CHAPTER 6
Discussion of Research Results

6.1 Introduction

Chapter 6 discusses research results in terms of academic contributions, marketing managerial implications, limitations, and directions for further research. The Chapter contains eight sections. The first discusses psychometric measurement properties of the 12 core cultural values scales, including suggestions for item rewordings and improvements. The second discusses research results related to the four propositions under investigation. The third focuses on nomological validity of the 12 core cultural value scales and the fourth addresses research limitations. Contributions to social science knowledge appear in the fifth section and the sixth discusses marketing managerial implications. The seventh section presents future research directions and the last section of Chapter 6 states conclusions of the entire dissertation.

6.2 Psychometric Measurement Properties of the 12 Core Cultural Value Scales

Results in Chapter 5 indicate that the 12 core cultural value scales developed and used in this study exhibit mixed measurement properties. This is expected, given that this study is the first attempt to measure core cultural values of Thai people. Four assessments of measurement properties follow for the 12 scales: internal consistency reliability, convergent validity, discriminant validity, and nomological validity. Based on these assessments, the 12 scales are classified as good, acceptable, and weak.

6.2.1 Assessment of Internal Consistency Reliability

Internal consistency refers to the degree of interrelatedness among items used to measure a single construct. Internal consistency reliability for this study was investigated using Cronbach's alpha, simple factor structure, composite reliability, and average variance extracted. Table 5.23 shows Cronbach's alpha values ranging from 0.48 to 0.81 for the 12 scales. Nunnally (1967) recommends an internal consistency minimum of 0.60 for initial measures such as developed in this study. Given this value, nine core cultural

value scales show acceptable to good internal consistency. Mai pen rai, sanuk, and risk aversion are the three scales that fail to meet the criterion, the later two falling just short of the mark with coefficient alpha values of 0.59 and 0.56, respectively.

A more rigorous internal consistency reliability assessment for measurement scales is based on composite reliability. Composite reliability represents the shared variance among a set of observed variables measuring a unidimensional latent construct (Fornell and Larcker 1981). Bagozzi and Youjae (1988) recommend that for a scale measurement to be reliable it should possess a composite reliability of at least 0.60. As shown in Table 5.23, composite reliabilities for the 12 core cultural value scales range from 0.49 to 0.85. Ten core cultural values scales—confrontation avoidance, face saving, kreng jai, autonomous, non-competitiveness, sanuk, family oriented, future oriented, risk aversion, and thrift—satisfy or almost satisfy the condition.

However, despite meeting both composite reliability as well as Cronbach's alpha requirements, the autonomous scale is still considered a weak measurement because one of its factor loadings is inadmissibly high at 1.17. The scale therefore is classified as weak and needing improvement. The mai pen rai scale also is considered weak and needing improvement because its composite reliability is low (0.49) and because it contains only two items. The sanuk scale falls just short of the mark on both Cronbach's alpha and composite reliability. Still, the scale shows potential in that with wording improvements both Cronbach's alpha and composite reliabilities should be improved. The scale holds promise because it contains only three items, with one good item and refinements needed on two weak items (sanuk2_1 and sanuk7_1). Thus, the sanuk scale is regarded as an acceptable scale but needing improvement.

Another test to establish a case for internal consistency reliability is through an assessment of simple factor structure or unidimensionality using confirmatory factor analysis. As shown in Figures 5.13, 5.14, and 5.15, each core cultural value measurement model has measures loading on separate but correlated latent factors in the three four-factor measurement models. By having no cross-loadings between observed

measures and other factors, the models strictly meet the unidimensionality criterion. Apart from random measurement error, scale items measure nothing but the constructs they were designed to measure.

Factor loadings and average variance extracted are other indications of whether scales exhibit adequate internal consistency reliability. Factor loadings represent reliability at the item level while average variance extracted represents reliability of a measurement as a whole. A factor loading value of 0.70 or greater is recommended for each measurement item, because anything less implies that random measurement error explains more of an item's variance than the indicated latent construct.

As can be expected for any initial measure development study, results here are mixed. Table 5.23 shows a range of factor loading values from 0.39 to 0.90, ignoring the inadmissible value for aut3_1. The two smallest factor loadings come from the sanuk7_1 and presen_1 items and the largest comes from future_6 (again ignoring the inadmissible value). Inspection of the sanuk7_1 and presen_1 items reveals that these statements are less direct and require some effort of interpretation on the part of respondents. In contrast, factor loadings greater than 0.70 are associated with straightforward statements and often contain the name of core value being measured. Based on the minimum factor loading value of 0.70, nine of 31 measures (29 percent) are considered as adequate and acceptable. Nine additional items (29 percent) have factor loadings between 0.61 and 0.69.

Average variance extracted describes internal consistency reliability at the factor level. Fornell and Larcker (1981) recommend that average variance extracted for any scale be at least 0.50 (which happens to be the same criterion in assessing convergent validity). Based on this value, five scales are acceptable—confrontation avoidance, face saving, non-competitiveness, future oriented, and thrift. A sixth scale, kreng jai, approaches the criterion with a value of 0.43.

Based on discussions of various assessment methods in this section, core cultural value measurements that are considered to have adequate reliability depend mainly rigor and type of reliability assessment. At a fundamental level like Cronbach's alpha, as many as nine core cultural value scales—confrontation avoidance, face saving, kreng jai, autonomous, present oriented, non-competitiveness, family oriented, future oriented, and thrift—are considered acceptable to good initial measures. In a more rigorous assessment of internal consistency reliability using composite reliability and average variance extracted, six scales—confrontation avoidance, face saving, kreng jai, non-competitiveness, future oriented, and thrift—qualify as acceptable to good.

6.2.2 Assessment of Convergent Validity

Beyond internal consistency reliability, sound psychometric measures must demonstrate adequate convergent validity. The term refers to the degree to which scale items correlate with other measures of the same construct. This study tests convergent validity of core cultural value scales in three ways: average variance extracted, factor loadings, and squared multiple correlations (*SMCs*).

Table 5.23 shows average variance extracted values ranging from 0.34 to 0.77. The smallest average variance extracted value comes from the sanuk scale with a value of 0.34; the largest comes from the non-competitiveness scale with a value of 0.84. Fornell and Larcker (1981) recommend that average variance extraction values for latent constructs exceed 0.50. Based on this criterion, seven core cultural value scales—confrontation avoidance, face saving, autonomous, non-competitiveness, future oriented, and thrift—meet this requirement with one other scale—kreng jai—coming close. On balance, the kreng jai scale is considered an acceptable scale, given that it has adequate internal consistency reliability as indicated by acceptable values for both Cronbach's alpha and composite reliability.

Because the ultimate goal for new measure development is to be able to measure a latent construct with a high level of reliability and validity, high factor loadings (effects of a latent construct on observed measurement items) are desirable. Factor loadings are the

basis for the calculation of item reliability (*SMC*) by squaring the item's standardized factor loading. High *SMC* values imply that the item is measuring a latent construct's true score rather than random measurement error. The recommended minimum threshold for *SMC* is 0.50; any value less implies that more measurement is error present in a scale than the captured true score. The square root of 0.50 or 0.70 is the corresponding threshold minimum for factor loadings.

Nine items—confro_2, face1_1, face2_1, kreng3t, presen_3, noncom_5, sanuk8_1, future_6, thrift_7—have *SMC* values equal or greater than 0.50 and satisfy this condition. Given that this is the first attempt to develop Thai core cultural values measurements, the presence of large and small *SMC* values can be expected. As noted earlier, nine items have factor loadings in the range of 0.61 to 0.69, which suggests that with minor wording improvements, *SMCs* for these items would exceed the 0.50 threshold. Wording improvements for these items is discussed in some detail in Section 6.2.4.

6.2.3 Assessment of Discriminant Validity

Discriminant validity refers to degree to which measures of conceptually distinct constructs differ. Discriminant validity is examined in this study for all core cultural values scales through three methods: correlational, factor structure, and average variance extracted.

Satisfactory discriminant validity can be assumed if correlations of composite scales do not exceed 0.85, while values above 0.85 indicate definitional overlap of concepts. Table 5.22 shows all observed correlations of the 12 core cultural values scales are relatively independent, indicated by values ranging from 0.00 to 0.42. No pairs of core cultural values scales exceed the conventional standard. Further, all correlations between latent constructs shown in Figures 5.13, 5.14, and 5.15 are far below 0.85, also indicating satisfactory discriminant validity.

Discriminant validity also can be assessed through a factor-based procedure. The procedure considers measurement of a construct to have adequate discriminant validity if

its average variance extracted is greater than its shared variance with any other construct. An alternate statement of this condition is that the square root of average variance extracted for a construct should be greater than any correlation of the construct with other relevant constructs.

To illustrate for the Thai National core cultural value scales in Table 5.23, the smallest square root of average variance extracted occurs for the mai pen rai scale at $(0.33)^{1/2}$ or 0.57. This value is greater than any correlation between any pair of constructs in the four-factor measurement model of Thai National core cultural values shown in Figure 5.13. Adequate discriminant validity also is found for the Ethnic Thai core cultural value scales in that the smallest square root of the average variance extracted occurs for the sanuk scale at $(0.34)^{1/2}$ or 0.58. This value is greater than any correlation between any pair of constructs in the four-factor measurement model of Ethnic Thai core cultural values shown in Figure 5.14. Finally, an assessment of adequate discriminant validity also holds for all Chinese Thai core cultural value scales in that the smallest square root of average variance extracted occurs for the family oriented scale at $(0.37)^{1/2}$ or 061. This value exceeds any correlation between any pair of constructs in the four-factor measurement model of Chinese Thai core cultural values shown in Figure 5.15. Thus, all 12 core cultural value scales pass recommended criteria for discriminant validity.

Because nomological validity can be assessed only after empirical investigations of hypotheses, this type of validity is discussed later in Chapter 6.

6.2.4 Summary of Scale Measurements and Suggested Improvements

To conclude discussion of measurement properties, scales developed in this study can be classified as good, acceptable, and weak. This classification depends on a number of criteria that the particular scale has fulfilled and the extent that further work must be carried out to improve these scale measurements.

To be classified as a good measure, a scale must meet all psychometric requirements (i.e., internal consistency reliability, convergent validity, and discriminant validity). Based on Cronbach's alpha, composite reliability, and average variance extraction, four core cultural values scales are classified as good. These scales are face saving, non-competitiveness, future oriented, and thrift. Still, items in these scales can be improved because several factor loadings fall marginally short of the recommended threshold. Possible changes might include making statements more precise and mentioning the value being measured. Additional work would include developing additional items to produce five- or six-item measurement scales that would represent each construct's domain of content more completely. For example, for the thrift value, a new scale item might reflect beliefs apart from the money domain such as "*I prefer to use a product until it is worn out rather than replacing early it with a new one*."

Scales in the acceptable measurement category must meet most required validity criteria. The confrontation avoidance scale meets all criteria except for the 0.57 factor loading for confro_3. The scale also needs additional items to better capture the relevant domain of content. The kreng jai scale meets most validity requirements except for the average variance extracted criterion where the scale slightly misses the mark by 0.07. The addition of a few more relevant items along with wording refinements for the kreng1_1 and kreng5t items would improve the scale.

The present oriented scale is similar to the case of kreng jai where two items fall slightly short of the average variance extraction criterion. Presen_1 and presen_2 items can be improved by rewording original statements to be more direct and straightforward about present oriented beliefs instead of having to infer to the concept indirectly. For example, the original statement can be changed from "*I think mostly about what is happening in the here and now*." to "*I think mostly about what is happening in the here and now and not so much about the past or future."* Presen_2 can be modified from "*It is no use worrying about the future, because whatever will be, will be*." to "*It is no use worrying about the future, the most important idea is to focus on the present.*"

As for the sanuk scale, the sanuk7_1 item might be dropped or reworded as it has the lowest factor loading of all indicators. Sanuk7_1 can be reworded from "*I do not like staying in the same old routine for a long time*" to "*I do not like staying in any routine activity for very long because it is boring*." Sanuk2_1 can be improved by rewording to make it more simple from "*I find it easy to entertain myself*" to "*I find it easy to enjoy life*" or to "*I always seem to find fun things to do*."

As for the family oriented scale, the original statement of the fam4t item can be improved by changing from "*It is the responsibility of married children to be with their parents in time of serious illness*" to "C*hildren have a responsibility to be with their parents in time of serious illness*." Also, fam5t might be reworded from "*Children owe it to their parents to put family interests above their own personal interests*" to "*Children should be grateful to their parents for their upbringing"* or *"Children should put family interests above their personal interests.*" The fam6t measurement item can be rewritten from "*As many activities as possible should be shared by married children and their parents*" to *"Married children always should spend some quality time with their parents.*"

The risk aversion scale can be improved by developing another set of measurement items in order to enrich the aggregate measurement scale. The original risk3_1 item may have had been affected by what is termed as "social desirability". Social desirability refers to the tendency for respondents to present themselves in a manner that is viewed favorably by other people in order to gain social acceptance. The risk3_1 item, "*I always gather information before buying products or services I am not familiar with,*" might be a case where respondents feel compelled to present themselves in a socially desirable manner and appear cautious with whatever they do. Risk4t item also suffers from the same social desirability problem as risk3_1 item and a new statement should be developed. Supporting this idea, inspection of frequency responses for the five risk aversion scale items finds four items with high proportions of responses either in the top two or bottom two response categories. This finding suggests that a completely new set of items must be developed to measure risk aversion.

The weak measurement category contains the mai pen rai and autonomous scales. The mai pen rai scale lacks sufficient items to produce acceptable values for coefficient alpha, composite reliability, and average variance extracted. The autonomous scale has two problems: aut3_1 has a factor loading greater than 1.00 (an inadmissible value) and aut7_1 has a loading below the 0.70 minimum. Revisions to statement items are needed. The original aut3_1 statement item was "*When necessary, I can let my commitments go unfulfilled.*" Possible improvements include a wording clarification such as "*There is nothing wrong with disregarding agreed-upon commitments if I have a change of heart.*" The aut7_1 item stated "*If I had to, I could quit most responsibilities in my life right now"* and appears to be somewhat a weak indicator. However, upon examination, the item reflects simplicity and precision in its intended message about the autonomous belief. The low factor loading for this item may have resulted from the inadmissible factor loading for aut3_1 and the author suggests that aut7_1 be retained as part of a core cultural value scale. The autonomous scale would benefit from additional items such as "*I do not like to commit to long-term projects or relationships*" and "*I don't like to conform to rules and regulations*."

In sum, four core cultural value scales are classified as good, six as adequate, and two as needing extensive further work. As an initial research effort to measure core cultural values in Thailand, this study recognizes the possibility for improving, enriching, and purifying all 12 scales.

6.3 Discussions of Main Data Analysis Results

This section discusses results of data analyses directed toward the four propositions stated in Chapter 3.

6.3.1 Core Cultural Values and Ethnicity

The first proposition examines whether Ethnic Thai and Chinese Thai people differ in degree of centrality with respect to Thai core cultural values. ANOVA results in Table 5.25 reveal that the three ethnic groups are much more alike than different.

In terms of the five Thai National core cultural values, ethnic group homogeneity ultimately may be due to the collectivism value. That is, the other four Thai National core cultural values in many aspects reflect characteristics of the collectivism value as shaped by Confucianism. Some features of collectivist values that are quite similar to the four Thai National values are: group cohesion and loyalty (confrontation avoidance), face sensitivity (face saving), sensitivity of others' feelings (kreng jai), submission to external locus of control (mai pen rai), and harmony with nature (Hofstede and Bond 1988; Triandis 1995; Usunier 1996; Wen 2003).

One exception to ethnic group homogeneity is the confrontation avoidance value. However, despite being statistically significant, ethnic group differences on the confrontation avoidance value are not large. The Ethnic Thai group has a mean value of 9.84, greater than that for Chinese Thai group at 9.11 and that for the Mixed Ethnic Thai group at 9.50. However, all three groups are still characterized by a high degree of the confrontation avoidance value (a two-item scale having a minimum value of 2.00 and a maximum of 12.00).

For the Ethnic Thai core cultural values, the present oriented value is the lone exception to ethnic group homogeneity. Table 5.25 shows that Ethnic Thais are highly present oriented individuals compared to the other two groups, indicated by the sizable mean value of 11.04 against mean values of 9.85 and 10.32 for Chinese Thais and Mixed Ethnic Thais, respectively. With only one core cultural value differing across the three groups, results for Ethnic Thai core cultural values again describe basic similarities among Ethnic Thai, Chinese Thai, and Mixed Ethnic Thai groups. An interesting finding, the mean value reported by Chinese Thai individuals for the non-competitiveness value—an Ethnic Thai core value—is greater than the means reported by Ethnic Thai and Mixed Ethnic Thai individuals.

For the Chinese Thai core cultural values, no ethnic group shows any significant differences in Table 5.25. Results run contrary to expectations for the Chinese Thai core

values in that not only are means reported by Chinese Thai group not significantly different, they are, in fact, lower than means for the other two ethnic groups. An explanation of this finding can be found in the assimilation process operating in Thai society in terms of social catalyst agents that reduce many cultural differences. These agents include similarities in religious beliefs and philosophies (Buddhism and Confucianism), intermarriage practices (Ethnic Thai and Chinese Thai), compulsory common education systems (first six years), and official languages spoken (Thai language), all of which appear to have over time smoothed out many cultural value differences (Freedman 1958; Lawler 1996; Skinner 1962; Thomson 1993). Another explanation for this finding can be found in terms of a restriction in range limitation to this study, discussed later in Chapter 6.

Based on data analysis results and preceding discussion, it is appropriate to conclude that all three ethnic groups—Ethnic Thai, Chinese Thai, and Mixed Ethnic Thai individuals—are similar in terms of core cultural values. Proposition 1 is therefore not supported.

6.3.2 Core Cultural Values, Consumption Attitudes, and Consumption Intentions

Research results pertaining to Propositions 2 and 3 are discussed in this section. Proposition 2 is concerned with relationships between core cultural values and consumption attitudes while Proposition 3 is concerned with relationships between core cultural values and consumption intentions. Based on results of data analysis, Proposition 2 is strongly supported while Proposition 3 is weakly supported.

6.3.3 Core Cultural Values and Consumption Attitudes

Data in Table 5.24 strongly support Proposition 2 in that many core cultural values are related to the six consumption attitudes—brand conscious, fashion conscious, impulse buying, materialism, money attitude, and variety seeking. To be precise, 39 of 78 pairs of core cultural values and consumption attitudes are significantly correlated. All core cultural values but the family oriented value exhibit fairly consistent patterns of

significant associations with the consumption attitude scales. One core cultural value—sanuk—correlates strongly with all six consumption attitude scales.

While the intent of Proposition 2 is exploratory, to add to the understanding of Thai core cultural values and consumption behavior, many correlations in Table 5.24 can be seen to indicate nomological validity of several core cultural value scales. To illustrate, a person who scores high on the sanuk value scale would be expected to seek enjoyment in consumption activities. In line with this thought, the sanuk value scale correlates moderately with attitudes for variety seeking, materialism, fashion conscious, impulse buying, money attitude, and brand conscious. As another example, the face saving value is significantly correlated with consumption attitude scales for brand conscious, fashion conscious, impulse buying, materialism, and money attitude. As yet another example, impulse buying attitudes correlate positively with face saving, collectivism, autonomous, present oriented, non-competitiveness, sanuk, and future oriented but negatively with risk aversion and thrift. In sum, six core cultural values—face saving, autonomous, present oriented, non-competitiveness, sanuk, and future oriented—have five or more significant relationships with the six consumption attitude scales. The collectivism and thrift values correlate significantly with two consumption attitude scales. The remaining core cultural values each have one significant correlation with a consumption attitude, except for the family oriented value. Most correlations in Table 5.24—including many of the not significant correlations—support the nomological validity of the core cultural value scales. Based on these results, Proposition 2 is strongly supported.

6.3.4 Core Cultural Values and Consumption Intentions

Support for Proposition 3 is rather weak. As noted in Chapter 5, only three of the 13 hypothesized relationships were found significant in support of the Proposition. These three associations are between: the collectivism value and choosing a new mobile phone; the non-competitiveness value and envying a successful friend; and the risk aversion value and watching an unplanned movie title. Two core cultural values—kreng jai and present oriented—were associated with their corresponding consumption intentions in directions opposite to those expected. Eight core cultural values—confrontation

avoidance, face saving, mai pen rai, autonomous, sanuk, family oriented, future oriented, and thrift—were not associated with their corresponding consumption intentions.

These results are understandable, given the centrality that core cultural values play in influencing consumption behavior, see Figure 6.1. The Figure depicts psychological "distance" between core cultural values and other psychological components operating within a person's cognitive processes. In relation to other psychological factors, core cultural values are situated farthest from purchase intentions. As a result, relationships between core cultural values and purchase intentions would be smaller than those between core cultural values and consumption attitudes. Thus, based on research results and interpretations, Proposition 3 is weakly supported because only H5, H7, and H12 find significant results.

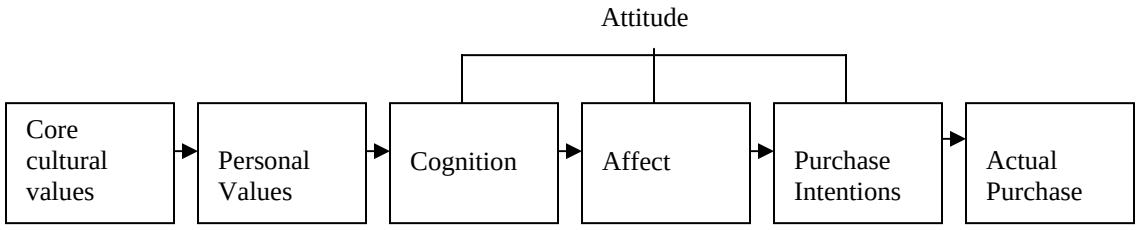

Figure 6.1. Psychological Components Preceding Purchase Behavior

6.3.5 Ethnicity and Ritual Practices

This section elaborates on data analysis results for Proposition 4, the association between ethnicity and ritual practices. Support for Proposition 4 is the strongest of all, with substantial effect sizes and near-zero levels of significance.

Cross-tabulations results in Tables 5.40 and 5.41 indicate that ethnic subculture members show a strong tendency to preserve their ethnic identity by maintaining ritual practices relevant to their respective ethnic group. These practices reinforce the ethnic identity for an individual's ego (i.e., I am an Ethnic Thai) as well as an individual's collective identity (i.e., We all are Ethnic Thais). This finding is in line with Markus and Kitayama (1991) in that collectivists including Thai National individuals do not see themselves as separate identities but see interconnectedness with close significant others. One

noteworthy result in Table 5.41 is that many Chinese Thai individuals take part in Thai New Year ritual activities. This finding is not unexpected given results for Proposition 1 and the presence of social catalyst agents for subcultural assimilation described in Section 6.3.1. In sum, based on data analysis results and discussion provided under this section, Proposition 4 is strongly supported.

6.4 Nomological Validity

Nomological validity is a necessary criterion that the 12 core cultural value scales developed in this study must meet. Nomological validity describes the ability of a scale to behave as expected with respect to other constructs to which it is related conceptually or theoretically (Churchill 1995). Nomological validity of many scales already has been addressed partially through earlier discussions of results in Chapter 6 with respect to scale relationships with consumption attitudes. What follows here is a more complete assessment.

To begin, nomological validity of the 12 Thai core cultural value scales can be questioned based on research results discussed in Section 6.3.1. That section describes the relative homogeneity among Ethnic Thais, Chinese Thais, and Mixed Ethnic Thais with respect to Thai core cultural values, an unexpected result based on Proposition 1. However, careful inspection of results in Table 5.25 shows substantive differences between Ethnic Thais and Chinese Thais on seven of the 13 core cultural value scales (restricting inspection to only those mean differences significant at $p < 0.20$). Specifically, Ethnic Thais have higher means than Chinese Thais for confrontation avoidance, face saving, kreng jai, mai pen rai, collectivism, present oriented, and future oriented. Closer inspection of means for these same core cultural values shows a logical pattern for all three ethnic groups, with means for the Mixed Ethnic Thai group falling between means for the Ethnic Thai and Chinese Thai groups on six of the seven core cultural values. In sum, inspection of significant and near significant mean differences in Table 5.25 supports the nomological validity of seven core cultural value scales.

Six core cultural value scales—face saving, autonomous, non-competitiveness, sanuk, present oriented, and future oriented—possess high nomological validity in that they strongly correlate with conceptually related consumption attitudes as shown in Table 5.24. The risk aversion and thrift scales also exhibit good nomological validity in their negative correlations with impulse buying and brand conscious attitudes.

The core cultural value scales show some promise of nomological validity in their expected associations with consumption intentions, although results are generally inferior to those described above. This conclusion can be explained by the fact that core cultural values and consumption intentions exist at different levels of abstraction as pointed out in Figure 6.1. Thus, any relationships found for Proposition 3 will be smaller than relationships found between core cultural values and consumption attitudes.

A closely related study Kahle (1983) also helps to explain weak relationships between values and intentions. Although the study did not specifically address relationships between values and intentions, it did suggest research activities to find significant relationships between values and behaviors. In brief, researchers should try to identify specific behaviors or specific instances where values are likely to be most influential on behaviors. Interpreting this suggestion, weak relationships found for Proposition 3 might indicate that core cultural values do not have satisfactory nomological validity—or weak relationships instead might indicate inadequate or faulty consumption intention scenarios. The issue cannot be resolved without further measurement development research for both the core cultural value scales and the consumption intention scenarios.

The last investigation of nomological validity focuses on the superiority of core cultural values over ethnicity as described in Section 5.11. Analysis in that section began by examining the linkage between ethnicity and consumption intentions. Results were expected to be weak (despite ethnicity showing high associations with ritual practices) because there is no theoretical or logical connection between ethnicity and consumption intentions as captured by the 12 scenarios. This expectation is confirmed by results shown in Table 5.42. The Table contains only one significant association for ethnicity (with paying a credit card balance, labeled as an autonomous value intention for the sake

of comparison), against three significant results for core cultural values. The result again supports the nomological validity of the core cultural value scales.

Another stringent assessment of nomological validity is carried out as shown under Section 5.11.2 where core cultural values are associated with Hirschman's (1981) subjective measure of ethnicity strength. Ethnicity strength is taken as a composite measure, created by summing responses to a question that asks about respondents' affiliated ethnic identity strength with responses to another a question that asks about respondents' affiliated religious strength (see Appendix 7, questions 7 and 9 of Part D). Respondents in the top (bottom) category of the composite measure are identified as belonging to the strongest (weakest) group and are expected to have (higher) (lower) core cultural value scale responses. As shown in Tables 5.44 and 5.46, results strongly support the nomological validity of the core cultural value scales in that mean values for the strongest and weakest groups lie in expected directions for 21 of the 24 mean comparisons (the exceptions are face saving and sanuk in Table 5.44 and future oriented in Table 5.46).

A final investigation of nomological validity of the core cultural value scales discussed in this section focused on relationships between the composite measure of subjective ethnicity and six consumption attitudes. Results are expected to be similar to those between ethnicity and consumption intentions in that subjective ethnicity should not be a strong predictor of consumption attitudes. Of the 12 correlations calculated between subjective ethnicity and consumptions attitudes, only one was significant, thus establishing yet another instance of nomological validity of core cultural value scales as sound measurement scales.

Based on discussion in this section, the 12 core cultural value scales possess satisfactory nomological validity for measurement scales early in their development.

6.5 Limitations

Reported results and discussions should be understood with three limitations in mind: inadequacy of core cultural value domain sampling, demographic and geographic homogeneity in the sample, and small subgroup sample sizes.

6.5.1 Inadequacy of Core Cultural Values Domain Sampling

Due to resource constraints and concerns for respondent fatigue and response rates, only the 12 most central core cultural values in Thai culture were selected for study. Thus, some regional Thai core cultural values were undoubtedly omitted from this study, as well as some less central Thai national core cultural values. This study limitation was noted in Chapter 4, where at one point in the research design a list of 30 Thai core cultural values was recognized but due to various constraints, the number was trimmed first to 19 and finally to 13. The author tried to ensure that the selection process to choose studied core cultural values was systematic, objective, and free of personal bias; this detailed procedure already has been discussed in Chapter 5.

Also due to resource constraints and concerns for respondent fatigue and response rates, the number of items in each core cultural value scale was limited to five in the final questionnaire. After confirmatory factor analyses, the final number of items retained in each scale was only three or two (see Table 5.23), a number insufficient to reflect the depth and breadth of respondent beliefs for any indigenous core cultural value. Thus, analyses involving these somewhat limited core cultural value scales are necessarily lacking in explanatory power—longer, richer measurements of Thai core cultural values should produce stronger results.

6.5.2 Homogeneity of Respondent Samples

Homogeneity of respondent samples is another study limitation. The limitation is manifested in the samples' unrepresentativeness of the adult Thai population in Bangkok and in a restriction in range that reduces power to detect subtle relationships.

As shown by respondent profiles in Table 5.1, samples used in this study consisted of above average Thai adults in terms of education and income. More than half of respondents indicated that their highest education level obtained is bachelor's degree (about 58 percent) followed by master's degree (21 percent). These values contrast with World Bank estimates of educational attainment indicating that about 55 percent of all Thais between the ages of 20 and 39 receive six or fewer years of formal education (*World Bank* 2002). Median monthly income was reported in this study as between 32,000 and 35,999 baht. This value exceeds that obtained by dividing Thailand's 2005 estimated GDP (176 billion, U.S. $) by the estimated adult population (32 million people) or approximately 15,000 baht/month (33 baht = $1 U.S.). Thus, it should be stressed that results of this study are limited to Thai residents of Bangkok and its surrounding areas and do not extend to the country as a whole.

The homogeneity of the study's two samples (based on the choice of sampling frames) leads to another limitation, characterized as a restriction in range problem. A restriction in range problem occurs whenever a sampling design collects data from a subset of a population that is more homogeneous than the total population.

The presence of a restriction in range reduces variance of observed measures from true values and thereby reduces internal consistency reliability and scale validity. This means that scales developed in this study would have possessed stronger reliabilities and validities had such a limitation not been present. A restriction in range also attenuates correlations among core cultural value scales as presented in Table 5.22. Magnitudes of scale correlations would have been higher and several correlations that were on the verge of reaching significance would have attained significance if more heterogeneity were present in the sample.

The presence of a restriction in range also reduces observed measures of effect size (because of reduced variances observed for independent and dependent variables under study). Given a fixed sample size and a chosen level of significance, a reduced effect size means that any statistical test will experience reduced power or ability to reject the

null hypothesis when it is false. Thus, a restriction in range limitation in the present study means less power to detect small associations between core cultural values scales and consumption attitude measures. The limitation also means less power to detect small associations between core cultural value scales and consumption intentions. In sum, several associations between core cultural values scales, consumption attitudes, and consumption intentions could have become significant had a more diverse group of Thai people been selected for analysis.

6.5.3 Small Subgroup Sample Size

Small subgroup sample size is a third study limitation. The limitation is particularly noteworthy when testing for differences between subjective ethnicity groups in analyses associated with Tables 5.44 and 5.46. The "weakest" subjective ethnicity groups in these Tables contain only 27 and 26 members, respectively, limiting power to detect significant relationships.

To illustrate the limitation, consider results for the mai pen rai value in Table 5.44. The effect size for this value in correlational form based on t = 1.50 with 103 degrees of freedom is 0.15, somewhat between a "small" and "medium" effect in conventional terms. However, power in the present study to detect this effect in a one-tail hypothesis test is only 42 percent (alpha = 0.05) or 56 percent (alpha = 0.10) (DSS Research 2006). Such results illustrate the small subgroup sample size limitation and the desirability of relaxing significance levels to 0.10 for analyses associated with Tables 5.44 and 5.46. Simply put, a larger sample size is needed to detect small and medium sized effects for subgroups in this study.

6.6 Contributions to Social Science Knowledge

The current study contributes to social science knowledge about Thai people in two ways. First, the study provides explicit knowledge about Thai people, particularly with respect to their core cultural values. Second, the study provides a means for social science researchers to generate additional knowledge about Thai people. Each idea is discussed in this section.

A careful reading of Chapter 5 would produce a list of “facts” about Thai people and their core cultural values similar to that shown below:

1. Core cultural values of Thai people include confrontation avoidance, face saving, kreng jai, mai pen rai, collectivism, autonomous, present oriented, non-competitiveness, sanuk, family oriented, future oriented, risk aversion, and thrift. Many core cultural values are associated with each other to a small degree.

2. Core cultural values differ little among Ethnic Thais, Chinese Thais, and Mixed Ethnic Thais. However, Ethnic Thais may value confrontation avoidance and a present oriented world view more so than other Thai people.

3. Many core cultural values of Thai people are related to their attitudes about popular brands, fashionable products, impulse buying, materialism, money, and variety seeking.

4. Core cultural values of Thai people are weakly related to consumption intentions, and likely even less so to consumption behaviors.

5. Ethnic backgrounds of Thai people strongly influence their consumption and other behaviors associated with Thai and Chinese New Year celebrations.

Chapter 5 provides specific quantitative values to support this list of facts, based on a variety of analyses using data collected from a sample of Bangkok residents. Chapters 2, 5, and 6 provide detailed insight into Thai culture and Thai consumer behavior, knowledge that cannot be found elsewhere.

Beyond this knowledge, the current study provides a means to learn more about Thai people in the conduct of future research. That is, a major contribution of this study to social science knowledge lies in its valid and reliable measurements of indigenous Thai core cultural values. With just slight revision, 10 of the 12 scales developed and used in this study can be used in various academic settings, for basic and applied research purposes. The scales reflect an extensive review of diverse social science and popular literatures; the qualitative opinions of Thai marketing academics, Thai marketing Ph.D. students, and Thai business professionals; and the quantified beliefs of a large sample of

Thai people. The scales are specific to Thai people and describe a complex, unique, and attractive culture.

The scales stand in contrast to two earlier research efforts to describe fundamental values of Thai people. Komin (1991) modeled her study after Rokeach (1973), using 23 instrumental values and 20 terminal values useful in distinguishing one culture from another. However, the broad, general nature of these values suggests that many of the 43 values in her study are of limited relevancy to Thai culture. For example, values such as brotherhood spirit, equality, inner harmony, mature love, salvation, a world at peace, a world of beauty, ambitious, broad-minded, and imaginative seem more descriptive of cultures other than Thailand's. Further, Komin's ranking methodology used to gather data is deficient in terms of response difficulty and in its producing data that possesses only ordinal properties. Hofstede (1984; 1988) uses five value dimensions to distinguish one culture from another: power distance, individualism, masculinity, uncertainty avoidance, and long term orientation. While all five dimensions appear relevant to Thai culture, the dimensions are quite limited in number and in their ability to produce an understanding of cultural values distinctive to Thai people.

Apart from the core cultural value scales, this study also contributes to future social science knowledge in the form of its ethnicity identification technique. The family tree methodology used in this study allows a researcher to decide whether or not a respondent belongs to a reported ethnic group by means of a graphical family tree, spanning two generations preceding the respondent. The methodology guides the respondent through a designation of his or her ethnic origins and should reduce any ambiguity a respondent might have in comparison to responding to a checklist type of question.

6.7 Managerial Implications

The literature review, data analysis results, and discussions of research results all contain information about the Thai value system that marketing decision makers should find useful. The information will be useful in both a general and a specific sense as decision makers create, modify, or control strategy and action plans for their businesses.

In a general sense, information about Thai core cultural values can be used to understand Thai people and their thoughts and behaviors. The 13 core cultural values shown in Table 5.25 are central to Thai society. By knowing that these values matter, decision makers in domestic and multinational companies operating in Thailand can recognize, comprehend, and appreciate Thai people as friends, employees, customers, suppliers, colleagues, competitors, and policy makers. Decision makers can predict reactions to internal company policies and external market actions, identify with company stakeholders, solve problems, and exploit opportunities. In short, decision makers can use information about Thai core cultural values to make better professional and personal decisions.

By knowing that these core cultural values matter in Thai society, decision makers can devise, modify or control their marketing communications strategies. Knowledge of the values would be useful in advertising, promotion, public relations, personal selling, and web page activities. As indicated in Tables 5.22 and 5.24, the values could be used individually or in combination. For example, a promotion strategy could focus on the sanuk value, future oriented value, or thrift value. Alternatively, it could focus on any two or on all three values in combination. However, reference to Table 5.22 shows that the sanuk/future oriented combination and future oriented/thrift would be seen by Thai people as consistent (correlations of 0.21 and 0.22, respectively) while the sanuk/thrift combination would be seen as inconsistent (correlation of 0.02). Reference to Table 5.24 shows other consistent and inconsistent combinations between core cultural values and consumption attitudes that will be useful in communication strategies.

In a specific sense, particular results of this study also can aid decision making. For example, consider the area of consumer complaint behavior at a large retailer or a product service center. Decision makers can train company representatives to be courteous when handling complaints and to be alert for cues that a customer may be sending, both ideas being rather conventional. However, research results in Chapter 5 would have company representatives specifically avoid confrontation, provide opportunities for customer face

saving, be “self-effacing, humble, and considerate” (kreng jai), and try to discount difficulties associated with product return or warranty service (mai pen rai). Why? The answer is that these four values are important to Thai people and the four values are highly correlated (Figure 5.13). Such behaviors on the part of company representatives would be most important to Ethnic Thai customers (Table 5.25) but certainly welcomed by Chinese Thai and Mixed Ethnic Thai customers.

As another specific application of study results, a conclusion from Table 5.25 is that Chinese Thai individuals are not culturally distinct in Thai society. Such a finding implies that a current belief depicting Chinese Thai to be “Chinese” may be a faulty stereotype rather than a true picture. Owing to this faulty belief, decision makers and practitioners may be tempted or lured into choosing a unique marketing strategy for Chinese Thai individuals. Such a decision will work against the market segmentation purpose. That is, study results strongly suggest that a segmentation process based on reported ethnicity (or even subjective ethnicity) will be less successful than a segmentation strategy based on Thai core cultural values. (However, one important exception to this point is that ethnicity remains a valid segmentation basis for specific ritual practices.) Study results also suggest that communications programs may be more efficient and effective by creating one unifying and meaningful message aimed at enticing a mainstream culture segment (Thai National culture or Ethnic Thai culture) rather than trying to make separate content thought suitable for members of the Chinese Thai subculture.

As noted above, core cultural values should be potential segmentation bases when used alone. However, a last specific application of study results would be segmentation analysis in marketing research using both core cultural values and consumption attitudes. Sanuk may be one of the most versatile segmentation bases because the value significantly associates with all studied consumption attitudes. Marketers can design products or advertisements around a sanuk value theme in order to create favorable perception in the mind of Thai consumers, which can subsequently lead to overall positive association with products. Another example would be the relationship between

the future oriented value with brand conscious, fashion conscious, and materialist attitudes (see Table 5.24). A fashion goods retailer may act on associated relationships by promoting trendy, prestige branded fashion clothing not as “you receive good value for money for years” (because of negative correlations for the thrift value) but as “you deserve it today” (because of the positive correlation with the present oriented value). In short, results of this study strongly indicate the merit of a marketing research segmentation study based on core cultural values and consumption attitudes, a topic for future research.

6.8 Future Research

Many future research opportunities are associated with the current study, split here into basic and applied research categories. Basic research might begin with further development of the 12 Thai core cultural value scales. At a minimum, such work would corroborate identification of important core cultural values, perhaps using a research design with a greater qualitative research emphasis and employing a grounded theory approach. Additional work is needed to produce valid and reliable measures of the autonomous and risk aversion value scales and to develop additional items for all scales such that each core cultural value’s domain of item content is adequately represented.

Given adequate, second generation core cultural value scales, additional basic research is needed to describe values for a representative sample of Thai people. The present study is limited in its use of Bangkok sampling frames and a resulting restriction in range. Additional basic research could remedy the limitation, collecting data from a wider representation of Thai people living in Bangkok and in other urban and rural areas in Thailand. The research design possibly could be extended to study Lao people, given their close cultural ties with Thailand. All such extensions would aim to increase representativeness and heterogeneity of the realized sample and to produce stronger relationships between research constructs and variables of interest. Care should be taken to collect sufficient data in these studies to conduct subgroup analyses with sufficient power to detect small and medium sized effects.

Concerning an extension of this study to Lao people, Thailand shares a common border and heritage with many Southeast Asian nations. One of these nations is the Lao People's Democratic Republic. Laos was once part of Thailand (formerly known as Siam) before the Thai king ceded it to the French in the nineteenth century, to avoid a war and the possibility of losing Thailand's sovereignty. Today, Thailand and Laos are quite similar in terms of customs, traditions, norms, languages, food, and clothing, for example. It would be interesting to learn of Lao core cultural values and their similarities and differences with Thailand core cultural values. Many Thais believe that Lao people are culturally similar to Ethnic Thais living in the northeast region of Thailand; it would be particularly interesting to compare these two groups along the Thai National and Ethnic Thai value dimensions. Further, it would be equally interesting to compare core cultural values collected in a similar fashion from many neighboring countries as Thailand's ASEAN trading partners.

Basic research could explain the numerous strong associations Ethnic Thai core cultural values and the six consumption attitudes (see Table 5.25) in an effort to understand why these associations exist. For example, the sanuk value is quite close conceptually to the "fun and enjoyment" value found in the List of Values research stream (Kahle and Kennedy 1989; Kahle, Poulos, and Sukdal 1988, Kamakura and Novak 1992). Consumers high on the fun and enjoyment value tend to enjoy an active life, socializing with others while maintaining their autonomy (a result not supported in the present study). Consumers high on the fun and enjoyment value tend to be original in thought, strong-willed, optimistic about their future, and risk takers. Further research might base the examination of relationships between sanuk and these aspects of the fun and enjoyment value in terms of consumption intentions. For example, consumers high and low on the sanuk value might have quite different consumption intentions with respect to purchasing insurance, adventure travel packages, and home security systems. Bases for these relationships might be found in terror management theory, self discrepancy theory, or social comparison theory.

Basic research could provide insight into the effects of two variables that might influence core cultural values—education and location. In effect, the present study controlled education and location of respondents though its choice of sampling frames and—perhaps as a result—found few differences among Ethnic Thais, Chinese Thais, and Mixed Ethnic Thais on core cultural values. If future research designs allowed education and location to vary to their fullest extents, results would indicate the relative effects of ethnicity, education, and location on core cultural values. For example, Chinese Thai individuals living outside Bangkok might live quite different lives than Chinese Thai individuals living in the capital city. If this conjecture is true, then the value structure of the Chinese Thai ethnic group may be different depending on residence location. Thus, a core cultural value like family oriented may be held with higher regard by Chinese Thai individuals living outside Bangkok than by those living inside Bangkok.

Eleven core cultural value scales are ready to be applied in a variety of research contexts. For example, an important topic of interest to academic marketing for the next decade concerns the marketing and use of environmentally friendly products. The mai pen rai value might be used to understand people's attitudes, intentions, and behaviors to gain insights into promoting and using energy efficient products. Respondents who already have begun using environmentally friendly products may score lower on the mai pen rai value, thus forming a niche group of academic and practitioner interest. Alternatively, the collectivism and future oriented values seem relevant as well in understanding attitudes, intentions, and behaviors of an environmentally friendly target segment and might provide greater insight. Research designs to investigate this possibility might be quite similar to that in the present study, using the core cultural value scales as independent variables to be associated with attitudes, intentions, and behaviors within an environmentally sensitive market segment.

As an aside, this example also may illustrate a relevancy to policy makers who can act on research relationships uncovered in the present study. For example, should correlations between the mai pen rai value, the future oriented value, and energy saving intentions be strong, policy makers may consider attempts to change attitudes of Thai people by de-

emphasizing mai pen rai value and by alerting them to future dangers of not saving energy such as blackouts, global warming, and droughts.

Still other possible applied research related to this work would be the use of the study's core cultural value scales and consumption attitude scales in studies of Thai market segments, customer satisfaction, customer complaint behaviors, and buyers' perceptions of marketing stimuli. In short, applied extensions of this work can be found in numerous important topic areas in marketing strategy and marketing management.

6.9 Conclusions

Based on data analysis results and discussions, it is appropriate to conclude that research on Thai core cultural values is an exciting new area of study with great potential to contribute to social science knowledge. Beyond the present study's research findings as new social science knowledge, the study's core cultural value scales (but for autonomous and risk aversion) possess adequate measurement properties as initial, preliminary measures and stand ready for use by other social science researchers. All 12 core cultural value scales developed and used in this study can be refined with additional measurement development work.

Through testing of four propositions, three more conclusions can be drawn from this study. First, the decades-old belief that Chinese Thais are culturally distinct in Thailand is challenged by findings of this study. Based on the four studied Chinese core cultural values, Chinese Thai individuals are not significantly different from Ethnic Thai and Mixed Ethnic Thai individuals. This finding may be viewed as the first empirical evidence showing that Chinese Thais have been assimilated and integrated into the mainstream value system of Thailand.

Second, several core cultural values among Thai people are shown to be closely related to consumption attitudes. As many as 39 out of 78 pairs of core cultural values and consumption attitudes are significantly correlated, suggesting that core cultural values

and consumption attitudes can be useful variables in making marketing decisions whether as predictor or segmentation variables.

Third, core cultural values are shown to be weakly related to consumption intentions. This finding has been explained by the fact that core cultural values are broad beliefs that may be too abstract to influence consumption intentions. Weak relationships found in this study between core cultural values and consumption intentions do not mean that core cultural values are not important to the study of consumer behavior. Rather, core cultural values should be seen as often lying at a subconscious level and connecting to personal and situation specific values that have a stronger influence on consumption intentions.