

## **CHAPTER 4**

### **Research Methodology**

#### **4.1 Introduction**

This chapter describes research methodology used to investigate propositions and hypotheses described in Chapter 3. Chapter 4 comprises five main sections, discussing research design, sampling plan, questionnaire and scale development, data collection by mail survey and drop-off survey, and data analysis procedures.

#### **4.2 Research Design**

The study's research design focused on gathering and analyzing data related to core cultural values, ritual practices, ethnicity, consumption attitudes, and consumption intentions collected from random samples in a population comprising Ethnic Thai, Chinese Thai, and Mixed Ethnic Thai individuals. The research design used a field survey to collect quantitative data through self-report questionnaires completed by population members. Data were collected over a three-month period, beginning June 26, 2005 and ending August 30, 2005.

Prior to data collection, a sampling plan was developed that defined the population of interest and described the study's sampling frame, unit of analysis, and sample size. The definition of the population of interest addressed issues faced in choosing respondents' geographic locations for data collection. Sampling frame decisions included procedures used to identify and reach the population of interest in an efficient manner. Unit of analysis decisions focused on screening techniques to identify members of the population from other Thai residents. Sample size decisions concerned estimates of the number of respondents needed to provide adequate power in subsequent data analyses, based on expected response rates.

Data from returned questionnaires were analyzed using confirmatory factor analyses and analysis of variance to examine relationships between core cultural values, consumption

attitudes, consumption intentions, ritual practices, and ethnicity. Analysis began with a series of confirmatory factor analyses as a rigorous investigation of measurement properties for the measures of core cultural values. Once acceptable measures were obtained, analysis proceeded with tests related to propositions and hypotheses described in Chapter 3 and an investigation into the nomological validity of the core cultural value scales. Details on all these aspects of the research design follow in the remainder of this chapter, except for details regarding data analysis and results that will be described in Chapter 5.

### **4.3 Sampling Plan**

Various alternatives were explored and compared in order to reach the population of interest in an efficient manner. Sampling plan decisions were weighed against various research constraints such as study completion time, costs, and representative scope prior to deciding on the best plan. Four sub-issues were addressed at this stage: population of interest, sampling frame, unit of analysis, and sample size.

#### **4.3.1 Population of Interest**

Because the population under study includes Ethnic Thai, Chinese Thai, and Mixed Ethnic Thai individuals, the general population of interest can be defined simply as adult Thai Nationals, currently about 63.1 million people. The Ethnic Thai and Mixed Ethnic Thai populations can be found just about anywhere in Thailand as these populations live across the country (although the majority of Ethnic Thai and Mixed Ethnic Thai individuals live in the Northeast region). The Chinese Thai population tends to concentrate in major cities, such as Bangkok, Chiang Mai, Hat Yai, Phuket, and Udon-Thani. The largest city in Thailand is Bangkok with a population estimated variously at 10 to 14 million people.

No current government report could be found that estimates the size of Chinese Thai population in Thailand. Many Chinese Thai individuals are third or fourth generation children of early Chinese immigrants who arrived in Thailand during the late 19<sup>th</sup> and

early 20<sup>th</sup> centuries. By the third generation, these individuals have become recognized by the Kingdom of Thailand as full Thai citizens. Although the Office of Statistics still collects data on a continuing basis, it keeps track only of the latest immigrants classified by ethnicity and country; it no longer keeps track of the total number of past immigrants, specifically descendants of Chinese immigrants. Thus, local scholars were contacted for their estimate of the current population of descendants of Chinese immigrants. This effort produced an estimate of about 14 percent of Thailand's entire population or 8.4 million people.

Considering issues in study completion time and study size, the chosen population of interest therefore is defined as adult individuals residing in Bangkok and its vicinity areas. Because of their common Bangkok location, members of this population will be somewhat more homogeneous on research variables of interest than the population of all adult Thais. Further, members of this population will be generally better educated and earn higher incomes than people living elsewhere in Thailand. Together, these two characteristics of the chosen population of interest imply a restriction in range limitation to this study, described in Chapter 6.

#### **4.3.2 Sampling Frames**

With about 8.4 million Chinese Thai individuals living across the country, the sampling frame for Chinese Thai sample had to be clearly specified and feasible to reach. The issue with regard to locating Ethnic Thais individuals was less problematic in that they can be easily located and contacted. Various alternatives were explored and compared in order to best reach these two primary target groups. Two directories were finally selected as sampling frames. One was obtained from the Electricity Generating Authority of Thailand (EGAT) and the other from the Teochiu Chinese Association.

To increase chances of collecting data from Ethnic Thai and Mixed Ethnic Thai individuals, a decision was made to use EGAT to provide the study's first sampling frame. EGAT (<http://www.egat.co.th>) is a state-owned electricity generating authority

that supplies electrical power to households, offices, and industries nationwide. The enterprise was established on May 1, 1969 and performs four basic functions:

- 1) To generate, acquire, and transmit energy to the Metropolitan Electricity Authority (MEA), the Provincial Electricity (PEA), other electric energy consumers, and neighboring countries.
- 2) To undertake various activities concerning electric energy, including securing energy sources derived from natural resources for the production of electric energy and other activities that promote the purposes of EGAT.
- 3) To undertake businesses concerning electric energy and other businesses concerning the activities of EGAT, or collaborate with other persons for these activities.
- 4) To produce and sell lignite or collaborate with other persons for this activity.

The actual sampling frame used was the payroll database of EGAT.

Chinese Thai respondents were recruited from a Chinese surname association, the Teochiu Chinese Association. The Teochiu Chinese Association is the largest overseas Chinese Thai speaking dialect association in Thailand, founded in 1938. In early days, the Association symbolized the unity of Teochiu dialect speaking immigrants in Thailand and assisted its members with their daily problems. Today, the Association performs four functions:

- 1) To promote greater cooperation between the Ethnic Thai and Chinese Thai communities.
- 2) To aid in various social charity works in Thailand.
- 3) To support Thai educational institutions, wherever possible such as founding bilingual Chinese Thai schools or normal curriculum Thai schools, including giving scholarships to underprivileged students.
- 4) To give relevant information regarding Chinese heritage and Chinese culture to all individuals and organizations.

The second sampling frame was taken from membership profiles contained in directories at the Association.

### **4.3.3 Unit of Analysis**

To ensure correct collection of data from each unit of analysis, a screening process was developed to identify the ethnic identities of respondents. The screening process ensured that Ethnic Thai and Chinese Thai respondents did not have a history of cross-intermarriage and, thus, established validity in measuring “true” ethnicity for each ethnic group. Cross-intermarriage between Ethnic Thai and Chinese Thai individuals is quite common in Thailand.

Ethnic identities were assessed via a family tree diagram appearing on page one of the questionnaire by respondents circling boxes to describe their respective ethnicities (See Appendix 7 under respondent screening questions). The family tree began with the respondent identifying his or her ethnicity and continued back two generations. Ethnic Thai respondents were expected to identify themselves by consistently circling all boxes labeled A on the diagram; Chinese Thai respondents were expected to identify themselves by consistently circling all boxes labeled B on the diagram. Mixed Ethnic Thai respondents would be identified by circling patterns of boxes A and B on the diagram. In addition to the family tree diagram, the questionnaire included Hirschman’s (1981) ethnicity measures as an additional measure of the ethnic background of respondents, as shown in the last section of Part D.

Another screening question was based on an age restriction for the population of interest: respondents in this study must be 23 years of age or older. This requirement ensured that respondents included only adult Thai individuals whose core cultural values and consumption behaviors were already well established.

#### 4.3.4 Sample Size and Method

The estimation of sample size is crucial to any study design. Too small a sample will lack sufficient power to detect subtle relationships among constructs under study while too large a sample might be overly powerful in capturing trivial relationships (Hair et al. 1998; Tabachnick and Fidell 2001). In deciding the best course of action in sample size planning, factors like desired power, alpha level, number of predictors, and expected effect sizes were taken into consideration. Cohen (1977) suggests that for most statistical inference tests, studies should be designed to obtain alpha levels of at least 0.05 with power levels of 0.80. Because previous work on culture (e.g., (Gibson 1999; Kwok et al. 2005) found culture to be a somewhat weak predictor, weak relationships are expected here between core cultural values, consumption attitudes, and consumption intentions. Using an estimate of  $\eta^2$  at 0.01 (Cohen's "small" effect size), alpha at 0.05, and mean squared error at 3.3 for a two-group ANOVA, sample sizes of 310, 220, and 170 are calculated for powers of 0.90, 0.80, and 0.70 respectively. Based on these results, a sample size of 300 was planned.

Because no formal published report describes response rates obtained in Thai consumer research studies, a multinational research firm—A.C. Nielsen Thailand—was contacted for its insights. Arrangement was made to discuss relevant issues concerning research experiences about issues at hand (mail survey response rates, incentives, mail handling issues, etc). According to A.C. Nielsen Thailand, response rates for mail surveys generally hover around 22 percent. Based on this estimate, the total required number of mail surveys was calculated and additional surveys planned in anticipation of common delivery problems such as mail handling and respondent relocation. The final sample size was targeted between 380-400 respondents, preferably 400 respondents so that the entire sample can be divided approximately equally (at least 150 respondents each for the Ethnic Thai and Chinese Thai groups, with remaining respondents as Mixed Ethnic Thai individuals).

#### 4.4 Questionnaire and Scale Development

Measurement items used in this study comprise a mixture of the author's newly developed scales measuring Thai core cultural values and consumption intentions and published scales drawn from various academic literatures. Newly developed scales measure 12 core cultural values for the three ethnic groups under study: confrontation avoidance, face saving, *kreng jai*, *mai pen rai*, autonomous, non-competitiveness, present oriented, *sanuk*, family oriented, future oriented, risk aversion, and thrift. Other measures developed during a pretest by the author include consumption intentions, as found in the form of respondent choices in response to 25 hypothetical consumption scenarios (See Appendix 2, Part C). Published scales included in the research design are measures of collectivism (Donthu and Yoo 1998; Hofstede 1984) and seven consumption related attitudes: brand conscious (Sproles and Kendall 1986), impulse buying (Rook and Fischer 1995), fashion conscious (Sproles and Kendall 1986), materialism (Richins and Dawson 1992), money attitudes (Roberts and Sepulveda 1999), price conscious (Sproles and Kendall 1986), and variety seeking (Donthu and Gilliland 1996). The newly developed scales are part of the author's contribution to academic knowledge in marketing, while published scales are measures that have been used before as reported in academic journals. Several published measures were adapted where necessary by making small changes to item wordings and item lengths to fit with the context of the present study.

Bagozzi and Youjae (1991); Brown, Churchill, and Peter (1993); Gorn (1997); Mullen (1995); and Wallendorf and Arnould (1988) have raised concerns about incorporating scales developed in one country for use in another country and the practice of employing a generic measure for use across different contexts without complete understanding of nature and limitations of these "borrowed" scales. Failure to recognize the fit between borrowed scales and appropriateness of their use in other studies can result in incorrect interpretations and produce doubts about generalizations of research findings (Brown et al. 1993; Churchill 1979; 1992; Mullen 1995). Care was taken in the present study to include only scales relevant to consumption related beliefs and consumption related behaviors present in varying degrees among Thai consumers.

Prior empirical studies on Thai culture, specifically on core cultural values in an academic marketing and consumer behavior framework are limited to one study by Komin (1991). As a result, the author had to draw on existing bodies of knowledge from various disciplines to identify relevant core cultural values for each ethnic group under study and to construct measurement items specific to each value. To construct these items, attention was given to core cultural value domains and to core cultural value definitions as well as to paradigms and guidelines used in developing psychometrically sound measures. The next section provides details of this process.

#### **4.4.1 Conceptual Equivalence of Study Constructs and Qualitative Research**

Churchill (1979) proposed seven guidelines for developing better measures in marketing research: 1) specification of domain of construct; 2) generation of sample items; 3) construct measures development; 4) measure purification; 5) data collection; 6) reliability assessment); and 7) validity assessment. Details of activities to construct measures of Thai core cultural values and consumption intentions follow in this section, consistent with Churchill's guidelines.

#### **4.4.2 Specification of Construct Domain**

As indicated by Churchill (1979) and Kollat, et al. (1970) definitions of constructs under study must be both precise and concise. Delineation of relevant (and irrelevant) terms to each construct definition and to each construct domain under study were accomplished through literature reviews as detailed in Chapter 2. Reviews included domestic and foreign literatures describing Ethnic Thai and Chinese Thai cultures from anecdotal observations, historical accounts, newspapers, focus group interviews, and empirical academic studies. This extensive effort produced an initial list of 27 core cultural values in an attempt to best represent indigenous core cultural values held by Thai people. In alphabetical order, these values are identified here as: achievement, autonomous, collectivism, confrontation avoidance, face saving, family oriented, femininity, filial piety, form over content, future oriented, individualism, kreng jai, mai pen rai, masculinity,

mastery over nature, moderation, non-competitiveness, past oriented, patience, pragmatism, present oriented, respect for hierarchy, risk aversion, sanuk, time is money, thrift, and wealth creation.

These values were the discussion topic of a focus group comprising six Thammasat doctoral candidates in marketing. All focus group members are Thais by birth and have lived in Thailand for much of their life; all were at least 25 years of age and well acquainted and comfortable with each other. Several scholars have raised questions about using acquaintances as members of a focus group believing that acquaintanceship could negatively affect the productivity of idea generation (Bellenger et al. 1976). However, other scholars hold a more positive view toward the inclusion of acquaintances in a focus group (Fern 1982; Nelson and Frontczak 1988; Wells 1974). For example, Nelson and Frontczak (1988) investigated the effects of acquaintanceship and analyst identity on idea quality and quantity in focus groups consisting of strangers, couples, and acquaintances. Results found that analyst identity was the most significant source of variation between the three groups. Acquaintanceship showed relatively minor impacts on the production of ideas but not to the extent that the authors advised against the use of acquaintances in a focus group.

Because the objective of the focus group was to validate existing literatures on prevalent core cultural values in Thai society and not to generate a new list of these values, the use of acquaintances is therefore justified in the current study. The focus group session itself was held in a relaxed living room setting located within the department program, but away from distractions such as friends, computers, books, and mobile phones. To begin the session comfortably, the author allowed participants to chat over a wide range of topics for about 15 minutes as they enjoyed food and beverages. Discussion of Thai cultural values followed until the session concluded after almost an hour and a half. Generally, the outcome of the focus group discussion was in line with theories and academic literatures in that the group described Thai culture as multidimensional comprising mainstream Thai values, Chinese Thai values, and mixed ethnicity values. Specifically, all group members considered the list of 27 core cultural values to be

representative of Thai culture, with some values considered more central than others. Nine less central core cultural values were eliminated: femininity, filial piety, form over content, masculinity, moderation, past oriented, patience, pragmatism, and wealth creation. A few participants expressed opinions about northeast regional cultural values as being slightly different from southern and central regional cultural values. However, the present study is concerned only with Thai core cultural values as a whole.

#### **4.4.3 Sample Item Generation and Construct Measure Development**

Having a list of 18 core cultural values, the author then developed a limited set of measurement items that would tap into each core cultural value construct, an important next step in developing good measures. Members of the focus group used in the previous stage also proved useful in this process. Three members of the group were given the limited set of measurement items listed in random order and asked to match each item to a respective core cultural value. Items that were matched to a value other than the one intended were closely scrutinized and either revised or eliminated. The 18 Thai cultural values were compiled as a list and presented to a second focus group consisting of 12 employees working in a private company. Focus group members were asked to rate each core cultural value item in terms of its representativeness of Thai culture on a scale of one to 10, one being the least representative value and 10 being the most representative value (See Appendix 1). Core cultural values receiving low scores were identified as candidates for elimination before constructing the pretest questionnaire. Values having low scores were reviewed by the author and dissertation supervisor and lead to elimination of achievement, individualism, mastery over nature, past oriented, and respect for hierarchy.

The remaining 13 core cultural values and their associated measurement statements then were edited and reviewed so that measurement statements would be as precise as possible. Ambiguous and double-barreled statements were rephrased or removed to enhance understanding of individual core cultural value statements. A week later, the list of 13 core cultural values was presented to the employees focus group for further comment, along with revised measurement statements again in random order. The

matching of measurement statements to core cultural values by focus group members showed few problems and the list of statements categorized under each core cultural value revealed values similar to those found in the literature. No focus group member seemed to have an entirely different perspective or opinion about the presented core cultural values and their measurement statements.

Paralleling activities to develop measures of core cultural values were efforts to construct a set of scenarios measuring consumption intentions. Based on the 13 core cultural values, 25 scenarios were constructed as hypothetical consumption situations that might show the influence of one or more of such values (See Appendix 2, Part C). Because the current study is the first attempt to investigate the link between indigenous core cultural values and consumption behavior through consumption intention scenarios, two hypothetical consumption scenarios were designed for most core cultural values for the pretest round of data collection in order to obtain the most representative consumption scenarios. Exceptions here included present oriented (one scenario), future oriented (one scenario), and family oriented scenarios (three scenarios) as presented under Part C.

Construction of consumption intentions involved many considerations. First and foremost, each consumption intention question must be relevant to the intended value it is designed to reflect, otherwise there would not be a relationship found between the core cultural value and consumption intentions. Formats of consumption scenarios presented in Part C are all uniform, each scenario starting with a depiction of a respondent being caught up in a situation where he or she must decide among given courses of actions or alternatives as a response. For example, the consumption intention intended for capturing the future oriented value describes a person caught up in a car purchase that the person really desires to have, only to be informed that the color of choice is not presently available. A respondent could exhibit the future oriented value by indicating an intention to wait for the color of choice or could exhibit the present oriented value instead through an intention of choosing to have a car of different color immediately.

Finally, eight dichotomous questions were written to measure ritual practices of respondents. Four questions asked about practices pertaining to observance of the Chinese New Year including participating in celebrations with relatives, carrying out of rituals, and giving and receiving money. Four questions asked about practices pertaining to observance of the Thai New Year including visiting parents and elderly individuals, carrying out of rituals, and visiting a temple.

#### **4.4.4 Measure Purification**

After the item generation and construct measure development phase, the entire pool of 13 core cultural values measures, consumption scenarios, and ritual practices was thoroughly examined and edited by two marketing professors, one from Thammasat University and the other from University of Colorado. Numerous small changes were made to several measurement items, all as found on the English language version of the pretest questionnaire.

An important goal of this review was to obtain consensus that all items contained in the pretest questionnaire were relevant to the research study. Particular attention was paid to core cultural values, to ensure that each value was measured by some five or six items. Single-item measures of latent constructs often have measurement problems and issues (Churchill 1979; Jacoby 1978; Nunnally 1978). That is, the primary source of measurement development error lies in an inadequate sampling of the domain of construct items and having insufficient measurement items to capture the domain. Selection criteria was based on face validity of items to best represent the domain of each construct as described in the literature, high item ratings and other feedback as obtained from focus groups, and construct centrality as stated by the opinions of the two professors and the author.

#### **4.4.5 Forward and Backward Translations**

Questionnaire items were originally written in English and then translated into Thai language. A Thai language questionnaire would ensure a uniform understanding of instructions for each section in the questionnaire as well as of questions being asked in each section.

Behling and Law (2000) suggest a four step procedure in the translation of questionnaire content used in cross cultural academic research. Application of the steps in the present study was as follows: 1) a bilingual fellow Ph.D. candidate translated the English-version questionnaire into Thai, 2) a second bilingual Ph.D. candidate with no prior knowledge of the wording of the original English questionnaire then translated the Thai version back into English, 3) the original and back-translated questionnaires then were compared for differences in meanings and wordings, 4) if a significant mismatch between the original and back-translated questionnaire was found then another forward and backward translation was conducted until the difference was resolved.

After obtaining a satisfactory Thai language questionnaire, it was given to two private company employees as an initial pretest. The two individuals were informed that there was no time limit to complete the questionnaire and that upon completion they would discuss the questionnaire with the author about any matter relating to the questionnaire. Completion time was half an hour, with ten-minute lapses between receipt of the first and second questionnaires. Comments and complaints from the two employees concerned questionnaire length, small font size, and a few wording issues that were easily resolved in the final pretest questionnaire.

#### **4.4.6 Final Pretest Questionnaire**

The final pretest questionnaire contained 174 questions organized into Parts A, B, C and D in the questionnaire (See Appendix 2). Different sections of the questionnaire were designed to collect different types of information and perceptions of respondents. Clear organization was particularly important to prevent discouragement among respondents

due to having to read too many instructions and questions within a section. The goal of each section of the questionnaire was to obtain a good response rate, high quality data, and positive attitudes toward completion of the questionnaire.

Part A of the final pretest questionnaire measuring contained 91 Likert-scale items measuring 13 core cultural values and eight items beliefs about democracy, a value outside the scope of this dissertations. Part B contained 32 Likert-scale items measuring seven consumption attitudes. Items in Part B were taken primarily from existing published scales identified earlier in this chapter. Part C contained 25 consumption intention scenarios and eight questions measuring ritual practices. Eight dichotomous response items measured ritual practices undertaken by the populations of interest concluded Part C. Part D collected information about respondents' age, gender, marital status, education, occupation, personal income levels, and four items as Hirschman's (1981) ethnicity measures.

Responses to statements appearing in Parts A and B of the final pretest questionnaire were recorded using six-point response categories—anchored from “Strongly Disagree” to “Strongly Agree”. Rationale for using six-point response categories was based on a finding from Harrison and McLaughlin (1993) that respondents' bias toward choosing a center point as the normal or average response rather than choosing a response that represents respondents' own beliefs about a question. In Part C, check marks and ratings were required responses to the mostly dichotomous questions measuring consumption intentions. In Part D, check marks were appropriate responses to each questionnaire statement.

The pretest questionnaire was printed as a 11-page booklet. The booklet's first page introduced the study and described study objectives, study importance, and pledge of confidentiality of participation.

#### 4.4.7 Pretest Data Collection

Pretest data collection was administered by the author and an assistant using the questionnaire shown in Appendix 2 and a convenience sample of 42 Thai adults, selected partly on their diversity. The sample included diners found at a large food court, street shoppers, and the author's friends. The purpose of pretesting was to identify any problematic measures at an early data collection stage so item modifications and item eliminations could be made before data collection with the final questionnaire.

Several complaints and suggestions were received during the pretest. Main complaints were about questionnaire length, negatively worded statements, and small font size used in the questionnaire. These problems were addressed after analysis of the pretest data.

#### 4.4.8 Measurement Assessment for Pretest

Data from the 42 pretest questionnaires were analyzed using coefficient alpha, item-to-total correlations, and exploratory factor analysis to examine the quality of all measurements. Numerous weak items were either modified or eliminated based on values obtained in these analyses. Results for coefficient alpha found most pretest scales to closely approach or exceed the minimum of 0.60 as recommended by Nunnally (1967). Table 4.1 below shows a breakdown by numbers of total items on the questionnaire by Parts (A, B, C, and D) before and after analysis of the pretest data.

**Table 4.1 Breakdown by Parts of Item Eliminations after EFA Analysis**

	<b>Part A</b>	<b>Part B</b>	<b>Part C</b>	<b>Part D</b>	<b>Total</b>
Total pretest questionnaire items	99	32	33	10	174
Number of items deleted	32	2	14	0	48
Number of items added	3	1	1	0	5
Final questionnaire items	70	31	20	10	131

As for the consumption intention scenarios that appeared in Part C, selection of the final representative scenarios designed for each core cultural value would depend chiefly on results obtained from the pretest round of data collection. Among criteria taken into

consideration were the extent to which the scenario agreed with the associated core cultural value, dissertation supervisor's comments, number of missing responses (implies bad understanding of the scenario), length of a scenario, qualities of response alternatives, and feedback from respondents. Appendix 7 under Part C shows the 12 consumption scenarios implemented in the final questionnaire.

#### **4.5 Final Questionnaire**

The final questionnaire now was ready to be launched. The final questionnaire was in the form of a 9-page booklet including a cover page containing an introduction to the study and general instructions. The cover page explained objectives of the study and underscored the importance of the study, the academic credibility of researchers, the promise of anonymity to all respondents, and the pledge of mailed research results if desired (Appendix 7). Respondents could choose whether or not to provide their mailing address on the booklet cover so that research findings could be sent back to interested respondents. The cover page contained logos of Thammasat University and Thammasat Doctoral Program in Marketing. The cover page ended with names and signatures of the researchers and advising professors.

The final questionnaire can be summarized as containing 96 Likert-scale items measuring 20 constructs of research interest, 12 consumption intention scenarios, eight ritual practices questions, four ethnicity questions, and ten demographic questions. The time required to complete the final questionnaire was about 20 to 30 minutes. Table 4.2 contains the 96 Likert-scale items organized by construct and indicates variable labels used in all data analyses.

**Table 4.2 Summary of Final Measures for the 20 Latent Constructs**


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All items use six-point scales with anchors as “Strongly Disagree,” “Moderately Disagree,” “Least Disagree,” “Least Agree,” “Moderately Agree,” and “Strongly Agree.”

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Item ID	Conceptual Definitions and Origins of Thai National Core Cultural Values
	<b>Confrontation Avoidance:</b> a belief that a person should avoid getting into conflicts with others. (Morris et al., 1998).
Confro_1	I usually avoid open discussion of my differences with another person.
Confro_2	I generally avoid an argument.
Confro_3	I try to stay away from disagreement with another person.
Confro_5	I sometimes avoid taking positions that would create controversy.
Confro_6	I think that confronting others seldom solves problems (New item)
	<b>Face Saving:</b> a belief that a person should exhibit behaviors and actions known to others that will accrue esteem, regard, and good opinion. (All new items)
Face1_1	It is important to be aware of one’s own face.
Face2_1	My public image is very important to me.
Face3_1	Nothing hurts me like when I loose my credibility in society.
Face5_1	I try always to do the right things in front of others to keep my good name.
Face6_1	I try to protect my reputation at all times.
	<b>Kreng Jai:</b> A belief that a person should be self-effacing, respectful, humble, and considerate of others to avoiding troubling or upsetting others. (All new items)
Kreng1_1	I am reluctant to ask others for help when in need.
Kreng2_1	It is important to respect other people’s privacy.
Kreng3_1	I am sensitive to demands that my requests place on others.
Kreng5_1	I avoid troubling others by not asking people for help.
Kreng6_1	I feel kreng jai to my close friends.
	<b>Mai Pen Rai:</b> a belief that a person should discount a difficult situation by a rationalization that the situation doesn’t really matter or that nothing really matters. (All items developed)
Mai1_1	I usually submit to events that I have no control over.
Mai2_1	When something does not turn out as expected, I often say “Mai Pen Rai” to myself.
Mai3_1	A self-restraint is to say “Mai Pen Rai” when unpleasant situations arise.
Mai4_1	In a highly emotional moment, I switch to “forgive and forget” behavior.
Mai6_1	To maintain social harmony is to disregard the very issues that cause discomfort.
	<b>Collectivism:</b> a belief that a person should be well-integrated into one a more cohesive in-groups throughout their lives (Hofstede 1984). (All items adapted from Yoo and Donthu 2002)
Collec_1	Individuals should sacrifice self-interest for the group (either at school or workplace).
Collec_2	Individuals should stick with the group (either at school or workplace) even through difficulties.
Collec_3	Group welfare (either at school or workplace) is more important than individual rewards.
Collec_4	Individuals should pursue their goals only after considering the welfare of the group (either at school or workplace).
Collec_5	Individuals should try to act like other group members (either at school or workplace).
Collec_6	I respect decisions made by my group (either at school or workplace).

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**Table 4.2 (Continued) Summary of Final Measures for the 20 Latent Constructs**

<b>Item ID</b>	<b>Conceptual Definitions and Origins of Ethnic Thai Core Cultural Values</b>
	<b>Autonomous:</b> a belief that a person should take an action based on personal will and individual freedom and should consider reciprocal obligations and expectations to be flexible rather than regimented. (Hirschfeld et al. 1977)
Aut3_1	When necessary, I let my commitments go unfulfilled. (New item)
Aut4_1	To accomplish something important, I sometimes disregard other people's feelings.
Aut6_1	I rely on myself in life.
Aut7_1	If I had to, I could quit most responsibilities in my life right now. (New item)
Aut8_1	I do what I want and seldom care what others think. (New item)
	<b>Non-competitiveness:</b> a belief that a person should avoid discerning the progress of others relative to one's own progress and should favor actions and behaviors that avoid personal rivalry. (Items adapted from Ryckman et al. 1990)*
Noncom_1	I enjoy competing against others. (new item)
Noncom_3	Competition brings out the best in me. (new item)
Noncom_5	I find myself being competitive in many situations. (adapted item)
Noncom_6	I compete with others even if they are not competing with me. (adapted item)
Noncom_7	Competing with others is a way to become successful in life. (new item)
	<b>Present Oriented:</b> a belief that a person should show continual regard for conditions and events of today and show little concern about conditions and events from yesterday or for tomorrow (All items adapted from Chetthamrongchai and Davies 2000).
Presen_1	I think mostly about what is happening in the here and now.
Presen_2	It is no use worrying about the future, because whatever will be, will be.
Presen_3	I live for today.
Presen_5	I am mostly concerned about how I feel right now.
	<b>Sanuk:</b> a belief that a person should engage in good fun in an activity or behavior that is not too complicated and enjoy the passing moment. (Farmer and Sundberg 1986)
Sanuk1_1	Life is not always duties and responsibilities, I often seek fun things to do. (new item)
Sanuk2_1	I find it easy to entertain myself. (adapted item)
Sanuk6_1	To do something that is sanuk is all I care for. (new item)
Sanuk7_1	I do not like staying in the same old routine for a long time. (new item)
Sanuk8_1	I always look for opportunities to enjoy myself. (new item)
<b>Item ID</b>	<b>Conceptual Definitions and Origins of Chinese Thai Core Cultural Values</b>
	<b>Family Oriented:</b> a belief and a devotion that a person should protect and care for everyone in one's immediate family to the best of one's ability. (All items adapted from Heller 1976)
Fam3_1	If a member of the family is insulted or injured, you should feel more strongly about it than if the person is not a member of the family.
Fam4_1	Married children should be with their parents in time of serious illness.
Fam5_1	Children owe it to their parents to put family interests above their own personal interests.
Fam6_1	As many activities as possible should be shared by married children and their parents.
Fam7_1	If a person's father has a medical bill of 60,000 Bath which he cannot pay, the son is morally obligated to pay.

**Table 4.2 (Continued) Summary of Final Measures for the 20 Latent Constructs**

<b>Item ID</b>	<b>Conceptual Definitions and Origins of Chinese Thai Core Cultural Values</b>
	<b>Future Oriented:</b> a belief that a person should show continual regard to unseen future conditions and events and exhibit little concern about conditions and events occurring yesterday or today. (Chetthamrongchai and Davies 2000)
Future_1	The future is more important than the past to me.
Future_2	The future is more interesting than the past to me.
Future_4	I spend more time thinking about next year.
Future_5	I plan for the future almost every day.
Future_6	I like thinking about what will happen in the future. I make plans and think I know what I am going to do.
	<b>Risk Aversion:</b> a belief that a person should avoid ambiguous situations where results can have serious consequences (All new items)
Risk3_1	I always gather information before buying products/services I am not familiar with to reduce performance risk.
Risk4_1	I always read the details of any agreement I sign.
Risk5_1	I try to stick to known brands to reduce the risk of a buying mistake.
Risk6_1	I don't mind driving or riding fast car whenever I am in the city.
Risk7_1	I avoid using a subway train because I think it is rather risky.
	<b>Thrift:</b> a belief that a person should be restrained in acquiring and using economic resources to achieve goals (All Items adapted from Yamauchi and Templer 1982)
Thrift_1	If you take good care of your possessions, you will save money in the long run.
Thrift_2	There are many things that are thrown away that are still quite useful.
Thrift_6	I discipline myself to get the most from my money.
Thrift_7	I am willing to wait on a purchase I want so that I can save money.
Thrift_8	There are things I resist buying today so I can save for tomorrow.
<b>Consumption Attitudes</b>	
<b>Construct of Interests</b>	<b>Conceptual Definition and Origins</b>
	<b>Brand Conscious:</b> the extent to which a consumer focuses on buying well-known products. (Sproles and Kendall 1986)
Brand1_1	Well-known national brands are best for me.
Brand2_1	The more expensive brands are usually my choices.
Brand3_1	Department and specialty stores offer me the best products.
Brand4_1	Most private label brands are almost the same quality as international brands. (new item)
	<b>Fashion Conscious:</b> the extent to which a consumer focuses on having up-to-date styles, especially as pertains to clothing. (Sproles and Kendall 1986)
Fashco_1	I usually have one or more outfits of the newest style.
Fashco_2	I keep my wardrobe up-to-date with the changing fashions.
Fashco_3	Fashionable, attractive styling is very important to me.
Fashco_4	I follow the latest fashion trends closely. (new item)

**Table 4.2 (Continued) Summary of Final Measures for the 20 Latent Constructs**  
**Consumption Attitudes**

<b>Construct of Interests</b>	<b>Conceptual Definition and Origins</b>
	<b>Impulse Buying:</b> the extent to which a consumer buys spontaneously, unreflectively, immediately, and kinetically. (Items taken from Rook and Fischer 1995)
Impul1_1	I often buy things spontaneously.
Impul2_1	I often buy things without thinking.
Impul3_1	"I see it, I buy it" describes me.
Impul4_1	"Buy now, think about it later" describes me.
Impul5_1	I buy things according to how I feel at the moment.
Impul6_1	Sometimes I am a bit reckless about what I buy.
	<b>Materialism:</b> the extent to which a consumer attaches importance to the possessions in one's life. (Richins and Dawson 2000)
Mat1_1	I admire people who own expensive homes, cars, and clothes.
Mat2_1	Some of the most important achievements in life include acquiring material possessions.
Mat3_1	A person's success in life often can be measured by what the person owns. (adapted item)
Mat4_1	The things I own say a lot about how well I am doing in life.
Mat5_1	I like to own things that impress people.
	<b>Money Attitude:</b> The extent to which a consumer uses money to impress and influence others as a symbol of success. (Roberts and Sepulveda 1999)
Moneya_1	I must admit that I purchase things because I know they will impress others.
Moneya_2	People I know tell me that I place too much emphasis on the amount of money a person has a sign of success.
Moneya_3	I behave as if money were the ultimate symbol of success.
Moneya_4	In honesty, I own nice things in order to impress others.
Moneya_5	Although I should judge the success of people by their deeds, I am more influenced by the amount of money they have.
	<b>Price Conscious:</b> the extent to which consumer focuses on buying products that are low priced, on sale, or at least good value for money. (Sproles and Kendall 1986)
Pricec_1	I buy as much as possible at sale prices
Pricec_2	Lower price products are usually my choice.
Pricec_3	I shop carefully to find the best value for my money
	<b>Variety Seeking:</b> the extent to which a consumer focus less on repeat purchase, induced by the utility or disutility the consumer derives from the change itself.
Varsee_1	I like to try different things.
Varsee_2	I like a great deal of variety.
Varsee_3	I like new and different styles.
Varsee_4	I like to try different products for the sake of comparison. (new item)

#### **4.6 Data Collection**

Data collection was carried out by the author along with two staff in charge of administrative tasks. Data collection methods were adapted based on the nature of the two sampling frames: a mail survey was implemented with the Teochiu Chinese Association and a drop-off survey was used with EGAT.

Rationale behind selection of the two survey methods was simple. Because the Teochiu Chinese Association does not hold an annual meeting but instead holds only a bi-annual meeting, a drop-off survey or a personal interview survey was not possible. A mail-survey technique was the only feasible collection method given the planned time frame for study completion. Chinese Thai individuals were selected at random from member directories available at the Association library. The most current directories (beginning from 2001 to 2003) were used as the sampling frame, containing names and addresses of about 3,000 members. Members were individually assigned a number from one to 3,000, of which 750 Chinese Thai individuals would be selected. Selection was done by randomly drawing numbers from one to 3,000 and then matching drawn numbers to identified members in the directories.

Prior to mailing out final questionnaires, notification was sent to each selected member of the Association. Four days later, questionnaire mailings were sent to selected members accompanied by a cover letter describing the general nature of the study and the importance of each member responding. First follow-up, second follow-up, and third follow-up mailings were used as necessary. All mailings were handled by the Thai Postal Service and were registered to ensure prompt delivery by Postal Service staff.

As for the Ethnic Thai and Mixed Ethnic Thai individuals at EGAT, data collection used a drop-off survey technique but still in a random manner. To begin the process, cooperation for the study was obtained from the Director of Human Resources. The Director promised that he would randomly distribute 750 questionnaire booklets to department heads at headquarter in separate blocs. Notification of questionnaire arrivals would be announced by each departmental head and then again via on-air reminders.

Questionnaires were handed from each department head to their staff through the use of 20 ballot boxes filled with small written notes of “yes” and “no.” EGAT staff who drew “yes” were asked to fill out a questionnaire. Similar to Chinese Thai respondents, each questionnaire at EGAT came with prepaid postage and an envelope for return of the completed questionnaire. Table 4.3 shows results of response rates for the two sampling frames.

**Table 4.3 Response Rates by Sampling Frame**

	<b>Teochiu Chinese Association</b>	<b>Electricity Generating Authority of Thailand</b>	<b>Total</b>
<b>Questionnaires sent</b>	750	750	1,500
<b>Unreturned questionnaires</b>	652	428	1,080
<b>Returned questionnaires</b>	98	322	420
<b>Response rate</b>	13.1 %	42.9 %	28.0 %

#### **4.7 Data Analysis Procedures**

To begin data analysis, Joreskog’s (1993) confirmatory factor analysis (CFA) approach was used to provide evidence of convergent and discriminant validities of measures. The approach includes three stages. The first stage estimates separate CFA measurement models for each core cultural value and each consumption attitude. The second stage estimates CFA measurement models for all pairs of constructs within each core cultural value group, allowing pairs of constructs to covary freely. The third combines all constructs for each cultural group into a single CFA measurement model, allowing all constructs in the model to covary freely. At each stage, measurement items showing poor fit are either eliminated or noted as candidates for future elimination. Goodness-of-fit results and other criteria were considered jointly in eliminating weak measures to produce acceptable construct measurements. Amos version 4.0 was used for all CFA analyses.

ANOVA is the main data analysis procedure used to test relationships between core cultural values and consumption intentions as proposed in Chapter 3. ANOVA was chosen as an ideal statistical technique to assess hypothesized relationships of differences attributed to groups. The SPSS statistical software package, version 10.0, was used for

all ANOVA analyses. Details regarding CFA and ANOVA analyses and their results appear in Chapter 5.

#### **4.8 Chapter Summary**

Because this research is the first to study core cultural values in Thailand, the author had to use a research design collecting primary data from the three populations of interest—Ethnic Thai, Chinese Thai, and Mixed Ethnic Thai individuals. Careful attention was paid in each phase of the research design—from focus group interviews to launch of the final questionnaire—to follow conventional research norms and guidelines. Key areas, such as selection of the sampling frames, units of analysis, and data collection techniques including ethnicity screening are all underscored and explained in this chapter.