# Cleveland State University EngagedScholarship@CSU



**ETD** Archive

2014

# A Functional Approach to Schwartz's Cultural Dimensions: Persuasive Appeals Corresponding to Individual Cultural Values

Chichang Xiong Cleveland State University

Follow this and additional works at: https://engagedscholarship.csuohio.edu/etdarchive Part of the <u>Communication Commons</u> How does access to this work benefit you? Let us know!

## **Recommended** Citation

Xiong, Chichang, "A Functional Approach to Schwartz's Cultural Dimensions: Persuasive Appeals Corresponding to Individual Cultural Values" (2014). *ETD Archive*. 582. https://engagedscholarship.csuohio.edu/etdarchive/582

This Thesis is brought to you for free and open access by EngagedScholarship@CSU. It has been accepted for inclusion in ETD Archive by an authorized administrator of EngagedScholarship@CSU. For more information, please contact library.es@csuohio.edu.

A Functional Approach to Schwartz's Cultural Dimensions: Persuasive Appeals

Corresponding to Individual Cultural Values

# CHICHANG XIONG

Bachelor of Arts in Communication

University of Science and Technology of China

June 2011

Submitted in partial fulfillment of requirements for the degree

MASTER OF ARTS IN APPLIED COMMUNICATION THEORY AND

METHODOLOGY

at the

CLEVELAND STATE UNIVERSITY

July 2014

# THESIS APPROVAL

# SCHOOL OF COMMUNICATION

This thesis has been approved for the

School of Communication

And the College of Graduate Studies by:

Kimberly A. Neuendorf

Thesis Committee Chairman School of Communication

06/17/14

(Date)

Richard M. Perloff

Committee Member School of Communication

06/17/14

(Date)

Leo W. Jeffres

Committee Member School of Communication

06/17/14

## ACKNOWLEDGEMENTS

I would like to give special thanks to my advisor, Dr. Kimberly Neuendorf, who provided suggestions and tremendous support not only on my thesis, but also on my career development. I've been in contact with a research team in better preparation for Ph.D. study because of your support. Thanks to my committee members, Dr. Richard Perloff and Dr. Leo Jeffres, that you've been appreciating and supportive of my work all the way.

I would love to thank the FRAMES Group, especially Alex Farmer, Jeff Allen, and Rafeeq Roberts. Without your help, I would never have a well-made set of stimuli, let alone progress of the thesis. I want to hereby thank and memorialize the late Dr. Paul Skalski, who was a great mentor and friend, and who was a great person and a great professor to almost everybody he knew.

Also, thanks to Jim Denny, Dr. Nokon Heo, Dr. Jeffrey Bolt and Dr. Cheryl Bracken, who've provided the sources for my research. I appreciate very much those of you, my dear officemates for supporting and listening to me. Thanks to everyone who worked with me in the School of Communication. Thanks to every one of my friends here at Cleveland State. With your company, I am enjoying life here and having fun with the study.

# A Functional Approach to Schwartz's Cultural Dimensions: Persuasive Appeals Corresponding to Individual Cultural Values

### CHICHANG XIONG

#### ABSTRACT

The goal of this study is to add to the literature of advertising as well as consumer psychology, specifically testing whether people's attitude towards online advertising would depend on how much the advertising resonated with their individual cultural values. Hereby, Schwartz's cultural dimensions were adopted, namely Hierarchy, Egalitarianism, Embeddedness, Intellectual Autonomy and Affective Autonomy. Past research has suggested that when advertising contained the same value a person stresses, that person would have more favorable attitudes towards the ad. More relevantly, research has demonstrated that if an advertisement was more relevant with a person's individual cultural values (Torelli et al., 2009), it would increase the favorability towards the ad. Using moving online banner ads, rather than still images, as advertising stimuli, this study tries to further investigate how advertising works on people. By exposing respondents to online banners embedding different cultural values, the study measured their attitudes towards the banners together with information on demographics and control variables. The results seemed not to support former studies that advertising containing the same value a person stresses received more favorability.

ABSTRACT	iv
CHAPTER I INTRODUCTION	1
CHAPTER II LITERATURE REVIEW	5
2.1 Schwartz's Cultural Values	5
2.2 Individual versus Culture Level Values	7
2.3 Functional Theory Applied to Persuasive Communication	9
2.4 Object Variations in Operationalizing Functional Theory	10
2.5 Cultural Values Reflected in Advertisements	11
2.6 Constructs in the Experiment	12
2.6.1 Dependent Constructs.	13
2.6.2 Control: National Identity.	13
2.6.3 Control: Cosmopoliteness.	14
2.6.4 Control: Self-monitoring	14
2.6.5 Control: Social Desirability Responding.	15
2.6.6 Control: Psychological Reactance.	16
2.7 Hypotheses	17
CHAPTER III METHODS	19
3.1 Materials	19
3.2 Measurements	22

# TABLE OF CONTENTS

3.2.1 Predictor measures.	
3.2.2 Dependent measures.	
3.2.3 Control measures.	
3.2.4 Demographics, media habits and additional measures.	
3.3 Design	
3.4 Data Analysis	
CHAPTER IV RESULTS	
4.1. Sample Description	
4.2. Hypotheses	
4.3. Additional Findings	
4.3.1. Manipulation Check	
4.3.2. Purchase Intention	44
4.3.3. Object Function	
CHAPTER V DISCUSSION	
5.1. Hypothesis Results	
5.2. Values of the General Sample	
5.3. Additional Results	
5.3.1. Manipulation Check Results	
5.3.2. Purchase Intention Results	57
5.3.3. Object Function Results.	60

5.4. Limitations	
5.5. Future Research	
REFERENCES	64
APPENDICES	
APPENDIX A	
APPENDIX B	
APPENDIX C	
APPENDIX D	
APPENDIX E	100

# LIST OF TABLES

Table 1. Experimental Design
Table 2. Scale Reliabilities
Table 3. Descriptive Statistics for Variables
Table 4. Correlations Relevant to the Hypotheses41
Table 5. Means of Five Manipulation Check Questions for Five Appeals
Table 6. Attitude and Purchase Intentions for Different Products
Table 7. Correlations between Attitude and Purchase Intention
Table 8. Multiple-item Measurements of Attitude and Purchase Intentions for Different
Products
Table 9. Multiple-item Measurements of Correlations between Attitude and Purchase
Intention
Table 10. Object Functions (Car, Coffee, Fragrance)
Table 11. Significance Level of Paired-sample T-tests Comparing Object Functions50

# LIST OF FIGURES

Figure 1. Mean Scores of Values	34
Figure 2. Mean Scores of Values (Excluding Non-Americans)	35

### CHAPTER I

#### INTRODUCTION

When we think of our values, we think of what is important to us in our lives (Schwartz, 2006). Human values are defined as desirable goals, varying in importance, that serve as guiding principles in people's lives (Schwartz, 1992). Rokeach (1986) has defined a value as an abstract ideal that can be positive or negative and is representative of a person's enduring beliefs regarding ideal modes of conduct (see also Fujioka and Neuendorf, 2014). Similarly, Shalom Schwartz and colleagues have considered basic values as "trans-situational goals, varying in importance, that serve as guiding principles in the life of a person or group" (Schwartz et al., 2012, p. 3). One person might have numerous values, with the importance of one particular value differing from other persons.' Values, and the importance of values, guide people's selection or evaluation of behavior and events (Schwartz, 1992). Thus, studying values can have practical meanings that can be applied to arenas such as marketing and advertising.

Schwartz (1992) mentioned that the primary content aspect of a value is the type

of goal or motivational concern it expresses. Ten motivational values, Power, Achievement, Hedonism, Stimulation, Self-Direction, Universalism, Benevolence, Tradition, Conformity and Security, were identified based on data collected by Schwartz and colleagues in 20 nations over a period of 20 years. The ten motivational values are organized on two bipolar dimensions, each pole representing a higher-order value type that combines two or more of the 10 values. One dimension is Openness to Change versus Conservation. In this dimension, Self-Direction and Stimulation compose Openness to Change, while Conformity, Tradition and Security compose Conservation. The other dimension is Self-Transcendence versus Self-Enhancement. In this dimension, Universalism and Benevolence compose Self-Transcendence, while Achievement and Power compose Self-Enhancement. Moreover, Schwartz stated that "the same set of four higher-order values that organizes individual-level value systems also organizes culturelevel value systems," because "a. psychological requirements of individuals place constraints on the ways institutions must be structured in order to be effective; [and] b. cultural priorities influence both the content of individual socialization and the social reinforcement contingencies that individuals experience in the pursuit of their values" (Schwartz, 1994, p. 97). Thus, parallel to the individual-level "Openness-to-change versus Conservation," the first culture-level dimension "Autonomy versus Conservatism" was proposed. And parallel to the individual-level "Self-Enhancement versus Self-Transcendence," the second culture-level dimension "Hierarchy and Mastery versus Egalitarian Commitment and Harmony With Nature" was proposed. In Schwartz (2006), "Autonomy versus Conservatism" and "Hierarchy and Mastery versus Egalitarian Commitment and Harmony With Nature" were validated based on data from 73 countries, and further organized into three dimensions: "Autonomy (Affective Autonomy and Intellectual Autonomy) versus Embeddedness," "Egalitarianism versus Hierarchy," and "Mastery versus Harmony" (Schwartz, 2006).

While values are abstract and fundamental to people, they have the potential to influence many different attitudes that people form towards the objects, people and ideas they encounter (Maio & Olson, 1995). According to Katz (1960), functional theories state that people's attitudes serve one or more of these functions: Adjustment (utilitarian), egodefensive, value-expressive and knowledge. Even the same attitude held by different people might serve different functions. Not every attitude is affected heavily by values, such as attitudes that serve only a utilitarian function. In order to be highly relevant to values, attitude has to serve a value-expressive function to a great extent. Maio and Olson (1994) found that subjects with value-expressive attitudes exhibited stronger valueattitude relations than did subjects with mixed attitude functions or utilitarian functions. Thus, they concluded that it is only when people form attitudes specifically aimed at expressing values that the values have significant relations to attitudes. If attitudes are aimed at fulfilling some other goals, values will be less strongly related to attitudes.

Another important principle of functional theories is that persuasive appeals matched with certain functions of an attitude are more effective than others. Clary et al.

(1998) demonstrated that persuasive appeals matched with people's motivation of volunteerism produced better results than did mismatched persuasive appeals.

The current study focuses on two dimensions of Schwartz's cultural values: (a) Autonomy (Affective Autonomy and Intellectual Autonomy) versus Embeddedness and (b) Hierarchy versus Egalitarianism. It aims at investigating the effectiveness of persuasive appeals matched with different cultural values on people. Selected products in the experiment serve a value-expressive function to differing degrees so that people's attitudes toward them may be differentially affected by their values.

## CHAPTER II

#### LITERATURE REVIEW

## 2.1 Schwartz's Cultural Values

"Individualism/Collectivism" is a widely used and broadly researched cultural values dimension over the last 40 years. An individualistic culture consists of "loosely linked individuals who view themselves as independent of collectives; are primarily motivated by their own preferences, needs, rights, and the contracts they have established with others" (Triandis, 1995, p. 2). A collectivist culture consists of "closely linked individuals who see themselves as parts of one or more collectives; are primarily motivated by the norms and duties imposed by those collectives" (Triandis, 1995, p. 2). Although individualism/collectivism is able to explain numerous cultural facts, scholars argue that this perspective is limited in terms of power and more cultural dimensions actually exist (Shavitt et al., 2011; Shavitt, Zhang, Torelli, & Lalwani, 2006).

Schwartz (2006) came up with three cultural dimensions: Autonomy versus Embeddedness, Hierarchy versus Egalitarianism, and Mastery versus Harmony. The first two dimensions will be further explored in this study. The first dimension defines the relationship between individuals and the group. Autonomous people are viewed as autonomous entities and express preferences, feelings, ideas, and abilities in their own uniqueness. In contrast, people with an orientation of Embeddedness are viewed as embedded entities in their social groups. They emphasize identifying with the group and striving toward shared goals. Moreover, Schwartz divided Autonomy further into Affective Autonomy and Intellectual Autonomy: Affective Autonomy promotes pleasant emotional experience for people, which includes pleasure, an exciting life and a varied life. Intellectual Autonomy on the other hand encourages people to be intellectually independent, such as being self-directional, creative or broadminded.

The second Schwartz dimension, Hierarchy versus Egalitarianism, describes the means by which people behave to preserve social structure. People with an orientation of Egalitarianism recognize one another as moral equals who care for everybody's welfare. Values including equality, social justice, responsibility, and honesty are emphasized. Unequal distributions of power, roles, and resources are considered legitimate, and hierarchical distribution of roles are taken for granted for people with an orientation of Hierarchy.

Schwartz's Autonomy/Embeddedness dimension is similar to Individualism/ Collectivism, and actually, it is claimed that Individualism/Collectivism could be defined by it (Schwartz, 1994). The reason is that Individualism/Collectivism has two themes within it: One theme focuses on whether it is the interests of the person or the group the

person belongs to take precedence; the other focuses on the Autonomy or Embeddedness of the person in the group. Schwartz (1992) argued that if people are truly embedded in their groups, conflict of interest is not experienced, so the first theme does not actually exist independently. Meanwhile, Schwartz's "Egalitarianism/Hierarchy" dimension is similar to the "Horizontal/Vertical" distinction introduced by Shavitt (Shavitt et al., 2006; Shavitt et al., 2011) because Shavitt actually defines horizontal as equality and vertical as hierarchy. However, "Egalitarianism/Hierarchy" is different from "Horizontal/Vertical" in that "Egalitarianism/Hierarchy" is a dimension independent of and defined clearly and separately from the "Autonomy/Embeddedness" cultural dimension. In contrast, "Horizontal/Vertical" is claimed to nest within "Individualism/Collectivism" and the two dimensions are inseparable (Shavitt, 2006). The way "Horizontal/Vertical" is defined is through defining the four cultural groups divided by "Horizontal/Vertical" and "Individualism/Collectivism," that is, through respectively defining "Horizontal Individualism," "Horizontal Collectivism," "Vertical Individualism," and "Vertical Collectivism." As is seen, Schwartz's dimensions offer a clearer conceptualization, and this will be adopted in this study.

## 2.2 Individual versus Culture Level Values

Individual values can be viewed as a product of culture combined with individual experience. Cultural-level values could not be simply applied to individual-level values. The commonalities among individual value priorities reflect the cultural emphases the

society puts on individuals, while individual variation reflects how people differ from each other due to unique personality and experience. Thus, individual-level values are derived from analyses of the scores of individual persons and culture-level values are based on national means of individual scores, making the two statistically independent (Schwartz, 1994). For example, Hofstede's findings for the Individualism/ Collectivism dimension and his power distance dimension emerged only in the culture-level analysis, but not at the individual-level analysis (Hofstede, 1980).

However, despite the statistical independence, culture-level and individual-level value dimensions are related conceptually in that, first, "institutional priorities in a society must take into account human nature to make individuals function properly in them," second, "individuals in a society are socialized to internalize cultural values to adapt to the society," and third, "value dimensions at the two levels should overlap somewhat because social reinforcement contingencies created by cultural priorities would tell whether conflict or compatibility takes place while individual is pursing particular values" (Schwartz, 1994, p. 93). Due to the conceptual relatedness of culture-level and individual-level value dimensions, "Openness to Change and Conservation" and "Self-Transcendence and Self-Enhancement" could operate as both. And because "Autonomy versus Embeddedness," "Hierarchy versus Egalitarianism," and "Mastery versus Harmony" emerged from above-mentioned higher-order value dimensions, they also function as individual-level values.

## 2.3 Functional Theory Applied to Persuasive Communication

Values could help explain the reasons people behave in certain ways, and help predict part of people's behaviors in the future. Functional theory is a way that connects value with people's behavior. It states that every attitude has its function or motivation. Functions of attitude can be adjustment, ego defense, value expression and knowledge (Katz, 1960). The Adjustment function is that people strive to maximize the rewards in the external environment and to minimize the penalties. This function is dependent on present or past perceptions of the utility of the attitudinal object for the individual. The Ego-defensive function is where people avoid facing either the inner reality of the kind of person one is, or the outer reality of the dangers the world holds for one, which stems basically from internal conflict with its resulting insecurities. For instance, many of our attitudes have the function of defending our self-image. The Value-expressive function is that some individual's attitudes reflect his/her central values, that is, his/her beliefs, selfimage or the type of person he/she conceives to be. The Knowledge function is that individuals seek knowledge to set up standards to understand the world around them. Attitude can serve one or more than one of those four functions. Even for two people who have the same attitude towards certain objects, these attitudes might serve different functions for the two people.

Another important principle of functional theories is the notion that an attitude that serves a certain function will change in response to different types of persuasive appeals matched with that certain function. Using this aspect of functional theory, Snyder, Clary and Stukas (2000) proposed a functional approach to volunteerism. They created six sets of advertisements, each of which adopted one of the six kinds of motivations behind volunteerism. It turned out people evaluated each advertisement as effective and persuasive to the extent that persuasive appeals in the advertisement matched their personal motivations for volunteerism (Clary, Snyder, Ridge, Copeland, Stukas, Haugen, & Miene, 1998).

## 2.4 Object Variations in Operationalizing Functional Theory

Shavitt (1989) proposed an object-based method in varying the functions of subjects' attitudes. Some objects serve primarily a single function while others serve multiple functions. By using products assumed to serve primarily either utilitarian or value-expressive (social identity) functions, Shavitt (1985) was able to establish that function-relevant appeals were more persuasive than function-irrelevant appeals. Shavitt further demonstrated that coffee and air conditioners serve primarily a utilitarian function, cars serve both utilitarian and value-expressive functions, and wedding rings, American flags or Ohio Buckeye t-shirts serve primarily a value-expressive function (Shavitt, 1990). While Shavitt proposed subject's personality, or subject's appearance as self-esteem maintenance objects, she did not propose any product that served primarily a self-esteem maintenance function.

Moreover, according to Maio and Olson (1994), people's attitude towards

products was affected heavily by people's central values only when the products serve to a great extent a value-expressive function. Thus, in the current study, in order to test how people's attitude towards persuasive appeals is affected by cultural values, the products selected needed to have value-expressive function as its major or one of its major functions.

While testing whether appeals about objects that predominantly engage a valueexpressive function should be more persuasive if they describe the object's valueexpressive function, Shavitt (1990) produced ads consisting of a short headline and approximately 120 words of text, such as "Astoria [perfume] is the sophisticated scent that tells people you're not one of the crowd." In this ad, the value expressed is "uniqueness," which is reflected in every one of Shavitt's ads. What if different values such as "uniqueness" and "stress for success" appear in two different ads? According to Functional Theory, if one of the two values "uniqueness" and "stress for success" is relevant with one individual's value systems while the other is irrelevant, the advertisement with values relevant with his/her value systems would produce a better effect than the advertisement with values irrelevant with his/her value systems.

# 2.5 Cultural Values Reflected in Advertisements

"[Culture-level] Cultural Values cannot be observed directly, they must be inferred from various cultural products (e.g., folktales)" (Schwartz, 1994, p. 92). One of the ways that cultural values could be reflected is through advertising (Shavitt, Lalwani, Zhang, & Torelli, 2006). A multi-nation enterprise would have to change its advertising strategy as it develops cross-culturally. Shavitt, Johnson, and Zhang (2011) content analyzed 1,211 magazine advertisements in five countries and revealed differences in terms of values embedded in national advertisements. In fact, patterns of ads that emphasize different cultural values corresponded well to countries' cultural classification in Shavitt's vertical/horizontal cultural dimensions. As cited in Shavitt et al. (2011), when Shavitt, Zhang, and Johnson (2006) asked US participants to list ads that they think persuasive, the extent to which they emphasized status themes were positively correlated with the degree to which they had a vertical cultural orientation. Moreover, in Torelli et al. (2009) (as cited in Shavitt et al., 2011), they found that the higher a person's horizontalindividualism orientation is, the more favorable he/she is towards advertisements that stress values consistent with horizontal-individualism. Other cultural orientations also had the same results.

The current study focuses on the effect of persuasive appeals respectively matched with two dimensions of Schwartz's cultural values. Products employed in the experiment would engage a large portion of the value-expressive function. People whose values are matched with the one expressed in an ad are supposed to have more positive attitudes towards the advertisement than those whose values are mismatched with values expressed in the ad.

#### 2.6 Constructs in the Experiment

*2.6.1 Dependent Constructs.* Attitude, Behavioral Intention and behavior are thought to closely bond with each other. In Theory of Reasoned Action (TRA), attitude has a direct impact on Behavioral Intention, and Behavioral Intention influences behavior. Behavioral Intention is "a person's plan or expectation for how he/she is going to behave" (Frymier & Nadler, 2007, p. 138). It was proposed to be the "best indicator of whether a person will actually perform a behavior" (Frymier & Nadler, 2007, p. 139).

2.6.2 Control: National Identity. A number of constructs were included as potential controls, for assessment of possible mediation between the independent constructs of cultural values held by individuals and the dependent constructs of attitudes and behavioral intention. Five such constructs were included. The first was national identity, derived from theories of social identity. Social identity is defined as "part of the individuals' self-concept which derives from their knowledge of their membership of a social group (or groups) together with the value and emotional significance of that membership" (Luhtanen & Crocker, 1991, p. 214). Social identity theory further postulates that people are not only motivated to achieve a positive personal identity but also a positive social identity, and one's social identity is achieved by social comparison between one's ingroup and outgroups. A nation is a large social group. Social identity measurement scale thus could be applied to the measurement of national identity. Because national identity influences to what extent an individual agrees/disagrees with values prevalent to his/her nation, it is important as we study individual values and should be controlled for.

2.6.3 Control: Cosmopoliteness. The second potential control construct was "Cosmopolitanism" or "Cosmopoliteness," which captures people's connectedness to the larger social environment or system (Jeffres et al., 2014), and is reflected by multiple dimensions, including: Diversity of interests, diversity of acquaintances, diversity of interpersonal communication network, cosmopolitan identification, interest in and an appreciation of different cultures, tolerance of different cultures, and diversity of media content to which one generally is exposed (Bracken, Jeffres, Neuendorf, Kopfman, & Moulla, 2005). Interest in or knowledge of other cultures inevitably leads to a person's recognition and appreciation of other cultural values, which might account for an explanation of how much a person's personal value relates to his/her own cultural values.

2.6.4 Control: Self-monitoring. The third control construct included in the study was self-monitoring. High self-monitoring persons are known to be "adept at tailoring their behavior to fit social and interpersonal considerations of situational appropriateness, and as a result, their behavior often displays marked situation-to- situation shifts in the images they convey to other people" (Snyder & Debono, 1985, p. 587). If an ad allows high self-monitoring individuals to perceive that the products could enhance their image, they should react favorably to it. In contrast, low self-monitoring persons do not mold their behavior to fit situational or interpersonal considerations, and are less concerned with the images they project to others in social situations. Thus, they are more concerned whether their behaviors are accurate reflection of their underlying attitude or values.

Through multiple experiments, Snyder and Debono (1985) found out individuals with different levels of self-monitoring reacted differently towards image-oriented and product-quality-oriented ads. Image-oriented ads are so-called "soft" ads, generally focusing on package of the product and stressing on external values of the product such as what it symbolizes and the image of people using the product. Product-quality-oriented ads are so-called "hard" ads, which stress the "intrinsic merit, inherent quality and functional value of the product itself." High self-monitoring individuals reacted more favorably to image-oriented ads while low self-monitoring individuals were more willing to try a product if it was marketed with a quality orientation. In the current experiment, the stimuli basically are "soft" ads, stressing external values of the products, such as whether it symbolizes "equality" or "luxury."

2.6.5 Control: Social Desirability Responding. A fourth control construct was social desirability responding. Kuncel and Tellegen (2009) defined socially desirable responding as "behaving in a manner that is consistent with what is perceived as desired by salient others" (p. 202). Paulhus (1991) proposed that social desirability is comprised of two dimensions: Impression Management and Self-Deception Enhancement, both of which lead to answers that make a respondent look good. Richman, Kiesler, Weisband and Drasgow (1999) pointed out that whether or not respondents are using a computer or a traditional instrument to respond to a survey, they would be more or less likely to

purposely distort their responses in a socially desirable direction. In the 60s and 70s, a variety of scales were developed to assess individual differences in socially desirable responding, such as the Approval-Motivation Scale, the Self- and Other-Deception Questionnaires, and the Marlowe-Crowne Scale (Paulhus, 1984). In Stober (1999), he constructed a new scale in the Marlowe-Crowne style, but with up-to-date contents. Based on inter-item correlations and item difficulties, 17 items were retained from the first pool of 33 items, and were called the Social Desirability Scale-17 (SDS-17). In Stober (2001), the SDS-17 were further validated and proved to be reliable measurements for people from all age groups. One of the seventeen items, however, was excluded due to near-zero item-total correlations. Thus, the newest SDS scale of Stober actually has 16 items in it. Social desirability responding is an issue with virtually all self-report and interview data collections; in this study, it is even more pertinent due to the focus on cultural values, which with their reflection of the inner self, carry some essence of the self-concept.

2.6.6 Control: Psychological Reactance. The final control construct included in this study was psychological reactance. Psychological Reactance Theory postulates that when freedom is threatened or eliminated, a motivational state, psychological reactance, is aroused to restore that loss of freedom (Hong & Faedda, 1996). Psychological Reactance might affect how people behave. For instance, some people might resist social influence, persuasion, or psychotherapy. It was proposed as a personality trait that differs individually, and could be measured on different individuals using a scale. Psychological reactance is an important consideration for all studies of persuasive messages.

# 2.7 Hypotheses

Schwartz's cultural dimensions are: Hierarchy/Egalitarianism, Autonomy/Embeddedness, and Mastery/Harmony. The current study focuses on only two dimensions: Hierarchy/Egalitarianism and Autonomy/Embeddedness. Out of the two dimensions, Autonomy could be further divided into Intellectual Autonomy and Affective Autonomy (Schwartz, 2006). In past research, individual cultural values orientations of participants were measured (Shavitt, Zhang, & Johnson, 2006; Torelli et al., 2009), and participants were asked to either rate their attitude toward ads embedding cultural values, or write ads that they personally thought persuasive. The current study followed past research by measuring participants' individual cultural values orientations and asking them to rate their attitude towards ads embedding cultural values.

Based on literature on Functional Theory, and Schwartz's cultural value dimensions and cultural values applied to advertising, the present study presents the following hypotheses.

H1: People scoring high in hierarchy will have more favorable Attitude towards Ad, Attitude towards Product than people scoring low in hierarchy towards advertisements emphasizing hierarchy.

H2: People scoring high in egalitarianism will have more favorable

17

Attitude towards Ad, Attitude towards Product than people scoring low in egalitarianism towards advertisements emphasizing egalitarianism.

H3: People scoring high in embeddedness will have more favorable Attitude towards Ad, Attitude towards Product than people scoring low in embeddedness towards advertisements emphasizing embeddedness.

H4: People scoring high in intellectual autonomy will have more favorable Attitude towards Ad, Attitude towards Product than people scoring low in intellectual autonomy towards advertisements emphasizing intellectual autonomy.

H5: People scoring high in affective autonomy will have more favorable Attitude towards Ad, Attitude towards Product than people scoring low in affective autonomy towards advertisements emphasizing affective autonomy.

H6: People scoring high in hierarchy will have more favorable Attitude towards Ad, Attitude towards Product towards advertisements that emphasize hierarchy than advertisements that emphasize egalitarianism.

H7: People scoring high in embeddedness will have more favorable Attitude towards Ad, Attitude towards Product towards advertisements that emphasize embeddedness than advertisements that emphasize intellectual autonomy and advertisements that emphasize affective autonomy.

## CHAPTER III

# METHODS

## 3.1 Materials

In the present study, a series of online banners was used to examine the impact of cultural values on advertising effect. An online banner typically consists of several static or moving images, each of which appears for several seconds and switches to another. They are usually embedded into web pages, such as shopping websites, social media, or informational websites, in order to advertise among audiences who visit those websites. In past research, still images or simple texts were produced in order to examine how people's values influenced the way they were affected by advertisements embedding such values (Shavitt, 1989; Shavitt & Lowrey, 1992). However, in the new era where the Internet is omnipresent in people's lives, more attention and resources have been devoted to online advertisements and e-marketing (Guha, Cheng & Francis, 2011; Lindell & Omri, 2011), because, first, it is more cost efficient as the Internet can reach an enormous

audience regardless of geographic location, age or social-economic status, and second, it is more time efficient, as online advertisements take less time and have a shorter cycle to implement compared to traditional advertisements. Magazine ads, not to mention simple texts, are nearly obsolete in examining modern people's attitude towards advertisement. Online banners were thus adopted for the study. A typical informational website (e.g., Craigslist.com, Answers.com, IMDB.com) was used as the implanting website of the banners. Before production of the banner ads, the study with a complete questionnaire and proposal for the banners was submitted to and approved by the Cleveland State University Institutional Review Board.

The stimuli consisted of 15 online advertisements made with three different product categories, namely car, fragrance and coffee, and five different values appeals corresponding to the Schwartz's cultural values adopted in the current study. The three products were selected from a list of product categories through piloting, based on the principle that they are suitable to use for both man and woman, appropriate to fit into the five cultural values, differ on product involvement, and the functions the product serves. New brands were created for each of the three product categories by the researchers to prevent people's attitudes towards existing brands from biasing the results. The novel brand names (Relance Indigo for car, La Barista for coffee, Le Volonte for fragrance) were pilot tested for being appropriate and not related with bad images for the product categories. All three products were thought to engage a value-expressive function, while the extent to which each engages utilitarian or self-esteem maintenance functions was thought to differ. Meanwhile, the five banners for each product category respectively reflected the five cultural values under investigation, namely Hierarchy, Embeddedness, Intellectual Autonomy, Affective Autonomy and Egalitarianism.

Across the three product categories, banners with the same cultural value remained consistent except for brand name and product image at the right bottom corner of the banner. Also, in each banner, a phone number and web address were included right below the product image (See Appendices A and B for example banner ads for each product category and full texts of the banner ads). The photos of the products came from existing brands but were PhotoShopped to get rid of brand names on them. The logos of the products were produced by the researchers based on the brand names. Colors and transitions between different images within each banner ad were selected based on online suggestions of practitioners' to match the values. Photos, logos and colors were pilot tested respectively to make sure that people did not recognize the product photos as any existing brands, considered the logos as appropriate for the product categories and the colors appropriate for the different values.

Production of the appeals used in the advertisements was based on Schwartz's PVQ (Portrait Values Questionnaire) (Schwartz, Melech, Lehmann, Burgess, Harris, & Owens, 2001). The PVQ is an extended version of Schwartz Value Survey (SVS). The SVS was used in current study to measure participants' individual value orientations, while the PVQ was used as the basis for producing the ad lines in the banners. Because the SVS contains 34 items for the five values, and is more abstract, with each item explained only by a short sentence of no more than six words. Comparatively, the PVQ consists of 21 items for the five values, with each item explained more explicitly by a longer sentence, thus making it easier to implement in ads. A second pilot test was conducted to test whether the completed stimuli, including the texts in the banner ads, were proper.

#### 3.2 Measurements

Study participants were asked a variety of questions in the research instrument, which was administered via SurveyMonkey. The full instrument may be found in Appendix C.

*3.2.1 Predictor measures.* Participants' individual values were measured employing the Schwartz Value Survey (SVS; Schwartz, 1992). The original Schwartz Value Survey included 56 items, which was reduced to 45 items after only 45 items were found to have reasonably equivalent meaning in all of the 66 countries investigated (Schwartz, 2006). This study examined five out of the seven Schwartz's cultural values, and utilized 34 of the 45 items measuring the five values.

3.2.2 Dependent measures. Participants' Attitude towards the Ad, Attitude towards the Product, and Purchase Intention are dependent variables, assessed by asking a series of questions adapted from Bergkvist and Rossiter (2009). Both single-item and multiple-

item measurements were adapted to double-check each other, also checking the consistency between the two measurement types. The two measurements mainly differed on the number of items used. A single-item measure of Attitude toward the Ad asked "Which of the following statements best describes your feeling about the ad?", followed by a 7-point response scale (from "I disliked it extremely," to "I liked it extremely"). A single-item measure of Attitude toward the Product asked "Which of the following statements best describes your feeling about the /specific brand of product/?", followed by a 7-point response scale (from "I think it is extremely bad," to "I think it is extremely good"). A single-item measure of Purchase Intention asked "If you were going to buy /product category/, how likely would you be to try /brand/?", followed by a 6-point response scale (from "no chance or almost no chance," to "certain or practically certain"). Each multiple-item measure included four pairs of adjectives asking respondents to rate the ad or the product, with the four items summed into a single scale. The multiple-item measurement for Attitude toward the Ad instructed "Indicate how well one or the other adjective in each pair describes how you perceived the ad on a 7-point scale," followed "Dislike-Like," "Bad-Good," "Unpleasant-Pleasant," by and "Uninformative-Informative." The multiple-item measurement for Attitude toward the Product was "Indicate how well one or the other adjective in each pair describes how you feel about the /product name/ on a 7-point scale," followed by "Bad-Good," "Dislike-Like," "Unpleasant-Pleasant," and "Useless-Useful." The multiple-item measure of Purchase

Intention was "Indicate how well one or the other adjective in each pair describes the likelihood that you would try /product name/ if you were to buy /product category/ on a 7-point scale," followed by "Unlikely-Likely," "Improbable-Probable," "Uncertain-Certain," and "Impossible-Possible."

In the current study, behavior could not be measured directly as people were not purchasing real products. The other two variables: attitude and Behavioral Intention were measured. Furthermore, in advertising research, Attitude towards the Ad, Attitude towards Product of a specific brand and Purchase Intention were commonly measured together (Bergkvist & Rossiter, 2009). Thus, the current study adopted items of measurement in past research to measure the three dependent variables.

*3.2.3 Control measures.* As described in the literature review section, five psychological constructs were included in the study as potential controls: National identity, Cosmopoliteness, Self-monitoring, Social Desirability Responding, and Psychological Reactance.

*National Identity.* The extent to which people identify with their own culture might help explain individual differences such as differences in individual cultural values orientations or individual responses to advertising. The four questions measuring National Identity were adapted from the Social Identity Scale by Luhtanen and Crocker (1991). The items are C1 through C4 in the instrument, which may be found in Appendix C.

Cosmopoliteness. This construct describes people's connectedness to the larger social environment or system. More than 28 items involving 6 dimensions were used to measure cosmopoliteness in Bracken, Jeffres, Neuendorf, Kopfman, and Moulla (2005). In the current study, a shorter version of the set of measures for cosmopoliteness was used, with seven items touching on the dimensions of "interest of other cultures" and "diversity of interpersonal communication network" adapted from Jeffres, Neuendorf, Bracken, and Atkin (2008). The first three items were on a 0-10 scale (where 0=strongly disagree, 5=neutral, 10=strongly agree) and were "I think of myself as a citizen of the world," "In any given month, I communicate with people from a wide variety of backgrounds and cultures," and "I'm more aware of what's going on around the world than most of my friends." Three additional items asked respondents to use a 0-10 scale to rate their interest in "travel to different countries," "current events in other countries," and "other cultures." An additional item asked respondents for the number of times they had traveled outside the United States in the past five years. In the current study, this seven-item measurement of "cosmopoliteness" was adopted. These items appear as D1 through D4 and E1 through E3 in Appendix C.

*Self-Monitoring*. This construct describes the extent to which an individual has the will and ability to modify how they are perceived by others. A 25-item self-monitoring scale was developed by Snyder (1974). Respondents are supposed to answer by selecting "true," "mostly true," "false," or "not usually true." Example items include "I find it hard

to imitate the behavior of other people," "I can make impromptu speeches even on topics about which I have almost no information," and "I guess I put on a show to impress or entertain people." These items are F1 through F25 in Appendix C.

Social Desirability Responding is one of the confounding factors in every selfadministered study. This tendency deviates people's report of their own behaviors or values so that it would improve their impression on others or is socially desirable. In Stober (2001), the new Social Desirability Scale-17 (SDS-17) was compared with other existing measurements of social desirability responding such as the Eysenck Personality Questionnaire-Lie Scale, Sets of Four Scale, Marlowe-Crowne Scale, Balanced Inventory of Desirable Responding Scale (BIDR), and was validated to be a "reliable and valid measure of social desirability, suitable for adults of 18 to 80 years old" (p. 222). The SDS-17 was further validated by Blake, Valdiserri, Neuendorf, and Nemeth (2006) for use in the United States. Thus, the SDS-17 was used here for the measurement of social desirability responding. These items may be found in B1 through B16 in Appendix C.

*Psychological Reactance* refers to people's motivational reaction to offers, persons, rules, or regulations that threaten or eliminate specific behavioral freedoms. It can affect persuasion by the level or extent people resist or adopt certain attitudes. In Hong and Faedda (1996), they used eleven items to measure psychological reactance and asked respondents to rate the statements from "strongly disagree" to "strongly agree." Example items include "When someone forces me to do something, I feel like doing the opposite," "I become frustrated when I am unable to make free and independent decisions," and "I resist the attempts of others to influence me."

A 11-item scale was adopted in the current study to measure Psychological Reactance, which was refined from the 14-item Hong Psychological Reactance Scale, after excluding three problematic items. In Appendix C, these items are N1 through N11.

*3.2.4 Demographics, media habits and additional measures.* Basic demographic information like gender, age, education, marital status, racial identity, and household income were measured. (See items P1 through P7 in Appendix C.) Besides that, general media use information was measured too, like hours of television viewed "per day" and "yesterday," hours of radio listening "yesterday," and emails sent out "yesterday," etc. (See items O1 through O9 in Appendix C.)

*Object function* refers to the main purposes an object can serve. For example, some objects may serve primarily a single type of purpose: e.g., An Ohio Buckeye flag serves a value-expressive purpose, but does not serve a utilitarian purpose. The functions of attitudes towards objects are substantially influenced by object function. People's attitudes towards the Ohio Buckeye flag may only derive from its value-expressive purpose (Shavitt, 1989). Thus, it is important to know about what functions a product serves when examining people's attitude towards it. A three-item scale was utilized as in Shavitt (1989) to measure object function on a 5-point response scale: "My past experiences with object" (Utilitarian), "My values and my friends' beliefs" (Social

Identity), and "My self-esteem: How confident I feel about myself" (Self-esteem maintenance), asking to what extent the respondents think the items contribute to their attitudes towards the object. These items can be found as L1 through L3 in Appendix C.

*Personal Relevance.* This is a measure of how familiar people are towards each of the product categories adopted in the study. Three items were included in the measure: Purchase history, frequency of purchase and intent of future purchase of the specific product category. These are items M1 through M3 in Appendix C.

## 3.3 Design

This experiment had two factors and used a partial repeated measures design. The two factors were Product Category (car, coffee and fragrance) and Cultural Value in Ad (five different cultural values: Hierarchy, Egalitarianism, Embeddedness, Intellectual Autonomy and Affective Autonomy). A complete within-subjects repeated measures design was not used as it would require each participant to view 3x5 = 15 different ads, and would create a strong demand characteristic by showing each participant all possible combinations. Instead, a five-group counterbalanced design was used as shown in Table 1, with the principle that each participant viewed all three product categories, with a different cultural value for each, and that in the design, each cultural value appeared an equal number of times for each product category.

Before viewing the stimuli, respondents were required to answer a series of questions including Individual Value Orientations, the Social Desirability Scale, National Identity, Cosmopoliteness and the Self-Monitoring Scale. Then, they were exposed to three clips of online banners. Following each banner clip, they were asked about recall and interpretation of messages in the ad, attitude towards the ad and product, object functions of the product, past and future experience with the product category (personal relevance), and manipulation check of the cultural value in the ad. Lastly, participants were asked to fill out a Psychological Reactance Scale, demographic information and general media usage questions. Administration of the experiment was online using SurveyMonkey.

A general pilot test checked effectiveness and appropriateness of both the stimuli and the questionnaire.

		Cultural Values	
	Car	Coffee	Fragrance
Group 1	Affective Autonomy	Intellectual Autonomy	Embeddedness
Group 2	Egalitarianism	Hierarchy	Intellectual Autonomy
Group 3	Embeddedness	Affective Autonomy	Hierarchy
Group 4	Hierarchy	Embeddedness	Egalitarianism
Group 5	Intellectual Autonomy	Egalitarianism	Affective Autonomy

Table 1. Experimental Design

### 3.4 Data Analysis

A series of reliability tests was run to check the reliability of multiple measures

used in scales. Results are reported in Table 2. All sets of measures reached an acceptable internal consistency Cronbach's alpha reliability of .60 or higher, with the exceptions of the Self-Monitoring Scale (alpha = .417) and one dimension of the Cosmopoliteness Scale (alpha = .561). With regard to the Self-Monitoring Scale, the relatively low reliability may be because although Snyder (1976) and later scholars all calculated self-monitoring score adding up all the items in the scale, the Self-Monitoring Scale was actually measuring several distinct dimensions: five in Hosch and Marchioni (1986) and three in Briggs, Cheek, and Buss (1980). In the current study, eight factors/dimensions were found using a Varimax factor analysis.

A principal-components factor analysis with an orthogonal (Varimax) rotation was executed on the seven items of Cosmopoliteness. Factors with an eigenvalue of 1.0 or greater were extracted. Two factors emerged, accounting for 59% of the total variance. The first factor had three high and clean loading items: Interest in current events in other countries, interest in travel to different countries and interest in other cultures. This factor was named "International Focus."

The second factor showed high loadings by the remaining four items: "I think of myself as a citizen of the world," "In any given month, I communicate with people from a wide variety of backgrounds and cultures," "I'm more aware of what's going on around the world than most of my friends" and number of times one has traveled outside the United States in the past five years. It was named "Cosmopolitan Communication." Both factors were found in Jeffres, Neuendorf, Bracken and Atkin (2008), and thus were named the same as in that study. The only difference was that the item "number of times one has traveled outside the United States" was loaded highly on "Cosmopolitan Communication" in the current study while it loaded highly on the other factor "International Focus" in Jeffres, Neuendorf, Bracken and Atkin (2008). Both factors were saved as factor scores during factor analysis, and were given the names accordingly. (See Appendix D for factor analysis results.)

	Number of	Cronbach's	Average
			Inter-item
	Items	alpha	Correlation
Hierarchy	4	.636	.299
Embeddedness	15	.894	.371
Egalitarianism	7	.826	.426
Intellectual Autonomy	4	.738	.413
Affective Autonomy	4	.810	.516
Attitude towards Ad	4	.908	.719
Attitude towards Product	4	.939	.795
Purchase Intention	4	.931	.770
National Identity	4	.845	.581

Table 2.	Scale	Rel	liabi	lities

Cosmopoliteness	International Focus	3 high loaders	.846	.647
	Cosmopolitan Communication	4 high loaders	.561	.242
Self-monitoring		25	.417	.026
SDS-17		16	.688	.120
Psychological Reactance		11	.877	.394

Due to the within-subjects design, each respondent was presented three clips of ads embedded with different cultural values, followed with questions asking about that specific clip of ad. Thus in the data analysis, each subject was treated as three cases in the SPSS file.

### CHAPTER IV

### RESULTS

## 4.1. Sample Description

Participants were recruited from students enrolled in courses in the School of Communication at Cleveland State University. They either received extra credit or credit for participation as a partial fulfillment of a class requirement.

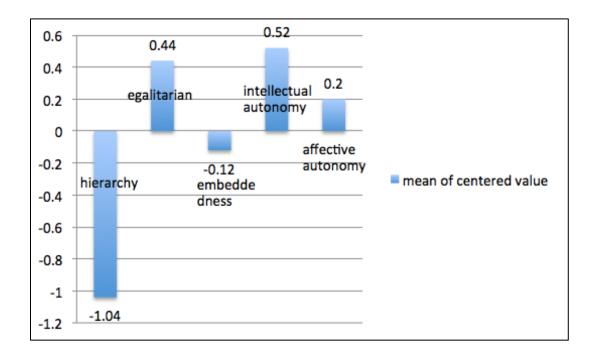
A total of 197 students participated in the study. Cases were deleted if more than 30 of the values items were rated the same number, as suggested by Schwartz (1992). In total 13 cases were deleted, leaving n=184. 40.8% were males (n=75) and 59.2% were females (n=109), ranging in age from 18 to 66 years old, with a mean of 22.2 years. 59.8% of the students were White/Caucasian (n=110), 26.1% Black or African American (n=48), 4.9% Hispanic or Latino (n=9), 3.8% Asian/Pacific Islander (n=7) and 5.4% Arabic (n=10). In regards to nationality, 89.1% of the respondents were American (n=164), 5.4% were Middle Eastern (n=10), and the rest (5.4%) were other nationalities

such as Korean, Chinese or Indian (n=10). Over half of the respondents reported watching TV two hours or more daily (62.2%, M=2.55), over half of them reported watching TV two hours or more "yesterday" (52.2%, M=2.22). 81.3% of the respondents reported listening to radio one hour or less "yesterday" (M=0.93). Concerning print media, 83.2% of respondents spent one day or less reading the newspaper last week (M=0.61). 71.0% of the respondents read one magazine or less on a regular basis (M=1.00). More than half of the respondents read more than two books (55.5%, M=5.54) in the past six months.

With regard to online media, 84.4% of the students reported spending two hours or more on the Internet yesterday, with 35.0% spending more than four hours (M=4.07). 37.5% of the respondents sent more than two emails yesterday (M=2.60). An average person spent 2.88 hours (M=2.88) social networking online yesterday, with 56.1% spending two hours or more.

Concerning individual ratings of values, similar to Schwartz (2006), we centered each individual respondent's ratings of the value items on his/her mean rating of all of the items. Mean scores of respondents' five categories of values (Hierarchy, Egalitarianism, Embeddedness, Intellectual Autonomy, Affective Autonomy) after centering are in Figure 1 as follows.

## Figure 1. Mean Scores of Values



From Figure 1, we can see that on average respondents valued intellectual autonomy the most, with egalitarianism second, and affective autonomy ranking third. With centered mean values for embeddness and hierarchy that were negative, we see that respondents valued hierarchy the least, and embeddedness second least.

Figure 2. Mean Scores of Values (Excluding Non-Americans)

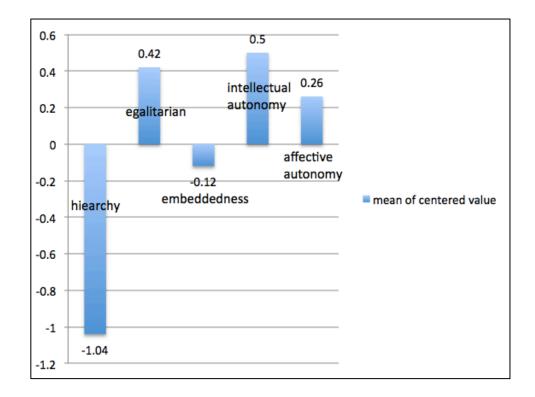


Figure 2 presents the Mean Scores of Values excluding non-Americans. From Figure 2, we can see that Hierarchy and Embeddedness remain the same level of scores, however, Egalitarianism and Intellectual Autonomy are a little lower, and Affective Autonomy is a little higher when excluding non-Americans.

Descriptive statistics for all the other measures/scales that were used in the study are listed in Table 3 as follows. Note that the values were uncentered in the table, and the scores were mean scores of the items consisting each value, instead of sum of the items.

1	
Mean	SD

 Table 3. Descriptive Statistics for Variables

Hierarchy Value (1-9)	5.77	1.36
Egalitarianism Value (1-9)	7.17	1.20
Embeddedness Value (1-9)	6.65	1.20
Intellectual Autonomy Value (1-9)	7.24	1.26
Affective Autonomy Value (1-9)	6.96	1.41
Single-item Att_Ad (1-7)	3.59	3.59
Single-item Att_Product (1-7)	3.70	3.70
Single-item PI (1-7)_	3.81	3.81
Multiple-item Att_Ad (1-7)	3.60	5.23
Multiple-item Att_Product (1-7)	3.84	5.05
Multiple-item PI (1-7)	3.38	5.69
National Identity (4-28)	16.21	6.67
Cosmopoliteness—	00	1.00
International Focus (factor scores)	.00	1.00
Cosmopoliteness—		
Cosmopolitan Communication	.00	1.00
(factor scores)		
Self-Monitoring (0-25)	10.58	2.88
Social Desirability Responding	8.29	3.15
(SDS-17) (0-16)	0.27	5.15
Psychological Reactance (1-55)	34.10	7.32

# 4.2. Hypotheses

The first five hypotheses proposed that people's individual values were positively related to their attitude towards an ad and product in an ad with corresponding values used in the ad's appeal. Pearson product-moment correlations were conducted to examine the relationships. Non-linear relationships were also examined. The select cases option in SPSS was utilized in order to analyze variables for each cultural value separately.

For hypothesis one, the ads with an appeal to the Hierarchy value were tested. Simple correlations indicated that neither attitude towards the ad nor attitude towards the product was significantly related to Hierarchy value. Thus, hypothesis one was not supported. The relationship was not significant even when controlling for demographics (income, age, gender (dummy coded as maledummy)) or control variables (National Identity, two dimensions of Cosmopoliteness, Self-monitoring, Social Desirability Responding, Psychological Reactance, product category (represented by two dummy variables)) or both sets (See correlations in Table 4). Non-linear relationships were not found except for between single-item Purchase Intention and Hierarchy (Exponential, p = .062).

For hypothesis two, the ads with an appeal to the Egalitarianism value were tested. Simple correlations indicated that neither attitude towards the ad nor attitude towards the product was significantly related to Egalitarianism value. Thus, hypothesis two was not supported. When controlling for demographics and/or control variables, the null results still held. Non-linear relationships were found between multiple-item Attitude toward Ad and Egalitarianism (Quadratic, "U-shaped," p = .076), and between multiple-item Attitude toward Product and Egalitarianism (Quadratic, "U-shaped," p = .042).

For hypothesis three, the ads with an appeal to the Embeddedness value were tested. Simple correlations indicated no significance, with the exception of a near-significant finding for attitude towards the ad, with a significance level of 0.121 and a Pearson correlation of 0.156. But still, hypothesis three was not supported. When controlling for demographics and/or control variables, the null results still held. Non-linear relationships were not found except for between single-item Purchase Intention and Embeddedness (Quadratic, "U-shaped," p = .032).

For hypothesis four, the ads with an appeal to the Intellectual Autonomy value were tested. Simple correlations indicated that only purchase intention was significantly related to Intellectual Autonomy ( $r_{PI} = 0.199$ , p = 0.044). However, purchase intention outcomes were not directly proposed in the hypothesis. Thus, hypothesis four was not supported. When controlling for demographic and/or control variables, the non-significant findings maintained. Non-linear relationships were not found except for between multiple-item Purchase Intention and Intellectual Autonomy (Exponential, p = .085).

For hypothesis five, the ads with an appeal to the Affective Autonomy value were tested. Simple correlations indicated that no significance was found. Thus, hypothesis five was not supported. When controlling for demographics and/or control variables, the same results held. Non-linear relationships were not found between Affective Autonomy and the dependent variables.

For hypothesis six, both ads with appeals to the Hierarchy value and ads with appeals to the Egalitarianism value were tested. Simple correlations between Hierarchy value and attitude towards the Egalitarianism ads were conducted, with single-item measures revealing a positive relationship between Hierarchy value and attitude towards Egalitarianism ad products ( $r_{pro} = 0.255$ , p = .012), but a negative relationship between Hierarchy value and purchase intention of the products promoted via Egalitarianism ads  $(r_{PI} = -0.266, p = .009)$ . However, multiple-item measurements revealed all positive relationships between Hierarchy value and attitude towards the ad, attitude towards the product, and purchase intention for Egalitarianism ads ( $r_{multiple ad}=0.285$ , p = .005;  $r_{\text{multiple pro}}=0.322$ , p = .001;  $r_{\text{PI}}=0.234$ , p = .023). Correlations between Hierarchy value and attitude towards Hierarchy ads were actually smaller (r<sub>ad</sub>=.009, ns; r<sub>pro</sub>=-.032, ns;  $r_{multiple ad}$ =.127, ns;  $r_{multiple pro}$ =.063, ns), indicating a preference for Egalitarianism ads over Hierarchy ads for those respondents with higher Hierarchy values. Contradictorily, the single-item purchase intention indicated it had negative relationship with Hierarchy value, while multiple-item purchase intention indicated positive for Egalitarianism ads. Thus, the findings for hypothesis six were mixed.

For hypothesis seven, ads with Embeddedness value, ads with Intellectual

Autonomy value, and ads with Affective Autonomy value were tested. None of the tested correlational relationships were significant. Thus, hypothesis seven was not supported.

				ie vunt to th	J1		
		Single-	Single-	Single-	Multiple	Multiple-	Multiple
	N	item	item	item	-item	item	-item
	1	Attitude_	Attitude_	Purchase	Attitude	Attitude_	Purchase
		Ad	Product	Intention	_Ad	Product	Intention
Hierarchy Value	103	.009	032	.115	.127	.063	.107
x Hierarchy Ad	103	(ns)	(ns)	(ns)	(ns)	(ns)	(ns)
Egalitarianism							
Value x	115	056	105	.070	106	098	094
Egalitarianism	115	(ns)	(ns)	(ns)	(ns)	(ns)	(ns)
Ad							
Embeddedness							
Value x	120	.156	.085	090	.027	.117	.077
Embeddedness	120	( <i>p</i> = .121)	(ns)	ns)	(ns)	(ns)	(ns)
Ad							
Intellectual							
Autonomy Value	125	037	019	.199	107	119	131
x Intellectual	125	(ns)	(ns)	( <i>p</i> = .044)	(ns)	(ns)	(ns)
Autonomy Ad							
Affective		0.1.6	0.40	111	007	0.40	11.5
Autonomy Value	128	.046	049	111	037	040	115
x Affective		(ns)	(ns)	(ns)	(ns)	(ns)	(ns)

Table 4. Correlations Relevant to the Hypotheses

Autonomy Ad							
Hierarchy Value x Egalitarianism Ad	115	.161 (ns)	.255 (p = .012)	266 ( <i>p</i> = .009)	.285 ( <i>p</i> = .005)	.322 ( <i>p</i> = .001)	.234 ( <i>p</i> = .023)
Embeddedness Value x Intellectual Autonomy Ad	125	.023 (ns)	.093 (ns)	133 (ns)	.052 (ns)	.143 (ns)	.121 (ns)
Embeddedness Value x Affective	128	122 (ns)	009 (ns)	023 (ns)	009 (ns)	.012 (ns)	.068 (ns)
Autonomy Ad							

# 4.3. Additional Findings

4.3.1. Manipulation Check. Ads using the five different appeals (values) were checked regarding how they were perceived using five manipulation check questions (See J1 through J5 in Appendix C), with each of the questions asking about how the respondents thought each of the five values were reflected in the ad (using wordings developed from Schwartz, 2006). See Table 5 for means of the five manipulation check questions for each appeal. For Affective Autonomy and Embeddedness appeals, the manipulation check item corresponding with the appeal had the highest mean. For the Egalitarianism appeal, both manipulation check questions asking about Affective Autonomy and Egalitarianism had high means. For Hierarchy and Intellectual Autonomy appeals, the manipulation check question asking about Affective Autonomy had the highest mean, followed by means of questions corresponding with the appeals. We could see that manipulation check of Affective Autonomy had the highest means almost for all the appeals except for Embeddedness appeals.

	Mani_	Mani_	Mani_	Mani_	Mani_
	Int_Auto	Aff_Auto	Embeddedness	Hierarchy	Egalitarianism
Int_Auto Appeals	<b>2.36</b> <sub>a</sub>	2.44 <sub>a</sub>	2.06 <sub>b</sub>	1.83 <sub>b</sub>	2.05 <sub>b</sub>

 Table 5. Means of Five Manipulation Check Questions for Five Appeals

Aff_Auto	2.02	<b>2.49</b> <sub>a</sub>	1.00	1 75	1.90
Appeals	2.02 <sub>b</sub>	<b>2.49</b> <sub>a</sub>	1.90 <sub>b</sub>	1.75 <sub>b</sub>	1.80 <sub>b</sub>
Embeddedness	1.87 <sub>b</sub>	2.09 <sub>a</sub>	<b>2.17</b> <sub>a</sub>	1.94 <sub>b</sub>	1.82 <sub>b</sub>
Appeals	1.0/b	2.09 <sub>a</sub>	<b>2.1</b> 7 <sub>a</sub>	1.74b	1.02b
Hierarchy	1.05	2.27	1.04	1.02	1.66
Appeals	1.85 <sub>a</sub>	2.27 <sub>b</sub>	1.94 <sub>a</sub>	<b>1.93</b> <sub>a</sub>	1.66 <sub>b</sub>
Egalitarianism	1.09	2.22	2.07	2.02	2 10
Appeals	1.98 <sub>b</sub>	2.22 <sub>a</sub>	2.07 <sub>a</sub>	2.03 <sub>b</sub>	<b>2.19</b> <sub>a</sub>

NOTE: Means in a given row that do not share a subscript are significantly or nearsignificantly different (p < .10) via paired-sample t-tests. However, these tests were run only comparing the targeted appeal's mean (in bold) with the means for the other four manipulation checks (e.g., for Int\_Auto Appeals, Mani\_Int\_Auto was tested against the other four means for Int\_Auto Appeals).

A series of paired-sample t-tests were conducted to check the significance of differences among the five manipulation check questions for the five appeals. (See Appendix E for the t-test results.)

4.3.2. *Purchase Intention*. Besides analyzing how attitudes towards the ads/products were predicted by values and related to other variables, the study included purchase intention as an exploratory additional dependent variable.

As expected, the means of attitudes toward the various ads/products were similar because all the ads were produced by the same animators using very similar templates—

i.e., with a very typical and rather plain banner ad format. The mean attitude scores were all in the same range, with the mean attitude towards car ads,  $M_{\text{Att_car_ad}}=3.54$ , the mean attitude towards coffee ads,  $M_{\text{Att_coffee_ad}}=3.79$ , and the mean attitude towards fragrance ads,  $M_{\text{Att_frag_ad}}=3.52$ . The mean overall attitude towards the car,  $M_{\text{Att_car}}=3.79$ , the mean overall attitude towards the coffee,  $M_{\text{Att_coffee}}=3.84$ , and the mean attitude towards the fragrance,  $M_{\text{Att_frag}}=3.55$ . In the response scales, 3.00 is "disliked it slightly," and 4.00 is "neither liked it nor disliked it," meaning that people in general held neutral or slightly negative attitudes towards those ads.

However, while looking at purchase intentions for those product categories, they differed to a large extent: The mean for purchase intention of the car was  $M_{PI\_car}=1.81$ , the mean for purchase intention of the coffee was  $M_{PI\_coffee}=4.56$ , and the mean for purchase intention of the fragrance was  $M_{PI\_frag}=4.96$ , where 1.00 is "no chance or almost no chance," 2.00 is "slight possibility," 3.00 is "some possibility," 4.00 is "fairly good possibility," and 5.00 is "very probable" (See Table 6).

	Attitude toward Ad	Attitude toward Product	Purchase Intention
Car	3.54	3.79	1.81
Coffee	3.79	3.84	4.56
Fragrance	3.52	3.55	4.96

Table 6. Attitude and Purchase Intentions for Different Products

Note: For attitude, 3.00 is "disliked it slightly," and 4.00 is "neither liked it nor disliked

it." For purchase intention, 1.00 is "no chance or almost no chance," 2.00 is "slight possibility,"3.00 is "some possibility," 4.00 is "fairly good possibility," and 5.00 is "very probable."

Table 7 lists the correlations between attitude and Purchase Intention for car, coffee and fragrance. From Table 7, we can see that attitude and Purchase Intention for car had significant and positive correlation, while attitude and Purchase Intention for coffee and fragrance had significant and negative correlation.

	Correlation	Significance	Correlation	Significance
	between	Significance	between	Significance
		Level		Level
	Att_Ad and PI		Att_Pro and PI	
Car	.204	<i>p</i> = .009	.273	<i>p</i> < .001
Coffee	289	<i>p</i> < .001	345	<i>p</i> < .001
Fragrance	250	<i>p</i> = .001	228	<i>p</i> = .002

Table 7. Correlations between Attitude and Purchase Intention

Table 8 lists the means of multiple-item measurements of attitude and Purchase Intention for car, coffee and fragrance. The mean attitude toward ads for car, coffee and fragrance of multiple-item measurements remains consistent: M<sub>multiple\_att\_ad\_car</sub>=3.43, M<sub>multiple\_att\_ad\_coffee</sub>=3.84, M<sub>multiple\_att\_ad\_frag</sub>=3.53. So does the mean attitude toward the car, coffee and fragrance: M<sub>multiple\_att\_car</sub>=3.98, M<sub>multiple\_att\_coffee</sub>=3.98, M<sub>multiple\_att\_frag</sub>=3.59.

The means of Purchase Intention of multiple-item measurements are:  $M_{multiple PI car}=3.21$ ,  $M_{multiple PI coffee}=3.73$ ,  $M_{multiple PI frag}=3.18$ . Although the multiple-item measurement scale (7-point) of Purchase Intention differs with its single-item measurement scale (5-point), we could transform the current 7-point scores into 5-point by dividing by 7 and multiplying by 5. The transformed scores of Purchase Intention for car, coffee and fragrance are: 2.29, 2.66 and 2.27, which are very different from the single-item scores of Purchase Intention.

Table 8. Multiple-item Measurements of

	Multiple-item	Multiple-item	Multiple-item	Transformed
	Attitude	Attitude	Purchase	Scores of Purchase
	toward Ad	toward Product	Intention	Intention
Car	3.43	3.98	3.21	2.29
Coffee	3.84	3.98	3.73	2.66
Fragrance	3.53	3.59	3.18	2.27

Attitude and Purchase Intentions for Different Products

Table 9 lists the correlations between multiple-item measurements of attitude and Purchase Intention for car, coffee and fragrance. However, the correlations differ to a great extent with the correlations between single-item measurements of attitude and Purchase Intention for the three product categories. While Purchase Intention and attitude towards car are significantly and positively correlated, Purchase Intention and attitude towards coffee and fragrance are also significantly and positively correlated. Moreover, correlations for coffee and fragrance are even larger than for car.

## Table 9. Multiple-item Measurements of

	Correlation between Multiple-item Att Ad and PI	Significance Level	Correlation between Multiple-item Att Pro and PI	Significance Level	
Car	.524	<i>p</i> <.001	.422	<i>p</i> <.001	
Coffee	.727	<i>p</i> <.001	.765	<i>p</i> <.001	
Fragrance	.731	<i>p</i> <.001	.763	<i>p</i> <.001	

#### Correlations between Attitude and Purchase Intention

# 4.3.3. Object Function.

Katz (1960) proposed that the four main functions of an attitude or a product are Instrumental (Utilitarian), Value-expressive, Ego-defensive (Self-esteem maintenance) and Knowledge Functions. The knowledge function is served by almost any attitude/product, and thus it is not considered in Shavitt's scale for measuring object function (Shavitt, 1989).

The current study adopted Shavitt's function scale to measure car, coffee, and fragrance's functionality. The results are presented in Table 10. From the table we can see that for each of the products, the utilitarian function is the highest. For both car and fragrance, self-esteem maintenance is the second highest. For coffee, value expression is the second highest, followed by self-esteem maintenance. Across the three products, coffee and car are both high on utilitarian. Car is the highest in both value expression and

self-esteem maintenance. Fragrance is the second highest in value expression and selfesteem maintenance, while coffee is the lowest.

	5		,		
	Litilitarian. Mar nast		Self Esteem: My		
	Utilitarian: My past	Value Expressive: My	self esteem: how		
	experiences with product:	values and my friends'	' confident the		
	how satisfied I am with	beliefs	product make me		
	product		feel about myself		
Car	3.13	2.57	2.71		
Coffee	3.17	2.36	2.18		
Fragrance	2.94	2.51	2.68		

Table 10. Object Functions (Car, Coffee, Fragrance)

Note: The scale used here is 1 = "does not contribute at all to my attitude," and 5 = "contributes a great deal to my attitude."

A series of paired-sample t-tests was conducted to further test the significance levels of the mean differences between different functions of the same product and also between the same functions of different products. Combining Table 10 and Table 11, we can see that, for car, utilitarian is significantly higher than both value-expressive and selfesteem maintenance, but self-esteem maintenance is not significantly higher than valueexpressive. For coffee, utilitarian is also significantly higher than both value-expressive and self-esteem maintenance, and value-expressive is significantly higher than selfesteem maintenance. For fragrance, utilitarian is significantly higher than both valueexpressive and self-esteem maintenance, and self-esteem maintenance is significantly higher than value-expressive.

Across the three products, both coffee and car serve a significantly higher utilitarian function than does fragrance. Car serves a significantly higher value-expressive function than does coffee. Both fragrance and car serve a significantly higher self-esteem maintenance function than does coffee.

Table 11. Significance Level of Paired-sample T-tests Comparing Object Functions

	Car_	Car_	Car_	Coffee_	Coffee_	Coffee_	Frag_	Frag_	Frag_
	U	V	S	U	V	S	U	V	S
Car_U									
Car_V	***								
Car_S	***	ns							
Coffee_									
U	ns								
Coffee_		_							
V		*		***					
Coffee_									
S			***	***	**				
Frag_U	.089			*					

Frag_V	 ns		 ns		***		
Frag_S	 	ns	 	***	**	**	

Note: 1. Car\_U stands for "Car\_Utilitarian," Car\_V stands for "Car\_Value-Expressive," Car\_S stands for "Car\_Self-esteem Maintanence." Coffee\_U stands for "Coffee\_Utilitarian," Coffee\_V stands for "Coffee\_Value-Expressive," Coffee\_S stands for "Coffee\_Self-esteem Maintanence." Frag\_U stands for "Fragrance\_Utilitarian," Frag\_V stands for "Fragrance\_Value-Expressive," Frag\_S stands for "Fragrance Self-esteem Maintanence."

2. \*\*\* stands for "p < .001," \*\* stands for "p < .01," \* stands for "p < .5," ns stands for "non-significant."

### CHAPTER V

### DISCUSSION

## 5.1. Hypothesis Results

The current study produced non-significant findings, with six of the seven hypotheses in the current study not supported at all, and the seventh one having mixed results. This is contradictory to past findings that high individual orientation of cultural values led to high favorability towards ads embedding such values (Shavitt, Zhang & Johnson, 2006; Torelli et al., 2009).

One possible explanation is that some people don't like their values being explicitly utilized in commercial ads. Especially when the banner ads were only 15 seconds, it might leave people with an impression that the only things the ads stressed were the values and they were exploited to sell the products. This is further supported when the overall score of respondents' cultural values before centering (i.e., subtracting the values scores from individual respondents' means of values) correlated negatively with their attitude toward the ads and the products. This means that the more strongly held were a person's own values, the more unfavorable the person was towards the ads. In order to avoid consumers' resistance, commercial/banner ads might need to embed values in a more implicit way.

Another possible explanation is people would like the ads to be more informational. In Shavitt and Kanfer (1999), they suggested that several factors contributed significantly to attitude towards Internet Advertising, among which Advertising Utility (informative, entertaining, useful for making decisions) is the biggest one, accounting for 43% of the variance in overall attitude alone. However, the banner ads in the current study mainly utilized cultural values to promote the products, and contained essentially no information about the products themselves, such as function of the car, origin of the coffee, etc. The only informational content was a photo of each product, and a phone number and web address for the product. Lack of information about the products might account for an important reason that people held less favorable attitudes toward the banner ads. One suggestion to banner ads (or Internet Advertising in general) thus is to increase the utility of the ad, making it as informative, entertaining, and useful for making decisions as possible.

A third explanation is that, due to the characteristic of online banners, not the whole information page is about the ad, thus respondents' attention might have been attracted to other places such as the website itself. Under the circumstance that people's attention was not focused on the ads, we could not ensure that people's responses to the manipulation checks and attitude questions were reflective of their orientation toward the ad/product.

Lastly, research has found that consumers held less favorable attitudes toward Internet Advertising (including Banner Ads) than General Advertising (Shavitt & Kanfer, 1999). In Shavitt et al. (1998), she found that better-educated, wealthier consumers held less favorable attitudes toward advertising than less-educated, lower-income consumers. Thus, Shavitt and Kanfer (1999) proposed the reason might be due to the demographics: as the Internet population is younger and better-educated, they would judge advertising relatively unfavorably. Considering respondents in the current study were college students, who were young and viewed a lot of online advertising on a daily basis, they might be critical toward general banner ads. Hence, the demographic factor might be one reason that people held less favorable attitudes towards the banner ads in the current study.

Excluding all the possible explanations, the non-significant findings of the current study, with measures and all the procedures very rigorous, raised the real possibility that the ubiquitous banner ad format may be a highly ineffective mode of advertising for the use of value-based appeals. Considering past research utilized still images mostly as their stimuli, and found positive results for value-based appeals, there might be major difference between the strategies of banner ads and still-image ads. The current study was one of the rare studies that used banner ads as stimuli, indicating that value-based appeals might not be very effective in banner ads in terms of promoting to its potential consumers. However, more research is still needed to test the relationship between people's attitude towards ads and values embedded in ads, especially in the new forms of advertising, namely banners ads, and other online moving image ads.

## 5.2. Values of the General Sample

As shown in Figure 1, the fact that the means of respondents were high on Intellectual Autonomy and Affective Autonomy, and low on Embeddedness supported what Schwartz (2006) proposed for cultural values in the US. However, he also proposed that the US was high on Hierarchy while relatively low on Equality, which is contrary to what was found in this study. This could be explained by two facts, one is the majority of respondents were students, who haven't entered into society and might have a beautiful illusion of the world that everyone is equal. Second is the respondents in the current study were not 100% Americans. As seen in Figure 2, in the Mean Scores of Values excluding non-Americans, Hierarchy and Embeddedness remain the same level of scores, however, Egalitarianism (most closely aligned with Equality) and Intellectual Autonomy are a little lower, and Affective Autonomy is a little higher.

The present study does to some extent call into question the validity of the Schwartz values dimensionality. There were difficulties in the operationalization of the value dimensions due to some vague or overly broad conceptualizations, particularly for the values of Hierarchy and Affective Autonomy. Often, it seemed that the operationalization of a given value for the generation of the ad stimulus was not wellmatched to the operationalization of a manipulation check measure for the same value, yet both were easily traceable to their common conceptual origins.

# 5.3. Additional Results

5.3.1. Manipulation Check Results. The results section (Table 5) indicates that Affective Autonomy was perceived to be highest across all the ads, except for Embeddedness Ads. This calls into question into two aspects. First, it can be questioned whether the stimuli correctly reflected the desired values by the researchers. Because of the broad definitions of cultural values in Schwartz (2006), especially for Hierarchy and Affective Autonomy, it is very hard to operationalize the concepts in ads. For instance, Hierarchy "relies on hierarchical systems of ascribed roles to insure responsible, productive behavior. It defines the unequal distribution of power, roles, and resources as legitimate. People are socialized to take the hierarchical distribution of roles for granted and to comply with the obligations and rules attached to their roles. Values like social power, authority, humility, and wealth are highly important in hierarchical cultures" (Schwarz, 2006, p. 141). Affective Autonomy "encourages individuals to pursue affectively positive experience for themselves. Important values include pleasure, exciting life, and varied life" (Schwartz, 2006, p. 140). More detailed definitions,

especially for Affective Autonomy, are needed, in order to accurately embed these values into ads.

Second, it may be questioned whether the manipulation check items are all valid. As cited in the last paragraph, the definitions of cultural values in Schwartz (2006) were quite vague and broad. Although the lines of the ads were adapted from the definitions, they went through several turns of adjustments via pre-tests to become very specific and understandable. However, the manipulation check items almost used the exact words in the definitions without further adjustments, which might have been too abstract for the respondents to catch the essential meanings of the values. With the inconsistency between lines in the ads and manipulation check items, it is possible that the manipulation did not work well for the ads.

Furthermore, because of the "affective positiveness" of Affective Autonomy, and because of the intentional entertaining and pleasing nature of ads in general, it might mislead respondents to think that all ads were high on Affective Autonomy. This type of "halo effect" for perceptions of advertising may explain why Affective Autonomy was perceived as the highest value across the different kinds of ads.

5.3.2. Purchase Intention Results. From the results section (Table 6), we know that respondents on average held neutral attitudes toward all kinds of ads/products in the ads. However, for their average purchase intention, they were less than "slightly possible" considering purchasing the car, while "very possible" considering purchasing the coffee

and fragrance. Looking at the correlations between attitude and Purchase Intention (Table 7), we know that when product involvement is high (car), the correlation between attitude and PI is high and positive, indicating the more people like the car, the more likely they would purchase it. However, when product involvement is low (coffee and fragrance), the correlation between attitude and PI is also high but negative, suggesting that the more people dislike the coffee or fragrance, the more likely they would purchase it. These results are for the single-item measurements. For multiple-item measurements (Table 9), when product involvement is low (coffee and fragrance), the correlation between attitude and PI is not product involvement is low (coffee and fragrance), the correlation between attitude and PI is not product involvement is low (coffee and fragrance), the correlation between attitude and PI is not product involvement is low (coffee and fragrance), the correlation between attitude and PI is not product involvement is low (coffee and fragrance), the correlation between attitude and PI is positive and actually higher than the positive correlation for the high-involvement product (car), contradicting the findings for the single-item measures.

The traditional view held is that attitude leads to behavior/behavior intention (Frymier & Nadler, 2007), but some research has contradicted this by proposing moderating factors between attitude and behavior. Fazio and Zanna (1981) proposed that attitudes formed through direct experience are stronger than those formed through indirect experience, and thus are more stable over time and have greater influence on behavior. Kokkinaki and Lunt (1997) found that product involvement and attitude accessibility are two moderating factors between attitude and behavior. When product involvement is low, the link between attitude and behavior is supposed to be weak.

In Traylor (1981), he suggested that coffee is a low-involvement product, while an

automobile is a high-involvement product. Fragrance, as a kind of cosmetic, might be aligned closely with bath soap, which is also low-involvement. In the current study, the findings support Kokkinaki and Lunt (1997) in terms of the car, that when product involvement is high, the link between attitude and behavior is strong, and the more people like the car, the more likely they would purchase it. However, the single-item results contradicted Kokkinaki and Lunt (1997) in terms of the coffee and fragrance, that when product involvement is low, the link between attitude and behavior is not weak, but rather, is strong and in the opposite direction. That is, the more people dislike the coffee or fragrance, the more likely they would purchase it. The findings of the multiple-item results contradicted Kokkinaki and Lunt (1997) in a different way, that when product involvement is low, the link between attitude and behavior is stronger and in the same (positive) direction.

In Bergkvist and Rossiter (2009), they proposed that single-item measurements of doubly concrete constructs (such as Attitude towards Ad or Purchase Intention), constructs that were agreed on by raters in terms of definition and attribute, were as reliable as traditional multiple-item measurements used in marketing that were thought to be more predictively valid. They noted that items used in multiple-item measures varied in their predictive validity and some differences were substantial. The current study actually questioned the validity of multiple-item measurements, suggesting the total abandonment of multiple-item measurements. 5.3.3. Object Function Results. In Shavitt (1990), she mentioned that coffee and air conditioners serve primarily a utilitarian function, cars serve both utilitarian and value-expressive functions, and wedding rings, American flags or Ohio Buckeye t-shirts serve primarily a value-expressive function.

Through the ratings in this study (see Table 10 and Table 11), car was found to be highest in two of the three functions: value expressive and self-esteem maintenance. Coffee serves primarily a utilitarian function, while proving to be the lowest in value expressive and self-esteem maintenance functions. Fragrance was found to be the lowest among the three in utilitarian function, while the highest (together with car) in selfesteem maintenance function. This supports Shavitt's findings. Furthermore, car was found to be also serving self-esteem maintenance function besides utilitarian and valueexpressive functions. Fragrance was found to be serving both utilitarian and self-esteem maintenance functions. This is an additional finding besides the main findings of the current study.

## 5.4. Limitations

As with every study, this study has limitations. The replicability of social science, especially in consumer psychology, has been frequently questioned (Asendorpf et al., 2013). Abundant failures to replicate earlier research exist, even when based on strong data and rigorous methodology. Individual (or dyads or groups), situations (natural or experimental), operationalizations (experimental manipulations, methods, and measures),

and time points are the factors that all have the potential to influence the results of social research.

Comparing the current study with past positive findings (Shavitt, Zhang, & Johnson, 2006; Torelli et al., 2009), the groups of respondents were similar as all were college students in America, while the other three factors noted by Asendorpf et al. differed on various bases. For example, the current study used the online software/service SurveyMonkey to conduct the entire study. Respondents could view the ads and answer the questions in any situation, at any time, even if they wanted to leave it on for a while, and then come back to continue the study. The situational factor and the time factor were very hard to control and might in fact have a major influence on the results. It was even harder with no researchers' administration to ensure that every respondent viewed the ad carefully.

Second, although the ads produced seemed to work well after pilot testing, it was still doubtful whether a broader audience would perceive the ads as they were intended to be conveyed. As moving images contain much more information than still images utilized in most past studies, it was hard to ensure that all the information expressed was understood in the same way as measured in the value items.

For example, equality was one value item that people rated, with an explanation of "equal opportunity for all" to assist understanding. However, if a person rated high on equality, did that mean he/she was supportive of equality because everybody was born equal, or that he/she thought everybody was not born equal but had an equal opportunity to strive for a better life? In terms of viewing the ad embedding the value of equality, how an individual person thought of this ad as reflecting equality is a question.

Thirdly, although the stimuli are moving, containing more information than still images, they are still limited in terms of reflecting every aspect of a single cultural value. Schwartz's SVS for measuring the five cultural values contains 34 items. Even if the PVQ is a shortened version of the SVS, which was referred to for making the ads, it still has 16 items for the five values. How to properly embed those precise aspects into ads so that respondents could perceive them properly and fully is a difficult issue.

# 5.5. Future Research

Most measures in the current study were adopted from past published studies and thus were valid and reliable. However, the operationalization of the study using banner ads to embed values seemed to be very rare in the area of consumer psychology. Even if pilot tested, the reliability and ecological validity of this kind of ad, especially without professional advertising company/personnel's creation, needs to be double-checked in future research.

Secondly, it is better that future research could add in measurements to examine whether each individual perceives the ad in the same way. Questions could be following each ad clip, asking things like "what is your definition of /value/?" "What kind of value do you think this ad reflects?" As this kind of question requires extensive time and effort for respondents to finish, future research could focus on one or two values, so that more information concerning each value could be collected.

Thirdly, measures of attention to the ad would help determine to what extent consumers might be avoiding ads that are onerous. To what degree people actually attend to online advertising is a big question, and future research needs to explore this.

Fourthly, more product information could be incorporated when designing ads for testing in the future. Manipulation check questions asking about people's opinions towards both product information and the value section of the ads would also be beneficial.

In general, more research is still needed to test value-based ad appeals, no matter whether the ad is in the form of a still image, a moving image or video. Concerning the non-significant results of the current study utilizing banner ads, later studies are suggested to focus more on still images to investigate people's response towards valuebased ad appeals. Also, moving-image ads should be explored too concerning its difference with still-image ads upon the effect of embedding values. Videos have not been tried so far for value-based ad appeals because it is very time-consuming and difficult for researchers to produce such ads in high enough quality to be ecologically valid. It is suggested that moving-image ads should be explored first to shed light on how video ads might work. The overall utility of including values in ads is still largely unknown, and many variations of advertising form and content need to be explored.

#### REFERENCES

- Asendorpf, J. B., Conner, M., De Fruyt, F., De Houwer, J., et al. (2013). Recommendations for increasing replicability in psychology. *European Journal of Personality*, 27(2), 108-119.
- Bergkvist, L., & Rossiter, J. R. (2009). Tailor-made single-item measures of doubly concrete constructs. *International Journal of Advertising*, 28(4), 607-621.
- Blake, B. F., Valdiserri, J., Neuendorf, K. A., & Nemeth, J. (2006). Validity of the SDS17 measure of social desirability in the American context. *Personality and Individual Differences*, 40, 1625-1636.
- Bracken, C., Jeffres, L., Neuendorf, K., Kopfman, J., & Moulla, F. (2005). How cosmopolites react to messages: America under attack. *Communication Research Reports*, 22(1), 47-58. doi:10.1080/0882409052000343516
- Briggs, S. R., Cheek, J. M., & Buss, A. H. (1980). An analysis of the Self-Monitoring Scale. *Journal of Personality and Social Psychology*, *38*, 679–686.
- Clary, E., Snyder, M., Ridge, R. D., Copeland, J., Stukas, A. A., Haugen, J., & Miene, P. (1998). Understanding and assessing the motivations of volunteers: A functional approach. *Journal of Personality and Social Psychology*, 74, 1516-1530.
- European Social Survey (2012), *Supplementary questionnaire*. Retrieved from http://www.europeansocialsurvey.org.

- Fazio, R. H., & Zanna, M. P. (1981). Direct experience and attitude-behavior consistency.
  In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 14, pp. 162-202). New York: Academic Press.
- Fujioka, Y., & Neuendorf, K. A. (2014, May). Racial identity, media, and perceived value orientations: What contributes to endorsement of mainstream American values?
  Top 3 Paper presented to the Ethnicity and Race Division of the International Communication Association, Seattle, WA.
- Guha, S., Cheng, B., & Francis, P. (2011, March). Privad: Practical privacy in online advertising. In Proceedings of the 8th USENIX conference on Networked systems design and implementation.
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage Publications.
- Hosch, H. M., & Marchioni, P. M. (1986). The Self-Monitoring Scale: A factorial comparison among Mexicans, Mexican Americans and Anglo Americans. *Hispanic Journal of Behavioral Sciences*, 8, 225–242.
- Jeffres, L. W., Bracken, C. C., Neuendorf, K., Kopfman, J., & Atkin, D. J. (2014). Cosmopoliteness, cultivation and media use. *Journal of Communication and Media Research*, 6(1), 1-24.

- Jeffres, L., Neuendorf, K., Bracken, C., & Atkin, D. (2008). The influence of communication and cosmopoliteness on quality of life perceptions. *The Open Communication Journal*, 2, 1-6.
- Katz, D. (1960). The functional approach to the study of attitudes. *Public Opinion Quarterly*, 24, 163-204.
- Kokkinaki, F., & Lunt, P. (1997). The relationship between involvement, attitude accessibility and attitude–behavior consistency. *British Journal of Social Psychology*, 36(4), 497-509.
- Kuncel, N. R., & Tellegen, A. (2009). A conceptual and empirical reexamination of the measurement of the social desirability of items: Implications for detecting desirable response style and scale development. *Personnel Psychology*, 62, 201-228.
- Lindell, Y., & Omri, E. (2011). A practical application of differential privacy to personalized online advertising. *IACR Cryptology ePrint Archive*, 152.
- Luhtanen, R., & Crocker, J. (1991). Self-esteem and intergroup comparisons: Toward a theory of collective self-esteem. In J. Suls & T. A. Wills (Eds.), Social comparison: Contemporary theory and research (pp. 211-234). Hillsdale, NJ: Lawrence Erlbaum.

- Maio, G. R., & Olson, J. M. (1995). Relations between values, attitudes, and behavioral intentions: The moderating role of attitude function. *Journal of Experimental Social Psychology*, 31, 266-285.
- Paulhus, D. L. (1991). Measurement and control of response bias. In J. P. Robinson, P. R. Shaver & L. S. Wrightsman (Eds.), *Measures of personality and social psychological attitudes* (pp. 17-59). San Diego, CA: Academic Press.
- Perloff, R. M. (1999). The third-person effect: A critical review and synthesis. *Media Psychology*, *1*, 353-378.
- Richman, W. L., Kiesler, S., Weisband, S., & Drasgow, F. (1999). A meta-analytic study of social desirability distortion in computer-administered questionnaires, traditional questionnaires, and interviews. *Journal of Applied Psychology*, 84(5), 754-775.
- Rokeach, M. (1986). *Beliefs, attitudes and values: A theory of organization and change.* San Francisco, CA: JosseyBass Publishers.
- Schlosser, A. E., Shavitt, S., & Kanfer, A. (1999). Survey of Internet users' attitudes toward Internet advertising. *Journal of Interactive Marketing*, *13*(3), 34-54.
- Schwartz, S. H. (1992). Universals in the content and structure of values: Theory and empirical tests in 20 countries. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 25, pp. 1-65). New York: Academic Press.

- Schwartz, S. H. (1994). Beyond individualism/collectivism: New cultural dimensions of values. In U. Kim, H. C. Triandis, C. Kagitcibasi, S.-C. Choi, & G. Yoon (Eds.), *Individualism and collectivism: Theory, method and applications* (pp. 85-119). Newbury Park, CA: Sage.
- Schwartz, S. H. (2006). A theory of cultural value orientations: Explication and applications. *Comparative Sociology*, *5*(2-3), 137-182.
- Schwartz, S. H., Melech, G., Lehmann, A., Burgess, S., Harris, M., & Owens, V. (2001). Extending the cross-cultural validity of the theory of basic human values with a different method of measurement. *Journal of Cross-Cultural Psychology*, 32(5), 519-542.
- Schwartz, S. H., Cieciuch, J., Vecchione, M., Davidov, E., Fischer, R., Beierlein, C.,
  Ramos, A., Verkasalo, M., Lönnqvist, J.-E., Demirutku, K., Dirilen-Gumus, O., &
  Konty, M. (2012). Refining the theory of basic individual values. *Journal of Personality and Social Psychology*, *103*(4), 663-688.
- Shavitt, S. (1989). Operationalizing functional theories of attitudes. In A. R. Pratkanis, S.
  J. Breckler, & A. G. Greenwald (Eds.), *Attitude structure and function* (pp. 331-337). Hillsdale, NJ: Lawrence Erlbaum.
- Shavitt, S. (1990). The role of attitude objects in attitude functions. Journal of Experimental Social Psychology, 26, 124-148.

- Shavitt, S., Johnson, T. P., & Zhang, J. (2011). Horizontal and vertical cultural differences in the content of advertising appeals. *Journal of International Consumer Marketing*, 23, 297-310.
- Shavitt, S., Lalwani, A. K., Zhang, J., & Torelli, C. J. (2006). The horizontal/vertical distinction in cross-cultural consumer research. *Journal of Consumer Psychology*, 16(4), 325-356.
- Shavitt, S., & Lowrey, T. M. (1992). Attitude functions in advertising effectiveness: The interactive role of product type and personality type. *Advances in Consumer Research*, *19*, 323-328. Shavitt, S., Lowrey, P. M., & Haefner, J. E. (1998). Public attitudes toward advertising: More favorable than you might think. *Journal of Advertising Research*, 7–22.
- Shavitt, S., Torelli, C. J., & Riemer, H. (2011). Horizontal and vertical individualism and collectivism: Implications for understanding psychological processes. In M. Gelfand, C.-Y. Chiu, & Y.-Y. Hong (Eds.), *Advances in culture & psychology* (Vol. 1, pp. 309-350). Oxford, UK: Oxford University Press.
- Shavitt, S., Zhang, J., Torelli, C. J., & Lalwani, A. K. (2006). Reflections on the meaning and structure of the horizontal/vertical distinction. *Journal of Consumer Psychology*, 16, 357-362.
- Snyder, M. (1974). Self-monitoring of expressive behavior. *Journal of Personality and Social Psychology*, 30(4), 526-537.

- Snyder, M., Clary, E., & Stukas, A. A. (2000). The functional approach to volunteerism.
  In G. R. Maio & J. M. Olson (Eds.), *Why we evaluate: Functions of attitudes* (pp. 265-393). Mahwah, NJ: Lawrence Erlbaum.
- Snyder, M., & DeBono, K. G. (1985). Appeals to image and claims about quality: Understanding the psychology of advertising. *Journal of Personality and Social Psychology*, 49(3), 586-597.
- Stober, J. (2001). The Social Desirability Scale-17 (SDS-17): Convergent validity, discriminant validity, and relationship with age. European Journal of Psychological Assessment, 17, 222-232.
- Torelli, C. J., & Shavitt, S. (2011). The impact of power on information processing depends on cultural orientation. *Journal of Experimental Social Psychology*, 47, 959-967.
- Torelli, C. J., Ozsomer, A., Carvalho, S. W., Keh, H. T., & Maehle, N. (2012). Brand concepts as representations of human values: Do cultural congruity and compatibility between values matter? *Journal of Marketing*, 76, 92-108.
- Traylor, M. B. (1981). An exploratory study reveals the relationship between product involvement and brand commitment. *Journal of Advertising Research*, 21(6), 51-56.
- Triandis, H. C. (1995). Individualism & collectivism. Boulder, CO: Westview.
- Triandis, H. C., & Gelfand, M. J. (1998). Converging measurement of horizontal and

vertical individualism and collectivism. Journal of Personality and Social Psychology, 74(1), 118-128.

### APPENDICES

## APPENDIX A

Example Banner Screenshots for Each Product Category

Example Banner Screenshot of Car:



Example Banner Screenshot of Coffee:



Example Banner Screenshot of Fragrance:



#### APPENDIX B

#### Brand Names and Full Texts of Banner Ads

### **Brand** Names:

La Barista Coffee, Relance Indigo Car, Le Volonte Fragrance

### Full Texts of Banner Ads:

*Hierarchy ads:* 

Be recognized for your good taste

Find the ultimate in luxury with /brand name/

Experience the feeling of being admired

Embeddedness ads:

Make the safe and wise choice

For a sense of the traditional (Classic & Lasting)

The definitive choice

Egalitarianism ads:

Everyone should share in the experience

A choice your whole community can embrace

A universal experience of joy

Intellectual Autonomy ads:

Make your own decision

Choose a true original

## For the open-minded driver/coffee drinker/fragrance user

Affective Autonomy ads:

Spoil yourself

Time to experience something extraordinary

Savor the ultimate good time with

#### APPENDIX C

#### Full Questionnaire

[Informed Consent Form]

Title: A Functional Approach to Schwartz's Cultural Dimensions: Persuasive Appeals Corresponding with Individual Cultural Values

Investigators:

Professor Kimberly Neuendorf, School of Communication, (216) 687-3994

Chichang Xiong, School of Communication, (216) 421-5377

We are studying how people react to online advertising. In order to do this we are asking you to complete a study asking a variety of questions about your attitudes towards certain online advertising that we show you and some of your demographic information.

Participation is completely voluntary and you may withdraw at any time, without penalty. The study will take about 30 minutes total to complete. Whether or not you might receive extra credit or research participation credit for taking part depends on what your instructor has agreed to. There is no consequence for not participating in this study, and the risks involved are nothing more than your inconvenience of time at the moment of survey. Your responses to the survey will be strictly confidential. Your name will not be collected or appear anywhere on the survey, and complete privacy will be guaranteed. For those of you receiving course credit or extra credit, names and contact information recorded will be collected and stored separately, maintaining your anonymity.

For further information regarding this research please contact Professor Kimberly Neuendorf at (216) 687- 3994, email: k.neuendorf@comcast.net, or Chichang Xiong at (216) 421-5377, email: c.xiong@csuohio.edu.

If you have any questions about your rights as a research participant you may contact the Cleveland State University Institutional Review Board at (216) 687-3630.

Clicking the checkbox below will constitute your informed consent to participate in the survey as outlined above. Click "continue" to enter the survey.

□ I am 18 years or older and have read and understood this consent statement and agree to participate.

#### CONTINUE

[A1, Individual Cultural Orientations (Schwartz, 1992)]

A1. Use a nine-point scale, rate each of the following values "AS A GUIDING PRINCIPLE IN MY LIFE," where 7 stands for "supreme importance," 3 "important," 0 "not important," and -1 "opposed to my values."

ACCEPTING MY PORTION IN LIFE submitting to life's circumstances

**RESPECT FOR TRADITION preservation of time honoured customs** 

HUMBLE modest, self effacing

AN EXCITING LIFE stimulating experiences

BROADMINDED tolerant of different ideas and beliefs

HELPFUL working for the welfare of others

FORGIVING willing to pardon others

AUTHORITY the right to lead or command

A VARIED LIFE filled with challenge, novelty and change

FREEDOM freedom of action and thought

HONEST genuine, sincere

SOCIAL ORDER stability of society

WEALTH material possessions, money

SOCIAL JUSTICE correcting injustice, care for the weak

OBEDIENT dutiful, meeting obligations

SOCIAL POWER control over others, dominance

POLITENESS courtesy, good manners

RESPONSIBLE dependable, reliable

CLEAN neat, tidy

SELF DISCIPLINE self restraint, resistance to temptation

ENJOYING LIFE enjoying food, sex, leisure, etc

MODERATE avoiding extremes of feeling & action

FAMILY SECURITY safety for loved ones

**RECIPROCATION OF FAVOURS avoidance of indebtedness** 

CREATIVITY uniqueness, imagination

WISDOM a mature understanding of life

EQUALITY equal opportunity for all

HONOURING OF PARENTS AND ELDERS showing respect

LOYAL faithful to my friends, group

PRESERVING MY PUBLIC IMAGE protecting my "face"

PLEASURE gratification of desires

DEVOUT holding to religious faith & belief

CURIOUS interested in everything, exploring

NATIONAL SECURITY protection of my nation from enemies

[B1-B16, Social Desirability Scale (Stober, 2001)]

Below you will find a list of statements. Please read each statement carefully and decide if that statement describes you or not. If it describes you, check the word "true"; if not, check the word "false."

B1. I sometimes litter.

B2. I always admit my mistakes openly and face the potential negative consequences.

B3. In traffic I am always polite and considerate of others.

B4. I always accept others' opinions, even when they don't agree with my own.

B5. I take out my bad moods on others now and then.

B6. There has been an occasion when I took advantage of someone else.

B7. In conversations I always listen attentively and let others finish their sentences.

B8. I never hesitate to help someone in case of emergency.

B9. When I have made a promise, I keep it – no ifs, ands or buts.

B10. I occasionally speak badly of others behind their back.

B11. I would never live off other people.

B12. I always stay friendly and courteous with other people, even when I am stressed out.

B13. During arguments I always stay objective and matter-of-fact.

B14. There has been at least one occasion when I failed to return an item that I borrowed.

B15. I always eat a healthy diet.

B16. Sometimes I only help because I expect something in return.

[C1-C4, National Identity Scale (Luhtanen & Crocker, 1991)]

Now, please tell us how you feel about the following statements, using a response scale from "strongly disagree" to "strongly agree."

C1. My nationality is an important reflection of who I am.

C2. In general, my nationality is an important part of my self-image.

C3. My nationality has very little to do with how I feel about myself.

C4. My nationality is unimportant to my sense of what kind of person I am.

[D1-D4, Cosmopoliteness Dimension "Cosmopolitan Communication";

E1-E3, Cosmopoliteness Dimension "International Focus" (Jeffres et al., 2008)] Please read the following three items carefully, decide how much you agree or disagree with them using a 0-10 scale where 0=strongly disagree, 5=neutral, 10=strongly agree.

D1. "I think of myself as a citizen of the world."

D2. "In any given month, I communicate with people from a wide variety of backgrounds and cultures."

D3. "I'm more aware of what's going on around the world than most of my friends."

Please read the following three items carefully, decide the extent of your interest on a 0-10 scale where 0=not at all interested, 10=very interested.

E1. "Travel to different countries."

E2. "Current events in other countries."

E3. "Other cultures."

D4. Please tell us the number of times you had traveled outside the United States in the past five years.

#### [F1 – F25, Self-Monitoring Scale (Snyder, 1974)]

Rate whether the following statements apply to you by selecting "very true", "mostly true", "somewhat true", or "not at all true".

F1. I find it hard to imitate the behavior of other people.F2. My behavior is usually an expression of my true inner feelings, attitudes, and beliefs.

F3. At parties and social gatherings, I do not attempt to do or say things that others will like.

F4. I can only argue for ideas which I already believe.

F5. I can make impromptu speeches even on topics about which I have almost no information.

F6. I guess I put on a show to impress or entertain people.

F7. When I am uncertain how to act in a social situation, I look to the behavior of others for cues.

F8. I would probably make a good actor.

F9. I rarely need the advice of my friends to choose movies, books, or music.

F10. I sometimes appear to others to be experiencing deeper emotions than I actually am.

F11. I laugh more when I watch a comedy with others than when alone.

F12. In a group of people I am rarely the center of attention.

83

F13. In different situations and with different people, I often act like very different persons.

F14. I am not particularly good at making other people like me.

F15. Even if I am not enjoying myself, I often pretend to be having a good time.

F16. I'm not always the person I appear to be.

F17. I would not change my opinions (or the way I do things) in order to please someone else or win their favor.

F18. I have considered being an entertainer.

F19. In order to get along and be liked, I tend to be what people expect me to be rather than anything else.

F20. I have never been good at games like charades or improvisational acting.

F21. I have trouble changing my behavior to suit different people and different situations.

F22. At a party I let others keep the jokes and stories going.

F23. I feel a bit awkward in company and do not show up quite so well as I should.

F24. I can look anyone in the eye and tell a lie with a straight face (if for a right end).

F25. I may deceive people by being friendly when I really dislike them.

[G1-G3, Recall and Persuasion Interpretation of Ads]

G1. Could you view this ad video properly? If no, what was the problem?

- A. Yes
- B. No
- C. Not at all

Please specify the problem, leave this blank if no problem.

G2. Think about the ad for /brand name/- please indicate what you remember about this ad in as much detail as you can:

G3. What do you think were the main messages in the ad for /brand name/?

[H1-H6, Attitude and Purchase Intention (Bergkvist & Rossiter, 2009)]

H1. Think about the ad for /BRAND/, which of the following statements best describes your feeling about the ad?

I disliked it extremely

I disliked it quite

I disliked it slightly

I neither liked it nor disliked it

I liked it slightly

I liked it quite

I like it extremely

H2. Below you will find four pairs of adjectives, indicate how well one or the other adjective in each pair describes how you perceived the ad for /BRAND/.

Dislike: \_\_\_\_\_ Like

Good: \_\_\_\_\_Bad

Pleasant: \_\_\_\_\_ Unpleasant

Uninformative: \_\_\_\_\_ Informative

H3. Thinking about the /BRAND/ /PRODUCT CATEGORY/, which of the following statements best describes your feeling about /BRAND/?

I think it extremely bad.

I think it quite bad.

I think it slightly bad.

I think it is neither good nor bad.

I think it slightly good.

I think it quite good.

I think it extremely good.

H4. Below you will find four pairs of adjectives. Indicate how well one or the other adjective in each pair describes how you feel about /BRAND/.

Bad: \_\_\_\_\_ Good

Like: \_\_\_\_ Dislike

Pleasant: \_\_\_\_\_ Unpleasant

Useful: \_\_\_\_\_ Useless

H5. If you were going to buy /PRODUCT CATEGORY/, how likely would you be to try

/BRAND/?

Certain or practically certain

Very probable

Fairly good possibility

Some possibility

Slight possibility

No chance or almost no chance

H6. Below you will find four pairs of adjectives. Indicate how well one or the other adjective in each pair describes the likelihood that you would try /BRAND/ if you were to buy /PRODUCT CATEGORY/.

Unlikely: \_\_\_\_\_ Likely

Probable: \_\_\_\_ Improbable

Uncertain: Certain

Impossible: \_\_\_\_ Possible

[I1-I3, Third-Person Effect (Perloff, 2003)]

Please respond to the following three items from "strongly disagree" to "strongly agree".

I1. The ad I viewed is likely to have a strong influence on me.

I2. The ad I viewed is likely to have a strong influence on my friends and family.

I3. The ad I viewed is likely to have a strong influence on the general public.

[J1-J5, Manipulation Check of Overall Ad (Schwartz, 2006), J1=Intellectual Autonomy, J2=Affective Autonomy, J3=Embeddedness, J4=Egalitarianism, J5=Hierarchy.]

Please rate on a 5-point scale about how much you think the OVERALL advertisement has reflected the following statement, where 1=not at all, 2= a little, 3= Somewhat, 4=Quite a lot, 5=very much.

- J1. Encourages you to pursue your own ideas and intellectual directions independently, such as being broadminded, curious, and creative.
- J2. Encourages you to pursue affectively positive experience for yourself, such as pleasure, exciting life, and varied life.
- J3. Maintain current status and restrain actions that might disrupt in-group solidarity or the traditional order, encourage values such as social order, obedience, respect for tradition.
- J4. Consider the welfare of others, commitment to cooperate and equality of everybody as human beings, encourage values such as social justice, equality, help and honest.
- J5. Take unequal distribution of power, roles, and resources for granted, comply with the obligations and rules attached to your roles, encourage values such as authority and humble.

K1-K2, Manipulation Check of Colors and Transitions in Ad, Innovative, Interesting= Intellectual Autonomy; Exciting, Enjoyable= Affective Autonomy; Classical, Conventional= Embeddedness; Equality, Welcoming= Egalitarianism; Rich, Tasteful= Hierarchy.]

K1. Please rate on a 5-point scale about to what extent you think the COLORS in the ad
reflect the following qualities, where 1=not at all, 2= a little, 3= Somewhat, 4=Quite a lot,
5=very much.
Innovative
Exciting
Classical
Enjoyable
Rich
Equality
Tasteful
Welcoming
Interesting
Conventional

K2. Please rate on a 5-point scale about to what extent you think the TRANSITIONS between slides in the ad reflect the following qualities, where 1=not at all, 2= a little, 3= Somewhat, 4=Quite a lot, 5=very much. Innovative, Interesting= Intellectual Autonomy; Exciting, Enjoyable= Affective Autonomy; Classical, Conventional= Embeddedness; Equality, Welcoming= Egalitarianism; Rich, Tasteful= Hierarchy.]

Innovative

Exciting

Classical

Enjoyable

Rich

Equality

Tasteful

Welcoming

Interesting

Conventional

[L1-L3, Object Function (Shavitt, 1989)]

Please rate on a 5-point scale to what extent you think the following three factors contribute to your attitude toward CARS, where 5 indicates that the factor "contributes a great deal to my attitude" and 1 indicates that the factor "does not contribute at all to my attitude."

L1. My past experiences with the objects: how satisfied I am with the /product/.

L2. My values and my friends' beliefs: how I express myself with my choice of /product/.

L3. My self-esteem: how confident my /product/s make me feel about myself.

#### [M1-M3, Personal Relevance]

M1. Have you ever bought a car/ fragrance/ coffee before?

M2. How often do you buy this product category?

M3. Would you buy more /product category/ in the future?

[N1-N11, Psychological Reactance Scale (Hong & Faedda, 1996)]

Please respond to the following three items with a response scale from "strongly disagree" to "strongly agree."

N1. When someone forces me to do something, I feel like doing the opposite.

N2. It makes me angry when another person is held up as a model for me to follow.

N3. Advice and recommendations induce me to do just the opposite.

N4. It irritates me when someone points out things which are obvious to me.

N5. I become angry when my freedom of choice is restricted.

N6. I consider advice from others to be an intrusion.

N7. I become frustrated when I am unable to make free and independent decisions.

N8. Regulations trigger a sense of resistance in me.

N9. I find contradicting others stimulating.

N10. I resist the attempts of others to influence me.

N11. When something is prohibited, I usually think "that's exactly what I am going to do."

- [O1-O9, Media Usage]
- O1. How many hours of television do you USUALLY watch per day?
- O2. How many hours of television did you watch yesterday?
- O3. How many hours did you listen to radio yesterday?
- O4. How many days last week did you read a newspaper?
- O5. How many different magazines do you read regularly?
- O6. In the past six months, how many books have you read?
- O7. Yesterday, about how many hours did you spend on the Internet?
- O8. Yesterday, about how many emails did you send?
- O9. Yesterday, about how many hours did you spend social networking online (e.g. Facebook, Twitter)?

[P1-P7, Demographics]

P1. Please indicate your age in years:

P2. What is your gender?

Female

Male

P3. What is the highest degree or level of school you have completed? If currently enrolled, highest degree received.

No schooling completed

Some high school, no diploma

High school graduate, diploma or the equivalent (for example: GED)

Some college credit, no degree

Bachelor's degree

Master's degree

Doctorate degree

P4. What is your marital status?

Single, never married

Married or domestic partnership

Widowed

Divorced

### Separated

### P5. Please specify your nationality.

U.S. American

Chinese

Other \_\_\_\_\_ (Please specify)

P6. Please specify your ethnicity.

White

Hispanic or Latino

Black or African American

Native American or American Indian

Asian / Pacific Islander

Other (specify)\_\_\_\_\_

P7. What is your annual household income?

Less than \$25,000

\$25,000 - \$49,999

\$50,000 - \$74,999

\$75,000 - \$99,999

\$100,000 - \$149,999

\$150,000 or more

## APPENDIX D

# Factor Analysis of Cosmopoliteness Items

#### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure	.719	
Bartlett's Test of Sphericity	Approx. Chi-Square	426.831
	df	21
	Sig.	.000
	51g.	.00

#### Communalities

	Initial	Extraction
q06_1"I think of myself as a	1.000	.379
citizen of the world".		
q06_2"In any given month, I	1.000	.607
communicate with people from		
a wide variety of backgrounds		
and cultures".		
q06_3"I'm more aware of	1.000	.558
what's going on around the		
world than most of my		
friends".		
q07_1Travel to different	1.000	.693
countries.		
q07_2Current events in other	1.000	.765
countries.		
q07_30ther cultures.	1.000	.804
no.trav_outus	1.000	.326

#### Communalities

	Initial	Extraction
q06_1"I think of myself as a	1.000	.379
citizen of the world".		
q06_2"In any given month, I	1.000	.607
communicate with people from		
a wide variety of backgrounds		
and cultures".		
q06_3"I'm more aware of	1.000	.558
what's going on around the		
world than most of my		
friends".		
q07_1Travel to different	1.000	.693
countries.		
q07_2Current events in other	1.000	.765
countries.		
q07_30ther cultures.	1.000	.804
no.trav_outus	1.000	.326

Extraction Method: Principal Component Analysis.

#### Total Variance Explained

Component		Initial Eigenval	ues	Extractio	n Sums of Squar	ed Loadings	Rotation Sums of Squared Loadings			
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	
1	3.014	43.056	43.056	3.014	43.056	43.056	2.406	34.373	34.373	
2	1.117	15.963	59.019	1.117	15.963	59.019	1.725	24.646	59.01	
3	.929	13.264	72.283							
4	.819	11.705	83.988							
5	.518	7.397	91.385							
6	.403	5.764	97.149							
7	.200	2.851	100.000							

Extraction Method: Principal Component Analysis.

#### **Rotated Component Matrix**<sup>a</sup>

	Comp	onent
	1	2
q06_1"I think of myself as a	.247	.564
citizen of the world".		
q06_2"In any given month, I	.255	.736
communicate with people from		
a wide variety of backgrounds		
and cultures".		
q06_3"I'm more aware of	.320	.675
what's going on around the		
world than most of my		
friends".		
q07_1Travel to different	.831	.048
countries.		
q07_2Current events in other	.837	.254
countries.		
q07_30ther cultures.	.876	.192
no.trav_outus	142	.553

a. Rotation converged in 3 iterations.

### APPENDIX E

Paired-Sample T-test of Manipulation Check Questions For Five Appeals

Appeal 1 (Affective Autonomy):

Affective Autonomy Value Perceived Compared with Other Four Values

				Paired Differen	ces				
				8	95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	q20_mani_2Affective Autonomy q20_mani_1Intellectual Autonomy	.46903	.95498	.08984	.29103	.64703	5.221	112	.000
Pair 2	q20_mani_Affective Autonomy q20_mani_3 Embeddedness	.58407	1.13959	.10720	.37166	.79648	5.448	112	.000
Pair 3	q20_mani_2Affective Autonomy q20_mani_4Hierarchy	.73451	1.22487	.11523	.50621	.96282	6.375	112	.000
Pair 4	q20_mani_2Affective Autonomy q20_mani_5Egalitarian	.69027	1.23981	.11663	.45917	.92136	5.918	112	.000

## Appeal 2 (Egalitarianism):

### Egalitarianism Value Perceived Compared with Other Four Values

				Paired Sample	s Test				
			AG. (5)	Paired Differen	ces				
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	q20_mani_5Egalitarian q20_mani_4Hierarchy	.16162	.91146	.09161	02017	.34340	1.764	98	.081
Pair 2	q20_mani_5Egalitarian q20_mani_3 Embeddedness	.12121	1.00278	.10078	07879	.32121	1.203	98	.232
Pair 3	q20_mani_5Egalitarian q20_mani_2Affective Autonomy	03030	1.14691	.11527	25905	.19844	263	98	.793
Pair 4	q20_mani_5Egalitaran q20_mani_1Intellectual Autonomy	.21212	1.20605	.12121	02842	.45266	1.750	98	.083

## Appeal 3 (Embeddedness):

## Embeddedness Value Perceived Compared with Other Four Values

				Paired Different	es						
				3			95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)		
Pair 1	q20_mani_3 Embeddedness q20_mani_1Intellectual Autonomy	.29907	1.30467	.12613	.04901	.54913	2.371	106	.020		
Pair 2	q20_mani_3 Embeddedness q20_mani_2Affective Autonomy	.07477	1.34376	.12991	18278	.33232	.576	106	.566		
Pair 3	q20_mani_3 Embeddedness q20_mani_4Hierarchy	.22430	.73084	.07065	.08422	.36437	3.175	106	.002		
Pair 4	q20_mani_3 Embeddedness q20_mani_5Egalitarian	.34579	1.22938	.11885	.11017	.58142	2.910	106	.004		

#### Paired Samples Test

## Appeal 4 (Hierarchy):

				Paired Differen	ces	Ű			
					95% Confidence Differe				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	q20_mani_4Hiearchy q20_mani_1Intellectual Autonomy	.07865	1.07898	.11437	14864	.30594	.688	88	.493
Pair 2	q20_mani_4Hierarchy q20_mani_2Affective Autonomy	33708	1.26081	.13365	60267	07149	-2.522	88	.013
Pair 3	q20_mani_4Hierarchy q20_mani_3 Embeddedness	01124	.81873	.08679	18370	.16123	129	88	.897
Pair 4	q20_mani_4Hierarchy q20_mani_5Egalitarian	.26966	.87599	.09286	.08513	.45419	2.904	88	.005

## Hierarchy Value Perceived Compared with Other Four Values

## Affective Autonomy Value Perceived Compared with Other Four Values

				Paired Sample	s Test				
				Paired Differen	ces			df	
		2		/	95% Confidence Differe		2		Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t		
Pair 1	q20_mani_2Affective Autonomy q20_mani_1Intellectual Autonomy	.41573	1.00915	.10697	.20315	.62831	3.886	88	.000
Pair 2	q20_mani_2Affective Autonomy q20_mani_3 Embeddedness	.32584	1.11575	.11827	.09081	.56088	2.755	88	.007
Pair 3	q20_mani_2Affective Autonomy q20_mani_4Hierarchy	.33708	1.26081	.13365	.07149	.60267	2.522	88	.013
Pair 4	q20_mani_2Affective Autonomy q20_mani_5Egalitarian	.60674	1.16402	.12339	.36154	.85195	4.917	88	.000

## 102

## Appeal 5 (Intellectual Autonomy):

				Paired Differen	ces				
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	q20_mani_1Intellectual Autonomy q20_mani_2Affective Autonomy	08257	.70879	.06789	21714	.05200	-1.216	108	.227
Pair 2	q20_mani_1Intellectual Autonomy q20_mani_3 Embeddedness	.30275	1.19803	.11475	.07530	.53021	2.638	108	.010
Pair 3	q20_mani_1Intellectual Autonomy q20_mani_4Hierarchy	.52294	1.15947	.11106	.30280	.74307	4.709	108	.000
Pair 4	q20_mani_1Intellectual Autonomy- q20_mani_5Egalitarian	.31193	1.07753	.10321	.10735	.51650	3.022	108	.003

## Intellectual Autonomy Value Perceived Compared with Other Four Values

## Affective Autonomy Value Perceived Compared with Other Four Values

				Paired Samples					
		Paired Differences					1		
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	q20_mani_2Affective Autonomy q20_mani_1Intellectual Autonomy	.08257	.70879	.06789	05200	.21714	1.216	108	.227
Pair 2	q20_mani_2Affective Autonomy q20_mani_3 Embeddedness	.38532	1.12964	.10820	.17085	.59979	3.561	108	.001
Pair 3	q20_mani_2Affective Autonomy q20_mani_4Hierarchy	.60550	1.17866	.11289	.38173	.82928	5.363	108	.000
Pair 4	q20_mani_2Affective Autonomy q20_mani_5Egalitarian	.39450	1.09729	.10510	.18617	.60282	3.753	108	.000

103