



NORGES HANDELSHØYSKOLE

Bergen, Spring 2012

Thesis Master within the main profile of International Business

Thesis Advisor: Professor Aksel Rokkan

CROSS-CULTURAL ADVERTISING: CULTURAL VALUES THAT AFFECT ADVERTISING LIKEABILITY.

by
Truong Van Thao Nguyen
(116527)

This thesis was written as a part of the master program at NHH. Neither the institution, the supervisor, nor the censors are - through the approval of this thesis - responsible for neither the theories and methods used, nor results and conclusions drawn in this work.

ABSTRACT

This paper attempts to investigate the cultural values that have influences on consumers' advertising likeability. Three groups of nationalities were assessed, including: Singaporean Chinese, Chinese from China, and Westerners. Advertising likeability was examined from two aspects: liking of culturally congruent advertisements and liking of humorous advertisements with sexual content. In the analysis of the impact of cultural elements, individual-level factors that have potential moderating effects were taken into account. These consist of the need for cognition (NFC), need for humor (NFH), and cosmopolitanism (COS).

The findings from this study have shown the effects of ad-culture congruency. In other words, cultural differences along Hofstede's dimension of collectivism and individualism have effects on consumers' preferences towards ad appeals. Subjects tend to show preferences for the ad appeal that is conforming to their cultural orientations. Specifically, Singaporean Chinese favor collectivistic themes, while their Western counterparts prefer individualistic themes. The moderating effect of Product type was not proved to be significant in this study. That is to say, whether the product is personal or non-personal, ad-culture congruency is beneficial. Besides, the level of cosmopolitanism did not appear to affect the liking of culturally congruent ads.

With regards to humorous advertisements with sexual content, results from this study suggest that Singaporean Chinese favor those ads less than Westerners but more than Chinese from China. Being well-known as modern and open-minded, Singaporean Chinese are still conservative towards sexuality contents in humorous ads. This liking is moderated by the individual level of cosmopolitanism (COS) and need for humor (NFH). Specifically, people who are highly cosmopolitan and have higher need for humor shown greater liking for sexually humorous advertisements.

Finally, the study looks at the role of advertising liking in advertising effectiveness. Findings have shown that liking of the ad leads to better attitudes towards the brand and purchase intention. This effect, however, is moderated by individual need for cognition (NFC).

TABLE OF CONTENTS

<i>Abstract</i>	1
<i>List of Tables</i>	4
<i>Table of Figures</i>	5
<i>List of Appendices</i>	6
<i>Foreword</i>	7
<i>1. Introduction</i>	8
1.1 Background.....	8
1.2 Objectives.....	10
1.3 Research Questions.....	12
1.4 Structure of the paper.....	12
<i>2. Theoretical Approach</i>	13
2.1 Advertising Effectiveness & Advertising likeability.....	13
2.1.1 Advertising effectiveness.....	13
2.1.2 Advertising likeability & its role in advertising effectiveness.....	13
2.2 Cultural differences.....	16
2.2.1 Hofstede’s Individualism versus Collectivism dimension.....	16
2.2.2 Humor and culture: differences between Singaporeans and Westerners.....	17
2.3 Ad-culture congruency.....	19
2.3.1 Cultural congruency along with Hofstede’s framework.....	19
2.3.2 Humor and sexual humor in international advertising.....	23
2.4 Ad-self congruency.....	26
2.4.1 Individual differences within individualistic/collectivistic cultures.....	27
2.4.2 Need for cognition (NFC).....	28
2.4.3 Need for cognition (NFC) and the effectiveness of culturally congruent advertisements.....	29
2.4.4 Need for cognition (NFC) and effectiveness of humorous advertising.....	29
2.4.5 Need for humor (NFH).....	30
2.4.6 Cosmopolitanism (COS).....	30
2.5 Development of Research hypotheses.....	32
2.5.1 Likeability of culturally congruent advertising in Singapore.....	32
2.5.2 Ad liking of humorous advertisement.....	33
2.5.3 Link between advertising likeability and advertising effectiveness.....	33
2.6 Proposed perceptual model.....	35
<i>3. Research Methods</i>	36
3.1 Advertising Stimuli.....	36

3.2 Sample.....	38
3.3 Measures – Definitions and Operationalization of Variables	39
3.3.1 Manipulation control.....	39
3.3.2 Measure of level of cosmopolitanism	42
3.3.3 Need for cognition (NFC)	43
3.3.4 Need for humor (NFH)	45
3.3.5 Ad likeability	46
3.3.6 Ad effectiveness.....	46
3.4 Procedure	47
4. <i>Research Findings & Discussions</i>	48
4.1 Preliminary analyses	48
4.1.1 Coding, recoding and computing total scores.....	48
4.1.2 Reliability check and exploratory factor analysis.....	49
4.2 Liking of cultural congruent advertisements	55
4.3 The effect of moderators: product type & level of cosmopolitanism	59
4.3.1 Moderating role of product type – personal versus non-personal product	59
4.3.2 Moderating role of level of cosmopolitanism.....	62
4.4 Liking of humorous advertisements with sexual contents & the moderating effect of individual Cosmopolitanism level and Need for humor	65
4.5 Effect on advertising effectiveness	71
4.6 Summary of findings.....	75
5. <i>Discussions & conclusions</i>	76
5.1 Discussion.....	76
5.1.1 Liking of culturally congruent advertisements & the role of product type.....	76
5.1.2 Differences in preferences for sexually humorous advertisements across cultures	78
5.1.3 The role of individual characteristics.....	78
5.1.3.1 Cosmopolitanism level.....	78
5.1.3.2 The role of individual Need for humor (NFH)	79
5.1.4 Impacts of advertising likeability on advertising effectiveness & the influence of individual Need for cognition (NFC).....	79
5.2 Conclusions and managerial implications	80
5.2.1 The use of culturally congruent advertisements	80
5.2.2 The use of humorous advertisements with sexual content.....	81
5.3 Further future research.....	82
5.4 Limitations	83

LIST OF TABLES

Table 1. T-tests mean difference of ‘amusing’ & ‘funny’ ratings between humorous and non-humorous ads across brands.....	40
Table 2. Correlation between ‘amusing’ and ‘funny’ items of ads.....	40
Table 3. T-tests mean difference of ‘amusing’ & ‘funny’ ratings between nationality groups	41
Table 4. Internal consistency of scale items.....	50
Table 5. Factor analysis: Rotated Component Matrix between NFC, NFH, and COS.....	52
Table 6. Correlation matrix at construct level: correlation coefficient (r) and significance value (in parentheses)	53
Table 7. Descriptive results: Mean and Standard Deviation of Ad liking across appeal types, product types, and nationality groups.	55
Table 8. ANOVA Tests: Effects of nationality, product type and appeal type on Ad liking ...	56
Table 9. Descriptive analysis of Ad liking for collectivistic versus individualistic appeals	57
Table 10. ANOVA tests: effects of appeal type and nationality on ad liking	57
Table 11. Mean difference between liking of collectivistic and individualistic appeal across nationality groups.....	58
Table 12. AVONA test: effects of product type, appeal type, nationality on Ad liking.....	59
Table 13. ANOVA tests: effects of appeal type and nationality on ad liking for personal & non-personal product.	60
Table 14. Level of cosmopolitanism across nationality groups.....	62
Table 15. Level of cosmopolitanism across nationality.....	62
Table 16. ANOVA test: Effect of appeal type and level of cosmopolitanism on Ad liking	63
Table 17. Descriptive analysis of liking of sexually humorous ads across nationality groups	65
Table 18. T-tests for liking of sexually humorous ads between groups of nationality.....	66
Table 19. ANOVA tests: effects of nationality, COS and NFH on Ad liking of sexually humorous adverts	66
Table 20. AVONA tests: effects of nationality, level of cosmopolitanism on Ad liking	67
Table 21. T-tests: Mean difference of Ad liking between low COS and high COS groups across nationality groups.....	68
Table 22. ANOVA results between nationality, Need for humor & ad liking	70
Table 23. T-tests between low NFH and high NFH groups across nationality groups	70
Table 24. Regression relation of ad liking (independent variable) and Δ brand attitude (dependent variable), controlled for NFC.....	72
Table 25. Regression relation of ad liking (independent variable) and purchase intention (dependent variable), controlled for NFC.....	73
Table 26. T-tests between brand attitude before and after exposure	74
Table 27. Regression relation of ad liking (independent variable) and change in brand attitude (dependent variable).....	75
Table 28. Regression relation of ad liking (independent variable) and purchase intention (dependent variable).....	75

TABLES OF FIGURES

Figure 1. Ad liking of collectivistic and individualistic appeal across nationalities	58
Figure 2. Ad liking of different appeals across nationality for personal product	61
Figure 3. Ad liking of different appeals across nationality for non-personal product.....	61
Figure 4. Ad liking of different appeals across nationality for low COS group.....	64
Figure 5. Ad liking of different appeals across nationality for low COS group.....	64
Figure 6. Ad liking based on level of cosmopolitanism across nationality groups	69

LIST OF APPENDICES

Appendix 1. Online Questionnaire	91
Appendix 2. Pretest findings.....	94
Appendix 3. Sample.....	98
Appendix 4. Scale Reliability Check.....	99
Appendix 5. Factor Analysis between NFC, NFH, and COS.....	103
Appendix 6. Correlation Matrix at Construct Level.....	107
Appendix 7. ANOVA – Cultural Congruent Ad Liking.....	109
Appendix 8. T-Test - Cultural Congruent Ad Liking	111
Appendix 9. ANOVA - Cultural Congruent Ad Liking for Personal and Non-personal Product Type.....	112
Appendix 10. ANOVA –Moderating Effect of Cosmopolitanism	113
Appendix 11. ANOVA - Sexually Humorous Ad Liking.....	113
Appendix 12. T-test- Sexually Humorous Ad Liking.....	115
Appendix 13. T-test - Sexually Humorous Ad Liking for Low and High COS groups	117
Appendix 14. T-Test – Brand Attitude Before and After Stimuli Exposure	119
Appendix 15. Regression – Ad liking and Change in Brand Attitude.....	120
Appendix 16. Regression: Ad liking and Purchase Intention	125
Appendix 17. T-Test – Compare High and Low NFC in the Relation between Ad Liking and Ad Effectiveness	130

FOREWORD

This Master thesis is written as part of the Master of Science in Economics and Business Administration program at the Norwegian School of Economics (NHH), with a main profile of International Business. My ambition is to contribute a fresh perspective to the contemporary research in the field of cross-cultural advertising, providing marketers with valuable insights in selecting the appropriate advertisements for culturally diverse markets.

The topic of this thesis and the study of advertising and consumer behavior in general are of my special interests. Aiming to look at the big picture, I examined a model which includes various constructs and factors. As these factors have the potential to influence the variables in interest, I believe this would help to avoid any confounding effects. Nevertheless, considering many variables in the analysis appears to make my paper complicated. I hope that the structure of the paper will make it easier to follow and understand. Within the scope of the Master thesis and several constraints incurred, the sample of this study (201 subjects) is considerably sufficient but a larger sample would be more favorable. I wish to have the opportunities to carry out similar studies on a larger scale in the near future.

I would like to express my deepest gratitude to my advisor, Professor Aksel Rokkan for his remarkable guidance, enlightening and fun discussions as well as continuous support throughout the research process. I am also grateful to my friend Lawrence Tan from National University of Singapore for his assistance during the data collection process. Besides, I would like to thank my friends in Norwegian School of Economics (NHH) for providing me with various stimuli samples, as well as proof-reading and constructive comments. Last but not least, I cannot thank my family enough for their love and continuous support in everything I do.

Bergen, June 16th 2012

Truong Van Thao Nguyen

1. INTRODUCTION

1.1 BACKGROUND

Advertising, as a form of social communication, is particularly reflective, and indicative of culture and its norms (Hong et al, 1987). As a consequence, international marketers carrying out advertising campaigns in overseas markets see the need to tailor their advertisements so as to reflect local cultural values. As the world economy expands across international borders, understanding the local culture is of utmost importance and is often considered to be prerequisite for successful international advertising (Keegan, 1989). In research field, there have been a considerable number of scholars who attempted to answer the key question in international advertising research, that whether national culture have any effect on the way consumers respond to advertising (Koslow & Costley, 2010; Taylor, 2005). In particular, the effect of culture variations on advertising effectiveness was of interest of many researchers. Just to name a few, Han and Shavitt (1994) examined cross-cultural differences in advertising effectiveness along the collectivism - individualism dimensions; Taylor et al (1997) compared the impact of information level on the effectiveness of television commercials in high and low context culture, and many other papers studied this complex topic (Aaker & Schmitt, 2001; Zhang & Neelankavil, 1997). Research often refers to this concept as ‘cultural congruency’ or more clearly, ‘ad-culture congruency’ (Chang, 2006; Emery & Tian, 2010; Maldonado, 2011).

Ad-culture congruence, however, as argued by some researchers, cannot predict ad effectiveness in all contexts. Treating the people in a culture as if they are homogeneous seems to overlook the diversity of that population (Chang, 2006). There appears to be sufficient variation among consumers within the same culture to justify the consideration of individual differences besides overall impact of cultural value orientation. For example, personality differences have been found to influence the type of ad appeal favored (Snyder & DeBono, 1985). Similarly, it has been found that consumers prefer ad messages portraying values that are congruent with their own (Wang & Mowen, 1997). Thus, the role of ad-self congruency should not be neglected; in other words, advertisers should be more aware of the possible influences of individual differences beyond what can be predicted by simplistic cultural classifications (Chang, 2006). Information processing is different at individual level, i.e. people process information in different ways, given that individuals possess different

personalities such as the need for cognition, need for humor and affect intensity. These factors may play the role of moderators in the relationship between culture values and ad effectiveness. Besides, at the individual level, the degree of socialization into the culture may also influence each individual's level of conformity to the social norms. An ideology that has gained attention from contemporary research in consumer behavior is cosmopolitanism, which refers to "a vision of an institutionally embedded global consciousness" (Cheah, 2006). Measuring the effectiveness of advertising in cross-cultural settings hence should not base on cultural dimensions alone.

Also, advertising effectiveness is a broad measurement. Pertinent research has measured this aspect based on three facets: attitude towards the ad, attitude towards the brand, and purchase intention (Halliwell, Dittmar & Howe, 2005; Lutz & MacKenzie, 1983; Maldonado, 2001). Recently, researchers have scrutinized their investigation on a specific aspect of advertising effectiveness, namely *advertising likeability*. This concept involves the affective component of consumer behaviors, which include the emotional and feelings states (Lavidge & Steiner, 1961). In other words, it is reasonable to argue that in order to develop ad liking among consumers, the advertisement has to provoke favorable feelings and attitudes. Advertising likeability therefore can be seen as the emotion-related component of the attitude towards the ad. The effect of advertising likeability on purchase intention has been proved to be positive in several studies (Fam, 2008; Biel & Bridgwater, 1990; Walker & Dubitsky, 1994). However, while it may imply positive attitude towards the ad, advertising likeability may not guarantee positive attitude towards the brand and purchase intention. As mentioned earlier, this would depend on the way individuals process information in the ad.

1.2 OBJECTIVES

In this paper, my attempt is to examine cultural aspects that influence advertising likeability. Singapore is chosen to be the case study, as the country presents an interesting context for cross-cultural advertising research. This is due to a number of reasons. First of all, there are multi nationalities in the country reflecting a diverse range of cultural values. With a population of 5.5 million people, Singapore consists of a mixture of Chinese, Malays, Indians, Caucasians and Eurasians, and other Asians of different origins. With its immigrant history, Singapore is considered as a crossroads for various ethnic and racial groups. International advertising in Singapore, therefore, may be challenging as it has to satisfy a variety of cultures. Secondly, although being an Asian city, Singapore displays a great extent of westernization, and hence, potentially a high level of cosmopolitanism. In fact, the country is the most modern city in the region. The level of cosmopolitanism is therefore significant and it is possible to assume that this may have an impact on cultural values of the people in this country. This, as explained earlier, may have an influence on the effect of ad-culture congruency. Although the study is focused specifically in Singapore, I expect that findings from the study will provide insights for marketers at a generalized level. In other words, my ambition is to give international advertisers visions about advertising in the Eastern and Western world.

As far as it goes, relatively little research on cross-cultural advertising has been done with a combination of various elements at both culture and individual level. I would like to look at ad liking in a big picture, examining interaction effects, if they exist, between different factors. Moreover, the impact of cosmopolitanism has not been discussed to a great extent in transnational advertising research to date. Hence, my paper endeavors to fill in the gap in cross-cultural advertising research and provide valuable insights for marketers from a fresh perspective.

In this study, I examined three groups of nationalities in Singapore, including Singaporean Chinese, Chinese from the People's Republic of China (PRC) and Westerners, defined as natives or inhabitants of the West. Singaporean Chinese are chosen to be studied because they make up the largest percentage of Singapore's population, besides Indians, Malays and others. Singaporean Chinese will be compared with Chinese from the People's Republic of China so as to have a clearer observation with regards to the moderating effect of cosmopolitanism level. The cultural metrics under examination are based on one of Geert

Hofstede's cultural dimensions, namely collectivism versus individualism. My attempt is to assess advertising likeability at a specific level. In this sense, advertising likeability attributes are narrowed down to two main attributes: *culturally-congruent and humorous*. The latter attribute 'humorous' is derived from component studies in advertising likeability from 1970s to date, which indicates that entertaining (also named clever, ingenuity, or humorous) is the most often liked attribute (Smit et al., 2006). Moreover, the use of humor in advertising is a growing interest in cross-cultural advertising research. Nevertheless, humor in advertising is a broad topic. As it will be reviewed later, humor in advertising comprise of several different themes; such as ludicrous, satire, pun, nonsense humor, warm humor, aggressive and sexual humor (Toncar, 2001; Weinberger & Spotts, 1989). Humorous advertising with sexual content is chosen to be the area of study in this paper, as this may be the theme with clearest distinction in preference between Eastern and Western culture. This will be described in more details in the literature review section. Moreover, it has to be noted that, although the main aspect in interest is advertising likeability, in this paper I also take into account the correlation between ad liking and ad effectiveness, measured by consumers' attitude towards the brand and purchase intention. To this end, as I expressed earlier, results from this research paper will contribute to providing useful insights for international marketers who want to advertise their brands effectively in Singapore as well as in other similar markets in Asia.

1.3 RESEARCH QUESTIONS

The main research question to be addressed is: What are the cultural aspects that influence advertising likeability? A case of Singapore, country of multi-nationalities. Three sub-questions will be examined, as specified below:

- To what extent does the cultural differences along the collectivism versus individualism dimension between Singaporean Chinese and Westerners affect their liking of culturally-congruent advertisements? How do the product type and the level of cosmopolitanism affect this relationship?
- To what extent does the cultural differences between Singaporean Chinese and Westerners affect their perception and liking of sexually humorous advertisements? Will individuals' level of need for humor and level of cosmopolitanism moderate this correlation, if any?
- How does individuals' level of need for cognition affect the relation between advertising likeability (specifically likeability that is obtained from ad-culture congruency and likeability of sexually humorous ads) and advertising effectiveness?

1.4 STRUCTURE OF THE PAPER

In order to achieve the objectives and address all the research questions in interest, the thesis is divided into five chapters. Chapter 1 provides a brief introduction to the research topic and background, as well as the main research questions to be investigated and the structure of the paper. Chapter 2 presents an overview of existing research on the topic in scientific literature, followed by hypotheses and a conceptual model. Chapter 3 describes the design and method employed in the research process, which include the measurements of constructs and relationships, as well as the specific procedure. Research findings of the empirical study will be explained in Chapter 4. Finally, chapter 5 consists of the discussion, a conclusion of the issues in the paper along with suggestions for further research and existing limitations of the study.

2. THEORETICAL APPROACH

2.1 ADVERTISING EFFECTIVENESS & ADVERTISING LIKEABILITY

2.1.1 ADVERTISING EFFECTIVENESS

Advertising plays an important role in companies' marketing communication activities. This is reflected in the huge amount of global advertising spending, which hits around \$490 billion in 2011 and is predicted to reach \$522 billion in 2012 with 6.4% increase (MediaBUZZ, 2011). The growth is observed even during the global economy crisis when many countries experienced financial problems (Nielsen, 2011). As a consequence, measuring the effectiveness of advertising remains a crucial task for marketers. The question is which assessment criteria should marketers rely on in determining the effectiveness of an advertisement. This topic has long been of interest in advertising research field. Seth (1974) has suggested several ad effectiveness measurement perspectives from theoretical considerations. Based on the review of prior empirical as well as theoretical research, there are at least three distinct dimensions of the measurements (Seth, 1974). The first aspect is the question of what is called cognitive distortion which entails in communication process. This includes attention, awareness, recall, recognition and selective perception. The second aspect is related to the advertisement's influence on the choice processes of consumers. This measured how does, and by how much, advertising influences the consumer's choice process by systematically biasing him towards an alternative. The third aspect of ad effectiveness is the ad's impact in increasing consumer's consumption behavior. Alternatively, recent research has adopted the measurement of advertising based on three dimensions: Attitude towards the ad (A_{ad}), attitude towards the brand (A_b), and purchase intention (PI), in which A_{ad} is positively related to brand beliefs and A_b , which in turn influences purchase intentions (Haley & Baldinger, 1991; Heath & Gaeth, 1994; MacKenzie & Lutz, 1989; Mitchell & Olson, 1981). Moreover, academics have considered attitude towards the ad (A_{ad}) as the principal predictor of the ad's success (Bergkvist & Rossiter, 2008). Also, marketers have long assumed that an individual's reaction towards an advertisement has an impact on their evaluation of an advertised brand and subsequent purchase decision (Chattopadhyay & Nedungadi, 1990). In the aspect of attitude towards the ad (A_{ad}), advertising likeability plays a significant role, as it will be discussed shortly in the following section.

2.1.2 ADVERTISING LIKEABILITY & ITS ROLE IN ADVERTISING EFFECTIVENESS

Advertising likability, or ad liking (abbreviated as L_{ad}), is part of attitudes to the ad which in turn is defined as “a predisposition to respond in a favorable or unfavorable manner to a particular advertising stimulus during a particular exposure occasion” (Mackenzie et al., 1986). To put it simply, ad liking measures the degree to which consumer likes the ad. It is often discussed in conjunction with ad dislikeability, which is the opposite concept, measuring how much the ad is disliked. The concept of ad liking has emerged as one of the most important copy-test measures that advertisers rely on to decide whether to select the ad for a marketing campaign (Bergkvist & Rossiter, 2008). Previous research indicates the importance of advertising likeability, showing that a key component of advertising effectiveness is whether it is liked or disliked. Liked ads lead to greater preference for the advertised product or service and intent to purchase (Kennedy and Sharpe, 2007; Smit et al., 2006). Fam (2008) argued that an effective advertisement is one that is well liked, well-remembered by target consumers and that they may be willing to watch again. Advertising likeability was referred to as “the first hurdle” that once the advertisement passes; it “receives further mental processing until liking the advertisement equates buying the advertised brand” (Smit et al., 2006). The role of advertising liking can be compared to that of a ‘gatekeeper’, which reflects that unless consumers like the advertisement, they will not pay any attention or watch it again, let alone persuasion effects. Advertising likeability is considered by many researchers as a valid criterion measurement of advertising effectiveness (e.g., Lutz, 1985; Mackenzie, Lutz & Belch, 1986; Muehling, 1987; Shimp, 1981; Thorson, 1981), as it has been suggested that advertising likeability can lead to advertising recall, favorable brand attitude, and possibly increased persuasive ability (Fam K., 2008). Bergkvist and Rossiter (2008) argued that the causality is very likely to be from Ad liking (L_{ad}) to the brand variables such as Brand beliefs ($Beliefs_b$), Attitudes toward the brand (A_b), and purchase intention (PI), especially for new brands as there are no prior brand variables that could be alternative causes. In literature, the concepts of ad likeability and attitude toward the advertisement are used interchangeably. For example, the meta-analysis of multiple-item A_{ad} and single-item L_{ad} measures by Brown and Stayman (1992) shows them to be measuring the same construct. To ensure that consumers' liking of the ad can be captured as accurately as possible, in this study ad liking will be measured by using multiple items rather than a single item, and hence is sometimes referred to as A_{ad} . Worth noticing is that recently, an idea has

gained ground that ad liking is not just a matter of “affection” but a combination of affective and cognitive elements (Smit et al., 2006). Consequently, cognitive constructs need to be taken into account when assessing advertising likeability.

Previous research, however, often considers likeability and dislikeability together and places them on one continuum, ignoring the separate effects that each might exert (Gazley, Krisjanous, & Fam, 2012). In addition, unlike other advertising elements, the extent to which ad likeability and dislikeability can be considered uniform across different cultures is not extensively researched (Gazley, Krisjanous, & Fam, 2012). As stated previously, in this study, advertising likeability will be assessed at a specific level. Firstly, ad likeability will be evaluated from cultural orientation perspective. In this sense, the liking of *cultural-congruent* advertisements will be measured. Secondly, the study of likeable attributes that past research has investigated will be applied. To narrow the scope of the paper, one aspect of the most likeable attribute is scrutinized, namely *humorous* advertising. *Humorous* characteristic is drawn from the six different components of advertising likeability and dislikeability that have been identified by researchers from 1970s to date (Smit et al., 2006). These include entertaining (also named clever, ingenuity, or humorous), energetic/stimulating, relevant, empathetic, familiar, and irritating (dislike attribute). Similarly, Gazley, Krisjanous & Fam (2011) studied five cities in five Asian countries in the topic “Likeable attributes of TV commercials in Asia”. The study findings showed that across all five cities, advertising likeability consists of seven like attribute and one dislike attribute. The most important for like attribute is "Entertaining," followed by "Warmth," "Soft Sell," "Strong/Distinctive/Sexy," "Relevant to Me," "Trendy/Modernity/Stylish," and "Status Appeal." The dislikeable attribute is "Boring/Worn Out". Out of the eight attributes, four attributes are consistent with previous studies undertaken in Europe and America. These include “Entertaining”, “Warmth”, “Relevant to me” and “Boring/Worn Out”. Fam (2008) claimed that the remaining attributes (“Soft Sell”, “Strong/Distinctive/Sexy”, “Trendy/Modernity/Stylish” and “Status Appeal”) could be identified as uniquely Asians. *Humorous* attribute is chosen to be central to this research as it is the most liked element; and as importantly, the topic of humor in advertising in relation with cultural differences has drawn great attention. This may be due to the differences in consumers’ perception of humorous advertising across cultures. Moreover, as explained before, humorous advertising with sexual content will be studied. This will be elaborated further in the later part of the literature review.

2.2 CULTURAL DIFFERENCES

2.2.1 HOFSTEDE'S INDIVIDUALISM VERSUS COLLECTIVISM DIMENSION

Individualism – Collectivism can be defined as “the degree to which individuals are integrated into groups” (Hofstede, 2001). On individualistic side, we find societies in which the ties between individuals are loose; people are I-conscious, the concept of self is important and everyone is expected to look after himself and his immediate family. Individualistic cultures are universalistic, assuming their values are valid for the whole world. People in individualistic cultures focus on self achievement; they are self-centered and emphasize more on individual goals. The collectivistic side, on the other hand, consists of strong ties between individuals in the societies; people are we-conscious and they are integrated into strong, cohesive in-groups. Their identity is based on the social system to which they belong, and avoiding loss of face is important (Hofstede & Mooij, 2010). Collectivistic societies appreciate harmony and loyalty. With regards to communication in the societies, Hofstede's individualism – collectivism dimension is in line with Hall's (1976, 1981) low versus high context cultures. Specifically, individualistic cultures also are low-context communication cultures with explicit verbal communication, while collectivistic cultures are high-context communication cultures, with an indirect style of communication. In advertising context, these differences in cultural values may translate to different perception and preference in advertisement themes or appeals; such as collectivistic versus individualistic themes as it will be described later in this study.

Interpreting cultural distance between Singapore and US/Europe in Hofstede's model

According to Hofstede's model, Singapore with a score of 20 is a collectivistic society. US on the contrary is an individualistic society, with a score of 91. Other European countries such as UK and Norway, even though score lower than US in this dimension, are still much closer to individualistic end of the continuum as compared to Singapore. Even though the country has long been exposed to the influence of the West as a result of being a British colony as well as an international crossroads, in Singapore, there remains to be the tendency to treasure traditional Asian values. One of those values is reflected through the role of family ties which remains paramount to Singaporean Chinese. This may contribute to explaining why the collectivistic behavior is emphasized in Singapore society rather than the individualistic behavior.

In this study, collectivism – individualistic continuum was based on the existing score from Hofstede’s framework and other preceding research. For example, Aaker and Mahaswaran (1997) determined that individualist cultures are found predominantly in the West, while collectivist cultures are located predominantly in the East. In this sense, Singaporean Chinese and Chinese from China, being Asians, are categorized as collectivistic cultures, while the Westerners are grouped in individualistic cultures. It might be more ideal to measure this construct in the studied sample. However, considering that there are many variables under examination in this study, including collectivistic/ individualistic values to measure would possibly result in overloading subjects, leading to biases in the results.

2.2.2 HUMOR AND CULTURE: DIFFERENCES BETWEEN SINGAPOREAN CHINESE AND WESTERNERS

Percy Ross (1916-2001), an American columnist and philanthropist used to say: “A clever, imaginative, humorous request can open closed doors and closed minds”. With this power, humor is a pervasive part of life (Lee & Lim, 2008). “No society is without humor” (Alford & Alford, 1981). In fact, it goes without saying that humor is a universal human phenomenon (Apte, 1985), perhaps the most common thing that every society can share. However, humor perception is not necessarily uniform across cultures, as cultural preferences may affect the cognitive or physiological processes of humor mechanism. Specifically, they may affect both the specific content of the humor and the perception of incongruities and their resolutions, as well as the interpretation of surprise element (Nevo et al., 2001). With more and more studies of cultural differences, we have come to realize that the way people from different cultures perceive humor is actually diverse. That is the reason why many jokes do not translate well across cultures, for example a joke that is amusing and risible in the US may not be perceived as funny in China. Of course the sense of humor is variable for each individual, but it cannot be ignored that humor from a specific culture has its own characteristics. For example, we often hear people in our daily lives refer to “American sense of humor” or “British sense of humor”. There must be something in common for the humor in one country, which is in some way distinctive from other countries. In other words, different nationalities have different types of sense of humor (Eysenck, 1944). A few studies have compared humor between different cultures by examining the content of jokes preferred in those cultures. For example, Castell and Goldstein (1976) studied jokes by students from Hong Kong, Belgium, and the

US. They found that US students are different from other national groups in their preference for jokes with sexual and aggressive content.

Nevo et al (2001) inspected Singaporean students of Chinese origin and compared these responses with results obtained using the same questionnaires and methods in previous studies in Israel and the US. The content analysis of jokes demonstrated an important finding that reflected conservative values held by Singaporean students. Compared to American students, they reported a significantly greater number of jokes with aggressive content and relatively fewer jokes with sexual content. In which, aggressive jokes are defined as those including elements of hostility, aggression, ridicule; while sexual jokes are those that evoke sexual connotations ranging from vulgar words to sexual allusions. Considering the results of this study in conjunction with the one from Castell and Goldstein (1976), it appears that the latter element of joke (sexual) is more distinctive between Singaporean Chinese and Americans, and besides it can be more strongly correlated with the cultural values of Singaporean Chinese. Most of Singaporeans are of Chinese descent; and while being considered as westernized, they still tend to cherish traditional values. Moreover, most people in Singapore are conservative because they are educated in Confucian, Muslim or Hindu traditions (Nevo et al., 2001). This may explain for the notable differences in the percentage of sexual jokes preferred by Singaporean Chinese and American samples in Nevo et al's (2001) study. These variances may reflect the different cultural norms with regards to the public expression of sexual behavior in the two countries. This has shown that humor preference follows normative social rules; in this case, Singaporeans did not tell more sexual jokes due to the social pressure of their conservative society (Nevo et al., 2001).

Nevo et al's (2001) study, specifically with regards to Singaporeans, provides significant insights. Sexual content in humorous advertising seems to provoke clearly different reaction and response from the audience in different cultures. This difference in preference for joke content will set a base to examine consumers' variations in perceiving humorousness in advertising, as explained in the next section.

2.3 AD-CULTURE CONGRUENCY

2.3.1 CULTURAL CONGRUENCY ALONG WITH HOFSTEDE'S FRAMEWORK

Advertising adaption to cultural values has long been a well-liked topic in pertinent research. Probably the largest study in this field is attributed to Albers-Miller and Gelb (1996). Having analyzed 1,807 advertisements in business publications from 11 countries, they attempted to relate advertising appeals to all four dimensions in Hofstede's framework, including individualism/collectivism, uncertainty avoidance, power distance, and masculinity/femininity. The analysis supported the culture-reflecting quality of advertising for 10 out of 30 hypothesized relationships. Also in this study, it was found that Hofstede's cultural model offers a tool for anticipating differences in advertising content with respect to cultural values (Moon & Chan, 2005). The core question in this study was whether the appeals that are most commonly used actually related to the values that are most salient in a particular culture. After Albers-Miller and Gelb (1996), many other researchers undertook investigation of ad-culture congruency topic. Hornikx and O'Keefe (2009) conducted a meta-analytic review of the research in this area; and their results confirmed that adapted ads are significantly more persuasive and better liked than unadapted ads, especially when the appeals are based on individualistic and collectivistic values.

The common method used in cross-cultural advertising research is to pair countries and examine the differences in several values portrayed in advertisements to find the most effective approach (Zinkhan, 1994). In doing this, Hofstede's four cultural dimensions is the most widely quoted model (Low & Shi, 2002), especially the individualism-collectivism dimension. The most often seen pair of countries studied is between an Asian country and the US, most likely because they represent the cultures which are at the opposite ends of the individualism – collectivism continuum. For example, Han and Shavitt (1994) inspected advertising appeals in Korea and the US and found that Korean ads were more frequently related to harmony and interdependence, while American ads tend to feature independence and individuality. Several other studies have attempted to compare the liking and persuasiveness of ads that are appealing to individualistic and collectivistic values for Chinese and American consumers (e.g., Aaker & Schmitt, 2001; J. Zhang, 2004).

Having said that, it does not mean other dimensions of cultural values have not been reviewed. Chang (2006) investigated cultural differences related to masculinity-femininity

aspect, with an aim to better understand the cultural effects on advertising appeals which have not been readily explained by individualism-collectivism facet alone. Her study found the variance in preferences for image and utilitarian advertising appeals between American and Taiwanese; and argued that this is dependent upon differences in cultural masculinity/femininity. Also, Moon & Chan (2005) studied the two dimensions uncertainty avoidance and masculinity/femininity in Hong Kong and Korea. Their results showed that femininity is an important variable for explaining differences in advertising between Hong Kong and Korea; and the appeals related to the masculinity/femininity dimension showed more differences. For example, television advertising in Hong Kong, a masculine society, uses more masculine appeals, while television advertising in Korea, a feminine society, uses more feminine appeals. Besides that, both countries' advertising shows no difference in the values of high uncertainty avoidance, although an appeal of high uncertainty avoidance is used more often in Korean advertising.

However, it should be noted that there exist conflicting findings in the literature on the relationship between culture and advertising persuasion/effectiveness (Aaker, 2000). For example, Tse, Belk, and Zhou (1989) found that persuasion appeals used in Hong Kong often evoke positive associations with idealized Western lifestyles. Mueller (1987) demonstrated that, counter to hypotheses, persuasion appeals depicting group orientation are more predominant in the US than in Japan. Further, Tan and Farley (1987) found that Singaporean participants prefer advertisements with Western rather than Asian models. A number of studies have suggested the shift in ad appeals in Eastern cultures (e.g., Lin, 2001; Zhang & Shavitt, 2003). For example, Zhang and Shavitt (2003) ascertained that themes that have appeared quite frequently in Chinese ads include those appealing to youth and modernity, which are characteristically individualistic. These observations may bring to attention other factors besides cultural congruency that may influence consumers' response to advertising appeals.

In fact, the relationship between cultural values and advertising effectiveness is not simple. There are several factors that may moderate or lessen the effect of cultural differences on consumers' response to advertisements. The relationship between culture and ad liking in particular is also moderated by several factors. The most often consideration is product type, or product category. Previous research demonstrates that different product types have the potential to moderate the liking and subsequently effectiveness of advertising appeals (Zhang

& Neelankavil, 1997). The reason for this, according to Lepkowska-White, Brashear, and Weinberger (2003), is that an information search carried out by potential customers is closely related to the types of needs the product satisfies. Products offer different benefits to people and therefore are different in their meanings to people. The same advertising appeal hence cannot fit all product types, making it necessary to match advertising appeals with the type of the product (Zhang & Neelankavil, 1997). For example, Johar and Sirgy (1991) pointed out that the effectiveness of value-expressive as opposed to utilitarian appeals is a function of such product-related factors as product differentiation, life cycle, scarcity, conspicuousness, as well as consumer-related factors, such as involvement, prior knowledge, and self-monitoring. As a consequence, appeals which are used to demonstrate the benefits and values of different products could be differentially effective in inducing desired responses from the consumers. Biel and Bridgwater's (1990) found that likeable food and beverage commercials have high scores on the scale of relevance and meaningfulness. Moreover, for food and beverage products, a lively and energetic execution is suitable, while with non-food and beverage category, it is crucial not to irritate viewers with worn out approaches. Similarly, Smit, Meurs, and Neijens (2006) studied that the entertainment attribute is more often used as an advertising strategy for expressive products with lower financial or social risk. In contrast, the relevance attribute was found to be more appropriate for "bigger tools" such as large appliances, insurance, and auto tires. In the same theme, Fam (2008) noticed advertising likeability to be differed among seven different product categories, including services, durables, household supplies, clothing, personal care, drinks, food, and addictive products.

In cross-cultural advertising likeability research along the cultural dimension of collectivism/individualism, the product type often concerns non-personal versus personal products. Pertinent research has discovered different outcomes in consumers' preference for ad appeals when the product is a non-personal type compared to when it is a personal type. Non-personal products are those which offer benefits and can be used in both individual and group social context, for example, a car or a camera. Personal products, on the other hand, are only consumed personally, and only offer personal benefits. Examples of personal products can be a toothbrush or a razor. Since these products provide different benefits and meaning to consumers, the same advertising message appeals may not apply. Zhang and Neelankavil (1997) found that non-personal products can be advertised with an individualistic appeal, (e.g. those emphasizing individual creativity with the use of camera), as well as with a collectivistic appeal, (e.g. those showing people in a social setting enjoying the occasion and

the camera), depending on the cultures in which the product is advertised. The authors argued that a collectivistic appeal would probably fare better in a collectivistic culture, whereas an individualistic appeal would typically perform well in an individualistic culture, but this is not the case for personal products such as razor or toothbrush. The latitude of choice in advertising themes can be limited in the case of these products. Regardless of the cultural contexts in which such products may be advertised, it would be less appropriate to use collectivistic appeals with such products since the consumption of such products typically happens in a private setting and there is little social consequences associated with the consumption of such products.

Together these studies suggest that it is more important to match cultural orientation with ad appeal for products that are socially visible (Zhang & Gelb, 1996), shared by family and friends (Han & Shavitt, 1994), or for shared products that involve higher decision risk (Gregory & Munch, 1997).

2.3.2 HUMOR AND SEXUAL HUMOR IN INTERNATIONAL ADVERTISING

As a universal phenomenon, humor is one of the most pervasively used emotional appeals in advertising, including international advertising. Researchers estimated that some 10 to 30% of the annual advertising expenditure in the United States is used for ads which employ humorous elements (Krishnan & Chakravarti, 2003). This suggests that advertisers consider humor as an effective advertising instrument. However, while humor has been shown to enhance consumers' responses to the ad in several studies (e.g., Scott, Klein, & Bryant, 1990; Weinberger & Campbell, 1991), empirical findings regarding humor effects are largely inconclusive and have generated mixed findings (e.g., Gelb & Zinkhan, 1986; Nelson, 1987). Weinberger and Gulas (1992) concluded after an extensive review that humor "is not, and never has been a magic wand that (indiscriminately) assures more successful advertising". More recently, researchers have begun to develop theories explaining the mechanisms in which humor is processed and identifying when humor actually occurs (e.g., Elpers, Mukherjee, & Hoyer, 2004). In this topic, the underpinning of cultural values in humorous advertising has been considered. In particular, for example, Alden, Mukherjee, and Hoyer (2000) developed a two-stage humor-processing model in which surprise generated in the first stage is transformed into humor in the latter stage. The role of cultural environment in this case is to shape consumers' expectations of acceptable beliefs, attitudes, and behaviors (Furrer, Liu, & Sudharshan, 2000; McCracken, 1986; Zhang & Gelb, 1996) that explain the extent of surprise and subsequently humor. Besides, contemporary humor research has learned that humor is an in-group phenomenon, which means that humor appreciated by members belonging to one group or one culture might not be valued by those outside that group or culture (Francis, 1994). Hence, in order to understand humor processing, it requires cultural constructs grounding (Lee & Lim, 2008). Despite its popularity, there have not been many research studies that analyzed the global use of humorous advertising and examined how it varies across cultures (Laroche et al., 2011). The question of how cultural beliefs and values influence consumer responses towards humor in advertising needs to be answered to a greater extent, so as to narrow the gap between humor intent by advertisers and the humorousness perceived by the consumers (Lee & Lim 2008). To this end, my study attempts to contribute to pertinent research by identifying conditions for ad humor effectiveness within the boundaries of specific cultures.

Many researchers studied humor with regards to the types of humor used in advertising. Recently, Hatzithomas et al (2011) discussed the use of various humor types in print advertising across culturally diverse countries, specifically UK and Greece, with the consideration of two dimensions in Hofstede's cultural framework, namely uncertainty avoidance and individualism – collectivism continuum. What they found is that cultural differences between UK and Greece are reflected in the type of humor that is often used in the two countries. In details, as Greek consumers tend to have uncertainty avoiding tendencies, Greek print ads incline to stress on cognitive humorous appeals in order to provide credible information to the audience. In contrast, British ads provide a great deal of pure entertainment through humor types such as sentimental humor and full comedy. In general, there are two main methodological instruments that have been employed in descriptive studies regarding the use of humor in advertising. The first one is Kelly and Solomon's (1975) typology, suggesting six types of humors including pun, understatement, joke, ludicrous, satire and irony. The second is Speck's (1987, 1991) humorous message taxonomy that links cognitive, affective and interpersonal mechanisms driving consumers' perception of ad humor with advertisers' communication intentions. Speck (1987, 1991) proposed that there exist three underlying processes leading to humorous appreciation, namely incongruity – resolution, arousal – safety and humorous disparagement. These humor processes result in five types of humor, which are comic wit, sentimental humor, satire, sentimental comedy, and full comedy. It appears that Speck's (1987, 1991) classifications have been adopted more often. For example, Lee and Lim (2008) studied two of these humor processes, namely incongruity resolution and arousal safety. Experimenting TV commercials in China, their results indicated that the high level of uncertainty avoidance and collectivism in the country have substantial influence on the effectiveness of TV advertisements with humor content. Uncertainty avoidance showed a clearer effect, in the sense that Chinese consumers respond more favorably to ad humor when this humor is accompanied with a solution (hence is able to avoid the uncertainty). Putting it in another way, collectivistic cultures with higher uncertainty avoidance react consistently more favorably to humorous advertisements when the arousal safety process uses a safe judgment than when it does not. When there is no safe judgment, they have difficulty in understanding the joke and they are more critical about these ads compared to individualist consumers from low uncertainty avoidance cultures (Hatzithomas et al, 2011). Another interesting note from this study is that Hofstede's work can be used as the basis for investigating effectiveness of humor employed

in ads. In the same fashion, Alden, Hoyer and Lee (1993) observed the difference in humor context across various cultures. They found that humorous ads from collectivistic countries tend to employ more humor in group contexts compared to those from individualistic countries. Other researchers have categorized humor in advertising in different ways. For example, McCullough & Taylor (1993) investigated the use of five types of humor in three countries US, UK and Germany. The five types of humor under investigation include aggressive, sexual, nonsense, warm and puns. Their study found no variations in humor type frequency among the three nationalities. However, they provided insights about the most often employed types, including puns, nonsense humor, and warm humor, with no national differences.

With regards to humor with sexual content, empirical research on this type of humor in advertising is sparse. Sexual humor is classified as a result of the arousal-safety mechanism (Beard & Tarpenning, 2005). Unfortunately, sexually humorous advertising is said to be common among advertisements that are easily perceived to be offensive. The use of humor on advertising has long been considered risky, considering the potential of this humor to cause offense to consumers (Beard, 2008), and this risk is potentially even greater when it is combined with sexuality. Beard (2008) referred to sexual ads such as Unilever's "Slag of All Snacks" or Snickers candy bar's "Car mechanics' kiss" Super Bowl 2007 television spot when he stated that advertising around the world is often characterized by either inadvertent or calculated humor-related offense. The use of sexual pictures or innuendo, among others, is also considered by other researcher as one of the controversial and inherently offensive themes (Waller, 1999; Waller et al., 2005; Wilson & West, 1981). Waller (1999) found that females are more likely to be offended by nudity and sexist and that, the audience was more likely to be offended by the themes of the ads than the products, services, or ideas being advertised. Similarly, Shimp and Stuart (2004) conducted a qualitative study of 25 college students in an attempt to examine when and how audiences respond to advertising with disgust. They discovered that the second most frequently mentioned category of disgusting advertising was "indecent, sexually oriented, sexist, and sexually objectifying portrayals".

2.4 AD-SELF CONGRUENCY

As much as culture has significant impact on consumers' response to advertising appeals, ad-culture congruence alone cannot predict ad effectiveness in all contexts (Chang, 2006). This argument has been supported by a number of researchers. For example, Gudykunst et al. (1996) ascertained that cultural values along the dimension of individualism/collectivism did not systematically predict consumer behavior. It is true that culture does strongly impact the formation of self-concepts (Markus & Kitayama, 1991), and the set of values and beliefs that one holds. Yet, it is not necessarily true that all individuals are equally subject to cultural influences (Kim et al, 1994). Variations at the individual level play a part here. Some people are less likely to accept the predominant values of their culture compared to others, thus individual differences can sometimes lead to what Chang (2006) called a "circumvention of cultural influence". Emery and Tian (2010) when studying the impacts of cultural differences on advertising appeals between China and the US also suggested that it is unwise to use Hofstede's cultural dimensions as a sole predictor for the effectiveness of advertising appeals. Furthermore, as briefly mentioned earlier, the effectiveness of advertising appeals may be moderated by other factors. Contemporary research has started to pay more attention to the concept of ad-self congruency, an important aspect that needs to be taken into account in matching the ad with the audiences. Ad-self congruency has been proven to have positive effect on advertising effectiveness in several empirical studies. For example, Brock, Brannon, and Bridgwater (1990) found that the effectiveness of the message in the ad can be increased by matching ad appeals to audiences' self-schema, in other words, by enhancing ad-self congruency. Similarly, advertising messages that are compatible with consumer self-concepts have been found more effective than incongruent messages (Chang, 2006). This effectiveness of self-congruent ad messages is reflected in better attitudes to the ad as well as attitudes towards the brand and greater intention to purchase (Hong & Zinkhan, 1995). In another study by Mehta (1999), he found that purchase intention increased with the greater convergence of the recipients' self-concept and brand image that was delineated in the ads. Chang's (2006) study on Taiwan and the US found that higher ad-self congruency was associated with greater ad liking, greater perceived ad believability, and better brand evaluations. Besides, purchase intentions were also positively predicted by ad-self congruency.

2.4.1 INDIVIDUAL DIFFERENCES WITHIN INDIVIDUALISTIC/COLLECTIVISTIC CULTURES

The argument here is that while cultures definitely play a big role in modeling values and emotions for people, they do not absolutely determine them, because people may accept or reject cultural influence based on their own personal characteristics (Kim et al., 1994). The extent that individuals comply with the norms of cultures they belong to may well be adjusted by differences at individual level. Thus, when discussing about individualistic or collectivistic societies, we cannot rule out the fact that there exist individual variations in each society. For instance, within an individualist culture these differences could be those between idiocentrics who are concerned with personal achievements and allocentrics who care more about receiving social support (Triandis et al., 1985). Polyorat and Alden (2005) referred to this concept as self-construal, which has been used extensively as an alternative indicator of individualism-collectivism cultural dimension (Gardner, Gabriel, & Lee, 1999; Hong et al., 2000; Lee & Kacen, 1999; Zhang, Mittal, & Feick, 2002). Self-construal refers to an individual's thoughts, feelings, and actions concerning relationships to others (Singelis, 1994). In individualist cultures, consumers tend to have an independent self-construal which emphasizes the separateness and uniqueness of the individual; while in collectivist cultures, people have an interdependent self-construal which underscores social connectedness and group relations (Polyorat & Alden, 2005). Yet, the concept of self-construal discussed by Polyorat and Alden (2005) indicates that individual differences are still culture-bound. It may be reasonable to argue that individual variances may even go beyond that. That is, it is possible for an individual in collectivist culture to possess an independent self-construal. The level of socialization of each individual may determine the extent one's culture can shape his mindsets and behaviors. In other words, the concept of cosmopolitanism should be taken into consideration. With the increasing globalization process nowadays, the degree of cosmopolitanism might moderate the impact of cultures on individuals. For example, in Asian countries, Western television shows and films are readily available, and contribute to increasing the influence individualism has on the values and behaviors of Asian people. As a result of this and other influences, some predict that the self-concepts of individuals in Asia may eventually approach those of individuals in the West (Schmidt, 2006).

Besides these individual dissimilarities within this specific culture, there are also other aspects of individual characteristics that may affect consumers' response to advertising appeals. The relationship between audience characteristics or individual differences such as

affect intensity and need for cognition, and responses to advertising has been studied frequently. An example is the study conducted by Geuens & Pelsmacker (2002) that examined the moderating effect of Need for cognition on the relationship of humor and the persuasion of the ads. In this study, Need for cognition will also be investigated, as it will be reviewed below.

2.4.2 NEED FOR COGNITION (NFC)

Research pertaining to consumers' reaction to advertising has been paying attention to the concept of need for cognition (NFC) at the individual level. For instance, Reinhard and Messner (2009) examined the impact of need for cognition (NFC) as a moderator of the relationship between source likeability and advertising effectiveness of explicit persuasive appeals. Geuens and Pelsmacker (2002), as mentioned earlier, conducted an empirical study on the topic of the role of humor in the persuasion of individuals varying in level of need for cognition (NFC). A classic definition of Need for cognition is by Cacioppo and Petty (1996), according to whom need for cognition (NFC) is "a tendency to engage in and enjoy thinking". Specifically, individuals who are high in need for cognition (NFC) are motivated to scrutinize and elaborate on the message carefully and process it in depth, while those who are low in need for cognition (NFC) are usually not willing to devote a lot of cognitive resources to process a message but rather they are more likely to rely on heuristic processing. Based on the well-known Elaboration Likelihood Model also by Petty and Cacioppo (1986), people with high need for cognition (NFC) tend to follow the central route processing, focusing on elements such as the strength of arguments, whereas their low need for cognition (NFC) counterparts normally follow peripheral route to persuasion, relying on salient cues such as endorsers or the number of arguments. Other models including the extended Elaboration Likelihood Model (ELM) by Tellis (2003) and the Five-route model (Supphellen, 2012) discuss that consumers process information provided in an ad in different approaches. People can arrive at an attitudinal judgment either by using all issue-relevant information (i.e., systematic processing), or alternatively by relying on easy judgmental rules such as "I agree with people I like" and other heuristics (Reinhard & Messner, 2009).

2.4.3 NEED FOR COGNITION (NFC) AND THE EFFECTIVENESS OF CULTURALLY CONGRUENT ADVERTISEMENTS

Although sparse, preceding research has studied the role of need for cognition (NFC) in the effectiveness of culturally congruent advertisements. For example, Aaker (2000) found that culturally congruent ad themes led to more favorable attitudes only under conditions of low involvement, or put differently, when need for cognition (NFC) is low. Specifically, based on accessibility-diagnostics framework, she argued that the conditions under which cultural congruity effects relative to cultural incongruity effects occur may depend on elaboration likelihood in the evaluation context. Increased accessibility of culturally congruent versus culturally incongruent material was the underlying causal mechanism. In a similar vein, Han and Shavitt (1994) used low-involvement products such as detergent in their study, and found that culturally congruent advertising themes were more persuasive. Besides, as discussed earlier, need for cognition (NFC) factor has been studied in its role of a moderator in assessing the effectiveness of culture-ad congruency. This reflects the interaction between ad-culture and ad-self congruence.

2.4.4 NEED FOR COGNITION (NFC) AND EFFECTIVENESS OF HUMOROUS ADVERTISING

There have been only a few studies that investigated the relationship between individual's need for cognition (NFC) and the effectiveness of humorous adverts. Results from these studies showed a similar pattern, in which individuals with high need for cognition (NFC) developed significantly more negative cognitions as compared to low need for cognition (NFC) counterparts, indicating that high need for cognition (NFC) individuals may be more skeptical (Geuens & Pelsmacker, 2002). Similarly, Zhang (1996) found that humorous advertising is more persuasive for low need for cognition (NFC) consumers than high need for cognition (NFC) consumers because humor is used as a peripheral cue by the former group to a greater degree. Audience members who are low in need for cognition are unlikely to spend much effort to evaluate claims about a product's attributes; consequently they are less likely to be influenced by such claims (Zhang, 1996).

2.4.5 NEED FOR HUMOR (NFH)

Another dimension of individual differences that may have impact on culture-ad congruency's effectiveness is need for humor (NFH), a construct that is closely related to the idea of "sense of humor". This personal trait has been ignored in contemporary research until recently (Cline et al., 2003). Being a subset of need for levity (NFL), need for humor (NFH) has been posited to moderate the responses to humorous advertising. Need for humor (NFH) comprises of two parts, internal and external. Internal humor is defined as the need to experience humor internally, or the need to generate humor, while external humor is the need to experience humor from external sources, i.e. the level of humor connoisseurship (Cline et al., 1999). Cline et al. (2003) investigated need for humor (NFH) through three separate studies and found the evidence that an individual's need for humor (NFH) may play a significant role in moderating attitudes to ads with humorous content. Specifically, high need for humor (NFH) individuals tend to form more favorable attitudes based on humorous ads, and show less favorable attitudes to ads with lower humor content (Cline et al., 1999). Need for humor presents a highly relevant and influential factor especially for humorous advertising research, and is worthy of further inspection.

2.4.6 COSMOPOLITANISM (COS)

Cosmopolitanism (COS) is the result of the emerging global culture, or in other words, the increasing exchanges between countries, cultures, and individuals worldwide. Some theorists believe that this cultural exchange has blurred the traditional distinction between home and away, and that more and more individuals now combine their national or localized identity with the global values (e.g. Tadmor & Tetlock, 2006; Arnett, 2002). Craig (2006) ascertained that these transnational values and identities, reflected on the level of cosmopolitanism, is a result of the rise of transnational networks of global cities, similar to the way nation-states emerged in earlier centuries that engendered national cultures and identities. The integration of global cultures has led to the emergence of groups of people who are more globally than locally oriented (Craig, 2006). These people have been labeled cosmopolitans. They possess a conscious openness to the world, are well aware of cultural differences and able to engage in divergent cultural encounters and experiences. They hold a specific set of attitudes and beliefs which are more international and less provincial (Yegenogeu, 2005). Cosmopolitans tend to be frequent travelers, being routinely involved with other people in various places, and provide doorways into other territorial cultures (Hannerz, 1992). People with the label of

cosmopolitans are sometimes referred to as transnationals, “those intellectuals who are at home in the cultures of other peoples as well as their own” (Konrad, 1984). Worth noting is that with the development of global media, especially with the widespread use of the internet, individuals are able to develop cosmopolitan values without leaving their native countries (Craig and Douglas, 2006). Putting this in another way, in today modern epoch, cultures are not necessarily territorially bounded (Appadurai, 1990; Craig & Douglas, 2006; Hannerz, 1990). Most of the transnational cultures have their roots in the West; they are in principle extensions or transformations of American and European cultures, although they may be absorbed to different degrees (Hannerz, 1992). For this reason, when discussing about cosmopolitanism, it is more relevant to refer to its level among people in the Eastern world.

Another interesting argument in the discussion of cosmopolitanism concept in literature is that perhaps cosmopolitanism (COS) is conceptualized best as situational and a matter of degree rather than as an absolute personal trait (Cleveland et al., 2009). That is to say, it may not make sense to refer to an individual as a cosmopolitan, while referring to another individual as a non-cosmopolitan. As well, this implies that the impact of an individual’s level of cosmopolitanism depends much on the situation and not always consistent. For example, Skrbis, Kendall, and Woodward (2004) posited that the links between cosmopolitan traits and various consumption behaviors are circumstantial. However, as Cleveland et al. (2009) pointed out, the application of cosmopolitanism (COS) in the literature has been chiefly theoretical.

In the context of international advertising, the concept of cosmopolitanism matters to a great extent. Cosmopolitans, with an open mind as well as great ability and willingness to engage in divergent cultural experiences, are likely to be more responsive to global consumer culture positioning strategies (Alden, Steenkamp, & Batra, 2006). They also incline to adopt products from other cultures and different countries of origin.

2.5 DEVELOPMENT OF RESEARCH HYPOTHESES

2.5.1 LIKEABILITY OF CULTURALLY CONGRUENT ADVERTISING IN SINGAPORE

Based on ad-culture congruity theory, preferences for advertising appeals are predicted to be affected by the cultural characteristics of the society. With Singaporean Chinese being collectivist and Westerners leaning towards individualist polar in the continuum, it is hypothesized that:

H1. Singaporean Chinese like collectivism ad appeals, while Western counterparts favor individualistic ones.

The moderating factors should be taken into account. Collective empirical evidence as presented in literature review section supports the presumption regarding the moderating role of product type, I hence posit that:

H2. Product type moderates the likeability of culturally-congruent advertising appeals. Specifically:

H2.1 For a non-personal product, appeals that are responsive to cultural values will be liked more than those that do not.

H2.2 There will be little or no difference for a personal product

The other possible moderating factor is level of cosmopolitanism. Being a collectivist society, Singaporean Chinese however are exposed to the modernity from the West to great extent. This is expected to have an impact on their presuming liking of collectivist theme. Level of cosmopolitanism, however, should be measured further at individual level. It is hypothesized that:

H3. The level of cosmopolitanism moderates the liking of culturally-congruent advertising appeals.

2.5.2 AD LIKING OF HUMOROUS ADVERTISEMENT

As explained earlier, despite Singapore's great extent of modernization, Singaporeans may respond to humorous ads with sexual content in a different way compared to the Westerners, due to the remaining conservative cultures in the country. Hence, it is proposed that:

H4. Singaporean Chinese are less favorable towards sexually humorous ads compared to Westerners, but more favorable compared to Chinese from China.

In assessing liking of sexually humorous advertisements, the degree of individual being cosmopolitan should be taken into account. The higher one is cosmopolitan, the more favorable one's reaction to humorous advertisements with sexuality is expected to be. It is hypothesized:

H5. The level of cosmopolitanism moderates the liking of humorous ads with sexual contents across different cultures.

This influence, however, has to be considered together with individual's characteristic such as need for humor (NFH). It is thus suggested:

H6. The difference in perception of humor in advertising between Singaporean Chinese and Westerners is influenced by individual's need for humor (NFH)

2.5.3 LINK BETWEEN ADVERTISING LIKEABILITY AND ADVERTISING EFFECTIVENESS

As mentioned earlier, Lavidge and Steiner (1961) discuss three facets or dimensions of advertising, including affective, cognitive and conative; in which ad liking is referred to as one of the elements in affective component. Advertising effectiveness, on the other hand, is a broader measure which may include all three components. Consequently, it is logical to consider cognitive elements when connecting from advertising liking to ad effectiveness.

As reviewed through the literature, individual's level of need for cognition (NFC) may have impact on the effectiveness of cultural congruent ads. Particularly, low need for cognition (NFC) participants tend to view congruity between their cultural background and the message's cultural orientation as a peripheral cue and shape their evaluations based on this

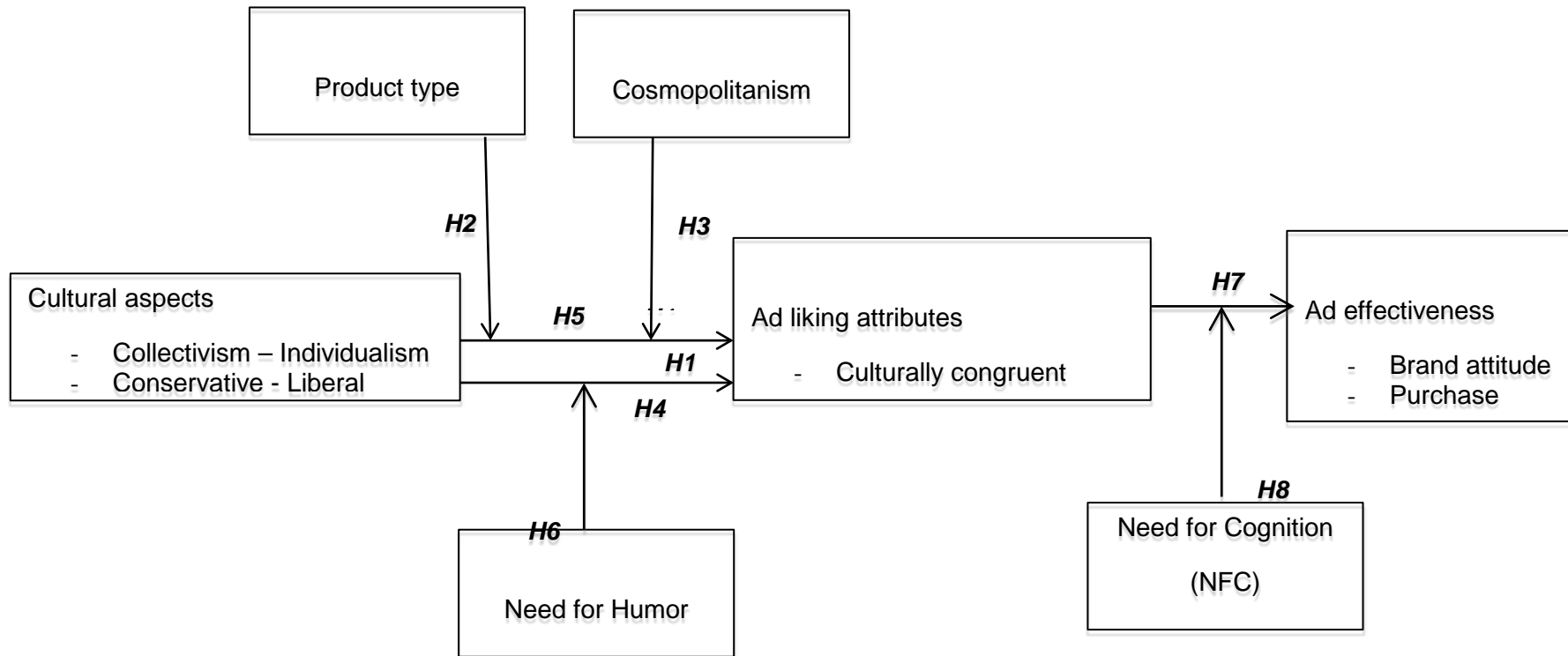
match. It seems reasonable to expect cultural appeals to “matter” primarily for low need for cognition (NFC) consumers. Moreover, need for cognition (NFC) also has an effect on the effectiveness of humorous advertisements, in this case, sexually humorous ads. The audience may find the ad likeable because they perceive it as funny, but it is another story whether or not they will develop positive attitude to the brand and purchase intention. In particular, humorous advertising is more persuasive for low need for cognition (NFC) consumers than high need for cognition (NFC) consumers because humor is used as a peripheral cue by the former group to a greater degree. Hence, it is speculated that:

H6. Advertising likeability is likely to lead to advertising effectiveness

However,

H7. The link from advertising likeability and advertising effectiveness is influenced by individual's need for cognition (NFC). Specifically, ad liking will have less positive effect on ad effectiveness for individuals with higher need for cognition (NFC).

Proposed Perceptual Model



3. RESEARCH METHODS

3.1 ADVERTISING STIMULI

Two separate sets of stimuli were used to test the two constructs: culturally-congruent ad appeals and sexually humorous ad appeals. These are commercials that were downloaded from Youtube, with most of them having been shown on TV in Europe, but not in Singapore. The ads that were not widely shown in Singapore are more favorable as they would help to avoid any bias in case subjects already watched the adverts many times. The measurement of ad liking in that case will likely be distorted since subjects may experience what is called mere-exposure effect, a psychological phenomenon in which people develop liking for an ad because they are exposed to that ad frequently and the ad becomes familiar with them. Firstly, for culturally-congruent ad appeals, four stimuli were presented to respondents. These four stimuli display two testing variables, including (1) ad appeals, in particular, collectivistic versus individualistic themes, and (2) product type, specifically personal versus non-personal product. Car is chosen as a non-personal product, as it can be used either in private or social setting. An ad with this non-personal product in collectivistic theme is the one from Nissan, in which it shows a family in a car on the way to their beach vacation. The audience gets the feeling of fun, joy and happiness in a family-shared experience. The other ad with the same product but in individualistic theme is from Volkswagen, portraying a man skydiving down to earth and then taking his Volkswagen GTI on the road. The feel they audience can get from this ad is self-expression, freedom and confidence of the individual. On the other hand, a personal product chosen is toothpaste. An initial idea of the personal product used in the experiment is a toothbrush, a classic object frequently used in previous research measuring the same concept (Zhang & Neelankavil, 1997; Hornikx & O'Keefe, 2009). However, due to the constraint of the available commercials, toothpaste ads were selected instead. Toothpaste can be considered as personal product as it is normally used in private setting, i.e. people often brush their teeth on their own. An individualistic-themed ad from Colgate shows a girl enjoying brushing her teeth and transforming through different styles of clothes. The toothpaste ad with a rather collectivistic theme is from Signal which shows the scene of father and son having fun brushing teeth and making jokes together.

The second set of stimuli includes those that contain sexually humorous content. These ads were chosen carefully after the manipulation check, as it will be explain later in the report.

Also, to make sure that the ads do not reach the point where they become offensive for the audience and in turn make them dislike the ad, the ads chosen contain considerably moderate level of sexiness. The ideal initial idea is to use adverts with brands from Norway, so that people in Singapore are not familiar with them and that will help to avoid the effect of brand familiarity in measuring advertising effectiveness. However, due to the constraints in available TV ads that meet all the criteria of being humorous, with sexual content, and from Norway, ads with popular brands were employed. In the attempt to control the confounding effect of brand familiarity, I measured respondents' attitude to the brand before and after showing the ad. Three ads in this theme, being chosen from a total of six ads after the pretest, were presented to the respondents. The first ad shown is Axe – “The cleaner you are, the dirtier you get”. The ad scene happens on a beach where the male model was washing with Axe, and all the girls on the beach started to follow his moves. When he realized that the girls were holding their bikini top, he lifted his hands off his chest so that the girls would do the same thing and show their chests. But all the girls shook their heads and smiled. The second ad is Ikea. The ad shows the children got home only to find their parents playing dirty game with each other. The mother was wearing lingerie and the father was naked. The children were shocked, and then the message appeared “time to move away from home?”. In this ad, the message itself plays an important part in making the ad to be perceived funny. The third advert is one of Peugeot car. Two ladybirds were making love in the car, and the car kept shaking hard. Everyone on the street was looking with amusement/surprise and this was accompanied with cheerful music, giving the ad a fun twist. Another note to make here is that these humorous adverts were chosen as they have the potential to be perceived differently by people with varying levels of need for cognition (NFC). Specifically, as the ads emphasize a lot more on hedonic values rather than functional ones, consumers with high need for cognition (NFC) might question the claims of the ads when it comes to brand attitude and purchase intention.

3.2 SAMPLE

A sample of two hundred and one undergraduate and graduate students were recruited from the National University of Singapore (NUS) and Norwegian School of Economics (NHH) with a mix of nationalities including Singaporean Chinese, Chinese from China, and Westerners (mainly Europeans and Americans). The use of students as subjects can be beneficial for the study in several ways. First of all, it is more convenient to get the students to come to the research laboratory in the university. Besides, carrying out the experiment in lab setting allows for uniform experimental environment for all subjects. This is particularly important in this study as experiments were conducted in two separate places, Singapore and Norway. Besides, studying college students would help to capture the perceptions of new consumers as they begin to integrate their view of appeals with their value system. They represent the upcoming generation of consumers. Although this group did not have years of purchasing experience, their perceptions might be predictive of future trends.

The sample consists of 66 Singaporean Chinese (32.8%), 69 Chinese from China (34.3%), and 66 Westerners (32.8%). As for Westerners, most of them are Europeans who are students in the Norwegian School of Economics (NHH). This is due to the difficulties that I had in recruiting sufficient Westerner students in Singapore. In order to stimulate the same experiment environment, I arranged laptops in a quiet room and recruited European students to participate in the study. The average age of subjects is 22 years; 43.8% are male and 56.2% are female. Most of the participants are undergraduate students (63.7%), followed by master students (71%), and the rest are post-doc (2%).

The sample was recruited randomly through a webpage that was sent to all students of the required nationalities in the university. As this study did not take long to complete, I managed to incorporate my study in another study conducted by a Phd student from National University of Singapore (NUS). As the main study is compulsory for students in the course Principle of Marketing, I had the sample that was sufficient.

3.3 MEASURES – DEFINITIONS AND OPERATIONALIZATION OF VARIABLES

3.3.1 MANIPULATION CONTROL

A pretest was conducted in National University of Singapore and Norwegian School of Business. The sample for the pretest is 40 students (38.5% are Singaporean Chinese, 23.1% are Chinese from China, and 38.5 % are Westerners). Complete responses were obtained from 39 subjects. Subjects were provided with a link to an online survey in which they were to view 12 advertisements from 6 brands. After viewing each advertisement, they were to indicate the extent they feel that the ad is amusing and funny. The purpose of the pretest is to find out whether the manipulation of humorous theme was successful. In other words, it is to check if the respondents perceived the humorous ads as significantly more humorous than the non-humorous ads. Six pairs of commercials were displayed to subjects. For each pair, the same brand is used; one of the ads is humorous and the other ad is descriptive and non-humorous. Besides Axe, Ikea, and Peugeot as explained above, the other three brands shown were Satis Footwear, Johnnie Walker and Guinness.

Two items (“I think this ad is amusing” and “I think this ad is funny”) were measured on a 7-point Likert scale (1=totally disagree, 7=totally agree). Three ads were then identified for further analysis, including Axe, Ikea, and Peugeot. These ads were chosen based on the results of statistical tests. As summarized in Table 1, Paired-Samples T-Test was conducted for each pair of humorous and non-humorous adverts from the same brand. Axe, Ikea and Peugeot have the highest and significant mean difference between humorous and non-humorous, suggesting that they are perceived as significantly more humorous than the non-humorous one. Among all, the Ikea ad demonstrates highest mean difference between humorous and non-humorous ads (mean difference of 3.54 and 4.36 for ‘amusing’ and ‘funny’ items respectively).

Another criterion for the choice of ad stimuli concerns the level of sexuality contained in the ad. As mentioned earlier, this level of sexuality should be adequate so that the ad will not be perceived as offensive and disliked by the viewers. Measuring this level is not within the scope of my study and this pretest, however short discussions with subjects in the pretest afterwards indicated that the ads chosen were not perceived as offensive.

Table 1: T-tests mean difference of ‘amusing’ & ‘funny’ ratings between humorous and non-humorous ads across brands

Ads	Items	Mean difference (humorous – non humorous)	Significance value
Axe	Amusing	2.949	.000
	Funny	3.410	.000
Ikea	Amusing	3.538	.000
	Funny	4.359	.000
Guinness	Amusing	2.179	.000
	Funny	2.949	.000
Peugeot	Amusing	2.949	.000
	Funny	4.692	.000
Satis	Amusing	2.692	.000
	Funny	3.231	.000
Johnnie Walker	Amusing	.897	.003
	Funny	1.026	.000

As well, correlations were derived between ‘amusing’ and ‘funny’ for each brand (Table 2). Also, these three brands have significant and high correlations between ‘amusing’ and ‘funny’ (correlation values of .357, .802, .483 for Axe, Ikea, and Peugeot respectively). This indicates that people who perceived the ads as ‘amusing’ also considered them ‘funny’. Measuring both items is in line with the method used by Geuens & Pelsmacker (2002). ‘Amusing’ and ‘funny’ both estimate the humorousness of the adverts, hence a significant correlation between them is necessary. Ads of other brands demonstrate high correlation between the two items as well; however a significant and large mean difference between humorous and non-humorous of the ads of the same brand is the primary condition for choice of stimuli.

Table 2: Correlation between ‘amusing’ and ‘funny’ items of ads

Ads	Correlation Value	Significance level
Axe	.357*	.026
Ikea	.802**	.000
Guinness	.654**	.000
Peugeot	.483**	.002
Satis	.623**	.000
Johnnie Walker	.804**	.000

*Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed)

Besides, Independent-Samples T-Tests were used to examine the variance between Singaporean Chinese and Westerners, as well as between Singaporean Chinese and Chinese from China for each brand in the two items ‘amusing’ and ‘funny’. This is to compare the perception of humor extent in the three chosen ads (Axe, Ikea, and Peugeot) between groups of nationalities. As it can be seen from Table 3, there were some differences witnessed between perceptions of humor in the ads from people across different cultures. Specifically, for Axe and Peugeot, the mean of ‘amusing’ and ‘funny’ scores from Singaporean Chinese are lower than those from Westerners, while being higher than Chinese from China. For Ikea, surprisingly, Singaporean Chinese perceive the ad more amusing and funny compared to their Western counterparts.

However, the differences are small and some of these differences are not statistically significant. This is in fact good for the study because the ads are perceived as humorous as the same level across nationality groups, a similar starting point to measure liking of these ads, which is the purpose of the main study.

Table 3: T-tests mean difference of ‘amusing’ & ‘funny’ ratings between nationality groups.

Ads	Items	Westerners – Singaporean Chinese		Singaporean Chinese – Chinese (China)	
		<i>Mean difference</i>	<i>Sig.</i>	<i>Mean difference</i>	<i>Sig.</i>
Axe	amusing	1.000*	.000	1.133*	.004
	funny	.733*	.036	1.400*	.013
Ikea	amusing	-.333	.209	1.867*	.000
	funny	-.267	.372	1.578*	.013
Peugeot	amusing	.200	.540	.733	.103
	funny	.200	.347	.400	.073

The detailed statistics of the manipulation checked can be found in Appendix 2.

After choosing the stimuli, measurements of constructs were derived. These constructs comprise of cosmopolitanism (COS), need for cognition (NFC), and need for humor (NFH). The scales for measurements were drawn from existing literature in relevant research. The construct of collectivism and individualism were adopted directly from Hofstede’s index and other past studies. This is to avoid overloading for participants.

3.3.2 MEASURE OF LEVEL OF COSMOPOLITANISM

To measure cosmopolitanism (COS) level, seven items were borrowed from the scale developed by Cleveland & Laroche (2007). This multidimensional scale was developed and validated to measure the acculturation to global consumer culture (Cleveland, 2007), and obtained through a procedure that was established by Churchill (1979) in developing a psychometric scale. This scale is reliable as the authors followed a comprehensive review of the relevant existing social sciences literature on the construct of cosmopolitanism (COS) (e.g., Belk, 2000; Hannerz, 1990, 1992; Skrbis, Kendall, & Woodward, 2004; Thompson & Tambyah, 1999) and drew from prevailing measures for concepts related to cosmopolitanism, such as global openness and world-mindedness (Baughn & Yaprak, 1996; Rawwas, Rajendran, & Wuehrer, 1996; Suh & Kwon, 2002).

These seven items were measured with seven-point Likert scales (with 1 being strongly disagree and 7 being strongly agree). The items are as follows:

1. I enjoy being with people from other countries to learn about their views and approaches
2. I like to observe people of other cultures, to see what I can learn from them
3. I find people from other cultures stimulating
4. I enjoy exchanging ideas with people from other cultures or countries
5. I am interested in learning more about people who live in other countries
6. I like to learn about other ways of life
7. Coming into contact with people of other cultures has greatly benefited me

As I will present in the research findings section, the items in cosmopolitanism (COS) scale indicated robust internal consistency, with Cronbach's alpha value of .941. This cosmopolitanism scale was presented to subjects after they finished evaluating the ad stimuli. Also, the subjects were told that the scale was part of a separate psychological study which was unrelated to the task they had just completed. In interpreting cosmopolitanism (COS) measurement, people with high degree of cosmopolitanism (COS), labeled as cosmopolitans, have high conscious openness to the world and cultural differences (Skrbis et al., 2004). They are world-minded, and hold a specific set of attitudes, beliefs, and skills, namely an openness toward and ability to engage in divergent cultural encounters, coupled with more international and less provincial self-perceptions (Yegenoglu, 2005).

3.3.3 NEED FOR COGNITION (NFC)

The abbreviated, 18-item need for cognition (NFC) scale developed by Cacioppo, Petty, and Kao (1984) was used to assess the degree to which each subject enjoyed the process of thinking. Similarly to the cosmopolitanism measurement, the need for cognition (NFC) scale was administered after the subjects had completed their evaluation of stimuli. The scale used contains statements about situations that require subjects' reactions to demand for cognitive effort. Self ratings on those statements were used to classify the subjects into two groups by the median-split method. The high need for cognition (NFC) group had ratings above the median and the low need for cognition (NFC) group had ratings below the median. A similar procedure was used by Zhang (1996).

Based on previous research, the need for cognition (NFC) scale appears to be a valid and reliable measure of individuals' tendencies to pursue and enjoy the process of thinking—that is, of their need for cognition (Cacioppo & Petty, 1982; Cacioppo, Petty, Feinstein, & Jarvis, 1996; Cacioppo et al., 1984; Sadowski, 1993; Sadowski & Gulgoz, 1992). In addition, these researchers have shown that need for cognition (NFC) scores are not influenced by gender, or by differences in the way that an individual accumulates and merges information during the thinking process. In general, scores on the need for cognition (NFC) scale are also not impacted by whether or not the individuals are trying to “paint a favorable picture of themselves” (Cacioppo & Petty, 1982).

An individual who has a high score on the need for cognition (NFC) scale is more likely to be “a thinker” as compared to someone with a low score. More specifically, people with high need for cognition (NFC) enjoy the thinking process and are able to engage in thinking about topics presented. Such people are likely to be able to process and systematize information, sorting out the irrelevant from the important (Cacioppo & Petty, 1982, 1984). People with high Need for cognition (NFC) score tend to process information in central routes in which they make judgment rationally and based on analysis. On the other hand, people with low score on Need for cognition (NFC) measurement are likely to process information in peripheral route and tend to rely on heuristics rather than rational thinking.

18-item Need for cognition (NFC) Scale

I would prefer complex to simple problems

I like to have the responsibility of handling a situation that requires a lot of thinking

Thinking is not my idea of fun*

I would rather do something that requires little thought than something that is sure to challenge my thinking abilities*

I try to anticipate and avoid situations where there is likely chance I will have to think in depth about something*

I find satisfaction in deliberating hard and for long hours.

I only think as hard as I have to *

I prefer to think about small, daily projects to long-term ones*

I like tasks that require little thought once I've learned them*

The idea of relying on thought to make my way to the top appeals to me

I really enjoy a task that involves coming up with new solutions to problems

Learning new ways to think doesn't excite me very much*

I prefer my life to be filled with puzzles that I must solve

The notion of thinking abstractly is appealing to me

I would prefer a task that is intellectual, difficult, and important to one that is somewhat important but does not require much thought

I feel relief rather than satisfaction after completing a task that required a lot of mental effort*

It's enough for me that something gets the job done; I don't care how or why it works

I usually end up deliberating about issues even when they do not affect me personally

The items with the asterisk (*) are reversed scoring items. Items in this scale have shown to be highly consistent (Cronbach's alpha of .911, as it will be explained later in research finding presentation), with an exception of one item: "I prefer to think about small, daily projects to long-term ones". The reason may be that either thinking about small daily projects or long term ones measures the extent that subjects enjoy the process of thinking (definition of need for cognition construct). This item will then be dropped out of the analysis.

3.3.4 NEED FOR HUMOR (NFH)

In measuring subjects' need for humor (NFH), Cline et al (2003)'s 12-item scale was adopted. This scale was revised from the Need for Levity (NFL) scale from the same authors which contained four dimensions of internal/external whimsy and internal/external humor (Cline et al. 1999). The Need for humor (NFH) scale has been used in a number of studies in US context. It offered some evidence that an individual's need for humor may play a significant role in moderating attitudes. Need for humor (NFH) appears to act as a motivator; with which high Need for humor (NFH) individuals respond more favorably to humorous ads. Also, subjects who are high in Need for humor (NFH) form more favorable attitudes based on humorous ads, and show less favorable attitudes to ads with lower humor content (Crawford & Gregory).

Internal: People expect me to say amusing things
I can crack people up with the things I say
I often come up with witty comments
I am good at thinking-up jokes or funny stories
People tell me that I am quick-witted.
I often feel the need to make other people laugh.

External: I am a connoisseur of humor
I prefer situations where people are free to express their senses of humor.
I enjoy being with people who tell jokes or funny stories
I often read jokes and funny stories
I enjoy being around quick-witted people
I need to be with people who have a sense of humor

Correlation was assessed between the internal and external dimensions of need for humor. Analysis has shown that there is a positive and high correlation between the two dimensions (correlation value of .791, $p=.000$). Therefore, the dimensions were summed and averaged into a single measure of Need for humor (NFH). This is in line with Cline et al (2003)'s approach. Scale reliability check was also carried out. With a Cronbach's alpha of .928, items in Need for humor (NFH) scale display great internal consistency. Moreover, measuring both internal and external aspects of humor helps to ensure capturing the adequate level of need for humor from subjects.

3.3.5 AD LIKEABILITY

A five-item Likert scale was used to measure ad liking. The items, adopted from MacKenzie, Lutz, and Belch (1986) and Madden, Allen, and Twible (1988) were: “interesting,” “good,” “likable,” “favorable,” and “pleasant.” These items were measured on a 7-point Likert scale (with 1 being strongly disagree and 7 being strongly agree). Cronbach’s alpha for ad liking was deemed satisfactory at 0.92. Ratings for the items were summed and averaged. This approach is consistent with the one employed by Chang (2005).

3.3.6 AD EFFECTIVENESS

As mentioned earlier, ad effectiveness include three dimensions, which are attitude towards the ad (A_{ad}), attitude towards the brand (A_b), and purchase intention (PI).

Attitude towards the ad (A_{ad}): Past research measured A_{ad} with a four-item, seven-point scale (“very bad/very good, “very unfavorable/very favorable,” “highly uncreative/highly creative” and “least attractive/very attractive” (Gardner 1985; MacKenzie, Lutz & Belch, 1986; Miniard, Bhatla, & Rose, 1990; Zhang & Gelb, 1996). Because attitude towards the ad (A_{ad}) is sometimes used interchangeably with ad liking, this study primarily focuses on measuring ad liking, however based on a multi-item scale rather than single-item scale.

Attitude towards the brand (A_b): I measured this construct with six items. The first three items were measured on a seven-point Likert scale (1 = strongly disagree and 7 = strongly agree). These include: “dislike quite a lot/like quite a lot,” “unsatisfactory/satisfactory,” and “very unappealing/very appealing” (Gardner, 1985; MacKenzie & Lutz, 1989; Miniard, Bhatla, & Rose, 1990; Mitchell, 1986). Another three semantic-differential items were used: good/bad, unfavorable/favorable, poor/excellent. Brand familiarity can have effect on attitude towards the brand, independent of attitude towards the ad itself. Hence, attitude towards brand was measured both before and after subjects evaluated the stimuli.

Purchase intention (PI): I measured this construct with seven items (Mathur, 1998). The first three items are “I would definitely intend to buy,” “I would absolutely consider buying,” “I would definitely expect to buy”, and “I am buying this product” (1 = “strongly disagree,” and 7 = “strongly agree”) (Teng & Laroche, 2006). Purchase intention was also measured with another 3-item semantic-differential scale that included: likely/unlikely, improbable/probable, and possible/impossible.

3.4 PROCEDURE

Two experiments were conducted among the sample of 201 students. One experiment was carried out in Singapore (149 participants), and the other experiment was run among Western students in Norway (52 subjects). As explained earlier, the separation of experiments was due to the lack of Western subjects recruited in Singapore. Lab settings help to ensure consistency in experiment environments. In Singapore, the experiment was incorporated in another study that was run by a student in National University of Singapore (NUS). The experiment was the last part of the whole study, with a break before subjects began to view the ads to make sure their mind was fresh. In Norway, the experiment was carried out in an experimental lab. Each participant was provided with a laptop. Subjects completed the survey online through Qualtrics, a tool to design questionnaires and collect responses online. Subjects started the experiment by answering questions about the brands depicted in the stimuli. Two questions regarding this were used. Firstly, I asked if they know about the brands; and secondly, their attitude towards those brands, including the six above-mentioned items.

The first stimulus of the experiment was one of the cultural-congruent ads. A 2 (individualistic versus collectivistic theme) X 2 (personal versus non-personal product) factorial model design was employed. 201 subjects were randomly assigned to one of the four conditions; i.e. one of the stimuli (car – family, car – self expression, toothpaste – father and son, and toothpaste – the girl). After viewing the ad, subjects were asked to indicate their response on items of advertising likeability, attitude towards the brand, and purchase intention.

Next, the four sexually humorous ads were presented to the respondents. Similarly, after viewing the ad, subjects were asked to choose the appropriate number on a scale measuring advertising likeability, attitude towards the brand, and purchase intention. The four stimuli were randomized to ensure there was no effect of any one specific ad on another ad.

Once respondents were done with the evaluation of stimuli, they were directed to the next page of the survey. Here they were told that they were to complete a separate survey for another professor in psychology department of the university. In this survey, subjects completed the scale of cosmopolitanism (COS), need for cognition (NFC) and need for humor (NFH). At the end of the survey, respondents were to indicate demographic information such as age, gender, educational background and nationality.

4. RESEARCH FINDINGS & DISCUSSIONS

4.1 PRELIMINARY ANALYSES

4.1.1 CODING, RECODING AND COMPUTING TOTAL SCORES

Research findings were analyzed using statistics software SPSS version 20.0. Before proceeding with the statistic tests, I carried out preliminary analyses to prepare the data. To start with, all the reversed scoring items were recoded so that they have the same scoring scale. These items belong to the need for cognition (NFC) scale as mentioned in the Methodology section. Next, the total scale scores were calculated. These include scales for Attitude towards the brand before exposure to the ad stimuli (A_{b1}), Attitude towards the ad (A_{ad}), Attitude towards the brand after exposure to the ad stimuli (A_{b2}), and purchase intention (PI). The total scale scores were computed for each brand. In addition, the total score for attitude towards the brand and purchase intention was calculated by adding up the scores from all brands (Nissan, Volkswagen, Signal, Colgate, Axe, Ikea, and Peugeot). This was done as a pre-step to prepare data for analyses on each brand as well as from overall perspective. Furthermore, total scale scores were also derived for need for cognition (NFC) scale, with reversed items, need for humor (NFH), and cosmopolitanism (COS) by summing up the scores of all items under each scale.

Besides, for each of the scales need for cognition (NFC), need for humor (NFH), and cosmopolitanism (COS), I created two groups of participants based on median-split method. 102 individuals with scores below the median constituted the “low- need for cognition (NFC)” group, while the 99 with scores above the median formed the “high-need for cognition (NFC)” group. Similarly, 96 subjects were classified into “low-need for humor (NFH)” group and 105 were grouped as “high-need for humor (NFH)”. Lastly, for cosmopolitanism (COS) dimension, 102 participants were defined as “low-cosmopolitanism (COS)” and 99 were with “high-cosmopolitanism (COS)” label.

For the four ad stimuli with collectivistic and individualistic themes, appeal type and product type was recoded. Specifically, collectivistic appeal was assigned the value of 1, while individualistic appeal was assigned the value of 2. Similarly, personal product (toothpaste) was labeled as 1, and non-personal product (car) was labeled as 2.

4.1.2 RELIABILITY CHECK AND EXPLORATORY FACTOR ANALYSIS

Table 4 summarizes the descriptive statistics and measures of internal consistency for the constructs across three groups of nationalities. Reliability check was executed in order to evaluate the internal consistency of the scales from the questionnaires. Cronbach's alpha coefficient was used as the indicator of internal consistency. According to DeVellis (2003), ideally, the Cronbach's alpha coefficient of a scale should be above .7, and preferably above .8. Moreover, as recommended by Briggs & Cheek (1986), optimal mean inter-item correlation values range from .2 to .4.

4.1.2.1 Need for cognition (NFC)

Cronbach's alpha of .9111 indicates high internal consistency and reliability for need for cognition (NFC) scale with this sample. The mean inter-item correlation of need for cognition (NFC) scale is .361, which suggests a strong relationship among the items. Cronbach's alpha and inter-item correlation mean of need for cognition (NFC) scale across each nationality (Singaporean Chinese, Chinese from China, and Westerners) also demonstrates high internal consistency of need for cognition (NFC) scale. Based on the corrected item-total correlation and Cronbach's alpha for each item, however, one item was dropped from the scale for this sample. This item is "I prefer to think about small, daily projects to long-term ones". The corrected item-total correlation value for this item is .236 (<.3) and Cronbach's alpha for this item is 0.941 (which is larger than total Cronbach's alpha .911). Hence, for this sample, I will consider 17 items of the scale.

4.1.2.2 Need for humor (NFH)

The Need for humor (NFH) scale also indicates robust internal consistency, with the Cronbach's alpha of .928, and values ranging from .188 to .730. The mean inter-item correlations value is .521 which proposes a very strong correlation between the items. Cronbach's alpha is also high for each nationality (>.8). All items shows adequate item-total correlation value, and hence all are kept for further analysis.

4.1.2.3 Cosmopolitanism (COS)

The cosmopolitanism (COS) scale demonstrates good reliability as well. The Cronbach's alpha of .941 and the mean inter-item correlations value of .694 suggest strong internal consistency between the items in this scale for this sample. Across nationality, the item

correlation is highly consistent for Chinese Singaporean and Westerners, but is rather low among the Chinese from China ($\alpha = .729$), which is acceptable according to DeVellis's (2003) criteria for Cronbach's alpha. Moreover, in Cleveland, Papadopoulos, and Laroche's (2011) study, the reliability of the seven-item COS factor was considered robust at .862. This value is higher in the current study.

4.1.2.4 Advertising likeability

Five items of Ad liking ("interesting," "good," "likable," "favorable," and "pleasant.") was checked for scale reliability. This was run for each of the ad as portrayed in Table 1 below. All ads display satisfactory internal consistency for ad liking scale, with high value of α and inter-items correlation means. This is with the exception of Nissan ad among Singaporean and Westerners ($\alpha < .7$). However, considering that the overall α for all subjects for this ad is sufficiently high ($\alpha = .827$), I kept all five items in this scale.

Table 4. Internal consistency of scale items: Cronbach alpha and inter-items correlation means

Scale	Overall	Singaporean Chinese	Chinese (China)	Westerners
NFC – 18 items, 1 dropped	.911 (.361)	.901 (.338)	.896 (.340)	.915 (.370)
NFH – 12 items	.928 (.521)	.925 (.512)	.946 (.590)	.901 (.440)
COS – 7 items	.941 (.694)	.931 (.656)	.729 (.292)	.933 (.671)
Advertising likeability (A_{ad})				
Nissan	.827 (.496)	.682 (.361)	.708 (.377)	.670 (.318)
Volkswagen	.953 (.807)	.887 (.788)	.966 (.851)	.924 (.730)
Signal	.938 (.760)	.904 (.692)	.955 (.812)	.902 (.651)
Colgate	.906 (.664)	.814 (.481)	.912 (.691)	.934 (.742)
Axe	.956 (.815)	.913 (.682)	.943 (.771)	.955 (.811)
Ikea	.958 (.823)	.947 (.783)	.892 (.632)	.946 (.781)
Peugeot	.945 (.774)	.953 (.802)	.805 (.465)	.943 (.790)

***Note:** inter-items correlation means are in parentheses

In order to further test the reliability of the scales used, Factor analysis was used across the three scales: need for cognition (NFC), need for humor (NFH), and cosmopolitanism (COS). The 18 items of the need for cognition (NFC) Scale, 12 items of the need for humor (NFH), and 7 items of the cosmopolitanism (COS) were subjected to principal components analysis (PCA). Prior to performing PCA, the suitability of data for factor analysis was assessed. Inspection of the correlation matrix revealed the presence of many coefficients of .3 and above. The Kaiser-Meyer-Olkin value was .808, exceeding the recommended value of .6 (Kaiser 1970, 1974) and Bartlett's Test of Sphericity (Bartlett 1954) reached statistical significance ($p=.000$), supporting the factorability of the correlation matrix. Principal components analysis revealed the presence of seven components with eigenvalues exceeding 1. However, an inspection of the screeplot revealed a clear break after the third component. Using Catell's (1966) scree test, it was decided to retain three components for further investigation. The three-component solution explained a total of 55.19% of the variance, with Component 1 contributing 22.85%, Component 2 contributing 22.12%, and Component 3 contributing 10.2%. To aid in the interpretation of these three components, varimax with Kaiser rotation was performed. The Statistical techniques to explore relationships among variables rotated solution revealed the presence of simple structure (Thurstone 1947), with all three components showing a number of strong loadings and all variables loading substantially on only one component. The interpretation of the three components was consistent with previous research on the testing scales, with cosmopolitanism (COS) items loading relatively strongly on Component 1, need for humor (NFH) items loading relatively strongly on Component 3, and need for cognition (NFC) items loading strongly on Component 3 (please refer to Table 5). There exists also significant correlation between the three constructs Need for cognition, Need for humor and cosmopolitanism, as seen from Correlation matrix in Table 6. In details, there is a positive correlation between cosmopolitanism (COS) and need for humor (NFH), as well as between cosmopolitanism (COS) and need for cognition (NFC), and a negative correlation exists between need for humor (NFH) and need for cognition (NFC). The results of this analysis support the use of the need for cognition (NFC), need for humor (NFH), and cosmopolitanism (COS) items as separate scales. The details of Factor analysis can be found in Appendix 6.

Table 5. Factor analysis: Rotated Component Matrix^a between NFC, NFH, and COS

Items	Component		
	1	2	3
I like to have the responsibility of handling a situation that requires a lot of thinking	.872		
The idea of relying on thought to make my way to the top appeals to me	.796		
I would prefer a task that is intellectual, difficult, and important to one that is somewhat important	.746		
I prefer my life to be filled with puzzles that I must solve	.730		
I would rather do something that requires little thought than something that is sure to challenge	.725		
Learning new ways to think doesn't excite me very much	.689		
I would prefer complex to simple problems.	.675		
I feel relief rather than satisfaction after completing a task that required a lot of mental effort	.635		
Thinking is not my idea of fun	.635		
I really enjoy a task that involves coming up with new solutions to problems.	.634		
The notion of thinking abstractly is appealing to me	.629		
I only think as hard as I have to	.564		
I usually end up deliberating about issues even when they do not affect me personally	.550		
I try to anticipate and avoid situations where there is likely chance I will have to think in depth...	.542		
It's enough for me that something gets the job done; I don't care how or why it works	.539	-.326	.354
I find satisfaction in deliberating hard and for long hours	.496		
I like tasks that require little thought once I've learned them	.484		
I prefer to think about small, daily projects to long-term ones			
I am a connoisseur of humor		.836	
People tell me that I am quick-witted		.822	
I often come up with witty comments		.807	
I am good at thinking-up jokes or funny stories		.772	
I can crack people up with the things I say		.740	
People expect me to say amusing things		.737	
I enjoy being with people who tell jokes or funny stories		.698	.440
I need to be with people who have a sense of humor		.686	.447
I often feel the need to make other people laugh		.681	
I prefer situations where people are free to express their senses of humor		.600	.549
I often read jokes and funny stories		.532	
I enjoy being around quick-witted people		.429	.397
I like to observe people of other cultures, to see what I can learn from them			.873
I enjoy being with people from other countries to learn about their views and approaches			.858
I am interested in learning more about people who live in other countries			.855
I find people from other cultures stimulating			.850
I like to learn about other ways of life.			.789
Coming into contact with people of other cultures has greatly benefited me.			.766
I enjoy exchanging ideas with people from other cultures or countries			.737

Extraction Method: Principal Component Analysis.

Before testing the hypotheses, correlations between variables in the study were assessed. Table 6 sums up these correlations. The significance value was taken as one-tailed when the relationship is in one direction, which is the case for most of the variables in this paper. For cosmopolitanism (COS), need for cognition (NFC), and need for humor (NFH), two-tailed significance values were taken since there might be two-way relationship between these factors.

Table 6. Correlation matrix at construct level: correlation coefficient (r) and significance value (in parentheses)

	Nationality	Appeal type	Product type	COS	NFH	NFC	Ad liking	Δ Brand attitude	Purchase intention
Nationality	1	.123* (.041)	.135* (.028)	-.076 (.143)	.048 (.247)	-.056 (.214)	.100 (.078)	-.046 (.257)	-.020 (.390)
Appeal type	.123* (.041)	1	.015 (.418)	-.128* (.035)	-	-	-.114 (.054)	-.348*** (.000)	.127* (.036)
Product type	.135* (.028)	.015 (.418)	1	.032 (.328)	-	-	-.021 (.383)	-.026 (.358)	-.142* (.022)
COS	-.076 (.143)	-.128* (.035)	.032 (.328)	1	.396** (.000)	.218** (.002)	.597** (.000)	.103 (.074)	.225** (.001)
NFH	.048 (.247)	-	-	.396*** (.000)	1	-.141* (.046)	.506** (.000)	.069 (.164)	.222** (.001)
NFC	-.056 (.214)	-	-	.218** (.002)	-.141* (.046)	1	.100 (.078)	-.046 (.257)	-.020 (.390)
Ad liking	.100 (.078)	-.114 (.054)	-.021 (.383)	.597*** (.000)	.506** (.000)	.140* (.024)	1	.309** (.000)	.311** (.000)
Δ Brand attitude	-.046 (.257)	-.348*** (.000)	-.026 (.358)	.103 (.074)	.069 (.164)	-.17** (.007)	.309** (.000)	1	.286** (.000)
Purchase intention	-.020 (.390)	.127* (.036)	-.142* (.022)	.225*** (.001)	.222*** (.001)	-.070 (.162)	.311** (.000)	.286** (.000)	1

*. Correlation is significant at the 0.05 level

**. Correlation is significant at the 0.01 level

***. Correlation is significant at the 0.001 level

Note: Δ Brand attitude indicates the change in brand attitude pre- and post-exposure (Δ = post-exposure A_b score – pre-exposure A_b score)

As observed from this matrix, there exist significant correlations between nationality and appeal type ($r = .123$, $p < .05$), appeal type and change in brand attitude and purchase intention ($r = -.348$ and $.127$ respectively, $p < .05$). The correlation between appeal type and product type, however, is not significant ($r = .015$, $p > .05$). Correlations between cosmopolitanism (COS) and ad liking, as well as between need for humor (NFH) and ad liking are significant and

large ($r=.597$ and $.506$ in that order). Also, three constructs at individual level (NFC, NFH, COS) are significantly correlated ($r(\text{COS}, \text{NFH}) = .396$, $r(\text{COS}, \text{NFC}) = .218$, $r(\text{NFH}, \text{NFC}) = -.141$, $p<.05$). Potential linkages between ad liking and the change in attitude towards brand as well as purchase intention are evident from the correlation analysis, ($r = .309$ and $.311$ in that order, $p<.001$). The correlation matrix at construct level provides some initial expectations for the testing of hypotheses.

In order to test hypothesis, a series of two-way ANOVA (analysis of variance) were conducted. Two-way analysis of variances allows testing the impact of two independent variables on one dependent variable. The advantage of using a two-way ANOVA is that it helps to test for interaction effects between factors, that is to say, when the effect of one independent variable is influenced by another. This statistical technique is suitable for my analysis, as I aim to test the moderating effect of a number of variables.

Besides, other statistical approaches were employed to test the hypotheses. Specifically, T-tests were used to measure the mean difference between dependent variables across groups, e.g. across groups of nationalities, or groups of high and low Need for humor (NFH), and so on. Descriptive data also provided relevant indicators for prediction. To test the relationship between advertising liking and the change in attitude towards brand and purchase intention, with the consideration of the potential moderator Need for cognition (NFC), hierarchical regression models were employed.

To enhance the readability of this paper, findings of the study will be presented according to the hypotheses proposed. Liking of culturally congruent advertisements and moderating factors will be assessed, followed by liking of sexually humorous advertisements. Lastly, the relationship between advertising likeability and advertising effectiveness (the change in attitude towards the brand and purchase intention) will be examined.

4.2 LIKING OF CULTURAL CONGRUENT ADVERTISEMENTS

Table 7 captures descriptive results for ad liking of advertisements with different appeals across different product type among three nationality groups. The first glance at this data shows the pattern that Singaporean Chinese and Chinese from China prefer collectivistic appeal over individualistic appeal (larger mean of liking for collectivistic appeals), while Westerners favor individualistic theme. This pattern can be found in both types of product: personal and non-personal.

Table 7. Descriptive results: Mean and Standard Deviation of Ad liking across appeal types, product types, and nationality groups.

Appeal	Product type	Nationality	Mean	Std. Deviation
Collectivistic	personal	Chinese Singaporean	27.250	1.026
		Chinese (China)	26.120	.821
		Westerners	21.583	1.185
	non-personal	Chinese Singaporean	25.636	.875
		Chinese (China)	25.769	1.139
		Westerners	18.750	1.026
Individualistic	personal	Chinese Singaporean	23.429	.896
		Chinese (China)	19.769	1.139
		Westerners	23.714	1.097
	non-personal	Chinese Singaporean	22.429	1.552
		Chinese (China)	20.056	.968
		Westerners	27.792	.838

In examining the degree of liking of cultural congruent advertisements, two-way ANOVA was conducted with ad liking measures on the appeals (collectivistic versus individualistic) as the dependent variables. The independent variables include appeal type, nationality, and cosmopolitanism so as to explore the influence of nationality on liking of different types of ad appeals as well as the moderating effect of product type and level of cosmopolitanism. Nationality, appeal type, and product type were used in one combined ANOVA test. This is consistent to the method used by Zhang & Neelankavil (1996) when they measured the influence of culture on advertising effectiveness in China and the USA. Level of cosmopolitanism (COS) was run in a separate ANOVA as it represents an individual level construct.

Table 8. ANOVA Tests: Effects of nationality, product type and appeal type on Ad liking

Dependent Variable: Ad liking of culturally congruent advertisements

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1774.518 ^a	11	161.320	9.570	.000	.358
Intercept	98779.548	1	98779.548	5860.024	.000	.969
Appeal	77.771	1	77.771	4.614	.033	.024
Product_type	2.549	1	2.549	.151	.698	.001
Nationality	114.148	2	57.074	3.386	.036	.035
Appeal * Product_type	82.564	1	82.564	4.898	.028	.025
Appeal * Nationality	1157.462	2	578.731	34.333	.000	.266
Product_type *	27.303	2	13.652	.810	.446	.008
Nationality						
Appeal * Product_type * Nationality	100.035	2	50.018	2.967	.054	.030
Error	3185.880	189	16.857			
Total	120209.000	201				
Corrected Total	4960.398	200				

a. R Squared = .358 (Adjusted R Squared = .320)

Details of the results will be discussed below according to the hypotheses stated earlier.

III. Singaporean Chinese like collectivism ad appeals, while Western counterparts favor individualistic ones.

As observed in Table 8, the average score across product type for Singaporean Chinese is higher for collectivistic appeal (26.443) compared to individualistic appeal (22.929). For Westerners, it is observed to be the opposite case. Westerners appear to prefer individualistic appeal (mean score of 25.75) to collectivistic appeal (mean of 20.167). This distinction is as expected. Moreover, comparing across nationalities, Singaporean Chinese had a higher liking score for collectivistic appeal compared to their Western counterparts, while liking score in individualistic appeal is higher for Westerners. To further examine these differences, liking score could be compared with Chinese from China. It can be seen that Singaporean Chinese and Chinese from China are similar in their preference for collectivistic appeal (mean of 26.44 and 25.94 respectively), which is higher than Westerners. Meanwhile, Chinese's liking for individualistic appeal is even lower than Singaporean Chinese. This shed some lights about the effect of cosmopolitanism level, which is presumed to be higher for Singaporean Chinese in comparison with Chinese from China. This will be further examined later.

Table 9. Descriptive analysis of Ad liking for collectivistic versus individualistic appeals

<i>Ad liking Mean (SD)</i>	<i>Singaporean Chinese</i>	<i>Westerners</i>	<i>Chinese (China)</i>
Collectivistic appeal	26.443 (.674)	20.167 (.784)	25.945 (.702)
Individualistic appeal	22.929 (.896)	25.753 (.690)	19.912 (.747)

ANOVA was conducted on the two between-subject factors with ad liking scores across product type as dependent variable. As seen from the results illustrated in table 10, there is a significant appeal type main effect for ad liking ($F=4.614$, $p<0.05$), as well as a significant nationality main effect ($F=3.386$, $p<.05$). This suggests that different appeals are most effective in different cultures. A significant nationality by appeal type two-way interaction effect was also present, indicating that the degree of the influences of each of the independent variables, in this case appeal type and nationality, on subjects' responses were not the same. In other words, there were differences in the magnitude of the cultural influences on advertisement appeals for the three nationalities. The influence of appeal type on ad liking was influenced by nationality.

Table 10. ANOVA tests: effects of appeal type and nationality on ad liking

<i>Source</i>	<i>F-Value</i>	<i>Sig.</i>
Appeal type (A)	4.614*	.033
Nationality (N)	3.386*	.036
A*N	34.333*	.000

* *significance level $p<.05$*

Note: Dependent variable: Ad liking of culturally congruent advertisements

As there was a significant appeal type by nationality interaction effect on ad liking, further test is necessary to examine this interaction effect. T-tests were conducted between ad liking for collectivistic themes and ad liking for individualistic themes for each group of nationality: Singaporean Chinese, Chinese (China), and Westerners. These T-tests showed that these differences in preference with regards to appeal type are statistically significant. This can be seen in Table 11. Singaporean Chinese and Chinese from China, as expected, show preference towards collectivistic theme over individualistic theme, while their Western counterparts favor individualistic appeal. Also worth noticing is that the mean difference

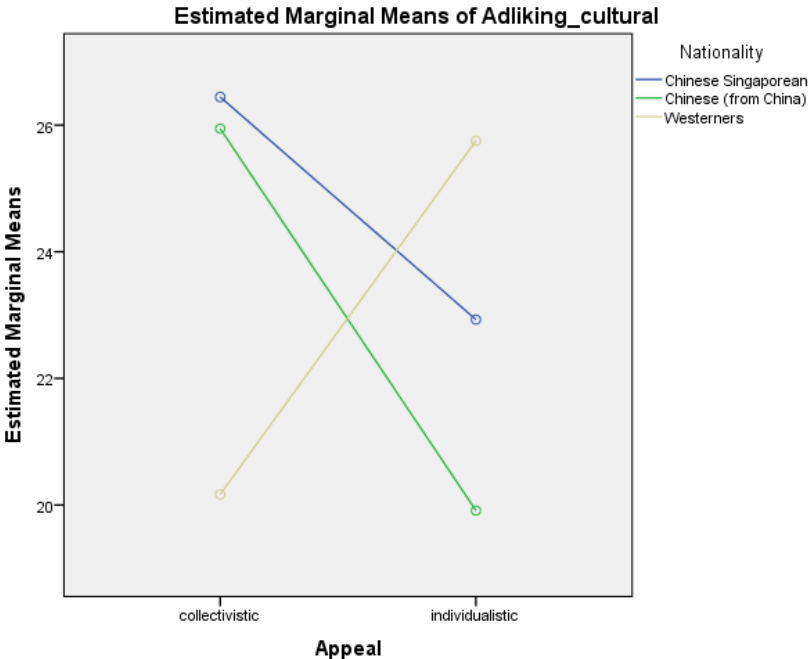
between the liking for the two types of appeal is lower among Singaporean Chinese compared to Chinese from China. According to the theory that was presented in the Literature review section above, this may indicate the influence of high level of cosmopolitanism in Singapore. However, based on the data in this study, as it will be shown later, cosmopolitanism level does not appear to have this influence.

Table 11. Mean difference between liking of collectivistic and individualistic appeal across nationality groups

Nationality group	Mean difference (collectivistic – individualistic)	Significance value	t-value	df
Singaporean Chinese	3.137*	.001	3.501	64
Chinese (from China)	6.065*	.000	5.659	67
Westerners	-6.325*	.000	-5.686	64

The effects of ad-culture congruence appear evident so far. A further look at Figure 1 below could affirm this finding. The graph has shown clearly the pattern I have discussed. Therefore, I conclude that H1 is supported.

Figure 1. Ad liking of collectivistic and individualistic appeal across nationalities



4.3 THE EFFECT OF MODERATORS: PRODUCT TYPE & LEVEL OF COSMOPOLITANISM

4.3.1 MODERATING ROLE OF PRODUCT TYPE – PERSONAL VERSUS NON-PERSONAL PRODUCT

H2. *Product type moderates the likeability of culturally-congruent advertising appeals. Specifically:*

H2.1 *For a non-personal product, appeals responsive to cultural values will be liked more than those that do not.*

H2.2 *There will be little or no difference for a personal product*

In order to test the moderating effect of product type, similar two-way ANOVA was run with one more independent variable, which is product type. Nationality and appeal type are between-subject factors and product type is a within-subject factor. The appeal type main effect is not significant. However, the results revealed significant three-way interaction between product type, appeal type and nationality ($F=2.97$ $p<.05$), as well as the product by appeal two-way interaction ($F=4.898$, $p<.05$) (please refer to Table 12). This suggested that the effect of appeal type on ad liking for different groups of nationality might be influenced by product type. In other words, there might be a moderation effect involving product type.

Table 12. AVONA test: effects of product type, appeal type, nationality on Ad liking

	<i>F-value</i>	<i>Sig.</i>
Product type^a (P)	.151	.698
Appeal type^b (A)	4.614*	.033
Nationality^b (N)	3.386*	.036
P*A	4.898*	.028
P*N	.810	.446
A*N	34.33*	.000
P*A*N	2.967*	.046

Note:

Dependent variable: Ad liking of culturally congruent advertisements

^a *within-subject factor*

^b *between-subject factor*

The moderation effect of product type shown in this study, however, is not in line with my predictions. To diagnose the specific influence of product type, ANOVA analyses were run separately for ad liking on personal product and non-personal product using nationality and appeal types as the independent variables (please see Table 13). For personal product, there

has shown a main appeal type effect as well as a main nationality effect ($F=12.48$ and 5.35 respectively, $p<.05$). An appeal type by nationality two-way interaction effect was also found for personal product ($F=10.02$, $p<.05$), implying that for personal product, people from different countries prefer different type of appeal. On the other hand, for non-personal product, I observed no main effect, however there is a two-way interaction effect of appeal type by nationality on ad liking ($F=26.12$, $p<.001$).

Table 13. ANOVA tests: effects of appeal type and nationality on ad liking for personal & non-personal product.

<i>Ad liking</i>	<i>Personal product</i>			<i>Non-personal product</i>		
	F value	df	Sig.	F value	df	Sig.
Appeal type	12.483	1	.001	.002	1	.967
Nationality	5.353	2	.006	.393	2	.676
Appeal type * Nationality	10.021	2	.002	26.121	2	.000

Besides, as seen from Figure 2 and 3 below, the differences in ad theme preference are shown in both personal and non-personal product type. While Westerners showed a bigger discrepancy in their preference for collectivistic versus individualistic ad appeal for non-personal, the differences in preference for ad appeal in personal product are prominent. The patterns in these figures are consistent with H1; specifically Chinese Singaporean and Chinese from China like collectivistic theme more than individualistic theme, and Westerners in contrast prefer individualistic appeal. Therefore, H2.1 is supported, however H2.2 is not supported.

Figure 2. Ad liking of different appeals across nationality for personal product

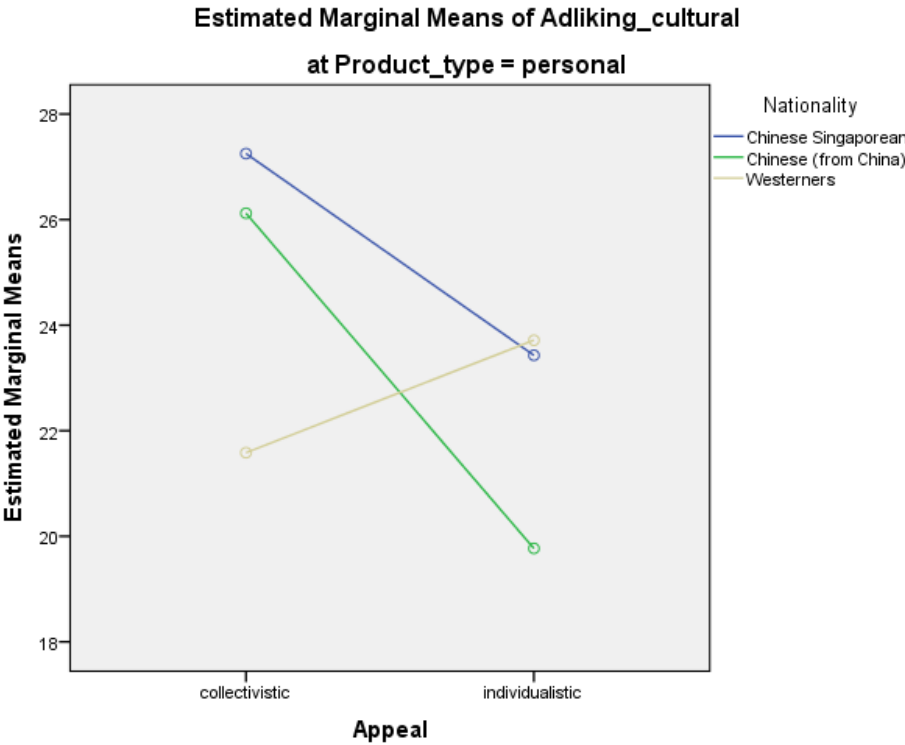
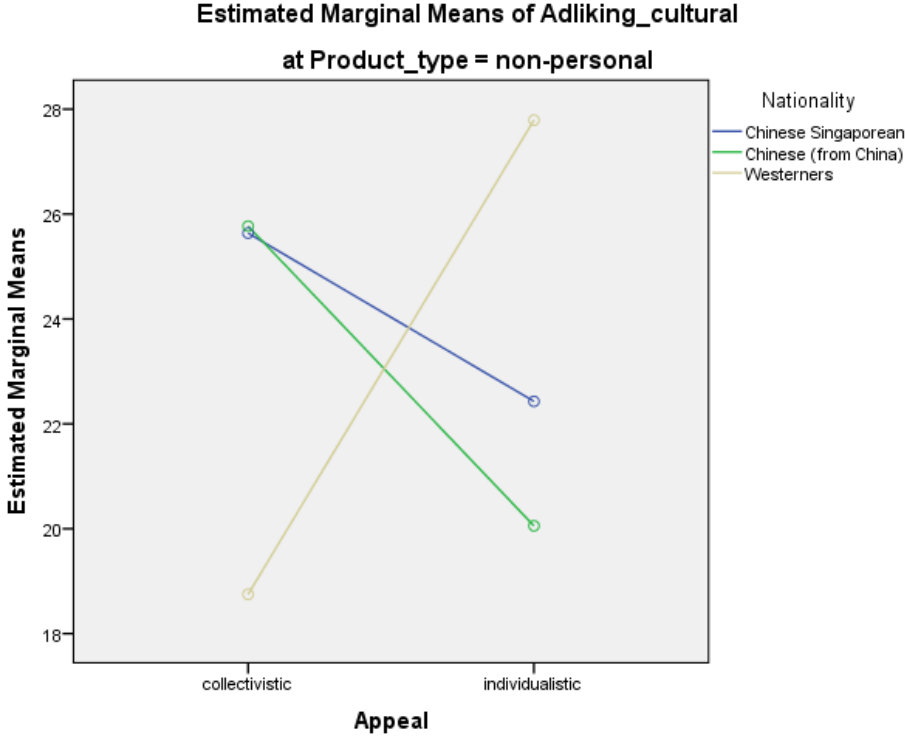


Figure 3. Ad liking of different appeals across nationality for non-personal product



4.3.2 MODERATING ROLE OF LEVEL OF COSMOPOLITANISM

H3. *The level of cosmopolitanism moderates the liking of culturally-congruent advertising appeals.*

As mentioned earlier, in contrast to my anticipation, the study showed that the level of cosmopolitanism does not play a role in the preference differences across cultures. Singaporean Chinese demonstrate a high level of cosmopolitanism (M=39.23, SD=5.81), followed closely by the Westerners (M= 37.92, SD=6.057). The Chinese from China seem to be less cosmopolitan (M= 28.88, SD=3.612) (see table 14). This is understandable as Singapore is a highly modern and globalized city, compared to cities in China. The level of cosmopolitanism in Singapore therefore can be considered high; however this factor is not a moderator of the relationship between as appeal type and ad likability, as it will be discussed shortly.

Table 14. Level of cosmopolitanism across nationality groups

COS	<i>Singaporean Chinese</i>	<i>Chinese (China)</i>	<i>Westerners</i>
Mean	39.23	28.88	37.92
Std. Deviation	5.851	3.612	6.057

ANOVA results reported no significant main cosmopolitanism level (COS) effect as well as no significant two-way or three-way interaction effect involving cosmopolitanism ($p > .05$). This can be seen from Table 15. This initial observation indicates that cosmopolitanism (COS) appears to have no influence of the effects of appeal type on ad liking.

Table 15. Level of cosmopolitanism across nationality

<i>Ad liking Source</i>	<i>F-value</i>	<i>df</i>	<i>Sig.</i>
Nationality (N)	2.358	2	.097
Cosmopolitanism (COS)	.003	1	.959
Appeal (A)	1.047	1	.308
N*COS	.378	2	.686
N*A	18.618	2	.000
COS*A	.140	1	.708
N*COS*A	.129	2	.879

The argument is strengthened by ANOVA results that were run separately for each nationality (displayed in Table 16). The only significant effect of cosmopolitanism (COS) on liking of culturally-congruent was found among the Singaporean Chinese ($F=5.03$, $p<.001$). However, no significant appeal by COS interaction effect was present for any nationality group ($p>.05$), proposing that the level of cosmopolitanism is not likely to affect ad liking based on the type of appeal used

Table 16. ANOVA test: Effect of appeal type and level of cosmopolitanism on Ad liking

Ad liking	Chinese Singaporean		Chinese (China)		Westerners	
	<i>F value</i>	<i>Sig.</i>	<i>F value</i>	<i>Sig.</i>	<i>F value</i>	<i>Sig.</i>
Appeal	.858	.359	4.080	.049	12.665	.001
COS	5.030*	.000	1.732	.083	1.167	.333
Appeal* COS	2.083	.086	1.838	.136	1.598	.170

As seen from Figure 4 and 5, the pattern is the same for low cosmopolitan (COS) and high cosmopolitan (COS) groups across three nationalities. Moreover, a minor but interesting note from these figures is that for Singaporean Chinese, the group of subjects with high level of cosmopolitanism showed lower liking score for individualistic ad appeal.

It can be concluded that H3 is not supported. The moderating role of cosmopolitanism was not supported by this study.

Figure 4. Ad liking of different appeals across nationality for low COS group

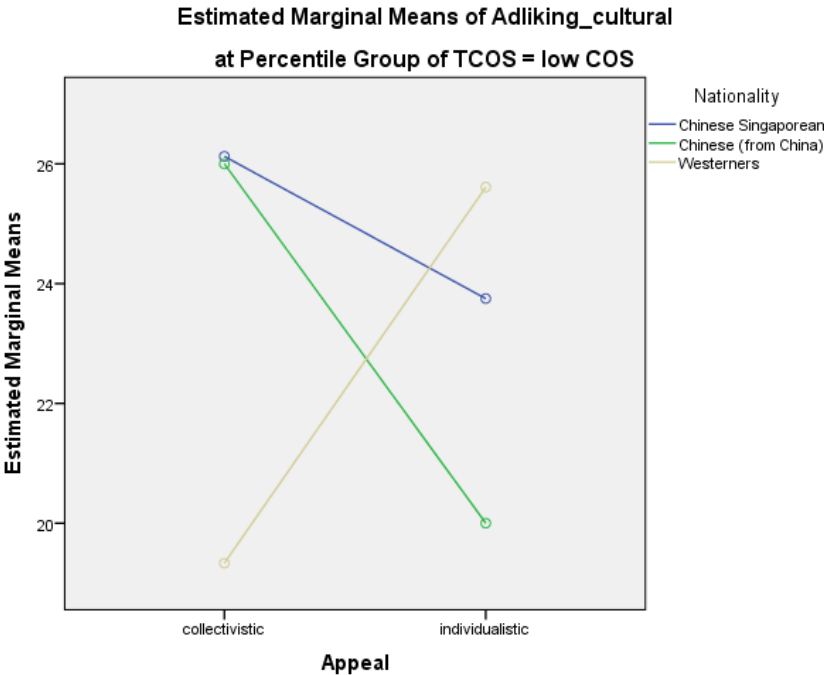
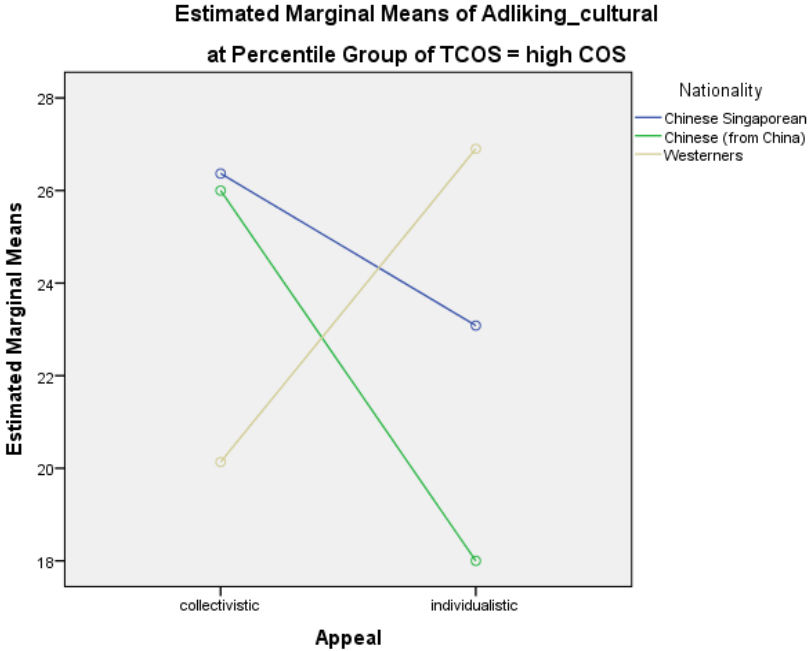


Figure 5. Ad liking of different appeals across nationality for low COS group



4.3 LIKING OF HUMOROUS ADVERTISEMENTS WITH SEXUAL CONTENTS & THE MODERATING EFFECT OF INDIVIDUAL COSMOPOLITANISM LEVEL AND NEED FOR HUMOR

H4. *Singaporean Chinese are less favorable towards sexually humorous ads compared to Westerners, but more favorable compared to Chinese from China.*

Table 17 summarizes the descriptive results of ad liking score for sexually humorous advertisements (including Axe, Ikea, and Peugeot) across three nationality groups. A common trend can be spotted here. For all three ads, Singaporean Chinese scored lower in the mean of ad liking compared to Westerners (M=72.39, SD=13.62 for Singaporean Chinese, and M=78.03, SD=13.88 for Westerners), but higher compared to the Chinese counterparts from China (M=54.07, SD=8.38). This very first observation suggests that my hypothesis about Singaporean’s preference for humorous advertisements with sexual contents can be supported. Further tests to confirm this were conducted.

Table 17. Mean and Standard Deviation of liking of sexually humorous ads across nationality groups

Ad liking score Mean (SD)	Singaporean Chinese	Westerners	Chinese (China)
Axe	24.06 (3.77)	25.39 (5.11)	18.65 (4.83)
Ikea	22.97 (5.95)	25.36 (6.06)	15.99 (3.43)
Peugeot	25.36 (5.989)	27.27 (4.94)	19.43 (3.48)
Total score	72.39 (13.62)	78.03 (13.88)	54.07 (8.38)

Note: Standard Deviation (SD) is in parentheses.

To further test this hypothesis, I ran t-tests to compare Singaporean Chinese and Westerners, as well as compare Singaporean Chinese and Chinese from China. Table 18 displays the results of these T-tests, and shows that there exist significant differences between subjects from these three countries, with the only exception of liking for Axe ad between Chinese Singaporeans and Westerners. There is also a statistically significant difference in total ad liking score between these groups. Between Singaporean Chinese and Westerners, the mean difference is 5.636 (ad liking for Singaporean Chinese is lower than that for Westerners, p.05). Between Singaporean Chinese and Chinese from China, mean difference is 18.32 (larger for

Singaporean Chinese, $p < .001$). Specifically, consistent with my initial observation, Singaporean Chinese like sexually humorous ads less than Westerners while this preference is more than Chinese from China. H4 is supported.

Table 18. T-tests for liking of sexually humorous ads between groups of nationality

Ad liking	Singaporean Chinese - Westerners				Singaporean Chinese – Chinese (China)			
	<i>Mean diff.</i>	<i>t value</i>	<i>df</i>	<i>Sig.</i>	<i>Mean diff.</i>	<i>t value</i>	<i>df</i>	<i>Sig.</i>
Axe	-1.333	-1.706	130	.090	5.408*	7.229	133	.000
Ikea	-2.394*	-2.289	130	.024	6.984*	8.395	133	.000
Peugeot	-1.909*	-1.999	130	.048	5.929*	7.069	133	.000
Total Score	-5.636*	-2.355	130	.020	18.321*	9.460	133	.000

ANOVA run with nationality, level of need for humor (NFH), and level of cosmopolitanism (COS) as independent variables and total ad liking for the three sexually humorous ads as dependent variable. We can observe from Table 19 that there exists significant main nationality, cosmopolitanism (COS), as well as need for humor (NFH) effect on ad liking. However, there are also interaction effects between these three variables, suggesting possible moderating effects. Discussion about these effects will be presented in details shortly.

Table 19. ANOVA tests: effects of nationality, COS and NFH on Ad liking of sexually humorous adverts

Dependent Variable: Ad liking of sexually humorous advertisements

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	35321.573 ^a	10	3532.157	43.786	.000	.697
Intercept	380406.543	1	380406.543	4715.674	.000	.961
Nationality	9110.229	2	4555.114	56.467	.000	.373
NTCOS	2051.938	1	2051.938	25.437	.000	.118
NTNFH	1378.466	1	1378.466	17.088	.000	.083
Nationality * NTCOS	3210.798	2	1605.399	19.901	.000	.173
Nationality * NTNFH	2926.879	2	1463.439	18.141	.000	.160
NTCOS * NTNFH	1894.231	1	1894.231	23.482	.000	.110
Nationality * NTCOS * NTNFH	3789.329	1	3789.329	46.974	.000	.198
Error	15327.024	190	80.669			
Total	978849.000	201				
Corrected Total	50648.597	200				

a. R Squared = .697 (Adjusted R Squared = .681)

H5. The level of cosmopolitanism moderates the liking of humorous ads with sexual contents across different cultures.

As discussed earlier, cosmopolitanism was not found to have influence of subjects' liking of culturally congruent advertisements. This seems not to be the case when it comes to likeability of sexually humorous adverts. We can see from ANOVA results in Table 20 that there is a cosmopolitanism (COS) main effect on ad liking for all three sexually humorous ad stimuli (Axe, Ikea and Peugeot), as well as on total liking of sexually humorous ads ($F=25.43$, $p<.001$). There is also a significant nationality by cosmopolitanism (COS) two-way interaction effect on ad liking of all ads, as well as on total ad liking score. This demonstrates that the influence of cosmopolitanism (COS) is different for each nationality group (Singaporean Chinese, Chinese from China, and Westerners). To further test this, T-tests for each group of nationality were run as it will be illustrated below.

Table 20. ANOVA tests: effects of nationality, level of cosmopolitanism on Ad liking

<i>Ad liking</i>	<i>Axe</i>		<i>Ikea</i>		<i>Peugeot</i>		<i>Total</i>	
	<i>F-value</i>	<i>Sig.</i>	<i>F-value</i>	<i>Sig.</i>	<i>F-value</i>	<i>Sig.</i>	<i>F-value</i>	<i>Sig.</i>
<i>N</i>	11.082	.000	50.079	.000	62.601	.000	56.467	.000
<i>COS</i>	9.430	.002	6.400	.012	51.536	.000	25.437	.000
<i>N*COS</i>	3.580	.030	23.329	.000	23.500	.000	19.901	.000

Note:

N (Nationality)

COS (Cosmopolitanism)

Sig.: significance level

T-tests results, which can be found in Table 21, showed the difference in ad liking between two groups across three countries: one group with people who have low degree of cosmopolitanism (low cosmopolitanism (COS) group) and the other group with those who are highly cosmopolitan (high cosmopolitanism (COS) group). The results for all groups showed that high cosmopolitanism (COS) subjects favor sexually humorous ads more than low cosmopolitanism (COS) participants (mean difference for all ads are significant at $p=.000$). For Singaporean Chinese, this difference is rather large (mean difference= 20.444 , $p<.001$), showing that there is a significant distinction in ad liking of sexually humorous ads across people with low cosmopolitanism (COS) and high cosmopolitanism (COS). This difference is much smaller among Westerners (mean difference= 4.042 , $p<.001$), and this difference is not statistically significant. The difference is moderate for Chinese from China with comparison

to the other two nationality groups (mean difference=5.47, $p<.001$). The interesting findings in this aspect is that while Singaporean Chinese demonstrate high level of cosmopolitanism in general (as discussed earlier), there exists two distinct groups of people among them, with low cosmopolitanism (COS) and high cosmopolitanism (COS), with distinctively different preference for humorous with sexual contents. This can also be observed in Figure 6. The slope of the line for Singaporean Chinese is bigger compared to the other two of Chinese from China and Westerners.

Table 21. T-tests: Mean difference of Ad liking between low COS and high COS groups across nationality groups

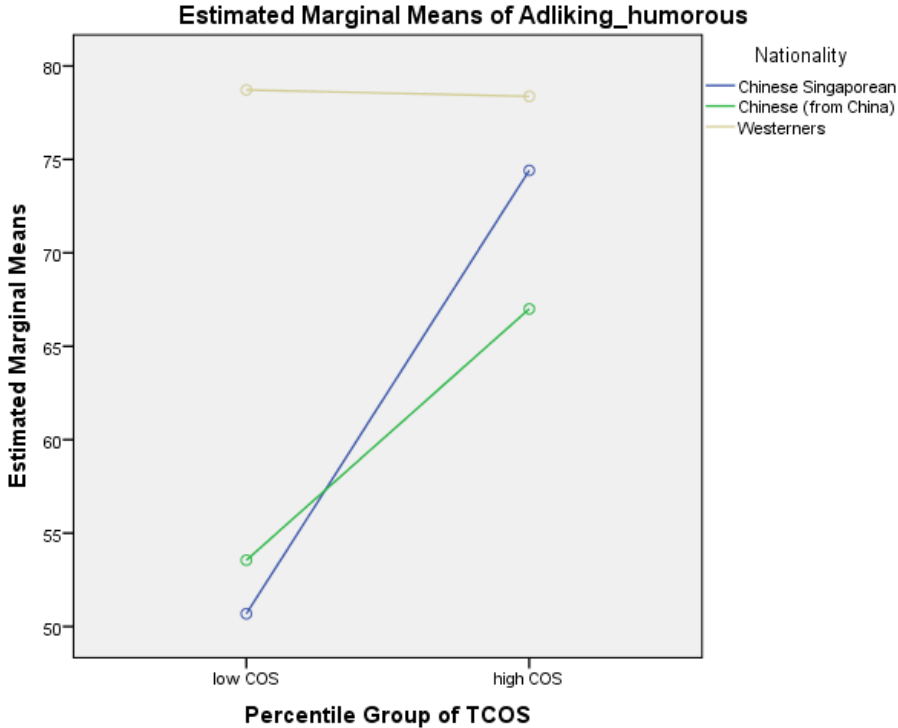
<i>Ad liking Mean diff (low COS – high COS)</i>	Singaporean Chinese		Westerners		Chinese (China)		All groups	
	Mean diff.	Sig.	Mean diff.	Sig.	Mean diff.	Sig.	Mean diff.	Sig.
Axe	-3.333	.005	-1.274	.334	-6.985	.013	-5.025	.000
Ikea	-7.806	.000	.542	.730	-1.061	.605	-6.181	.000
Peugeot	-9.306	.000	-3.310	.008	-5.470	.007	-7.154	.000
Total	-20.444	.000	-4.042	.258	-13.515	.005	-18.36	.000

Note:

Dependent variable: Ad liking of sexually humorous advertisements

Mean difference = ad liking score for low COS group – ad liking score for high COS group.

Figure 6. Ad liking based on level of cosmopolitanism across nationality groups



H6. The difference in perception of humor with sexual content in advertising between Singaporean Chinese and Westerners is influenced by individual’s need for humor (NFH).

Another construct at individual level that is expected to have moderating effect on people’s perception of humor in advertising is need for humor (NFH). ANOVA results (summarized in Table 22) revealed that there is a significant main Need for humor effect on ad liking of sexually humorous adverts in Axe and Peugeot ads ($F=18.53$ and 27.59 respectively, $p<.001$). Need for humor (NFH) also has significant main effect on the combined ad liking of sexually humorous advertisements ($F=17.08$, $p<.001$). Moreover, there appears to be a two-way nationality by Need for humor (NFH) interaction effect across all three ads ($F=7.376$, 19.538 , 19.551 , and 23.482 respectively for Axe, Ikea, Peugeot and total liking, $p<.001$), suggesting that the impact of need for humor (NFH) at individual may vary along with nationality group. Need for humor (NFH) therefore can be expected to have influence on people’s liking of these sexual humors in ads.

Table 22. ANOVA results between nationality, Need for humor & ad liking

Ad liking	Axe		Ikea		Peugeot		Total	
	<i>F-value</i>	<i>Sig.</i>	<i>F-value</i>	<i>Sig.</i>	<i>F-value</i>	<i>Sig.</i>	<i>F-value</i>	<i>Sig.</i>
N	11.082	.000	50.079	.000	62.601	.000	56.467	.000
NFH	18.532	.000	.734	.393	27.591	.000	17.088	.000
N*NFH	7.386	.001	19.538	.000	19.551	.000	23.482	.000

Note:

N (Nationality)

NFH (Need for humor)

To further test the influence of need of humor on the variant liking across three groups of nationalities, T-tests were run between two groups with low need for humor and high need for humor for each group. It can be seen that all countries display a difference between these two groups (please refer to Table 23). People with high level of need for humor like humorous ads with sexual content more than people with low need for humor; most likely because of the humor factor in the ads. In particular, Westerners appear to have a bigger gap between these two groups (Mean difference=14.54, higher for high need for humor (NFH) group, $p < .05$), compared to Singaporean Chinese (Mean difference=10.6, higher for high need for humor (NFH) group, $p < .05$) and Chinese from China (Mean difference=10.15, higher for high need for humor (NFH) group, $p < .05$). H6 is therefore supported.

Table 23. T-tests between low NFH and high NFH groups across nationality groups

<i>Ad liking</i> <i>Mean diff</i> <i>(low NFH – high NFH)</i>	Singaporean Chinese		Westerners		Chinese (from China)		All groups	
	Mean diff.	Sig.	Mean diff.	Sig.	Mean diff.	Sig.	Mean diff.	Sig.
Axe	-3.3	.004	-6.37	.023	0.51	.123	-3.05	.013
Ikea	-2.1	.012	-4.49	.034	-10.44	.007	-2.34	.245
Peugeot	-5.2	.027	-3.7	.014	-5.38	.015	-4.76	.005
Total	-10.6	.042	-14.54	.029	-5.31	.024	-10.15	.034

So far all the analysis is focused on advertising likeability. In the following section, the link between advertising liking and advertising effectiveness, measured in this study by attitude towards the brand and purchase intention, will be assessed with the support of statistical tests. Need for cognition (NFC) will also be taken into account in the analysis for its possible moderating role.

4.4 EFFECT OF AD LIKING ON ADVERTISING EFFECTIVENESS

Two hypotheses concerning the contribution of ad liking to advertising effectiveness include:

H7. *Advertising likeability is likely to lead to advertising effectiveness.*

And

H8. *The link from advertising likeability and advertising effectiveness is influenced by individual's need for cognition (NFC). Specifically, ad liking will have less positive effect on ad effectiveness for individuals with higher need for cognition (NFC).*

With regards to attitude towards the brand, as brand attitude was measured before and after exposure to the ad stimuli, here the change in brand attitude (denoted by: Δ brand attitude) was used as the dependent variable. Taking into account the possible moderating effect of individual Need for cognition (NFC) level, hierarchical multiple regressions were used to assess the ability of ad liking to predict levels of the change in brand attitude and purchase intention, after controlling for the influence of need for cognition (NFC). The results are summarized in Table 24 and Table 25 Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity and homoscedasticity. Analyses were carried out at aggregate level where all the brands were combined in one as well as for each brand. Observing the results for all brands combined (last part of Table 24), we can see that need for cognition (NFC) were entered at Step 1, explaining only 2% of the variance in the change in brand attitude. After entry of Ad liking at step 2 the total variance explained by the model as a whole was 13.9%, $p < .001$. Ad liking explained an additional 11.7% of the variance in change in brand attitude, after controlling for need for cognition (NFC) (R^2 change 0.117). In the final model, both Need for cognition and Ad liking were statistically significant with Ad liking recording a higher beta value ($\beta = .347$, $p < .001$) than Need for cognition (NFC) ($\beta = -.21$, $p < .001$). This has shown the role of ad liking in the change in brand attitude, however

Looking at each brand, a common trend found is that Ad liking was statistically significant for most brands, except for Colgate, with Beta value much higher than that of need for cognition (NFC) for most cases. In the final model, need for cognition (NFC) was statistically significant only for Peugeot ad, but again with lower beta value in comparison with Ad liking. However, as need for cognition (NFC) was significant at aggregate level with all ads

combined, the role of need for cognition (NFC), while being less influential compared to Ad liking, cannot be underemphasized.

Table 24. Regression relation of ad liking (independent variable) and Δ brand attitude (dependent variable), controlled for NFC

			R square	R square change	Standardized Coefficient (β)	Sig.
Nissan	Model 1	NFC	.033	.033	.182*	.010
	Model 2	NFC	.341	.308	.103	.078
AdLiking_Nissan		.561*			.000	
VW	Model 1	NFC	.008	.008	-.087	.220
	Model 2	NFC	.061	.054	-.069	.317
AdLiking_VW		.233*			.001	
Signal	Model 1	NFC	.053	.053	-.230*	.001
	Model 2	NFC	.521	.468	-.079	.118
AdLiking_Signal		.700*			.000	
Colgate	Model 1	NFC	.005	.005	-.068	.337
	Model 2	NFC	.006	.001	-.061	.398
AdLiking_Colgate		-.037			.611	
Axe	Model 1	NFC	.001	.001	.035	.620
	Model 2	NFC	.043	.041	-.003	.963
AdLiking_Axe		.207*			.004	
Ikea	Model 1	NFC	.000	.000	-.012	.869
	Model 2	NFC	.107	.107	-.073	.284
AdLiking_Ikea		.333*			.000	
Peugeot	Model 1	NFC	.057	.057	-.239*	.001
	Model 2	NFC	.168	.111	-.287*	.000
AdLiking_Peugeot		.337*			.000	
Total	Model 1	NFC	.022	.022	-.149*	.035
	Model 2	NFC	.139	.117	-.211*	.002
AdLiking_Total		.347*			.000	

Note: Dependent variable: Δ brand attitude

Similarly, hierarchical multiple regression was run to predict purchase intention with two independent levels ad liking and need for cognition (please refer to Table 25). Need for cognition was again entered at step 1 and explained only .3% of variance in purchase intention. Ad liking, entered at step 2, explained 9.7% of this variance. Ad liking explained an additional 9.3% of variance. At aggregate level with all combined brands, only ad liking was statistically significant with a Beta value of .311 ($p < .001$). This is consistent across all brands, suggesting the contribution of ad liking to purchase intention. Need for cognition, although having not shown significant contribution to purchase intention in combined brands value, was statistically significant in Ikea and Peugeot ads. Its beta value, however, is lower than ad liking.

Table 25. Regression relation of ad liking (independent variable) and purchase intention (dependent variable), controlled for NFC

			R square	R square change	Standardized Coefficient (β)	Sig.
Nissan	Model 1	NFC	.017	.017	.129	.069
	Model 2	NFC	.936	.919	-.008	.669
AdLiking_Nissan		.968*			.000	
VW	Model 1	NFC	.007	.007	-.086	.227
	Model 2	NFC	.887	.880	-.015	.538
AdLiking_VW		.941*			.000	
Signal	Model 1	NFC	.047	.047	-.218*	.002
	Model 2	NFC	.965	.918	-.006	.645
AdLiking_Signal		.981*			.000	
Colgate	Model 1	NFC	.031	.031	.175*	.013
	Model 2	NFC	.970	.939	-.009	.468
AdLiking_Colgate		.986*			.000	
Axe	Model 1	NFC	.000	.000	-.012	.871
	Model 2	NFC	.077	.077	-.064	.360
AdLiking_Axe		.282*			.000	
Ikea	Model 1	NFC	.079	.079	.282*	.000
	Model 2	NFC	.179	.100	.222*	.001
AdLiking_Ikea		.322*			.000	
Peugeot	Model 1	NFC	.015	.015	-.122	.084
	Model 2	NFC	.041	.026	-.145*	.040
AdLiking_Peugeot		.163*			.022	
Total	Model 1	NFC	.003	.003	.056	.426
	Model 2	NFC	.097	.093	.000	.996
AdLiking_Total		.311*			.000	

It can be concluded that H7 is supported. Specifically, ad liking may lead to a change in brand attitude. It has to be noted that the change in brand attitude across brands in this study is positive, in other words, brand attitude after the exposure was improved after exposure to the ad stimuli, as will be shown in T-tests later. This implies the positive effect of ad liking on improving brand attitude.

To further test this change in brand attitude, correlation analyses and T-tests were run to compare brand attitude before and after exposure to the ad stimuli (table 26). As observed from the correlation column in table16, there is a significant and positive correlation between pre-exposure and post-exposure brand attitude. This correlation is strong for most of the ads ($r < .5$, $p < .05$). Besides, t-tests results revealed several significant differences between pre- and post- exposure brand attitude. However, only with the exception in Signal ad with the biggest difference (mean difference = 3.094, $p < .001$), for other ads the difference is rather

small. This may imply that while ad liking could improve brand attitude, the improvement is rather small. All in all, H7 is supported, even though the causal effect of ad liking to ad effectiveness was not demonstrated strongly in this study.

Table 26. T-tests between brand attitude before and after exposure

	Correlation (r) Post-exposure & pre-exposure	Sig.	Mean difference	St. Deviation	t value	df.	Sig.
Nissan	.427*	.002	1.922*	3.230	-4.248	50	.000
Volkswagen	.612*	.000	.633	3.432	-1.290	48	.203
Signal	.493*	.000	3.094*	2.891	-7.793	52	.000
Colgate	.709*	.000	.333	3.124	.739	47	.463
Axe	.720*	.000	.935*	3.467	-3.825	200	.000
Ikea	.645*	.000	.194	2.880	.955	200	.341
Peugeot	.605*	.000	1.672*	3.323	-7.132	200	.000

Also, ad liking has positive impact on purchase intention as shown from the results of this study. With regards to Need for cognition, regression analysis suggested that while need for cognition (NFC) might moderate the effect of ad liking on brand attitude, the effect of need for cognition (NFC) on the relationship between ad liking and purchase intention seems to show mixed results. To further test this, regression with ad liking as the independent variable and change in brand attitude (for combined value of all brands) was conducted separately for low and high need for cognition (NFC) groups. It can be seen from Table 27 that there is a distinctive difference between participants with low level of need for cognition (NFC) and those with high need for cognition (NFC) with regards to Ad liking's contribution to the change in brand attitude. For those with low need for cognition (NFC), R^2 as well as Beta value of ad liking variable ($R^2=.239$, $\beta=.488$, $p<.001$) are much higher compared to those of high need for cognition (NFC) subjects ($R^2=.066$, $\beta=.257$, $p<.05$). This suggests that for people with low level of need for cognition (NFC), ad liking have stronger effects on changing brand attitude than for people with high need for cognition (NFC). A similar pattern was observed in purchase intention (Table 28). Ad liking is statistically significant only for low need for cognition (NFC) group ($R^2=.270$, $B=.519$, $p<.001$), but not for high need for cognition (NFC) group. Based on this finding, it suggests that ad liking have effects on purchase intention only for people with low level of need for cognition (NFC). This is persistent with my initial expectations. H8 is therefore supported.

Table 27. Regression relation of ad liking (independent variable) and change in brand attitude (dependent variable)

	R ²	Standardized Coefficient (β)	t-value	Sig.
Low NFC	.239	.488*	5.680	.000
High NFC	.066	.257*	2.574	.012

Table 28. Regression relation of ad liking (independent variable) and purchase intention (dependent variable)

	R ²	Standardized Coefficient (β)	t-value	Sig.
Low NFC	.270	.519*	6.169	.000
High NFC	.027	.163	1.601	.113

4.5 SUMMARY OF FINDINGS

No.	Hypothesis	Results
1	H1. Singaporean Chinese like collectivism ad appeals, while Western counterparts favor individualistic ones.	supported
2	H2. Product type moderates the likeability of culturally-congruent advertising appeals. Specifically: H2.1 For a non-personal product, appeals responsive to cultural values will be liked more than those that do not. H2.2 There will be little or no difference for a personal product	supported not supported
3	H3. The level of cosmopolitanism moderates the liking of culturally-congruent advertising appeals.	not supported
4	H4. Singaporean Chinese are less favorable towards sexually humorous ads compared to Westerners, but more favorable compared to Chinese from China.	supported
5	H5. The level of cosmopolitanism moderates the liking of humorous ads with sexual contents across different cultures.	supported
6	H6. The difference in perception of humor with sexual content in advertising between Singaporean Chinese and Westerners is influenced by individual's need for humor (NFH).	supported
7	H7. Advertising likeability is likely to lead to advertising effectiveness	supported
8	H8. The link from advertising likeability and advertising effectiveness is influenced by individual's need for cognition (NFC). Specifically, ad liking will have less positive effect on ad effectiveness for individuals with higher NFC.	supported

5. DISCUSSIONS & CONCLUSIONS

5.1 DISCUSSION

5.1.1 LIKING OF CULTURALLY CONGRUENT ADVERTISEMENTS & THE ROLE OF PRODUCT TYPE

Findings in this study have highlighted the benefits of understanding the impacts of cultural differences in advertising context, as culturally congruent advertisements are proven to be effective. Specifically, in this case, Singaporean Chinese as well as Chinese from China favor ads with collectivistic themes that focus on family values, group benefits and interdependence between individuals in the society. In contrast, Westerners prefer individualistic ad appeals that emphasize self-achievement and self-expression. This result is consistent with other studies conducted earlier between an Asian and a Western culture, most often China and the United States (Tsai & Wee-na, 1996; Wong et al, 1987; Zhang & Neelankavil, 1997). This contributes to supporting the argument that the application of Hofstede's cultural framework is still evident, at least with the collectivism – individualism dimension.

An interesting finding from this study is that the high level of cosmopolitanism (COS) of Singaporean Chinese appears to have no influence on the liking of culturally congruent advertisements. It was expected that being a highly cosmopolitan country, Singaporean Chinese would demonstrate their preference for individualistic appeals over collectivistic ones. This was expected because, as discussed in theoretical approach section, a number of studies have suggested the changes in the appeals used in ads in Eastern cultures nowadays (e.g., Lin, 2001; J. Zhang & Shavitt, 2003). For example, Zhang & Shavitt (2003) ascertained that appeals promoting youth and modernity, which are characteristically individualistic appeals, appear frequently in Chinese ads. Similarly, Tse, Belk, and Zhou (1989) found that in Hongkong ads depicted with idealized Western lifestyle are able to evoke favorable associations. Further, Tan and Farley (1987) found that Singaporean Chinese participants prefer advertisements with Western models rather than Asian ones. However, counter to hypotheses, this study has shown that despite being modern, Singaporean Chinese still lean towards the collectivistic values. They treasure family ties and this is reflected in their preferences for advertisements with collectivistic themes rather than individualistic themes. This reaffirms Cleveland's (2009) proposition that perhaps cosmopolitanism (COS) is best conceptualized as situational as the links between cosmopolitan traits and various

consumption behaviors are sometimes found to be circumstantial (Skrbis, Kendall & Woodward, 2004).

Another finding that is worth noticing concerns the role of product type in the effectiveness of different ad appeals. Particularly, not only non-personal product advertisements require cultural congruency with the target market, this is necessary for personal product as well. So even for products that are purchased and consumed in private setting such as a toothbrush, people from different cultures indicated divergent preferences for different advertising appeals. This is contradicting to findings from previous researchers in the same field, who suggested that for personal products, there is no difference in preference for ad appeals. This contrasting finding might imply potential weaknesses in my research design or the stimuli used, or it is possible that previous researchers have overlooked the role that cultural values play in people's perception in personal product advertisements. Moreover, this finding is in line with the results of Unilever Oral Care's study in China (Unilever, 2008). They measured the effect of two different TV advertisements on adults' and children's brushing habits. One of the ads is the Signal ad that was used in my study. It depicts the scene of a father and son enjoying quality time and brushing their teeth together. The other ad is a more traditional anti-cavity toothpaste advert that did not emphasize any family shared experience. The research showed that the father and son ad was enjoyable to watch, and it in fact influenced actual tooth brushing behavior. Even though the study measured different factors and the appeals were more of emotional versus functional theme, rather than collectivistic and individualistic themes as in my study, the point I want to highlight here is that even for products that are purchased and used privately such as toothpaste, ads that depict family shared values are favored in Asia and are likely to lead to a change in behavior. This result provides insights about considering cultural values in advertising for both personal and non-personal products. Failing to do so for personal products may undermine the likability for the ads of those products. So, even for those offerings which are consumed in private settings, in advertising context, there should be a fit between the ad appeal and the culture in which the ad is run.

5.1.2 DIFFERENCES IN PREFERENCES FOR HUMOROUS ADVERTISEMENTS WITH SEXUAL CONTENT ACROSS CULTURES

As discussed earlier, although being known as the most modern citizens in Asia, Singaporean Chinese are still conforming to the common Asian values; one of which is the treasuring of family values. Another characteristic of Singaporean Chinese despite this modernity is that they are still conservative, as shown in Nevo et al's (2001) study. It has to be noted however that this conservativeness is in comparison with the western culture, because compared with Chinese from China, Singaporean Chinese are more open-minded. This is consistent with the general level of cosmopolitanism for each nationality group found in this study; in which Singaporeans are more cosmopolitan than the Chinese from China, but less cosmopolitan compared to the Westerners. The conservativeness has been reflected through their attitude towards advertisements with sexually humorous content. Singaporean Chinese favor these advertisements less than their western counterparts but more than Chinese from China. This finding is as anticipated, and would provide insights for advertisers who wish to employ sexual humor in markets with different cultures. More precisely, specifically for Singapore market, the seemingly high level of modernity and open-mindedness should not be overestimated.

5.1.3 THE ROLE OF INDIVIDUAL CHARACTERISTICS

As explained in the theoretical approach, considering ad-culture congruency alone potentially results in overlooking the role of ad-self congruency, in other words, the effect of individual characteristics on ad liking. This study has proven the existence of such effects. Specifically, individual level of cosmopolitanism and need for humor moderates consumers' liking of sexually humorous advertisements.

5.1.3.1 Cosmopolitanism level (COS)

Cosmopolitanism level, or the extent to which individuals are open and willing to integrate global values into their traditional values, does not change the way Singaporean Chinese hold their collectivistic values, but it has an influence on their attitudes towards humorous ads with sexual contents. Individuals who are highly cosmopolitan have more favorable attitudes towards sexually humorous content, while those who are more traditional are less favorable to those advertisements. This is as expected especially for Singaporean Chinese and Chinese from China since their traditional values go along with being conservative and sexuality is

rather a sensitive topic. Notably, in the case of Singapore, the two groups with high or low cosmopolitanism (COS) demonstrate distinctive preference for sexually humorous advertisements. This brings us to the attention that to consider Singapore as a whole as being either conservative or open-minded will likely mislead advertising strategies. Obviously, individual differences matter.

5.1.3.2 The role of individual need for humor (NFH)

Another individual characteristic that has been shown in this study to have impact on liking of sexually humorous advertisements is the concept of need for humor (NFH). Specifically, humorous advertisements with sexual content are perceived more favorably and have better effects on ad likeability for people with high need for humor (NFH). For others who have low need for humor, using sexually humorous content in advertising might not be effective, as the probability is that these people might not perceive the content in the adverts as funny, or that even if they perceive the ads as funny, it does not make a difference on their ad liking because humor does not play a big role in their evaluation.

5.1.4 IMPACTS OF ADVERTISING LIKEABILITY ON ADVERTISING EFFECTIVENESS & THE INFLUENCE OF INDIVIDUAL NEED FOR COGNITION (NFC)

The study reaffirms the role of advertising likeability on advertising effectiveness. This finding, similar to previous research, again emphasizes the need to make advertisements likeable in order to enhance consumers' brand attitude and subsequently their purchase intention. Having said that, it does not necessarily mean advertising liking can guarantee positive brand attitude and potential purchase intent. In fact, this study has shown that the change in attitude towards brand that is brought about by ad liking is rather small. That is to say, consumers may find it difficult to be persuasive by adverts in order to change their attitudes towards the brand dramatically.

Findings in this study have also highlighted the role of individual need for cognition (NFC). It is more difficult for advertisers to affect consumers with high level of need for cognition (NFC) by advertisements in order to change their attitudes towards brands as well as purchase intention. The reason for this might be that people with high level of need for cognition (NFC) are more likely to process information in the ad with high level of elaboration, hence more cautious about claims in the ad. As mentioned in the literature review, these consumers tend

to base their evaluations on the claims from the ad and the strength of the argument. Hence, it is possibly the case that even when they like the adverts, they will devote time and effort to assess the arguments in the ad and will become skeptical to the ad if it provides a weak argument. Low need for cognition (NFC) consumers, on the other hand, tend to process information with low level of elaboration, and often base their evaluation on salient cues. Hence, their liking of an ad may have stronger effect on their attitude towards the brand and subsequently purchase intention. People's different need for cognition (NFC) presents people's different information processing routes. For example, Supphellen (2012) discussed five different processing routes in his five-route model.

5.2 CONCLUSIONS AND MANAGERIAL IMPLICATIONS

This study provides marketers with valuable insights in selecting appropriate advertisements for different markets in order to achieve maximized effectiveness. The importance of understanding cultural values has become more and more evident together with the increasing globalization. Findings from this study give certain intuitions in using culturally congruent advertisements as well as humorous advertisements with sexual content.

5.2.1 THE USE OF CULTURALLY CONGRUENT ADVERTISEMENTS

It is apparent from this study as well as previous research that cultural differences matter in consumer preferences. Despite the increasing rate of globalization entailing the opening up of many countries, along with that is the integration of culture towards the West, people from the East and the West still hold cultural values that were introduced by Hofstede in 1980. These differences in turn affect the ways consumers perceive advertisements. It is hence crucial for marketers to bear in mind these differences in order to achieve high ad liking from consumers. As discussed earlier, within cross-cultural advertising research, another stream of literature has raised the question of the shift in cultures theme that people in highly cosmopolitan cities in Asia favor. For example, Schmidt (2006) mentioned that the middle class in China is beginning to define the lifestyles of an increasingly self-confident and cosmopolitan citizenry, and the consumption patterns in the leading cities now resemble those of any big metropolis in western world. Current findings that emerge from my study add to the arguments that the increasing level of modernization in Asia has not yet changed the values that they hold since long. Even the high level of cosmopolitanism in Singapore, a city well-known for being westernized and modern, does not appear to affect Singaporean's

preference for collectivistic values such as family ties. International advertisers should take these traditional values into account when designing advertisements in the eastern markets.

5.2.2 THE USE OF HUMOROUS ADVERTISEMENTS WITH SEXUAL CONTENT

Marketers should be careful when using sexual humorous advertisements, especially in Asian markets. As shown in this study Singaporean Chinese and Chinese from China have much lower preferences for sexually humorous advertisements compared to Westerners. The ad stimuli were carefully chosen in order to avoid evoking any negative attitude to the ad from the audiences. In reality, it is wise for marketers to pay attention to the extent of sexuality contained in their ads, besides conforming to advertising standards. Negative attitude from consumers based on the ad may have negative impacts on the brand attitude. This is to say, the sexuality level in these humorous advertisements should not be beyond the level that makes the ad offensive and be perceived as ‘disliked’ commercial.

Besides, marketers should take into consideration consumers’ differences at individual level. Specifically, one of these characteristics is the level of cosmopolitanism and this may give some valuable insights about segmentation. Taking individual level differences into the analysis, it is beneficial to have a new segmenting approach. Instead of categorize customers as Asian or Western, it is probably better to group customers as Westerners, Asians and westernized Asians, i.e. Asians who are highly cosmopolitan. This might be difficult in Singapore because the country is small; this would make it difficult to segment these two groups although the study shows that there are two distinctive groups of low and highly cosmopolitans. However, in a big country such as China, people in big cities such as Shanghai or Beijing are more open and cosmopolitan, hence it might be effective to use humorous commercials with sexual content there. However, it is not advisable to entirely replicate advertisements from the West. Advertisements should be modified to suit different markets. Nevertheless, the use of sexual themes should always be with care.

The second individual characteristic that marketers should think about is Need for humor, referred to as sense of humor in everyday language. It should not be a surprise that people with high Need for humor tend to perceive humorous advertisements with sexual content more favorably than people with low Need for humor. Although this characteristic of the individuals are hard to be influenced and changed, marketers can undermine the effect of low Need for humor by conducting due diligence about the cultures with regards to the types of

humor favored in that specific country. As discussed by Eysenck (1944), different nationalities have different types of sense of humor. People from different cultures prefer different types of humors, for example, Americans prefer sexual and aggressive jokes (Nevo et al, 2001), while Chinese are more conservative and as a result less favorable to that type of jokes. McCullough & Taylor (1993) provided useful discoveries that there are types of humor that are employed without any national differences. These include puns, nonsense humor and warm humor. Using these most often and probably most widely accepted forms of humor appeal seems to be less risky when carrying out an advertisement in a new market with cultural values that are foreign to the advertisers. All in all, substantial market research which allows for employing the appropriate type of humor in a market would help to cater effectively to consumers. Alternatively, individual need for humor can be used as a base for segmentation. Specifically, marketers can identify media vehicles that are likely to draw audiences characterized by high need for humor. Using humorous advertisements in these media channels would help to cater to the right audience.

The last note for marketers is about the effect of ad liking on consumers' brand attitude and purchase intention. This study and pertinent research has proven the important role of ad liking. Nonetheless, it has to be noted as well that consumers' attitude towards the brand in some cases are persistent and hard to change. Moreover, consumers tend to be skeptical about advertisers' claims in the ads. Hence, advertising alone is not sufficient to influence consumers' brand attitude and actual purchasing behaviors. Other marketing activities should be conducted along with advertising to achieve synergizing impacts.

5.3 FURTHER FUTURE RESEARCH

Advertising in cross cultural settings is a broad and interesting topic for research in the field. With the emerging topic of ad-self congruency in pertinent research, more research should be conducted to examine on a greater scale the role of individual characteristics such as Need for cognition (NFC), Need for humor (NFH) and level of cosmopolitanism (COS).

Moreover, with regards to sexually humorous advertisements, it should be valuable to have studies which investigate the threshold extent of sexuality content contained in the ad that

may make the ad disliked by consumers across cultures. This is important as the use of humor in advertising has long been considered risky, considering the potential of this humor to cause offense to consumers (Beard, 2008). Humorous advertisements which contain elements of sexuality carry even larger potential to be perceived as offensive. Hence, it would be beneficial if advertisers know what is sufficient to be effective and where to stop.

Furthermore, as discussed in the theoretical approach section, besides need for cognition, need for humor, and cosmopolitan level, another individual attribute that might have influence on consumers' ad liking degree is the concept of affect intensity. This study did not incorporate this factor in examination due to the overloading of the number of variables in the research. Future research should attempt to measure the effect of affect intensity as well. Furthermore, the role of mood is potentially influential, especially in the case of humorous advertising. Humorous advertisements are likely to place viewers in good mood, and hence undermining the effects of Need for cognition. People feel happy and as a consequence have favorable attitude to the claims in the ad, and therefore favorable attitudes to the brand. Mood factor should be examined in a more formal study in the future.

Last but not least, as cosmopolitanism is likely correlated to age, it will be interesting to investigate the role of age in ad liking of culturally congruent advertisements as well as liking of humorous advertisements with sexual content.

5.4 LIMITATIONS

Several limitations are present that may weaken the internal validity of the study. This is due to several constraints faced during the process of this study. First of all, collectivism and individualism level were based solely on Hofstede's index and other studies rather than measuring subjects themselves. As mentioned before, this measurement was left out to avoid overloading participants with the questionnaires. It would have been better if these constructs were freshly measured in my study. However, considering Asians as collectivists and Westerners as individualists is a long tradition in pertinent research (Muk, 2007; Low & Shi, 2002; Emery & Tian, 2010, Tsai & Wee-na, 2006, Hong, Muderrisoglu & Zinkhan 1987), therefore the constructs should be reliable.

Besides, the collectivistic theme used in the stimuli displays mainly family values. These are the values that play an important role in the lives of Singaporean Chinese. The question is then will there be any difference in the finding if the theme depicts any group context but not in family settings, for example, a group of friends, colleagues or neighbors. Worth noticing is that one study conducted by Emery (2010) showed that the appeal of “family” was significantly supported as an individual appeal and not as a collective appeal. However, I chose ads with family settings as collectivistic themes because the same theme was used in a majority of past studies (Triandis et al., 1988; Childers and Rao,1992). Moreover, Gregory (1999) used similar manipulation for this construct. His ad depicted a father, mother and child shown together along with the product for the automobile ad. Besides, social psychologists for years have consistently conceptualized the collectivistic construct as the normative influence to comply to in-group (family-oriented) goals over personal (self-oriented) goals (Gregory, 1999). It is therefore convincing to use family settings as such to depict collectivistic ad appeals.

Another limitation in this study concerns the use of familiar brands in the ad stimuli. As explained earlier, this is not ideal, however is constrained by the unavailability of stimuli (video ads) which satisfy multiple conditions, such as both sexual and humorous, or collectivistic theme and personal product. Pre-exposure brand attitude is likely to affect post-exposure brand attitude, hence undermining the role of ad liking in this study. There is evidence suggesting that in cases of familiar, established brands, brand attitude tends to influence ad attitude (Mackenzie, Lutz, and Belch, 1986). Using fictitious brands would provide better estimates of ad liking’s effects. To minimize the effects of this drawback, analysis was run with the change in brand attitudes as a dependent variable. Doing this allows me to measure the extent to which ad liking contributes to changing consumers’ attitudes to the brands.

REFERENCES

- Aaker, J. L. (2000). Accessibility or Diagnosticity? Disentangling the influence of culture on persuasion processes and attitudes. *The Journal of Consumer Research*, 26.
- Aaker, J.L. & Maheswaran, D. (1997). The Effect of Cultural Orientation on Persuasion. *Journal of Consumer Research*. 24, 315-328.
- Aaker, J. L., & Schmitt, B. (2001). Culture-dependent assimilation and differentiation of the self: Preferences for consumption symbols in the United States and China. *Journal of Cross-cultural Psychology*, 32, 561–576.
- Albers-Miller, N. D. (1996). Designing cross-cultural advertising research: A closer look at paired comparisons. *International Marketing Review*, 13(5), 59-76.
- Albers-Miller, N. D., & Gelb, B. D. (1996). Business advertising appeals as a mirror of cultural dimensions: A study of eleven countries. *Journal of Advertising*, 25(4), 57-71.
- Alden, D. L., & Hoyer, W.D. (1993). An Examination of Cognitive Factors Related to Humorousness in Television Advertising. *Journal of Advertising*. 22 (Summer), 29–37.
- Alden, D. L., Hoyer, W.D, & Lee, C. (1993). Identifying Global and Culture-Specific Dimensions of Humor in Advertising: A Multinational Analysis. *Journal of Marketing*, 57 (April), 64–75.
- Alden, D. L., Steenkamp, J., & Batra, R. (2006). Consumer Attitudes Toward Marketplace Globalization: Structure, Antecedents, and Consequences. *International Journal of Research in Marketing*, 23 (3), 227–39.
- Alford F. and Alford, R. (1981). A Holo-Cultural Study of Humor. *Ethos*, 9: 149–164.
- Appadurai, A.(1990). Disjuncture and Difference in the Global Economy. *Theory Culture & Society*, 7(2/3), 295–310.
- Arnett, J.J. (2002). The psychology of globalization. *American Psychologist*, Vol. 57 No.10, pp.774-83.
- Beard, F. K. (2008). Advertising and Audience offense: the role of intentional humor. *Journal of Marketing Communications*, 14 (1), 1-17.
- Beard, F.K., & Tarpenting, D. (2005). Humorous advertising concepts and premises: generation, execution and evaluation. *Journal of Advertising Education*, 8 (2), 17–32.
- Bergkvist, L., & Rossiter, J. R. (2008). The role of ad likeability in predicting an ad's campaign performance. *Journal of Advertising*, 37 (2), 85-97.
- Biel, A.L., & Bridgewater, C.A. (1990). Attributes of likeable television commercials, *Journal of Advertising Research*, 30 (3), 38-44.
- Brock, T., Brannon, L.A., & Bridgewater, C. (1990). Message effectiveness can be increased by matching appeals to recipients' self-schemas: Laboratory demonstrations and a national field experiment. In Agres, S.J., J. Edell, & T. Dubitsky, *Emotion in advertising: Theoretical and practical explorations* (pp. 285-315). New York: Quorum Books.
- Brown, P., & Stayman, M. (1992). Antecedents and consequences of attitude toward the ad: A meta-analysis. *The Journal of consumer research*, 19, 34-51
- Cacioppo, J.T., & Petty, R.E. (1982). The Need for Cognition. *Journal of Personality and Social Psychology*, 42 (1), 116-131.
- Cacioppo, J.T., Petty, R.E., Feinstein, J.A., Blair, W. and Jarvis, G. (1996). Dispositional Differences in Cognitive Motivation - The Life and Times of Individuals Varying in Need for Cognition. *Psychological Bulletin*, 119 (2), 197-253.
- Castell, P.J., & Goldstein, J.H. (1976) Social occasions of joking: A cross cultural study. In A.J. Chapman & H.C.Foot (Eds.). *It's a funny thing humour* (pp. 193-197). Oxford, UK: Pergamon Press.
- Chang, C. (2005). The moderating influence of Ad framing for Ad-self-congruency effects. *Psychology & Marketing*, 22, 955-968.
- Chang, C. (2006). Seeing the small picture: Ad-self versus ad-culture congruency in international advertising. *Journal of Business and Psychology*, 20 (3).
- Chattopadhyay, A., & Nedungadi, P. (1990). Ad affect, brand attitude, and choice: the moderating roles of delay and involvement. *Advances in Consumer Research*, 17, 619-620.

- Cheah, P. (2006). Cosmopolitanism. *Theory, Culture & Society*, 23(2-3), 486-496.
- Childers, T. L. & Rao, A. R. (1992). The influence of familial and peer-based reference groups on consumer decisions. *Journal of Consumer Research*, 19 (September), 198-211.
- Churchill, Gilbert A. (1979). A Paradigm for Developing Better Measures of Marketing Constructs. *Journal of Marketing Research*, 16 (February), 64-73.
- Cleveland, M. et al (2010). Cosmopolitanism, individual-level values and cultural-level values: a cross-cultural study. *Journal of Business Research*, 64, 934-943.
- Clevand, M., Papadopoulou, N., & Laroche, M. (2011). Identity, demographics, and consumer behaviors: International market segmentation across product categories. *International Marketing Review*, 28(3), 244 -266
- Cline, T. W., T., Machleit, K. A., K., & Kellaris, J. (1999). Is there a need for levity?. *Society for Consumer Psychology 1998 Winter Conference, Machleit, K. A. and Campbell, M. C. (Eds.)*. Austin, Texas.
- Cline, T.W., Altsech, M.B., & Kellaris, J. (2003). When Does Humor Enhance or Inhibit Ad Responses? The Moderating Role of the Need for Humor. *Journal of Advertising* , 32(3), 31-45.
- Craig, C.S., Douglas, S.P. (2006). Beyond national culture: implications of cultural dynamics for consumer research. *International Marketing Review*, 23(3), 322-42.
- Crawford, H. J., & Gregory, G. D. (n.d.). Scale validation issues in situations of minimal cultural difference.
- Elpers, J., Mukherjee, W.A., & Hoyer, W.D (2004). Humor in Television Advertising: A Moment-to-Moment Analysis. *Journal of Consumer Research*, 31 (December), 592-598.
- Emery, C. & Tian, K.R.(2010). China compared with the US: Cultural differences and the impacts on advertising appeals. *International Journal of Marketing*, 1(1).
- Eysenck, H. (1944). National differences in "Sense of humor": Three experimental and statistical studies. *Journal of Personality* , 13 (1), 37-54.
- Fam, K. (2008). Attributes of likeable television commercials in Asia. 418-32.
- Francis, Linda (1994). Laughter, the Best Mediation: Humor as Emotional Management in Interaction. *Symbolic Interaction*, 17 (2), 147-163.
- Furrer, Olivier, Ben Shaw-Ching Liu, and D. Sudharshan (2000). The Relationships Between Culture and Service Quality Perceptions: Basis for Cross-Cultural Market Segmentation and Resource Allocation. *Journal of Service Research*, 2 (4), 355-371.
- Heath, T.B. & Gaeth, G.J. (1994). Theory and Method in the Study of Ad and Brand Attitudes: Toward Systematic model. In M. B. Clark, Attention, attitude, and affect in response to advertising (pp. 125-148). Hillsdale, N.J.: L. Erlbaum Associates.
- Gazley, A., Krisjanous, J., & Fam, K. (2012). Like it or not: differences in advertising likeability and dislikeability within Asia. *Asia Pacific Journal of Marketing and Logistics* , 24 (1), 23-40.
- Gelb, B.D., and Zinkhan, G.M. (1986). Humor and Advertising Effectiveness After Repeated Exposures to a Radio Commercial. *Journal of Advertising*, 15 (2), 15-34.
- Geuens, M., & Pelsmacker, P. (2002). The role of humor in the persuasion of individuals varying in need for cognition. *Advances in Consumer Research* , 29.
- Gregory, G.D. (1999), Assessing the impact of 'individual' and 'collective' ad appeals: a cross-cultural comparison of advertisements in the U.S. and Mexico. *Academy of Marketing Studies Journal*, 3(1).
- Gregory, G. D. & Munch, J. M. (1997). Cultural values in international advertising: An examination of familial norms and roles in Mexico. *Psychology and Marketing*, 14(2), 99-119.
- Gudykunst, W. B., Matsumoto, Y., Ting-Toomey, S., Nishida, T., Kim, K., & Heyman, S.(1996). The influence of cultural individualism-collectivism, self-construals, and individual values on communication styles across cultures. *Human Communication Research*, 22, 510-543.
- Haley, R. I., & Baldinger, A. L. (1991). The ARF copy research project. *Journal of Advertising Research*, 31(2), 11-32.
- Hall, E.T. (1976). *Beyond Culture*, New York: Doubleday
- Han, S.P., & Shavitt, S. (1994). Persuasion and culture: advertising appeals in individualistic and collectivistic societies. *Journal of Experimental Social Psychology*, 30, 326-50.

- Hannerz, U. (1990). Cosmopolitans and Locals in World Culture. *Theory, Culture, and Society*, 7 (2–3), 237–51.
- Hannerz U. (1992) Cultural complexity: studies in the social organization of meaning. New York: *Columbia University Press*; 1992.
- Hatzithomas, L.; Zotos, Y; Boutsouki,C.. (2011). Humor and cultural values in print advertising: a cross-cultural study. *International Marketing Review*, 28(1).
- Hofstede, G. (2001). Culture's Consequences (2nd. utg.). CA: *Sage, Thousand Oaks*.
- Hofstede, G., & Mooij, M. (2010). The Hofstede model, applications to global branding and advertising strategy and research. *International Journal of Advertising* , 29 (1), 85-110.
- Hong, J. W. & Zinkhan, G. M. (1995). Self-concept and advertising effectiveness: The influence of congruency, conspicuousness, and response mode. *Psychology & Marketing*, 12, 53–77.
- Hong, J. W., Muderrisoglu, A. & Zinkhan, G. M. (1987) Cultural differences and advertising expression: A comparative content analysis of Japanese and U.S. magazine advertising. *Journal of Advertising*, 16(1), 55-62.
- Hong, Y., Morris, M.W, Chiu, C.Y, and Benet-Martinez, V. (2000). Multicultural minds: A dynamic constructivistic approach to culture and cognition. *American Psychologist*.
- Hornikx, J.M.A.; O'Keefe, D.J. (2009). Adapting consumer advertising appeals to cultural values: A meta-analytic review of effects on persuasiveness and ad liking. In Beck, C.S. (ed.), *Communication Yearbook* 33, pp. 38-71, New York : Lawrence Erlbaum.
- Johar, J.S., & Sirgy, J.M. (1991). Value-expressive versus utilitarian advertising appeals: when and why to use which appeal. *Journal of Advertising*, 20 (3), 23-33.
- Keegan, W. (1989). *Global Marketing Management*. Prentice-Hall.
- Kelly, J.P. and Solomon, P.J. (1975). Humor in television advertising. *Journal of Advertising*, 4(3), 31-35.
- Kennedy, R., Sharpe, B. (2007). Do people pay more attention to likeable ads? (A preliminary examination of whether of whether ad likeability works via attitude or attention). Proceedings from the Australia New Zealand Marketing Academy Conference, Dunedin New Zealand .
- Kim U., Triandis H. C., Kagitcibasi C., Choi S., & Yoon G., (Eds.) (1994). Individualism and collectivism: Theory, Method, and Applications. *Thousand Oaks, CA: Sage*.
- Konrad G. (1984) Antipolitics. San Diego and New York: *Harcourt Brace Jovanovich*
- Lavidge, R., & Steiner, G. (1961). A model for predictive measures of advertisement effectiveness. *Journal of Marketing*.
- Koslow, S., & Costley, C. (2010). How consumer heterogeneity muddles the international advertising debate. *International Journal of Advertising*, 29 (2), pp.221-44.
- Krishnan, H. S., and Chakravarti, D. (2003). A Process Analysis of the Effects of Humorous Advertising Executions on Brand Claims Memory. *Journal of Consumer Psychology*, 13 (3), 230–245.
- Laroche M., Nepomuceno, M.V., Huang, L., & Richard, M.O. (2011). What's So Funny? The Use of Humor in Magazine Advertising in the United States, China, and France. *Journal of Advertising Research*.
- Lavidge, R.J., & Steiner, G.A. (1961). A Model for Predictive Measurement of Advertising Effectiveness. *Journal of Marketing* , 25(6), pp. 59-62.
- Lee, J.A, & Kacen, J. (1999). The relationship between independent and interdependent self-concepts and reasons for purchase. *Journal of Euromarketing*, 8(1/2), 83-99.
- Lee, Y., & Lim, E. (2008). What's funny and what's not: the moderating role of cultural orientation in ad humor. *Journal of Advertising* , 37 (2), 71-84.
- Lepkowska-White, E., Weinberger, M. and Brashear, T. (2003). A test of Ad Appeal Effectiveness in Poland and the US: The Interplay of Appeal, Product and Culture. *Journal of Advertising*, 32(3): 57–68.
- Low, S.P., & Shi, Y.Q., (2002). An exploratory study of Hofstede's cross-cultural dimensions in construction projects. *Management Decision*, 40 (1),7 - 16.
- Lutz, R.J. (1985). Affective and cognitive antecedents of Attitude toward the ad: A conceptual framework. In Psychological Processes and Advertising Effects: *Theory, Research, and*

- Application*, Linda Alwitt and Andrew Mitchell, eds. Hillsdale, NJ: Erlbaum,
- Lutz, R.J., Mackenzie, S. B. & Belch, G.E. (1983). Attitude toward the Ad as a Mediator of Advertising Effectiveness: Determinants and Consequences. *Advances in Consumer Research*, 10, 532-539.
- Mackenzie, S.B. & Lutz, R.J. (1989). An empirical examination of attitude toward the ad in an advertising pretest context. *Journal of Marketing*, 53, 48-65.
- MacKenzie, S.B., Lutz, R.J., & Belch, G.E. (1986). The Role of Attitude Toward the Ad as a Mediator of Advertising Effectiveness: A Test of Competing Explanations. *Journal of Marketing Research*, 23 (May) 130-143.
- Madonaldo, C. (2011). The effect of cultural orientation on advertising effectiveness. A comparison among Americans, Mexican-Americans, and Mexicans. *Academy of Marketing Studies Journal*.
- Markus, H. & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98, 224–253.
- Mathur, A. (1998). Incorporating Choice into an Attitudinal Framework: Cross-Cultural Extension and Additional Findings. *Journal of International Consumer Marketing*, 10 (4): 93-110.
- McCracken, Grant (1986). Culture and Consumption: A Theoretical Account of the Structure and Movement of the Cultural Meaning of Consumer Goods. *Journal of Consumer Research*, 13 (June), 71–84.
- McCullough, L. & Taylor, R. (1993). Humor in American, British and German Ads. *Industrial Marketing Management*, 22(1), pp. 17-28.
- MediaBUZZ. (2011, December). *GroupM: Global Ad Spending Up by 6.4% in 2012*. Retrieved on March 5, 2012 from <http://www.mediabuzz.com.sg/asian-emarketing/december-2011/1438-groupm-global-ad-spending-up-by-64-in-2012>.
- Miniard, P., Bhatla, S. & Rose, R. (1990). On the Formation and Relationship of Ad and brand Attitudes: An Experimental and Causal Analysis. *Journal of Marketing Research*, 27 (August), 290-303.
- Mitchell, A.A., & Olson, J.C. (1981). Are Product a Beliefs the Only Mediator of Advertising Effects on Brand Attitude. *Journal of Marketing Research*, 18 (August), 318-332.
- Moon, Y. S., & Chan, K. (2005). Advertising appeals and cultural values in television commercials: A comparison of Hongkong and Korea. *International Marketing Review*, 22 (1), 48-66.
- Muehling, D.D. (1987). An investigation of Factors underlying Attitudes towards advertising in general. *Journal of Advertising*, 16(1), 32-40.
- Muk, A. (2007). Cultural influences on adoption of SMS advertising: A study of American and Taiwanese consumers. *Journal Of Targeting, Measurement & Analysis For Marketing*, 16(1), 39-47.
- Nelson, J. E. (1987). Comment on Humor and Advertising Effectiveness After Repeated Exposures to a Radio Commercial. *Journal of Advertising*, 16 (Spring), 63–65.
- Nevo, O., Nevo, B., & Leong, S.Y (2001). Singaporean Humor: a cross-cultural and cross-gender comparison. *The Journal of General Psychology*, 128 (2), 143-156.
- Nielsen. (2011, October 3). *Global Advertising Spend Up 5.7% In Q2 2011*. Retrieved on February 2012 from <http://www.nielsen.com/us/en/insights/press-room/2011/global-ad-spend-up-in-q2-2011.html>.
- Petty, R.E., & Cacioppo, J.T. (1986). The Elaboration Likelihood Model of Persuasion. *Advances in Experimental Social Psychology*, 19, 123-205.
- Polyorat, K., & Alden, D. (2005). Self-construal and need for cognition effects on brand attitudes and purchase intentions in response to comparative asvertising in Thailand and the United States. *Journal of Advertising*, 34(1), 37-48.
- Reinhard, M.A., & Messner, M. (2009, August). The effects of source likeability and need for cognition on advertising effectiveness under explicit persuasion. *Journal of Consumer Behavior*, 179-191.
- Sadowski, C. J. (1993). An examination of the short need for cognition scale. *The Journal of Psychology*, 127, 451–454
- Sadowski, C. J., & Gulgoz, S. (1992). Internal consistency and test-retest reliability of the Need for

- Cognition Scale. *Perception and Motor Skills*, 74, 610.
- Scott, C., Klein, D.M., & Bryant, J. (1990). Consumer Response to Humor in Advertising: A Series of Field Studies Using Behavioral Observation. *Journal of Consumer Research*, 16 (March), 498–501.
- Seth, J. N. (1974). Measurement of advertising effectiveness: some theoretical considerations. *Journal of Advertising*, 3 (1), 6-11.
- Shimp, T.A. (1981). Attitude toward the Ad as a Mediator of Consumer Brand Choice. *Journal of Advertising*, 10(2), 9-15.
- Shimp, T. A. & Stuart, E. W. (2004) The role of disgust as an emotional mediator of advertising effects. *Journal of Advertising*, 33(1), pp. 54–53.
- Skrbis, Z., Kendall, G., & Woodward, I. (2004). Locating Cosmopolitanism: Between Humanist Ideal and Grounded Social Category. *Theory, Culture, and Society*, 21 (6), 115–36.
- Schmidt, V.H. (2006) Limits to growth? China's Rise and its Implications for Europe, presented at the 33rd congress of the German Sociological Association, 9-13 October 2006 in Kassel, Germany
- Smit, E.G., Van Meurs, L., Neijens, P.C. (2006, March). Effects of advertising likeability, a 10-year perspective. *Journal of Advertising Research*.
- Snyder, M., & DeBono, K. (1985). Appeals to image and claims about quality: Understanding the psychology of advertising. *Journal of Personality and Social Psychology*, 49, 586-597.
- Speck, S.P. (1991). The humorous message taxonomy: a framework for the study of humorous ads. *Journal of Current Issues and Research in Advertising*, 13(1), 1-44.
- Tadmor, C.T., Tetlock, P.E. (2006). Biculturalism: a model of the effects of second-culture exposure on acculturation and integrative complexity. *Journal of Cross-Cultural Psychology*, 37(2), 173-290.
- Taylor, C.R., Miracle, G.E., & Wilson, R.D. (1997). The impact of information level on the effectiveness of US and Korean television commercials. *Journal of Advertising*, 26(1), 1-18.
- Taylor, C.R. (2005), "Moving international advertising research forward: a new research agenda", *Journal of Advertising*, 34 (1), 7-16.
- Teng, L., & Laroche, M. (2006). Interactive Effects of Appeals, Arguments, and Competition Across North American and Chinese Cultures. *Journal of International Marketing*, 14 (4), 110-128.
- Thorson, E. (1981). Likeability: 10 years of academic research. In *Transcript Proceedings: Eighth Annual Advertising Research Foundation Copy Research Workshop*. New York: Advertising Research Foundation.
- Toncar, M.F. (2001). The use of humor in television advertising: revisiting the US–UK comparison. *International Journal of Advertising*, 20, 521–39.
- Triandis, H. C. (1985). Allocentric vs. idiocentric tendencies: Convergent and discriminant validation. *Journal of Research in Personality*, 19 (3), 95–415.
- Triandis, H. C., Bontempo, R., Villareal, M., Asai, M. & Lucca, N. (1988). Individualism and collectivism: Cross-cultural perspectives on self-ingroup relationships. *Journal of Personality and Social Psychology*, 54(2), 323-338.
- Tsai, W., & Wei-Na, L. (2006). Between and within culture variations of cultural value orientation reflected in television commercials: an exploratory study of China and the United States. *American Academy Of Advertising Conference Proceedings*, 93-102.
- Unilever. (2008, September). *Unilever Oral Care launches brush day and night campaign*: Retrieved June 5, 2012, from: <http://www.brushdayandnight.com/en-gb/why-brush-day-and-night/for-journalists/unilever-oral-care-launches-brush-day-night-campaign.aspx>
- Walker, D., & Dubitsky, T.M. (1994). Why liking matters. *Journal of Advertising Research*, No.May/June, 9-18.

- Waller, D. S. (1999) Attitudes toward offensive advertising: an Australian study. *The Journal of Consumer Marketing*, 16(3), 288–294.
- Waller, D. S., Fam, K.S., & Erdogan, B.Z. (2005) Advertising of controversial products: a cross-cultural study. *The Journal of Consumer Marketing*, 22(1), 6–13.
- Wang, C., & Mowen, J. (1997). Towards understanding of advertising appeals in Taiwanese magazine ads and its implications. *Competitiveness Review*, 7 (1), 46-57.
- Weinberger, M.G., & Campbell, L. (1991).The Use and Impact of Humor in Radio Advertising. *Journal of Advertising Research*, 30 (December/January), 44–51.
- Weinberger, M.G., and Gulas, C.S. (1992). The Impact of Humor in Advertising: A Review. *Journal of Advertising*, 21 (Winter), 35–59.
- Weinberger, M. G. & Spotts, H.E. (1989). Humor in US versus UK TV commercials: a comparison. *Journal of Advertising*, 18(2), 39–44.
- Wilson, A. & West, C. (1981) The marketing of ‘unmentionables’. *Harvard Business Review*, *Journal of Advertising*, 18(2), 39–44.
- Wong, J.W., Muderrisoglu, A., & Zinkhan, G.M.. (1987). Cultural differences and advertising expression: a comparative content analysis of Japanese and US magazine advertising. *Journal of Advertising*, 16 (1), 55-62.
- Yeğenoğlu, M. (2005). Cosmopolitanism and nationalism in a globalized world. *Ethnic and Racial Studies*, 28 (1), 103-31.
- Zhang, Y. (1996). Responses to humorous advertising: the moderating effect of need for cognition. *Journal of Advertising*, 25 (1).
- Zhang, J., & Shavitt, S. (2003). Cultural values in advertisements to the Chinese X-generation: Promoting modernity and individualism. *Journal of Advertising*, 32(1), 23–33.
- Zhang, Y., & Neelankavil, J. (1997). The influence of culture on advertising effectiveness in China and the USA: a cross-cultural study. *European Journal of Marketing*, 31 (2), 134-149
- Zhang, Y., and Gelb, B. (1996). Matching Advertising Appeals to Culture: The Influence of Products’ Use Conditions. *Journal of Advertising*, 25 (Fall), 29–46.
- Zhang, Y., Mittal, V. and Feick, L. (2002). To choose or to reject: It is up to Who I am: The impact of self-construal on decision strategy. *Asia Pacific Advances in Consumer Research*, vol.5
- Zinkhan, G. M. (1994). International Advertising: A research agenda. *Journal of Advertising*, 23 (1).



APPENDICES

APPENDIX 1. ONLINE QUESTIONNAIRE

Thank you for your participation. This survey will take about 10 minutes to complete. In this study, you will view several adverts and then tell us your opinion about these ads. Then, you will be given a separate survey conducted by a Professor from Department of Psychology in National University of Singapore. Please indicate your choice by clicking on the appropriate number. There is no right or wrong answer, it is your true opinion that counts.

- Q1. Do you know brand NISSAN? Yes (1) No (2)
- Q2. Your opinion about NISSAN:
- | | | | | | | | | |
|---------------------|-----|-----|-----|-----|-----|-----|-----|------------------|
| Dislike quite a lot | (1) | (2) | (3) | (4) | (5) | (6) | (7) | Like quite a lot |
| Unsatisfactory | (1) | (2) | (3) | (4) | (5) | (6) | (7) | Satisfactory |
| Very unappealing | (1) | (2) | (3) | (4) | (5) | (6) | (7) | Very appealing |
| Bad | (1) | (2) | (3) | (4) | (5) | (6) | (7) | Good |
| Unfavorable | (1) | (2) | (3) | (4) | (5) | (6) | (7) | Favorable |
| Poor | (1) | (2) | (3) | (4) | (5) | (6) | (7) | Excellent |
- Q3. Now, you are going to view an ad of Nissan
- Q4. I think this ad is:
- | | | | | | | | | |
|-------------|----------------------|-----|-----|-----|-----|-----|-----|-------------------|
| | Strongly
disagree | | | | | | | Strongly
agree |
| Interesting | (1) | (2) | (3) | (4) | (5) | (6) | (7) | |
| Good | (1) | (2) | (3) | (4) | (5) | (6) | (7) | |
| Likeable | (1) | (2) | (3) | (4) | (5) | (6) | (7) | |
| Favorable | (1) | (2) | (3) | (4) | (5) | (6) | (7) | |
| Pleasant | (1) | (2) | (3) | (4) | (5) | (6) | (7) | |
- Q5. Again, please tell us our opinion about NISSAN:
- | | | | | | | | | |
|---------------------|-----|-----|-----|-----|-----|-----|-----|------------------|
| Dislike quite a lot | (1) | (2) | (3) | (4) | (5) | (6) | (7) | Like quite a lot |
| Unsatisfactory | (1) | (2) | (3) | (4) | (5) | (6) | (7) | Satisfactory |
| Very unappealing | (1) | (2) | (3) | (4) | (5) | (6) | (7) | Very appealing |
| Bad | (1) | (2) | (3) | (4) | (5) | (6) | (7) | Good |
| Unfavorable | (1) | (2) | (3) | (4) | (5) | (6) | (7) | Favorable |
| Poor | (1) | (2) | (3) | (4) | (5) | (6) | (7) | Excellent |
- Q6 I would definitely intend to buy this product
- | | | | | | | | | |
|--|----------------------|-----|-----|-----|-----|-----|-----|-------------------|
| | Strongly
disagree | | | | | | | Strongly
agree |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | |
- Q7 I would absolutely consider buying
- | | | | | | | | | |
|--|-----|-----|-----|-----|-----|-----|-----|--|
| | | | | | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | |
- Q8 I would definitely expect to buy:
- | | | | | | | | | |
|--|-----|-----|-----|-----|-----|-----|-----|--|
| | | | | | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | |
- Q9. I am buying this product:
- | | | | | | | | | |
|-------------------|-----|-----|-----|-----|-----|-----|-----|----------------|
| Strongly disagree | (1) | (2) | (3) | (4) | (5) | (6) | (7) | Strongly agree |
| Unlikely | (1) | (2) | (3) | (4) | (5) | (6) | (7) | Likely |
| Improbable | (1) | (2) | (3) | (4) | (5) | (6) | (7) | Probable |
| Impossible | (1) | (2) | (3) | (4) | (5) | (6) | (7) | Possible |

For the rest of the study, we would appreciate your participation in a survey by a Professor from the Department of Psychology in National University of Singapore. This is a separate study.

- Q1 I would prefer complex to simple problems.
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q2 I like to have the responsibility of handling a situation that requires a lot of thinking
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q3 Thinking is not my idea of fun
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q4 I would rather do something that requires little thought than something that is sure to challenge my thinking abilities
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q5 I try to anticipate and avoid situations where there is likely chance I will have to think in depth about something
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q6 I find satisfaction in deliberating hard and for long hours
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q7 I only think as hard as I have to
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q8 I prefer to think about small, daily projects to long-term ones
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q9 I like tasks that require little thought once I've learned them
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q10 The idea of relying on thought to make my way to the top appeals to me
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q11 I really enjoy a task that involves coming up with new solutions to problems.
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q12 Learning new ways to think doesn't excite me very much
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q13 I prefer my life to be filled with puzzles that I must solve
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q14 The notion of thinking abstractly is appealing to me
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q15 I would prefer a task that is intellectual, difficult, and important to one that is somewhat important but does not require much thought
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q16 I feel relief rather than satisfaction after completing a task that required a lot of mental effort
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q17 It's enough for me that something gets the job done; I don't care how or why it works
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q18 I usually end up deliberating about issues even when they do not affect me personally
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q19 People expect me to say amusing things
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q20 I can crack people up with the things I say
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q21 I often come up with witty comments
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q22 I am good at thinking-up jokes or funny stories
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q23 People tell me that I am quick-witted
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q24 I often feel the need to make other people laugh
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q25 I am a connoisseur of humor

- Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q26 I prefer situations where people are free to express their senses of humor
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q27 I enjoy being with people who tell jokes or funny stories
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q28 I often read jokes and funny stories
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q29 I enjoy being around quick-witted people
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q30 I need to be with people who have a sense of humor
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q31 I enjoy being with people from other countries to learn about their views and approaches
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q32 I like to observe people of other cultures, to see what I can learn from them
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q33 I find people from other cultures stimulating
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q34 I enjoy exchanging ideas with people from other cultures or countries
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q35 I am interested in learning more about people who live in other countries
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q36 I like to learn about other ways of life.
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q37 Coming into contact with people of other cultures has greatly benefited me.
Strongly disagree (1) (2) (3) (4) (5) (6) (7) Strongly agree
- Q38 Your age:
- Q39 Your gender: Male (1) Female (2)
- Q40 Education background:
- Q41 Which city are you from?
- Q42 Nationality:
Chinese Singaporean (1) Chinese (from China) (2) Westerners (3)

APPENDIX 2. PRETEST FINDINGS

nationality_recoded

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Westerners	15	38.5	38.5	38.5
Singaporean Chinese	15	38.5	38.5	76.9
Chinese from China	9	23.1	23.1	100.0
Total	39	100.0	100.0	

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	axe_fun_amusing - axe_nofun_amu	2.949	1.638	.262	2.418	3.480	11.245	38	.000
Pair 2	axe_fun_funny - axe_nofun_funny	3.410	1.983	.318	2.767	4.053	10.739	38	.000
Pair 3	ikea_fun_amu - ikea_nofun_amu	3.538	1.603	.257	3.019	4.058	13.782	38	.000
Pair 4	ikea_fun_funny - ikea_nofun_funny	4.359	1.547	.248	3.857	4.861	17.593	38	.000
Pair 5	guinness_fun_amu - guinness_nofun_amu	2.179	1.715	.275	1.624	2.735	7.937	38	.000
Pair 6	guinness_fun_funny - guinness_nofun_funny	2.949	1.946	.312	2.318	3.580	9.463	38	.000
Pair 7	peugeot_fun_amu - peugeot_nofun_amu	2.949	1.555	.249	2.445	3.453	11.841	38	.000
Pair 8	peugeot_fun_funny - peugeot_nofun_funny	4.692	1.104	.177	4.334	5.050	26.545	38	.000
Pair 9	satis_fun_amu - satis_nofun_amu	2.692	1.542	.247	2.193	3.192	10.907	38	.000
Pair 10	satis_fun_funny - satis_nofun_funny	3.231	1.709	.274	2.677	3.785	11.809	38	.000
Pair 11	johnie_fun_amu - johnie_nofun_amu	.897	1.759	.282	.327	1.468	3.186	38	.003
Pair 12	johnie_fun_funny - johnie_nofun_funny	1.026	1.614	.258	.502	1.549	3.969	38	.000

Axe_ Westerners vs Singaporean Chinese: Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
axe_fun_amusing	Equal variances assumed	.629	.434	4.710	28	.000	1.000	.212	.565	1.435
	Equal variances not assumed			4.710	26.804	.000	1.000	.212	.564	1.436
axe_fun_funny	Equal variances assumed	.366	.550	2.200	28	.036	.733	.333	.051	1.416
	Equal variances not assumed			2.200	27.252	.036	.733	.333	.050	1.417

Axe_Singaporeans vs Chinese : Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
axe_fun_musing	Equal variances assumed	5.335	.031	3.178	22	.004	1.133	.357	.394	1.873
	Equal variances not assumed			2.639	9.734	.025	1.133	.429	.173	2.094
axe_fun_funny	Equal variances assumed	4.400	.048	2.687	22	.013	1.400	.521	.319	2.481
	Equal variances not assumed			2.392	11.799	.034	1.400	.585	.122	2.678

Ikea_ Westerners vs Singaporeans: Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
ikea_fun_amu	Equal variances assumed	.985	.330	-1.285	28	.209	-.333	.259	-.865	.198
	Equal variances not assumed			-1.285	24.510	.211	-.333	.259	-.868	.202
ikea_fun_funny	Equal variances assumed	1.350	.255	-.907	28	.372	-.267	.294	-.869	.335
	Equal variances not assumed			-.907	24.666	.373	-.267	.294	-.872	.339

Ikea Singaporeans vs Chinese (China): Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
ikea_fun_amu	Equal variances assumed	6.686	.017	5.128	22	.000	1.867	.364	1.112	2.622
	Equal variances not assumed			4.310	10.047	.002	1.867	.433	.902	2.831
ikea_fun_funny	Equal variances assumed	13.686	.001	2.688	22	.013	1.578	.587	.361	2.795
	Equal variances not assumed			2.148	8.861	.061	1.578	.735	-.088	3.244

Peugeot Westerners vs Singaporeans: Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
peugeot_fun_amu	Equal variances assumed	3.193	.085	.620	28	.540	.200	.323	-.461	.861
	Equal variances not assumed			.620	24.695	.541	.200	.323	-.465	.865
peugeot_fun_funny	Equal variances assumed	.404	.530	.956	28	.347	.200	.209	-.229	.629
	Equal variances not assumed			.956	26.736	.348	.200	.209	-.230	.630

Peugeot Singaporeans vs Chinese: Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
peugeot_fun_amu	Equal variances assumed	.070	.793	1.703	22	.103	.733	.430	-.159	1.626
	Equal variances not assumed			1.718	17.436	.104	.733	.427	-.166	1.632
peugeot_fun_funny	Equal variances assumed	4.838	.039	1.880	22	.073	.400	.213	-.041	.841
	Equal variances not assumed			1.887	17.182	.076	.400	.212	-.047	.847

CORRELATION BETWEEN 'AMUSING' AND 'FUNNY' ITEMS

Correlations

		axe_fun_amusing	axe_fun_funny
axe_fun_amusing	Pearson Correlation Sig. (2-tailed) N	1 39	.357* .026 39
axe_fun_funny	Pearson Correlation Sig. (2-tailed) N	.357* .026 39	1 39

*. Correlation is significant at the 0.05 level (2-tailed).

Correlations

		guiness_fun_amu	guiness_fun_funny
guiness_fun_amu	Pearson Correlation Sig. (2-tailed) N	1 39	.654** .000 39
guiness_fun_funny	Pearson Correlation Sig. (2-tailed) N	.654** .000 39	1 39

** . Correlation is significant at the 0.01 level (2-tailed).

Correlations

		satis_fun_amu	satis_fun_funny
satis_fun_amu	Pearson Correlation Sig. (2-tailed) N	1 39	.623** .000 39
satis_fun_funny	Pearson Correlation Sig. (2-tailed) N	.623** .000 39	1 39

** . Correlation is significant at the 0.01 level (2-tailed).

Correlations

		ikea_fun_amu	ikea_fun_funny
ikea_fun_amu	Pearson Correlation Sig. (2-tailed) N	1 39	.802** .000 39
ikea_fun_funny	Pearson Correlation Sig. (2-tailed) N	.802** .000 39	1 39

** . Correlation is significant at the 0.01 level (2-tailed).

Correlations

		peugeot_fun_amu	peugeot_fun_funny
peugeot_fun_amu	Pearson Correlation Sig. (2-tailed) N	1 39	.483** .002 39
peugeot_fun_funny	Pearson Correlation Sig. (2-tailed) N	.483** .002 39	1 39

Correlations

		johnie_fun_amu	johnie_fun_funny
johnie_fun_amu	Pearson Correlation Sig. (2-tailed) N	1 39	.804** .000 39
johnie_fun_funny	Pearson Correlation Sig. (2-tailed) N	.804** .000 39	1 39

** . Correlation is significant at the 0.01 level (2-tailed).

APPENDIX 3. SAMPLE

Nationality

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Chinese Singaporean	66	32.8	32.8	32.8
Chinese (from China)	69	34.3	34.3	67.2
Westerners	66	32.8	32.8	100.0
Total	201	100.0	100.0	

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Your age:	201	19	30	22.00	2.322
Valid N (listwise)	201				

Your gender:

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	88	43.8	43.8	43.8
Female	113	56.2	56.2	100.0
Total	201	100.0	100.0	

Education background:

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid master	71	35.3	35.3	35.3
post-doc	2	1.0	1.0	36.3
undergrad	128	63.7	63.7	100.0
Total	201	100.0	100.0	

COMPARE 3 GROUPS ON NFC; NFH; COS

Descriptive Statistics^a

	N	Mean	Std. Deviation
Total Need for Cognition	66	77.45	12.537
Total Need for Humor	66	54.50	10.195
Total Cosmopolitanism	66	39.23	5.851
Valid N (listwise)	66		

a. Nationality = Chinese Singaporean

Descriptive Statistics^a

	N	Mean	Std. Deviation
Total Need for Cognition	66	75.71	12.360
Total Need for Humor	66	55.70	10.172
Total Cosmopolitanism	66	37.92	6.057
Valid N (listwise)	66		

a. Nationality = Westerners

	N	Mean	Std. Deviation
Total Need for Cognition	69	68.39	11.217
Total Need for Humor	69	51.49	9.426
Total Cosmopolitanism	69	28.88	3.612
Valid N (listwise)	69		

a. Nationality = Chinese (from China)

APPENDIX 4. SCALE RELIABILITY CHECK

4.1 NEED FOR COGNITION (NFC)

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
I would prefer complex to simple problems.	69.42	146.695	.526	.623	.907
I like to have the responsibility of handling a situation that requires a lot of thinking	69.63	136.065	.823	.795	.898
Thinking is not my idea of fun	69.50	145.001	.641	.531	.904
I would rather do something that requires little thought than something that is sure to challenge my...	69.74	143.393	.715	.585	.902
I try to anticipate and avoid situations where there is likely chance I will have to think in depth...	69.30	147.362	.442	.418	.910
I find satisfaction in deliberating hard and for long hours	69.22	146.902	.459	.464	.909
I only think as hard as I have to	69.64	148.062	.562	.468	.906
I prefer to think about small, daily projects to long-term ones	69.37	154.974	.236	.434	.914
I like tasks that require little thought once I've learned them	69.94	144.816	.467	.570	.910
The idea of relying on thought to make my way to the top appeals to me	69.38	141.518	.713	.647	.902
I really enjoy a task that involves coming up with new solutions to problems.	68.68	147.020	.555	.529	.906
Learning new ways to think doesn't excite me very much	69.30	142.182	.683	.635	.903
I prefer my life to be filled with puzzles that I must solve	69.98	142.010	.626	.540	.904
The notion of thinking abstractly is appealing to me	69.50	142.601	.590	.564	.905
I would prefer a task that is intellectual, difficult, and important to one that is somewhat importa...	69.51	144.321	.716	.616	.903
I feel relief rather than satisfaction after completing a task that required a lot of mental effort	69.83	145.091	.595	.463	.905
It's enough for me that something gets the job done; I don't care how or why it works	69.63	139.894	.571	.584	.907
I usually end up deliberating about issues even when they do not affect me personally	69.40	147.471	.481	.430	.908

Reliability Statistics

	Cronbach's Alpha Based on Standardized Items	N of Items
Cronbach's Alpha	.911	18

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.361	-.152	.695	.847	-4.577	.024	18

4.2 NEED FOR HUMOR (NFH)

Correlation between internal & external humor

		in_NFH	ex_NFH
in_NFH	Pearson Correlation	1	.791**
	Sig. (2-tailed)		.000
	N	201	201
ex_NFH	Pearson Correlation	.791**	1
	Sig. (2-tailed)	.000	
	N	201	201

** . Correlation is significant at the 0.01 level (2-tailed).

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
People expect me to say amusing things	49.73	86.180	.613	.607	.925
I can crack people up with the things I say	49.34	83.687	.738	.572	.920
I often come up with witty comments	49.55	83.439	.798	.710	.918
I am good at thinking-up jokes or funny stories	49.54	85.809	.621	.639	.925
People tell me that I am quick-witted	49.41	84.023	.737	.659	.920
I often feel the need to make other people laugh	49.55	86.249	.636	.587	.924
I am a connoisseur of humor	49.47	83.790	.785	.730	.918
I prefer situations where people are free to express their senses of humor	49.12	85.719	.693	.643	.922
I enjoy being with people who tell jokes or funny stories	49.19	84.387	.770	.695	.919
I often read jokes and funny stories	49.41	88.533	.507	.526	.929
I enjoy being around quick-witted people	48.99	86.930	.666	.684	.923
I need to be with people who have a sense of humor	49.16	84.305	.760	.683	.919

4.3. COSMOPOLITANISM (COS)

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
I enjoy being with people from other countries to learn about their views and approaches	30.06	36.746	.851	.758	.928
I like to observe people of other cultures, to see what I can learn from them	30.37	35.134	.836	.765	.929
I find people from other cultures stimulating	30.36	35.572	.851	.736	.927
I enjoy exchanging ideas with people from other cultures or countries	30.18	37.258	.752	.704	.936
I am interested in learning more about people who live in other countries	30.26	35.273	.830	.777	.929
I like to learn about other ways of life.	30.15	37.918	.732	.560	.938
Coming into contact with people of other cultures has greatly benefited me.	30.11	36.842	.782	.716	.933

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.941	.941	7

Summary Item Statistics

	Mean	Min	Max	Range	Maximum/Minimum	Variance	N of Items
Inter-Item Correlations	.694	.579	.836	.257	1.444	.006	7

AD LIKING (FOR ALL NATIONALITY GROUPS COMBINED)

NISSAN

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.827	.831	5

Summary Item Statistics

	Mean	Min	Max	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.496	.181	.816	.635	4.509	.045	5

VW

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.953	.954	5

Summary Item Statistics

	Mean	Min	Max	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.807	.706	.926	.219	1.310	.004	5

SIGNAL

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.938	.940	5

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.760	.624	.880	.256	1.410	.004	5

COLGATE

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.906	.908	5

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.664	.488	.832	.344	1.706	.007	5

AXE

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.956	.957	5

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.815	.776	.872	.095	1.123	.001	5

IKEA

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.958	.959	5

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.823	.771	.888	.117	1.152	.001	5

PEUGEOT

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.945	.945	5

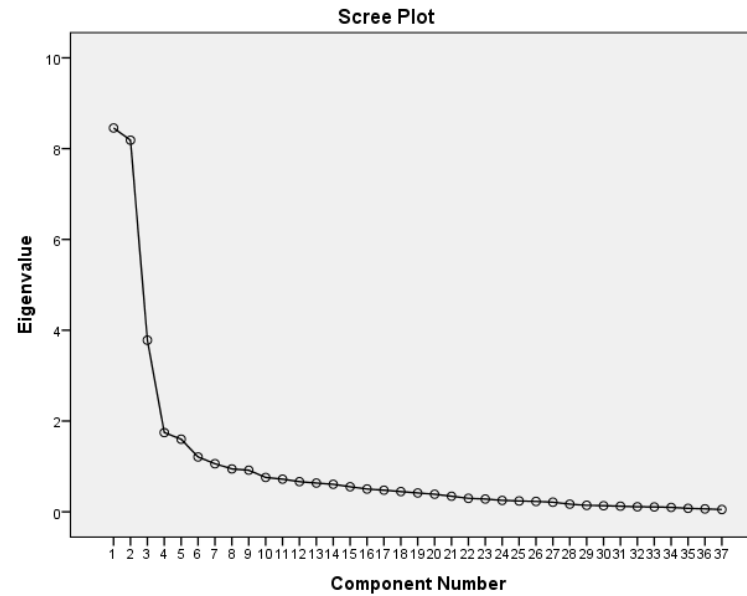
Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.774	.689	.857	.168	1.244	.004	5

APPENDIX 5. FACTOR ANALYSIS BETWEEN NFC, NFH, AND COS

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.808
Bartlett's Test of Sphericity	Approx. Chi-Square	6002.766
	df	666
	Sig.	.000



Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.455	22.851	22.851	8.455	22.851	22.851
2	8.186	22.124	44.975	8.186	22.124	44.975
3	3.781	10.218	55.193	3.781	10.218	55.193
4	1.745	4.717	59.910			
5	1.600	4.324	64.233			
6	1.209	3.267	67.501			
7	1.060	2.865	70.366			
8	.945	2.555	72.921			
9	.917	2.479	75.400			
10	.758	2.048	77.448			
11	.720	1.946	79.394			
12	.664	1.795	81.189			
13	.633	1.712	82.900			
14	.607	1.642	84.542			
15	.553	1.493	86.035			
16	.503	1.359	87.394			
17	.477	1.289	88.684			
18	.447	1.208	89.891			
19	.416	1.123	91.015			
20	.387	1.047	92.062			
21	.344	.930	92.991			
22	.298	.805	93.796			
23	.281	.761	94.557			
24	.252	.682	95.239			
25	.239	.645	95.884			
26	.229	.618	96.501			
27	.212	.572	97.074			
28	.170	.459	97.532			
29	.144	.389	97.921			
30	.134	.363	98.284			
31	.124	.335	98.619			
32	.112	.303	98.922			
33	.107	.289	99.211			
34	.098	.266	99.477			
35	.078	.211	99.688			
36	.065	.175	99.863			
37	.051	.137	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix^a

	Component		
	1	2	3
I prefer situations where people are free to express their senses of humor	.792		
I enjoy being with people who tell jokes or funny stories	.781		
I need to be with people who have a sense of humor	.779		
I find people from other cultures stimulating	.763		-.402
Coming into contact with people of other cultures has greatly benefited me.	.740		-.334
I often come up with witty comments	.723	-.303	.313
I enjoy exchanging ideas with people from other cultures or countries	.723		-.324
I enjoy being with people from other countries to learn about their views and approaches	.698		-.475
I like to observe people of other cultures, to see what I can learn from them	.673		-.508
I can crack people up with the things I say	.663	-.395	
I like to learn about other ways of life.	.659		-.419
People tell me that I am quick-witted	.638		.506
I am interested in learning more about people who live in other countries	.636	.361	-.497
I am a connoisseur of humor	.609	-.390	.434
I enjoy being around quick-witted people	.562		
I often feel the need to make other people laugh	.521	-.341	.311
I often read jokes and funny stories	.444		
I like to have the responsibility of handling a situation that requires a lot of thinking		.786	.326
I would rather do something that requires little thought than something that is sure to challenge my...		.760	
I would prefer a task that is intellectual, difficult, and important to one that is somewhat importa...		.721	
Learning new ways to think doesn't excite me very much		.718	
Thinking is not my idea of fun		.713	
The idea of relying on thought to make my way to the top appeals to me		.679	.397
It's enough for me that something gets the job done; I don't care how or why it works		.677	
The notion of thinking abstractly is appealing to me		.639	
I only think as hard as I have to		.630	
I prefer my life to be filled with puzzles that I must solve		.626	.409
I feel relief rather than satisfaction after completing a task that required a lot of mental effort		.616	
I really enjoy a task that involves coming up with new solutions to problems.		.578	
I like tasks that require little thought once I've learned them		.555	
I find satisfaction in deliberating hard and for long hours		.518	
I usually end up deliberating about issues even when they do not affect me personally		.494	
I try to anticipate and avoid situations where there is likely chance I will have to think in depth...		.438	.301
I prefer to think about small, daily projects to long-term ones			
I would prefer complex to simple problems.		.462	.617
I am good at thinking-up jokes or funny stories	.457		.560
People expect me to say amusing things	.429	-.331	.511

Extraction Method: Principal Component Analysis. 3 components extracted.

Rotated Component Matrix^a

	Component		
	1	2	3
I like to have the responsibility of handling a situation that requires a lot of thinking	.872		
The idea of relying on thought to make my way to the top appeals to me	.796		
I would prefer a task that is intellectual, difficult, and important to one that is somewhat importa...	.746		
I prefer my life to be filled with puzzles that I must solve	.730		
I would rather do something that requires little thought than something that is sure to challenge my...	.725		
Learning new ways to think doesn't excite me very much	.689		
I would prefer complex to simple problems.	.675		
I feel relief rather than satisfaction after completing a task that required a lot of mental effort	.635		
Thinking is not my idea of fun	.635		
I really enjoy a task that involves coming up with new solutions to problems.	.634		
The notion of thinking abstractly is appealing to me	.629		
I only think as hard as I have to	.564		
I usually end up deliberating about issues even when they do not affect me personally	.550		
I try to anticipate and avoid situations where there is likely chance I will have to think in depth...	.542		
It's enough for me that something gets the job done; I don't care how or why it works	.539	-.326	.354
I find satisfaction in deliberating hard and for long hours	.496		
I like tasks that require little thought once I've learned them	.484		
I prefer to think about small, daily projects to long-term ones			
I am a connoisseur of humor		.836	
People tell me that I am quick-witted		.822	
I often come up with witty comments		.807	
I am good at thinking-up jokes or funny stories		.772	
I can crack people up with the things I say		.740	
People expect me to say amusing things		.737	
I enjoy being with people who tell jokes or funny stories		.698	.440
I need to be with people who have a sense of humor		.686	.447
I often feel the need to make other people laugh		.681	
I prefer situations where people are free to express their senses of humor		.600	.549
I often read jokes and funny stories		.532	
I enjoy being around quick-witted people		.429	.397
I like to observe people of other cultures, to see what I can learn from them			.873
I enjoy being with people from other countries to learn about their views and approaches			.858
I am interested in learning more about people who live in other countries			.855
I find people from other cultures stimulating			.850
I like to learn about other ways of life.			.789
Coming into contact with people of other cultures has greatly benefited me.			.766
I enjoy exchanging ideas with people from other cultures or countries			.737

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

APPENDIX 6. CORRELATION MATRIX AT CONSTRUCT LEVEL

Correlations

		Nationality	Appeal	Product_type	Total Cosmopolitanis m	Adliking_cultur al	tAbChange_cult ural	tPI_cultural
Nationality	Pearson Correlation	1	.123*	.135*	-.076	-.112	-.170**	-.096
	Sig. (1-tailed)		.041	.028	.143	.056	.008	.088
	N	201	201	201	201	201	201	201
Appeal	Pearson Correlation	.123*	1	.015	-.128*	-.114	-.348**	.127*
	Sig. (1-tailed)	.041		.418	.035	.054	.000	.036
	N	201	201	201	201	201	201	201
Product_type	Pearson Correlation	.135*	.015	1	.032	-.021	-.026	-.142*
	Sig. (1-tailed)	.028	.418		.328	.383	.358	.022
	N	201	201	201	201	201	201	201
Total Cosmopolitanism	Pearson Correlation	-.076	-.128*	.032	1	.117*	-.021	-.073
	Sig. (1-tailed)	.143	.035	.328		.050	.386	.151
	N	201	201	201	201	201	201	201
Adliking_cultural	Pearson Correlation	-.112	-.114	-.021	.117*	1	.408**	.268**
	Sig. (1-tailed)	.056	.054	.383	.050		.000	.000
	N	201	201	201	201	201	201	201
tAbChange_cultural	Pearson Correlation	-.170**	-.348**	-.026	-.021	.408**	1	.188**
	Sig. (1-tailed)	.008	.000	.358	.386	.000		.004
	N	201	201	201	201	201	201	201
tPI_cultural	Pearson Correlation	-.096	.127*	-.142*	-.073	.268**	.188**	1
	Sig. (1-tailed)	.088	.036	.022	.151	.000	.004	
	N	201	201	201	201	201	201	201

*. Correlation is significant at the 0.05 level (1-tailed).

** . Correlation is significant at the 0.01 level (1-tailed).

Correlations

		Nationality	Total Need for Humor	Adliking_humorous	tAbChange_humorous	tPI_humorous
Nationality	Pearson Correlation	1	.048	.144*	.037	.018
	Sig. (1-tailed)		.247	.021	.301	.400
	N	201	201	201	201	201
Total Need for Humor	Pearson Correlation	.048	1	.506**	.069	.222**
	Sig. (1-tailed)	.247		.000	.164	.001
	N	201	201	201	201	201
Adliking_humorous	Pearson Correlation	.144*	.506**	1	.352**	.432**
	Sig. (1-tailed)	.021	.000		.000	.000
	N	201	201	201	201	201
tAbChange_humorous	Pearson Correlation	.037	.069	.352**	1	.366**
	Sig. (1-tailed)	.301	.164	.000		.000
	N	201	201	201	201	201
tPI_humorous	Pearson Correlation	.018	.222**	.432**	.366**	1
	Sig. (1-tailed)	.400	.001	.000	.000	
	N	201	201	201	201	201

*. Correlation is significant at the 0.05 level (1-tailed). **. Correlation is significant at the 0.01 level (1-tailed).

Correlations

		Nationality	Total Need for Cognition	total liking of all ads	tAb_change	tPI
Nationality	Pearson Correlation	1	-.056	.100	-.046	-.020
	Sig. (1-tailed)		.214	.078	.257	.390
	N	201	201	201	201	201
Total Need for Cognition	Pearson Correlation	-.056	1	.140*	-.173**	-.070
	Sig. (1-tailed)	.214		.024	.007	.162
	N	201	201	201	201	201
total liking of all ads	Pearson Correlation	.100	.140*	1	.309**	.311**
	Sig. (1-tailed)	.078	.024		.000	.000
	N	201	201	201	201	201
tAb_change	Pearson Correlation	-.046	-.173**	.309**	1	.286**
	Sig. (1-tailed)	.257	.007	.000		.000
	N	201	201	201	201	201
tPI	Pearson Correlation	-.020	-.070	.311**	.286**	1
	Sig. (1-tailed)	.390	.162	.000	.000	
	N	201	201	201	201	201

*. Correlation is significant at the 0.05 level (1-tailed). **. Correlation is significant at the 0.01 level (1-tailed)

Correlations

		Total Need for Cognition	Total Need for Humor	Total Cosmopolitanism
Total Need for Cognition	Pearson Correlation	1	-.141*	.218**
	Sig. (2-tailed)		.046	.002
	N	201	201	201
Total Need for Humor	Pearson Correlation	-.141*	1	.396**
	Sig. (2-tailed)	.046		.000
	N	201	201	201
Total Cosmopolitanism	Pearson Correlation	.218**	.396**	1
	Sig. (2-tailed)	.002	.000	
	N	201	201	201

*. Correlation is significant at the 0.05 level (2-tailed). **. Correlation is significant at the 0.01 level (2-tailed).

APPENDIX 7

ANOVA – CULTURAL CONGRUENT AD LIKING

Tests of Between-Subjects Effects

Dependent Variable: Adliking_cultural

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1774.518 ^a	11	161.320	9.570	.000	.358
Intercept	98779.548	1	98779.548	5860.024	.000	.969
Appeal	77.771	1	77.771	4.614	.033	.024
Product_type	2.549	1	2.549	.151	.698	.001
Nationality	114.148	2	57.074	3.386	.036	.035
Appeal * Product_type	82.564	1	82.564	4.898	.028	.025
Appeal * Nationality	1157.462	2	578.731	34.333	.000	.266
Product_type * Nationality	27.303	2	13.652	.810	.446	.008
Appeal * Product_type * Nationality	100.035	2	50.018	2.967	.054	.030
Error	3185.880	189	16.857			
Total	120209.000	201				
Corrected Total	4960.398	200				

a. R Squared = .358 (Adjusted R Squared = .320)

5. Appeal * Product_type

Dependent Variable: Adliking_cultural

Appeal	Product_type	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
collectivistic	personal	24.984	.590	23.821	26.148
	non-personal	23.385	.588	22.224	24.546
individualistic	personal	22.304	.606	21.109	23.499
	non-personal	23.425	.671	22.103	24.748

6. Appeal * Nationality

Dependent Variable: Adliking_cultural

Appeal	Nationality	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
collectivistic	Chinese Singaporean	26.443	.674	25.113	27.774
	Chinese (from China)	25.945	.702	24.560	27.329
	Westerners	20.167	.784	18.620	21.713
individualistic	Chinese Singaporean	22.929	.896	21.161	24.696
	Chinese (from China)	19.912	.747	18.439	21.386
	Westerners	25.753	.690	24.391	27.115

8. Appeal * Product_type * Nationality

Dependent Variable: Adliking_cultural

Appeal	Product_type	Nationality	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
collectivistic	personal	Chinese Singaporean	27.250	1.026	25.225	29.275
		Chinese (from China)	26.120	.821	24.500	27.740
		Westerners	21.583	1.185	19.245	23.921
	non-personal	Chinese Singaporean	25.636	.875	23.910	27.363
		Chinese (from China)	25.769	1.139	23.523	28.015
		Westerners	18.750	1.026	16.725	20.775
individualistic	personal	Chinese Singaporean	23.429	.896	21.661	25.196
		Chinese (from China)	19.769	1.139	17.523	22.015
		Westerners	23.714	1.097	21.550	25.879
	non-personal	Chinese Singaporean	22.429	1.552	19.368	25.490
		Chinese (from China)	20.056	.968	18.147	21.964
		Westerners	27.792	.838	26.139	29.445

APPENDIX 8. T-TEST - CULTURAL CONGRUENT AD LIKING

Independent Samples Test^a

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Adliking_cultural	Equal variances assumed	.050	.824	3.501	64	.001	3.137	.896	1.347	4.927
	Equal variances not assumed			3.453	55.214	.001	3.137	.908	1.317	4.958

a. Nationality = Chinese Singaporean

Independent Samples Test^a

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Adliking_cultural	Equal variances assumed	12.673	.001	5.659	67	.000	6.065	1.072	3.925	8.204
	Equal variances not assumed			5.438	50.265	.000	6.065	1.115	3.825	8.304

a. Nationality = Chinese (from China)

Independent Samples Test^a

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Adliking_cultural	Equal variances assumed	6.232	.015	-5.686	64	.000	-6.325	1.112	-8.548	-4.103
	Equal variances not assumed			-5.957	64.000	.000	-6.325	1.062	-8.447	-4.204

a. Nationality = Westerners

APPENDIX 9. ANOVA - CULTURAL CONGRUENT AD LIKING FOR PERSONAL AND NON-PERSONAL PRODUCT TYPE.

Tests of Between-Subjects Effects^b

Dependent Variable: Adliking_cultural

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	591.888 ^a	5	118.378	8.725	.000
Intercept	52712.377	1	52712.377	3885.340	.000
Nationality	145.251	2	72.625	5.353	.006
Appeal	169.358	1	169.358	12.483	.001
Nationality * Appeal	271.900	2	135.950	10.021	.000
Error	1288.864	95	13.567		
Total	60297.000	101			
Corrected Total	1880.752	100			

a. R Squared = .315 (Adjusted R Squared = .279) b. Product_type = personal

Tests of Between-Subjects Effects^b

Dependent Variable: Adliking_cultural

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1180.424 ^a	5	236.085	11.698	.000
Intercept	46406.990	1	46406.990	2299.537	.000
Nationality	15.882	2	7.941	.393	.676
Appeal	.034	1	.034	.002	.967
Nationality * Appeal	1054.294	2	527.147	26.121	.000
Error	1897.016	94	20.181		
Total	59912.000	100			
Corrected Total	3077.440	99			

a. R Squared = .384 (Adjusted R Squared = .351)

b. Product_type = non-personal

Estimates^a

Dependent Variable: Adliking_cultural

Nationality	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Chinese Singaporean	25.339	.611	24.126	26.553
Chinese (from China)	22.945	.630	21.694	24.195
Westerners	22.649	.725	21.210	24.087

a. Product_type = personal

Estimates^a

Dependent Variable: Adliking_cultural

Nationality	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Chinese Singaporean	24.032	.975	22.097	25.968
Chinese (from China)	22.912	.818	21.289	24.536
Westerners	23.271	.725	21.831	24.710

a. Product_type = non-personal

APPENDIX 10. ANOVA: MODERATING EFFECT OF COSMOPOLITANISM

Between-Subjects Factors

		Value Label	N
Appeal	1	collectivistic	104
	2	individualistic	97
Nationality	1	Chinese Singaporean	66
	2	Chinese (from China)	69
	3	Westerners	66
Percentile Group of TCOS	1	low COS	102
	2	high COS	99

Tests of Between-Subjects Effects

Dependent Variable: Adliking_cultural

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1565.971 ^a	11	142.361	7.927	.000
Intercept	33980.320	1	33980.320	1892.007	.000
Appeal	18.801	1	18.801	1.047	.308
Nationality	84.682	2	42.341	2.358	.097
NTCOS	.048	1	.048	.003	.959
Appeal * Nationality	668.752	2	334.376	18.618	.000
Appeal * NTCOS	2.520	1	2.520	.140	.708
Nationality * NTCOS	13.577	2	6.789	.378	.686
Appeal * Nationality * NTCOS	4.617	2	2.309	.129	.879
Error	3394.427	189	17.960		
Total	120209.000	201			
Corrected Total	4960.398	200			

a. R Squared = .316 (Adjusted R Squared = .276)

APPENDIX 11. ANOVA: SEXUALLY HUMROUS AD LIKING, INDEPENDENT VARIABLES: NATIONALITY, NFH, COS

Tests of Between-Subjects Effects

Dependent Variable: Adliking_humorous

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	35321.573 ^a	10	3532.157	43.786	.000	.697
Intercept	380406.543	1	380406.543	4715.674	.000	.961
Nationality	9110.229	2	4555.114	56.467	.000	.373
NTCOS	2051.938	1	2051.938	25.437	.000	.118
NTNFH	1378.466	1	1378.466	17.088	.000	.083
Nationality * NTCOS	3210.798	2	1605.399	19.901	.000	.173
Nationality * NTNFH	2926.879	2	1463.439	18.141	.000	.160
NTCOS * NTNFH	1894.231	1	1894.231	23.482	.000	.110
Nationality * NTCOS * NTNFH	3789.329	1	3789.329	46.974	.000	.198
Error	15327.024	190	80.669			
Total	978849.000	201				
Corrected Total	50648.597	200				

a. R Squared = .697 (Adjusted R Squared = .681)

Tests of Between-Subjects Effects

Dependent Variable:Aad_Axe

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	2878.038 ^a	10	287.804	17.858	.000	.485
Intercept	45616.481	1	45616.481	2830.388	.000	.937
Nationality	357.198	2	178.599	11.082	.000	.104
NTCOS	151.983	1	151.983	9.430	.002	.047
NTNFH	298.669	1	298.669	18.532	.000	.089
Nationality * NTCOS	115.395	2	57.698	3.580	.030	.036
Nationality * NTNFH	238.063	2	119.031	7.386	.001	.072
NTCOS * NTNFH	70.196	1	70.196	4.355	.038	.022
Nationality * NTCOS * NTNFH	18.347	1	18.347	1.138	.287	.006
Error	3062.171	190	16.117			
Total	108983.000	201				
Corrected Total	5940.209	200				

a. R Squared = .485 (Adjusted R Squared = .457)

Tests of Between-Subjects Effects

Dependent Variable:Aad_Ikea

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	5199.832 ^a	10	519.983	28.096	.000	.597
Intercept	35201.724	1	35201.724	1902.051	.000	.909
Nationality	1853.645	2	926.822	50.079	.000	.345
NTCOS	118.448	1	118.448	6.400	.012	.033
NTNFH	13.579	1	13.579	.734	.393	.004
Nationality * NTCOS	863.523	2	431.761	23.329	.000	.197
Nationality * NTNFH	723.194	2	361.597	19.538	.000	.171
NTCOS * NTNFH	552.393	1	552.393	29.847	.000	.136
Nationality * NTCOS * NTNFH	651.827	1	651.827	35.220	.000	.156
Error	3516.377	190	18.507			
Total	100407.000	201				
Corrected Total	8716.209	200				

a. R Squared = .597 (Adjusted R Squared = .575)

Tests of Between-Subjects Effects

Dependent Variable: Aad_Peugeot

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	5208.095 ^a	10	520.810	55.020	.000	.743
Intercept	46470.289	1	46470.289	4909.284	.000	.963
Nationality	1185.144	2	592.572	62.601	.000	.397
NTCOS	487.826	1	487.826	51.536	.000	.213
NTNFH	261.169	1	261.169	27.591	.000	.127
Nationality * NTCOS	444.891	2	222.445	23.500	.000	.198
Nationality * NTNFH	370.135	2	185.067	19.551	.000	.171
NTCOS * NTNFH	135.522	1	135.522	14.317	.000	.070
Nationality * NTCOS * NTNFH	1007.640	1	1007.640	106.451	.000	.359
Error	1798.502	190	9.466			
Total	122351.000	201				
Corrected Total	7006.597	200				

a. R Squared = .743 (Adjusted R Squared = .730)

APPENDIX 12. T-TEST- SEXUALLY HUMOROUS AD LIKING

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Aad_Axe	Equal variances assumed	.069	.794	7.229	133	.000	5.408	.748	3.929	6.888
	Equal variances not assumed			7.268	127.898	.000	5.408	.744	3.936	6.881
Aad_Ikea	Equal variances assumed	9.584	.002	8.395	133	.000	6.984	.832	5.339	8.630
	Equal variances not assumed			8.302	102.948	.000	6.984	.841	5.316	8.653
Aad_Peugeot	Equal variances assumed	16.365	.000	7.069	133	.000	5.929	.839	4.270	7.588
	Equal variances not assumed			6.991	103.508	.000	5.929	.848	4.247	7.611
Adliking_humoros	Equal variances assumed	12.924	.000	9.460	133	.000	18.321	1.937	14.490	22.152
	Equal variances not assumed			9.364	107.146	.000	18.321	1.956	14.443	22.200

Group Statistics

	Nationality	N	Mean	Std. Deviation	Std. Error Mean
Aad_Axe	Chinese Singaporean	66	24.06	3.770	.464
	Westerners	66	25.39	5.111	.629
Aad_Ikea	Chinese Singaporean	66	22.97	5.954	.733
	Westerners	66	25.36	6.063	.746
Aad_Peuget	Chinese Singaporean	66	25.36	5.989	.737
	Westerners	66	27.27	4.935	.607
Adliking_humoros	Chinese Singaporean	66	72.39	13.620	1.677
	Westerners	66	78.03	13.879	1.708

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Aad_Axe	Equal variances assumed	1.751	.188	-1.706	130	.090	-1.333	.782	-2.880	.213
	Equal variances not assumed			-1.706	119.576	.091	-1.333	.782	-2.881	.214
Aad_Ikea	Equal variances assumed	.233	.630	-2.289	130	.024	-2.394	1.046	-4.463	-.325
	Equal variances not assumed			-2.289	129.957	.024	-2.394	1.046	-4.463	-.325
Aad_Peuget	Equal variances assumed	.999	.319	-1.999	130	.048	-1.909	.955	-3.799	-.019
	Equal variances not assumed			-1.999	125.418	.048	-1.909	.955	-3.800	-.019
Adliking_humoros	Equal variances assumed	.493	.484	-2.355	130	.020	-5.636	2.394	-10.372	-.901
	Equal variances not assumed			-2.355	129.954	.020	-5.636	2.394	-10.372	-.901

APPENDIX 13. T-TEST - SEXUALLY HUMOROUS AD LIKING FOR LOW AND HIGH COS GROUPS

Group Statistics^a

	Percentile Group of TCOS	N	Mean	Std. Deviation	Std. Error Mean
Aad_Axe	low COS	12	21.33	1.723	.497
	high COS	54	24.67	3.841	.523
Aad_Ikea	low COS	12	16.58	8.857	2.557
	high COS	54	24.39	3.988	.543
Aad_Peugeot	low COS	12	17.75	6.580	1.899
	high COS	54	27.06	4.354	.593
Adliking_humoros	low COS	12	55.67	16.295	4.704
	high COS	54	76.11	9.745	1.326

a. Nationality = Chinese Singaporean

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Aad_Axe	Equal variances assumed	14.226	.000	-2.927	64	.005	-3.333	1.139	-5.608	-1.059
	Equal variances not assumed			-4.619	38.866	.000	-3.333	.722	-4.793	-1.874
Aad_Ikea	Equal variances assumed	22.277	.000	-4.738	64	.000	-7.806	1.648	-11.097	-4.514
	Equal variances not assumed			-2.986	12.008	.011	-7.806	2.614	-13.500	-2.111
Aad_Peugeot	Equal variances assumed	6.059	.017	-6.061	64	.000	-9.306	1.535	-12.373	-6.239
	Equal variances not assumed			-4.677	13.219	.000	-9.306	1.990	-13.597	-5.014
Adliking_humoros	Equal variances assumed	9.690	.003	-5.746	64	.000	-20.444	3.558	-27.552	-13.337
	Equal variances not assumed			-4.183	12.801	.001	-20.444	4.887	-31.019	-9.870

a. Nationality = Chinese Singaporean

Independent Samples Test^a

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Aad_Axe	Equal variances assumed	.004	.952	-.974	64	.334	-1.274	1.308	-3.887	1.340
	Equal variances not assumed			-1.035	56.949	.305	-1.274	1.231	-3.739	1.191
Aad_Ikea	Equal variances assumed	3.610	.062	.347	64	.730	.542	1.562	-2.579	3.662
	Equal variances not assumed			.399	63.986	.691	.542	1.358	-2.171	3.254
Aad_Peuget	Equal variances assumed	.729	.396	-2.750	64	.008	-3.310	1.204	-5.714	-.905
	Equal variances not assumed			-2.731	47.001	.009	-3.310	1.212	-5.748	-.871
Adliking_humoros	Equal variances assumed	.998	.322	-1.141	64	.258	-4.042	3.543	-11.120	3.036
	Equal variances not assumed			-1.220	57.848	.227	-4.042	3.312	-10.672	2.589

a. Nationality = Westerners

ALL GROUPS:

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Aad_Axe	Equal variances assumed	.330	.566	-7.351	199	.000	-5.025	.684	-6.373	-3.677
	Equal variances not assumed			-7.360	198.625	.000	-5.025	.683	-6.372	-3.679
Aad_Ikea	Equal variances assumed	.874	.351	-7.497	199	.000	-6.181	.825	-7.807	-4.555
	Equal variances not assumed			-7.502	198.919	.000	-6.181	.824	-7.806	-4.557
Aad_Peuget	Equal variances assumed	.168	.682	-10.742	199	.000	-7.154	.666	-8.468	-5.841
	Equal variances not assumed			-10.756	198.379	.000	-7.154	.665	-8.466	-5.843
Adliking_humoros	Equal variances assumed	.018	.892	-9.999	199	.000	-18.361	1.836	-21.982	-14.740
	Equal variances not assumed			-10.012	198.404	.000	-18.361	1.834	-21.978	-14.744

APPENDIX 14. T-TEST – BRAND ATTITUDE BEFORE AND AFTER STIMULI EXPOSURE

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Ab1_Nissan	20.43	51	2.500	.350
	Ab2_Nissan	22.35	51	3.375	.473
Pair 2	Ab1_VW	22.86	49	4.335	.619
	Ab2_VW	23.49	49	2.829	.404
Pair 3	Ab1_Signal	18.62	53	1.789	.246
	Ab2_Signal	21.72	53	3.319	.456
Pair 4	Ab1_Colgate	23.56	48	4.405	.636
	Ab2_Colgate	23.23	48	3.441	.497
Pair 5	Ab1_Axe	20.83	201	4.742	.335
	Ab2_Axe	21.77	201	4.506	.318
Pair 6	Ab1_Ikea	22.30	201	3.225	.227
	Ab2_Ikea	22.11	201	3.575	.252
Pair 7	Ab1_Peugeot	18.96	201	3.658	.258
	Ab2_Peugeot	20.63	201	3.809	.269

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Ab1_Nissan & Ab2_Nissan	51	.427	.002
Pair 2	Ab1_VW & Ab2_VW	49	.612	.000
Pair 3	Ab1_Signal & Ab2_Signal	53	.493	.000
Pair 4	Ab1_Colgate & Ab2_Colgate	48	.709	.000
Pair 5	Ab1_Axe & Ab2_Axe	201	.720	.000
Pair 6	Ab1_Ikea & Ab2_Ikea	201	.645	.000
Pair 7	Ab1_Peugeot & Ab2_Peugeot	201	.605	.000

Paired Samples Test

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	Ab1_Nissan - Ab2_Nissan	-1.922	3.230	.452	-2.830	-1.013	-4.248	50	.000
Pair 2	Ab1_VW - Ab2_VW	-.633	3.432	.490	-1.618	.353	-1.290	48	.203
Pair 3	Ab1_Signal - Ab2_Signal	-3.094	2.891	.397	-3.891	-2.298	-7.793	52	.000
Pair 4	Ab1_Colgate - Ab2_Colgate	.333	3.124	.451	-.574	1.240	.739	47	.463
Pair 5	Ab1_Axe - Ab2_Axe	-.935	3.467	.245	-1.418	-.453	-3.825	200	.000
Pair 6	Ab1_Ikea - Ab2_Ikea	.194	2.880	.203	-.207	.595	.955	200	.341
Pair 7	Ab1_Peugeot - Ab2_Peugeot	-1.672	3.323	.234	-2.134	-1.209	-7.132	200	.000

APPENDIX 15. REGRESSION – AD LIKING AND CHANGE IN BRAND ATTITUDE

Total

Model Summary^c

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.149 ^a	.022	.017	7.258532	.022	4.492	1	199	.035
2	.372 ^b	.139	.130	6.829577	.117	26.783	1	198	.000

a. Predictors: (Constant), Percentile Group of TNFC

b. Predictors: (Constant), Percentile Group of TNFC, total liking of all ads

c. Dependent Variable: tAb_change

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	7.001	1.599		4.379	.000					
	Percentile Group of TNFC	-2.172	1.025	-.149	-2.119	.035	-.149	-.149	-.149	1.000	1.000
2	(Constant)	-5.206	2.798		-1.861	.064					
	Percentile Group of TNFC	-3.089	.981	-.211	-3.150	.002	-.149	-.218	-.208	.967	1.034
	total liking of all ads	.148	.029	.347	5.175	.000	.309	.345	.341	.967	1.034

a. Dependent Variable: tAb_change

NISSAN

Model Summary^c

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.182 ^a	.033	.028	1.79369	.033	6.829	1	199	.010
2	.584 ^b	.341	.334	1.48448	.308	92.536	1	198	.000

a. Predictors: (Constant), Percentile Group of TNFC

b. Predictors: (Constant), Percentile Group of TNFC, Aad_Nissan

c. Dependent Variable: AbChange_Nissan

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-.490	.395		-1.241	.216					
	Percentile Group of TNFC	.662	.253	.182	2.613	.010	.182	.182	.182	1.000	1.000
2	(Constant)	-.645	.327		-1.971	.050					
	Percentile Group of TNFC	.375	.212	.103	1.771	.078	.182	.125	.102	.980	1.020
	Aad_Nissan	.097	.010	.561	9.620	.000	.575	.564	.555	.980	1.020

a. Dependent Variable: AbChange_Nissan

VW

Model Summary^c

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.087 ^a	.008	.003	1.70109	.008	1.511	1	199	.220
2	.248 ^b	.061	.052	1.65840	.054	11.377	1	198	.001

a. Predictors: (Constant), Percentile Group of TNFC

b. Predictors: (Constant), Percentile Group of TNFC, Aad_VW

c. Dependent Variable: AbChange_VW

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.590	.375		1.576	.117					
	Percentile Group of TNFC	-.295	.240	-.087	-1.229	.220	-.087	-.087	-.087	1.000	1.000
2	(Constant)	.287	.376		.764	.446					
	Percentile Group of TNFC	-.236	.235	-.069	-1.003	.317	-.087	-.071	-.069	.994	1.006
	Aad_VW	.036	.011	.233	3.373	.001	.238	.233	.232	.994	1.006

a. Dependent Variable: AbChange_VW

SIGNAL

Model Summary^c

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.230 ^a	.053	.048	1.96117	.053	11.128	1	199	.001
2	.722 ^b	.521	.516	1.39852	.468	193.330	1	198	.000

a. Predictors: (Constant), Percentile Group of TNFC

b. Predictors: (Constant), Percentile Group of TNFC, Aad_Signal

c. Dependent Variable: AbChange_Signal

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	2.181	.432		5.049	.000					
	Percentile Group of TNFC	-.924	.277	-.230	-3.336	.001	-.230	-.230	-.230	1.000	1.000
2	(Constant)	.459	.332		1.382	.169					
	Percentile Group of TNFC	-.317	.202	-.079	-1.570	.118	-.230	-.111	-.077	.954	1.049
	Aad_Signal	.123	.009	.700	13.904	.000	.718	.703	.684	.954	1.049

a. Dependent Variable: AbChange_Signal

COLGATE

Model Summary^c

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.068 ^a	.005	.000	1.52135	.005	.924	1	199	.337
2	.077 ^b	.006	-.004	1.52419	.001	.259	1	198	.611

a. Predictors: (Constant), Percentile Group of TNFC

b. Predictors: (Constant), Percentile Group of TNFC, Aad_Colgate

c. Dependent Variable: AbChange_Colgate

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.226	.335		.673	.502					
	Percentile Group of TNFC	-.207	.215	-.068	-.961	.337	-.068	-.068	-.068	1.000	1.000
2	(Constant)	.225	.336		.671	.503					
	Percentile Group of TNFC	-.186	.219	-.061	-.848	.398	-.068	-.060	-.060	.965	1.036
	Aad_Colgate	-.006	.011	-.037	-.509	.611	-.048	-.036	-.036	.965	1.036

a. Dependent Variable: AbChange_Colgate

AXE

Model Summary^c

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.035 ^a	.001	-.004	3.47365	.001	.246	1	199	.620
2	.206 ^b	.043	.033	3.40965	.041	8.541	1	198	.004

a. Predictors: (Constant), Percentile Group of TNFC

b. Predictors: (Constant), Percentile Group of TNFC, Aad_Axe

c. Dependent Variable: AbChange_Axe

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.576	.765		.752	.453					
	Percentile Group of TNFC	.243	.491	.035	.496	.620	.035	.035	.035	1.000	1.000
2	(Constant)	-2.011	1.161		-1.732	.085					
	Percentile Group of TNFC	-.023	.490	-.003	-.046	.963	.035	-.003	-.003	.965	1.036
	Aad_Axe	.132	.045	.207	2.923	.004	.206	.203	.203	.965	1.036

a. Dependent Variable: AbChange_Axe

IKEA

Model Summary^c

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.012 ^a	.000	-.005	2.88751	.000	.027	1	199	.869
2	.327 ^b	.107	.098	2.73585	.107	23.674	1	198	.000

a. Predictors: (Constant), Percentile Group of TNFC

b. Predictors: (Constant), Percentile Group of TNFC, Aad_Ikea

c. Dependent Variable: AbChange_Ikea

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-.095	.636		-.149	.882					
	Percentile Group of TNFC	-.067	.408	-.012	-.165	.869	-.012	-.012	-.012	1.000	1.000
2	(Constant)	-2.670	.802		-3.329	.001					
	Percentile Group of TNFC	-.422	.393	-.073	-1.073	.284	-.012	-.076	-.072	.966	1.036
	Aad_Ikea	.145	.030	.333	4.866	.000	.319	.327	.327	.966	1.036

a. Dependent Variable: AbChange_Ikea

PEUGEOT

Model Summary^c

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.239 ^a	.057	.052	3.23484	.057	12.037	1	199	.001
2	.410 ^b	.168	.160	3.04570	.111	26.483	1	198	.000

a. Predictors: (Constant), Percentile Group of TNFC

b. Predictors: (Constant), Percentile Group of TNFC, Aad_Peugeot

c. Dependent Variable: AbChange_Peugeot

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	4.013	.712		5.633	.000					
	Percentile Group of TNFC	-1.585	.457	-.239	-3.469	.001	-.239	-.239	-.239	1.000	1.000
2	(Constant)	-.048	1.036		-.047	.963					
	Percentile Group of TNFC	-1.903	.435	-.287	-4.379	.000	-.239	-.297	-.284	.980	1.021
	Aad_Peugeot	.189	.037	.337	5.146	.000	.296	.343	.334	.980	1.021

a. Dependent Variable: AbChange_Peugeot

APPENDIX16. REGRESSION AD LIKING AND PURCHASE INTENTION

Total

Model Summary^c

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.056 ^a	.003	-.002	12.083220	.003	.636	1	199	.426
2	.311 ^b	.097	.087	11.532124	.093	20.474	1	198	.000

a. Predictors: (Constant), Percentile Group of TNFC

b. Predictors: (Constant), Percentile Group of TNFC, total liking of all ads

c. Dependent Variable: tPI

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	99.601	2.661		37.425	.000					
	Percentile Group of TNFC	1.361	1.706	.056	.798	.426	.056	.056	.056	1.000	1.000
2	(Constant)	81.579	4.724		17.270	.000					
	Percentile Group of TNFC	.008	1.656	.000	.005	.996	.056	.000	.000	.967	1.034
	total liking of all ads	.218	.048	.311	4.525	.000	.311	.306	.306	.967	1.034

a. Dependent Variable: tPI

Nissan

Model Summary^c

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.129 ^a	.017	.012	11.377	.017	3.349	1	199	.069
2	.967 ^b	.936	.935	2.913	.919	2836.802	1	198	.000

a. Predictors: (Constant), Percentile Group of TNFC

b. Predictors: (Constant), Percentile Group of TNFC, Aad_Nissan

c. Dependent Variable: PI_Nissan

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	2.088	2.506		.833	.406					
	Percentile Group of TNFC	2.940	1.607	.129	1.830	.069	.129	.129	.129	1.000	1.000
2	(Constant)	.408	.642		.635	.526					
	Percentile Group of TNFC	-.178	.416	-.008	-.428	.669	.129	-.030	-.008	.980	1.020
	Aad_Nissan	1.054	.020	.968	53.262	.000	.967	.967	.959	.980	1.020

a. Dependent Variable: PI_Nissan

VW

Model Summary^c

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.086 ^a	.007	.002	11.414	.007	1.467	1	199	.227
2	.942 ^b	.887	.886	3.856	.880	1545.939	1	198	.000

a. Predictors: (Constant), Percentile Group of TNFC

b. Predictors: (Constant), Percentile Group of TNFC, Aad_VW

c. Dependent Variable: PI_VW

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	9.238	2.514		3.675	.000					
	Percentile Group of TNFC	-1.952	1.612	-.086	-1.211	.227	-.086	-.086	-.086	1.000	1.000
2	(Constant)	1.024	.875		1.171	.243					
	Percentile Group of TNFC	-.337	.546	-.015	-.617	.538	-.086	-.044	-.015	.994	1.006
	Aad_VW	.988	.025	.941	39.318	.000	.942	.942	.938	.994	1.006

a. Dependent Variable: PI_VW

SIGNAL

Model Summary^c

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.218 ^a	.047	.043	11.456	.047	9.912	1	199	.002
2	.982 ^b	.965	.965	2.193	.918	5230.579	1	198	.000

a. Predictors: (Constant), Percentile Group of TNFC

b. Predictors: (Constant), Percentile Group of TNFC, Aad_Signal

c. Dependent Variable: PI_Signal

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	14.436	2.523		5.721	.000					
	Percentile Group of TNFC	-5.093	1.618	-.218	-3.148	.002	-.218	-.218	-.218	1.000	1.000
2	(Constant)	.386	.521		.742	.459					
	Percentile Group of TNFC	-.146	.317	-.006	-.461	.645	-.218	-.033	-.006	.954	1.049
	Aad_Signal	1.005	.014	.981	72.323	.000	.982	.982	.958	.954	1.049

a. Dependent Variable: PI_Signa

COLGATE

Model Summary^c

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.175 ^a	.031	.026	11.853	.031	6.282	1	199	.013
2	.985 ^b	.970	.969	2.103	.939	6124.011	1	198	.000

a. Predictors: (Constant), Percentile Group of TNFC

b. Predictors: (Constant), Percentile Group of TNFC, Aad_Colgate

c. Dependent Variable: PI_Colgate

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.443	2.611		.170	.865					
	Percentile Group of TNFC	4.195	1.674	.175	2.506	.013	.175	.175	.175	1.000	1.000
2	(Constant)	.484	.463		1.046	.297					
	Percentile Group of TNFC	-.220	.302	-.009	-.727	.468	.175	-.052	-.009	.965	1.036
	Aad_Colgate	1.205	.015	.986	78.256	.000	.985	.984	.969	.965	1.036

a. Dependent Variable: PI_Colgate

AXE

Model Summary^c

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.012 ^a	.000	-.005	6.260	.000	.026	1	199	.871
2	.277 ^b	.077	.067	6.031	.077	16.414	1	198	.000

a. Predictors: (Constant), Percentile Group of TNFC

b. Predictors: (Constant), Percentile Group of TNFC, Aad_Axe

c. Dependent Variable: PI_Axe

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	25.724	1.379		18.656	.000					
	Percentile Group of TNFC	-.143	.884	-.012	-.162	.871	-.012	-.012	-.012	1.000	1.000
2	(Constant)	19.383	2.053		9.442	.000					
	Percentile Group of TNFC	-.796	.867	-.064	-.918	.360	-.012	-.065	-.063	.965	1.036
	Aad_Axe	.323	.080	.282	4.051	.000	.270	.277	.277	.965	1.036

a. Dependent Variable: PI_Axe

IKEA

Model Summary^c

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.282 ^a	.079	.075	4.037	.079	17.139	1	199	.000
2	.423 ^b	.179	.171	3.821	.100	24.094	1	198	.000

a. Predictors: (Constant), Percentile Group of TNFC

b. Predictors: (Constant), Percentile Group of TNFC, Aad_Ikea

c. Dependent Variable: PI_Ikea

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	22.926	.889		25.782	.000					
	Percentile Group of TNFC	2.360	.570	.282	4.140	.000	.282	.282	.282	1.000	1.000
2	(Constant)	19.297	1.120		17.227	.000					
	Percentile Group of TNFC	1.860	.549	.222	3.387	.001	.282	.234	.218	.966	1.036
	Aad_Ikea	.204	.042	.322	4.909	.000	.363	.329	.316	.966	1.036

a. Dependent Variable: PI_Ikea

PEUGEOT

Model Summary^c

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.122 ^a	.015	.010	3.856	.015	3.017	1	199	.084
2	.202 ^b	.041	.031	3.814	.026	5.363	1	198	.022

a. Predictors: (Constant), Percentile Group of TNFC

b. Predictors: (Constant), Percentile Group of TNFC, Aad_Peugeot

c. Dependent Variable: PI_Peugeot

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	24.746	.849		29.137	.000					
	Percentile Group of TNFC	-.946	.544	-.122	-1.737	.084	-.122	-.122	-.122	1.000	1.000
2	(Constant)	22.457	1.297		17.311	.000					
	Percentile Group of TNFC	-1.125	.544	-.145	-2.067	.040	-.122	-.145	-.144	.980	1.021
	Aad_Peugeot	.107	.046	.163	2.316	.022	.142	.162	.161	.980	1.021

a. Dependent Variable: PI_Peugeot

APPENDIX 17. T-TEST - COMPARE HIGH & LOW NFC IN THE RELATION BETWEEN AD LIKING & AD EFFECTIVENESS

Model Summary^{b,c}

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.488 ^a	.239	.231	5.168129	.239	32.267	1	103	.000

a. Predictors: (Constant), total liking of all ads

b. Percentile Group of TNFC = low NFC

c. Dependent Variable: tAb_change

Coefficients^{a,b}

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics		
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF	
1	(Constant)	-11.712	2.955		-3.963	.000						
	total liking of all ads	.186	.033	.488	5.680	.000	.488	.488	.488	1.000	1.000	

a. Percentile Group of TNFC = low NFC

b. Dependent Variable: tAb_change

Model Summary^{b,c}

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.257 ^a	.066	.056	8.263762	.066	6.625	1	94	.012

a. Predictors: (Constant), total liking of all ads

b. Percentile Group of TNFC = high NFC

c. Dependent Variable: tAb_change

Coefficients^{a,b}

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-8.578	4.445		-1.930	.057		
	total liking of all ads	.118	.046	.257	2.574	.012	1.000	1.000

a. Percentile Group of TNFC = high NFC

b. Dependent Variable: tAb_change

Model Summary^{b,c}

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.519 ^a	.270	.263	8.769677	.270	38.051	1	103	.000

a. Predictors: (Constant), total liking of all ads

b. Percentile Group of TNFC = low NFC

c. Dependent Variable: tPI

Coefficients^{a,b}

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics		
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF	
1	(Constant)	70.483	5.015		14.055	.000						
	total liking of all ads	.343	.056	.519	6.169	.000	.519	.519	.519	1.000	1.000	

a. Percentile Group of TNFC = low NFC

b. Dependent Variable: tPI

Model Summary^{b,c}

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.163 ^a	.027	.016	13.731437	.027	2.562	1	94	.113

a. Predictors: (Constant), total liking of all ads

b. Percentile Group of TNFC = high NFC

c. Dependent Variable: tPI

Coefficients^{a,b}

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	90.715	7.386		12.281	.000		
	total liking of all ads	.122	.076	.163	1.601	.113	1.000	1.000

a. Percentile Group of TNFC = high NFC

b. Dependent Variable: tPI

