

**A TALE OF TWO COUNTRIES: A CROSS-CULTURAL
EXAMINATION OF CONNECTEDNESS-
SEPARATENESS SELF-SCHEMA
AND ITS APPLICATION TO
ADVERTISING RESEARCH**

By

CHENG LU WANG

Bachelor of Arts
Shanghai Teachers University
People's Republic of China
1982

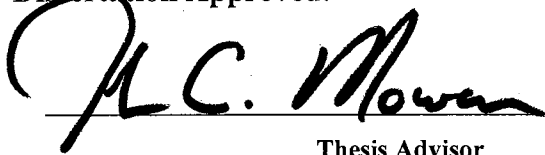
Master of Arts
Southeast Missouri State University
Cape Girardeau, Missouri
1989

Specialist of Education
The University of Georgia
Athens, Georgia
1991

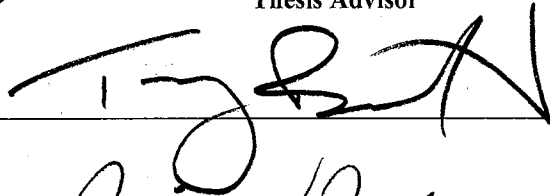
Submitted to the Faculty of
The Graduate College of
The Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
DOCTOR OF PHILOSOPHY
May 1996

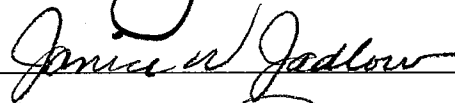
**A TALE OF TWO COUNTRIES: A CROSS-CULTURAL
EXAMINATION OF CONNECTEDNESS-
SEPARATENESS SELF-SCHEMA
AND ITS APPLICATION TO
ADVERTISING RESEARCH**

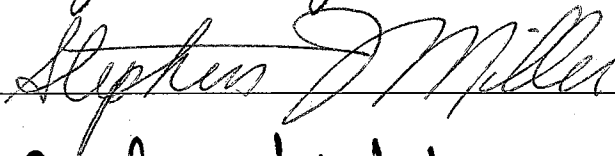
Dissertation Approved:

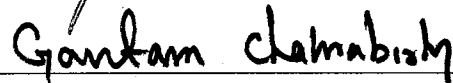


Thesis Advisor











Dean of the Graduate College

ACKNOWLEDGMENT

I wish to express my sincere appreciation to Dr. John C. Mowen, my program chair and dissertation committee chair, for his guidance throughout my doctoral program. His invaluable insights and intelligent comments from the first stage of this dissertation have led it to the right direction.

I also extend my gratitude to Dr. Terry Bristol, for his continuous supports and stimulating critiques; to Dr. Goutam Chakraborty, for his help with the methodology and analysis; and to Dr. Steve Miller and Dr. Janice Jadow, for their helpful comments and suggestions, while serving as members of my dissertation committee.

My gratitude also goes to Dr. Lee Manzer, Mr. Todd Donavan, Mr. Ajay Gupta, Mr. Tom Lanis, Mr. Brian Larson, Mr. James Lee, Mr. Shiva Rachakonad and Mr. Rohit Rampal for their assistance to use their students as my research subjects.

I am deeply indebted to my parents and my wife. During my overseas academic life in the United States, their everlasting love, unconditional understanding and unwavering encouragement have always been my source of intelligence, energy and vitality. I dedicate this dissertation to my parents, Shan Xiang Wang and Ru Zhen Chen, and to my beloved wife, Shirley Yin, with sincere respect. Mere words cannot explain my love and appreciation. Taking this once-in-life opportunity, I give them the brightest smile and the biggest hug which they like to receive most.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
II. DIFFERENT WAYS OF SELF CONSTRUAL ACROSS CULTURES: HYPOTHESES DEVELOPMENT	6
Overall Hypotheses	7
Hypotheses on Three Dimensions of the C-S construct	8
C-S Self-Schema As an Individual Difference Variable	15
Applications to Advertising Message Construction	16
III. RESEARCH METHODOLOGY AND FINDINGS	20
An Overview of Cross-Cultural Research Methodology	20
Study One: Scale Development	22
Procedures	23
Findings from the Study One	25
Reliability of the C-S Scale	25
Factor Pattern	25
Scale Validation	28
Study Two: An Application of C-S Construct to Cross-Cultural Consumer Research	30
Procedures	30
Subjects	30
Experimental Stimuli	32
Manipulation	33
Findings From Study Two	33
A Cross-Cultural Analysis of the C-S Scale Structure	33
Cultural and Gender Differences in C-S self schema	42
Results From the Experiment	46
Manipulation Check	46
MANOVA Results	46
ANCOVA Results	58
Confounding Check	60
Check for Demand Artifacts	62
Testing of H6 and H8 Within Each Countries	62

IV. GENERAL DISCUSSION	76
V. CONTRIBUTIONS AND MANAGERIAL IMPLICATIONS	82
Theoretical Contributions	82
Methodological Contributions	83
Managerial Implications	85
VI. LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH	87
REFERENCES	90
APPENDIXES: MEASUREMENT SCALE AND STIMULUS ADS	105

LIST OF TABLES

Table	Page
I. Connectedness-Separateness Scale	26
II. Correlations between the C-S Scale and the MES, the Social Desirability and the Collectivism Scales	27
III. Correlations between Each Dimension of the C-S Scale and the MES, the Social Desirability and the Collectivism Scales	27
IV. CFA Results on the Chinese Sample	36
V. CFA Results on the U.S. Sample	38
VI. CFA Results on the Combined Sample	40
VII. ANOVA Results on Connectedness Scores: Test of H1 & H5	42
VIII. Cell Mean and Cell Size of Nation*Sex Analysis	42
IX. MANOVA Results on Three Dimensions of the C-S Scale: Test of H2, H3 & H4	44
X. ANOVA Results on the Dimension 1 (Test of H2)	44
XI. Cell Mean and Cell Size of Nation*Sex Analysis (Dimension 1)	44
XII. ANOVA Results on the Dimension 2 (Test of H3)	45
XIII. Cell Mean and Cell Size of Nation*Sex Analysis (Dimension 2)	45
XIV. ANOVA Results on the Dimension 3 (Test of H4)	45
XV. Cell Mean and Cell Size of Nation*Sex Analysis (Dimension 3)	45
XVI. MANOVA Test of H6a & H6b	48

XVII. Ad-By-Group ANOVA Results: Test of H6a (A_{ad})	48
XVIII. Cell Mean and Cell Size of Ad*Group Analysis (A_{ad})	49
XIX. Ad*Group ANOVA Results: Test of H6b (A_b)	50
XX. Cell Mean and Cell Size of Ad*Group Analysis (A_b)	50
XXI. MANOVA (Ad*Nation*Sex) Results: Test of H7 and H8	52
XXII. ANOVA (Ad*Nation*Sex) Result: Test of H7a and H8a (A_{ad})	52
XXIII. Cell Means In a Three-Way Analysis (H7a and H8a: A_{ad})	52
XXIV. Cell Mean and Cell Size of Ad*Nation Analysis (H7a: A_{ad})	53
XXV. ANOVA (Ad*Nation*Sex) Results: Test of H7b and H8b) (A_b)	54
XXVI. Cell Means In a Three-Way Analysis (H7b and H8b: A_b)	54
XXVII. Cell Mean and Cell Size of Ad*Nation (H7b: A_b)	55
XXVIII. Cell Mean and Cell Size of Ad*Sex Analysis (H8a: A_{ad})	56
XXIX. Cell Mean and Cell Size of Ad*Sex Analysis (H8b: A_b)	57
XXX. ANCOVA On C-S*Ad	59
XXXI. ANCOVA On Confounding Variables	61
XXXII. MANOVA Test of H6a & H6b with U.S.A. Sample	64
XXXIII. ANOVA Results with U.S. Sample: Test of H6a (A_{ad})	64
XXXIV. Cell Mean and Cell Size of Ad*Group Analysis From U.S. Sample (A_{ad})	65
XXXV. ANOVA Results with the U.S. Sample: Test of H6b (A_b)	66
XXXVI. Cell Mean and Cell Size of Ad*Group Analysis From U.S. Sample (A_b)	66
XXXVII. MANOVA Test of H6a & H6b with P.R.C. Sample	67
XXXVIII. ANOVA Results with P.R.C. Sample: Test of H6a (A_{ad})	67

XXXIX. Cell Mean and Cell Size of Ad*Group Analysis From P.R.C. Sample (A_{ad})	68
XXXX. ANOVA Results with P.R.C. Sample: Test of H6b (A_b)	69
XXXXI. Cell Mean and Cell Size of Ad*Group Analysis From P.R.C. Sample (A_b)	69
XXXXII. MANOVA Test of H8a & H8b with P.R.C. Sample	70
XXXXIII. ANOVA (Ad*Sex) Results with P.R.C. Sample: Test of H8a (A_{ad})	70
XXXXIV. Cell Mean and Cell Size of Ad*Sex Analysis From P.R.C. Sample (A_{ad})	71
XXXXV. ANOVA (Ad*Sex) Results with P.R.C. Sample: Test of H8b (A_b)	72
XXXXVI. Cell Mean and Cell Size of Ad*Sex Analysis From P.R.C. Sample (A_b)	72
XXXXVII. MANOVA Test of H8a and H8b with U.S. Sample (A_b)	73
XXXXVIII. ANOVA (Ad*Sex) Results with U.S. Sample: Test of H8a (A_{ad})	73
XXXXIX. Cell Mean and Cell Size of Ad*Sex Analysis From U.S. Sample (A_{ad})	74
XXXXX. ANOVA (Ad*Sex) Results with U.S. Sample: Test of H8b (A_b)	75
XXXXXI. Cell Mean and Cell Size of Ad*Sex Analysis From U.S. Sample (A_b)	75
XXXXXII. Summaries of Hypotheses Testing Results	80-81

LIST OF FIGURES

Figure	Page
1. Scree Plot of Eigenvalues	27
2. C-S Construct: Three Dimensions (P.R.C. Sample)	37
3. C-S Construct: Three Dimensions (U.S.A. Sample)	39
4. C-S Construct: Three Dimensions (Combined Sample)	41
5. Test of H6a (Attitude-Toward-Ad)	49
6. Test of H6b (Attitude-Toward-Brand)	50
7. Test of H7a (Attitude-Toward-Ad)	53
8. Test of H7b (Attitude-Toward-Brand)	55
9. Test of H8a (Attitude-Toward-Ad)	56
10. Test of H8b (Attitude-Toward-Brand)	57
11. Test of H6a with U.S.A. Sample	65
12. Test of H6b with U.S.A. Sample	66
13. Test of H6a with P.R.C. Sample	68
14. Test of H6b with P.R.C. Sample	69
15. Test of H8a with P.R.C. Sample	71
16. Test of H8b with P.R.C. Sample	72
17. Test of H8a with U.S.A. Sample	74
18. Test of H8b with U.S.A. Sample	75

INTRODUCTION

An individual's behavior is a function of his image of what kind of person he is and how he wants others to see him. This self-image is reflected to some extent in everything he does, including his buying of goods and service (Joseph W. Newman 1957, P. 52-53).

Recently, consumer researchers have shown an increasing interest in the role of possessions in maintaining and supporting the consumer's self-concept and sense of identity (Ball and Tasaki 1992; Belk 1988, 1992; Dawson and Bamossy 1991; Hirschman and LaBarbera 1990; Schultz, Kleine and Kerman 1989). An individual's favorite possessions have been proposed as either instrumental or symbolic extension of one's self (Belk 1988; Csikszentmihalyi and Rochberg-Halton 1981; Dittmar 1989, 1991; Kamptner 1991). The more an object is self-relevant, the more it tends to connect to one's self or to become one's extended self (Belk 1988; Markus and Sentis 1982).

Research on the extended self, however, has focused on how consumers attach themselves to material objects and on how the material objects are incorporated into one's extended self (Ball and Tasaki 1992; Belk 1988; 1992; Richins and Dawson 1992; Richins and Rudmin 1994). However, the subject of how an individual extends his or her self through social resources (e.g., other peoples and relationships with significant others) has been largely ignored in the consumer literature. Chu (1985) suggests that the self develops out of interactions with three broad entities: significant others, materials and

objects, and ideas and beliefs. Compared to material objects and ideology, one's relationships with significant others are of crucial importance to the formation of an individual's self, since it is largely through interactions with the significant others that an individual comes to perceive and internalize the ideological content of his society and that the individual learns to manage and manipulate his material environment. Significant others will become part of one's self when one emotionally attaches to the relationship (Kernberg 1977) and when one develops a "relational schema" in which significant others are internalized into one's self-schema (Baldwin 1992). The nature of one's identifications with significant others to some extent determines the nature of the community we call the self (Cavell 1985).

One explanation of the self-extension mechanism is the introjection process, which refers to the incorporation of other persons or objects into oneself subconsciously (Webster 1986, p.1187). When an external object or a person is introjected, self and others are experienced as inextricably intertwined. In psychology, the term "connected self" has been used to indicate the fact that significant others and social relationships may be an important part of one's definition of self (Markus and Oysermen 1988, Lang-Takac and Osterweil 1992; Wang and Mowen 1996; Woike 1994). As such, one's perception of self and one's perception of other persons are often connected. In an extreme case, the self even may not have fixed and rigid boundaries between the self and significant others (James 1890; Rosenberg 1979).

Different ways of self construal exist in one's perceptions of others and/or relationships with others in one's self-definition. While some people tend to hold a more "separated self-schema," others may have a more "connected self-schema." In particular,

an individual with a separated self-schema tends to perceive himself or herself as distinct from others--i.e., "I am an independent identity." In contrast, an individual with a connected self-schema tends to perceive himself or herself as the continuation of others or others as an extension of the self -- i.e., "I am a part of others" (Wang and Mowen 1996). According to Markus and Kitayama (1991), the independent (separated) versus interdependent (connected) construals of self are among the most general schemata of the individual's self-system.

A person's self-schema sensitizes him or her to perceiving schema-relevant information in themselves and others and enables people efficiently to remember and to judge schema-relevant information. For those with a separated self-schema, such self-relevant stimuli would include information relevant to one's self-defining attributes. For those with a connected self-schema, however, such stimuli would include information about significant others with whom the person has a relationship or information about the self in relation to other people. Such a distinction between a separated and a connected self-schema would have important implications in understanding and explaining consumer attitudinal and behavioral responses to marketing communications (Wang and Mowen 1996). As such, the connectedness vs. separateness commercial theme can be developed as a message variable appealing to different consumer market segments.

The research stream on consumer extended self is also delimited by its predominant focus on societies that hold an individualistic concept of self (Belk 1988), and thus is more likely to reflect a Western view of self. Materialism, or a consumption-based orientation to happiness seeking, for instance, has generally been seen as a Western trait (Ger and Belk 1990). Research by Wallendorf and Arnould (1988) and Rudmin

(1988) suggest that the materialism scales developed by Belk (1985) are more appropriate to the United States than to other cultures, especially those of the Third world. According to Triandis et al. (1988), individualistic values, rooted in Western cultures, tend to emphasize elements of identity that reflect possessions--what do I own, what experiences have I had, what are my accomplishments, etc. In non-Western cultures, which are more likely to hold a collective concept of self, one's relationships with significant others tend to be highly emphasized. As such, in collective cultures, one's identity is defined more in terms of relationships with reference groups. Researchers have suggested that the independent (separated) view of self is most clearly exemplified in some sizable segments of American culture, as well as in many Western European cultures. The interdependent (connected) view of self is, however, exemplified in Asian cultures as well as African, Latin-American, and many southern European cultures (Markus and Kitayama 1991).

The present research is a cross-cultural extension of Wang and Mowen's (1996) exploratory study, which defined the domain and dimensions of the connectedness-separateness construct, developed a C-S scale to measure the construct, and applied the C-S construct to advertising message construction. Their study found that an individual's C-S schema moderated one's responses to "connectedness" vs. "separateness" advertising appeals.

Conceding its exploratory nature, their study identified several limitations which warrant further investigation. First, the C-S scale development did not go through the iterative purification process as suggested by Churchill (1979). Second, with a relatively small sample, especially a small non-Western sample, conducting separate factor analyses for each culture may be inappropriate. The overall factor pattern or dimensions of the

construct also needed to be further clarified. Third, since the non-Western sample was composed of international students attending a U.S. university, it may not necessarily show same characteristics of consumers in other countries. To address these major limitations, this study will (1) develop and purify the C-S scale with a larger sample to further establish its reliability and validity (2) conduct studies with new samples at both the United States and People's Republic of China to make more valid cross-cultural comparisons, and (3) conduct an experimental study at both countries to investigate the moderating effect of the C-S construct on consumer responses to advertising appeals.

The overall objective of this study is sought to answer two research questions: (1) does the connectedness-separateness self-schema differentiate individuals among cultures and between genders, and (2) do these individual differences influence consumers' attitudinal responses to marketing communications. The study will not only extend our understanding of the role of the self-schema in consumer behavior but also provide knowledge to assist in international marketing promotion and segmentation.

DIFFERENT WAYS OF SELF-CONSTRUAL

ACROSS CULTURES: HYPOTHESES DEVELOPMENT

An advertisement taken from an American magazine pictures a happy American family enjoying its vacation together. The caption says: "We get our money's worth" . . . It seems perfectly natural for Americans to say "we get our money's worth." One wonders what a Chinese family would do to achieve togetherness and whether it would use money to measure the worth of family union (Godwin C. Chu 1985, p. 257).

In a cross-cultural study, psychologist Phoebe Ellsworth presented a chart showing a single fish swimming away from a group to American and Chinese subjects. Americans tended to view this chart positively -- as a sign that the single fish was striking out on its own. But the most common Chinese interpretation was that the single fish was being expelled from the group. The more dramatic differences emerged with a chart that showed a group of fish converging on a single fish. American participants interpreted the converging fish as a threat to the individual while Chinese participants saw the situation as a happy one, with a friendly group coming to join an isolated fish. In general, Chinese respondents were much better at answering questions on how the group felt about a situation. The Americans often said that they could not answer because a group does not feel anything (Kleiner 1996). This study demonstrates how people from different cultures tend to have different perceptions and judgments about the same social situations

regarding the self and others. In particular, Chinese people are geared toward considering the feelings of the group (others), while Americans tend to focus on the individual (the self). These differences in perceptions and interpretations of self-other relations reflect cross-cultural differences in self-construals, conceding the self is the frame of reference in terms of which all other perceptions gain their meaning (Combs and Snygg 1959). A literature review of research in psychology, sociology and anthropology suggests that the connectedness-separateness distinction has been widely evidenced and has the utility for describing an individual's perception of his or her self in relation to others. Series of research hypotheses were developed based on this construct.

Overall Hypotheses:

The importance of significant others or social relations in one's extended self structure may be a major distinction between the Western self and the non-Western self (Chu 1985; DeVos, Marsella and Hsu 1985; Geertz 1984; Hsu 1971; 1985; Johnson 1985; Markus and Kitayama 1991; Sampson 1977; 1988; Shweder and Bourne 1984; Triandis 1989). For instance, Belk's (1992) conceptualization of the extended self posits that material possessions are likely to be in the centric layers surrounding the core self and that collective possessions such as family, communities, and societies are in the out layer to material possessions. This is likely to be true in the Western individualistic culture. In contrast, the collective self has been proposed to be structured in concentric circles in non-Western collective cultures (Hsu 1971; 1985). Hsu (1971) has observed that the Chinese personality consists of a much broader interpersonal layer than that of an American. This social orientation of the Chinese would presumably have some impact on the relative frequency with which certain categories are used to describe the self.

Cross-cultural studies of Chinese (and other oriental cultures as well) consumers and business people commonly note the importance of *guanxi* (relationship networks) in business transactions. The relationship network is an important social resource for a Chinese business person since Chinese prefer to do business with people that they know (Carroll 1991) and that they have established personal relationships. In Chinese culture, social relations are more likely to be in the centric layer of extended self structure. Thus, an overall hypothesis here is that American subjects tend to have a separated self-schema and Chinese subjects tend to have a connected self-schema. The Connectedness-Separateness Self-Schema scale is developed to test this overall hypothesis.

H1: Chinese subjects will score higher on connectedness than American subjects.

Hypotheses on Three Dimensions of the C-S Construct

Research has indicated that the C-S construct is likely to be a multi-factor construct (Kashima et al., 1995; Lang-Takac and Osterweil 1992; Wang and Mowen 1996). More specific hypotheses were developed based on cross-cultural research on the self schema and the identified dimensions of the C-S construct. These dimensions of the C-S construct were proposed as: self-other boundary, independence-interdependence, and private-self vs. collective-self orientation.

Self-Other Boundary

The self-other boundary refers to one's perception of the self as a distinct identity or as a continuous link in interpersonal relationships. Regarding one's information processing, Woike's (1994) study found that individuals who had more concern about separateness tended to use more differentiation processing and individuals who had more concern about connectedness tended to use more integration processes. Evidence showed

that individualists tend to perceive the self as a distinct entity from the ingroup and collectivists tend to perceive the self as an extension of the ingroup (Triandis et al. 1988). Previous research also found that American subjects typically judge more self-other differences and less self-other similarities than subjects from non-Western cultures usually do (Markus and Kitayama 1991).

Researchers have long noted that a Western self may be characterized by self-contained individualism which exhibits a firm self-other boundary, detached or separated self concept (DeVos, Marsella, and Hsu 1985; Sampson 1988; Shweder & Levine 1984). Geertz (1984) has argued that this Western conception of the person as a bounded and unique universe that distinguishes the self from others and natural background is a rather peculiar idea within the context of the world's cultures. People from many Asian cultures tend to insist on the fundamental relatedness of individuals to each other. In Japan, for instance, the word for self, *jibun*, refers to one's share of something beyond oneself (Hamaguchi 1985). Hui and Triandis (1986) maintain that collectivism is manifested in one's consideration of the effects of one's own decision on others, sharing of material resources, sharing of less tangible (or nonmaterial) resources, willingness to adopt others' opinions, worry about self-presentation and loss of face, sharing of the outcome with others, and the feeling of involvement and contribution in others' lives. In other words, while the Western cultures tend to view the self as distinct from others, the non-Western cultures tend to view the self as connected with others. Maintaining such self-other connections requires inhibiting the "I" perspective and processing instead from the "thou" perspective (Hsu 1971). One's maturity is measured by one's capacity of "merger or oneness with persons other than self" (Weise, Rothbaum and Blackburn 1984, p. 959).

In both Western and non-Western cultures an individual is always born with a social relation and must be responsive to the social environment. The difference resides in the fact that, for a Western separated self, other people are important generally in the sense of being standards of reflected appraisals, or as sources that can verify and affirm the inner core of the self (Steele 1988; Swann and Reed 1981). In contrast, an Eastern interdependent self emphasizes the fundamental connectedness of human beings to each other (DeVos 1985; Hsu 1985; Kondo 1982; Miller 1984; Shweder and Bourne 1984). An Eastern self is thus extended beyond the individual to include a wide variety of significant others such as the family and the community (Kirkpatrick and White 1985). In Confucian culture, for example, even one's body parts do not simply belong to oneself but also belong to one's parents. This is exemplified by a well-known traditional Chinese saying: "one's body, hair, and skin are gifts from one's parents. One is not at liberty to do harm to them" (Tu 1985). As such, one's self in certain aspects reflects a developing part of a continuing family lineage. It is a progressive continuity of the specific ancestry of one's family.

H2: Chinese subjects will value a self-other connection more than American subjects.

Independence (autonomy, self-reliance) vs. Interdependence (mutual reliance)

The independence vs. interdependence dimension refers to one's perception of the self as an autonomous and self-relied individual or as a person who is mutually relied with other people. A prevalent theme in cross-cultural research of self concept is that the self in Western culture is conceptualized as "individualistic self" or "independent self" and the self in Eastern culture is conceptualized as "collective self" or "interdependent

self" (Hamaguchi 1985; Hofstede 1981, 1983; Triandis 1989; Triandis, Bontempo, Villareal, Asai, and Lucca 1988). In general, a person is less self-contained in collectivist cultures than in individualistic cultures (Rosaldo 1984).

Johnson (1985), for instance, notes that in the West and most clearly in the United States, the rhetorical belief in independence acts to conceal the complex interdependencies in family and social relationships. A subscription to an inflated view of individualism is condensed in the popular contemporary phrase of "doing your own thing." Similarly, Sampson (1977) argued that a predominant theme that describes American cultural ethos is self-contained individualism. "The self-contained person is one who does not require or desire others for his or her completion or life; self-contained persons either are or hope to be entire unto themselves" (p.770). Thus, one's individuation can only be attained at the expense of cutting oneself off from others. Help should not be requested from others because it creates obligations, nor should assistance be offered because it detracts from one's own living (Waterman 1981).

In non-Western cultures, however, the emphasis is on attending to others and on harmonious interdependence with them (Markus and Kitayama 1991). In the Confucian culture, such as in China, to involve the other in an individual's self-cultivation is required for his or her own self-development. Confucian self devoid of human-relatedness has little meaningful content of its own (Tu 1985). Since the self in Confucian literature is often understood in terms of dyadic relationships, a Confucian man's self-awareness of being a son, a brother, a husband, or a father dominates his awareness of himself as a self-reliant and independent person (Tu 1985). Consequently, one's self-extension process may be primarily through acquiring and maintaining social

relationships, on which individuals mutually rely. Hui and Villareal's (1989) study confirmed their hypothesis that individualists would have a high need for autonomy, whereas collectivists would show greater affiliative, nurturant, and succorant needs. Experiencing interdependence entails seeing oneself as part of an encompassing social relationship or as an "ensemble self" (Markus and Kitayama 1991; Sampson 1988). One's primary orientation is thus toward social relations and mutual-reliance with other people (Chu 1985). What is focal in the Eastern self, then, is not an individual's independence, but the interdependent relationships of the person to others.

H3: Chinese subjects will emphasize interdependence and mutual reliance more than American subjects.

Private-Self Orientation (Individual achievement and Personal growth) vs. Collective-Self Orientation (Group goals and collective achievement)

The private-self orientation vs. the collective-self orientation refers to one's mental activities which are mainly focused on internal (i.e., personal) attributes or on external (i.e., social) stimuli. The private self concerns one's individual goals or personal achievements, which are typically evaluated by internal standards. On the other hand, the collective self concerns collective goals or group achievements, which are evaluated by internalized goals of reference groups. As noted by Greenwald (1988), the substantial variations across persons in the relative prominence of the private vs. collective facet of self are referred to as differences in one's goal oriented behavior.

With respect to cultural differences, Triandis (1989) argues that the private self is emphasized more in individualistic cultures such as North America or Europe than in collectivistic cultures such as those of East Asia. People with an individualistic cultural

background tend to have more private self-cognition, and fewer collective self-cognition, than people from a collective cultural background (Trafimow, Triandis and Goto 1991). The data from Triandis and his colleagues (1989) study also suggest that U.S. idiocentrism (i.e., emphasizes personal goals and self-achievement) concept includes more concern for one's own goals than the ingroup's goals, less attention to views of the ingroup, detachment from ingroups, deciding on one's own rather than asking for the views of others, and less general concern for the ingroup.

For a person with a separated self-schema, feeling good about oneself typically requires fulfilling the tasks associated with being unique, expressing one's inner attributes, and asserting and enhancing oneself (Markus and Kitayama 1991). The emphasis on private-self growth is especially pronounced in Maslow's (1956) notion of "self-actualizing people." Since self-actualizing people are propelled by growth motivation rather than deficiency motivation, according to Maslow, they are dependent for their own development and continued growth upon their own potentialities and latent resources rather than have other people available. Growth-motivated people "may actually be hampered by others" since "they have become strong enough to be independent of the good opinion of other people, or even of their affection" (p.177). Maslow's notion of self-actualizing people is rooted in Western individualist cultures, in which the conception of the self assumes that all psychological matters pertain to the single person (Kirkpatrick and White 1985).

In non-Western cultures, one's private or personal goals may be subordinate one's group or collective self goals (Triandis 1989). Feeling good about one's self tend to derive from belonging to, and fulfilling the tasks associated with, relevant others or

reference groups (Markus and Kitayama 1991). Researchers have observed that the Chinese need hierarchy may be quite different from what proposed by Maslow, in that social needs, rather than individual aggrandizement, are at both top and bottom of the hierarchy (Nevis 1983; Tse, Belk and Zhou 1989). A distinctive feature of Confucian ritualization is an ever-deepening and broadening awareness of the presence of the other in one's self-actualization. This feature is manifested by a well-known statement in the Confucians' work: "Wishing to establish oneself, one establishes others; wishing to enlarge oneself, one enlarges others" (quoted in Tu 1985).

Both the Western culture and the Eastern culture recognize one's achievement in social status and material possessions, which influence one's self-esteem. However, one's self-esteem needs can be social oriented (the regard and respect that one receives from other people) or individual oriented (personal achievement). For a Western individualistic self, self-esteem may be gain through individual endeavor, since his or her culture says that his self-esteem depends upon how well he can stand on his own two feet. One tends to achieve individual identity through the acquiring of the material wealth and positions, instead of being fixed by inherited position (Dittmar 1991). Consequently, as Hsu (1985) indicates, the Western self has to work for his personal fulfillment of psychosocial homeostasis through mastering the environment or through exploring his or her own inner world or resorting the god. For an Eastern collective self, however, the self-esteem is tied to his first group, his parents, siblings, and other social relations which enable an individual to maintain his or her psychological homeostasis without resorting to other elements such as gods or things. In Chinese culture, for example, an individual's achievement is supposed to glorify his or her family and ancestors more than himself or

herself. Parents cherish many of their hopes, which they know that impossible for themselves to reach, in their children, from whom their self can be extended and their unattainable dream can be realized. An individual gains "face" when significant others feel proud of him or her.

H4: Chinese subjects will value group goals and collective achievements more than American subjects.

C-S Self Schema As an Individual Difference Variable:

The connectedness-separateness self-schema is hypothesized to moderate individual responses to social stimuli as well as commercial communications. As such, the individual differences in C-S self schema can also be examined within each culture or on a global basis. This notion is particularly important considering the fact that international market segmentation may not only look at the cross-cultural differences in consumer self-schema, but also need to look at cross-cultural similarities in defined consumer segments in the world market. Intermarket segmentation or global consumer segmentation has been proposed to capitalize on cross-national similarities in terms of consumer characteristics (Farley 1986; Hassan and Katsanis 1991; Kale and Sudharshan 1987; Wind and Douglas 1972). Several such global consumer segments, such as Information Seekers (Thorelli, Beck, and Engledow 1975), teenager (Feinberg 1989; Hassan and Katsanis 1991), and working women (Douglas 1976; Douglas and Urban 1977) and so on, have been identified in international consumer research literature (see Wang 1995, for a review). Consequently, international market segmentation may benefit from comparing between-culture variances as well as within-culture variances in terms of separateness vs. connectedness self-schema of consumer segments in international

markets. One may expect that in every culture there are consumer segments that hold a separated or connected self-schema.

The individual differences in self construal can also be examined between sexes. In the psychology literature, for instance, Bakan's (1966) terms, "agentic" and "communal," are often used to describe gender differences related to separateness and connectedness. Studies from gender differences suggested that men tend to emphasize more on material possessions than women do whereas women tend to emphasize more on social relationships than men do (Dittmar 1991; Kamptner 1991). In other words, while men tend to see possessions as important mainly because of their instrumental, pragmatic and self-referent symbols of achievement, women tend to regard possessions as important because they symbolize interpersonal integration, relatedness and emotional attachment (Dittmar 1989). In contrast to men, women are more likely to be "connected Knowers" and tend to have a greater capacity for empathy, sensitivity and responsiveness to others (Belenky et al., 1986; Chodorow 1978; Hoffman 1977). As such, for women, loss of important relationships may be experienced as a loss of the sense of the self. This occurred because women's sense of self may be organized around affiliations and relationships (Miller 1986). In general, research suggests that men tend to perceive the self as separated from other people or tend to define themselves based on individuality and personal traits while women tend to perceive the self as connected with significant others or tend to incorporate those significant others in self definition.

H5: Female subjects will score higher on connectedness than male subjects.

Applications to Advertising Message Construction:

An important focus in advertising involves identifying message appeal variables.

Message appeal refers to the overall style of the advertising rather than details of message claims or format (Percy and Rossiter 1992). Research suggests that the effectiveness of message appeals is often mediated and/or moderated by individual differences (McIntyre, Harris, and Norvell 1986; Venkatraman et al. 1990). Debevec and Iyer (1988), for instance, argue that consumers' responses to advertising may be moderated by their self-referencing levels elicited by advertisement.

Several theories have suggested that the advantage of self-relevant information in perception and memory accrues in large part from its emotional importance to people (Ferguson, Rule, and Carlson 1983; Fiske and Taylor 1984; Greenwald and Pratkanis 1984; Markus 1977; Markus and Sentis 1982). The self-schema theory (Fiske and Taylor 1984; Markus 1977; Markus and Sentis 1982) posits that an individual's self-schema sensitizes one's information processing and motivates schema consistent behaviors. People tend to seek and recall information that confirms or affirms their self-concept (Steele 1988; Swann and Read 1981). Self related information becomes more salient and therefore the referent in one's attention, perception, memory, judgment, emotion, motivation, attitude formation and behavior intention. As such, Shavitt and Brook (1984) argue that traditional measurements of advertising effectiveness based on recall and persuasion "have neglected the role of the self in message processing. They suggest that the self should be viewed as a key component in any analysis of consumer persuasion. Researchers (Desarbo and Harshman 1985) also suggest that advertising which appeals to the self concept of consumers reduces irritation, and is also likely to be more effective.

From the consumer research perspective, the self-image/product-image congruence theory (Sirgy 1982) may explain the mechanism through which the C-S

construct acts as a moderating variable in consumers' responses to marketing communications. One would expect that consumers will prefer an advertising theme or a brand if the ad theme and/or product/brand cues are congruent with his or her self schema. Therefore, if present and potential consumers of the product can be identified with a specific self schema, the promotional efforts can be directed to associate the product with the self schema desired by the customers (Malhotra 1988). Wang and Mowen's (1996) study has provided initial evidence of the utility of the C-S construct as a moderating variable and/or a message appeal variable in advertising effectiveness. Individuals with a separated-schema were found to respond more favorable to separated appeals and individuals with a connected self-schema tended to respond more favorably to connected appeals. They suggest that international market as well as domestic market may be segmented based on consumer separateness vs. connected self-schema. A connectedness theme or a separateness theme may be developed for different country and/or consumer market segments. Based on above hypotheses that American subjects tend to be more separated and Chinese tend to be more connected and that men tend to be more separated and women tend to be more connected, hypotheses were developed that predict how consumer responses to advertising appeals will vary based upon both within-culture differences (consumer segments with separated vs. connected self-schema and male vs. women) and between-culture differences.

H6a: Subjects scoring higher on connectedness will prefer an ad with a "connectedness" theme more than subjects scoring lower on connectedness. In contrast, subjects scoring lower on connectedness will prefer an ad with a "separateness" theme more than subjects scoring higher on connectedness.

H6b: Subjects scoring higher on connectedness will prefer a brand in the "connected appeal" ad more than subjects scoring lower on connectedness. In contrast, subjects scoring lower on connectedness will prefer a brand in the "separated appeal" ad more than subjects scoring higher on connectedness.

H7a: Chinese subjects will prefer an ad with a "connectedness" theme more than American subjects. In contrast, American subjects will prefer an ad with a "separateness" theme more than Chinese subjects.

H7b: Chinese subjects will prefer a brand in the "connectedness appeal" ad more than American subjects. In contrast, American subjects will prefer a brand in the "separateness appeal" ad more than Chinese subjects.

H8a: Female subjects will prefer an ad with a "connectedness" theme more than male subjects. In contrast, male subjects will prefer an ad with a "separateness" theme more than female subjects.

H8b: Female subjects will prefer a brand in the "connectedness appeal" ad more than male subjects. In contrast, male subjects will prefer a brand in the "separateness appeal" ad more than female subjects.

RESEARCH METHODOLOGY

The true cross-cultural study (is the one) which includes at least two cultures and in which at least one other factor in the design is manipulated by the experimenter and crossed with culture, i.e., each condition of the experiment is carried out in each culture (Brown and Sechrest 1980, p.300).

An Overview of Cross-Cultural Research Methodology

Cross-cultural Consumer research usually follows two approaches. The first approach is to conduct studies only on one culture (usually a foreign country) and then compare the results to what has been found in another culture (usually the home country). In "classical cross-cultural research" (Pepitone and Triandis 1987), for instance, the interest is in seeing if and to what extent hypotheses tested and confirmed on one cultural sample hold for one or more other cultural samples. The implicit assumption of this approach is that the study will permit legitimate comparisons with another culture because the study is replication of one already done. The problem of such one-culture replication studies is that the assumptions made in the home country may not hold in another cultures. Nisbet (1971) notes that such comparative method may involve ethnocentric assumptions. The result may be the cultural self-referring bias (Lee 1966), which refers to the tendency for a researcher to perceive or interpret phenomena or behavior observed in other cultures in terms of his or her own cultural self-referent.

Albaum and Peterson's (1984) have noted that cross-cultural researchers often employed consumer behavior theories or models in other cultures without checking the appropriateness of underlying assumptions of these models in other cultures. However, many U.S.-made consumer theories are often culture-bound. Cote and Tansuhaj (1989), for instance, question the cross-cultural validity of some underlying assumptions of Fishbein's behavioral intention model. Their empirical results indicated that American samples differ from Jordanians and Thais in terms of time orientation, the locus of control and probabilistic thinking.

The second approach is to compare consumer behaviors in two or more cultures simultaneously by treating the culture as an independent variable. Cross-cultural differences in certain attitudinal and behavioral responses are measured as dependent variables. The implicit assumption is that culture is the determinant of consumer behavior (Henry 1976). This approach is based on the comparative research framework, which is concerned with the system detection, identification, classification, measurement, and interpretation of similarities and differences among phenomena (Boddewyn 1969). Such comparative studies often rely on consumer surveys. Survey studies, however, typically reveal the correlations between cultures and certain consumption patterns but may not be able to provide theoretical explanations and causal inferences.

According to Brown and Sechrest (1980, p.300), perhaps the only kind with real values from the standpoint of permitting strong causal inferences is the "true cross-cultural study," which requires at least two cultures and in which at least one other factor in the design is manipulated by the experimenter. Moreover, this approach allows investigators to study two or more cultures simultaneously to duplicate their own

procedures than to replicate the work at a different period in time.

Following Brown and Sechrest's (1980) suggestion, the present research was composed of two parts: a scale development procedure and an experimental design. In addition to treating culture as a quasi-experiment variable, the experiment is carried out to manipulate the advertisement themes in terms of the C-S construct in both countries (More details will be discussed in following sections).

Study One: Scale Development

Thirty-five items were generated based on the domain and dimensions of the C-S construct defined in the previous discussions. The items were previously tested with a small sample of college students (N=67) and were evaluated for their content validity and face validity by experts in scale development. While the scale development process was based on Wang and Mowen's (1996) exploratory study, as a cross-cultural extension, special care was taken in cross-cultural research methodological issues.

Of critical concern in scale development is the conceptual equivalence, that is, whether an item or a question has the same meaning in different cultural contexts (Douglas and Craig 1983). The translation equivalence is a central issue in the establishment of conceptual equivalence. The most commonly employed method in cross-cultural consumer research is through an initial translation to the target language by one bilingual person, and a back translation to the original language by another person (Brislin 1970; Brislin 1976; Werner and Campbell 1970). Another technique, which has been employed in Hui's 1988) study of the collectivism-individualism construct in the U.S., and in Hong Kong, is to produce the different language versions of scale items side

by side. Since this procedure bypassed the use of back-translation, the scale would at least be not monocultural (Hui 1988).

The "decentering" technique was employed in the present study to ensure the conceptual equivalence. In an effort to "decenter" the C-S scale, two versions (English and Chinese) of the scale were produced at almost the same time by a bilingual researcher. As such, the two versions have equal status as "original" (Hui 1988). Both versions of the scale were then back translated by other Chinese bilinguals. The equivalence of the wordings of the two versions was further checked and revised by the researcher.

Procedures

In a regularly scheduled class of students attending a mid-western university in the United States, 210 participants (including 156 American students and 54 international students, and 111 males and 99 females) were given a test booklet containing four measurement scales. One scale was the C-S scale and the others were related measures that were included to assess the convergent and discriminant validity of the C-S scale. After reading the directions, the participants were asked to answer each of the statements by circling the appropriate number on a 9-point likert-type scale (From "Strongly Disagree" to "Strongly Agree"). The four scales are briefly described below:

1. The Connectedness-Separateness (C-S) scale. In its original form, it was a 35-item, paper-and-pencil questionnaire designed to measure the specified C-S domain and three dimensions. Individuals with a separated self-schema are expected to value independence, autonomous, distinguish from others, self-reliance, individual goals and personal growth, etc. On the other hand, consumers with a connected self-schema are

expected to enjoy intimate relationships and sharing of personal experience, to value group goal and collective achievement, perceive self as connected with significant others and mutually relied with others, etc. About half of the items showed a separated self-schema and other half revealed the connected self-schema. All the items were randomly ordered. The scoring for the separateness items was reversed. Thus, a high score reflects a connectedness self-schema and a low score indicates a separateness self-schema.

2. The Maintenance of Emotional Separation (MES) scale (Corcoran 1982). The MES is a 7-item scale measuring the emotional separation between the respondents and others in interpersonal relationships. The MES was reported having a Cronbach's alpha of .71 and was found to negatively correlate with empathic tendencies (Corcoran 1982). The MES is expected to correlate with the C-S scale and with the self-other boundary dimension of the C-S scale.

3. The "self-reliance vs. interdependence" factor (11 items) in Collectivism Scale (Hui and Villareal 1989). Hui and Villareal's study confirmed their hypothesis that collectivism was negatively correlated with preference for autonomy, but positively correlated with preferences for Affiliation, Succorance, and Nurturance from Jackson's Personality Research Form (PRF) (Jackson, 1988). This scale is then expected to be correlated with the C-S scale and with the independence/autonomy vs. interdependence/mutual reliance dimension of the C-S scale.

4. The short form of Social Desirability Scale (Crowne and Marlowe 1960). Ten items were selected from the social desirability scale based on Ballard, Crino, and Ruberfeld's (1988) study, which indicated that these items met the criterion of sensitivity (35% or higher in the discriminant index) and consistency of keying (direction of the

keying of individual items is consistent across the judges and over time span). No significant relationship is expected between the Social Desirability Scale and the C-S scale.

Findings from the Study One

Reliability of the C-S scale:

The Cronbach alpha of the original 35 items was .75. Following Churchill's (1979) procedure for scale purification, 18 items with low correlation-with- total (and/or with-component after factor analysis) were deleted. The retained 17- item scale showed a Cronbach alpha of .79, which indicates an acceptable internal consistency of the scale (Nunnally 1967).

Factor Pattern:

Kaiser's measure of sampling adequacy (MSA) had a value of 0.79, suggesting the adequacy to perform the factor analysis. The principal factor analysis with a VARIMAX rotation generated a 3-factor solution as specified (a same three-factor structure was generated from a PROMAX rotation) (see Figure 1 for the scree plot of Eigenvalues). The three factors were named as (1) separation/distinction vs. connection/sharing (Cronbach alpha=.75), (2) private self orientation vs. collective self orientation (Cronbach alpha=.67), and (3) independence/autonomy vs. interdependence/mutual reliance (Cronbach alpha= .65). The correlations between factor 1 and factor 2 is .44, between factor 1 and factor 3 is 0.38, and between factor 2 and factor 3 is .19. The three-factor pattern is clean and interpretable. All the factor loadings are above .45 (the purified scale and related loadings are shown in Table 1).

TABLE 1:
CONNECTEDNESS-SEPARATENESS SCALE

Scale Items	Factor Loadings		
	<u>Factor 1</u>	<u>Factor 2</u>	<u>Factor 3</u>
<u>Separation/Distinction Vs. Connection/Sharing:</u>			
2. When I describe myself, I also mention those who are important to me as they were part of myself.	.64	.09	.07
21. I like to share my favorite things with my family members or best friends.	.64	.22	.24
5. I consider those people who are closely related to me as a part of myself.	.64	.06	.13
17. Among my most intimate family members and close friends, we share our personal experience.	.63	.14	.19
8. I find that I easily experience other people's feelings as my own feelings.	.60	.27	.07
16. A good relationship consists of people who enjoy being together.	.52	.13	.02
33. I make most of my personal decisions jointly with other family members or close friends.	.49	.38	.16
<u>Private Vs. Collective Self Orientation</u>			
34. A mature person should use important social norm as a guide to his/her behavior.	.02	.80	.07
26. I believe that an individual should follow socially acceptable standards.	.07	.77	.11
35. My personal achievement resides in my contributions to the society.	.28	.60	.20
30. My personal achievement would not be possible without a supportive relationship with other people.	.38	.47	.10
29. How I define myself is influenced by my relationship with my reference groups.	.25	.45	.10
<u>Independence Vs. Interdependence</u>			
23. A person should be independent from others, even if with his or her intimate friends or family members.	.11	.003	.70
18. Keeping my autonomy and independence is most important in any relationships.	.04	.08	.65
12. I like to solve my personal problems by myself, even if someone else could help me.	.21	.08	.62
14. I prefer to make my own decisions in most situations.	.32	.02	.58
10. I often feel uncomfortable when I am tied to a close relationship.	.09	.10	.56

Factor Eigenvalues: Factor 1 = 4.07; Factor 2 = 2.01; Factor 3 = 1.33

Figure 1
Scree Plot of Eigenvalues

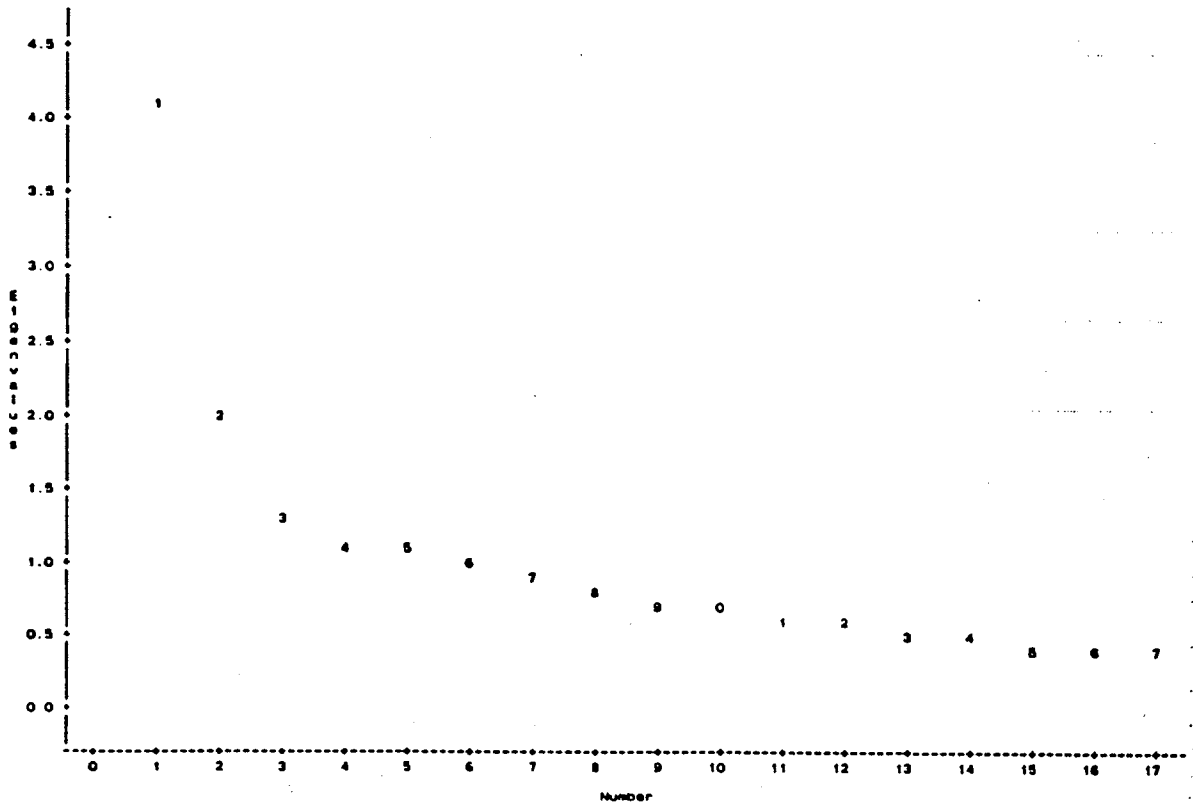


Table 2:
Correlations between C-S scale and MES, Social Desirability, & Collectivism scale

C-S Scale	MES		DESIRABILITY		COLLECTIVISM	
	r	p	r	p	r	p
	.24	<.0004	.12	>.05	.49	<.0001

Table 3:
Correlations between each factor of the C-S scale and MES, Social Desirability, & Collectivism scale

C-S Scale	MES		Desirability		Collectivism	
	r	p	r	p	r	p
Factor 1	.20	<.0035	.13	>.05	.44	<.0001
Factor 2	.29	<.0001	.12	>.05	.04	>.05
Factor 3	.04	>.05	.05	>.05	.59	<.0001

Scale Validation:

To assess the convergent and discriminant validity of C-S scale, correlations of the C-S scale and three other measures were examined (see Table 2). The correlation between the C-S scale and a similar measure, MES (Cronbach alpha=.78) was statistically significant ($r=.24$, $n=210$, $p<.0004$). The correlation between the C-S scale and another measure of a theoretically related construct -- the “self-reliance vs. interdependence” factor of the Collectivism scale (Cronbach alpha=.80), was also statistically significant ($r=.49$, $n=210$, $p<.0001$). These correlations were theoretically expected and the convergent validity is established. In contrast, the correlation between the C-S scale and the Social Desirability scale (Cronbach alpha=.74) was insignificant ($r=.12$, $n=210$, $p>.05$). The low correlation suggests that the discriminant validity is present.

To further assess the psychometric properties of the scale, correlations of each factor of the C-S scale and the three measures were also compared (see Table 3). The results showed that factor one (separation/distinction vs. connection/sharing) was significantly correlated with the Maintenance of Emotion separation ($r=.20$, $p<.0035$), as expected. Factor one was also significantly correlated with the “self-reliance vs. interdependence” factor of the Collectivism scale ($r=.44$, $p<.0001$). This may suggest that individuals who perceive themselves as connected with others also tend to be interdependent with others. Factor two (private-self orientation vs. collective-self orientation) was also found to be significantly correlated with MES ($r=.29$, $p<.0001$). Factor three (independence/autonomy vs. interdependence/mutual reliance) was significantly correlated with “self-reliance vs. independence” factor of the collectivism scale ($r=.45$, $p<.0001$), as predicted. These results showed the additional convergent

validity of the C-S scale. None of the three factors significantly correlates with the Social Desirability scale. Again, the discriminant validity is demonstrated.

A t-test was conducted to compare sex differences in terms of connectedness scores. The results showed that female subjects scored significantly higher (mean= 6.13) on the C-S scale than male subjects (mean= 5.58) ($t=4.15$, $df=208$, $p<.0001$). The expected sex difference in C-S self-schema was, in general, confirmed by the data, which provided the predictive validity of the scale.

As an additional attempt to validate the C-S scale in another culture, the Chinese version of the C-S scale was also administered in the People Republic of China. The subjects were 86 Chinese college students with the demographic background comparable to that of the U.S. subjects. Results showed a similar but not an identical factor pattern. Three items (item 17, 21 and 33) originally loaded in the “separation vs. connection” factor were “shifted” to the “private self vs. collective self orientation” factor. The difference is that in the U.S. sample the “separation vs. connection” factor explained more variances than the other two factors whereas in the Chinese sample the “private self vs. collective self orientation” explained more variances than the other two factors. In general, the three dimensions of the scale were the same between the two country samples. Since the Chinese sample in this study was used to compare the overall structure of C-S scale across-cultures rather than to develop the scale, the original 3-factor solution based on the U.S. sample, which included both American and international students, was adopted in the second study.

Study Two: An Application of the C-S Construct to Cross-Cultural Consumer Research

The major purpose of the second study was to demonstrate the potential utility of the C-S construct in cross-cultural consumer research as well as in international market segmentation. It was hypothesized that consumers' connectedness-separateness self schema would moderate their attitudinal responses to advertising appeals. In addition to a confirmatory factor analysis of the overall model of the C-S structure, an experimental method was used in this study, with dependent measures of attitude-toward-ad (A_{ad}) and attitude-toward-brand (A_b). These scales were adapted from Holbrook and Batra (1987).

Procedures

Basic procedures of this study followed the first study, and the refined (17- item) C-S scale was used in this second study, which was composed of two phases. In the first phase, subjects were asked to complete the C-S questionnaire. The second phase occurred two to three weeks later. In this phase experimental materials were administered by the same bilingual researcher. While the same subjects were used in both phases, no information about the relationship between the two phases of the study was given to the subjects. Demand artifacts were checked by asking subjects to guess the hypotheses of the study during the end of the second phase.

Subjects

A new pool of subjects was drawn from two convenient samples of college students from the United States and from the People's Republic of China. Respondents in each phase were identified and matched by their student ID numbers. Because the main purpose of the first phase was to obtain each subject's C-S scale score, which would be

used as a blocking variable in the second phase, those respondents that can not be identified by ID numbers or can not be matched in two phases were discarded. As a result, the final sample size used in data analysis was smaller than actual numbers of participants. The Chinese sample was composed of 105 (out of 126) college students (male=55, female=50) attending business classes at Shanghai International Business University, People's Republic of China. The U.S. sample was initially composed of 138 (out of 174) college students attending marketing or management classes from a mid-western university in the United States. Conceding that the U. S. sample is supposed to represent American subjects, international students were identified and then removed from the data analysis. This resulted in 96 subjects in the final U.S. sample, with 55 males and 41 females. The two groups were similar in terms of age (average between 19 and 24), major (mainly in business, economics, and other social sciences) and marital status (most were unmarried).

Researchers (Berry 1976; Eckensberger 1972) have argued that if the aim of a cross-cultural research is to determine the influence of "cultural conditions" on behavior in time, the samples need represent the single "cultural variables" in question in various degrees. The Chinese culture and the U.S. culture were selected in this research because China not only has one fifth of the world population, its cultural values also represent those of most Asian cultures which are dominated by a common Confucian philosophy. The United States, on the other hand, represents a melting pot of predominantly Western culture. As such, at the cultural level, China and the United States which were selected for this research is appropriate regarding the connectedness-separateness construct as the variable of interest.

Similarly, on the individual level, either representative sample or non-representative subject samples may be appropriate depending on the particular research objective (Berry 1980). In particular, if the object is to assert universal generalizations, the representativeness of the sample is appropriate. On the other hand, "if individuals are being selected because they represent some variable of interest, then their representativeness of some population is not important" (Berry 1980, p.15). Moreover, as noted by Brown and Sechrest (1980), the researcher who is interested in making causal statements will place internal validity first on a list of priorities, and research populations selected so as to have the best groups on which to test the hypotheses. Therefore, for the theory-testing purpose of this study, the homogeneous sample of college students is reasonable to assess the internal validity of experimental treatments (Calder, Phillips, and Tybout 1981; Dipboye and Flanagan 1979).

Experiment Stimuli

In the experimental study, the stimulus product was a watch with a neutral brand name-- ALPS, which symbolizes a European brand (i.e., Switzerland). Researchers have demonstrated that a same product may serve different functions in terms of purposes for purchasing across cultures (Green and Alden 1988; Woods, Cheron and Kim 1985). Therefore, the functional equivalence of experimental stimuli was also considered in this study. From a pretest with two products, a watch and a pen, the watch was selected in the final study as the stimulus product because it serves similar functions in the U.S. and in China. To control the possible cross-cultural differences in perceptions of the importance of the product attributes, the advertisements minimized the information of product attributes. Instead, only the manipulation themes (separateness appeal vs. connectedness

appeal) were emphasized in two ads. For both U.S. and Chinese subjects, the product is "made-in" a third "foreign country" (Switzerland) to help ensure that similar "country-of-origin" effect in both country. The perceived affordability, usage situation, country-of-origin effect and involvement level were measured as confounding checks to examine the cross-cultural functional equivalence of the product.

Manipulation

Subjects in each country were randomly assigned to one of the treatment conditions by seeing either the "separateness appeal" watch ad or the "connectedness appeal" watch ad. The picture and the brand name of the two ads were identical and two messages were written in a way to maintain maximum similarities in lengths, wordings and formats, while varying the advertising themes. The "separateness theme" emphasizes "uniqueness," "independent identity," "autonomy," and "self-other differences," etc. The "connectedness theme," in contrast, highlights "togetherness," "interdependence," "sharing" and "caring" for others, and "communal relationships," etc. (See Appendix).

Findings from Study Two

A Cross-Cultural Analysis of the C-S Scale Structure

One of the concerns for cross-cultural comparisons is the metric equivalence. Metric equivalence exists when the psychometric properties of two (or more) sets of data from two (or more) cultural groups exhibit essentially the same coherence or structure (Berry 1980). It may be demonstrated by common factor structures and test loading constancy from culture to culture (Buss and Royce 1975; Irvine and Carroll). Unlike functional and conceptual equivalence, metric equivalence can usually be established only after the data have been collected and analyzed (Berry 1980).

In the present study, data analysis procedures followed a two-stage approach to analysis (Douglas and Craig 1983). Data were first analyzed within each country and then was analyzed with the pooled sample. Thus, the comparability of findings across different countries and the significance of observed differences and similarities could be examined. An initial analysis showed that the correlation of the means of 17 items of the C-S scale across two countries was .58 ($n=17$, $p<.0137$), which provided evidence of the cross-cultural reliability of the data and the adequacy of the translation (Douglas and Craig 1983)

A confirmatory factor analysis (CFA) was conducted for the U.S. sample ($N=96$) and the Chinese sample ($N=105$) separately as well as with two samples pooled together. A visual inspection of the Q-plot of standardized residuals showed that the normality of the data was adequate for both the U.S. sample, the Chinese sample, and the pooled sample. The results of CFA for each sample are summarized in Table 4, Table 5, Table 6, Figure 2, Figure 3 and Figure 4.

The Chi-square test for the Chinese sample had the value of 134.47 with 116 degrees of freedom ($p>.05$). This statistic showed support for believing that the differences of the predicted and actual matrices were nonsignificant, indicative of acceptable application of this measure. Because Chi-square test for CFA has often been criticized to be too sensitive to sample size differences, researchers typically tend to discount the Chi-square test and resort to other methods for evaluating the fit of the mode to the data (Bearden, Sharma, and Teel 1982; Hair et al., 1992). As such, the goodness of fit indices were used to complement this measure. The GFI value of .877 and the AGFI value of .838, suggested the adequacy of the overall model fit. The low value

(.064) of the root mean square residual (RMSR) is also acceptable. In addition, t-tests were significant for all factor loadings at $\alpha=.01$. A similar factor pattern and factor loadings were found for the U.S. sample, although the results were less desirable than those found in the Chinese sample. In particular, the Chi-square value of 164.88 (df=116) was significant ($p<.002$), but GFI value of 0.834 and the RMSR value of 0.068 suggested that the model was marginally acceptable. All factor loadings were also significant at .01 level. For the pooled sample, the Chi-square value of 168.84 with 116 degrees of freedom was significant ($p<.001$). However, the relatively high values of GFI (.912) and AGFI (.883), and the low RMSR value of 0.052 indicated an adequate fit of the model to the data. The t-values, again, indicated that all the estimated loadings were significant at an alpha of .01. These results, in general, suggested that the specified 3-factor structure of the C-S scale was supported.

Table 4
Confirmatory Factor Analysis Results On the Chinese Sample

Lambda	Value	t	p
11	.61	6.38	.01
21	.57	5.89	.01
31	.79	9.05	.01
41	.42	4.18	.01
51	.69	7.54	.01
61	.61	6.37	.01
71	.65	6.94	.01
82	.80	9.24	.01
92	.65	6.93	.01
10 2	.55	5.65	.01
11 2	.73	8.19	.01
12 2	.78	8.93	.01
13 3	.71	7.45	.01
14 3	.67	6.94	.01
15 3	.65	6.68	.01
16 3	.59	6.05	.01
17 3	.54	5.38	.01

Chi-Square = 134.47 (df = 116, p = .06)

GFI = .877

RMSR = .064

$\phi_{21} = .66$, $\phi_{32} = .59$, $\phi_{31} = .55$

Figure 2
C-S Construct: Three Dimensions (P.R.C. Sample)

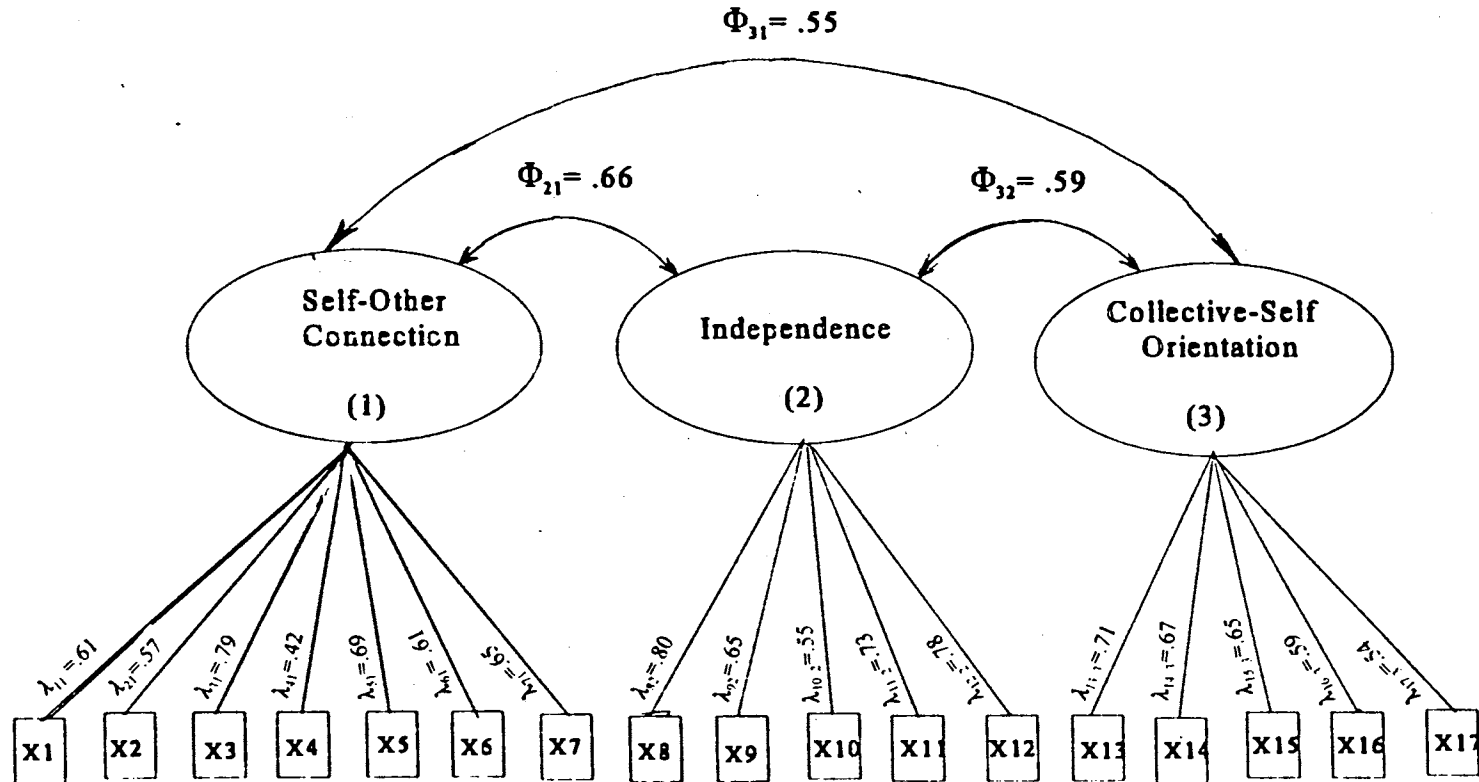


Table 5
Confirmatory Factor Analysis Results On the U.S.A. Sample

Lambda	Value	t	p
11	.73	7.98	.01
21	.69	7.44	.01
31	.67	7.12	.01
41	.43	4.17	.01
51	.60	6.23	.01
61	.50	5.03	.01
71	.79	9.03	.01
82	.86	10.43	.01
92	.57	5.98	.01
10 2	.73	7.98	.01
11 2	.72	7.96	.01
12 2	.70	7.62	.01
13 3	.52	4.83	.01
14 3	.62	5.96	.01
15 3	.61	5.86	.01
16 3	.52	4.86	.01
17 3	.71	7.06	.01

Chi-Square = 164 (df = 116, p = .002)

GFI = .834

RMSR = .068

$\phi_{21} = .96$, $\phi_{32} = .71$, $\phi_{31} = .62$

Figure 3
C-S Structure: Three Dimensions (U.S. Sample)

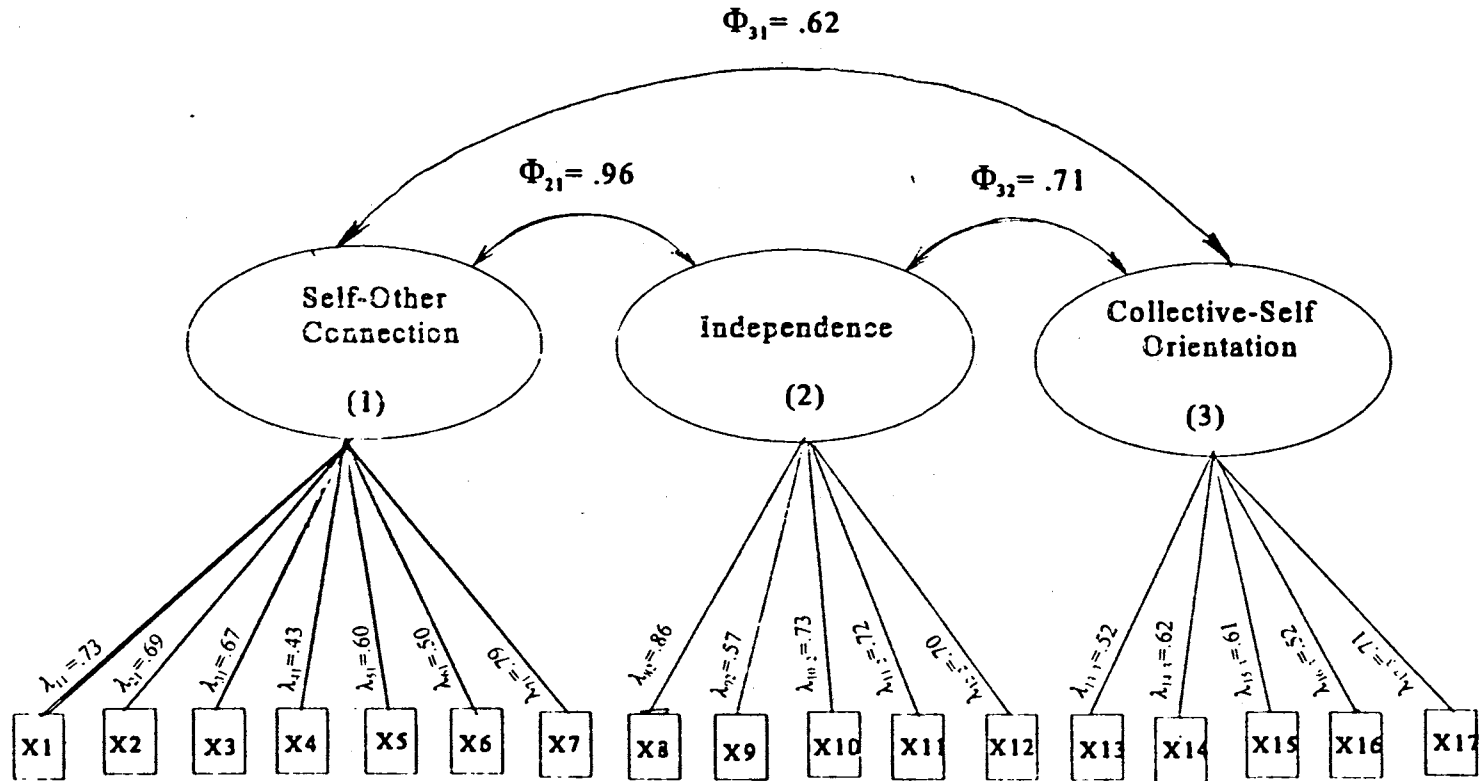


Table 6
Confirmatory Factor Analysis Results On the Combined Sample

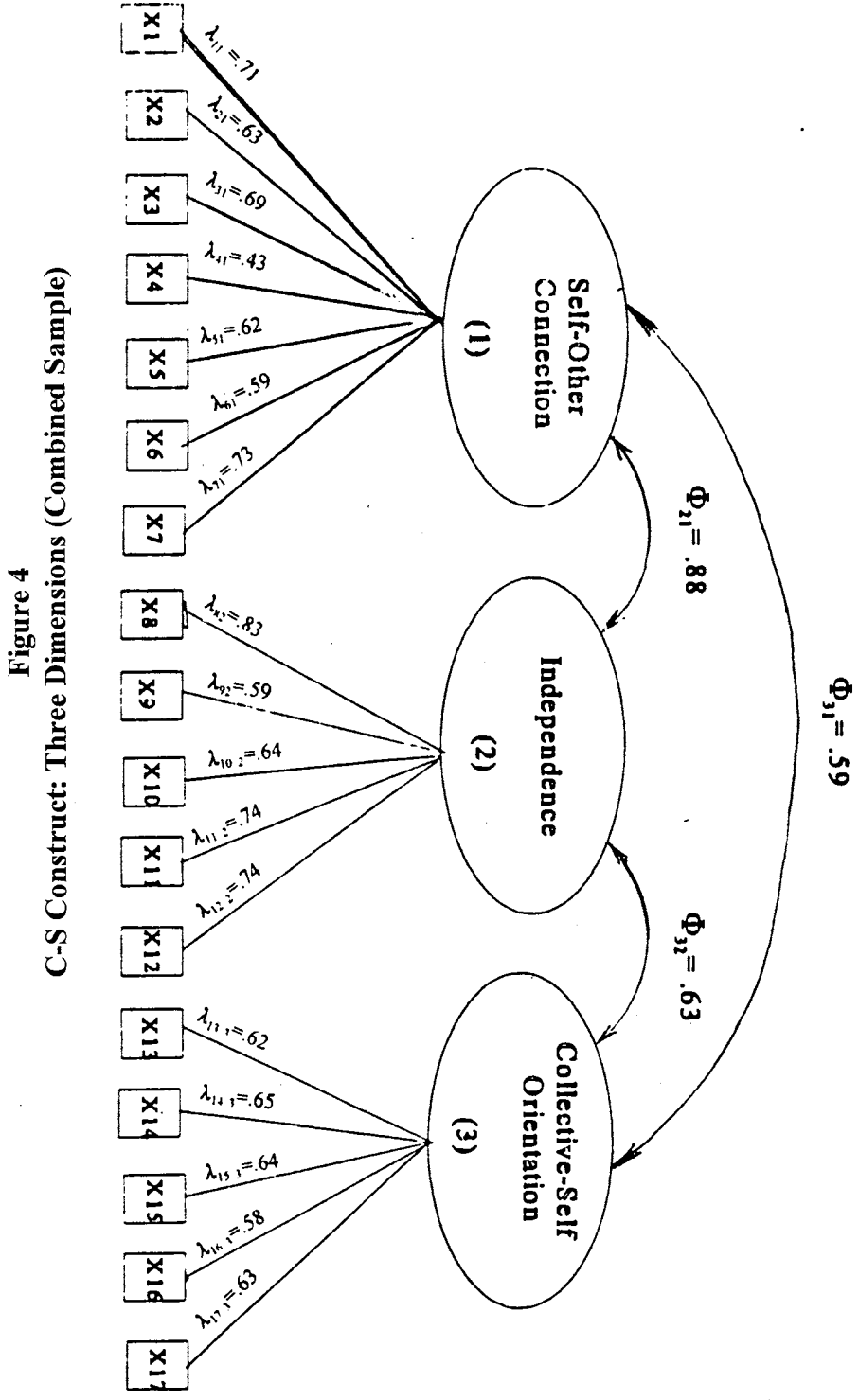
Lambda	Value	t	p
11	.71	10.88	.01
21	.63	9.44	.01
31	.69	10.74	.01
41	.43	6.07	.01
51	.62	9.28	.01
61	.59	8.65	.01
71	.73	11.39	.01
82	.83	13.82	.01
92	.59	8.76	.01
10 2	.64	9.67	.01
11 2	.74	11.65	.01
12 2	.74	11.79	.01
13 3	.62	8.65	.01
14 3	.65	9.25	.01
15 3	.64	9.08	.01
16 3	.58	8.06	.01
17 3	.63	8.82	.01

Chi-Square = 168.84 (df = 116, p = .001)

GFI = .912

RMSR = .052

$\phi_{21} = .88$, $\phi_{32} = .63$, $\phi_{31} = .59$



Cultural and Gender Differences in C-S Self-Schema

A two-way ANOVA (nation by sex) was conducted to test overall hypotheses that “Chinese subjects will score higher on connectedness than American subjects” (H1) and that “female subjects will score higher on connectedness than male subjects” (H5). Both hypotheses were supported by the main effects of the nation ($F=4.14$, $df=1$, 197, $p<.04$) and sex ($F=6.83$, $df=1$, 197, $p<.01$). (See Table 7 & Table 8). In addition, the magnitude of effect was measured by the Standard Omega Square (ω^2) (Keppel 1989). Since subject numbers were not equal across cells, the harmonic mean (a weighted average of n across cells) was used to calculate the effect size. The ω^2 was .02 for the nation and .03 for the sex. Both effect sizes are to be considered “small” (Cohen 1977).

Table 7
ANOVA Results on Connectedness Scores (Test of H1 & H5)

Source	df	SS	F	p	ω^2
Nation	1	6.22	4.14	.04	.02
Sex	1	10.27	6.83	.01	.03
Nation*Sex	1	1.63	1.09	.29	NA
Error	197	296.10			

Table 8
Cell Means and Cell Size of Nation by Sex Analysis

	U.S.A.	P.R.C.	Marginal
Male	5.08 (n=55)	5.62 (n=55)	5.35
Female	5.72 (n=41)	5.89 (n=50)	5.80
Marginal	5.35	5.75	

A MANOVA was conducted to test H2, H3, and H4 simultaneously for the three dimensions of the C-S scale (see Table 9). The main effects of Nation ($F=5.27$, $p<.002$, in terms of Wilk's Lambda) and of Sex ($F=4.05$, $p<.01$) were both significant. At the univariate level, ANOVA results showed that both nations and sexes were significantly different on the first dimension -- separation/distinction vs. connection/sharing (see Table 10 and Table 11). Thus, H2 (Chinese subjects will value a self-other connection more than American subjects) was supported, although the ω^2 was small (.02 for both effects). H4 (Chinese subjects will value group goals and collective achievements more than American subjects) was also supported by the significant difference between nations on the third dimension (private self orientation vs. collective self-orientation), with a ω^2 of .04. There was no significant difference between sexes on this dimension (see Table 14 and Table 15). The reverse pattern was shown in the second dimension (independence/ autonomy vs. interdependence/ mutual reliance) in that there was no significant difference between nations but a significant difference between sexes ($\omega^2=.05$) (see Table 12 and Table 13). Thus, H3 (Chinese subjects will emphasize interdependence and mutual reliance more than American subjects) was not supported (this will be discussed in the discussion section). The results, in general, suggested that the C-S schema does differentiate individuals across cultures and genders.

Table 9
MANOVA Results on Three Dimensions of the C-S Scale (Test of H2, H3& H4)

Source	df	F	p (Wilk's Lamba)
Nation	3, 195	5.27	.002
Sex	3, 195	4.05	.001
Nation*Sex	3, 195	0.79	.49

Table 10
ANOVA Results on Dimension 1 (Connection vs. Separation)--Test of H2

Source	df	SS	F	p
Nation	1	8.88	4.61	.03
Sex	1	8.73	4.53	.03
Nation*Sex	1	.36	0.19	.66
Error	197	379.79		

Table 11
Cell Means and Cell Size of Nation by Sex Analysis (Dimension 1)

	U.S.A	P.R.C.	Marginal
Male	5.60 (n=55)	6.11 (n=55)	5.84
Female	6.11 (n=41)	6.44 (n=50)	6.25
Marginal	5.82	6.27	

Table 12
ANOVA Results on Dimension 2 (Independence vs. Interdependence)--Test of H3

Source	df	SS	F	p
Nation	1	.32	0.10	.75
Sex	1	34.66	11.05	.001
Nation*Sex	1	5.67	1.81	.18
Error	197	617.90		

Table 13
Cell Means and Cell Size of Nation by Sex Analysis (Dimension 2)

	U.S.A	P.R.C.	Marginal
Male	4.28 (n=55)	4.70 (n=55)	4.49
Female	5.45 (n=41)	5.20 (n=50)	5.31
Marginal	4.77	4.93	

Table 14
ANOVA Results on Dimension 3
(Private Self orientation vs. Collective Self Orientation) --Test of H4

Source	df	SS	F	p
Nation	1	14.01	9.58	.002
Sex	1	0.76	0.52	.47
Nation*Sex	1	1.25	0.86	.36
Error	197	288.10		

Table 15
Cell Means and Cell Size of Nation by Sex Analysis (Dimension 3)

	U.S.A	P.R.C.	Marginal
Male	5.16 (n=55)	5.85 (n=55)	5.49
Female	5.44 (n=41)	5.81 (n=50)	5.63
Marginal	5.28	5.84	

Results from the Experiment

In the experimental design, subjects were randomly assigned to either the “connectedness ad” condition (the ad shows “a connectedness theme”) or the “separateness ad” condition (the ad shows “a separateness theme”). A subject’s scores in C-S scale and his or her nationality and gender were treated as blocking variables.

Manipulation Checks

A 9-point, 4-item scale was developed to ask subjects to identify the advertising theme as “connected” or “separated” based on manipulation themes (see the Appendix). Two items were “connectedness theme” questions (i.e., the ad emphasizes the theme of "sharing" and "being togetherness," and the ad emphasizes the importance of intimate relationships and mutual reliance). The other two items were “separateness theme” questions (i.e., the ad promotes the independent and unique lifestyle, and the ad highlights the "self-other" differences and the individual self-identity). Subjects rated their opinions from “strongly disagree” to “strongly agree.” The scoring for the “separateness theme” items was reversed. Thus, a higher score indicates that the subject considers the ad showing “connectedness theme.” It is expected, then, subjects in the “connectedness ad” condition should score higher than those in the “separateness ad” condition. The Cronbach alpha for the manipulation scale was .90. The results showed that subjects in the “connectedness” ad condition (mean=6.33) scored significantly higher than those in “separateness” ad condition (mean=3.32) ($t=2.58$, $df=199$, $p<.01$). The manipulation was successful in the experiment.

MANOVA Results

To investigate the moderating effect of the C-S schema on consumer attitudes

toward the ad and brand, H6, H7, and H8 were tested by MANOVAs with dependent measures of attitude- toward-the-ad (Cronbach alpha = .79) and attitude-toward-the-brand (Cronbach alpha=.76). The partial correlation between A_{ad} and A_b was .84.

Subjects were split into “low” and “high” groups based C-S scale scores (median split) and the groups were then treated as the blocking variable in the experimental design. Since MANOVA showed a significant interaction effect ($p < .0001$, in terms of Wilk’s Lambda) between groups and the assigned conditions of ad version (see Table 16), ANOVA was conducted for A_{ad} (see Table 17, Table 18 and Figure 5) and A_b (see Table 19, Table 20 and Figure 6) separately. The same interaction (group-by-ad condition) effects were found for A_{ad} ($F=52.94$, $df=1,197$, $p < .0001$) and for A_b ($F=28.85$, $df=1,197$, $p < .0001$). The ω^2 was .18 for A_{ad} and .13 for A_b . No main effects were significant. Thus, H6a (Subjects scoring higher on connectedness will prefer an ad with a “connectedness” theme more than subjects scoring lower on connectedness. In contrast, subjects scoring lower on connectedness will prefer an ad with a “separateness” theme more than subjects scoring higher on connectedness) and H6b (Subjects scoring higher on connectedness will prefer a brand in the “connected appeal” ad more than subjects scoring lower on connectedness. In contrast, subjects scoring lower on connectedness will prefer a brand in the “separated appeal” ad more than subjects scoring higher on connectedness) were supported by the data.

Table 16
MANOVA Test of H6a and H6b (Ad*Group)

Sources	df	F	p (Wilk's Lamba)
Ad Version	2, 196	.42	.66
Group	2, 196	.25	.78
Ad * Group	2, 196	26.35	.0001

Table 17
Ad-by-Group ANOVA Results: A_{ad} (Test of H6a)

Sources	df	SS	F	p
Ad Version	1	.01	.01	.94
Group	1	.79	.49	.48
Ad * Group	1	85.89	52.94	.0001
Error	197	319.58		

Table 18
Cell Means and Cell Size of Ad*Group Analysis -- A_{ad}

	Low-Group	High-Group	Marginal
Ad=C	(1) 4.51 (n=48)	(2) 5.94 (n=55)	5.27
Ad=S	(3) 5.83 (n=48)	(4) 4.65 (n=50)	5.23
Marginal	5.17	5.33	

Figure 5
Test of H6a

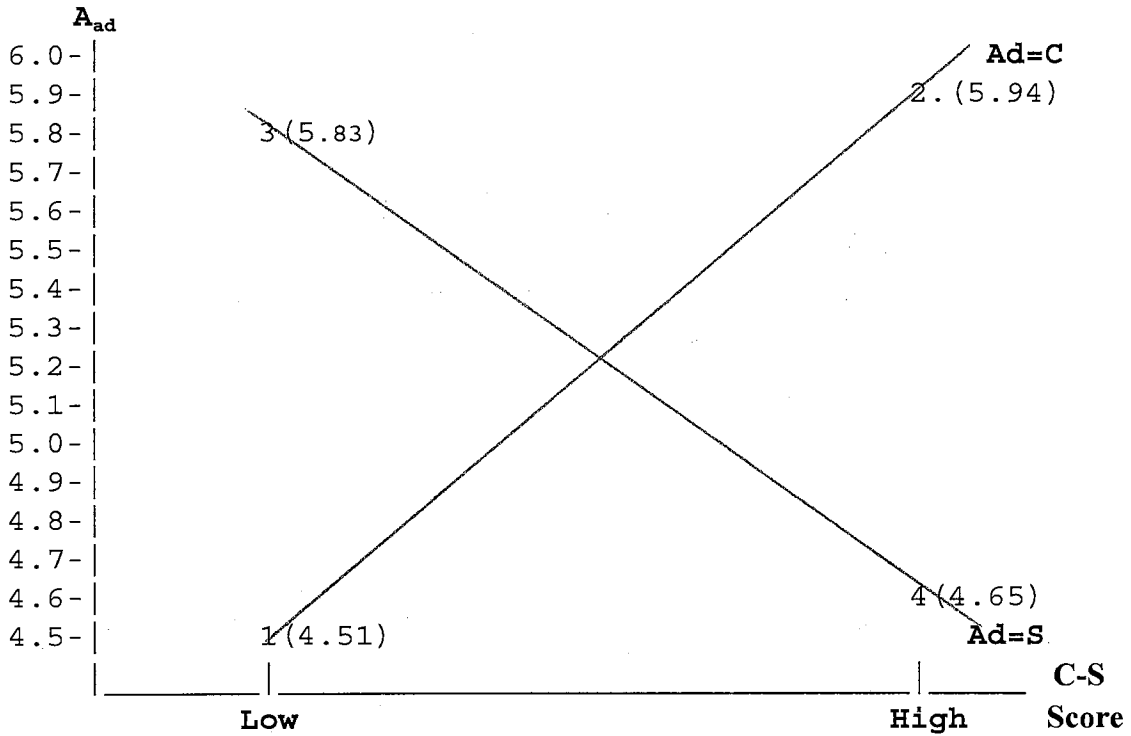


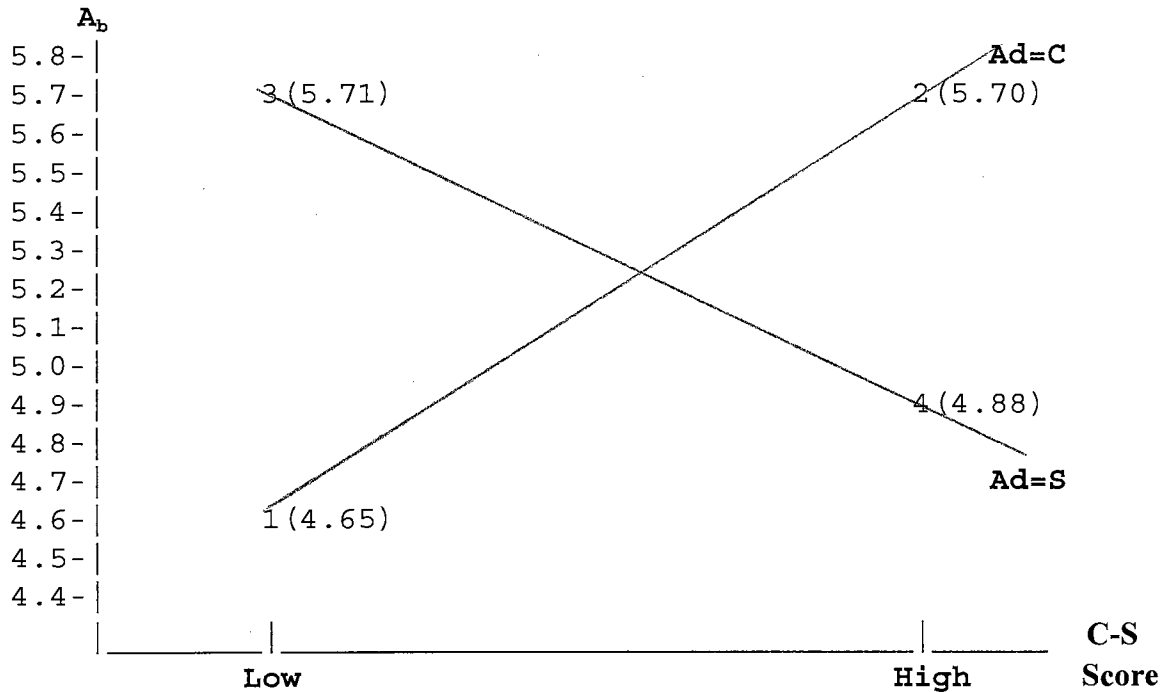
Table 19:
Ad-by-Group ANOVA Results: A_b (Test of H6b)

Sources	df	SS	F	p
Ad Version	1	.68	.44	.51
Group	1	.58	.38	.54
Ad * Group	1	44.37	28.85	.0001
Error	197	302.97		

Table 20:
Cell Means and Cell Size of Ad*Group Analysis -- A_b

	Low-Group	High-Group	Marginal
Ad=C	(1) 4.65 (n=48)	(2) 5.70 (n=55)	5.20
Ad=S	(3) 5.71 (n=48)	(4) 4.88 (n=50)	5.28
Marginal	5.16	5.32	

Figure 6:
Test of H6b



Regarding cross-cultural differences in responses to advertising themes, the MANOVA showed a marginally significant interaction (nation by ad version) effect ($F=2.75$, $p<.07$, in terms of Wilk's Lambda) (see Table 21). ANOVA results, however, indicated a significant ad-by-nation interaction effect for both A_{ad} ($F=4.94$, $p<.03$, $\omega^2=0.02$) (see Table 22, Table 23, Table 24 and Figure 7) and A_b ($F=4.83$, $p<.03$, $\omega^2=0.02$) (see Table 25, Table 26, Table 27 and Figure 8). Duncan test showed that, for both A_{ad} and A_b , U.S. subjects rated significantly higher than Chinese subjects in the "separateness ad" condition but no significant differences in the "connectedness ad" condition. This might partly explain the small effect size. Therefore, H7a (Chinese subjects will prefer an ad with a "connectedness" theme more than American subjects. In contrast, American subjects will prefer an ad with a "separateness" theme more than Chinese subjects) and H7b (Chinese subjects will prefer a brand in the "connectedness appeal" ad more than American subjects. In contrast, American subjects will prefer a brand in the "separateness appeal" ad more than Chinese subjects) were both partially supported in that the predictions were confirmed only in the "separateness" ad condition.

Similarly, H8a and H8b, which stated that female subjects will prefer an ad/brand with a "connectedness" theme whereas male subjects will prefer an ad/brand with a "separateness" theme, were tested with a MANOVA, which showed a significant ad-by-sex interaction effect ($F=5.64$, $p<.004$, in terms of Wilk's Lambda) (see Table 22). At the univariate level, ANOVA results indicated significant interaction effects for A_{ad} ($F=10.75$, $p<.001$, $\omega^2=.04$) (see Table 22, Table 23, Table 28 and Figure 9) and for A_b ($F=9.01$, $p<.003$, $\omega^2=.03$) (see Table 25, Table 26, Table 29 and Figure 10). Thus, H8a and H8b were supported when the two country samples sample were pooled together.

Table 21: MANOVA (Ad*Nation*Sex) Test of H7 and H8

Sources	df	F	p (Wilk's Lamba)
Ad Version	2, 192	.31	.73
Nation	2, 192	2.85	.06
Sex	2, 192	0.26	.77
Ad * Nation	2, 192	2.75	.07
Ad* Sex	2, 192	5.64	.004
Nation * Sex	2, 192	0.86	.43
Ad*Nation*Sex	2, 192	0.66	.52

Table 22: ANOVA (Ad*Nation*Sex) Test of H7a & H8a (A_{ad})

Source	df	SS	F	p
Ad Version	1	0.35	0.19	.67
Nation	1	2.99	1.57	.21
Sex	1	0.20	0.10	.75
Ad*Nation	1	9.40	4.94	.03
Ad*Sex	1	20.44	10.75	.001
Nation*Sex	1	2.48	1.41	.25
Ad*Nation*Sex	1	2.50	1.32	.25
Error	193	366.88		

**Table 23
Cell Means in a Three-Way Analysis (H7a & H8a: Attitude-Toward-Ad)**

	U.S.A.		P.R.C.	
	Male	Female	Male	Female
Ad=C	(1) 4.87 (n=27)	(2) 5.78 (n=19)	(3) 5.06 (n=33)	(4) 5.73 (n=24)
Ad=S	(5) 5.64 (n=28)	(6) 5.11 (n=22)	(7) 5.41 (n=22)	(8) 4.38 (n=26)

Table 24
Cell Means and Cell Size of Ad-by-Nation Analysis (H7a: Attitude-Toward-Ad)

	U.S.A	P.R.C.	Marginal
Ad=C	(1) 5.25 (n=46)	(3) 5.34 (n=57)	5.32
Ad=S	(2) 5.40 (n=50)	(4) 4.85 (n=48)	5.14
Marginal	5.32	5.14	

Figure 7:
Test of H7a

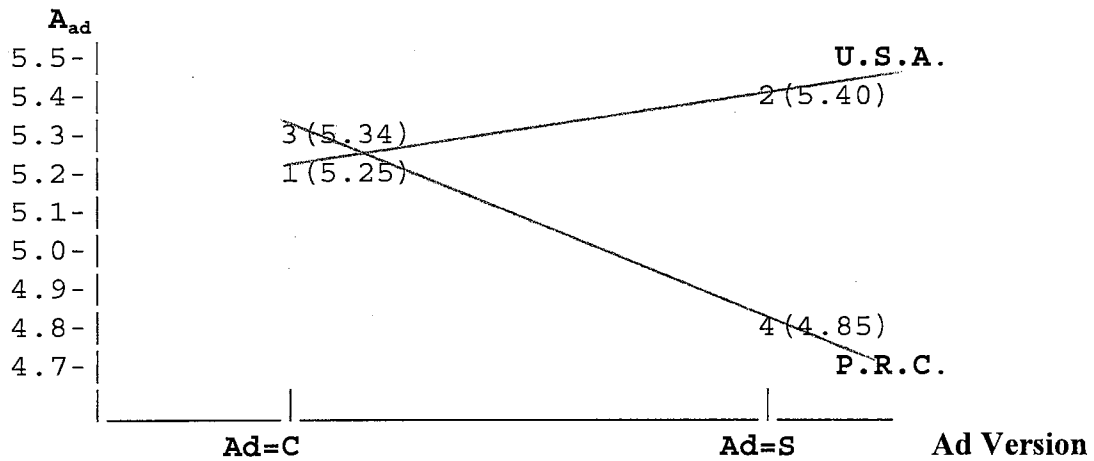


Table 25
ANOVA (Ad*Nation*Sex) Test of H7b and H8b (A_b)

Source	df	SS	F	p
Ad Version	1	0.01	0.01	.92
Nation	1	8.33	5.14	.03
Sex	1	0.71	0.44	.51
Ad*Nation	1	7.83	4.83	.03
Ad*Sex	1	14.62	9.01	.003
Nation*Sex	1	0.35	0.22	.64
Ad*Nation*Sex	1	1.36	0.84	.36
Error	193	312.98		

Table 26
Cell Means in a Three-Way Analysis (H7b and H8b: Attitude-Toward-brand)

	U.S.A.		P.R.C.	
	Male	Female	Male	Female
Ad=C	(1) 4.98 (n=27)	(2) 5.57 (n=19)	(3) 4.89 (n=33)	(4) 5.64 (n=24)
Ad=S	(5) 5.78 (n=28)	(6) 5.60 (n=22)	(7) 5.22 (n=22)	(8) 4.54 (n=26)

Table 27
Cell Means and Cell Size of Ad-by-Nation Analysis (H7b: Attitude-Toward-Brand)

	U.S.A.	P.R.C.	Marginal
Ad=C	(1) 5.22 (n=46)	(3) 5.21 (n=57)	5.22
Ad=S	(2) 5.70 (n=50)	(4) 4.85 (n=48)	5.29
Marginal	5.46	5.05	

Figure 8:
Test of H7b

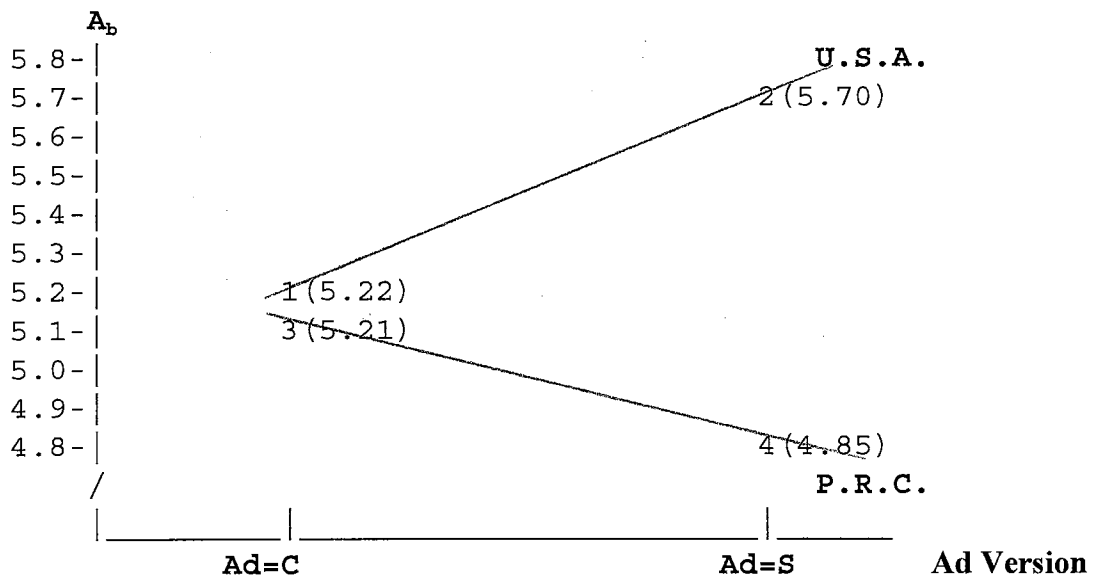


Table 28
Cell Means and Cell Size of Ad by Sex Analysis (H8a: Attitude-Toward-Ad)

	Male	Female	Marginal
Ad=C	(1) 4.97 (n=60)	(3) 5.75 (n=43)	5.30
Ad=S	(2) 5.54 (n=50)	(4) 4.71 (n=48)	5.13
Marginal	5.23	5.20	

Figure 9
Test of H8a

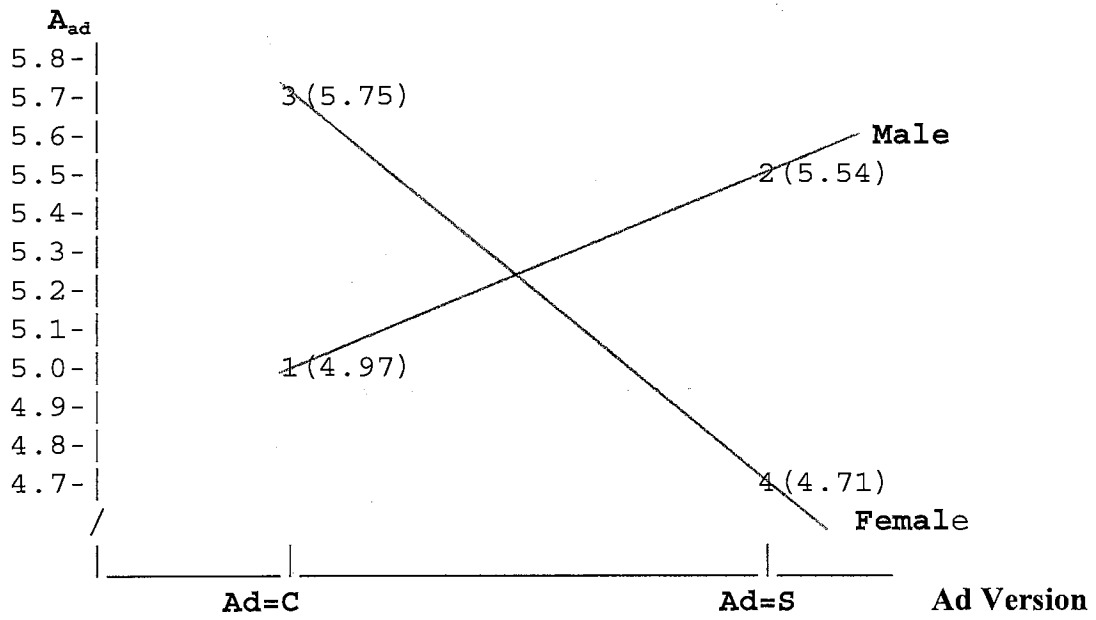
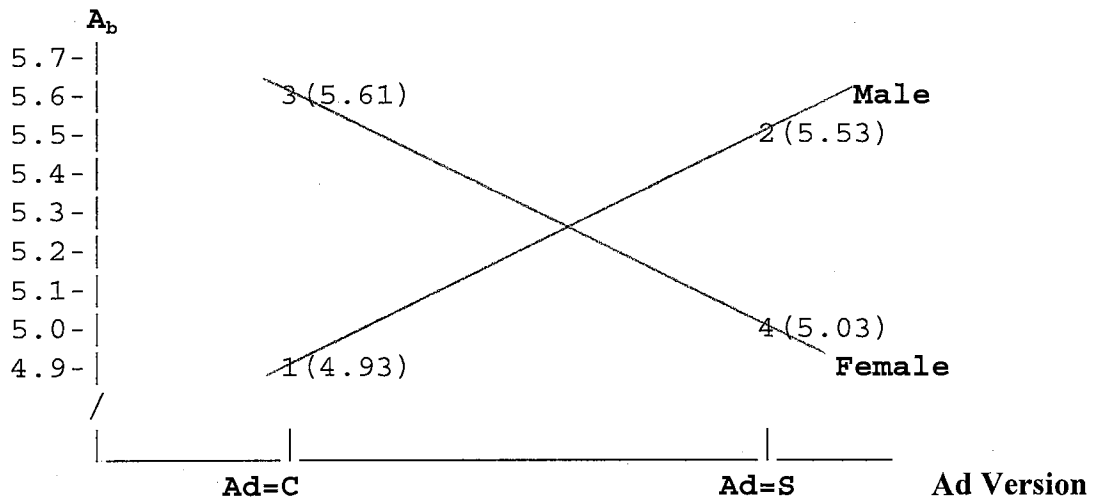


Table 29
Cell Means and Cell Size of Ad by Sex Analysis (H8b: Attitude-Toward-Brand)

	Male	Female	Marginal
Ad=C	(1) 4.93 (n=60)	(3) 5.61 (n=43)	5.21
Ad=S	(2) 5.53 (n=50)	(4) 5.03 (n=48)	5.29
Marginal	5.20	5.30	

Figure 10
Test of H8b



ANCOVA Results

In order to investigate whether the cultural differences and sex differences can be explained by individual differences in C-S self-schema, an analysis of covariance (ANCOVA) was conducted. Conceding that the effect of C-S schema on attitudes toward the ad and the brand depends on the experiment conditions, the interaction term of subjects' C-S score and ad condition was used as a covariate. The results showed that both cultural differences and sex differences diminished when the covariate was introduced into the analysis (see Table 30). Specifically, the difference between nations in attitude toward the ad (H7a) and attitude toward the brand (H7b) both became insignificant when the covariate was introduced. The differences between sexes in attitude toward the ad (H8a) and attitude toward the brand (H8b) also greatly diminished in the ANCOVA. These results suggested that the observed cultural/gender differences in attitudinal responses to “connectedness” or “separateness” advertising appeals may be explained by individuals' connectedness or separateness self-schema.

Table 51
Analysis of Covariance on C-S*Ad

Source	df	Attitude-Toward-Ad			Attitude-Toward-Brand		
		SS	F	p	SS	F	p
C-S Score	1	0.09	0.08	.78	.98	0.86	.35
Ad	1	0.05	0.04	.83	.33	0.29	.59
Nation	1	3.33	2.69	.10	8.41	7.35	.01
Sex	1	0.13	0.11	.74	0.84	0.73	.39
C-S*Ad	1	161.20	132.23	.0001	110.04	96.19	.0001
C-S*Nation	1	0.41	0.33	.56	0.03	1.02	.88
C-S*Sex	1	0.57	0.47	.49	1.58	1.38	.24
Ad*Nation	1	1.77	1.45	.23	1.92	1.68	.19
Ad*Sex	1	6.45	5.29	.02	5.79	5.07	.03
Error	191	232.85			218.50		

Confounding checks

In order to examine the possibility that the findings were confounded by other noncontrolled variables, a 9-point, 6-item scale was designed to measure perceptions of product affordability, usage situation, and country-of-origin effect. A 3-item involvement scale, adapted from Foote, Cone & Belding Involvement Subscale (Ratchford 1987) was also included in the measurement instrument. The Cronbach alpha for the involvement scale is .74.

While the t-test showed that there were no significant differences between nations ($t=1.47$, $df=199$, $p=.14$) and sexes ($t=1.15$, $df=199$, $p=.25$) in terms of levels of involvement, there were significant differences in affordability ($t=2.59$, $df=199$, $p<.01$) and usage situations ($t=2.57$, $df=199$, $p<.01$) between nations and a significant difference in country-of-origin effect between genders ($t=2.64$, $df=199$, $p<.01$). To assess the possibility of these differences may confound the findings of between-nation and between- gender differences on attitude-toward-the-ad and attitude-toward-the brand, an analysis of covariance was conducted by treating affordability, usage situation, country-of-origin, and involvement as covariates. The ANCOVA results indicated that these covariates had no significant effects on the dependent measures of A_{ad} and A_b (see Table 30). In other words, the ANCOVA suggested that there seemed no apparent evidence that these variables had confounded the main findings of the research, which indicated significant ad-by-nation and ad-by-sex interaction effects in A_{ad} and A_b , as predicted by H7 and H8.

Table 31

ANCOVA Results on Confounding Variables

Source	df	Attitude-Toward-the-Ad			Attitude-Toward-the-Brand		
		SS	F	p	SS	F	p
Ad Version	1	.04	.02	.89	.47	.30	.58
Nation	1	3.46	1.81	.18	9.30	5.92	.02
Sex	1	.06	.03	.86	.39	.25	.62
Involvement	1	.27	.14	.71	.40	.26	.61
Affordability	1	4.87	2.55	.11	8.96	5.71	.02
Usage	1	.93	.48	.49	.35	.22	.64
C-O-O	1	4.33	2.27	.13	7.99	5.09	.03
Ad*Nation	1	8.82	4.61	.03	6.73	4.28	.04
Ad*Sex	1	18.67	9.76	.002	13.79	8.78	.003
Error	191	365.37			300.04		

Check for Demand Artifacts

Because in the second study the phase one and the phase two were separated by an elapse of two to three weeks, it was expected that the subjects should not be able to detect the research hypothesis. To check the possibility of demand artifacts, subjects were asked to guess the hypotheses in the end of the study. No evidence was found that subjects could detect the hypotheses of the study or the relationships between the two phases of the study. Interestingly, although same written instructions were given to both U.S. and Chinese subjects, the results, however, showed differences between U.S. subjects and Chinese subjects in hypotheses guessing. The typical answer of U.S. subjects is “to test the effectiveness of the ad.” This can be explained by the fact U.S. subjects are used to such marketing research questionnaires given by professors or doctoral students in their routine classes. The typical answer of Chinese subjects is, however, “trying to sell the product to the student market.” This was due to the fact that Chinese (or some foreign) companies sometimes would ask college students to fill out surveys as a way to promote their products. The different experiences with doing questionnaires seemed to have no apparent effects on the research results. However, they may explain why Chinese subjects tend to have lower attitude toward the brand than their U.S. counterparts ($F=5.14$, $df=1,193$, $p<.03$), while there were no significant differences between Chinese and U.S. subjects in terms of attitude-toward-ad ($F=1.57$, $df=1,193$, $p>.05$). (See Table 22 and Table 25 for the main effect between nations).

Testing H6 and H8 Within Each Country

In addition, H6 and H8 were tested by the data from each country separately. H6a and H6b were supported by the data from both country samples, as indicated by

significant interactions between ad versions and groups in attitude-toward-the-ad ($F=53.63$, $df=1,92$, $p<.0001$ for the U.S. sample, and $F=26.61$, $df=1,101$, $p<.0001$ for the Chinese sample) and in attitude-toward-the-brand ($F=33.09$, $df=1,92$, $p<.0001$ for the U.S. sample and $F=20.52$, $df=1,101$, $p<.0001$ for the Chinese sample) respectively (see Table 32, Table 33, Table 34, Table 35, Table 36, Table 37, Table 38, Table 39, Table 40, Table 41, Figure 11, Figure 12, Figure 13 and Figure 14).

H8a and H8b were also supported by the data from the Chinese sample. Specifically, there was a significant sex-by-ad-version interaction effect with MANOVA ($F=4.89$, $p<.01$, in terms of Wilk's Lambda) (see Table 42), as well as with ANOVA for A_{ad} ($F=9.29$, $df=1,101$, $p<.003$) (See Table 43, Table 44 and Figure 15) and for A_b ($F=8.33$, $df=1,101$, $p<.005$) (see Table 45, Table 46 and Figure 16). However, there were no any significant effects with the U.S. sample (see Table 47, Table 48, Table 49, Table 50, Table 51, Figure 17 and Figure 18). Therefore, H8a and H8b were supported by the data from the Chinese sample but not from the U.S. sample.

Table 32
MANOVA Test of H6a & H6b With the U.S.A. Sample

Sources	df	F	p (Wilk's Lamba)
Ad Version	2, 91	2.47	.09
Group	2, 91	0.55	.58
Ad * Group	2, 91	27.45	.0001

Table 33
ANOVA Results on Ad-by-Group: Test of H6a (A_{ad}) with the U.S.A. Sample

Sources	df	SS	F	p
Ad Version	1	4.68	4.26	.04
Group	1	0.11	0.10	.75
Ad * Group	1	58.88	53.63	.0001
Error	92	101.74		

Table 34
Cell Means and Cell Size of Ad-by-Group Analysis from the U.S.A. Sample (H6a)

	Low-Group	High-Group	Marginal
Ad=C	(1) 4.19 (n=17)	(2) 5.73 (n=29)	5.17
Ad=S	(3) 6.26 (n=30)	(4) 4.58 (n=20)	5.59
Marginal	5.51	5.25	

Figure 11:
Test of H6a (U.S.A.)

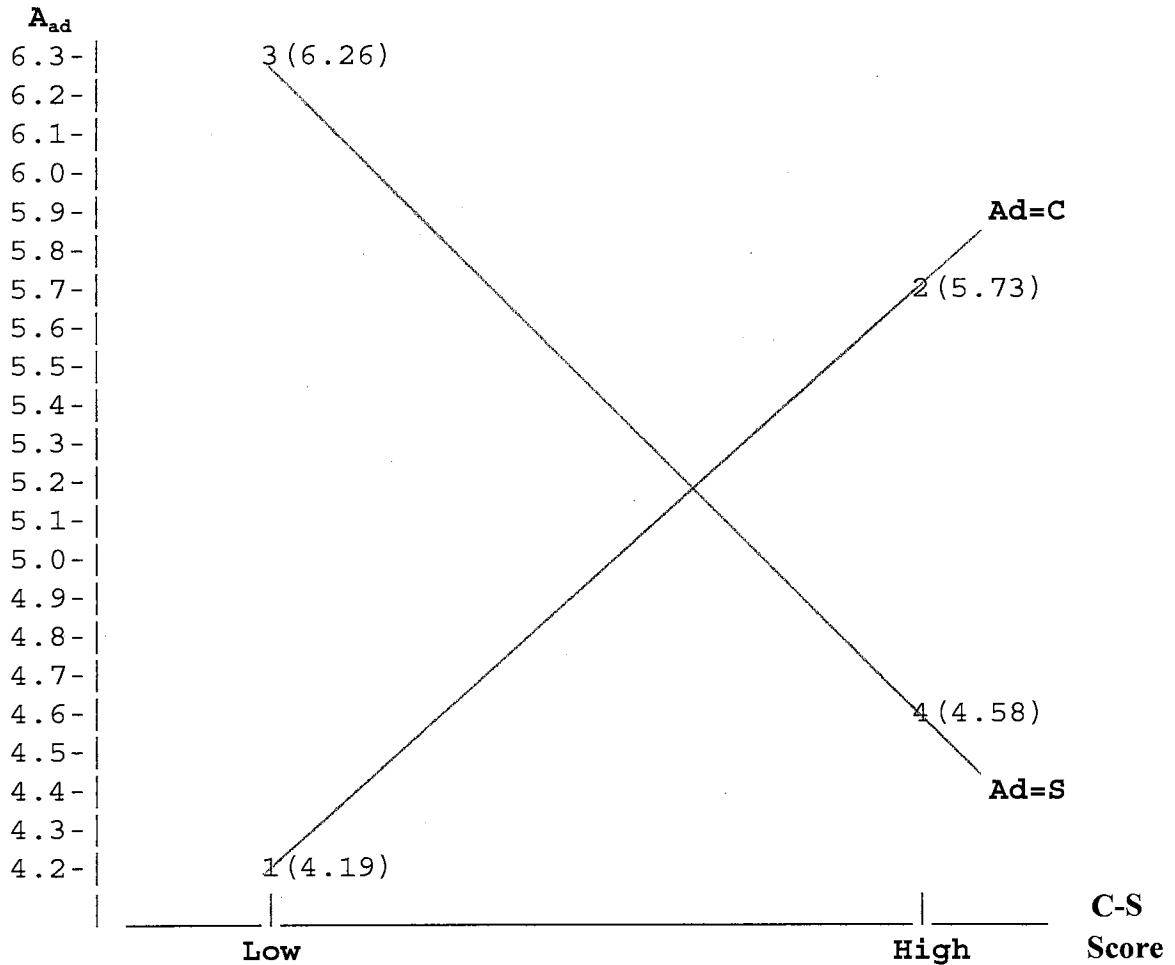


Table 35: ANOVA on Ad--by-Group: Test of H6b (A_b) with the U.S.A. Sample

Sources	df	SS	F	p
Ad Version	1	4.90	3.91	.05
Group	1	1.20	0.96	.33
Ad * Group	1	41.47	33.09	.0001
Error	92	115.29		

Table 36

Cell Means and Cell Size of Ad-by-Group Analysis from the U.S.A. Sample (H6b)

	Low-Group	High-Group	Marginal
Ad=C	(1) 4.51 (n=17)	(2) 5.64 (n=29)	5.22
Ad=S	(3) 6.33 (n=30)	(4) 4.75 (n=20)	5.70
Sum	5.67	5.28	

Figure 12: Test of H6b (U.S.A.)

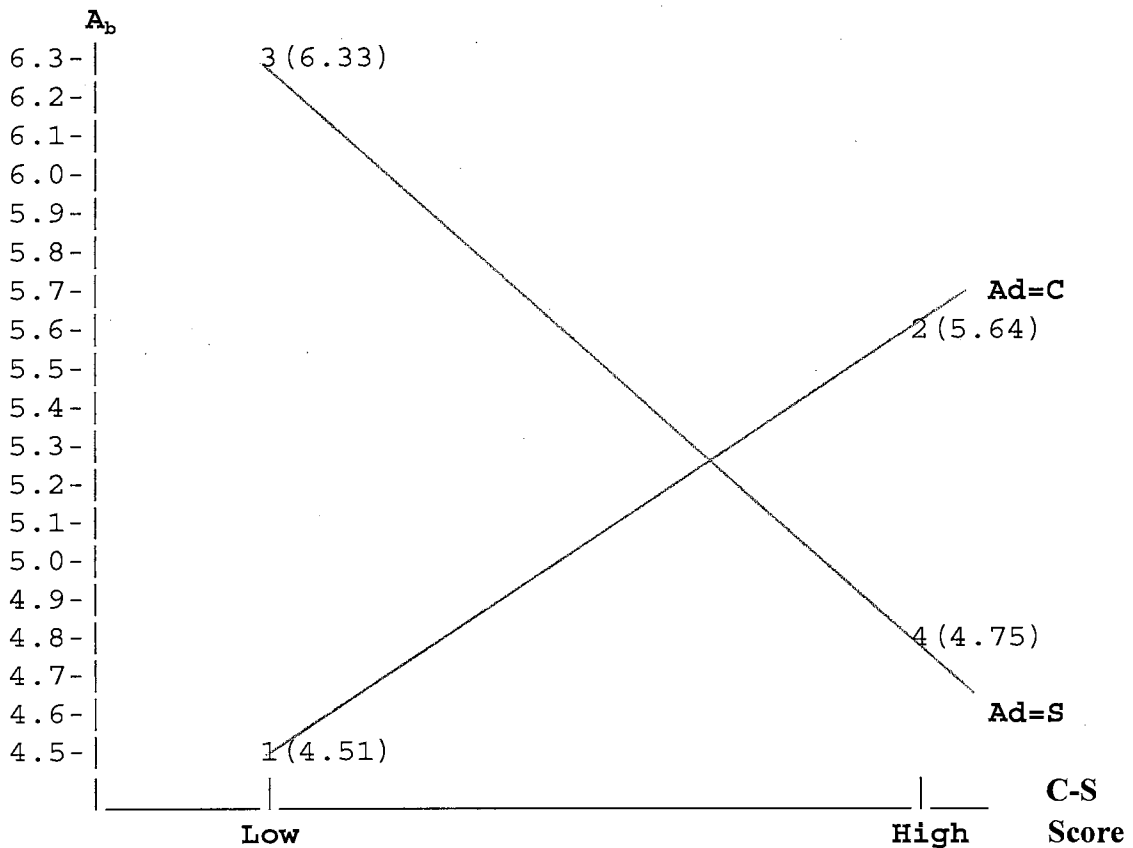


Table 37:
MANOVA Test of H6a & H6b With the P.R.C. Sample

Sources	df	F	p (Wilk's Lamba)
Ad Version	2, 100	2.16	.12
Group	2, 100	0.35	.78
Ad * Group	2, 100	13.58	.0001

Table 38:
ANOVA on Ad-by-Group: Test of H6a (A_{ad}) with the P.R.C. Sample

Sources	df	SS	F	p
Ad Version	1	7.87	4.36	.04
Group	1	0.50	0.28	.78
Ad * Group	1	48.02	26.61	.0001
Error	101	182.25		

Table 39:
Cell Means and Cell Size of Ad-by-Group Analysis of P.R.C. Sample (H6a)

	Low-Group	High-Group	Marginal
Ad=C	(1) 4.65 (n=30)	(2) 6.15 (n=27)	5.36
Ad=S	(3) 5.46 (n=24)	(4) 4.24 (n=24)	4.85
Marginal	5.01	5.25	

Figure 13:
Test of H6a (P.R.C.)

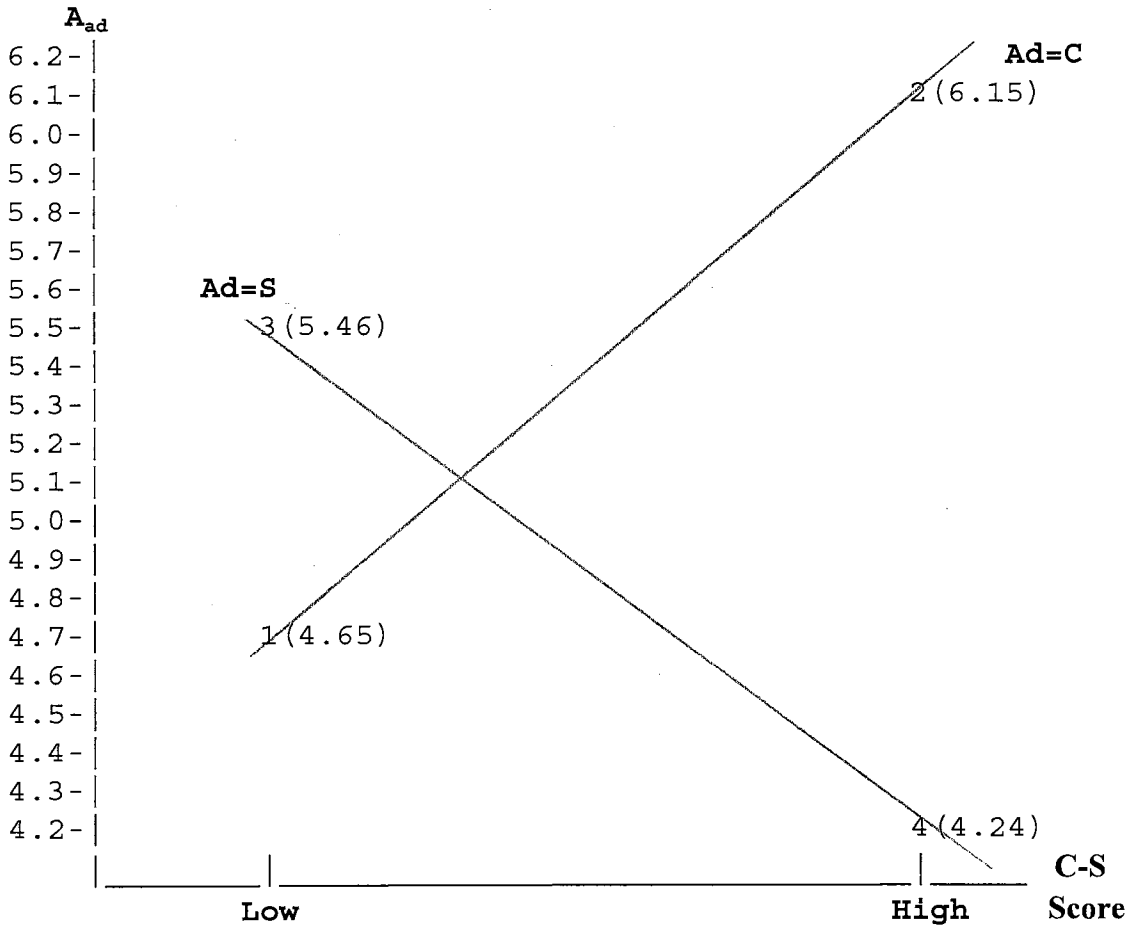


Table 40: ANOVA on Ad-by-Group: Test of H6b (A_b) with the P.R.C. Sample

Sources	df	SS	F	p
Ad Version	1	3.78	2.68	.10
Group	1	0.01	0.04	.92
Ad * Group	1	28.91	20.52	.0001
Error	101	142.28		

**Table 41
Cell Means and Cell Size of Ad by Group Analysis from the P.R.C. Sample (H6b)**

	Low-Group	High-Group	Marginal
Ad=C	(1) 4.69 (n=30)	(2) 5.24 (n=27)	4.95
Ad=S	(3) 5.36 (n=24)	(4) 4.33 (n=24)	4.85
Marginal	4.99	4.81	

Figure 14: Test of H6b (P.R.C.)

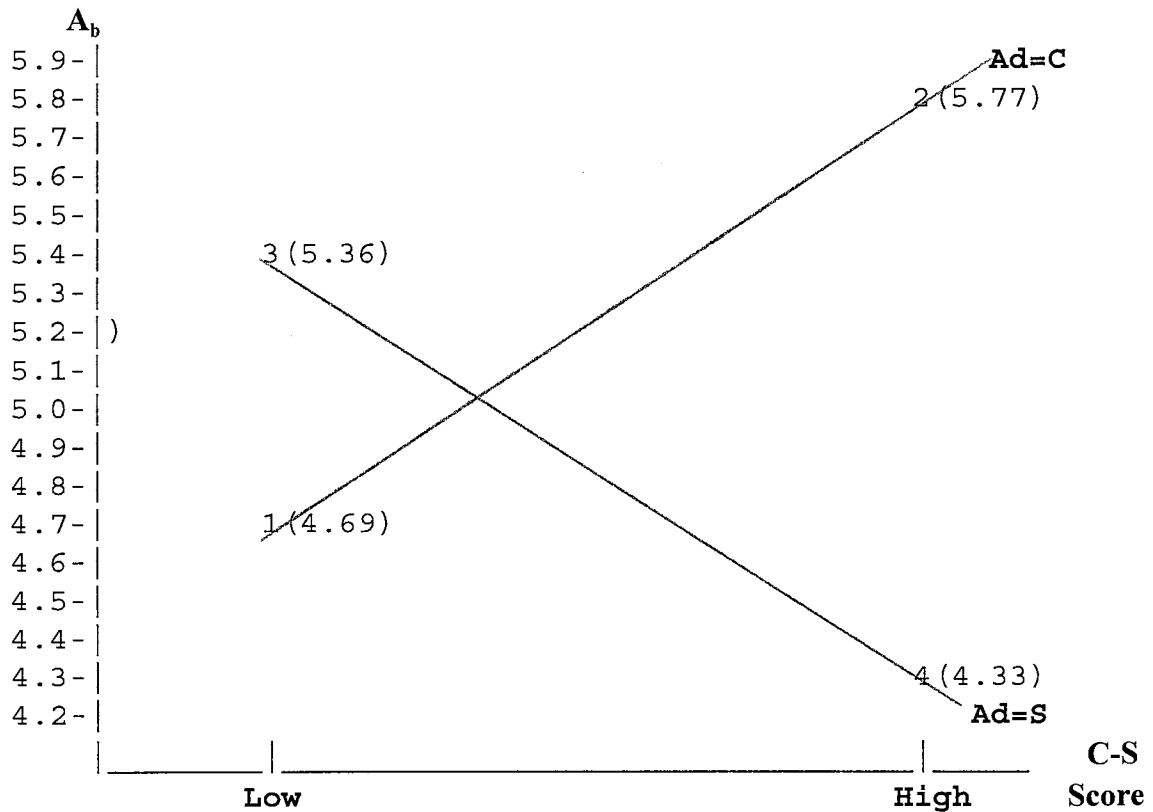


Table 42
MANOVA Test of H8a & H8b (Ad by Sex) With P.R.C. Sample

Sources	df	F	p (Wilk's Lamba)
Ad Version	2, 100	1.67	.19
Sex	2, 100	0.63	.53
Ad * Sex	2, 100	4.89	.01

Table 43
ANOVA Results on Ad by Sex with the P.R.C. Sample (Test of H8a: A_{ad})

Sources	df	SS	F	p
Ad Version	1	7.04	3.35	.07
Sex	1	0.67	0.32	.57
Ad * Sex	1	19.52	9.29	.003
Error	101	212.22		

Table 44
Cell Means and Cell Size of Ad-by-Sex Analysis with the P.R.C. Sample (A_{ad})

	Male	Female	Marginal
Ad=C	(1) 5.06 (n=33)	(2) 5.77 (n=24)	5.36
Ad=S	(3) 5.41 (n=22)	(4) 4.38 (n=26)	4.85
Marginal	5.20	5.05	

Figure 15:
Test of H8a (P.R.C.)

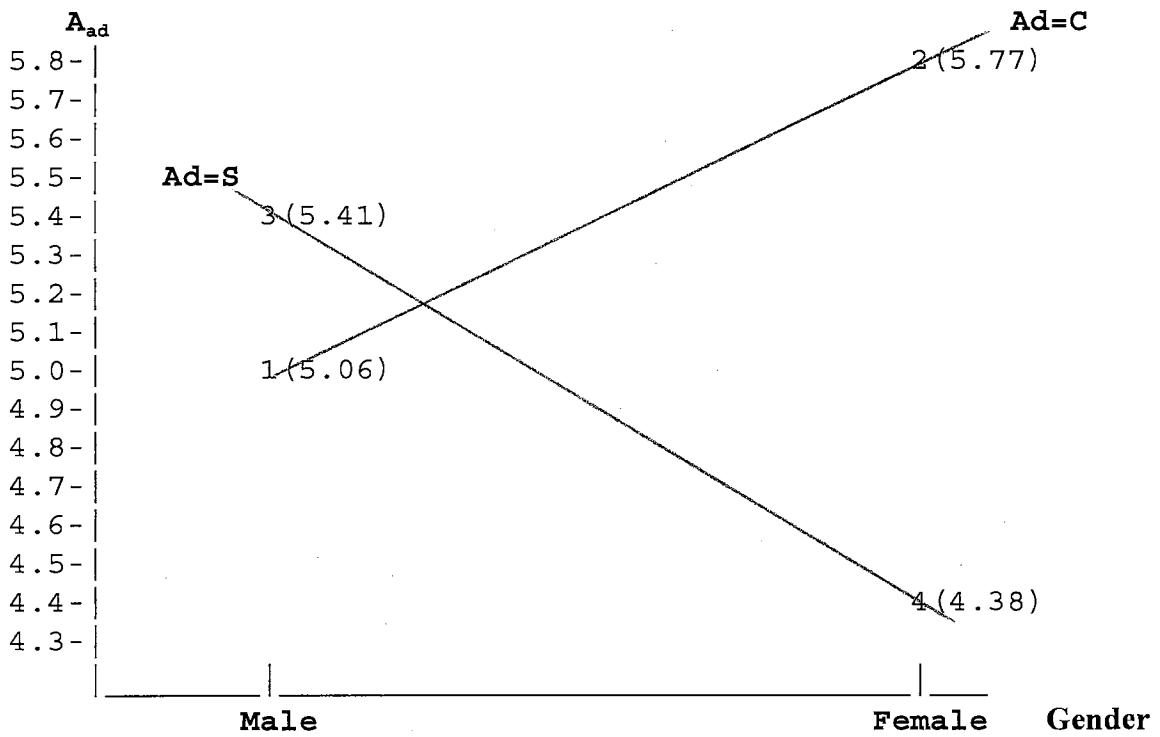


Table 45
ANOVA Results on Ad-by-Sex with the P.R.C. Sample (Test of H8b: A_b)

Sources	df	SS	F	p
Ad Version	1	3.78	2.41	.12
Group	1	0.03	0.02	.89
Ad * Group	1	13.05	8.33	.005
Error	101	158.26		

Table 46
Cell Means and Cell Size of Ad by Sex Analysis with the P.R.C. Sample (A_b)

	Male	Female	Marginal
Ad=C	(1) 4.89 (n=33)	(2) 5.64 (n=24)	5.21
Ad=S	(3) 5.22 (n=22)	(4) 4.54 (n=26)	4.85
Marginal	5.01	5.05	

Figure 16
Test of H8b (P.R.C.)

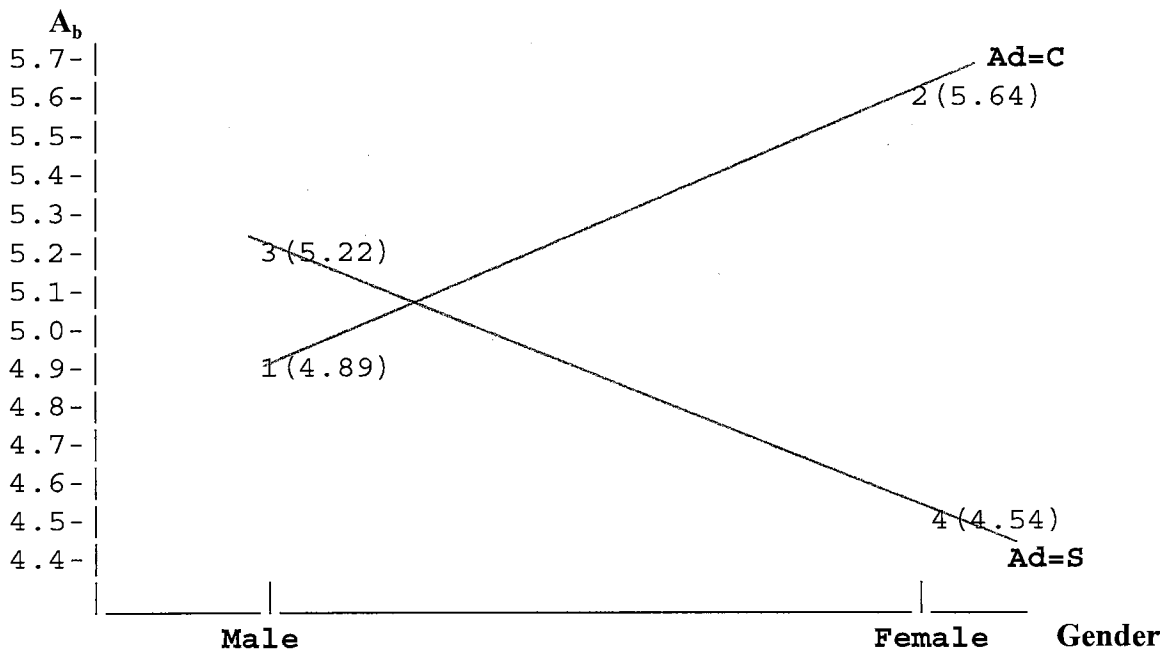


Table 47
MANOVA Test of H8a & H8b (Ad*Sex) With U.S.A. Sample

Sources	df	F	p (Wilk's Lamba)
Ad Version	2, 91	2.45	.09
Sex	2, 91	0.59	.56
Ad * Sex	2, 91	1.29	.29

Table 48
ANOVA Results on Ad-by-Sex with the U.S.A. Sample (Test of H8a: A_{ad})

Sources	df	SS	F	p
Ad Version	1	2.91	1.73	.19
Sex	1	1.95	1.16	.28
Ad * Sex	1	4.13	2.46	.12
Error	92	154.67		

Table 49
Cell Means and Cell Size of Ad-by-Sex Analysis with the U.S.A. Sample (A_{ad})

	Male	Female	Marginal
Ad=C	(1) 4.87(n=27)	(2) 5.58 (n=19)	5.16
Ad=S	(3) 5.64 (n=28)	(4) 5.51 (n=22)	5.58
Marginal	5.17	5.54	

Figure 17:
Test of H8a (U.S.A.)

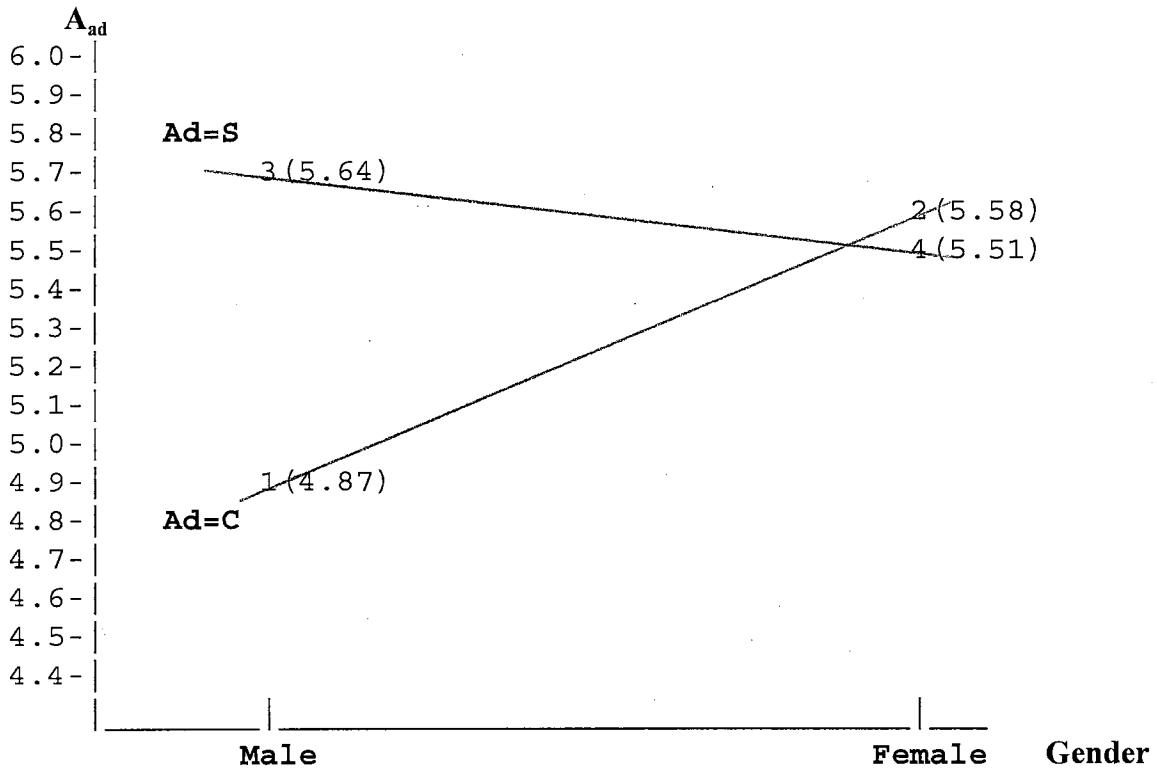


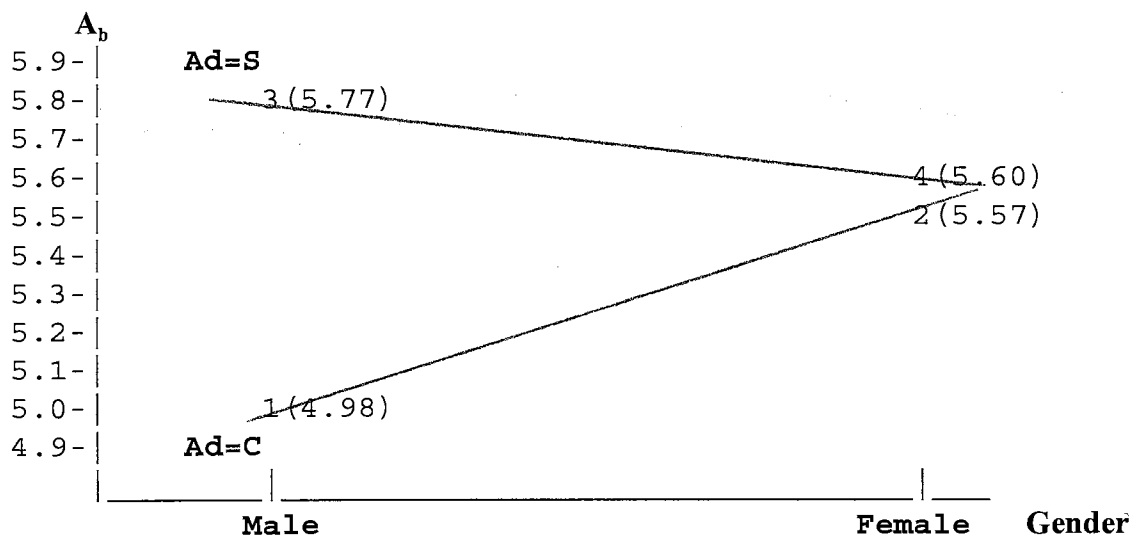
Table 50
ANOVA Results on Ad-by-Sex with the U.S.A. Sample (Test of H8b: A_b)

Sources	df	SS	F	p
Ad Version	1	4.05	2.41	.12
Group	1	0.98	0.58	.45
Ad * Group	1	3.37	2.00	.16
Error	92	154.72		

Table 51
Cell Means and Cell Size of Ad-by-Sex Analysis with the U.S.A. Sample (A_b)

	Male	Female	Marginal
Ad=C	(1) 4.98 (n=27)	(2) 5.57 (n=19)	5.23
Ad=S	(3) 5.77 (n=28)	(4) 5.60 (n=22)	5.71
Marginal	5.37	5.57	

Figure 18:
Test of H8b (U.S.A.)



GENERAL DISCUSSION

The present research consists of two studies. The first study developed and tested the C-S scale with a sample from college students attending a mid-western U.S. university and then the scale was validated with a comparable sample from the People's Republic of China. The scale was then refined by examining its reliability and validity. The second study employed the refined scale to conduct studies with new samples in the People's Republic of China and in the U.S. In addition, an experiment was conducted in which advertisements were developed with advertising themes using either connected or separated appeals. Responses to the ad themes could be compared across individuals revealing either connected or separated self-schema. Through this process, the moderating role of the C-S construct in consumer attitudinal responses to advertising appeals at a cross-cultural setting was conducted.

The results from the first study delineated the domain and dimensions of the C-S construct by developing and purifying the C-S scale. The refined 17-item, 3-dimension scale was shown to possess acceptable reliability (indicated by the adequate Cronbach alpha), convergent and discriminant validity (demonstrated by reasonable correlations between C-S scale and the Maintenance of Emotional Separation scale and the "self-reliance vs. interdependence" factor of the Collectivism scale, and by the low correlation between the C-S scale and the Social Desirability scale). The convergent validity and discriminant validity of the scale were further evidenced by theoretically expected

correlations (or no correlations) between each dimension of the C-S scale and the other three measures. The overall prediction about sex differences in connectedness and separateness self-schema was supported by the data. Thus, the scale also revealed the predictive validity. As a cross-cultural extension of the previous study (Wang and Mowen 1996), which was conducted only with the U.S. sample, the present study showed comparable structure patterns between the Chinese sample and the U.S. sample. Thus, evidence was found of the cross-cultural measurement reliability, which qualified further investigation in the second study.

The second study validated the C-S scale in a cross-cultural setting. The confirmatory factory analysis provided supports for the 3-factor structure identified from the first study. Results regarding sex differences in each dimension of the scale were consistent with the findings from the first study. Thus, the test-retest reliability of the scale is present.

Results from individual differences in connected-separateness scores answered the first research question concerning whether the connectedness-separateness self-schema differentiates individuals among cultures and between genders. The overall hypotheses regarding differences existing between cultures (H1) and sexes (H5) were supported. However, the effect sizes of differences between nations and genders are considered to be small. In addition, two hypotheses regarding cross cultural differences in connection/ separation dimension (H2) and in the private/ collective self orientation dimension (H4) were supported by the data. Hypothesis 3, which predicted that “Chinese subjects tend to emphasize interdependence and mutual reliance more than American subjects do,” was not supported. Instead, there was a significant difference between sexes on this

dimension. These results, however, are consistent with recent findings from cross-cultural psychological studies (Kashima et al. 1995; Miller 1994; Singelis 1994), which indicate that cultural and gender differences are unlikely to be characterized by the same dimensions of the self. Specifically, as Kashima et al. (1995) found, the relational dimension (the connection/separation dimension and independent/mutual reliance dimension in terms of the current study) characterizes gender differences in self-construal, whereas the individualistic and collective dimension (the private self/collective self orientation dimension in terms of the current study) describes cultural differences.

The studies highlight the notion that the connectedness-separateness concept is a multidimensional construct that differentiates cultures and genders across different dimensions. In other words, results from analysis of each dimension of the C-S scale suggest that Chinese subjects tend to value a self-other connection more than American subjects, and that Chinese subjects tended to value group goals and collective achievements more than American subjects. However, Chinese subjects do not necessarily show a greater tendency of being interdependent or mutually reliant than American subjects. On the other hand, the results also suggest that female tend to value a self-other connection more than male subjects, and female subjects tend to emphasize interdependence and mutual reliance more than male subjects. However, female subjects do not necessarily value group goals and collective achievements more than male subjects.

The results from the experimental study answered the second research question concerning whether individual differences in C-S self schema influence consumers' attitudinal responses to marketing communications. The data supported predictions that

individual differences in the C-S score would moderate subjects' attitude toward the advertisement and the brand, as demonstrated by a strong interaction effect between a subject's C-S self-schema and his or her responses to the connectedness ad or separateness ad. The results were consistent in the U.S. sample, in the Chinese sample as well as in the pooled sample. The findings that Chinese subjects tended to prefer the "connectedness advertising" theme and that U.S. subjects were more likely to respond to "separateness advertising" appeals suggest that the C-S construct may be conceived as a segmentation variable in international marketing. The data supported the hypotheses regarding sex differences in responding to connectedness vs. separateness advertising appeals for the Chinese sample and the pooled sample, but not for the U.S. sample.

The overall results (see Table 52 for a summary of hypotheses testing) replicated findings from the previous study (Wang and Mowen 1996), which employed a different product -- a credit card. While the moderating effects of an individual's C-S schema on his or her attitudinal responses to advertising are to be considered "large," significant differences between cultures and sexes are considered to have "small" effect sizes.

The results also suggest that the C-S construct is more an individual difference variable than a cultural or sex variable. In other words, the C-S construct largely explains cross cultural and between gender differences in responses to connectedness vs. separateness advertising appeals. This was revealed in the analysis of covariance. When the interaction term, C-S score by ad version, was introduced as a covariate into the analysis of attitude-toward-the-ad and attitude-toward-the-brand, the cultural differences disappeared and the gender differences greatly diminished. As such, cultures and genders can be segmented in terms of the C-S construct.

Table 52
Summaries of Hypothesis Testing Results

H#	HYPOTHESIS	TESTING METHOD	RESULTS
H1	<i>Chinese subjects will score higher on connectedness than American subjects.</i>	Two-Way (Nation*Sex) ANOVA	Supported
H2	<i>Chinese subjects will value a self-other connection more than American subjects.</i>	Two-Way (Nation*Sex) MANOVA	Supported
H3	<i>Chinese subjects will emphasize interdependence and mutual reliance more than American subjects.</i>	Two-Way (Nation*Sex) MANOVA	Not Supported
H4	<i>Chinese subjects will value group goals and collective achievements more than American subjects.</i>	Two-Way (Nation*Sex) MANOVA	Supported
H5	<i>Female subjects will score higher on connectedness than male subjects.</i>	Two-Way (Nation*Sex) ANOVA	Supported
H6a	<i>Subjects scoring higher on connectedness will prefer an ad with a "connectedness" theme more than subjects scoring lower on connectedness. In contrast, subjects scoring lower on connectedness will prefer an ad with a "separateness" theme more than subjects scoring higher on connectedness.</i>	Two-Way (Ad*Group) MANOVA	Supported
H6b	<i>Subjects scoring higher on connectedness will prefer a brand in the "connected appeal" ad more than subjects scoring lower on connectedness. In contrast, subjects scoring lower on connectedness will prefer a brand in the "separated appeal" ad more than subjects scoring higher on connectedness.</i>	Two-Way (Ad*Group) MANOVA	Supported

H#	HYPOTHESIS	TESTING METHOD	RESULTS
H7a	<i>Chinese subjects will prefer an ad with a "connectedness" theme more than American subjects. In contrast, American subjects will prefer an ad with a "separateness" theme more than Chinese subjects.</i>	Three-Way (Ad*Nation*Sex) MANOVA and ANCOVA	Partially supported (in the "separateness" ad condition but not in the "connectedness" ad condition. The cultural differences disappeared in the ANCOVA.
H7b	<i>Chinese subjects will prefer a brand in the "connectedness appeal" ad more than American subjects. In contrast, American subjects will prefer a brand in the "separateness appeal" ad more than Chinese subjects.</i>	Three-Way (Ad*Nation*Sex) MANOVA and ANCOVA	Partially supported (in the "separateness" ad condition but not in the "connectedness" ad condition). The cultural differences disappeared in the ANCOVA
H8a	<i>Female subjects will prefer an ad with a "connectedness" theme more than male subjects. In contrast, male subjects will prefer an ad with a "separateness" theme more than female subjects.</i>	Three-Way (Ad*Nation*Sex) MANOVA and ANCOVA	Supported by P.R.C. data and combined data, but not U.S. data. The gender differences diminished in the ANCOVA.
H8b	<i>Female subjects will prefer a brand in the "connectedness appeal" ad than male subjects. In contrast, male subjects will prefer a brand in the "separateness appeal" ad more than female subjects.</i>	Three-Way (Ad*Nation*Sex) MANOVA and ANCOVA	Supported by P.R.C. data and combined data, but not U.S. data. The gender differences diminished in the ANCOVA.

CONTRIBUTIONS AND MANAGERIAL IMPLICATIONS

Theoretical Contributions

Cross-cultural study should begin with theoretical propositions that make explicit the cultural comparisons which are needed. Once the theoretical proposition is clear, then the basis for choosing cultures to compare should be evident (Brown and Sechrest 1989). Unfortunately, one major problem in cross-cultural consumer research is a lack of theories, and consequently, theory-based studies (Wang 1995). Without theory-based propositions and predictions guiding a research design, many cross-cultural consumer studies may be described as opportunistic, and often result from a researcher's short-term sabbaticals abroad or sudden access to some secondary international data (Arndt 1978; Albaum and Peterson 1984). As a result, these studies are usually full of idiosyncratic and often, employ stereotypical descriptions of observed phenomena that have little theoretical justification. The goals of predicting and explaining consumer behavior in different cultures or international markets are difficult to achieve. As such, strategic implications of those empirical findings are often unjustified (Wang 1995).

The present research employed the connectedness-separateness self-schema theory in a cross-national setting as an initial attempt toward cross-cultural validation of the scale. As a theory-based investigation, hypotheses were derived from cross-cultural conceptualizations of the self concept and related constructs from anthropology,

psychology and consumer or business research. The hypotheses were chosen because they possess specific characteristics of theoretical interest and not simply because they seem satisfactorily different (Brown and Sechrest 1980). As a cross-cultural extension of the previous empirical study (Wang and Mowen 1996), the studies contributes to our knowledge of cross-cultural differences, as well as within cultural differences, in consumer C-S self schema and of the impact of the C-S self-schema on consumer attitudinal responses to marketing communications.

Methodological Contributions

While most areas of consumer behavior enquiry are typically defined by the content of investigation (e.g., consumer choice, purchase intention, satisfaction, brand loyalty, etc.), cross-cultural research is, however, defined by its methodologies (Berry 1980; Sechrest 1977). The comparability of the phenomena as well as of the data collected, which are the major concerns of the cross-cultural research (Lee 1966), are mainly determined by the research methodology. The need for comparability gives rise to a number of important methodological issues in the design of primary data collection (Douglas and Craig 1983). A historical review of cross-cultural consumer research literature, however, has revealed that cross-cultural reliability and validity are major obstacles in the progress of the field (Wang 1995).

The difficulties largely reside in the emics vs. etics dilemma, that is, the issue of whether similar research designs can be used or are relevant in different environments (Pike 1966). According to Berry (1969, p.13), "Both emics and etics are essential levels of analysis in cross-cultural psychology: without etics, comparisons lack a frame; without emics, comparisons lack meat." The major problem is then how to describe behavior in

terms which are meaningful to members of a particular culture (an emic approach) while at the same time to compare validly behavior in that culture with behavior in another or all other cultures (the etic aim). Campbell (1964) has argued that only when a common underlying process exists can there be the possibility of interpreting differences in behavior. One solution to the emic vs. etic dilemma is to establish cross-cultural measurement equivalence, which includes functional equivalence, conceptual equivalence, and metric equivalence (Berry 1969; 1980; Douglas and Craig 1983; Green and White 1976). Toward a goal of establishing a cross-culturally valid theory in the present research, efforts have been put on maintaining cross-cultural functional, conceptual, and metric equivalence.

While the experimental method has been argued as the strongest tool available to social scientists from the standpoint of permitting causal inferences, it is underutilized in cross-cultural research (Brown and Sechrest 1980). With respect to the nature of the phenomena, comparative studies based on consumer surveys are typically nonmanipulative in the sense that the situation has not been staged for the purposes of the research (Berry 1980). Although culture itself can be viewed as an independent variable, it cannot be manipulated because individuals cannot be randomly assigned into a culture. It is the case of the "nontreated control" (Brown and Sechrest 1980) and consumer performance differences detected in data may be spurious. A recent literature review of cross-cultural consumer research from 1960s to mid- 1990s indicates that the predominant research methods employed by international consumer researchers have been consumer surveys and interviews, whereas only few studies using experimental methods (See Wang 1995 for an extensive review).

The present study has gone beyond traditional comparative studies based on cross-cultural consumer surveys. It was conducted in a sense of "true cross-cultural study" (Brown and Sechrest 1980) in that a manipulation of advertising themes is involved in both countries. The advantage of such experimental design is its capability of making causal inferences beyond the observed cultural differences and thus providing predictions and explanations for cross-cultural consumer attitudes and behaviors. Subjects in each country were randomly assigned to each ad version treatment condition. Consequently, the observed similarities or differences may be explained in terms of cross-cultural differences in self-construals and the moderating effect of the S-C self-schema, rather than a general conclusion regarding the relationships between culture and consumer behaviors.

Managerial Implications

One implication of the study for marketers is to predict consumer behavior based on different self-extension motivations. Research suggests that a message will be most effective when it evokes a consumer's self thought or when a consumer can think about himself or herself as he or she processes the message (Shavitt and Brock 1984). For an individual with separated self-schema, his or her self-extension may focus on personal growth and self-aggrandizement. This private self-orientation is exemplified in Barnett, Klassen, McMinimy and Schwarz's (1987) study of American subjects' response to promotion messages. Their results showed that subjects were to respond more favorably to a message that emphasized benefits to the self than to a message that emphasized benefits to the other. According Barnett et al.'s explanation, perhaps the self-oriented message was an especially persuasive message precisely because it emphasized an

enhancement, rather than a diminution, of the self.

However, for an individual with a connected self-schema, his or her self-extension may through other people using "vicarious experience" (Belk 1988). Consumers may seek to assure that their selves will extend beyond their deaths through one's children, heirs and dependents (Lifton 1973; Veblen 1899). Similarly, gift giving and donation of possessions may also be explained by this vicarious experience of consumption, in which the giver wishes to see the gifts or organs transferred to the receiver (Belk 1988; McCracken 1985). The awareness of the connection of self-other relations or the collective aspect of the self thus may make a "connected person" more willing to donate body organs to significant others. This may be especially true in Confucian culture in which one's body parts are not only considered to belong to oneself, but also considered to belong to one's parents and to symbolize one's family lineage. Using connected appeals thus may be more effective to the collective self.

Another implication, as indicated by the present research, is that international market as well as domestic market can be segmented based on consumers' C-S schema, conceding that a uniform self concept appeal directed at the entire market may not be fruitful. Marketers should identify and/or segment their markets in terms of different aspects of self-concept to determine product (e.g., branding) and promotion strategies (Malhotra 1988). Since individuals differ in their C-S self schema, and since the C-S schema plays a role in moderating consumers' attitudinal responses to advertising themes, connectedness or separateness message can be developed and communicated to appeal different consumer segments.

LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

The present study is an initial attempt to develop and validate the C-S construct across cultures and to apply the C-S construct into cross-cultural consumer research. In general, it is still in its exploratory stage and exists several limitations which warrant future theoretical justifications and empirical investigations.

First, this study was conducted in two countries with different cultural patterns and these two countries may be, in some extent, representative of the Eastern culture and Western culture. However, there were also cultural differences among countries even with very similar historical or cultural background, such as between China and Japan. There may also have significant differences between the U.S. and West European countries. It is insufficient to consider this study as comparing the “Eastern-Self” and the “Western-Self” at this stage. Therefore, the best can be said from the current findings is “a tale of two countries.” More studies with a large pool of countries representing a variety of geographical, economical, cultural and political background are deemed necessary to draw more valid strategic implications for international marketing segmentation and promotions.

Second, a homogenous sample, as the convenience sample of college students used in present studies, is a reasonable choice for theory testing purpose. However, the external validity or the generalizability of the findings was limited. In order to make

more managerial implication, more diversified “real” consumer samples will be desirable in future studies.

Third, expect for the interaction effect between an individual’s C-S self-schema (in terms of C-S score) and his or her attitudinal response to “connectedness” or “separateness ad,” most hypotheses were supported with a small magnitude of the effect, as measured by the Standard Omega Square. It should be cautious in making conclusions and managerial implications based on these results at the current stage. They deserve attention for future repeated studies.

Fourth, since the objective of the confirmatory factor analysis in the second study was to verify the structure of the C-S factors rather than to modify the factor structure identified in the first study, no remedial measure was taken to purify the C-S scale based on modification indices from the CFA. Further purifying the C-S scale in cross-cultural settings is desirable in future research.

Fifth, the hypothesis regarding the second dimensions of the C-S construct, or the H3, which stated that “Chinese subjects tend to emphasize interdependence and mutual reliance more than American subjects do” was not supported. Although this result is consistent with findings from recent psychological studies and could be interpreted by the multidimensional structure of the C-S construct, further theoretical justifications, conceptual clarifications, and empirical falsifications are required to make the construct more cohesive and to improve the power of the C-S theory in making prediction and explanation.

Sixth, there showed different results from the two countries in terms of the sex difference in responding to the connectedness or separateness ad theme. There were

significant sex differences in the Chinese sample but not in the U.S. sample. Since the same non-significant interaction effect was found with the U.S. data in the previous study (Wang and Mowen 1996), it stimulates an interest in further empirical investigation and theoretical explanation.

REFERENCES

- Albaum, Gerald and Robert A. Peterson (1984), "Empirical Research in International Marketing," *Journal of International Business Studies*, 15 (1), 161-173.
- Arndt, Johan (1978), "Comments on Cross-Cultural Consumer Research," *Advances in Consumer Research*, 5, 705.
- Bakhtin, M. M. (1966). *The Duality of Human Existence*. New York: Beacon Press.
- Baldwin, Mark W. (1992), "Relational Schema and the Processing of Social Information," *Psychological Bulletin*, 112 (3), 461-484.
- Ball, A. Dwayne and Lori H. Tasaki (1992), "The Role and Measurement of Attachment in Consumer Behavior," *Journal of Consumer Psychology*, 1 (2), 155-172.
- Ballard, R., Crino, M. D., & Ruberfeld, S. (1988). "Social Desirability Response Bias and the Marlowe-Crowne Social Desirability Scale," *Psychological Reports*, 63, 227-237.
- Barnett, Mark A., Michael Klassen, Vera McMinimy and Laurel Schwarz (1987), "The Role of Self- Other-Oriented Motivation in the Organ Donation Decision," in *Advances in Consumer Research*, Vol. 14, eds. Melanie Wallendorf and Paul Anderson, Provo, UT: Association for Consumer Research, 335-337.
- Bearden, W. O., Subhash Sharma, and J. E. Teel (1982), "Sample Size Effects on Chi-Square and Their Statistics Used in Evaluating Causal Models," *Journal of*

- Marketing Research*, 19 (November), 425-430.
- Belk, Russel W. (1988), "Possessions and the Extended Self," *Journal of Consumer Research*, 15 (September), 139-167.
- Belk, Russell W. (1992), "Attachment to Possessions," *Human Behavior and environment*, 12, 37-62.
- Belenky, M. F., B. M Clinchy, N. R. Goldberger, and J. M. Tarule (1986), *Women's Way of Knowing: The Development of Self, Voice, and Mind*. New York: Basic books.
- Berry, John W. (1969), "On Cross-Cultural Comparability," *International Journal of Psychology*, 4, 119-128.
- Berry, John W. (1976), *Human Ecology and Cognitive Style: Comparative Studies in Cultural and Psychological Adaptation*, Beverly hills: Sage/Halsted.
- Berry, John W. (1980), "Introduction to Methodology," In Harry C. Triandis and John W. Berry (eds), *Handbook of Cross-Cultural Psychology*, Vol. 2, *Methodology*, Boston, MA: Allyn and Bacon, Inc., 1-28.
- Boddewyn, Jean J. (1966), "A Construct for Comparative Marketing Research," *Journal of Marketing Research*, 3 (May), 149-153.
- Breckler, S. J. and Anthony J. Greenwald (1986), "Motivational Facets of the Self," ed. E. T. Hiffins and R. Sorrentino, *Handbook of Motivation and Cognition*, New York: Guilford Press, 145-164.
- Brislin, Richard W. (1970), "Back-Translation for Cross-Cultural Research," *Journal of Cross-Cultural Psychology*, 1, 185-216.
- Brislin, Richard W. (1976), "Comparative Research Methodology: Cross-Cultural Studies," *International Journal of Psychology*, 11, 215-229.

- Brown, Elizabeth D. and Lee Sechrest (1980), "Experiments in Cross-Cultural Research,"
In Harry C. Triandis and John W. Berry (eds), *Handbook of Cross-Cultural
Psychology*, Vol. 2, Methodology, Boston, MA: Allyn and Bacon, Inc., 297-318.
- Buss, A., and J. B. Royce (1975), "Detecting Cross-Cultural Commonalities and
Differences: Intergroup Factor Analyses," *Psychological Bulletin*, 82, 128-136.
- Calder, Bobby J., Lynn W. Phillips, and Alice M. Tybout (1981), "Designing Research
for Application," *Journal of Consumer Research*, 8 (December), 197-207.
- Campbell, D. T. (1964), "Distinguish Differences of Perception from Failures of
Communication in Cross-Cultural Studies" in *Cross-Cultural Understanding*,
eds., F. S. C. Northrop and H. H. Levingston, 308-336. N.Y.: Harper & Row.
- Carroll, Paul J. (1991), "Doing business in Taiwan -- Cultural and Marketing Hints,"
Business America, July 29/August 12, 10-11.
- Cavell, Marcia (1985), "The Self and Some Related Issues: A Philosophical Perspective,
Part 1." *Psychoanalysis and Contemporary Thought*, 8 (1), 3-27.
- Chodorow, N. (1978). *The Reproduction of Mothering*. University of California Press.
- Churchill, Gilbert A. Jr. (1979). "A Paradigm for Developing Better Measures of
Marketing Constructs," *Journal of Marketing Research*, 16 (February), 64-73.
- Chu, Godwin C. (1985), "The Changing Concept of Self in Contemporary China," in
Marsella, Anthony J., George Devos and Francis L. K. Hsu (eds.), *Culture and
Self: Asian and Western Perspectives*, New York: Tavistock Publications, 252-
277.
- Cohen, J. (1977), *Statistical Power Analysis for the Behavior Sciences*, NY: Academic
Press.

- Combs, A. and D. Snygg (1959), *Individual Behavior*, New York Harper, 2nd ed.
- Corcoran, K. J. (1982), "An Exploratory Investigation into Self-Other Differentiation: Empirical Evidence for a Monistic Perspective on Empathy," *Psychotherapy: Theory, Research and Practice*, 19, 63-68.
- Cote, Joseph A. and Patriya S. Tansuhaj (1989), "Culture Bond Assumptions in Behavior Intention Models," *Advances in Consume Research*, 16, 105-109.
- Crowne, D. P. & Marlowe, D. (1960). "A New Scale of Social Desirability Independent of Psychopathology," *Journal of Consulting Psychology*, 24 (August), 349-354.
- Dawson, Scott and Gary Bamossy (1991), "If 'We Are What We Have,' What Are We When We Don't Have? An Exploratory Study of Materialism Among Expatriate Americans," *Journal of Social Behavior and Personality*, 6 (6), 363-384.
- Debevec, K. & Iyer, E. (1988). "Self-Referencing as a Mediator of the Effectiveness of Sex-Role Portrayals in Advertising," *Psychology and Marketing*, 5 (1), 71-84.
- Desarbo, W. S., and R. A. Harshman (1985), "Celebrity-Brand Congruence Analysis," in J. H. Leigh and C. R. Martin, Jr. (ed), *Current Issues and Research in Advertising*, Ann Arbor, MI: The University of Michigan.
- DeVos, George, Anthony J. Marsella and Francis L. K. Hsu (1985), "Introduction: Approaches to Culture and Self," in Anthony J. Marsella, George Devos and Francis L. K. Hsu (eds.), *Culture and Self: Asian and Western Perspectives*, New York: Tavistock Publications, 1-23.
- Dipboye, Robert L. and Michael F. Flanagan (1979), ""Are Findings in the Field More Generalizable Than in the Laboratory?" *American Psychologist*, 34 (February),

141-150.

Dittmar, Helga (1989), "Gender Identity-Related Meanings of Personal Possessions," *British Journal of Social Psychology*, 28, 159-171.

Dittmar, Helga (1991), "Meanings of Material Possessions as Reflections of Identity: Gender and Social-Material Position in Society," *Journal of Social Behavior and Personality*, 6 (6), 165-186.

Douglas, Susan P. (1976), "Cross-National Comparisons: A Case Study of working and Non-Working Wives in the U.S. and France," *Journal of Consumer Research*, 3 (June), 12-20.

Douglas, Susan P. and Christine D. Urban (1977), "Life-Style Analysis to Profile Women in International Market," *Journal of Marketing*, 41 (July), 46-54.

Douglas, Susan P. and Samuel C. Craig (1983), *International Marketing Research*, Englewood Cliffs, New Jersey: Prentice-Hall.

Eckensberger, L. (1972), "The Necessity of a Theory for Applied Cross-Cultural Research," in L. J. Cronbach and P. J. D. Drenth (ed.), *Mental Tests and Cultural Adaptation*, The Hague: Mouton, 99-107.

Farley, J. U. (1986), ""Are There Truly International Products and Prime Prospects for Them?" *Journal of Advertising Research*, 26 (5), 17-20.

Ferguson, T. J., B. G. Rule, and D. Carlson (1983), "Memory for personally relevant information," *Journal of Personality and Social Psychology*, 44, 251-261.

Fiske, Susan T. and Shelley E. Taylor (1984), *Social Cognition*, Reading, MA: Addison-Wesley Publishing Company.

Geertz, Clifford (1984), "From the Natives' Point of View: On the Nature of

- Anthropological Understanding," in Richard A. Shweder and Robert A. Levine (eds.), *Culture Theory*, Cambridge: Cambridge University Press, 123-136.
- Ger, Guliz and Russell W. Belk (1990), "Measuring and Comparing Materialism Cross-Culturally," *Advance in Consumer Research*, 17, 186-192.
- Green, Robert T. and P. White (1976), "Methodological Consideration in Cross-National Consumer Research," *Journal of International Business Studies*, 16 (Spring), 48-54.
- Green, Robert T. and Dana L. Alden (1988), "Functional Equivalence in Cross-cultural Consumer Behavior: Gift Giving in Japan and the United States," *Psychology and Marketing*, 5 (Summer), 155-168.
- Greenwald, Anthony G. (1988), "A Social-Cognitive Account of the Self's Development," ed. Eaniel K. Lapsley and F. Clark Power, *Self, Ego and Identify: Integrative Approaches*, New York: Springer-Verlag, 30-42.
- Greenwald, Anthony G. and A. R. Pratkanis (1984), "The self" in R. S. Wyer and T. K. Srull (Eds.), *Handbook of Social Cognition*, Hillsdale, N.J.: Erlbaum. Vol. 3, 129-178.
- Hair, Joseph F. Jr., Rolph E. Anderson, Ronald L. Tatham, and William C. Black (1992), *Multivariate Data Analysis*, N.Y.: Macmillan Publishing Company.
- Hamaguchi, E. (1985), "A Contextual Model of the Japanese: Toward a Methodological Innovation in Japanese Studies," *Journal of Japanese Studies*, 11, 289-321.
- Hassan, Salah S. and Lee Prevel Katsanis (1991), "Identification of Global Consumer Segments: A Behavior Framework," *Journal of International Consumer Marketing*, 3 (2), 11-28.

- Henry, Walter A. (1976), "Cultural Values Do Correlate with Consumer Behavior," *Journal of Marketing Research*, 13 (May), 121-127.
- Hoffman, M. L. (1977), Sex Differences in Empathy and Related Behaviors, *Psychological Bulletin*, 52, 712-722.
- Hofstede, Geert H. (1981), *Cultural Consequences: International Difference in Work-Related Values*, Beverly Hill, CA: Sage.
- Hofstede, Geert H. (1983), "National Cultures in Four Dimension." *International Studies of Management and Organization*, 13 (2), 46-74.
- Holbrook, Morris B. and Rajeev Batra (1987), "Assessing the Role of Emotions as Mediators of Consumer Responses to Advertising," *Journal of Consumer Research*, 14 (December), 404-20.
- Hsu, Francis J. K. (1971), "Psychological-Social Homeostasis and Jen: Conceptual Tools for Advancing Psychological Anthropology," *American Anthropologist*, 73 (1), 23-44.
- Hsu, Francis J. K. (1985), "The Self in Cross-Cultural Perspective," in Marsella, Anthony J., George Devos and Francis L. K. Hsu (eds.), *Culture and Self: Asian and Western Perspectives*, New York: Tavistock Publications, 24-55.
- Hui, C. Harry (1988), "Measurement of Individualism-Collectivism," *Journal of Research in Personality*, 22 (1), 17-36.
- Hui, C. Harry, and Harry C. Triandis (1986), "Individualism-Collectivism: A Study of Cross-Cultural Researchers," *Journal of Cross-Cultural Psychology*, 17 (2), 225-248.
- Hui, C. Harry and Marcelo J. Villareal (1989), "Individualism-Collectivism and

- Psychological Needs: Their Relationships in Two Cultures," *Journal of Cross-Cultural Psychology*, 20 (3), 310-323.
- Irvine, Sid H. and William K. Carroll (1980), "Testing and Assessment Across Cultures: Issues in Methodology and Theory," In Harry C. Triandis and John W. Berry (eds), *Handbook of Cross-Cultural Psychology*, Vol. 2, Methodology, Boston, MA: Allyn and Bacon, Inc., 181-244.
- Jackson, D. N. (1988), *Personality Research Form Manual*, Goshen, N.Y.: Research Psychologists Press).
- James, Williams (1890), *Principles of Psychology*, New York: Dover.
- James, Williams (1915), *Psychology: A Brief Review*, New York: Holt.
- Johnson, Frank (1985), "The Western Concept of Self," in Marsella, Anthony J., George Devos and Francis L. K. Hsu (eds.), *Culture and Self: Asian and Western Perspectives*, New York: Tavistock Publications, 91-38.
- Kale, Sudhir H. and D. Sudharshan (1987), "A Strategic Approach to International Segmentation," *International Marketing Review*, 60 (Summer), 60-70.
- Kamptner N. Laura (1991), "Personal Possessions and Their Meanings: A life-Span Perspective," *Journal of Social Behavior and Personality*, 6 (6), 209-228.
- Kashima, Yoshihisa, Susumu Yamaguchi, Uichol Kim, Sang-Chin Choi, Michele J. Gelfand, and Masaki Yuki (1995), "Culture, Gender, and Self: A Perspective from Individualism-Collectivism Research," *Journal of Personality and Social Psychology*, 69 (5) 925-937.
- Keppel, G. (1989), *Design and Analysis: A Researcher's handbook*, N.J.: Prentice Hall.
- Kernberg, O. (1977), *Borderline Conditions in Pathological Narcissism*, International

University Press

Kirkpatrick, John and Geoffrey M. White (1985), "Exploring Ethnopsychologies," in

Geoffrey M. White and John Kirkpatrick (Eds.), *Person, Self, and Experience: Exploring Pacific Ethnopsychologies*. pp. 3-23. Berkeley, CA: University of California Press.

Kleiner, Kurt (1996), "West Bows to Psychology's Cultural Revolution," *New Scientist*, 149 (2018), 24.

Kondo, Dorinne (1986), "Dissolution and Reconstruction of Self: Implications for Anthropological Epistemology," *Cultural Anthropology*, 1, 74-88.

Lang-Takac, Esther and Zahava Osterweil (1992), "Separateness and Connectedness: Differences between the Genders," *Sex Roles*, 21 (5/6), 277-289.

Lee, James A. (1966), "Cultural Analysis of Overseas Operations," *Harvard Business Review*, 44 (March-April), 106-114.

Lifton, Robert J. (1973), "The Sense of Immortality: On Death and the Continuity of Life," *American Journal of Psychoanalysts*, 33 (1), 3-15.

Malhotra, Naresh K. (1988), "Self Concept and Product choice: An Integrated Perspective," *Journal of Economic Psychology*, 9 (March), 1-28.

Markus, Hazel (1977) "Self-Schemata and Processing Information about the Self," *Journal of Personality and Social Psychology*, 35, 63-78.

Markus, Hazel and Keith P. Sentis (1982), "The Self in Social Information Processing," in Suls (ed.), *Psychological Perspectives on the Self*, (Vol. 1), Hillsdale, N.J.: Erlbaum.

Markus, Hazel and D. Oysermen (1988), "Gender and Thought: The Role of the Self-

- Concept," in M. Crawford and M. Hamilton (eds.), *Gender and Thought*, New York: Springer-Verlag, 100-127.
- Markus, Hazel Rose and Shinobu Kitayama (1991), "Culture and the Self: Implications for Cognition, Emotion, and Motivation," *Psychological Review*, 98 (2), 224-253.
- Maslow, Abraham H. (1956), "Self-Actualizing People: A Study of Psychological Health," in *The Self: Exploration in Personal Growth*, ed., Clark E. Moustakas, New York: Harper & Brothers Publishers.
- McCracken, Grant (1986), "Culture and Consumption: A Theoretical Account of the Structure and Movement of the Cultural Meaning of Consumer Goods," *Journal of Consumer Research*, 13 (June), 71-84.
- McIntyre, P., Hosch, H. M., Harris, R. J., & Norvell, D. W. (1986). "Effects of Sex and Attitudes toward Women on the Processing of Television Commercials." *Psychology & Marketing*, 3 (3), 181-190.
- Miller, J. G. (1984), "Culture and the Development of Everyday Social Explanation," *Journal of Personality and Social Psychology*, 46, 961-978.
- Miller, J. G. (1994), "Cultural Diversity in the Morality of Caring: Individually-Oriented Versus Duty-Based Interpersonal Moral Codes." *Cross-Cultural Research*, 28, 3-39.
- Nevis, Edwin C. (1983), "Cultural Assumptions and Productivity: The United States and China," *Sloan Management Review*, 24 (3), 17-29.
- Newman, Joseph W. (1957), *Motivation Research and Marketing Management*, Boston, Harvard University, Graduate School of Business Administration, Division of Research.

- Nisbet, R. (1971), "Ethnocentrism and Comparative Method," in *Essays on Modernization of Undeveloped Societies*, ed. A. R. Desai, Bombay: Thacker. Vol. 1., 95-114.
- Pepitone, Albert and Harry C. Triandis (1987), "On the Universality of Social Psychological Theories," *Journal of Cross-Cultural Psychology*, 18 (4), 471-498.
- Percy, L. & Rossiter, J. R. (1992). Advertising Stimulus Effects: A Review. *Journal of Current Issue and Research in Advertising*, 14 (1), 75-90.
- Pike, Kenneth (1966), *Language in Relation to a Unified Theory of the Structure of Human Behavior*, The Hague: Mouton.
- Ratchford, Brian T. (1987), "How Insights Around the FCB Grid," *Journal of Advertising Research*, 27 (August-September), 24-38.
- Richins, Marsha L. and Scott Dawson (1992), "A Consumer Values Orientation for Materialism and Its Measurement: Scale Development and Validation," *Journal of Consumer Research*, 19 (December), 303-316.
- Richins, Marsha L. and Floyd W. Rudmin (1994), "Materialism and Economic Psychology," *Journal of Economic Psychology*, 15, 217-231.
- Rosaldo, Michelle Z. (1984), "Toward an Anthropology of Self and Feeling," in *Culture Theory: Essays on Mind, Self, and Emotion*, eds. Richard A. Shweder, and Robert A. Levine, Cambridge, London, Cambridge University Press, 137-157.
- Rosenberg, M. (1979), *Conceiving the Self*, New York: Basic Book, Inc.
- Rudmin, Floyd W. (1988), "Dominance, Social Control, and Ownership: A History and A Cross-Cultural Study of Motivations for Private Property," *Behavior Science Research*, 27, 130-160.

- Sampson, Edward E. (1977), "Psychology and the American Ideal," *Journal of Personality and Social Psychology*, 35, 767-782.
- Sampson, Edward E. (1988), "The Debate on Individualism: Indigenous Psychologies of the Self and Their Role in Personal and Social Functioning," *American Psychologist*, 43 (1), 15-22.
- Sears, R. R. (1961), "Transcultural Variables and Conceptual Equivalence," in B. Kaplan (ed.), *Studying Personality Cross-Culturally*, New York: Row, Peterson, 445-455.
- Sechrest, Lee (1977), "On the Dearth of Theory in Cross-Cultural Psychology: The Is Madness in Our Method," in *Basic Problems in Cross-Cultural Psychology*, ed. Y. H. Poortinga, Amsterdam: Swets and Zeitlinger.
- Shavitt, S. & Brock, T. C. (1984). "Self-relevant responses in commercial persuasion," in K. Sentsis & J. Olson (eds), *Advertising and Consumer Psychology*, New York: Praeger.
- Shweder, R. A. and E. J. Bourne (1984), "Does the concept of the person vary cross-culturally?" in R. A. Shweder and Levine (eds.), *Culture Theory*, Cambridge, Cambridge University Press, 158-199.
- Singelis, T. M. (1994), "The Measurement of Independent and Interdependent Self-Construals," *Personality and Social Psychology Bulletin*, 20, 580-591.
- Sirgy, M. J. (1982). "Self-Concept in Consumer Behavior Research: A review." *Journal of Consumer Research*, 9 (December), 287-300.
- Steele, C. M. (1988), "The Psychology of Self-Affirmation: Sustaining the Integrity of the Self," in *Advances in Experimental Social Psychology*, ed. L Berkowitz, Vol. 21, San Diego, CA: Academic Press, 261-302.

- Swann, W. B., Jr. and S. J. Read (1981), "Acquiring Self-Knowledge: The Search for Feedback That Fits," *Journal of Personality and Social Psychology*, 41, 1119-1128.
- Thorelli, Hans B., Helmut Becker, and Jack Engledow (1975), *The Information Seekers: An International Study of Consumer Information and Advertising Image*. MA: Cambridge: Ballinger Publishing, Inc.
- Trafimow, David, Harry C. Triandis, and Sharon G. Goto (1991), "Some Tests of the Distinction between the Private Self and the Collective Self," *Journal of Personality and Social Psychology*, 60 (5), 649-655.
- Triandis, C. Harry (1989), "The Self and Social Behavior in Differing Cultural Contexts," *Psychological Review*, 96 (3), 506-520.
- Triandis, C. Harry, Robert Bontempo, Marcelo J. Villareal, Masaaki Asai, and Nydia Lucca (1988), "Individualism and Collectivism: Cross-Cultural Perspectives on Self-Ingroup Relationships," *Journal of Personality and Social Psychology*, 34 (2), 323-338.
- Tse, David K., Russell W. Belk, and Nan Zhou (1989), "Becoming a Consumer Society: A Longitudinal and Cross-Cultural Content Analysis of Print Ads from Hong Kong, the People's Republic of China, and Taiwan," *Journal of Consumer Research*, 15 (March), 457-473.
- Tu, Wei-Ming (1985), "Selfhood and Otherness in Confucian Thought," in Marsella, Anthony J., George Devos and Francis L. K. Hsu (eds.), *Culture and Self: Asian and Western Perspectives*, New York: Tavistock Publications, 231-251.
- Veblen, T. (1899), *The Theory of Leisure Class*, New York: Macmillan.

- Venkatraman, M. P., Marlino, D., Kardes, F. R., & Sklar, K. B. (1990), "The Interactive Effects of Message Appeal and Individual Differences on Information Processing and Persuasion," *Psychology & Marketing*, 7 (2), 85-96.
- Wallendorf, Melanie and Eric Arnould (1988), "My Favorite Things: A Cross-Cultural Inquiry into Object Attachment, Possessiveness and Social Linkage," *Journal of Consumer Research*, 14 (March), 531-547.
- Wang, Cheng L. (1995), "Evolution of International Consumer Research: A Historical Review from 1950s to Mid-1990s," *Journal of Euromarketing*, 5 (1).
- Wang, Cheng L. and John C. Mowen (1996), "Separateness-Connectedness Self-Schema: Scale Development and Application to Advertising Message Construction," Unpublished Manuscript.
- Waterman, Alan S. (1981), "Individualism and Interdependence," *American Psychologist*, 36 (7), 762-773.
- Webster's Third New International Dictionary (1986). Merriam-Webster Inc.
- Weise, John R., Fred M. Rothbaum, and Thomas C. Blackburn (1984), "Standing Out and Standing In: The psychology of Control in American and Japan," *American Psychologist*, 39 (September), 955-969.
- Werner, O. and Campbell, D. (1970), "Translating, Working Through Interpreters and the Problem of Decentering," in R. Naroll and R. Cohen (eds.), *A Handbook of Method in Cultural anthropology*, New York: Natural History Press, 398-420.
- Wind, Yoran and Susan P. Douglas (1982), "Comparative Consumer Research: The Next Frontier," *Management Decision*, 4 (1982), 24-35.
- Woike, Barbara A. (1994), "The Use of Differentiation and Integration Processes:

Empirical Studies of 'Separate' and 'Connected' Ways of Thinking," *Journal of Personality and Social Psychology*, 67 (1), 142-150.

Woods, Walter A., Emmanuel J. Cheron, and Dong Man Kim (1985), "Strategic Implications of Differences in Consumer Purposes for Purchasing in Three Global Markets," in *Global Perspectives in Marketing*, ed., Erdener Kaynak, New York: Praeger Publisher, 155-170.

APPENDIX

MEASUREMENT SCALE AND STIMULUS ADS

INSTRUCTION

A Swiss company has recently developed a new brand of watch -- *Alps*. Since college students are one of its targeted markets, the marketing manager wants to know your opinions about the tentatively developed advertisement. Here is the advertisement. Please read it carefully and give your opinions by answering the following questions based on the 9-point scale.

My Reaction to This Advertisement Is:

1. Dislike Neutral Like
1-----2-----3-----4-----5-----6-----7-----8-----9
2. Unfavorable Neutral Favorable
1-----2-----3-----4-----5-----6-----7-----8-----9
3. Negative Neutral Positive
1-----2-----3-----4-----5-----6-----7-----8-----9
4. Bad Neutral Good
1-----2-----3-----4-----5-----6-----7-----8-----9

My impression about the ALPS watch is:

5. Extremely unfavorable Neutral Extremely favorable
1-----2-----3-----4-----5-----6-----7-----8-----9
6. Extremely negative Neutral Extremely positive
1-----2-----3-----4-----5-----6-----7-----8-----9
7. Extremely bad Neutral Extremely good
1-----2-----3-----4-----5-----6-----7-----8-----9
8. Extremely Dislike Neutral Extremely Like
1-----2-----3-----4-----5-----6-----7-----8-----9

18. The ALPS watch ad shows the importance of intimate relationships and mutual reliance.

Strongly Disagree Strongly Agree
1-----2-----3-----4-----5-----6-----7-----8-----9

19. To purchase the Alps watch is a very important decision to me.

Strongly Disagree Strongly Agree
1-----2-----3-----4-----5-----6-----7-----8-----9

20. The decision to purchase the Alps watch requires a lot of thought.

Strongly Disagree Strongly Agree
1-----2-----3-----4-----5-----6-----7-----8-----9

21. There is a lot to lose if I choose the wrong brand of watch.

Strongly Disagree Strongly Agree
1-----2-----3-----4-----5-----6-----7-----8-----9

22. Please guess the purpose of this study _____

23. Your last six (6) digits of social security number (for recording purpose only).

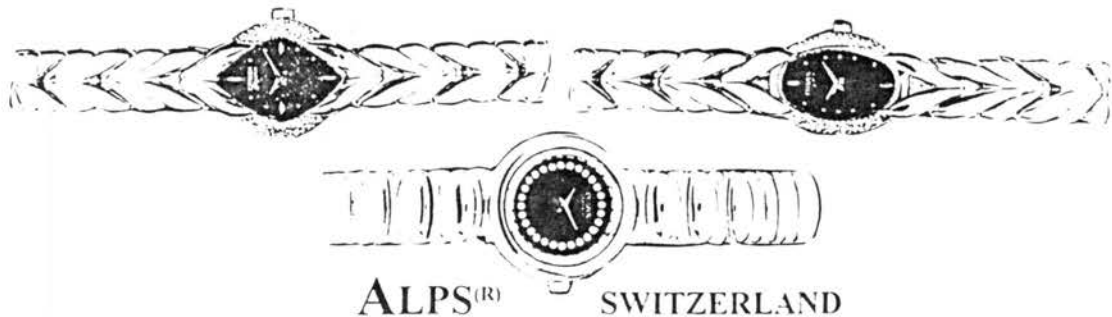


Although we have always been reminded of our striking similarities, it is our differences we have always insisted on. In a close relationship, each of us still "stands out" as an independent person.

It is no wonder then, that each of us owns a different ALPS watch. For while style is key, individual choice is still everything. I am proud of my unique personality and lifestyle.

Because a watch speaks for you, make sure it's using your unique language. The ALPS watch expresses who you are. With the ALPS, you can feel the independence, the autonomy, and the difference.

THE ALPS WATCH. THE ART OF BEING UNIQUE.



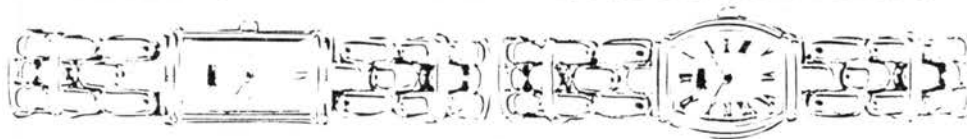


Although we have different personalities and lifestyles, it is our communalities that we appreciate. In a close relationship, the "me" is a part of "us," and we are interdependent people.

It is no wonder then, that all of us own an ALPS watch. Relationships and mutual understanding are still everything. We are proud of belonging to the "ALPS family."

Because a watch speaks for you, make sure it's using our common language. The ALPS watch expresses your concern for others. With the ALPS, you can feel the intimacy and the sharing.

THE ALPS WATCH. A REMINDER OF RELATIONSHIPS.



ALPS SWITZERLAND

一家瑞士手表廠最近開發出一種新產品——阿爾卑斯手表。因為大學生是這種手表的主要銷售市場之一，營銷人員希望知道你對他們暫時設計的廣告的意見。

請你有細讀一下這廣告，然後在相應的數字上劃個圈來表示你的意見。

我對這廣告的反應是

- | | | |
|-----------------------------------|----|-----|
| 1. 不喜歡 | 中性 | 喜歡 |
| 1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9 | | |
| 2. 壞感 | 中性 | 好感 |
| 1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9 | | |
| 3. 否定的 | 中性 | 肯定的 |
| 1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9 | | |
| 4. 壞的 | 中性 | 好的 |
| 1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9 | | |

我對阿爾卑斯手表的印象是

- | | | |
|-----------------------------------|----|-------|
| 5. 極其不喜歡 | 中性 | 極其喜歡 |
| 1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9 | | |
| 6. 極其壞感 | 中性 | 極其好感 |
| 1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9 | | |
| 7. 極其否定的 | 中性 | 極其肯定的 |
| 1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9 | | |
| 8. 極其壞的 | 中性 | 極其好的 |
| 1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9 | | |

現在請你按照“極不同意”或“極其同意”來回答下列問題：

- | | |
|-----------------------------------|------|
| 9. 多數人能夠買得起阿爾卑斯手表。 | |
| 非常不同意 | 非常同意 |
| 1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9 | |
| 10. 阿爾卑斯手表是一般人買不起的高價表。 | |
| 非常不同意 | 非常同意 |
| 1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9 | |
| 11. 阿爾卑斯手表是日常所用的手表。 | |
| 非常不同意 | 非常同意 |
| 1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9 | |
| 12. 阿爾卑斯手表是特殊情況下才會佩戴的豪華手表。 | |
| 非常不同意 | 非常同意 |
| 1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9 | |

13. 因為是瑞士製造，阿爾卑斯手表質量很高。

非常不同意

非常同意

1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9

14. 總體來說，我喜歡瑞士製造的手表。

非常不同意

非常同意

1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9

15. 阿爾卑斯手表廣告強調的是“共享”和“歡聚”的含義。

非常不同意

非常同意

1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9

16. 阿爾卑斯手表廣告所宣傳的是“獨特的”和“獨立的”。

非常不同意

非常同意

1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9

17. 阿爾卑斯手表廣告突出的是“自我”與“他人”的差異和個人的特殊性。

非常不同意

非常同意

1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9

18. 阿爾卑斯手表顯示的是親密關係和相互依靠的重要性。

非常不同意

非常同意

1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9

19. 對我而言，購買阿爾卑斯手表是非常重要的決定。

非常不同意

非常同意

1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9

20. 購買阿爾卑斯牌手表需要考慮很久。

非常不同意

非常同意

1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9

21. 買錯手表牌子，對我來說會是個很大失誤。

非常不同意

非常同意

1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9

22. 最後請你隨意猜一猜這項問卷研究的設想目的。

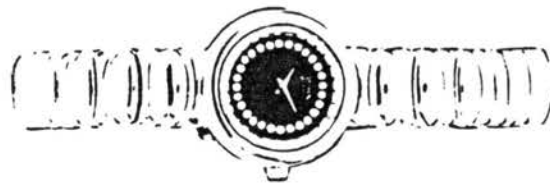


儘管人們總是提醒我們之間的驚人相似，我們看重的是我們之間的差別。在一種親密的人際關係中，“我”有別於“我們”。我是一個獨立的人。

於是，毫不奇怪，我們每個人擁有一個不同的阿爾卑斯牌手表。個別差異和個人選擇高於一切。我為自己獨特的“阿爾卑斯方式”而感到自豪。

既然一個手表代表你說話，就讓它使用你特有的語言。阿爾卑斯牌手表表達出你是怎樣的人。擁有阿爾卑斯牌手表，你會感受到獨立自主和與眾不同。

阿爾卑斯手表-----表現獨特的藝術



阿爾卑斯

瑞士製造

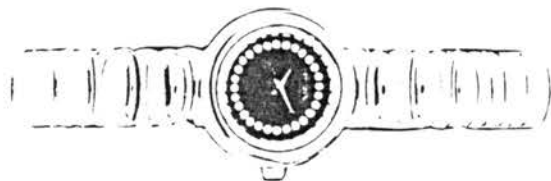


儘管我們各有不同的個性和生活方式，我們看重的是我們的共同性。在一種親密的人際關係中，“我”是我們的一部份。我們是相互依靠的人們。

於是，毫不奇怪，我們個人都擁有一個阿爾卑斯手表，人際關係和相互理解高於一切。我們為共同屬於“阿爾卑斯家庭”而感到自豪。

既然一個手表代表你說話，就讓它使用我們的共同語言。阿爾卑斯手表表達出你對他人的關心。擁有阿爾卑斯，你會感受到親密無間和共同享受的樂趣。

阿爾卑斯手表-----人際關係的提示



阿爾卑斯

瑞士製造

VITA

CHENG LU WANG

Candidate for the Degree of

Doctor of Philosophy

Dissertation: A TALE OF TWO COUNTRIES: A CROSS-CULTURAL EXAMINATION OF CONNECTEDNESS-SEPARATENESS SELF-SCHEMA AND ITS APPLICATION TO ADVERTISING RESEARCH

Major field: Business Administration

Biographical:

Education: Graduated from Shanghai No. 2 high school, Shanghai, People's Republic of China in 1975; received Bachelor of Arts degree in Psychology from Shanghai Teachers University, Shanghai, People's Republic of China in February 1982; received Master of Arts degree in Counseling from Southeast Missouri State University, Cape Girardeau, Missouri in May 1987; received Specialist of Education degree in Educational Psychology from University of Georgia, Athens, Georgia in 1991, respectively. Completed the requirements for the Doctor of Philosophy degree with a major in Marketing at Oklahoma State University in May 1996.

Experience: Employed as a lecturer by Shanghai Teachers University, Department of Educational Psychology, 1982 to 1987; employed by University of Georgia, Department of Educational Psychology as a teaching assistant, 1989 to 1991; employed by Oklahoma State University, Department of Marketing as a teaching assistant, 1992 to 1995.

Professional Memberships: American Marketing Association; Southwestern Marketing Association.

