subjects (96% for the U.S. subject and 97% for the Taiwanese subjects) mentioned social oriented reasons for purchasing gifts.

These findings suggest that the feasibility of global marketing standardization is product situation specific. For products engaging a single non-ambivalent attitude function (social or non-social), global marketing standardization is feasible. Consumers in both cultures tend to focus on that clearly identified attitude function. However, for ambivalent attitude function products, global marketing standardization is more difficult because consumers will focus on the different attitude functions, depending on their culture.

The Role of Personality in Different Product Situations (Hypothesis 3 and 4)

The results of using the high and low ATSCI classification are very similar to those using the culture categorization. In fact, the overall effect is stronger when dividing the sample by the ATSCI score than by culture. Specifically, for ambivalent attitude function products (i.e., printers in this thesis), consumers who care more about social comparison information have higher attitude scores associated with the social oriented product concepts than with the non-social oriented product concept. In contrast, consumers who care less about social comparison information have higher attitude scores associated with the non-social oriented product concept than with the social oriented product concepts.

In addition, consumers who care more about social comparison information have

higher purchase intention scores associated with the social adjustment product concept than with the non-social oriented product concept, while consumers who care less about social comparison information have lower purchase intention scores associated with the social adjustment product concept than with the non-social oriented product concept.

This again demonstrates that the attitude function a product serves is perceived differently by consumers with different personalities in the case of the ambivalent attitude function product. Consumers who care more about social comparison information focus more on the social implication than on the non-social attributes of the product. Therefore, for these consumers, a product concept depicting social oriented statements is more effective than a product concept depicting non-social oriented statements at narrowing the gap between "actual self" and "ought self" and generating favorable attitudes. On the other hand, consumers who care less about social comparison information focus more on the non-social attributes than on the social implication of the product, and thus a product concept depicting non-social oriented statements is more effective at reducing the gap between "actual self" and "ideal self" and generating favorable attitudes.

For product engaging only social oriented attitude functions (i.e., gift-giving in this thesis), consumers who care more about social comparison information have higher attitude and purchase intention scores toward the social oriented product concepts than toward the non-social oriented product concept. Consumers who care less about social comparison information also have higher purchase intention scores associated with the social expressive product concept than with the non-social oriented product concept. This shows that <u>for a social oriented product,</u> all consumers regardless of personality need to consider the social meaning behind the behavior. A product concept depicting social

oriented statements, therefore, has higher persuasive power than a product purely emphasizing non-social oriented statements.

These results suggest a promising basis for global marketing segmentation: i.e., personality factors. Marketers can not only segment the market by culture or country, but also segment the market by personality. In other words, they can market a product using a consistent product concept to a particular personality segment across cultures. This assertion will be confirmed in next section's discussion of the mediation effect of personality on the relationship between culture and product concept persuasiveness.

The Mediation Effect of Personality Factor (Hypothesis 5)

The empirical data strongly support the assertion that personality can fully mediate the relationship between culture and attitude as well as between culture and purchase intention. In five out of six models, the personality scale chosen (i.e., ATSCI) fully mediated the effect of culture on attitude and purchase intention. This, again, supports the contention that personality instead of culture can be a major foundation for global marketing segmentation. The persuasiveness of a certain product concept is affected more directly by consumers' own personalities than by culture. The effect of the culture on product concept persuasiveness is indirect through personality.

The Effect of Other Variables (Covariates Analyses of Hypothesis 1 to 4)

When the uniqueness, believability, and comprehensibility of the product concept were specified in the model as covariates, the main effect of product concept, the interaction between product concept and culture, and the interaction between product concept and personality all disappeared. The uniqueness, believability, and comprehensibility of the product concept were better predictors of the consumers' attitudes

and purchase intentions than culture, personality, and product concept. The results may demonstrate that marketers should focus their efforts on developing unique, believable, and comprehensible product concepts instead of dealing with personality or culture factor in the global market, because such a product concept is more effective in generating favorable attitudes and purchase intentions for all consumers.

The question then becomes: what constitutes a unique, believable, and comprehensible product concept? One may argue that a <u>social oriented</u> product concept is perceived to be more unique, believable, and comprehensible by consumers in a collectivistic culture and by consumers who care more about social comparison information than by consumers in an individualistic culture and consumers who care less about social comparison information. In contrast, a <u>non-social oriented</u> product concept is perceived to be more unique, believable, and comprehensible by consumers in an individualistic culture and by consumers who care less about social comparison information than by consumers in a collectivistic culture and by consumers who care more about social comparison information. This assertion was confirmed by testing models where the uniqueness, believability, and comprehensibility of the product concept were specified as dependent variables.

The results demonstrate that the differences in attitude and purchase intention generated by different product concepts are still affected by culture and personality, but that these effects work through uniqueness, believability, and comprehensibility instead of directly. In other words, consumers in a collectivistic culture and consumers who care more about social comparison information regarded a social oriented product concept as more persuasive than the non-social oriented product concept because they considered the

former one more unique, believable, and comprehensible, while consumers in an individualistic culture and consumers who care less about social comparison information regarded a social oriented product concept as less persuasive than the non-social oriented product concept because they considered the latter one more unique, believable, and comprehensible than the former.

In conclusion, personality and culture factors are still very important in affecting consumers' attitude and purchase intention toward a product concept, although these factors' influence may be indirect through uniqueness, believability and comprehensibility.

The Relation between Attitude and Purchase Intention (Hypothesis 6)

Final important finding concerns the differences in strength of the relationship between attitude and purchase intention, depending on product concept. For products engaging solely the social oriented attitude function, a social oriented product concept can create a stronger relationship between attitude and purchase intention than does a non-social oriented product concept. This finding suggests that when the product concept "matches" the product type, a consumer will have higher motivation and ability to process the product concept via the central route, and therefore, the relational strength between attitude and purchase intention is stronger.

Combining this result with what was learned about the first two themes (hypothesis 1 to 4), it implies that, for a social oriented product, a social oriented product concept can not only generate more favorable attitude and/or purchase intention than a non-social oriented product concept, but it can also create a stronger relationship between attitude and purchase intention. This gives an additional reason that marketers should always create a social oriented product concept for product engaging social oriented attitude

functions, regardless of culture or personality factors.

The results are different however, in the case of the ambivalent attitude function product. For an ambivalent attitude function product (i.e., printer in this study), there is no difference in the relational strength between attitude and purchase intention among different product concepts. This suggests that different consumers may focus on different attitude functions for this kind of product in order to form attitudes and purchase intentions. These attitudes and purchase intentions are based on the whether the product concept delivers the attitude function they are looking for. The difference in attitude function focus only affects attitude and/or purchase intention, and not the relational strength between attitude and purchase intention. Does the ambivalent attitude function of the product itself attenuate a consumer's motivation and ability? This needs to be explored in the future studies.

LIMITATIONS

The first limitation in interpreting the findings is the representativeness of the sampled countries on the individualism and collectivism dimension. Although the U.S. and Taiwan differ greatly in terms of individualism and collectivism, they do not necessarily represent all aspect of this construct. Also, collectivism and individualism may not be an unidimensional factor (Triandis 1994). Therefore, the present findings should be consider preliminary. Further studies in other countries and different areas within a country should be conducted to test the generalizability of the results.

Second, the use of student subjects also limits the generalizability of the finding. It may be that people in different generations possess dramatically different

individualism/collectivism tendencies for example. Younger generations are normally considered to be more individualistic than older generations (Triandis 1994). The results may show more pronounced differences between cultures if older subjects are used. However, it should be noted that both the printer and gift-giving are relevant consumption domains for the student subjects in this study. This study is the first step for the whole stream of research.

There are some limitations in the process of two-group confirmatory factor analysis for establishing measurement equivalence. The unfit or unequal items were deleted based on post-hoc analysis. Further cross-validation studies on the measurement model may be needed to validate the measurement representation.

CONTRIBUTIONS

International Marketing Standardization Argument

In the context of the international marketing standardization argument, there are at least four major contributions. First, this study shows that there are culture and personality effects when the product engages ambivalent attitude functions. The culture and personality effects diminish when the product engages a single attitude function. This kind of product classification is first proposed in this study.

Second, using product concepts as the experimental stimuli also provide a good basis for future research. As stated in Chapter two, focusing on the product concept level can reduce the confounding effects between the executional level and the conceptual level in experimental studies. Researchers can first find out the fundamental differences among cultures before any other further studies are conducted using stimuli that differ at the

executional level. The focus on the product concept level, however, doesn't debase the importance of studies about executional aspects. It will be discussed below (in the future research section) how to conduct future research on these executional aspects, based on the research result of this study.

Third, the study provides promising results regarding international marketing segmentation. The ATSCI personality scale appears to be as effective as culture in segmenting consumer groups, and it also can fully mediate the culture effect in most cases. This demonstrates that cross-culture marketing segmentation should be a feasible strategy. That is, marketers can standardize their product for a particular segment that exists across cultures.

Finally, the study presents a systematic framework for international marketing standardization strategy based on an extensive review of international standardization/ adaptation studies. It clarifies the definition, domains, and implications of the standardization strategy, as well as showing how consumer perspectives can complement the research stream. The study is also one of the few studies that uses the consumer's perspective and systematically explores the differences in consumer behavior in different cultures.

Cross-Cultural Consumer Behavior

As far as theory in cross-cultural consumer behavior is concerned, this study attempts to integrate the attitude function perspective. In particular, it incorporates interaction effects between product concept and culture as well as between product concept and personality. This confirms Shavitt's (1989, 1992) points about the interaction between product characteristics and other variables. The research demonstrates that

theories of attitude functions can form a fruitful research stream in cross-cultural consumer behaviors. More importantly, in this thesis, explanatory power was enriched by successfully integrating conceptualizations of self-concept and consumption symbolism. The three self-concepts presentation, for example, can form an important framework for future cross-cultural consumer research.

Based on theories of attitude functions, this thesis demonstrated that there are fundamental consumer differences between cultures in evaluating social or non-social product concepts for products engaging ambivalent attitude functions. This difference may be reduced by marketing manipulation (uniqueness, believability, comprehensibility of the product concept). However, a product concept couched within existing attitude functions will more easily generate the uniqueness, believability, and comprehensibility of the product concept.

Research Methodology

In term of research methodology, there are at least two major contributions. First, this study applied a multi-method approach to investigate culture differences. This approach allowed the researcher to look at the research domain from different angles and provided richer results from the data. Preliminary studies also provided a strong foundation for the confirmatory study. Second, this study also provided a procedure for establishing measurement equivalent model across cultures. Although this process is very important for cross-cultural comparison, it was not implemented widely in the cross-cultural research (Hui and Triandis 1985; Singh 1995; Triandis 1994).

MARKETING IMPLICATIONS

Marketing Standardization versus Marketing Adaptation

Marketers should understand that there are some fundamental differences in the effectiveness of social versus non-social oriented product concepts in generating consumers' attitudes and purchase intentions across cultures (or in different segments in a culture) when the product is engaging ambivalent attitude functions. For this kind of product, the social oriented product concepts are more persuasive than the non-social oriented product concepts for (1) consumers in a collectivistic society and (2) consumers who care more about social comparison information. On the other hand, non-social oriented product concepts are more persuasive than social oriented product concepts for (1) consumers in an individualistic culture and (2) consumers who care less about social comparison information. Unless it is very costly, an adaption strategy at the product concept level in different cultures or segments should be adopted for this kind of product.

For products engaging a single attitude function, however, a standardization strategy at the product concept level is highly recommended. It was demonstrated that a social oriented product concept not only can create more favorable attitudes and purchase intentions, but also can generate a stronger linkage between attitude and purchase intention than does a non-social oriented product concept for a social oriented product.

Global Marketing Segmentation

Cross-cultural market segmentation is a viable strategy. Marketers can sell certain products to the "same" segment across cultures using a same product concept. This study shows that while culture does have an impact on a product concept's persuasiveness, this influence is indirect through personality. Therefore, using personality as the segmentation

basis is more direct and effective in serving as a segmentation basis.

Furthermore, using personality as the basis for segmentation can also help marketers in estimating the potential of a market segment in a certain culture or country. Culture is a macro variable. It is very difficult to quantify the differences between two cultures. Personality, however, can be measured by marketers and directly compared. In this study for example, the results imply that on average Taiwanese are more attentive to social comparison information than their U.S. counterparts. Distribution estimates in each country can be compared. It can show what percent of the subjects in Taiwan actually have higher Attention-To-Social-Comparison-Information scores than the U.S. average, or vice versa. This kind of information can help marketers estimate the segment's potential before entering a certain culture.

The Importance of Uniqueness, Believability, and Comprehensibility

Consistent with traditional knowledge about communication, uniqueness, believability, and comprehensibility of product concepts are very important in generating consumers' favorable attitudes and purchase intentions. The study found that the results are similar when using uniqueness, believability, and comprehensibility rather than attitude and purchase intention as dependent variables in the MANOVA model. For ambivalent attitude functions product, consumers in a collectivistic culture and consumers who care more about social comparison information not only considered a social oriented product concept more persuasive, but also more unique, believable and comprehensible than a non-social oriented product concept. On the other hand, consumers in an individualistic culture and consumers care less about social comparison information regarded a non-social oriented product concept not only more persuasive, but also more unique, believable, and

comprehensible than a social oriented product concept.

It is not impossible to create a non-social oriented product concept that is unique, believable, and comprehensible for consumers in a collectivistic culture and consumers who care more about social comparison information. Nor is it impossible to create a social oriented product concept that is unique, believable, and comprehensible for consumers in an individualistic culture and consumers who care less about social comparison information. It is simply less likely to happen when product, product concept, culture, and personality are mismatched than when they are matched. Thus, when creating product concepts, marketers may consider the findings in this study as the first step to generating unique, believable, and comprehensible product concepts targeted for certain people in a certain culture.

Product Classification Is Not Given

This study showed that a product can be classified as social oriented, non-social oriented, and ambivalent attitude function. Different product types may affect the feasibility of a marketing standardization strategy. However, marketer should not classify a product into one of the above categories based solely on their own cultural experiences. The same product may be classified into different categories in different cultures or countries. As shown in the study, a computer printer can be deemed as a non-social oriented object in the individualistic society, while considered as a social oriented product in the collectivistic society. Furthermore, whether a product is a social oriented, a non-social oriented, or an ambivalent attitude function product can sometimes be influenced by marketers. As shown in the preliminary study, toothpaste may be considered more social oriented in the United State than in Taiwan. This demonstrates that the

classification of the product is not given. Marketers can explore the possibility of repositioning a product to a different focus.

FUTURE RESEARCH

There are several future research projects that can be conducted within this research stream. First, the same studies can be conducted in other countries. As stated, the United States and Taiwan are only samples of individualistic and collectivisitic cultures. More studies should be conducted in other countries. In addition, the sample should incorporate older generations and to examine cohort effects. Second, more product types should be chosen to be tested by the same framework. The findings may show that the effects of a product concept on attitudes and purchase intentions are different between convenience, specialty and shopping products. This thesis suggests a difference based on the specialty versus shopping classification. For the gift store, the product concept not only affects attitude but also purchase intention. On the other hand, for the printer case, the product concept only affects consumers' attitudes. The results are reasonable because the financial cost and specific knowledge requirements for buying a computer printer are much higher than in the gift store case. For this kind of product, a product concept probably affects only consumers' attitudes since it only depicts the basic idea of the product. Consumers may need to have more information about the product to form purchase intention. If this claim can be verified by future study, then there is a lower risk for marketers in standardizing a specialty product internationally, regardless whether the product engages single or ambivalent attitude functions. Future research is needed to verify this assertion. Finally, a product engaging only non-social related attitude

function should also be included in the future study. It was not included in this research.

Third, it was found that uniqueness, believability, and comprehensibility of product concepts are very important for generating consumers' favorable attitudes and purchase intentions. Product concept variations, culture, and personality became insignificant in predicting subjects' attitudes and purchase intentions when these three variables were included in the model. However, the study also found that the results are very similar when using uniqueness, believability, and comprehensibility instead of attitude and purchase intention as dependent variables. That is, for the printer, consumers in a collectivistic culture and consumers who care more about social comparison information considered social oriented product concepts not only more persuasive, but also more unique, believable and comprehensible than the non-social oriented product concept. On the other hand, consumer in an individualistic culture and consumers who care less about social comparison information regarded the non-social oriented product concept not only more persuasive, but also more unique, believable, and comprehensible than social oriented product concepts.

Since the study was conducted at the product concept level, one may ask (1) whether uniqueness, believability, and comprehensibility can be created at the executional level (e.g., using famous models, experts, or fancy packages) and, (2) whether the uniqueness, believability, and comprehensibility created in the marketing executional level have the same impact on attitude and purchase intention as those created at the product concept level.

Suppose the answers for both questions are yes; then marketers actually don't need to care about the product concept level standardization. The most important thing for

them is to make sure that the marketing activities are unique, believable, and comprehensible in each country at the execution level. On the other hand, if the answers for both questions are no, then marketers should focus on product concept level standardization. Research of this kind involves the interface between the strategic and the executional level. The result should have important implications for international marketing practice.

Finally, the preliminary study showed that it is reasonable to divide the social oriented concept into social adjustment and social expressive classification. However, the results did not generate significant results for that classification in the confirmatory study. This may have been caused by the similarity of the two concepts. For example, the social adjustment product concept for the gift store emphasized the importance of choosing a right gift to represent the relationship. The social expressive product concept stressed the importance of finding a gift that can represent the subject's feeling. Some consumers may consider that expressing feeling and relationship maintenance are similar. People express feelings to enhance, maintain, or reduce the relationship. Feeling expression and relationship representation may be two sides of a coin.

To generate stronger and different effects for the two social oriented product concepts, future research may apply comparative product concepts. For example, the social expressive product concept can emphasize the importance of expressing individual feelings without considering others' feelings, while the social adjustment product concept can underscore the importance of fitting others' real needs without considering self expressiveness.

APPENDICES

APPENDIX A

PRODUCT CONCEPT

I. GIFT STORE: Social Adjustment Product Concept

A leading gift store is interested in establishing a store in this area. They want to know consumers' reactions to their service. Please review the following product description very carefully. The store should be available locally very soon.

No Embarrassment About Giving An Inappropriate Gift Anymore

It is always embarrassing when your gift is inappropriate for the occasion and the relationship you have with the recipient.

With the support of an advanced computer data base, just provide our computers with the occasion and your relationship with the receiver. You will receive a list of gifts that are most appropriate for the occasion and that accurately represent your relationship with the receiver. Without hassle, you can buy the appropriate gift right here in our store.

Now you can always have the most <u>appropriate</u> gift without hassle.

II. GIFT STORE: Social Expressive Product Concept

A leading gift store is interested in establishing a store in this area. They want to know consumers' reactions to their service. Please review the following product description very carefully. The store should be available locally very soon.

A Gift That Can Really Show Your Personality and Your Feelings

You always want to find a gift that can represent your personality and how you feel.

With the support of an advanced computer data base, just provide our computers with what you want the receiver to know. You will receive a list of gifts that can most accurately represent your personality and your feelings. Without hassle, you can buy the gift right here in our store.

Now you can always have a gift that really shows your personality and feelings without hassle.

III. GIFT STORE: Non-Social Oriented Product Concept

A leading gift store is interested in establishing a store in this area. They want to know consumers' reactions to their service. Please review the following product description very carefully. The store should be available locally very soon.

It's Never Been Easier To Find A Quality Gift

We stock high quality products only.

With the most extensive international sourcing, our store only stocks the most updated and quality gifts that you will never find in any other store. You can use our store on-line computer system to browse through the quality gift items we carry.

In our store, you can easily find the perfect gift, one with the highest quality.

Now you can easily find a quality gift without hassle.

IV. PRINTER: Social Adjustment Product Concept

A leading computer printer firm is interested in knowing consumers' reactions to their new product. Please review the following product description very carefully. The product should be available locally very soon.

Your Friends and Family Will Be Proud of Your Choice

You always want your friends and family to feel proud of your work.

An internationally renown manufacturer has developed a new computer printing technology called "Neo-Laser Technology." The results are actually comparable to those of a normal laser printer but at a more reasonable price. Your friends and family will definitely be proud of your choice.

Now you can have a printer that your <u>friends and family</u> can be proud of.. and at a reasonable price.

V. PRINTER: Social Expressive Product Concept

A leading computer printer firm is interested in knowing consumers' reactions to their new product. Please review the following product description very carefully. The product should be available locally very soon.

A Professional Print Job Can Make You Feel Good

You always feel good when your documents look professional.

An internationally renown manufacturer has developed a new computer printing technology called "Neo-Laser Technology." You will always feel good with this new technology because your documents always look more professional. The results of this printer are actually comparable to those of a normal laser printer but at a more reasonable price.

You will feel good all the time because your printer can always print <u>professional-looking</u> documents.. and at a more reasonable price.

VI. PRINTER: Non-Social Oriented Product Concept

A leading computer printer firm is interested in knowing consumers' reaction to their new product. Please review the following product description very carefully. The product should be available locally very soon.

Finally There Is A Computer Printer With Quality That Other Economical Printers Do Not Possess

The quality of this new printer is assured through the newest computer printing technology.

An internationally renown manufacturer has developed a new computer printing technology called "Neo-Laser Technology." The quality of the new printing technology is better than other economical computer printers. The results are actually comparable to those of a normal laser printer but at a more reasonable price.

Now you can easily own a printer with quality that other economical printers do not possess.. and yet at a reasonable price.

APPENDIX B

ENGLISH QUESTIONNAIRE

APPENDIX B

ENGLISH QUESTIONNAIRE

Instruction Sheet

Michigan State University
Department of Marketing & Logistics

1. The purpose of this research is to see how consumers react to different new product descriptions. Your answer can help academic and marketing researchers know more about consumers' needs. Your participation will require about 30 minutes. You will be asked to evaluate descriptions of a new printer and a gift store and then complete some questionnaire about your impressions and opinions about the two descriptions.

2. You are free not to participate at all and you are free to withdraw participation at any time without prejudice.

3. Your responses will keep strictly confidential and that the results of this study will be reported as aggregate data. No individual participant will be identified. You will not need to write your name on any of the materials you receive here today.

4. You will receive additional information about this study after your participation is completed.

5. You indicate your voluntary agreement to participate by completing and returning this questionnaire.

6. If you have any further question regarding this study, please contact Jyh-shen Chiou (353-6381) or Dr. Cornelia Droge, Professor of Marketing (353-6381).

1. What is your overall reaction to this gift store when you read through the description? There is no right or wrong reaction. Just write anything that came to your mind when reading the product description.

Below are a number of questions that ask for your opinion about the gift store. For each question, there are several scales to measure your opinions about the question. Please answer each scale by circling the number which most accurately describes your opinion. For example, if the description on the right hand side most describes your opinion on the question, circle 7 on the scale. If the description on the left hand side most describes your opinion on the question, circle 1 on the scale. If you has neutral opinion on the question, circle 4 on the scale.

2. Please describe your overall attitude toward this gift store on the each of the following scales:

Unfavorable	1	2	3	4	5	6	7 Favorable
Bad	1	2	3	4	5	6	7 Good
Foolish	1	2	3	4	5	6	7 Wise
Harmful	1	2	3	4	5	6	7 Beneficial

3. My purchasing gifts from this gift store in the future would be: (Please answer each of the following scales)

Unfavorable	1	2	3	4	5	6	7 Favorable
Bad	1	2	3	4	5	6	7 Good
Foolish	1	2	3	4	5	6	7 Wise
Harmful	1	2	3	4	5	6	7 Beneficial

4. Most people who are important to me would probably consider my purchasing gifts from this gift store to be: (please answer each of the following scales)

Foolish	1	2	3	4	5	6	7 Wise
Useless	1	2	3	4	5	6	7 Useful
Worthless	1	2	3	4	5	6	7 Valuable

5. Most people who are important to me would probably think I_____ buy gifts from this gift store.

Definitely should not	1	2	3	4	5	6	7 Definitely should

6. How much control do you have over whether you do or do not buy gifts from this store?

Very Little Control	1	2	3	4	5	6	7 Complete Control

7. For me to buy gifts from this store is_____.

Difficult	1	2	3	4	5	6	7 Easy

8. If I want to I could easily buy gifts from this store.

Disagree	1	2	3	4	5	6	7 Agree

9. It is mostly up to me whether or not I will buy gifts from this store.

Disagree	1	2	3	4	5	6	7 Agree

10. Please circle the number on each of the following scales that best describes whether you would actually purchase gifts from this gift store when it is available in the local market.

Unlikely	1	2	3	4	5	6	7 Likely
Uncertain	1	2	3	4	5	6	7 Certain
Impossible	1	2	3	4	5	6	7 Possible

11. Overall, how would you rate this gift store on each of the following attributes.

Not at all Unique	1	2	3	4	5	6	7 Extremely Unique
Not at all Different	1	2	3	4	5	6	7 Extremely Different
Not at all Exclusive	1	2	3	4	5	6	7 Extremely Exclusive

12.. Overall, how would you rate the believability of the gift store description on each of the following scales.

Not Believable	1	2	3	4	5	6	7 Believable
Not True	1	2	3	4	5	6	7 True
Bogus	1	2	3	4	5	6	7 Sincere

13. Overall how would you rate the comprehensibility of the gift store description on each of the following scales.

Not Comprehensible	1	2	3	4	5	6	7 Comprehensible
Confusing	1	2	3	4	5	6	7 Not Confusing
Not Understandable	1	2	3	4	5	6	7 Understandable

14. When you saw the description of the gift store, you felt the information in it_____.

Important	1	2	3	4	5	6	7 Unimportant
Irrelevant	1	2	3	4	5	6	7 Relevant
Means a lot to me	1	2	3	4	5	6	7 Means nothing to me
Unexciting	1	2	3	4	5	6	7 Exciting
Dull	1	2	3	4	5	6	7 Neat
Matters to me	1	2	3	4	5	6	7 Doesn't matter
Fun	1	2	3	4	5	6	7 Not fun
Appealing	1	2	3	4	5	6	7 Unappealing
Boring	1	2	3	4	5	6	7 Interesting
Of no concern to me	1	2	3	4	5	6	7 Of concern to me

1. What is your overall reaction to this computer printer when you read through the description? There is no right or wrong reaction. Just write anything that came to your mind when reading the product description.

Below are a number of questions that ask for your opinion about the computer printer. For each question, there are several scales to measure your opinions about the question. Please answer each scale by circling the number which most accurately describes your opinion. For example, if the description on the right hand side most describes your opinion on the question, circle 7 on the scale. If the description on the left hand side most describes your opinion on the question, circle 1 on the scale. If you has neutral opinion on the question, circle 4 on the scale.

2. Please describe your overall attitude toward this computer printer on each of the following scales:

Unfavorable	1	2	3	4	5	6	7 Favorable
Bad	1	2	3	4	5	6	7 Good
Foolish	1	2	3	4	5	6	7 Wise
Harmful	1	2	3	4	5	6	7 Beneficial

3. My purchasing this computer printer in the future would be: (please answer each of the following scales).

Unfavorable	1	2	3	4	5	6	7 Favorable
Bad	1	2	3	4	5	6	7 Good
Foolish	1	2	3	4	5	6	7 Wise
Harmful	1	2	3	4	5	6	7 Beneficial

4. Most people who are important to me would probably consider my purchasing this computer printer to be: (please answer each of the following scales)

Foolish	1	2	3	4	5	6	7 Wise
Useless	1	2	3	4	5	6	7 Useful
Worthless	1	2	3	4	5	6	7 Valuable

5. Most people who are important to me would probably think I_____ buy this computer printer.

Definitely should not   1   2   3   4   5   6   7   Definitely should

6. How much control do you have over whether you do or do not buy this computer printer?

Very Little Control   1   2   3   4   5   6   7   Complete Control

7. For me to buy this computer printer is_____.

Difficult   1   2   3   4   5   6   7   Easy

8. If I want to I could easily buy this computer printer.

Disagree   1   2   3   4   5   6   7   Agree

9. It is mostly up to me whether or not I will buy this computer printer.

Disagree   1   2   3   4   5   6   7   Agree

10. Please circle the number on each of the following scales that best describes whether you would actually purchase this computer printer when it is available in the local market.

Unlikely	1	2	3	4	5	6	7	Likely
Uncertain	1	2	3	4	5	6	7	Certain
Impossible	1	2	3	4	5	6	7	Possible

11. Overall, how would you rate this computer printer on each of the following attributes.

Not at all Unique	1	2	3	4	5	6	7	Extremely Unique
Not at all Different	1	2	3	4	5	6	7	Extremely Different
Not at all Exclusive	1	2	3	4	5	6	7	Extremely Exclusive

12.. Overall, how would you rate the believability of this computer printer description on each of the following scales.

Not Believable	1	2	3	4	5	6	7	Believable
Not True	1	2	3	4	5	6	7	True
Bogus	1	2	3	4	5	6	7	Sincere

13. Overall how would you rate the comprehensibility of this computer printer description on each of the following scales.

Not Comprehensible	1	2	3	4	5	6	7	Comprehensible
Confusing	1	2	3	4	5	6	7	Not Confusing
Not Understandable	1	2	3	4	5	6	7	Understandable

14. When you saw the description of the computer printer, you felt the information in it_____.

Important	1	2	3	4	5	6	7	Unimportant
Irrelevant	1	2	3	4	5	6	7	Relevant
Means a lot to me	1	2	3	4	5	6	7	Means nothing to me
Unexciting	1	2	3	4	5	6	7	Exciting
Dull	1	2	3	4	5	6	7	Neat
Matters to me	1	2	3	4	5	6	7	Doesn't matter
Fun	1	2	3	4	5	6	7	Not fun
Appealing	1	2	3	4	5	6	7	Unappealing
Boring	1	2	3	4	5	6	7	Interesting
Of no concern to me	1	2	3	4	5	6	7	Of concern to me

Next we would like to know how much experience you have had with computer printers.

1.. Do you own a computer printer? _____Yes _____No

2. What type of computer printer do you most often use ?

   _____Laser _____Ink-jet _____ Dot matrix _____ others

3. How often do you use a computer printer?

   a. Almost every day
   b. Once every two to three days
   c. Once every week
   d. Once every month
   e. Seldomly use

4. What do you normally print? (you may choose more than one choice for this question)

   a. Term papers or other class related reports
   b. Personal/unofficial papers
   c. Business related document
   d. Others (please indicate _____)

5. Have you ever purchased a computer printer, either for yourself or for others?

   _____Yes _____No

6. Compared to average persons, rate your knowledge of how much you know about a computer printer.

   I know very little   1   2   3   4   5   6   7   I know a great deal

7. Compared to average persons, rate your knowledge of how much you know about different brands of computer printers.

   I know very little   1   2   3   4   5   6   7   I know a great deal

8. Compared to average persons, rate your knowledge of how much you know how to buy a computer printer.

   I know very little   1   2   3   4   5   6   7   I know a great deal

9. Please indicate how much information you have searched about computer printers.

   Very little   1   2   3   4   5   6   7   Very much

Please answer the following questions. If the statement is true, please circle "True." If the statement is wrong, please circle "False." If you don't know, please circle "Don't Know"

True	False	Don't Know	
T	F	D	1. General speaking , ink-jet cartridges for ink-jet printers are expensive, making operating costs more expensive than a laser or a dot-matrix printer.
T	F	D	2. Ink-jet printers use xerographic technology.
T	F	D	3. An Ink-jet printer normally requires less electronic energy than a laser or a dot-matrix printers.
T	F	D	4. The term "dbi" is used to measure printing quality.
T	F	D	5. The image of an ink-jet printer is electronically created on a light-sensitive drum. A powdered toner sticks to the area where light touches the drum and then transfers to a sheet of paper.
T	F	D	6. A daisy wheel printer is one kind of dot-matrix printer.
T	F	D	7. Normally "ppm" is used to measure the printing speed of a dot-matrix printer.
T	F	D	8. Other thing being equal, the larger the memory of a printer, the better the "spooling" function for the computer system.

Next we would like to know how much experience you have had with stores where you can buy gifts.

1. Who do you most often give gifts to ?
   a. My boy or girl friend
   b. Close friends but not boy/girl friend
   c. Other friends
   d. Family members/ Relatives
   e. Business associates
   f. Others (please indicate_____)

2. How often do you purchase a gift for a friend, relative or any other person from a store?
   a. About every month
   b. About once every 2-3 months
   c. About once every half year
   d. About once a year
   e. Seldomly buy gifts

3. Compared to average persons, rate your knowledge of how much you know about stores where you can buy gifts.

   I know very little   1   2   3   4   5   6   7   I know a great deal

7. Compared to average persons, rate your knowledge of how much you know about different stores where you can buy gifts.

   I know very little   1   2   3   4   5   6   7   I know a great deal

8. Compared to average persons, rate your knowledge of how much you know about how to buy a gift from a store.

   I know very little   1   2   3   4   5   6   7   I know a great deal

9. Please indicate how much information you have searched about stores where you can buy gifts.

   Very little   1   2   3   4   5   6   7   Very much

The statements below concern your personal reactions to a number of different situations. No two statements are exactly alike, so consider each statement carefully before answering. If a statement is true or mostly true as applied to you, check "T" under the true column. If a statement is false or mostly false as applied to you, check "F" under the false column.

TRUE   FALSE

T   F   1. I find it hard to imitate the behavior of other people

T   F   2. At parties and social gatherings, I do not attempt to do or say things that others will like

T   F   3. I can only argue for ideas which I already believe

T   F   4. I can make impromptu speeches even on topics about which I have almost no information

T   F   5. I guess I put on a show to impress or entertain others

T   F   6. I would probably make a good actor

T   F   7. In a group of people I am rarely the center of attention

T   F   8. In different situations and with different people, I often act like very different persons

T   F   9. I am not particularly good at making other people like me

T   F   10. I'm not always the person I appear to be

T   F   11. I would not change my opinions (or the way I do things) in order to please someone or win their favor

T   F   12. I have considered being an entertainer

T   F   13. I have never been good at games like charades or improvisational acting

T   F   14. I have trouble changing my behavior to suit different people and different situations

T   F   15. At a party I let others keep the jokes and stories going

T   F   16. I feel a bit awkward in public and do not show up quite as well as I should

T   F   17. I can look anyone in the eye and tell a lie with a straight face (if for a right end)

T   F   18. I may deceive people by being friendly when I really dislike them

II. The statements below concern your personal reactions to a number of different situations. No two statements are exactly alike, so consider each statement carefully before answering. For each question, please circle or check your agreement or disagreement with the statement on the scale. For example, if you strongly agree, circle 7 on the scale; if you strongly disagree, circle 1 on the scale; if you are unsure or think that the question does not apply to you, circle 4 on the scale.

	Strongly Disagree					Strongly Agree	
1. It is my feeling that if everyone else in a group is behaving in a certain manner, this must be the proper way to behave.	1	2	3	4	5	6	7
2. I actively avoid wearing clothes that are not in style.	1	2	3	4	5	6	7
3. At parties I usually try to behave in a manner that makes me fit in.	1	2	3	4	5	6	7
4. When I am uncertain how to act in a social situation, I look to the behavior of others for cues.	1	2	3	4	5	6	7
5. I try to pay attention to the reactions of others to my behavior in order to avoid being out of place.	1	2	3	4	5	6	7
6. I find that I tend to pick up slang expressions from others and use them as part of my vocabulary.	1	2	3	4	5	6	7
7. I tend to pay attention to what others are wearing.	1	2	3	4	5	6	7
8. The slightest look of disapproval in the eyes of a person with whom I am interacting is enough to make me change my approach.	1	2	3	4	5	6	7
9. It's important for me to fit into the group I'm with.	1	2	3	4	5	6	7
10. My behavior often depends on how I feel others wish me to behave.	1	2	3	4	5	6	7
11. If I am the least bit uncertain as to how to act in a social situation, I look to the behavior of others for cues.	1	2	3	4	5	6	7
12. I usually keep up with clothing style changes by watching what others wear.	1	2	3	4	5	6	7
13. When in a social situation, I tend not to follow the crowd, but instead behave in a manner that suits my particular mood at the time.	1	2	3	4	5	6	7

III. The statements below concern your personal opinions to a number of different situations. No two statements are **exactly** alike, so consider each statement carefully before answering

	Strongly disagree					Strongly Agree	
1. My happiness depends very much on the happiness of those around me	1	2	3	4	5	6	7
2. It is important for me to maintain harmony within my group	1	2	3	4	5	6	7
3. I like sharing little things with my neighbors	1	2	3	4	5	6	7
4. The well-being of my co-workers is important to me	1	2	3	4	5	6	7
5. If a relative were in financial difficulty, I would help within my means	1	2	3	4	5	6	7
6. If a co-worker gets a prize I would feel proud	1	2	3	4	5	6	7
7. To me, pleasure is spending time with others	1	2	3	4	5	6	7
8. I feel good when I cooperate with others	1	2	3	4	5	6	7
9. I usually sacrifice my self-interest for the benefit of my group	1	2	3	4	5	6	7
10. Children should be taught to place duty before pleasure	1	2	3	4	5	6	7
11. It is important to me that I respect decisions made by my groups	1	2	3	4	5	6	7
12. Family members should stick together, no matter what sacrifices are required	1	2	3	4	5	6	7
13. Parents and children must stay together, as much as possible	1	2	3	4	5	6	7
14. It is my duty to take care of my family, even when I have to sacrifice what I want	1	2	3	4	5	6	7
15. I respect the majority's wishes in groups of which I am a member	1	2	3	4	5	6	7
16. It is important to consult close friends and get their ideas before making a decision	1	2	3	4	5	6	7
17. Winning is everything	1	2	3	4	5	6	7
18. It annoys me when other people perform better than I do	1	2	3	4	5	6	7
19. It is important to me that I do my job better than others	1	2	3	4	5	6	7
20. I enjoy working in situations involving competition	1	2	3	4	5	6	7

	Strongly disagree					Strongly agree	
21. Competition is the law of nature	1	2	3	4	5	6	7
22. When another person does better than I do, I get tense and aroused	1	2	3	4	5	6	7
23. Without competition it is not possible to have a good society	1	2	3	4	5	6	7
24. Some people emphasize winning; I am not one of them	1	2	3	4	5	6	7
25. I often do "my own thing"	1	2	3	4	5	6	7
26. Being a unique individual is important to me	1	2	3	4	5	6	7
27. I'd rather depend on myself than on others	1	2	3	4	5	6	7
28. I rely on myself most of the time; I rarely rely on others	1	2	3	4	5	6	7
29. My personal identity independent from others is very important to me	1	2	3	4	5	6	7
30. My personal identity is very important to me	1	2	3	4	5	6	7
31. I am a unique person, separate from others	1	2	3	4	5	6	7
32. I enjoy being unique and different from others	1	2	3	4	5	6	7

Your age: _____

Major: _____

Gender: _____Female _____Male

Which of the following are you?

_____ Caucasian American
_____ African American
_____ Hispanic American
_____ Asian American
_____ Native American
_____ International Student (Name of your country_____)
_____ Other (please specify_____)

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