Critical Tests of Alternative Theories of Cultural Value Orientations on Consumers' International Service Purchases and Experiences

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Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Please note that a substantial paper has been published from this thesis; I am the first author on that paper. The *Journal of Travel Research* is listed as an A* journal on the Australian Business Deans Council list. "Shih-Yun Hsu, Arch G. Woodside and Roger Marshall (2013), "Critical Tests of Multiple Theories of Cultures' Consequences: Comparing the Usefulness of Models by Hofstede, Inglehart and Baker, Schwartz, Steenkamp, as well as GDP and Distance for Explaining Overseas Tourism Behavior", *Journal of Travel Research*, DOI: 10.1177/0047287512475218."

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Abstract

The thesis provides critical tests of the usefulness of four alternative theories, proposed by Hofstede, Inglehart and Baker, Schwartz, and Steenkamp, of national cultures' influences for explaining consumers' consumption of international services. The study applies critical testing of these four theories in two research contexts: visiting Australia by holiday (vacation) travellers from 5 Asian and 5 Western nations and visiting the United States by holiday (vacation) travellers from 12 nations. The thesis is unique in proposing and testing configurationl (i.e., "causal recipe") perspectives of cultural influences rather than testing via "unpacking" the net effects of cultural dimensions separately. The findings indicate that cultural configurations do impact consumption behaviour of international services beyond the influences of home-destination distance and national wealth, and Schwartz's theory is useful in particular in explaining unique aspects of consuming international services.

Keywords: critical test; qualitative comparative analysis; fuzzy set; national culture; consumer behaviour; international tourist; Hofstede; Inglehart; Schwartz; Steenkamp

Introduction and Overview

1.1 The Study Focus

Tourism is one of the world largest industries with great potential to continue the dramatically growth experienced in recent years. According to the World Tourism Council (2012), in 2011 the industry contributed 9% of global GDP, or a value of over US$6 trillion, and accounted for 255 million jobs. Over the next ten years this industry is expected to grow by an average of 4% annually, taking it to 10% of global GDP, or some US$10 trillion. Further, by 2022, the Council anticipates that the industry will account for 328 million jobs, or 1 in every 10 jobs on the planet.

Understandably, many researchers have already devoted their time to study tourism and its related topics, to gain knowledge about tourists and their behaviours, in order to promote the development of the tourism industry. Governments are also interested in this activity; understanding the different behaviours of tourists from various countries with different culture backgrounds is of critical important for countries' tourism authorities forming marketing plans and designing marketing strategies to attract international tourists from different countries.

Many of the scholars, who already devote research resources to investigate the different behaviours of international travellers, believe that culture is one of the main reasons that cause international travellers to behave differently depending on their country of origin (Crotts & Pizam, 2003; Crotts & Erdmann, 2000; Reisinger, 2009; Reisinger & Mavondo, 2006; Reisinger & Turner, 2003; Reisinger & Crotts, 2010; Pizam & Sussmann, 1995).

This belief, of the importance of tourists' country of origin to understanding the expenditure patterns of tourists, provides the focus for this thesis. Two large databases are used to provide input to analysis, using methods that have not been utilized before, in order to establish if any of the established national cultural theories outperform simple control-comparison models, such as the predictions of GDP per capita by home-destination distance model, in explaining and forecasting tourists' expenditures to the United States and Australia.

1.2 Prior Approaches

Prior researchers mainly focus on examining the individual influence of cultural dimensions one at a time on consumer behaviour to investigate how each culture value influences the behaviours of consumers. For example, using Hofstede's (1983) typology of four principal cross-cultural values (power distance, uncertainty avoidance, individualism/collectivism, and masculinity), Lynn, Zinkhan, and Harris (1993) examine each value's impact of tipping behaviour. No attempt is made by Lynn et al., or any other published researchers, to go beyond examining a single cultural condition's influence on individual or organizational behaviour until Woodside, Hsu, and Marshall (2011).

However, national cultures represent complex values acting in concert rather than individual factors affecting behaviour. For example, considering low, medium, and high levels of each of Hofstede's four cultural values permits a property space analysis of 81 complex antecedent conditions or antecedent paths (Lazarsfeld, 1937). While not all combinations occur among observable national cultures, data and research methods are available to permit the examination of how complex cultural conditional statements,

beyond the view of individual cultural dimensions, affect the behaviour of individuals or firms.

1.3 National Culture Theories

In spite of many cultural theories that exist in the literature, Hofstede's culture framework is the one that has been applied most widely in cross-cultural studies. Other studies have been applied less, mainly due either to their lack of underpinning empirical evidence or to the relatively limited numbers of nations, or societies, included in their studies. Yet even Hofstede's widely applied theory has come under criticism, mainly on the grounds that a national score on a cultural variable represents an average that may hide both significant cultural sub-groups within a country and great variation within a country. This debate is visited later in the thesis, and using country as a unit of analysis is justified both theoretically and also in view of the burden of empirical evidence.

Therefore, the thesis proposes a configural-based theoretical approach (via the use of Boolean algebra) for examining the influences of alternative antecedent combinations of national culture values on international tourist behaviours of the influence of individual cultural values-- rather than adopting the dominant logic of a "net effects" (Ragin 2008) theoretical and analytical stance. Configural theory and analyses match well with the meaning of culture as a complex system of values; the study examines the relevancy of configurations within four principal theories of national cultural influences. Listed by high-to-low citation impacts, these studies include those of Hofstede (1980), Schwartz (1994, 2006), Inglehart and Baker (2000), and Steenkamp (2001). This study includes conducting critical tests (Carlsmith, Ellsworth, & Aronson, 1976) of these

alternative theories of cultural consequences on consumer purchases and experiences in buying major services – international leisure travel to Australia and the United States of America.

1.4 Testing the Theories

A "critical test" is testing the efficacy of contrasting theories on behaviour rather than testing an alternative theoretical proposition versus a null hypothesis. Armstrong, Brodie, and Parsons (2001) urge the adoption of performing critical tests in advancing behavioural science, because a competing hypotheses approach is preferred by marketing scientist for its generalizing ability to exploratory and dominant hypothesis approaches.

Individual national cultures consist of complex statements of cultural dimensions representing unique configurations of conditional multiple-value paths to outcomes. This research transforms Hofstede, Schwartz, Inglehart and Baker, and Steenkamp's data on the terminal values of national cultures into fuzzy-set membership scores for undergoing qualitative comparative analysis (QCA). Configurational thinking, in terms of degree of membership in different combinations of causally relevant thinking (qualitative comparative analysis (QCA) via fuzzy set social science (see Ragin 2008), provides a unique and useful understanding that goes beyond net-effects approaches (i.e., multiple regression and ANOVA methods) for explaining tourist behaviour.

With two sets of the consumption data, including consumption activities by visitors to Australia and the United States from nations in Asia, Europe, and North America, the study examines the contributions of both configurational QCA and net-effect approaches to understanding the consumption of international consumer services. Prior

research studies using Hofstede's theory do not actually study complex antecedent conditional statements (e.g., see Lynn, Zinkhan, & Harris, 1993). This study provides unique and valuable development to theory and empirical testing of such antecedent statements.

1.4.1 **Research Overview**

The following diagram represents a conceptual overview of the research. The four cultural theories of interest and the control-comparison data of GDP per capita and home-destination distance are shown in the box on the left, and it is proposed that they all have a causal influence on the behavioural patterns of tourists in their various destinations, either the USA or Australia in this research. The sub-cultural variables of age and the consumption variables of purpose of trip moderate this influence. Finally, the box on the right, the dependant variables, includes 5 types of consumption behaviours.

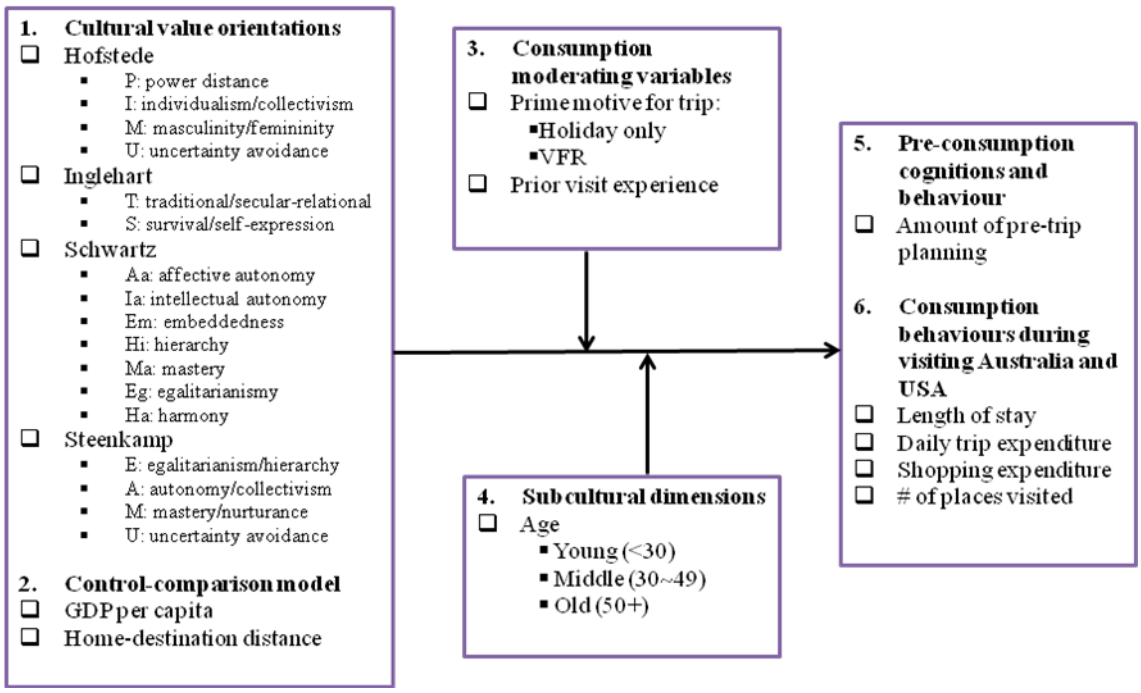


Figure 1: The Conceptual Framework of Culture's Influences on International Tourism

1.5 Results and Contributions

The major focus of the thesis is upon the testing of the four cultural theories, mentioned above, and comparing them and economic data to see which can best predict tourists' consumer behaviour. Analysis reveals a number of related results, which are highlighted here.

First, it is established that a configuration of national cultural values performs better than any single variable acting alone. The details are contained in the analysis section of the thesis, but the fact alone is of value, as this thesis (and the two published papers stemming from it (Woodside, Hsu and Marshall, 2011; Hsu, Woodside and Marshall, 2012)) contains the first research that demonstrates this clearly – prior to this time cross

cultural research has been restricted to dealing with one cultural value at a time. This finding alone provides a substantial contribution to the literature of cultural values.

Second, and less original but nevertheless of value, analysis reveals that countries do differ in terms of their cultural value configurations. For example, although there are 16 possible cultural configurations with four cultural values of Hofstede's theory (and all four theories are used in the analysis), not all of them exist in the countries studied in the thesis. The Eastern countries included in the analysis, including Hong Kong, Japan, Malaysia, Singapore, and Taiwan, are all high in power distance and low in individualism, while most Western countries are low in power distance, except for Italy, France and Spain, and high in individualism, except for Italy. This finding seems trivial at first glance, as it seems obvious that this should be the case. However, in the light of the criticism made of viability and validity of measuring cultural values at a national level, the contribution takes on more significance.

The results of most interest are at the heart of the thesis' purpose – to compare the four cultural theories with each other, with the gross domestic product of the country of tourists' origin, and the distance from their home to the destination, to confirm the power of cultural values as behavioural predictors. This analysis is conducted by a meta-analysis of the fsQCA results, presented as box plots showing the distribution of consistency scores, for ease of comparison.

The findings are slightly different for the Australian and American datasets, but both do, indeed, confirm the importance of cultural values as determinants of tourists' behaviour. The behaviours include the length-of-stay, shopping expenditure, daily expenditure, number of states visited and even, for the American data, pre-trip planning. In general, it is found that Schwartz's theory performs better than other cultural theories,

and all of them are superior to GDP per capita and home-destination distance. This is a valuable contribution both in a theoretical sense, in that strong support for the predictive power of configurational national culture is provided, and also in a practical sense, as the information here is of direct relevance to those concerned with marketing their country to overseas tourists.

An interesting variation on this finding is that GDP and distance come into their own for repeat visits and visiting friends and relatives, when the cultural aspects are less important to the purposes of the visit.

Similarly, a restricted meta-analysis (estimating the number of substantial consistency scores of 0.75 or higher (Ragin, 2006; Wagemann & Schneider, 2007) to indicate useful models in fuzzy set comparative qualitative analysis and their ranges for findings testing a given theory) shows that although culture does strongly influence tourists' behaviour, there is no difference by age. This is contrary to common belief, in that other researchers consider it likely that older, more experienced, travellers would be less prone to predictability by country of origin. This finding also provides support to Hofstede (2001), who claims that cultural change within a country is very slow.

A final contribution can be claimed as this study is the first that uses fuzzy set comparative qualitative analysis within this context. Chapter 4 provides details of this new analytical technique, and explains why it is better suited to the type of complex analysis in this thesis than more typical regression or structural equation modelling approaches.

The findings provide clues for marketing strategists as to which complex antecedent value profiles are particularly relevant in associating with high expenditures per day and long versus short holiday visits. Given that "perfectly consistent set

relations are relatively rare in social research" (Ragin, 2008, p. 45) particular nations may stand out as relatively high potential response nations to marketing campaigns – marketing campaigns that complement and compliment these nations' value profiles that are favourable toward high revenue for the host nation.

A substantial contribution of this thesis lies in its focus on nuance – in understanding and testing the proposition that nations represent nuanced complexity of complex value conditions and not only simple statements (e.g., low versus high collectivism). Explaining the impact of values on consumer behaviour via formal comparisons for a large-sample study of cross-national tourism behaviour of multiple service consumption behaviours in tourism is a major contribution.

1.6 Structure

This thesis is structured using seven chapters. Following this introduction chapter, the literature regarding national culture theories is considered, in Chapter 2. The four leading theories are identified and described and their usefulness discussed. At this point a short chapter, Chapter 3, regarding tourists' behavioral patterns is presented. Although tourists' behavior is, in a sense, merely a vehicle to test the four cultural theories, there is a small body of publically available prior work in the area and lessons can be learned from both the strengths and the weaknesses of these studies.

The method of analysis used to test the four theories is fuzzy set comparative qualitative analysis (fsQCA). There are good reasons to use this method and the analysis technique is becoming used more widely. Yet there is not yet general understanding of this non-statistical method, so Chapter 4 contains a comprehensive discussion of both the rationale and the operationalization of the logic.

Chapter 5 describes the research method, including a description of the sample data, the research and analytical procedures. This is followed, in turn, with the analysis itself, in Chapter 6, while Chapter 7 discusses these findings by first linking results to hypotheses, then discussing the limitations and consequent future study opportunities and the contribution of the study.

Chapter 2: Theories of National Culture

2.1 Introduction

In Chapter 1 the general objectives of this thesis are explained, and the way in which the research question is addressed is described. In this chapter the central idea of culture is discussed, particularly with respect to the viability of measuring culture at a national level, and specifically with consideration of the four major theories of national culture tested later in this research.

2.2 Background to National Cultural Theory

Researchers, in a wide range of disciplines such as accounting (Harrison, 1993), information technology (Veiga & Floyd, 2001), management (Shane, 1994), marketing (Nakata & Sivakumar, 1996), psychology (Triandis, 1989), sociology (Clark, Ramsbey, & Adler, 1991) and tourism (Ng, Lee, & Soutar, 2007) clearly demonstrate that culture plays an important role in shaping people's behaviours. As the premise that culture can be measured meaningfully at a national level is central to this thesis, the debate around alternative ways of considering culture is first explored. After this consideration the four major theories of national culture are reviewed.

One of the early definitions of culture is made by Tylor in 1871, quoted by Soares, Farhangmehr and Shoham (2007, p 277), as "the complex whole which includes knowledge, belief, art, morals, custom and any other capabilities and habit acquired by man as a member of society." Many other researchers have taken this all-embracing

approach to culture (1999) and added to, or modified, Tylor's definition. Indeed, Kroeber and Klukholm's (1952) work contains a synthesis of 159 similar definitions.

An alternative approach has emerged, however, where scholars define culture in behavioural terms, as an interactive aggregate of common characteristics shared by the population of a nation (Clark, 1990; Hofstede, 1980, 2001; Steenkamp, 2001). Hofstede's (1980) much cited phrase, 'the collective programming of the mind' represents the essence of this view of culture. This is a much more useful definition to marketing and business practitioners and theorists, but defining a culture in terms of the aggregate behavioural patterns of a geographically-defined population has attracted some criticism. Nevertheless, the approach does have great worth and it is utilized in this thesis, so before discussing the leading theories of national culture the criticisms of this national, behavioural approach are first addressed.

2.3 Criticisms of Defining Culture by Country

Critics think that more than one culture exists in a nation and that using an average disguises the cultural variations within a country's borders. They also claim that with globalization and advances in communication technology, people coming from different cultural backgrounds travel, immigrate and interact with each other easily so that the original cultures are contaminated and changed (Craig & Douglas, 2006; Douglas & Craig, 1997, 2006; McSweeney, 2002). This criticism is particularly aimed at Hofstede, as his data is old and his theory cited the most. Finally, critics point to the IBM employee sample used by Hofstede and point to further bias. These are interesting

criticisms and do have some face value, although to date there is no empirical evidence to support them.

2.3.1 **Country as the Unit of Cultural Analysis**

As culture can be conceptualized at different levels, such as meta-cultures, micro cultures, and national cultures (Steenkamp, 2001), debate occurs on whether or not national culture is the only culture within a nation and whether nation is the best unit for analyzing culture (McSweeney, 2002). For the reasons that it is almost impossible to delimit culture groups (Clark, 1990; Dawar & Parker, 1994) and that all members of a nation typically share a similar history, language, and political and educational environment (Dawar & Parker, 1994), nation is the only convenient unit of analysis available for studying culture; "nation" is easy to define and identify historically and geographically (Clark, 1990). Besides Hofstede, many researchers support the conception that nation is useful as a meaningful proxy for culture as long as within-country commonalities and between-country differences exist (Dawar & Parker, 1994; Schwartz, 2006; Steenkamp, 2001).

2.3.2 **Dated Data**

Some researchers criticize Hofstede's country scores because they are based on the data collected more than three decades ago, and thus are in need of being updated (Fernandez, et al., 1997; McSweeney, 2002; Sivakumar & Nakata, 2001; Steenkamp, 2001). Hofstede, though, suggests that "a nation's culture has centuries-old roots" (Hofstede, 2002, p. 1356) and thus cultural change within a nation will be very slow indeed. Others agree with his reasoning (Schwartz, 2006; Sivakumar & Nakata, 2001).

There is also some published empirical evidence to support this view. Marshall, Dong & Lee (1994) show, with cross-sectional analysis, that immigrants from China to New Zealand become progressively more individualistic as they leave China. Thus born-in-New Zealand Chinese are indistinguishable in terms of individualism from born-in-New Zealand Europeans, but new Chinese immigrants to New Zealand are less individualistic than locals but more so than their Chinese counterparts. It thus seems, as Hofstede suggests, more likely that individuals' cultural characteristics will change and become absorbed by the country's culture as they join a nation, than that the national culture will change significantly with immigration. This at least minimizes the dating argument raised by Hofstede's critics.

2.3.3 **Culture as a National Mean**

In response to the related issue of whether or not representing a national culture as an average is misleading, Hofstede (1991, p 253) points out:

> "We do not compare individuals, but we compare what is called central tendencies in the answers from each country. There is hardly an individual who answers each question exactly by the mean score of his or her group: the 'average person' from a country does not exist."

A national mean, or average score, for some country on various cultural variables is both meaningful and useful, as long as the caveat is observed that although the mean difference between two countries on some aspect of national culture may be different, not every individual in those countries will display the same difference. Many scholars perceive substantial relevancy in national cultural

theories in explaining human behaviour, including Clark (1990), Dewar & Parker (1994), Hofstede (2002), Schwartz (2006), and Steenkamp (2001).

2.3.4 **Hofstede's "Biased" IBM Sample**

Finally, critics also believe the data Hofstede obtained from a single multinational company, IBM, about work-related issues have limited its ability to represent the entire national cultures as well as people in other situations (McSweeney, 2002; Steenkamp, 2001). Moreover, some of the items used by Hofstede to measure the cultural values may have different meanings in different countries and should not be used in comparing cultures (Schwartz, 2006; Steenkamp, 2001).

However, his data have been carefully replicated and empirically validated by many researchers using his "Value Survey Modules" (VSMs) on various populations, such as airline pilots (Merrit, 2000), consumers (de Mooij, 2001), civil servants (Mouritzen & Svara, 2002), and employees of other organizations (van Nimwegen, 2002).

Other work has addressed the validity of Hofstede's data. Schwartz, in 2003, compared his embeddedness dimension and Hofstede's individualism dimension and found a correlation of 0.59, and a further correlation (of 0.46) between his egalitarian and Hofstede's power distance dimensions. Although these dimensions are not identical, they are very similar and give a good indication. Furthermore, Hoppe (1990), in a study of nations' elites, updated Hofstede's data in 18 Western European nations, Turkey and the United States. He reported correlations of between .56 and .69 between the datasets.

It is not the purpose of this thesis to debate this issue, but it is appropriate

to acknowledge a legitimate point of view, that culture cannot be defined along national lines. The burden of evidence comes down strongly in favour of the contrary view, however, so this is the approach taken here.

2.4 Cross-Cultural Studies in Tourism

This thesis is concerned with testing national cultural theories by predicting tourist expenditure patterns, and, according to Dimanche (1994), Mattila (2004) and Pizam (2000), cross-cultural consumer behaviour studies in travel and tourism are rare, relative to general consumer behaviour. Furthermore, Mattila (2004) states that the majority of these studies adopt a rather different perspective of culture, such as country of residence or ethnicity. Unfortunately such research does not contribute so much to theory, as it offers only empirical evidence and does not address the underlying cultural motivations concerned. This lacuna is addressed here, as the national cultural theories, discussed below, are predicated on the theory that national populations do have shared, measurable, cultural dimensions.

2.5 Choice of National Cultural Theories

According to Taras' (2010) culture survey catalogue, a total of 154 instruments are publicly available for measuring culture. It is clearly impractical to deal with all these, but the measurement and comparison of national cultures demands the use of a small number of universal, or terminal, values to be identified to allow such cross-cultural comparisons. Among cross-cultural theorists who have developed such scales and applied them internationally Geert

Hofstede, Ronald F. Inglehart, Shalom H. Schwartz are the three most widely cited authors of the cross-cultural studies in the Social Science Citation Index (Sivakumar & Nakata, 2001). Steenkamp has derived a scale from two of the other authors, and his work is also widely cited.

This chapter next introduces the comprehensive national cultural frameworks developed and used by these scientists for cross-cultural research, then compares their ideas to identify key similarities among them. Particular attention is paid to Hofstede's work as it can lay claim to be among the most important frameworks in social science, and provides by far the widest database. In spite of this dominance, which cannot be ignored, there have been calls made for the development and/or application of alternative national culture models for further theory development in the field of cross-cultural consumer behaviour (e.g., Lenartowicz and Roth 1999; Steenkamp 2001; Yoo et al. 2000) and it partly in response to these calls that this thesis examines three other theories and compares them to Hofstede's.

2.6 Four Major Cultural Value Theories

2.6.1 Hofstede's National Cultural Value Dimensions

Hofstede's (1980, 2001) well-known theory of national cultural value dimensions is based on the data collected in two survey rounds from IBM's international employee attitude survey program, between 1967 and 1973. The data includes answers to more than 116,000 questionnaires from 72 different countries in 20 languages. However, the initial analysis is limited to the data from 40 countries due to some countries containing

missing data in the occupational categories. Later, in 1982, the list of countries extends to 50 countries plus three regions (Hofstede, 1980, 2001).

In his book, *Culture's consequences: International differences in work-related values*, Hofstede (1980) identifies four national cultural dimensions, including power distance, uncertainty avoidance, individualism versus collectivism, and masculinity versus femininity. Later, around 1985, a fifth dimension, long-term versus short-term orientation, is found from answers to the Chinese Value Survey (CVS) developed by Michael Harris Bond, based on student responses from 23 countries (Hofstede, 2001). Hofstede's five dimensions of national culture values are summarized as follows.

1. The power distance index (PDI) measures the degree of inequality in power perceived by the less powerful member between a superior and a subordinate in a hierarchy. Inequality is a common phenomenon found in countries with high scores on the power distance index whereas egalitarian nations typically score low.

2. Individualism-collectivism refers to the degree of independence in the way people work. Countries that score high on the individualism index (IDV) are described as individualistic countries, in which people's social ties are loose and they prefer to act as individuals. On the contrary, countries that score low on IDV are known as collectivistic countries, in which people like to act as members of a group which responds by offering protection and security to the individual.

3. Masculinity measures the degree of dominance of the masculine values in a country. Masculine values such as assertiveness and competitiveness are

dominant in countries with high scores on the masculinity index (MAS). In contrast, the feminine values, such as nurturance and tenderness, are dominant in countries with low MAS scores.

4. Uncertainty avoidance refers to the degree of comfortableness perceived by the populations of a culture in unstructured situations. People in countries with higher scores on the uncertainty avoidance index (UAI) feel more anxious and stressed when facing uncertain situations than those in countries with lower scores on UAI.

5. Long-term versus short-term orientation refers to the extent to which a culture focuses on the future. Countries with higher scores on the long-term orientation index (LTO) focus more on the future while countries with lower score on LTO focus more on the past and present. This affects, for instance, on national attitudes to saving.

Hofstede's national cultural framework may be the most influential conceptual foundation in cross-cultural studies (Fernandez, Carlson, Stepina, & Nicholson, 1997), in that his work has been cited 1,101 times during the years of 1987 and 1997, according to the Social Science Citation Index (Sivakumar & Nakata, 2001). His framework is both conceptually and empirically important. Many similarities occur in different typologies of culture corresponding to his national value dimensions (Clark, 1990). In addition, his five dimensions are validated by more than 140 various survey and non-survey studies that compare between 5 and 39 countries (Hofstede, 2001).

2.6.2 **Inglehart's World Values**

Inglehart, Baker, and Norris (Inglehart & Baker, 2000; Inglehart & Norris, 2003) identify two value dimensions of cross-cultural variation, through four waves of their World Values Survey (WVS) from 1981 to 2001, to address issues in sociology about modernization. The WVS data are collected from interviewing an average of 1,400 respondents per country from 81 countries on all six inhabited continents, that together contain more than 80% of the world's population. Inglehart's two cultural dimensions are summarized as follows.

1. The traditional versus secular-rational dimension concerns orientations towards authority. In traditional societies, people emphasize the importance of religion, nation, and family. On the other hand, people in secular-rational societies do not think those are so important.

2. The survival versus self-expression dimension concerns the relation between self and group. Survival values emphasize the importance of economic and physical security. In survival societies, people feel unhappy and insecure when facing unfamiliar things and changes. On the contrary, self-expression values emphasize subjective wellbeing and quality of life. In self-expression societies, people take survival for granted and willingly accept differences and changes.

Based on the WVS, Inglehart and Welzel (2005) create a cultural map of the world (reproduced as Figure 2.1). This map illustrates countries in the light of the two cross-cultural variations that Inglehart identifies. Each dot represents a country based on its people's values, rather than its geographical location. Therefore, English speaking

countries, such as New Zealand, Canada, and Australia are cultural neighbours with similar values, despite their geographically disparate locations.

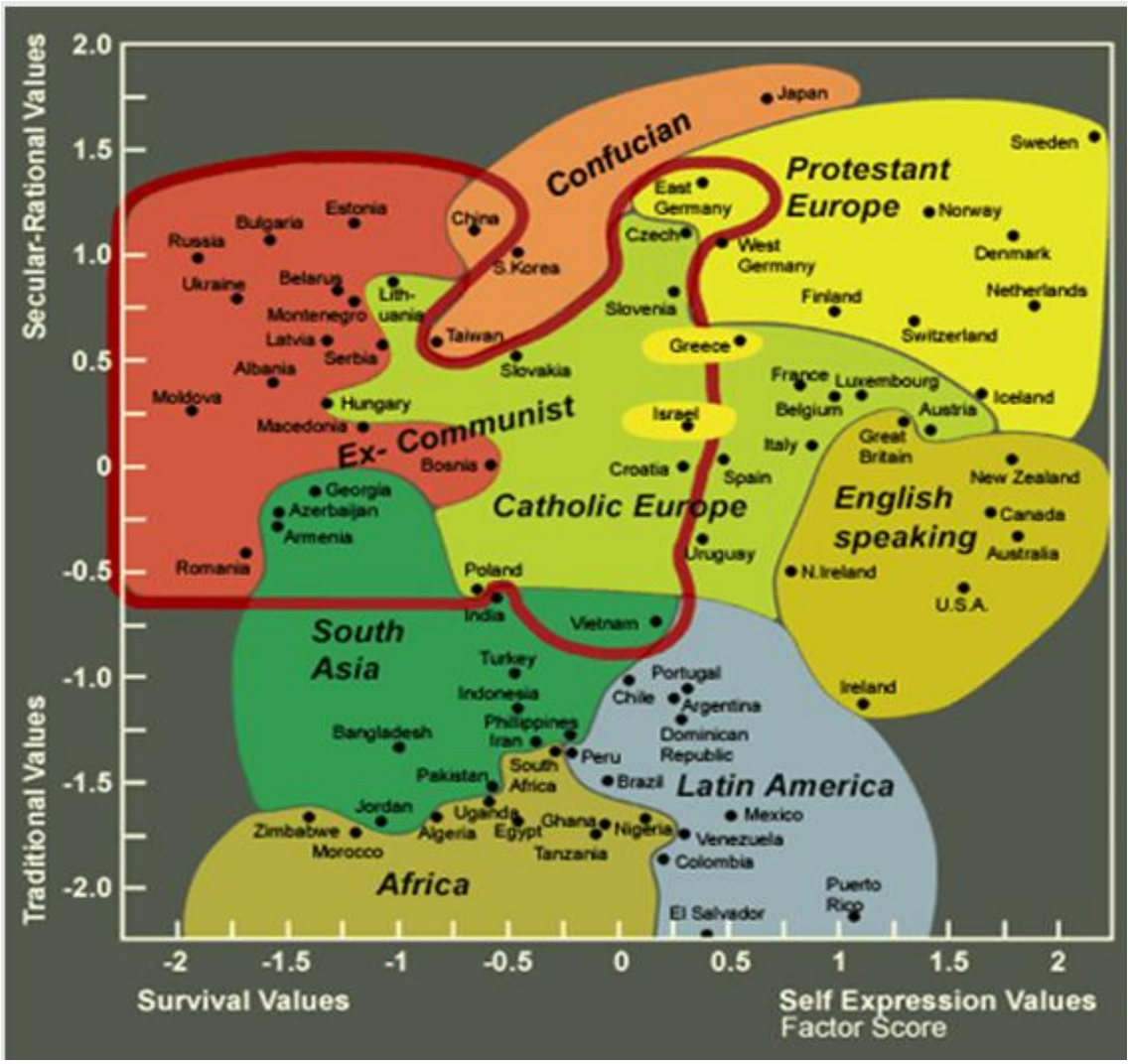


Figure 2.1: Inglehart's Cultural Map of the World

Source: Inglehart, R. & Welzel, C. (2005). *Modernization, Cultural Change and Democracy.* New York: Cambridge University Press: p. 64 based on the World Values Surveys, see www.worldvaluessurvey.org

Even though Inglehart's framework has not yet been applied as widely as Hofstede's model, his model deserves to receive scholarly attention not only because of the sound methodology in his research, but also the extensive size and duration covered in his data collection.

2.6.3 **Schwartz's Cultural Value Orientations**

Schwartz (2006) validates three cultural value dimensions, which contains seven cultural value orientations, based on his findings analyzed from the data collected from a total of 73 countries via two different instruments; the Schwartz Value Survey (SVS) and the Portrait Values Questionnaire (PVQ). The SVS data was collected from schoolteachers and college students in 67 nations during the years of 1988 and 2000. The PVQ data was gathered from the European Social Survey (ESS) in 20 countries. Schwartz's seven cultural value orientations are summarized in three bipolar cultural value dimensions as follows.

1. Autonomy versus embeddedness emphasizes the relations between the individual and the group. In autonomy cultures, people are independent and unique. They are encouraged to express their own internal attributes, such as feelings, ideas, and preferences. There are two types of autonomy, including intellectual autonomy and affective autonomy. In contrast, in embeddedness cultures people are embedded in collectivity. They emphasize maintaining the status quo, and restrain actions that may disrupt group unity or the existing order.

2. Egalitarianism versus hierarchy emphasizes people's responsibilities, attached to their roles and social resource allocation. In egalitarianism cultures, people are moral equals who have shared interests of committing to cooperate with others

and considering the welfare of others. However, in hierarchy cultures, the unequal distribution of roles, power, and resources are legitimate. People play unequal roles in hierarchical systems that grant them different powers and responsibilities.

3. Harmony versus mastery emphasizes the way people manage to fit in the natural and social world. In harmony cultures, people understand and appreciate the world as it is and try to preserve it. However, in mastery cultures, people try to actively direct and change the surrounding environment in order to achieve their goals.

Figure 2.2: Schwartz's Seven Cultural Dimensions

Source: Schwartz, S. H. (2006). A theory of cultural value orientations: Explication and applications. *Comparative Sociology*, 5(2-3), 137-182.

Unlike Hofstede and Inglehart's frameworks, based on *a posteriori* theorizing, Schwartz's cultural value dimensions are based on *a priori* theorizing (Schwartz, 2006). In addition, his approach to view "cultural dimensions as forming an integrated, non-orthogonal system," as shown in Figures 2.2 and 2.3, distinguishes his interdependent dimensions from Hofstede and Inglehart's orthogonal dimensions (Schwartz, 2006, p. 142). Although Schwartz's model is based on strong theoretical foundations with more recent data than Hofstede's, his framework has not yet been applied widely (Steenkamp, 2001).

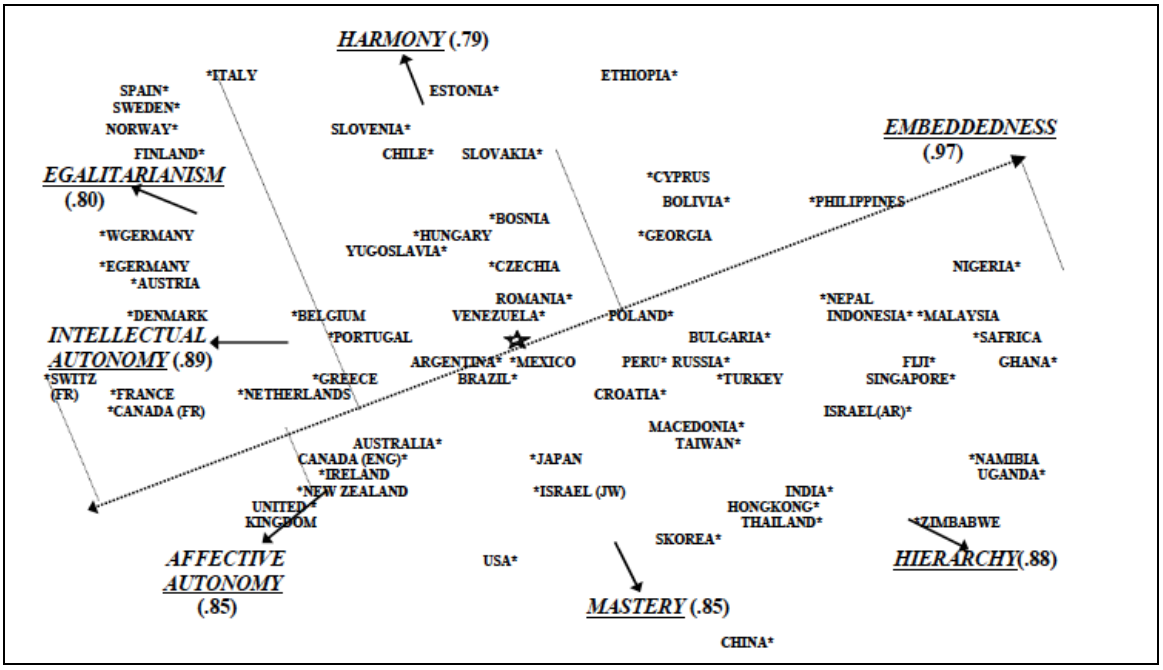


Figure 2.3: Schwartz's Co-Plot Map of 76 National Groups on Seven Cultural Orientations

Source: Schwartz, S. H. (2006). A theory of cultural value orientations: Explication and applications. *Comparative Sociology*, 5(2-3), 137-182.

2.6.4 **Steenkamp's National-Cultural Dimensions**

Steenkamp (2001) examins the two major cultural dimensions proposed by Hofstede and Schwartz, and derives four comprehensive national-cultural dimensions by analyzing the national cultural ratings of the 24 countries included in both Hofstede and Schwartz's datasets. His four national-cultural dimensions are stated as follows.

1. The autonomy versus collectivism dimension, consistent with both Hofstede's individualism/collectivism dimension and Schwartz's autonomy/embeddedness dimension, deals with the relation between the individual and the group. Hofstede's power distance also associates with this dimension to maintain the order in a society.

2. The egalitarianism versus hierarchy dimension, like Schwartz's egalitarianism/ hierarchy dimension, refers to how people consider the interests of others and cooperate in harmony with them.

3. The mastery versus nurturance dimension, which is similar to Hofstede's masculinity/femininity and Schwartz's harmony/mastery, deals with how people fit into their social and natural environment, and emphasizes assertiveness and achievement.

4. Uncertainty avoidance, also found in Hofstede's framework, refers to how people handle ambiguity and uncertain situations.

Steenkamp reports that the first two dimensions correlate with each other while other correlations are negligible. The society that is high on conservatism tends to emphasize hierarchy; on the other hand, a society that views an individual as an

autonomous self is more likely to address the importance of egalitarianism in order to maintain the function of the society.

Although Steenkamp's national cultural dimensions are purely derived from Hofstede and Schwartz's data sets, his study undoubtedly both offers validation to the concept on national culture and shows the importance of their cultural theories by pointing out the commonalities between the two.

2.7 Comparison of Hofstede, Inglehart, Schwartz, and Steenkamp's Value Dimensions

Similarities appear in comparing Hofstede, Schwartz, Inglehart and Baker, and Steenkamp's value dimensions, although they conduct different research on different subjects with different methods in different periods of time. The table below shows that two, three, and four of the five dimensions in Hofstede's framework are closely associated with both Inglehart and Baker's dimensions, all three of Schwartz's dimensions and all four of Steenkamp's.

Table 2.1: Comparison of Major Cultural Theories and Dimensions

	Hofstede (1980)	Inglehart & Baker (2000)	Schwartz (1994, 2006)	Steenkamp (2001)
Authority	Power Distance	Traditional vs. Secular-rational	Egalitarianism vs. Hierarchy	Egalitarianism vs. Hierarchy
Self & Group	Individualism vs. Collectivism	Survival vs. Self-expression	Autonomy vs. Embeddedness	Autonomy vs. Collectivism
Social/ natural environment	Masculinity vs. Femininity		Mastery vs. Harmony	Mastery vs. Nurturance
Uncertainty	Uncertainty Avoidance			Uncertainty Avoidance

First, Hofstede's power distance is similar to both Schwartz and Steenkamp's egalitarianism/hierarchy and Inglehart and Baker's traditional/secular-relational dimension because they all refer to the authority orientation. Second, Hofstede's Individualism/collectivism overlaps with Schwartz's autonomy/embeddedness, Inglehart and Baker's survival/self-expression and Steenkamp's autonomy/collectivism due to their concerns about the relation between individual and group. Third, Hofstede's masculinity/femininity, Schwartz's harmony/mastery and Steenkamp's mastery/nurturance are all associated with the relationship to the social and natural environment. Fourth, both Hofstede and Steenkamp contain the uncertainty avoidance dimension that deals with how people handle uncertain situations.

2.8 Chapter summary

This chapter first dealt with the controversy around the validity of measuring culture at a national level in order to compare countries on the basis of their different

cultural dimensions. Both a strong theoretical argument and a body of empirical evidence support the idea that a national culture can indeed be viably measured, and that such measurement is a practically useful and a theoretically valid thing to do.

Four validated scales are selected because of their appropriateness to cross-cultural research and because of the high level of their citations. Inglehart's and Schwartz's studies make a strong contribution to theory but cover a relatively small number of national cultural value dimensions. Steenkamp's scale, derived from that of Hofstede and Schwartz, is as yet relatively untested. Hofstede's theory indeed seems the most comprehensive national cultural framework in cross-cultural studies, as others have claimed.

In the next chapter, this thesis briefly surveys the existing literature on forecasting tourists' expenditure patterns. It is the major purpose of this thesis to test the four cultural theories just discussed to see which one performs best when predicting the expenditure patterns of tourists from different countries to two major destinations, and to test the idea that national cultural theories better predict such patterns than more typical measures, such as GDP per capita of the tourists' home countries.

Chapter 3: Tourist Behaviour Patterns in National Culture Studies

3.1 Introduction

In the previous chapter, four major theories of cultural values are discussed and explained. The focus of this thesis is upon showing that these cultural theories can apply at a country level, and that, indeed, it is both meaningful and useful so to do. In this chapter, the thesis reviews the literature regarding tourist behaviour patterns in national culture studies.

National-culture consumer behaviour studies in international tourism and hospitality are relatively rare (Gnoth & Zins, 2010) compared to general consumer behaviour studies though studies on studies relating demographic and economic influences on international travel behaviour are extensive (e.g., De Menezes & Moniz 2006; Gokovalia, Bahara, & Kozak, 2007; Thrane, & Farstad, 2012).

Existing research does suggest, though, that international travellers from various countries behave in different ways based on their nationalities when visiting a foreign destination. Because the data used in this research (described in detail in Chapter 5) includes tourists' behaviour concerning length-of-stay, travel expenditure, shopping expenditure and pre-trip planning, these are the sub-headings used in this chapter.

None of these studies (e.g., De Menezes & Moniz 2006; Gokovalia, Bahara, & Kozak, 2007; Thrane, & Farstad, 2012) uses fsQCA methods, but instead rely upon means comparisons and different symmetric tests (e.g., multiple regression analyses). In addition, the studies all consider the impact of one value at a time rather than considering a causal recipe of values. Nevertheless, they all add to the justification of

conducting the research as all do underscore the importance of cultural values as a predictor of tourists' behaviour.

3.2 Research Concerning Length-of-stay

Fridgen (1996) notes that the average length-of-stay for Europeans is between 26 and 27 days when visiting North America, while the average length-of-stay for Japanese tourists is about 11 days. Fridgen ascribes this to the cultural influence, where Japanese visitors are keen to get back to their extended families.

Pizam and Sussmann (1995) take a novel approach, and consider the perceived behaviour of Japanese, French, Italian, and American tourists when visiting London through the eyes of British tour guides. They discover that American tourists tend to take longer trips than Italians, followed by the Japanese, and that French tourists tend to take the shortest trips. Pizam and Jeong (1996) also researched the perception of Korean tour guides regarding the behaviour of tourists from Japan, Korea, and USA when visiting Korea, and find that Americans tend to take the longest trips among the three nationalities and Japanese take the shortest trips. Again, a cultural cause is suggested.

Kim and Prideaux (2005) study tourists from Australia, China, Hong Kong, Japan, and USA visiting Korea and find a similar pattern. They claim that American and Australian tourists tend to stay 7 days or more, Chinese tourists tend to stay 5 to 6 days, and Japanese tourists only stay for 3 to 4 days.

From the above literature, it seems that tourists from Western countries, such as Australia, USA, and European countries, tend to stay longer than those from Eastern countries, such as Japan, when travelling to either a Western (the USA and Britain in the research cited above) or an Eastern country (Korea in this instance).

3.3 Research Concerning Expenditures

Laesser and Crouch (2006) study the expenditure patterns of international visitors to Australia and point out that visitors from Asian countries tend to spend 20% to 30% more on a trip than those from European countries. Tourist expenditure can be roughly divided into the two major categories of travel expenditure and shopping expenditure. Travel expenditure generally associates with the amount of money tourists spend on hotel accommodation, transportation, packaged tours, and so on. Shopping expenditure mainly refers to the amount of money tourists spend on purchasing goods/souvenirs for their family and relatives at home.

3.3.1 **Travel Expenditure**

Wu, Li, and Song (2011) investigate the consumption behaviour patterns of tourists from eight countries, including Australia, United Kingdom, United States, Mainland China, Japan, Singapore, South Korea, and Taiwan, when visiting Hong Kong. The results of their study show the consumption behaviour differs significantly from country to country. Tourists from Australia, the United Kingdom and the United states tend to spend a larger portion (38.1%, 46.3%, and 52.5% respectively) of their total expenditure on hotel accommodation than tourist from Mainland China (10.6%), Japan

(35.6%), Singapore (34.3%), South Korea (26.2%), and Taiwan (23.5%). These are very different, although the research is descriptive rather than statistical.

Divisekera (2010) studies the five major components of tourist consumption of international tourists from New Zealand, United Kingdom, United States, and Japan visiting Australia, and reveals that tourists from New Zealand, United Kingdom, and United States spend 17.1%, 19%, and 29.3% respectively of their total expenditures on hotel accommodation while the Japanese only spend a startling 7%.

The above studies suggest that tourists from Western countries, such as Australia, New Zealand, United Kingdom, and United States, tend to spend a larger proportion of the total expenditure on hotel accommodation than tourists from Eastern countries, including Mainland China, Japan, Singapore, South Korea, and Taiwan. That there is some disagreement between the studies is immaterial in the present context, as the point is that there are differences, and they can be roughly grouped by cultural group.

3.3.2 **Shopping Expenditure**

Wu, Li, and Song's (2011) study, cited above, also discusses shopping expenditures. Their research suggests that tourists from Mainland China (72.6%), Japan (37.9%), South Korea (48.2%), Singapore (41.3%), and Taiwan (54%) tend to spend a greater portion of their total expenditure on shopping than tourist from Australia (38.4%), the United Kingdom (23.8%), and the United States (21.1%). Again, this is not surprising in itself, and begs the causal question of whether it is culture or wealth that is the most important factor.

Divisekera (2010) also shows that tourists from New Zealand, UK, and USA spend 35.3%, 20.5%, and 18.5% of the total expenditures on shopping while Japanese spend nearly half (49.3%) of it.

The above studies suggest that tourists from Eastern countries, such as Mainland China, Japan, Singapore, South Korea, and Taiwan, tend to spend a greater proportion of the total expenditure on shopping than tourists from Western countries, including Australia, New Zealand, United Kingdom, and United States.

3.4 Research Concerning Pre-Trip Planning

Pizam and Sussmann's (1995) study show that unlike Japanese tourists, who plan their trips and follow their plans very rigidly, Italians, French, and Americans tend to visit places in unplanned manner. In other words, Japanese tourists spend more time and effort planning their trips ahead of time than tourists from Western countries, such as France, Italy, and the United States. This is an interesting finding, in that it cannot be put down to economic causes, but strongly indicates a national cultural difference.

Iverson (1997) similarly compares vacation planning characteristics between Korean and Japanese tourists to Guam and conclude that Korean tourists seem to take significantly shorter time than Japanese tourists in making their travel decisions. That such a difference is found between these two geographically close countries with somewhat similar cultures, surely indicates that differences must also exist between tourists from geographically and culturally disparate tourists from Eastern and Western countries.

3.5 A parallel Study

In 2005 Inja Ahn, a PhD candidate at the University of New South Wales, studied the same issue as that studied here, and even used a sub-set of the data. Ahn's work does not appear in any published journal at the time of writing this thesis. Ahn used regression techniques and studied the impact of three cultural models (Hofstede's, Schwartz' and Inglehart's) on Australian inbound tourists from a number of countries. Ahn's findings are somewhat different from those in this thesis, but that is to be expected as she used a completely different analytical technique – this issue is discussed in detail in Chapter 4 when the fuzzy set qualitative comparative analysis technique is explained.

Her results, interestingly, find that culture affects pre-trip planning more than behaviour at the destination (Australia in her instance); but Ahn does find strong evidence for the effects of country-level culture on tourists behaviour in general.

3.6 Chapter Summary

Although not many national culture studies are reported in the context of international tourism and hospitality, those that have been report significant variations between the behavioural patterns of tourists from different countries, and between Eastern and Western countries. Tourists from Eastern countries tend to take shorter trips, spend less on travel expenditures, shop more for goods/souvenirs, and spend more time planning for the trips than those from Western countries. This evidence is

fragmented and sometimes inconsistent between authors, but taken as a body of evidence it provides a strong platform to launch this thesis' research. Certainly all these authors seem convinced that culture does have a role in determining tourists' behaviour, and most link culture to nation.

The thesis now moves on to provide an explanation of the fuzzy set qualitative comparative analysis used in the research, and also provides the reader with the information needed about the fsQCA software to enable meaningful considerations of the research findings.

Chapter 4: Qualitative Comparative Analysis

4.1 Purpose of the Chapter

Those familiar with the rationale and procedures of fuzzy-set qualitative comparative analysis (fsQCA) can skip this chapter. For those who are not familiar with the technique, this chapter provides a guide sufficiently detailed to enable the reader to understand the analysis conducted in this thesis.

In very naive terms, regression analysis takes a set of independent variables and traces changes to their means within a dataset, in relation to the mean of a dependent variable, or variables. Backed by a logical chain of reasoning, causation can then be inferred. QCA takes a different approach. In the original, crisp-set, QCA, each independent variable is re-coded to be either present or absent, and then analysis establishes a set of independent variables (being either present or absent) that consistently result in some (dependent) outcome. This set of induced variables is akin to a causal recipe, rather than an *a priori* theoretic linear chain of causation, as in a pure statistical approach.

The following text first offers the general rationale for QCA, and describes why the technique was invented in the first place. The next section describes the simple Boolean algebra that empowers the technique, and then a stronger case is made for the superiority of the technique over typical statistical approaches in some analytical situations.

At this point the discussion moves to the development of fuzzy-set QCA, where data is coded to allow partial membership in a (fuzzy) set, which adds more power to

the analysis. The chapter then discusses the operationalization of the analysis, using free software, and shows how the data is coded, and how the results in the software output analysed.

The final section of this chapter relates fsQCA analysis to the data used in this research. This will provide a road-map to the analysis that follows in Chapter 6, and enable the results to be presented without interrupting the reader's concentration with explanation.

4.2 The rationale for Qualitative Comparative Analysis

According to Yin (2003, p.1), "in general, case studies are the preferred strategy when "how" and "why" questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context." Moreover, Ragin (1987, p.51-52) points out four benefits of using the case study approach: "First they are designed to uncover patterns of invariance and constant association [;] … second …the method is relatively insensitive to the frequency distribution of types of cases [;] …third, case orientated methods force investigators to consider their cases as whole entities …[and] fourth, case-oriented method stimulate rich dialogue between ideas and evidence." Thus, social and behavioural researchers often find themselves engaging in qualitative comparative studies examining and comparing cases.

However, most of the time, these cases are very limited in number for meaningful macro-level comparisons; for example, there are only six states and five political parties in Australia. These numbers are far less than sufficient for undergoing most

conventional quantitative statistical analysis, such as multiple regression analysis (MRA) and structural equation modelling (SEM). Ragin (2006, p.8) states in his book that "these [statistical] techniques are simply not feasible in investigations with small or even moderate Ns, the usual situation in comparative social science."

Besides, Woodside (2013) points out that the focus on net effects is misleading because not all cases in the data appear to support a positive or negative relationship between independent and dependent variables in conventional statistical methods. He further states "reality usually indicates that any insightful combination of conditions has an asymmetrical relationship with an outcome condition and not a symmetrical relationship" (Woodside, 2013, p.464).

In conventional statistical methods, cases with extreme values are usually treated as outliers and ignored by researchers. In fact, these cases are important and deserve further investigation, especially in social and behavioural science (Katz, Vom Hau, & Mahoney, 2005). In addition, the main limitation of single case studies or multiple case studies is that it is very difficult to produce any form of statistical generalization to a broader population, because the findings are only limited to a single or a few cases (Bryman & Bell, 2007).

Therefore, American political sociologist, Charles C. Ragin, takes a middle path between quantitative and qualitative methods and developed a new data analysis method called Qualitative Comparative Analysis (QCA) initially for the purpose of solving problems of generalizing the findings of small number of cases at the macro level (Ragin, 1987). Ragin states in his new book, *Configurational Comparative Methods*, that his ambition in using this method is to "allow systematic cross-case comparisons,

while at the same time giving justice to within-case complexity, particularly in small- and intermediate-N research designs" (Rihoux & Ragin, 2009, p. xviii).

Moreover, one of QCA's goals is to "integrate the best features of the case-orientated approach with the best features of the variable-orientated approach" (Ragin, 1987, p. 84). QCA makes it possible to study causal conditions that are insufficient but necessary parts of causal recipes which are themselves unnecessary but sufficient. In other words, with QCA it is possible to assess causation that is very complex, involving alternative combinations of causal conditions, which are capable of generating the same outcome.

With the work of Ragin and many other scholars over the past two decades, QCA and its related techniques, including crisp set (csQCA), multi-value QCA (mvQCA), fuzzy-set (fsQCA), and MSDO/MDSO (most similar, different outcome/most different, same outcome), were developed and have been productively applied in a wide range of disciplines not only in small- and intermediate-N research designs at macro-level, but also in large-N researches at meso- or even micro-level (Rihoux & Ragin, 2009).

4.3 Crisp set QCA and Boolean Algebra

csQCA was the first QCA technique developed by Ragin. He adapted the idea of Boolean algebra for the treatment of complex sets of binary data to "simplify complex data structures in a logical and holistic manner" (Ragin, 1987, p. viii). Boolean algebra, the foundation of csQCA, was developed by George Boole in the 1840s. It is suitable for calculating binary data with only two values, 0 and 1, where 0 represents full non-membership in the set and 1 represents full membership in the set. The basic rules and

logic of Boolean algebra allow researchers to construct complex causal relationship with a set of condition variables and outcome variables.

In Boolean conventions, an uppercase letter represents the 1 value, a lowercase letter represents the 0 value, a mid-level period, "·", represents the logical AND, "+" represents the logical OR, and "→" represents the causal connection between a set of condition variables and the outcome. For example, a formula, **X·Y·Z + X·Y·z → O**, can be read as the presence of X, combined with the presence of Y and with the presence of Z OR the presence of X, combined with the presence of Y and with the absence of Z lead to the presence of the outcome O.

However, in the above formula, whether the condition variable Z is present or not, the outcome condition, O, is still present. Then the formula can be shortened through an operational process called Boolean minimization to become **X·Y → O**, which can be read as the presence of X combined with the presence of Y leads to the presence of the outcome O. In order to produce the outcome, a combination of both conditional variables must present because neither of them is sufficient for the outcome to occur. In other words, the presence of X is necessary but insufficient to cause the outcome, so is the presence of Y.

4.4 The Importance/Advantage of QCA

Often for the type of research questions proposed by social and behavioural researchers, QCA is potentially more important than quantitative analysis for the reason that almost all social science theory is verbal in nature and also fundamentally formulated in terms of sets and set relations (Ragin, 2008). However, conventional

quantitative analysis methods treat independent variables as separable causes of an outcome to explain variation of dependent variables individually.

Unlike conventional quantitative analysis, QCA places more emphasis on analyzing asymmetric set relations rather than calculating the net effects of independent variables in linear models from a symmetric (correlation and multiple regression) perspective. "In set-theoretic work, the idea of a causal recipe is straightforward, for the notion of combined causes is directly captured by the principle of set intersection" (Ragin, 2008, p. 9). QCA allows researchers to identify the commonalities across a set of observed cases by examining different configurations (combinations) of causally relevant condition variables linked to a particular outcome. In other words, QCA helps researchers to find patterns in the condition variables for the cases they study and make sense of them.

Similar to quantitative analysis approaches, replicability and transparency are the two major advantages QCA has over other qualitative approaches. QCA techniques are formalized techniques due to the reason that they were developed based on set theory and Boolean algebra with fixed and stable rules of logic. In addition, QCA techniques require researchers to act with transparency along the stages of the research process, so that other researchers can easily replicate their studies for confirmation or falsification (Rihoux & Ragin, 2009).

Based on the advantages addressed above, QCA is a more appropriate method than conventional statistical methods for analysing the research data in the study reported here for the following two main reasons. First, QCA allows this research to investigate culture's influences on consumer behaviour based on a small number of

countries. Second, national cultures consist of complex statements of cultural values representing unique configurations of conditional multiple-value recipes leading to outcomes. QCA makes it possible to study cultures' complex consequences on consumer behaviour by examining alternative "causal recipes," or different paths that are linked to a particular outcome.

4.5 Fuzzy-Set QCA

Table 4.1: Variants of QCA

Variant of QCA	Name	Variable Range	Useful
csQCA	Crisp-set	Dichotomous	When variables can be defined and approximated into binary categories of present (1) and absent (0)
mvQCA	Multi-value	Multi-chotomous	When attribute values under study can reasonably be summarized into a small number of discrete options
fsQCA	Fuzzy-set	Continuous	When finer graduations in the dataset are significant and each variable can be assigned a value along a continuous range

Source: Jordan, E., Gross, M. E., Javernick-Will, A. M., & Garvin, M. J. (2011). Use and misuse of qualitative comparative analysis. *Construction Management and Economics, 29*(11), 1159-1173.

However, in many cases the conditions are complex and cannot be force-fitted into one of the two categories (as for crisp set QCA), or even one of the three or four categories (for use in multi-value QCA). In order to solve this problem, Ragin (2000) adopts Zadeh's fuzzy-set theory and extended csQCA to develop fsQCA. This technique allows researchers to calibrate partial membership in sets using values

ranging from 0.0 and 1.0 with three-value, four-value, or six-value fuzzy sets or even a continuous fuzzy set (Ragin, 2008; Rihoux & Ragin, 2009). Table 4.1 shows the comparison of the three variants of QCA technique, including csQCA, mvQCA, and fsQCA.

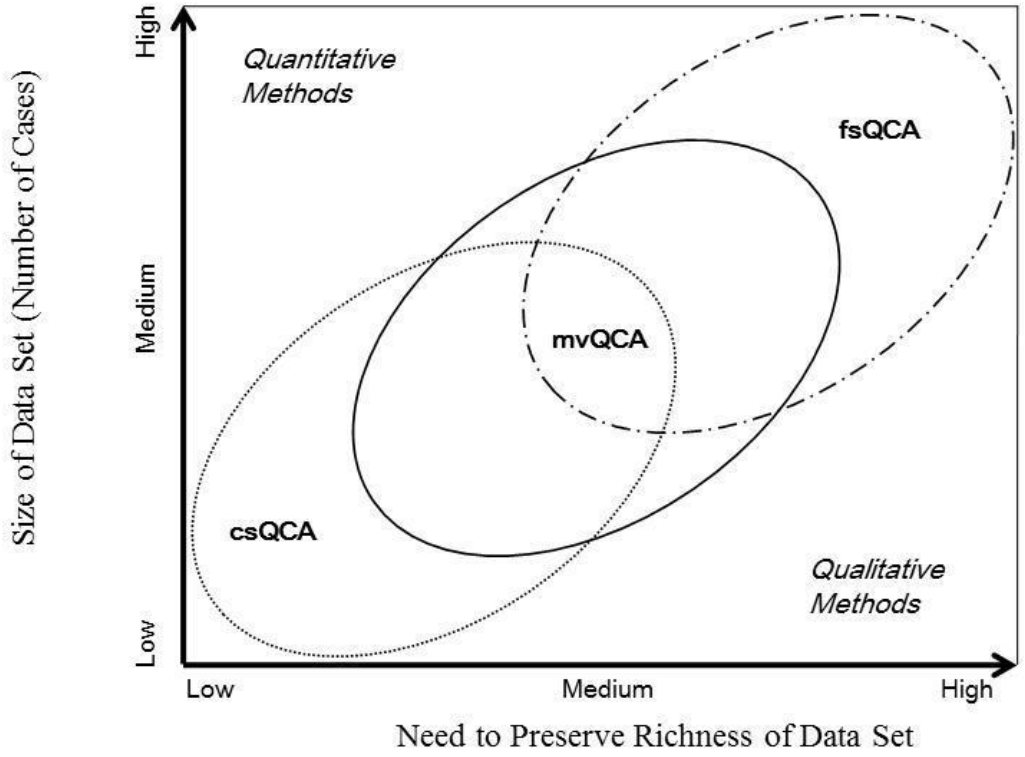


Figure 4.1: Best use of QCA, MVQCA and fsQCA

Source: Rihoux, B. (2006). Qualitative comparative analysis (QCA) and related systematic comparative methods: Recent advances and remaining challenges for social science research. *International Sociology, 21*(5), 679-706.

Figure 4.1 illustrates that fsQCA is a more suitable technique to employ than csQCA and mvQCA when the size of data set is large and the need to preserve richness of data set is high. In the research reported here there is a large database, and the need to

preserve richness (take account of each aspect of a particular cultural theory) is high so, with reference to Figure 4.1 above, a fuzzy set approach is adopted.

Three common operations apply to fuzzy sets, including negation, logical AND, and logical OR. In a crisp set, all data are binary with values of either 1 or 0, so the negation of the data is simply attained by switching the membership value from 1 to 0 or from 0 to 1; the negation is represented with a lowercase letter. Unlike crisp set data, the negation of fuzzy set data needs to be subtracted from 1; the negation is then represented with the tilde symbol "~" in front of the letter. For example, the negation of a condition variable, X, is represented as ~X, and the value of ~X equals to 1 minus the membership score of X (Ragin, 2008; Rihoux & Ragin, 2009).

With fuzzy sets, logical AND is computed by taking the lowest membership score of each case in the sets and logical OR is computed by taking the highest membership score (Ragin, 2008; Rihoux & Ragin, 2009). For example, a configuration contains 3 condition variables, X, Y, and Z. Case A has membership scores of 0.6 in X, 1.0 in Y, and 0.8 in Z, and case B has membership scores of 0.7 in X, 0.5 in Y, and 0.9 in Z. The score of X·Y·Z is 0.6 for case A and 0.5 for case B. The score of X+Y+Z is 1.0 for case A and 0.9 for case B.

4.6 Measures of Adequacy

Two quantitative measures assess the level of correspondence between the theoretically assigned conditions and the anticipated outcomes, as posited by Ragin (2006). Consistency and coverage are the metrics used in QCA to rate the "goodness of fit."

Consistency means determining if a configuration of conditions is necessary for an outcome to occur, by assessing the degree to which one set is contained within another. The following formula determines the degree of consistency (Ragin, 2008, p. 99);

$$\text{Consistency } (X_i \leq Y_i) = \Sigma[\min (X_i, Y_i)]/\Sigma(X_i),$$

where X_i is the degree of membership in the set X

Y_i is the degree of membership in the outcome set Y;

$(X_i \leq Y_i)$ is the subset relation under consideration and indicates the lower of the two values.

Thus, if all the values of condition Xi are equal or less than the corresponding values of the outcome Yi, the consistency is 1, signifying full consistency. A further measure of consistency, that has conceptual clarity, comes from the work of Rihoux and De Meur (2009):

$$\text{Consistency} = \frac{\text{the number of cases for which a given condition and outcome are present}}{\text{The number of cases for which only the outcome is present}}$$

Ragin (2004, 2006c) suggests that there are no substantive grounds for accepting observed consistency scores below 0.70. Values for consistency should ideally be at least 0.75 (Ragin, 2006; Wagemann & Schneider, 2007) to indicate useful models (also called paths or solutions).

In contrast, coverage is a gauge of the empirical relevance or importance of configurations of conditions (Ragin, 2006, p. 301; Woodside & Zhang, 2012) and is expressed as:

$$\text{Coverage } (X_i \leq Y_i) = \Sigma(\min(X_i,Y_i))/\Sigma(Y_i) \text{ OR}$$

$$\text{Coverage} = \frac{\text{For a given outcome, no. of cases containing a given solution term}}{\text{Total number of cases with the outcome}}$$

When coverage is too small (below 0.2) then there are numerous ways to achieve the outcome and the studied configuration of conditions does not do a useful job of explaining the link between high membership of the configuration of conditions (Xi) and high membership of the outcome (high Yi) (Ragin, 2006).

Thus a good fit in QCA is indicated by the coverage and consistency of the multiple configuration models. Only models that are useful – those where high configuration set membership is associated with high outcome membership, where the consistency is above 0.70 or, better, 0.75, and the coverage scores are between 0.2 and 0.6 are useful. In short, consistency and coverage indexes in fsQCA are analogous to correlation and coefficient of determination in statistical analysis (Woodside, 2013).

4.7 Operationalisation in This Thesis

A full and detailed description of the research process is given later, under "Method," but a brief explanation brings the general discussion back to the work reported here. Free fsQCA software is available online at www.fsqca.com, and is used in this work.

In order to run the analysis, all the original data need to be entered into the program and then transformed, or "calibrated" in QCA terminology, into fuzzy membership scores between 0 and 1 – again, this detail is explained in full later, but to calibrate the original data into fuzzy membership scores, three thresholds for full membership (fuzzy score = 0.95), the crossover point (fuzzy score = 0.50), and full nonmembership (fuzzy score = 0.05) need to be identified. It is then possible to analyze

the causal relationships within the data by evaluating consistency and coverage scores. In some work a higher number of categories is used, either four or even six, but three is deemed appropriate given the data available.

Liu, Lin, Wang and Wu (2012) claim that showing the logic of data structure in a diagram allows a researcher display what can be a very complicated set of relations in a way that facilitates understanding and thus data collection and analysis. They cite research and present diagrams showing the value of seeing the structure of data in developing clear thinking about data collection and analysis. In the same vein, the fsQCA software provides an attractive visual way to swiftly check a model for adequacy by including plots in the program output. In XY plots, the numbers on the Y-axis show the consistency scores, and the numbers on the X-axis show the coverage scores. As shown in this Figure 4.2, all cases fall into the upper-left triangle of the plot, indicating that for the measured outcomes consistency is higher than coverage, showing that indeed the antecedent conditions in this case are causal.

The actual consistency and coverage scores are reported, both in the boxes at the top left of the plot chart (consistency) and bottom right (coverage) and also in table format. For the very large dataset used here, typical practice is followed and some plots are shown for specific, smaller subsets of data analysis, but the main analysis concerns a meta-analysis of the larger dataset, presented as box plots. This enables the reader to see quickly the comparative consistency scores of the best-fitting models of different cultural theories for specific outcomes without direct reference to the very many output plots.

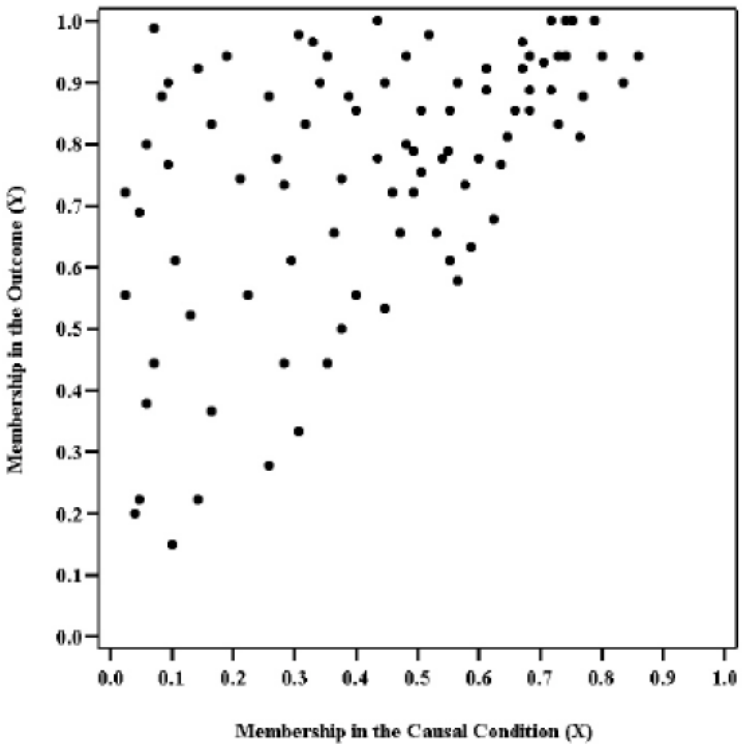


Figure 4.2 Fuzzy Subset Relation Consistent with Sufficiency

Source: Ragin, C. C. (2008). *Redesigning social inquiry: Fuzzy sets and beyond*. Chicago, IL: The University of Chicago Press.

4.8 Chapter summary

This chapter provides an overview of comparative qualitative analysis, showing its derivation, general form and the development from crisp set QCA to fuzzy set QCA. Advantages of using the analytical technique are discussed, and a guide given to analysing the output. Chapter 5 flows from this discussion, giving greater detail of the research method used, including details of the origin, composition and preparation of the data, and the research procedures followed.

Chapter 5: Method

5.1 Introduction

Previous chapters discuss the four major cultural theories, explain the reasons to study tourist behaviour on a national level, and introduce the analysis technique, fsQCA. This chapter starts with the design of the study, follows by the development of the key propositions, the procedures of proposition testing, and the descriptions of the data sets, including cultural values data from the four cultural theories, the Australian consumption data, and the American consumption data.

5.2 Design of the Study

Individual national cultures consist of complex statements of cultural dimensions representing unique configurations of conditional multiple-value paths to outcomes. Configurational thinking in terms of degree of membership in different combinations of causally relevant thinking provides unique and useful understanding that goes beyond net-effects approaches (i.e., multiple regression and ANOVA methods) for explaining behaviour (Ragin, 2008).

Based upon the literature review and available secondary data, the study proposes a theory that culture has influences on tourist behaviour and these influences differ by some consumption moderating variables, including purposes of the trip and prior trip experiences, as well as some sub-cultural dimensions, such as age. At the same time, the study compares culture's influences with the influences of the simple controllable

model (GDP per capita and home-destination distance). Figure 5.1 shows the conceptual framework of the study.

The thesis plans to do a critical test on the four alternative culture value models as well as the control-comparison model findings by using meta-analysis. Meta-analysis is defined as "the statistical analysis of a large collection of analysis results from individual studies for the purpose of integrating the findings (Glass, 1976, p. 3)." Scholars often use meta-analysis for conducting systematic reviews to point out what is already known and what need to be addressed in specific fields (Dickersin & Berlin, 1922).

For analysis, the study needs to transform the country scores of the different cultural values and the behavioural data on consumption into fuzzy-set scores to find out the impact of the cultural value configurations on consumer behaviours as well as the behavioural tendencies of the consumers in each country.

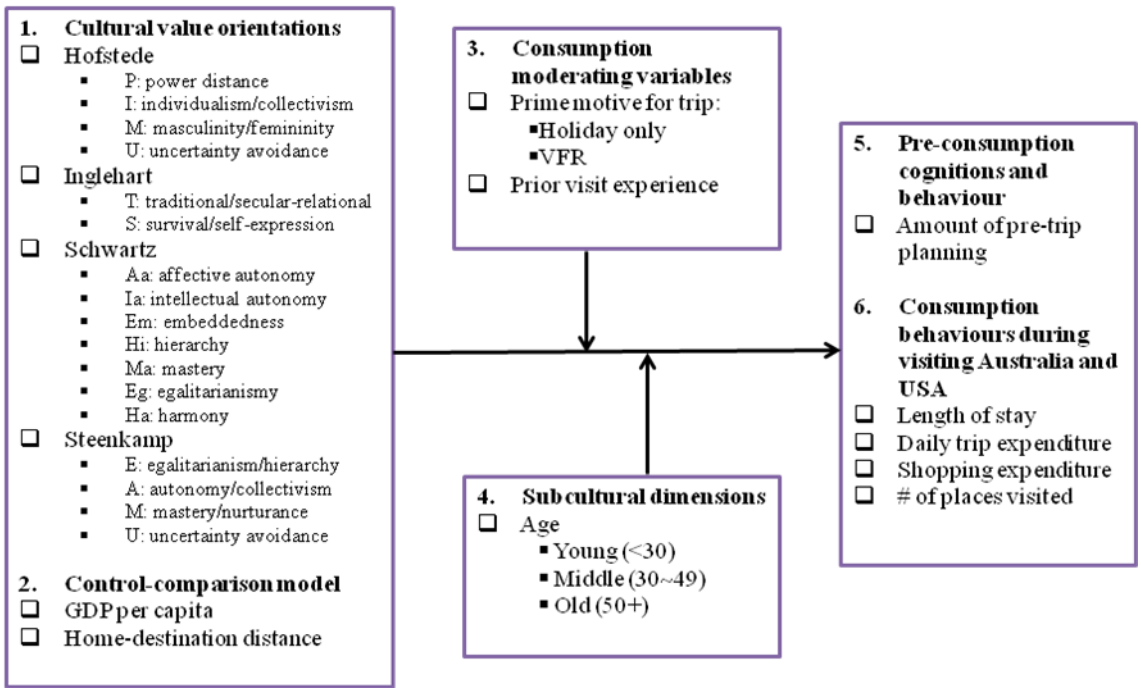


Figure 5.2: The Conceptual Framework of Culture's Influences on International Tourism

5.3 Key Propositions

Based on the literature review, six key propositions are developed and stated as follows.

5.3.1 Proposition 1: National cultures as value configurations provide useful explanations of tourism behaviour.

Previous studies only study the influences of individual cultural values on consumer behaviour one at a time. In fact, they only study the values, not culture. Since the nature of culture includes various values, culture needs to be studied as a configuration of values. The configuration of cultural values should work better in predicting and explaining consumer behaviour than the individual values.

5.3.2 **Proposition 2: Examining cultural value configurations at the national level offers useful explanations of why tourism behaviour various across countries.**

Since the debate on whether or not nation is a good proxy for culture has been going on for a long time, it is necessary to study whether or not culture differs from county to country. National cultures can be described by different configurations of cultural values. For example, Americans are low in power distance, high in individualism, high in masculinity, and low in uncertainty avoidance while Japanese are high in power distance, low in individualism, high in masculinity, and high in uncertainty avoidance by using Hofstede's national cultural values.

5.3.3 **Proposition 3: The major national culture theories do differ systematically in their usefulness in explaining international tourism behaviour of nations.**

Before conducting any analysis, the thesis predicts that the control-comparison variables of GDP per capita and home-destination distance will not work as well as the four cultural theories. There are some grounds to suggest that the national theories themselves will also perform differently. The cultural value theory proposed by Inglehart and Baker may be the least effective in explaining tourist behaviour amongst the four cultural theories, because it only covers two cultural values while the other theories include four or more cultural values. Schwartz's theory may work better than all the other theories because it is based on a sound *a priori* theory, and has not received any criticism to date. On the other hand, Hofstede's theory is conducted 30 years ago and has been attacked by many scholars. Steenkamp's theory should be placed between Schwartz's and Hofstede's theories in terms of performance as it is based on those two theories. Although each of the theories has its own strengths and weaknesses in

explaining consumer behaviours, it is still expected that they will outperform GDP and distance.

5.3.4 **Proposition 4: National cultures associate with international tourism behaviour most for holiday-only visitors.**

The degree of cultural influences is greater for people travel on holiday purpose than for people travel on visiting friends and relatives purposes. For those who travel to visit friends and relatives, their friends and relatives are very likely to open their homes to them and make arrangements for their trips. Thus, the influences of their friends and relatives on the consumption behaviour are greater than culture.

The degree of cultural influences is greater for first-time visitors than those who have previous experiences. For those who have previous experiences, the influences, such as control-comparison findings and prior trip experiences, are greater than culture.

5.3.5 **Proposition 5: National cultures affect consumer time and shopping expenditures.**

Culture affects consumer behaviour in different ways. There are different consumption patterns between Eastern and Western cultures. For example, (1) People from Western cultural countries tend to stay longer on a trip to a foreign country than people from Eastern cultural countries, because Eastern cultures are high in power distance and hierarchy. Thus, people from Eastern cultural countries need to return their homes to maintain their positions after a short trip. (2) People from Eastern countries may spend more on their trip everyday than people from Western countries, because Eastern cultures are high in uncertainty avoidance and masculinity. Not only they do not want to worry about food or accommodation in a foreign country, but also

they want to show that they are able to stay in a five-star hotel and have some fancy meals. (3) People from Eastern cultural countries are more likely to spend more money on shopping than people from Western cultural countries, because Western cultures are high in individualism and they do not care about other people as much as people from Eastern cultural countries. Thus, people from Eastern cultural countries are more likely to shop for their friends and family at home. (4) People from Western cultural countries are more likely to visit more places than people from Eastern cultural countries, because Western cultures are high in individualism. (5) Although Eastern cultures are high in uncertainty avoidance, people from Eastern cultural countries do not spend as much time as people from Western cultural countries on their pre-trip planning. That is because people from Eastern cultural countries tend to join group tours and take short trips.

5.3.6 **Proposition 6: Age does not moderate the impact of national cultures on international tourism behaviour.**

There is little if any prior research regarding this proposition, so expectations are not firm. One argument that culture is becoming less important for young people than for old people because of the internationalizing influence of digitalization, and that older people are more deeply culturally embedded and set in their traditional ways. However, scholars, such as Hofstede (2001, 2002) and Schwartz (2006), believe that culture has "centuries-old roots" and it changes very slowly. The only available empirical research on the issue suggests that these latter scholars are correct (Marshall, Dong and Lee, 1994). In balance, then the expectation is that there will be little or no difference in the degree of cultural influence by age.

5.4 Proposition Testing

In order to test the above propositions the thesis plans to first evaluate the consistency and coverage scores of the fuzzy set relations of individual cultural values as well as cultural value configurations on different outcome conditions from the Australian and American data sets based on the four alternative cultural value theories to determine whether the individual values or the combination of the cultural values would work better in predicting tourists' consumption behaviours.

Second, the thesis identifies the best cultural value configuration in each of the four cultural value theories to represent each country by choosing the maximum score from the various cultural value configuration scores.

Third, according to Ragin (2006), consistency score has to be at least 0.75 to indicate substantial causal relationship, so the thesis adopts a restricted meta-analysis to analyze only the consistency scores over 0.749 of the best fitting models in each of the four theories as well as the control-comparison conditions to conclude with the most useful theory in explaining and predicting consumer behaviour. "Restricted meta-analysis" includes estimating the number of substantial consistency scores of 0.75 or higher and their ranges for findings testing a given theory.

Fourth, restricted meta-analysis allows the study to explore whether or not the degree of cultural influences on consumer behaviour changes by the first-time travellers and repeat travellers as well as their trip purposes of spending the holiday only or visiting friends and relatives.

Fifth, the thesis adopts the best cultural theory to find out the consumption patterns of tourists from different countries as well as compare the consumption patterns of people from Eastern countries and Western countries, and then verify if the consumption patterns of tourists from different countries are consistent in both of the Australian and the American data sets.

Finally, restricted meta-analysis allows the study to explore whether the degree of cultural influences on consumer behaviour differs by the three different age groups of young, middle, and old.

5.5 Data Sets

Four sets of the cultural value data and two sets of the secondary consumption data along with the control-comparison data for GDP per capita and home-destination distance examined in the study are summarized as follows.

5.5.1 Cultural Value Data

The study summarizes cultural value scores of the countries available in Hofstede, Inglehart, Schwartz, and Steenkamp's cultural theories in the following four tables (Table 5.5.1, 5.5.2, 5.5.3, & 5.5.4), respectively.

Table 5.5.1: Hofstede's Country's Scores

Country	Power Distance	Individualism	Masculinity	Uncertainty Avoidance
Australia	36	90	61	51
Brazil	69	38	49	76
Canada	39	80	52	48
China	80	20	66	30
France	68	71	43	86
Germany	35	67	66	65
Hong Kong	68	25	57	29
India	77	48	56	40
Indonesia	78	14	46	48
Italy	50	76	70	75
Japan	54	46	95	92
Korea (S.)	60	18	39	85
Malaysia	104	26	50	36
Netherlands	38	80	14	53
New Zealand	22	79	58	49
Singapore	74	20	48	8
Spain	57	51	42	86
Sweden	31	71	5	29
Switzerland	34	68	70	58
Taiwan	58	17	45	69
U.K.	35	89	66	35
U.S.A.	40	91	62	46
Venezuela	81	12	73	76

Source: Hofstede, G. (1983). National cultures in four dimensions: A research-based theory of cultural differences among nations. *International Studies of Management and Organization*, *13*(1/2), 46-74.

Table 5.5.2: Inglehart's Country's Scores

Country	Traditional/ Secular-rational	Survival/ Self-expression
Australia	0.21	1.75
Brazil	-0.98	0.61
Canada	-0.26	1.91
China	0.80	-1.16
France	0.63	1.13
Germany	1.31	0.74
Hong Kong	1.20	-0.98
India	-0.36	-0.21
Indonesia	-0.47	-0.80
Italy	0.13	0.60
Japan	1.96	-0.05
Korea (S.)	0.61	-1.37
Malaysia	-0.73	0.09
Netherlands	0.71	1.39
New Zealand	0.00	1.86
Singapore	-0.64	-0.28
Spain	0.09	0.54
Sweden	1.86	2.35
Switzerland	0.74	1.90
Taiwan	1.16	-1.18
U.K.	0.06	1.68
U.S.A.	-0.81	1.76
Venezuela	-1.60	0.43

Source: Inglehart, R., & Welzel, C. (2005). *Modernization, cultural change, and democracy: the human development sequence*. New York: Cambridge University Press.

Table 5.5.3: Schwartz's Country's Scores

Country	Affective Autonomy	Intellectual Autonomy	Embedded-ness	Hierarchy	Mastery	Egalitarian	Harmony
Australia	3.50	4.12	4.06	2.36	4.09	4.98	4.05
Brazil	3.30	4.13	3.97	2.64	4.16	4.92	4.02
France	4.41	5.15	3.35	2.16	3.89	5.45	4.31
Germany	4.03	4.75	3.42	2.27	4.07	5.37	4.42
Hong Kong	3.11	4.08	4.04	2.83	4.18	4.85	3.34
Italy	2.95	4.60	3.82	1.69	4.08	5.57	4.80
Japan	3.54	4.68	3.87	2.28	4.27	4.69	4.07
Malaysia	3.16	4.07	4.46	2.43	4.34	4.66	3.5
Netherlands	3.51	4.44	3.68	2.26	3.98	5.39	3.98
New Zealand	3.98	4.36	3.73	2.38	4.23	5.15	3.99
Singapore	3.04	3.68	4.38	2.75	3.93	4.79	3.72
Spain	3.97	4.90	3.42	2.03	4.11	5.55	4.53
Switzerland	4.24	5.33	3.25	2.2	4.18	5.19	4.5
Taiwan	3.21	3.93	4.31	2.85	4.11	4.68	4.17
USA	3.65	4.2	3.9	2.39	4.34	5.03	3.7

Source: Schwartz, S. H. (1994). Beyond individualism/collectivism: New cultural dimensions of values. In U. Kim, H. C. Triandis, C. Kagitcibasi, S.-C. Choi & G. Yoon (Eds.), *Individualism and Collectivism: Theory, Method and Applications* (pp. 85-119). California: Sage Publications.

Table 5.5.4: Steenkamp's Country's Scores

Country	Autonomy	Egalitarianism	Mastery	Uncertainty Avoidance
Australia	2	3	30	-63
Brazil	-36	-25	8	23
France	77	30	-41	64
Germany (W.)	60	28	15	14
Hong Kong	-54	-55	20	-44
Italy	-10	91	30	6
Japan	15	-57	83	46
Malaysia	-91	-41	36	-25
Netherlands	16	36	-53	-44
New Zealand	41	6	39	-52
Singapore	-89	-48	-34	-55
Spain	43	52	-15	61
Sweden	53	43	-92	-44
Switzerland	93	24	32	24
Taiwan	-59	-54	-12	23
U.S.A.	11	1	70	-76

Source: Steenkamp, J.-B. E. M. (2001). The role of national culture in international marketing research. *International Marketing Review*, 18(1), 30-44.

5.5.2 **Australian Data**

Prior research by Woodside and Ahn (2008) is the source of the first data set. The Cooperative Research Centre for Sustainable Tourism in Australia funded their research to support the data acquisition from the Australian Bureau of Tourism Research. The data set contains information of 2,630 international visitors to Australia in 2000 from 14 countries, including Canada, Germany, Hong Kong, Indonesia, Japan, Malaysia, Netherlands, New Zealand, Singapore, Korea, Switzerland, Taiwan, United Kingdom,

and the United States. The respondents are classified into different segments by the three age groups of young (<30), middle (30~49), and old (50+), and the four purposes of their trips, including first-time holiday, first-time visiting friends and relatives (VFR), repeat holiday, and repeat VFR. The consumption data used in the study to analyze the behavioural tendencies of visitors of different country origin includes average nights of stay, daily trip expenditures, shopping expenditures, and number of the regions and states visited. (Please see Tables 5.5.5 to 5.5.8 for details.)

Table 5.5.5: Australian Consumption Data—First-Time Holiday

Country	Age	Nights	$ Per Day	Shopping	States visited
Canada	Young	48	113	360	2.6
	Middle	40	307	727	3.4
	Old	27	153	354	1.9
Germany (W.)	Young	41	117	333	2.9
	Middle	32	160	426	3.4
	Old	24	136	389	3.1
Hong Kong	Young	10	243	654	1.8
	Middle	8	348	862	1.7
	Old	6	400	978	1.0
Indonesia	Young	14	14	100	1.0
	Middle	11	272	150	1.3
	Old	3	533	1000	1.0
Japan	Young	14	299	1076	1.8
	Middle	6	375	1221	1.6
	Old	8	238	545	1.6
Korea (S.)	Young	25	216	658	1.9
	Middle	6	303	1039	1.8
	Old	3	50	138	2.0
Malaysia	Young	14	150	489	1.8

	Middle	8	197	223	1.2
	Old	16	59	684	1.7
	Young	81	105	310	2.7
Netherlands	Middle	23	145	302	2.6
	Old	32	139	167	3.0
	Young	9	181	649	1.1
New Zealand	Middle	7	253	482	1.1
	Old	12	21	183	1.0
	Young	10	212	432	1.6
Singapore	Middle	9	348	523	1.4
	Old	7	362	1200	2.0
	Young	69	104	461	3.9
Switzerland	Middle	38	140	700	3.7
	Old	19	130	150	2.5
	Young	7	123	542	2.5
Taiwan	Middle	6	327	1,705	2.5
	Old	5	272	1,029	2.5
	Young	63	97	330	2.9
U. K.	Middle	34	180	397	2.6
	Old	20	162	416	2.3
	Young	28	153	238	2.1
U. S. A.	Middle	15	255	727	2.3
	Old	12	207	755	2.7

Table 5.5.6: Australian Consumption Data—First-Time VFR

Country	Age	Nights	$ Per Day	Shopping	States visited
	Young	77	125	270	2.2
Canada	Middle	17	78	300	1.0
	Old	14	171	175	1.2
	Young	55	45	280	2.5
Germany (W.)	Middle	27	72	538	2.0
	Old	0	0	0	0
Hong Kong	Young	9	151	536	1.0

	Middle	0	0	0	0
	Old	0	398	1500	1.0
	Young	14	37	150	1.0
Indonesia	Middle	22	22	383	1.0
	Old	21	55	0	4.0
	Young	14	133	874	0.9
Japan	Middle	9	322	616	1.1
	Old	5	287	200	1.1
	Young	11	51	150	1.3
Korea (S.)	Middle	45	18	300	2.0
	Old	51	45	400	1.0
	Young	13	101	567	1.7
Malaysia	Middle	0	0	0	0
	Old	56	32	500	1.0
	Young	32	42	120	2.0
Netherlands	Middle	21	60	160	1.7
	Old	16	63	300	1.3
	Young	46	79	973	1.0
New Zealand	Middle	33	32	390	1.0
	Old	18	148	60	1.0
	Young	6	174	1000	1.0
Singapore	Middle	7	184	450	1.5
	Old	6	220	300	1.0
	Young	29	92	133	2.0
Switzerland	Middle	14	186	350	2.0
	Old	46	35	300	1.0
	Young	9	164	316	1.1
Taiwan	Middle	23	96	745	1.0
	Old	0	0	0	0
	Young	43	76	368	1.5
U. K.	Middle	23	125	504	1.6
	Old	33	104	265	2.0
	Young	25	86	703	1.9
U. S. A.	Middle	19	165	282	2.2
	Old	23	251	436	1.8

Table 5.5.7: Australian Consumption Data—Repeat Holiday

Country	Age	Nights	$ Per Day	Shopping	States visited
	Young	92	50	194	2.6
Canada	Middle	21	134	590	1.7
	Old	35	160	379	1.7
	Young	40	97	140	3.3
Germany (W.)	Middle	32	183	283	2.5
	Old	37	157	377	2.3
	Young	7	129	200	1.2
Hong Kong	Middle	12	395	897	1.5
	Old	17	224	35	1.0
	Young	15	35	100	2.0
Indonesia	Middle	15	407	1764	1.3
	Old	16	535	458	1.0
	Young	11	240	719	1.0
Japan	Middle	8	370	773	0.9
	Old	14	240	758	0.5
	Young	6	314	1036	1.4
Korea (S.)	Middle	14	451	1071	0.9
	Old	0	0	0	0
	Young	6	268	200	1.1
Malaysia	Middle	9	481	1034	1.2
	Old	5	1434	225	1.0
	Young	46	78	167	3.2
Netherlands	Middle	31	169	425	2.9
	Old	24	336	967	3.7
	Young	19	141	266	1.1
New Zealand	Middle	13	243	381	1.3
	Old	12	203	594	1.3
	Young	7	304	991	1.4
Singapore	Middle	8	304	592	1.2
	Old	7	709	384	1.1

	Young	58	88	232	3.2
Switzerland	Middle	24	124	270	2.4
	Old	26	120	217	1.0
	Young	35	150	558	1.9
Taiwan	Middle	6	369	1100	1.6
	Old	7	213	850	2.0
	Young	38	97	161	1.8
U. K.	Middle	31	143	400	2.4
	Old	29	190	426	2.2
	Young	16	171	187	1.9
U. S. A.	Middle	15	192	330	1.7
	Old	19	214	729	1.7

Table 5.5.8: Australian Consumption Data—Repeat VFR

Country	Age	Nights	$ Per Day	Shopping	States visited
	Young	11	103	225	1.5
Canada	Middle	15	76	235	1.2
	Old	37	38	25	1.6
	Young	13	38	106	1.4
Germany (W.)	Middle	24	112	167	1.9
	Old	39	113	423	2.0
	Young	13	124	286	1.3
Hong Kong	Middle	14	246	850	1.2
	Old	13	1320	267	1.0
	Young	73	36	264	1.2
Indonesia	Middle	14	549	614	1.0
	Old	14	321	679	1.3
	Young	14	140	219	0.5
Japan	Middle	13	144	451	0.6
	Old	10	128	443	0.6
	Young	31	177	750	1.0
Korea (S.)	Middle	19	154	808	1.8
	Old	17	8	20	1.0

	Young	19	760	283	1.0
Malaysia	Middle	27	151	380	1.1
	Old	28	307	279	1.3
	Young	20	79	225	1.0
Netherlands	Middle	22	185	100	1.0
	Old	51	29	217	1.5
	Young	14	83	309	1.1
New Zealand	Middle	8	144	346	1.1
	Old	17	63	206	1.2
	Young	11	106	475	1.2
Singapore	Middle	13	94	353	1.2
	Old	15	298	1561	1.0
	Young	4	164	200	1.0
Switzerland	Middle	24	73	150	2.5
	Old	15	83	233	1.0
	Young	11	135	589	1.3
Taiwan	Middle	12	177	842	1.5
	Old	112	94	6000	1.0
	Young	26	92	436	1.6
U. K.	Middle	26	113	432	1.4
	Old	45	68	344	1.7
	Young	24	54	188	1.3
U. S. A.	Middle	18	125	222	1.4
	Old	22	110	372	1.6

Due to the availability of the country scores in the four value data sets, the data from ten countries, including Germany, Hong Kong, Japan, Malaysia, Netherlands, New Zealand, Singapore, Switzerland, Taiwan, and U.S.A., are analyzed in the study.

5.5.3 **American Data**

The second set of the data is published by the Office of Travel and Tourism Industries, International Trade Administration of the U.S. Department of Commerce. The data set includes the inbound travellers to the United States in 2008 from 18 countries; however, due to the availability of the country scores in the four cultural value data sets, only the data of 12 countries, including Australia, Brazil, France, Germany, Italy, Japan, Netherlands, New Zealand, Singapore, Spain, Switzerland, and Taiwan, are analyzed in the study. The consumption data used to analyze the behavioural tendencies of tourists from each country in the study includes average travel spending, length-of-stay, time spends on planning the trip, and number of the states visited. (Please see Table 5.5.9 for details.)

Table 5.5.9: American Consumption Data

Country	Travel spending	Nights	Pre-trip planning days	States visited
Australia	4,406	14	90	2.2
Brazil	3,888	10	60	1.6
China	5,511	10	30	2.2
France	3,052	9	70	1.6
Germany (W.)	2,886	11	80	1.7
India	5,055	23	30	1.9
Ireland	3,009	8	60	1.3
Italy	3,339	9	60	1.8
Japan	3,315	4	60	1.2
Korea (S.)	3,445	7	30	1.6
Netherlands	2,592	9	75	1.7
New Zealand	3,890	13	90	2
Singapore	3,915	10	30	1.8
Spain	3,240	8	60	1.5
Sweden	3,008	6	60	1.6
Switzerland	3,167	9	60	1.7
Taiwan	3,848	8	30	1.5
U.K.	2,843	10	90	1.4

Seven countries are available in all the four cultural value data sets and both consumption data sets including Germany, Japan, Netherlands, New Zealand, Singapore, Switzerland, and Taiwan. (Please see Table 5.5.10 for details.)

Table 5.5.10: Comparison of Four Cultural Value Data and Two Consumption Data Sets

Country	Cultural Value Data				Consumption Data		Overlap
	Hofstede	Inglehart	Schwartz	Steenkamp	Australia	USA	
Australia	✓	✓	✓	✓		✓	
Brazil	✓	✓	✓	✓		✓	
Canada	✓	✓			✓		
China	✓	✓	✓			✓	
France	✓	✓	✓	✓		✓	
Germany (W.)	✓	✓	✓	✓	✓	✓	✓
Hong Kong	✓	✓	✓	✓	✓		
India	✓	✓				✓	
Indonesia	✓	✓			✓		
Italy	✓	✓	✓	✓		✓	
Japan	✓	✓	✓	✓	✓	✓	✓
Korea (S.)	✓	✓			✓	✓	
Malaysia	✓	✓	✓	✓	✓		
Netherlands	✓	✓	✓	✓	✓	✓	✓
New Zealand	✓	✓	✓	✓	✓	✓	✓
Singapore	✓	✓	✓	✓	✓	✓	✓
Spain	✓	✓	✓	✓		✓	
Sweden	✓	✓		✓		✓	
Switzerland	✓	✓	✓	✓	✓	✓	✓
Taiwan	✓	✓	✓	✓	✓	✓	✓
U.K.	✓	✓			✓	✓	
U.S.A.	✓	✓	✓	✓	✓		
Venezuela	✓	✓				✓	

5.5.4 **Distance & GDP per Capita Data**

The study retrieves information about flight distance between the main exit airport of each country to Australia and USA from http://www.travelmath.com/distance/. Sydney is the main entrance airport in Australia to receive international arrivals. Los Angeles and New York are the main entrance airports on the west and east coast of USA to receive international arrivals (please see Table 5.5.11 & 5.5.12 for details). The study uses the shorter distance from the main exit airport of each country to either Los Angeles or to New York in the analysis.

Table 5.5.11: Distance between the Main Exit Airport of Each Country and Sydney, Australia

Country	Airport	To Sydney (Miles)
Germany	Frankfurt	10,240
Hong Kong	Hong Kong	4,566
Japan	Tokyo	4,842
Malaysia	Kuala Lumpur	4,108
Netherlands	Amsterdam	10,339
New Zealand	Auckland	1,342
Singapore	Singapore	3,918
Switzerland	Zurich	10,294
Taiwan	Taipei	4,498
USA	Los Angeles	7,496

Table 5.5.12: Distance between the Main Exit Airport of Each Country and USA

Country	Airport	To Los Angeles (Miles)	To New York (Miles)
Australia	Sydney	7,496	9,934
Brazil	Rio de Janeiro	6,293	4,803
France	Paris	5,658	3,636
Germany	Frankfurt	5,794	3,864
Italy	Rome	6,345	4,292
Japan	Tokyo	5,487	6,755
Netherlands	Amsterdam	5,569	3,654
New Zealand	Auckland	6,511	8,815
Singapore	Singapore	8,782	9,531
Spain	Madrid	5,832	3,595
Switzerland	Zurich	5,932	3,941
Taiwan	Taipei	6,790	7,799

Gross domestic product (GDP) per capita is one of the important indexes to represent the economic performance of a country. The study adopts the GDP per capita data from the database of International Monetary Fund. 2000 GDP per capita is used with the Australian data set and 2008 GDP per capita is used with American data set. (Please see Table 5.5.13 & 5.5.14 for details.)

Table 5.5.13: 2000 GDP Per Capita of Each Country

Country	2000 GDP Per Capita (US dollars)
Germany	23,168.07
Hong Kong	25,198.73
Japan	36,810.99
Malaysia	3,391.92
Netherlands	24,250.65
New Zealand	13,556.94
Singapore	23,018.65
Switzerland	34,802.00
Taiwan	14,426.46
USA	34,773.78

Table 5.5.14: 2008 GDP Per Capita of Each Country

Country	2008 GDP Per Capita (US dollars)
Australia	50,150.35
Brazil	8,676.00
France	48,012.01
Germany	46,498.66
Italy	40,449.60
Japan	37,940.48
Netherlands	54,445.06
New Zealand	31,713.94
Singapore	41,291.12
Spain	36,970.46
Switzerland	67,378.87
Taiwan	18,306.11

5.6 Calibrating variables into fuzzy membership scores

In order to run the analysis, the study needs to transform all values of the original cultural variables and behavioural variables into fuzzy membership scores between 0.00 and 1.00. It is necessary to use the fsQCA software program to calibrate them by first identifying the thresholds for full membership (fuzzy score=0.95), cross-over point (fuzzy score=0.50), and full non-membership (fuzzy score=0.05). Please see the following two tables (Table 5.6.1 & 5.6.2) for details.

Table 5.6.1: Calibrating cultural variables into fuzzy membership scores

	Cultural variables	**0.95**	**0.50**	**0.05**
Hofstede	Power distance	80	50	20
	Individualism/collectivism	80	50	20
	Masculinity/femininity	80	50	20
	Uncertainty avoidance	80	50	20
Inglehart	Traditional/secular-rational	-1.5	0	1.5
	Survival/self-expression	-1.5	0	1.5
Schwartz	Affective autonomy	4.1	3.6	3.1
	Intellectual autonomy	5.1	4.3	3.75
	Embeddedness	4.4	3.9	3.35
	Hierarchy	2.75	2.5	2.3
	Mastery	4.3	4.16	4.0
	Egalitarianism	5.33	5.1	4.7
	Harmony	4.1	3.7	3.38
Steenkamp	Egalitarianism/hierarchy	90	0	-90
	Autonomy/collectivism	90	17.5	-55
	Mastery/nurturance	80	15	-50
	Uncertainty avoidance	60	-7.5	-75

Table 5.6.2: Calibrating behavioural variables into fuzzy membership scores

	Behavioural variables	0.95	0.50	0.05
	Nights	30	14	5
Australian	Daily expenditure	350	180	50
Data Sets	Shopping	1000	500	300
	States/regions visited	10	3	1
	Nights of stay	12	8	4
American	Travel spending	4000	3000	2000
Data Sets	States visited	2	1.5	1
	Pre-trip planning days	90	60	30
Distance to Sydney		10000	5000	1500
Distance to US		8700	6100	3500
Per Capita GDP 2000		36000	20000	4000
Per Capita GDP 2008		67000	37500	8000

5.7 Chapter summary

In this chapter, the study explains and describes the design of the study, the six key propositions, the proposition testing procedures, and all data sets used in the study. Also, at the end of this chapter, the study prepares the original data by transforming all values of antecedent and outcome conditions into fuzzy-set membership scores for running the analysis using fsQCA. Therefore, in the next chapter, the thesis will demonstrate how to run the analysis and test the propositions step by step in order to find out the impact of the cultural value configurations on tourist behaviours as well as the behavioural tendencies of tourist in each country.

Chapter 6: Analyses and Findings

6.1 Introduction

In Chapter 6 the research method is detailed, and six research propositions are formulated. This chapter describes the analysis that provides data to address these propositions. As a reminder, the propositions are listed in Table 6.1. The propositions are listed in a logical order and the analysis follows this order. The results are presented below and their discussion follows in Chapter 7.

Table 6.1 The Research Propositions

Number	Proposition
1	National cultures as value configurations provide useful explanations of tourism behaviour.
2	Examining cultural value configurations at the national level offers useful explanations of why tourism behaviour various across countries.
3	The major national culture theories do differ systematically in their usefulness in explaining international tourism behaviour of nations.
4	National cultures associate with international tourism behaviour most for holiday-only visitors.
5	National cultures affect consumer time and shopping expenditures.
6	Age does not moderate the impact of national cultures on international tourism behaviour.

6.2 Proposition1: National cultures as value configurations provide useful explanations of tourism behaviour.

The focus of this proposition is that a configuration of cultural values will predict behaviour better than any single cultural value. Fuzzy set membership scores of cultural values from the four cultural theories under consideration, and tourist consumption data from Australian and American datasets are input into the fsQCA software program for analysis. Note that for the Australian dataset only the data of first-time holiday visitors to Australia are used. As explained in the previous context in developing proposition 4 that culture's influence is greater for first-time visitors than repeat visitors as well as for holiday visitors than VFR visitors.

In order to estimate whether individual cultural values or the configurations of cultural values work better in predicting and explaining the behavioural outcomes, consistency and coverage scores are evaluated. According to Ragin (2000, 2008), consistency scores should be equal to or higher than coverage scores to indicate the antecedent conditions are subsets of the outcome conditions. In addition, consistency scores should be at least 0.75 or higher to indicate that the antecedent conditions are sufficient for the outcome conditions to occur.

Australian data: Table 6.2.1 lists the best predicting individual values and the best predicting configuration of values for the outcome condition by using the data from Hofstede's country scores and first-time holiday visitors to Australia. Table 6.2.1 shows that all the best configurations of Hofstede's cultural values (in column 2) have higher consistency scores than all the best individual cultural values (in column 3).

Table 6.2.1: Consistency and coverage scores of the causal fuzzy set relations of the best Hofstede's individual and the configuration of cultural values

Outcome Condition	=f (P); =f (I); =f (M); =f (U)	=f (P, I, M, U)	Coverage of Improvement Possible %
Stay	I (.728, .836)	~P·I·U (.852, .651)	45.59
~Stay	~I (.842, .738)	P·~I (.850, .688)	5.06
Daily	P (.796, .739)	~P·I·M·~U (.811, .275)	7.35
~Daily	~P (.721, .781)	~P·I·U (.840, .633)	42.65
Shop	~I (.751, .707)	P·~I (.761, .662)	4.02
~Shop	~M (.742, .572)	~P·I·U (.807, .570)	25.19
Visit	~P (.765, .755)	~P·I·~M·U (.846, .256)	34.47
~Visit	P (.750, .760)	P·~I·M (.921, .560)	68.40
		Average coverage of improvement possible %	29.09%,

Note: I = individualism, P = power distance, M = masculinity, U=uncertainty avoidance

This table shows, in column 1, the particular predicted outcome variable – in both present and absent form – for length-of-stay, shopping or daily expenditures, and number of states visited. The second column shows the consistency figures for best model for individual values while the third column shows the best models for a configuration of values. In all cases, as expected, the configurational result is better. The last column shows the coverage of improvement possible in percentage. Coverage of improvement possible is calculated as:

Coverage of improvement possible= $[(C_1-C_0) / (1-C_0)]$ X 100%.

whereas C_1 is the consistency score of the configuration of values and C_0 is the consistency score of the individual values.

Table 6.2.2, below, shows the same data for Inglehart's model and, once again, all the best models for configural data have better consistency scores than the best models for the individual values. Note that in this case, of course, the individual values are only Traditional and Survival.

Table 6.2.2: Consistency and coverage scores of the causal fuzzy set relations of the best Inglehart's individual and the configuration of cultural values

Outcome Condition	=f (T); =f (S)	=f (T, S)	Coverage of Improvement Possible %
Stay	~S (.705, .935)	~T·~S (.853, .745)	50.17
~Stay	S (.925, .671)	T·S (.940, .258)	20.00
Daily	S (.879, .646)	~T·S (.894, .542)	12.40
~Daily	~S (.686, .897)	~T·~S (.845, .727)	50.64
Shop	S (.845, .659)	~T·S (.889, .572)	28.39
~Shop	S (.715, .877)	~T·~S (.836, .675)	42.46
Visit	~S (.715, .852)	~T·~S (.857, .673)	49.82
~Visit	S (.810, .649)	T·S (.937, .284)	66.84
	Average coverage of improvement possible %		40.09

Note: T: traditional; S: survival

Tables 6.2.3 and 6.2.4 repeat the analysis for Schwartz's model and Steenkamp's model respectively, and show similar results.

Table 6.2.3: Consistency and coverage scores of the causal fuzzy set relations of the best Schwartz's individual and the configuration of cultural values

Outcome Condition	=f (Aa); =f (Ia); =f (Em); =f (Hi); =f(Ma); =f (Eg); =f (Ha)	=f (Aa, Ia, Em, Hi, Ma, Eg, Ha)	Coverage of Improvement Possible %
Stay	Eg (.854, .763)	Ia·~Em·~Hi·~Ma·Eg·Ha (.983, .469)	88.36
~Stay	Hi (.911, .602)	~Aa·~Ia·Em·Hi·~Ma·~Eg·Ha (.989, .277)	87.64
Daily	Hi (.825, .553)	~Aa·Ia·~Em·~Hi·Ma·~Eg·Ha (.974, .207)	85.14
~Daily	Eg (.793, .698)	Ia·~Em·~Hi·~Ma·Eg·Ha (.942, .443)	71.98
Shop	Hi (.772, .548)	~Aa·~Ia·Em·Hi·~Ma·~Eg·Ha (.884, .266)	49.12
~Shop	Eg (.820, .677)	Ia·~Em·~Hi·~Ma·Eg·Ha (.951, .419)	72.78
Visit	Eg (.848, .681)	~Ma·Eg (.955, .511)	70.39
~Visit	~Ha (.797, .502)	~Aa·Ia·~Em·~Hi·Ma·~Eg·Ha (.988, .229)	94.09
		Average coverage of improvement possible %	77.44

Aa: affective autonomy; Ia: intellectual autonomy; Em: embeddedness; Hi: hierarchy; M: mastery; Eg: egalitarian; Ha: harmony

As Tables 6.2.1 to 6.2.4 show, the average improvement possible in the consistency scores of fuzzy set relations are 29.09%, 40.09%, 77.44%, and 40.32% for Hofstede, Inglehart, Schwartz, and Steenkamp, respectively. This shows that configurational scores are higher than those of individual values.

Table 6.2.4: Consistency and coverage scores of the causal fuzzy set relations of the best Steenkamp's individual and the configuration of cultural values

Outcome Condition	=f (A); =f (E); =f (M); =f (U)	=f (A, E, M, U)	Coverage of Improvement Possible %
Stay	E (.936, .586)	A·E·~M·~U (.950, .347)	21.87
~Stay	~A (.808, .767)	~A·~E·~M (.872, .513)	33.33
Daily	~A (.766, .736)	~A·~E·~M (.848, .506)	35.04
~Daily	E (.958, .591)	A·E·M·U (.989, .324)	73.81
Shop	~A (.688, .702)	~A·~E·~M·U (.810, .298)	39.10
~Shop	E (.897, .519)	A·E·~M·~U (.972, .328)	72.82
Visit	E (.893, .502)	~A·~M (.918, .390)	23.36
~Visit	~A (.724, .759)	~A·~E·~U (.788, .607)	23.19
Average coverage of improvement possible %			40.32

A: autonomy; E: egalitarianism; M: mastery; U: uncertainty avoidance

US data: Similar to the analysis with Australian tourist consumption data, the analysis of American consumption data is presented in Tables 6.2.5 to 6.2.8. Note that in all instances the same pattern emerges; the configurations of cultural values score higher in consistency than individual values for Hofstede's, Inglehart's, Schwartz' and Steenkamp's theories just as they do for the Australian data.

Table 6.2.5: Consistency and coverage scores of the causal fuzzy set relations of the best Hofstede's individual and the configuration of cultural values

Outcome Condition	=f (P); =f (I); =f (M); =f (U)	=f (P, I, M, U)	Coverage of Improvement Possible %
Stay	~U (.907, .446)	~P·I·M·~U (1.000, .221)	100
~Stay	~I (.503, .683)	P·~I·M·U (.837, .538)	67.2
Plan	~P (.891, .732)	I·~M·U (.946, .427)	50.46
~Plan	~I (.836, .832)	~I·M·U (.946, .446)	67.07
Shop	~I (.954, .557)	P·~I (.972, .527)	39.13
~Shop	~P (.508, .865)	~P·I·~M·U (.745, .482)	48.17
Visit	~U (.961, .465)	P·~I·~U (.976, .285)	38.46
~Visit	P (.510, .897)	P·~I·U (.795, .671)	58.16
	Average coverage of improvement possible %		58.58

P = power distance; I = individualism; M = masculinity; U = uncertainty avoidance

Table 6.2.6: Consistency and coverage scores of the causal fuzzy set relations of the best Inglehart's individual and the configuration of cultural values

Outcome Condition	=f (T); =f (S)	=f (T, S)	Coverage of Improvement Possible %
Stay	T (.986, .505)	T·~S (1.000, .448)	100
~Stay	S (.697, .637)	~T·S (.805, .621)	36.64
Plan	~S (.771, .957)	~T·~S (.890, .785)	51.97
~Plan	S (.912, .611)	T·S (1.000, .345)	100
Shop	T (1.000, .490)	T·S (1.000, .202)	0
~Shop	~T (.430, 1.000)	T·S (.554, .290)	21.75
Visit	T (.946, .477)	T·S (1.000, .208)	100
~Visit	S (.700, .663)	~T·S (.791, .632)	30.33
	Average coverage of improvement possible %		54.96

T: traditional; S: survival

Table 6.2.7 Consistency and coverage scores of the causal fuzzy set relations of the best Schwartz's individual and the configuration of cultural values

Outcome Condition	=f (Aa); =f (Ia); =f (Em); =f (Hi); =f(Ma); =f (Eg); =f (Ha)	=f (Aa, Ia, Em, Hi, Ma, Eg, Ha)	Coverage of Improvement Possible %
Stay	~Ha (.989, .110)	Aa·Ia·~Em·~Hi·Ma·Eg·Ha (1.000, .251)	100
~Stay	Ma (.583, .626)	~Aa·Ia·~Em·~Hi·Ma·~Eg·Ha (.755, .223)	41.25
Plan	Ma (.813, .469)	~Aa·~Ia·Em·~Hi·~Ma·~Eg·Ha (1.000, .163)	100
~Plan	~Ha (.924, .168)	~Aa·~Ia·Em·Hi·~Ma·~Eg·Ha (.952, .389)	36.84
Shop	~Ha (1.000, .106)	~Aa·~Ia·Em·~Ma·~Eg·Ha (1.000, .308)	0
~Shop	~Em (.461, .997)	~Aa·~Ia·Em·Hi·Ma·~Eg·~Ha (.714, .075)	46.94
Visit	~Ha (1.000, .109)	Aa·Ia·~Em·~Hi·Ma·Eg·Ha (1.000, .247)	0
~Visit	Hi (.603, .671)	~Aa·Ia·~Em·~Hi·Ma·~Eg·Ha (.782, .240)	45.09
		Average coverage of improvement possible %	46.26

Aa: affective autonomy; Ia: intellectual autonomy; Em: embeddedness; Hi: hierarchy; M: mastery; Eg: egalitarian; Ha: harmony

Table 6.2.8: Consistency and coverage scores of the causal fuzzy set relations of the best Steenkamp's individual and the configuration of cultural values

Outcome Condition	=f (A); =f (E); =f (M); =f (U)	=f (A, E, M, U)	Coverage of Improvement Possible %
Stay	~U (.947, .564)	E·M·U (1.000, .306)	100
~Stay	U (.489, .903)	A·~E·U (.762, .575)	53.42
Plan	E (.841, .641)	A·~E·M (.943, .453)	64.15
~Plan	~A (.778, .773)	~A·~E·~M (.821, .588)	19.37
Shop	~A (.970, .565)	A·~E·M (1.000, .385)	100
~Shop	E (.566, .895)	A·E·M·U (.760, .521)	44.70
Visit	~U (.980, .574)	E·M·U (1.000, .301)	100
~Visit	U (.494, .972)	A·~E·U (.815, .638)	63.44
	Average coverage of improvement possible %		68.14

A: autonomy; E: egalitarianism; M: mastery; U: uncertainty avoidance.

The average improvement possible in the consistency scores of fuzzy set relations are 58.58%, 54.96%, 46.26% and 68.14%, for Hofstede, Inglehart, Schwartz, and Steenkamp respectively. Thus, based on the analysis above, cultures are most usefully viewed as configurations of values rather than in terms of individual values, when studying culture's influences on consumer behaviour.

6.3 Proposition 2: Examining cultural value configurations at the national level offers useful explanations of why tourism behaviour various across countries.

This seemingly simple proposition seeks differences between the expenditure patterns of tourists from different countries. Differences found here will offer support

to those espousing the notion that culture can be meaningfully analysed at a national level, and provide further empirical evidence to refute their detractors.

In order to find out the best cultural configuration to represent each country with each of the four cultural theories, cultural value scores of each country from Hofstede, Inglehart, Schwartz, and Steenkamp's theories are input into EXCEL for analysis. A country's representative cultural configuration is identified by choosing the maximum score from all the possible cultural configuration scores of that country.

A total of 15 countries, including Australia, Brazil, France, Germany, Hong Kong, Italy, Japan, Malaysia, Netherlands, New Zealand, Singapore, Spain, Switzerland, Taiwan, and USA, are studied. Tables 6.3.1, 6.3.2, 6.3.3, and 6.3.4 show the representative cultural configurations for each country by using Hofstede, Inglehart, Schwartz, and Steenkamp's cultural theories, respectively. Although there are 16 possible cultural configurations with four cultural values of Hofstede's theory, not all of them exist in the countries studied in the thesis.

Table 6.3.1: Representative Cultural Configurations by Hofstede's Theory

Country	Representative cultural configuration
Australia/Germany/Switzerland	~P·I·M·U
Brazil/Taiwan	P·~I·~M·U
France/Spain	P·I·~M·U
Hong Kong/Malaysia 1	P·~I·M·~U
Italy	P·~I·M·~U
Japan	P·~I·M·U
Netherlands	~P·I·~M·U
New Zealand/USA	~P·I·M·~U
Singapore/Malaysia 2	P·~I·~M·~U

P: power distance; I: individualism; M: masculinity; U: uncertainty avoidance

Table 6.3.1 shows that all the Eastern countries in the study, including Hong Kong, Japan, Malaysia, Singapore and Taiwan, are high in power distance and low in individualism. On the other hand, most Western countries are low in power distance with the exceptions of Italy, France and Spain which are high, and high in individualism except for Italy. Unlike other Western countries, Italy and the Netherlands are special, as their cultural configurations are exactly opposite to each other.

Table 6.3.2: Representative Cultural Configurations by Inglehart's Theory

Country	Representative Cultural Value Configuration
Australia/France/Germany/Italy/Netherlands/ New Zealand 1/Spain/Switzerland	~T·~S
Brazil/Malaysia/New Zealand 2/USA	T·~S
Hong Kong/Japan/Taiwan	~T·S
Singapore	T·S

T: traditional; S: survival

Only four possible cultural configurations exist with Inglehart's theory, as he only develops two cultural value dimensions. As Table 6.3.2 shows, Singapore is culturally distinct from all the other 14 countries in the study in that it is high in both traditional and survival dimension. Other Asia countries, such as Hong Kong, Japan, and Taiwan are low in traditional (high in secular-rational) and high in survival values. European countries, including France, Germany, Italy, Netherlands, Spain, and Switzerland are grouped together with Australia and New Zealand as high secular and high self-expression countries. New Zealand is located at the boundary between traditional and secular-rational values, so can also be grouped with Brazil, Malaysia and USA as a high traditional and high self-expression country.

Table 6.3.3: Representative Cultural Configurations by Schwartz's Theory

Country	Representative Cultural Value Configuration
Australia	~Aa·~Ia·~Em·~Hi·~Ma·Eg·Ha
	~Aa·~Ia·~Em·~Hi·~Ma·~Eg·Ha
	Aa·~Ia·~Em·~Hi·~Ma·Eg·Ha
	Aa·~Ia·~Em·~Hi·~Ma·~Eg·Ha
Brazil 1	~Aa·~Ia·Em·Hi·Ma·~Eg·Ha
Brazil 2/Singapore/Taiwan	~Aa·~Ia·Em·Hi·~Ma·~Eg·Ha
France/Germany/Spain	Aa·Ia·~Em·~Hi·~Ma·Eg·Ha
Hong Kong	~Aa·~Ia·Em·Hi·Ma·~Eg·~Ha
Italy/Netherlands	~Aa·Ia·~Em·~Hi·~Ma·Eg·Ha
Japan	~Aa·Ia·~Em·~Hi·Ma·~Eg·Ha
Malaysia	~Aa·~Ia·Em·~Hi·Ma·~Eg·~Ha
	~Aa·~Ia·~Em·~Hi·Ma·~Eg·~Ha
New Zealand/Switzerland	Aa·Ia·~Em·~Hi·Ma·Eg·Ha
USA	Aa·~Ia·Em·~Hi·Ma·~Eg·Ha
	Aa·~Ia·Em·~Hi·Ma·~Eg·~Ha
	Aa·~Ia·~Em·~Hi·Ma·~Eg·Ha
	Aa·~Ia·~Em·~Hi·Ma·~Eg·~Ha

Aa: affective autonomy; Ia: intellectual autonomy; Em: embeddedness; Hi: hierarchy; Ma: mastery; Eg: egalitarian; Ha: harmony

Schwartz's seven cultural values permit 128 possible cultural configurations. More cultural configurations are useful to represent the 15 countries in the study, compared to the other three cultural theories. Most Eastern countries, except for Japan, are low in affective autonomy and high in embeddedness while most Western countries are high in affective autonomy and low in embeddedness.

Table 6.3.4: Representative Cultural Configurations by Steenkamp's Theory

Country	Representative Cultural Value Configuration
Australia/New Zealand/USA	A·~E·M·~U
Brazil/Taiwan	~A·~E·~M·U
France/Germany 1/Spain	A·E·~M·U
Germany 2/Switzerland	A·E·M·U
Hong Kong/Malaysia	~A·~E·M·~U
Italy	~A·E·M·U
Japan	A·~E·M·U
Netherlands	A·E·~M·~U
Singapore	~A·~E·~M·~U

A: autonomy; E: egalitarianism; M: mastery; U: uncertainty avoidance.

With Steenkamp's theory (Table 6.3.4), most Western countries are high in autonomy, except for Italy, and high in egalitarianism, except for Australia, New Zealand and the USA. Most Eastern countries are low in both autonomy and egalitarianism, except for Japan, which is high in autonomy.

Besides Inglehart's theory, which has only two cultural value dimensions and is limited to include more than four cultural configurations, Hofstede, Schwartz, and Steenkamp's theories show that distinct cultural differences exist between Eastern and Western countries no matter which one of the culture theories applies. Eastern countries, such as Hong Kong, Japan, Malaysia, Singapore, and Taiwan either stand out alone with unique cultural configurations, or group together with other Eastern countries. The same applies to the Western countries. Among the 15 countries in the study, the cultural configuration of Brazil is the same as that of some Eastern and Western countries. For example, Brazil's cultural configuration is not only the same as Taiwan's

according to Hofstede, Schwartz, and Steenkamp's theories, but also the same as New Zealand and USA's using Inglehart's theory.

Proposition 2 is thus successfully addressed, and the results offer support to the concept of a national cultural configuration.

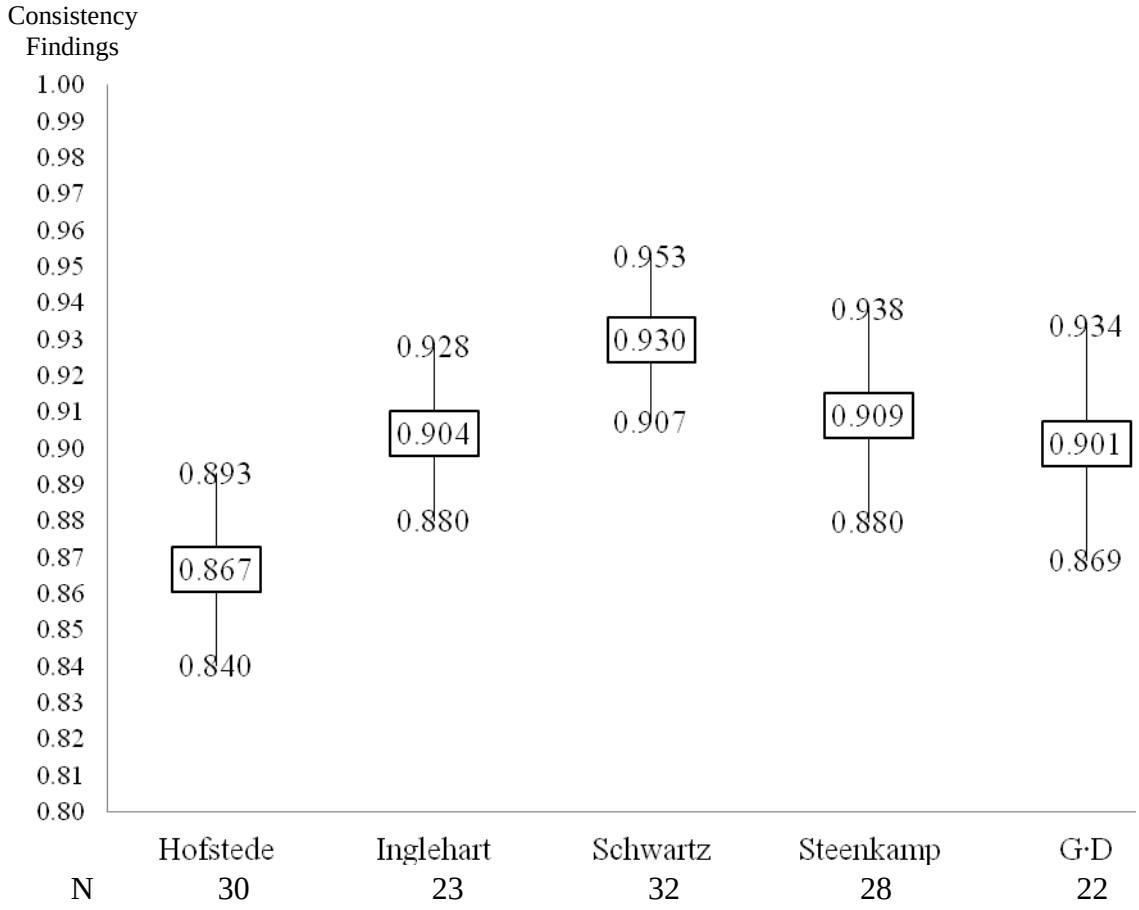
6.4 Proposition 3: The major national culture theories do differ systematically in their usefulness in explaining international tourism behaviour of nations.

At this point the analysis method changes a little, as there is so much data to be considered that a meta-analysis is best used. The detailed consistency scores are listed in Appendices A to Y. Consistency scores over 0.749 of the best fitting models of the four theories and the control-comparison model (GDP per capita and home-destination distance) on affirmation and negation of the four consumption datasets are estimated, including length-of-stay, not length-of-stay, daily expenditure, not daily expenditure, shopping expenditure, not shopping expenditure, number of states/regions visited, and not number of states/regions visited for international inbound visitors to Australia.

The data is presented as box plots of the consistency scores, so that both the mean levels and the distributions of consistency scores can be noted.

Figure 6.4.1 shows that Schwartz's theory is the most useful, followed by Steenkamp's, Inglehart's, G·D, and Hofstede's theory in explaining and predicting

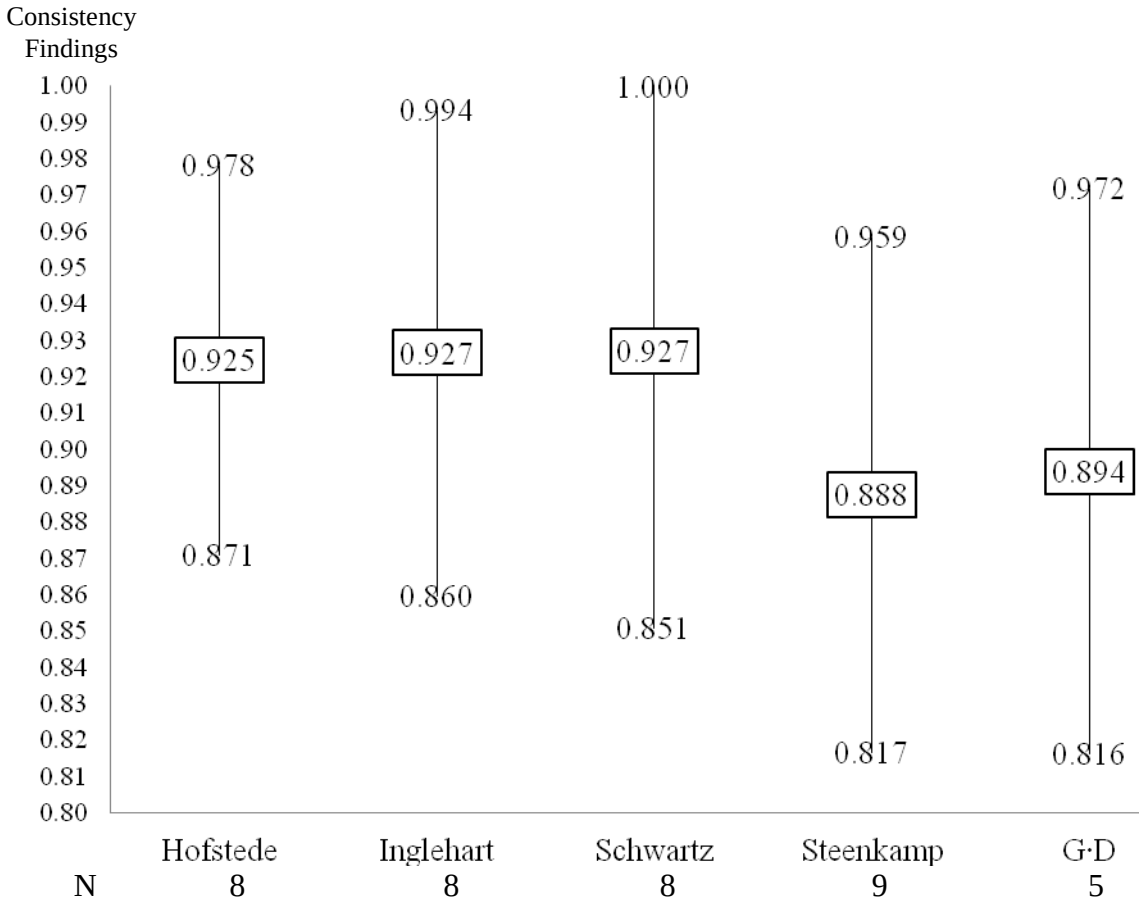
Figure 6.4.1: Meta-Analysis of Consistency Averages of Best Fitting Models of Four Theories and G·D for Grouped Data of Visitors to Australia (Range Covering ± 1.96 Average Values for Consistency Estimates > 0.749)



tourists' consumer behaviour. Not only is the mean consistency score of Schwartz's theory higher than those of the other three theories and the control-comparison model, but also the range of the means (plus and minus 1.96 standard error) of Schwartz's theory is tighter than those of the others. In other words, the findings of the meta-analysis indicate that Schwartz's theory is more powerful and can more accurately estimate consumer behaviour than the other three theories as well as the control-comparison model.

The same analysis is run using the American consumption data, this time including length-of-stay, not length-of-stay, pre-trip planning, not pre-trip planning, shopping expenditure, not shopping expenditure, number of states/regions visited, and not number of states/regions visited for international inbound visitors to USA. Again, the detailed consistency scores are available in Appendixes A, F, K, P, and U

Figure 6.4.2: Meta-Analysis of Consistency Averages of Best Fitting Models of Four Theories and G·D for Grouped Data of Visitors to USA (Range Covering ± 1.96 Average Values for Consistency Estimates > 0.749)



Interestingly, the analysis of the American consumption data shows different findings to the Australian. Figure 6.4.2 shows Hofstede, Inglehart, and Schwartz's

theories are better than both Steenkamp's theory and the control-comparison model in explaining and predicting consumer behaviours. Also, the ranges of the theories in Figure 6.4.2 are much wider than those in Figure 6.4.1. The discrepancy in the range in the two analyses may mainly result from the fact that the numbers of the consistency scores in the Australian data analysis are far greater than those in the American analysis.

Again, the data presented addresses the proposition, and offers support for the idea that cultural values are a more powerful predictor of tourists' behaviour than the GDP per capita and home-destination data, even though the findings for the Australian and US data are not in agreement about the power of the various cultural theories.

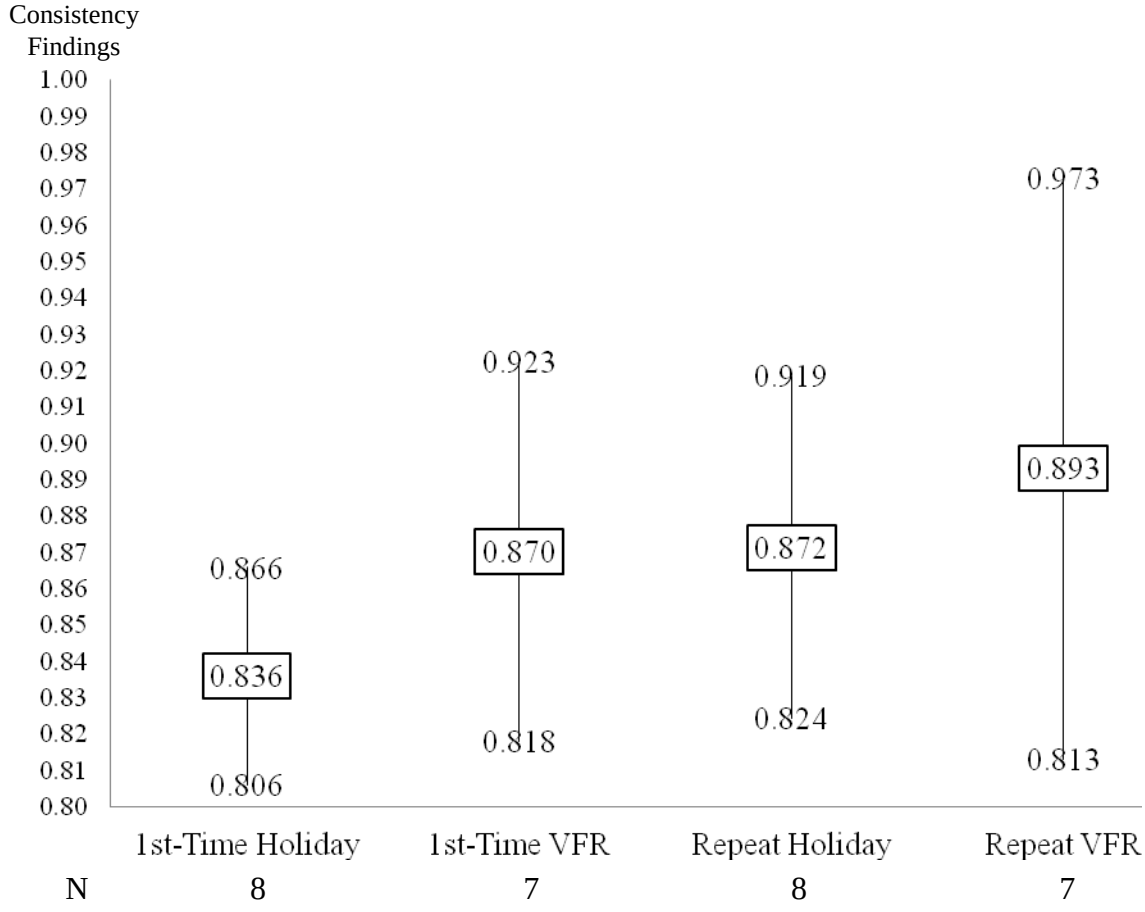
6.5 Proposition 4: National cultures associate with international tourism behaviour most for holiday-only visitors.

This proposition sets up an expectation that the effects of culture of the tourists' country of origin will exert less influence when they are visiting friends or relatives. Similarly, the more frequently an individual visits a destination then they will blend in more than first-time travellers.

Meta-analysis is again applied to analyze whether cultural influences on consumer behaviour differ by purposes of the trip and previous experience. Figures 6.5.1 to 6.5.5 show the findings of meta-analysis by four purposes of the trip for visitors to Australia with Hofstede, Inglehart, Schwartz, and Steenkamp's theories as well as the control-comparison model.

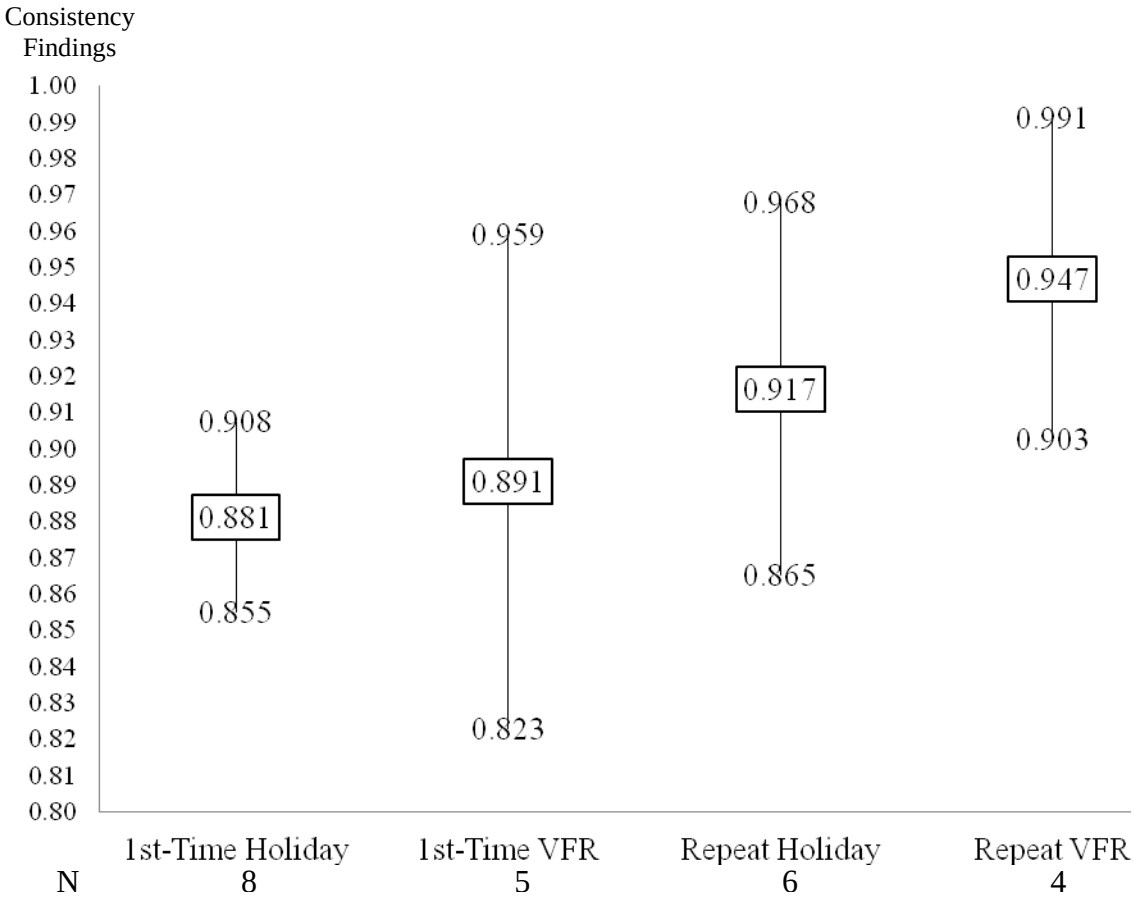
There are two points worthy of note here. First, it is accuracy that is of interest here, so that the point of analytical interest is the spread of the consistency scores around the means for the groups of data. That is, the narrower the distribution, the more accurate the model. The second point is that, given the results of prior propositional testing and bearing in mind that the absolute consistency score is not of prime interest here, the study nevertheless expects Schwartz's theory to give the most reliable absolute indication of effect (i.e. score higher).

Figure 6.5.1: Meta-Analysis of Consistency Averages of Hofstede's Best Fitting Models by Four Purposes for Grouped Data of Visitors to Australia (Range Covering ± 1.96 Average Values for Consistency Estimates > 0.749)



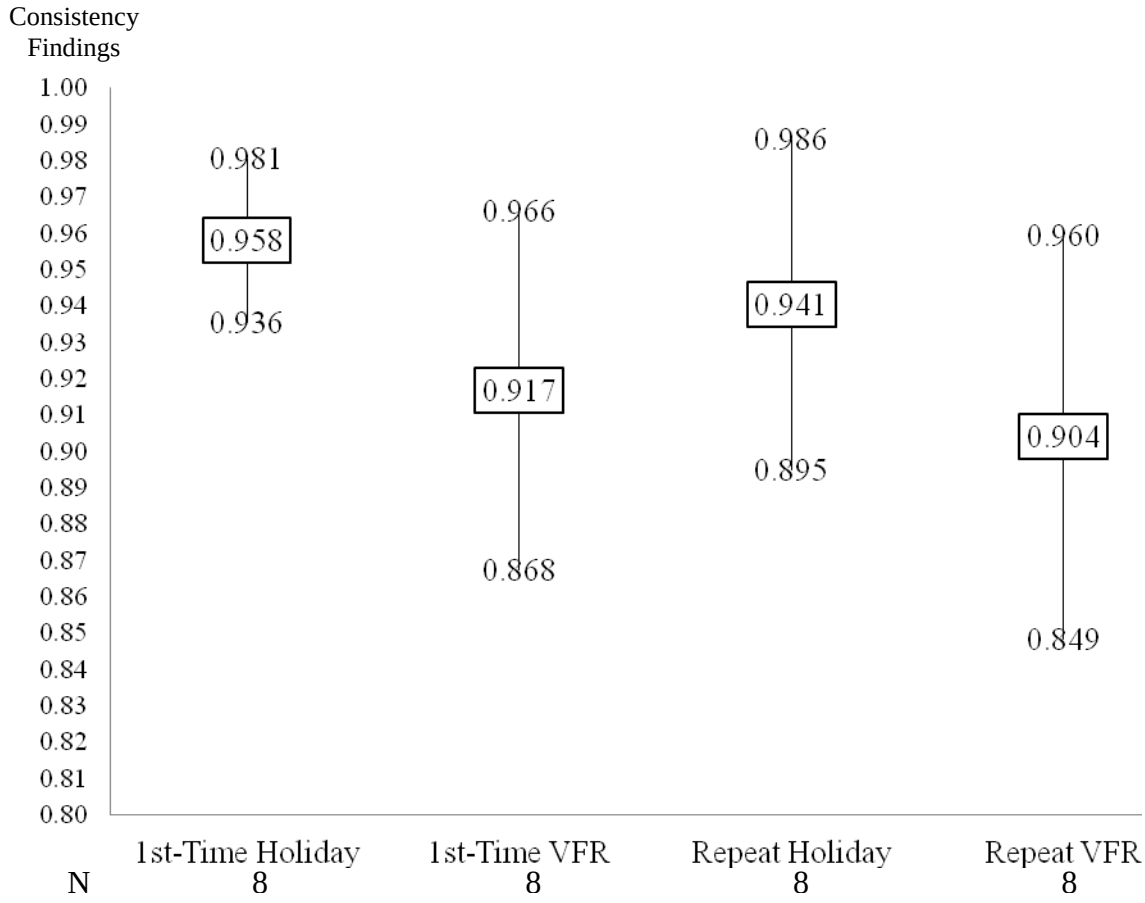
Note: Please see Appendix B, C, D, & E for detailed consistency scores.

Figure 6.5.2: Meta-Analysis of Consistency Averages of Inglehart's Best Fitting Models by Four Purposes for Grouped Data of Visitors to Australia (Range Covering ± 1.96 Average Values for Consistency Estimates > 0.749)



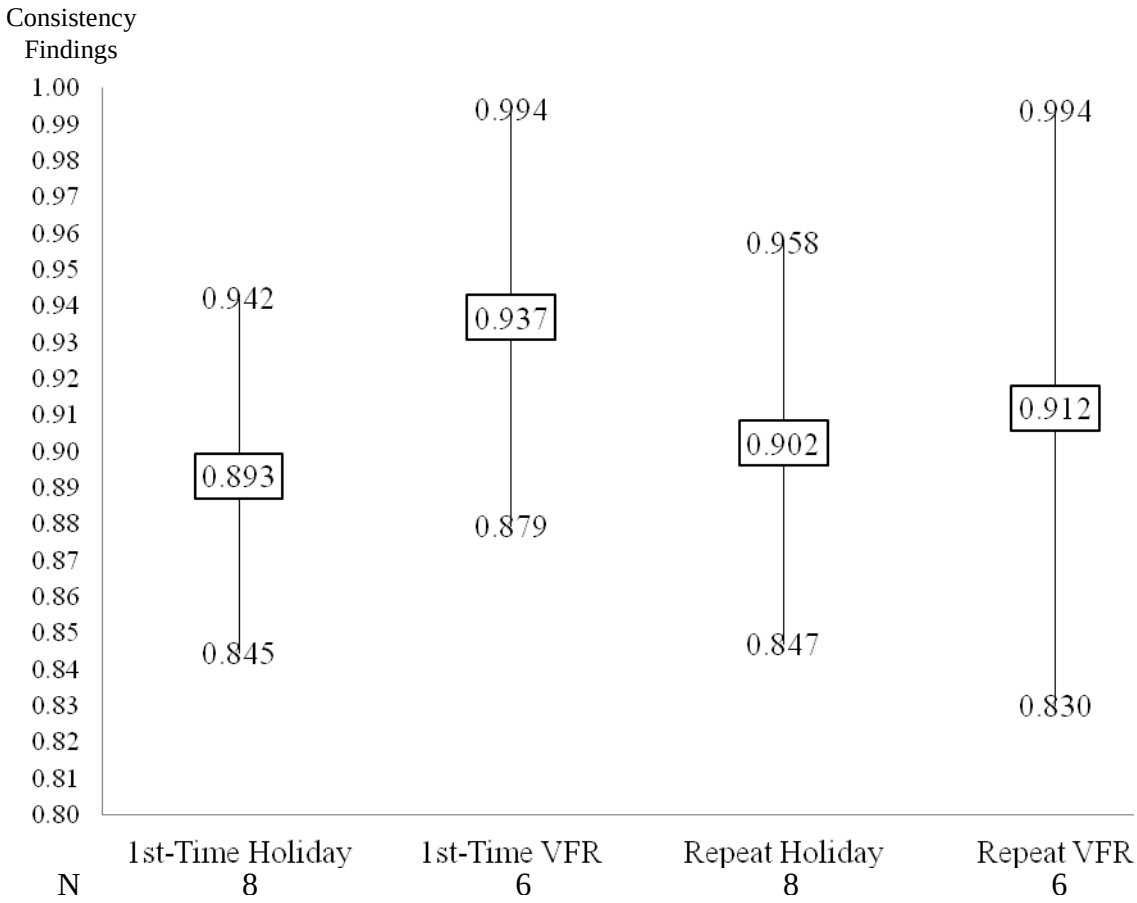
Note: Please see Appendix G, H, I, & J for detailed consistency scores.

Figure 6.5.3: Meta-Analysis of Consistency Averages of Schwartz's Best Fitting Models by Four Purposes for Grouped Data of Visitors to Australia (Range Covering ± 1.96 Average Values for Consistency Estimates > 0.749)



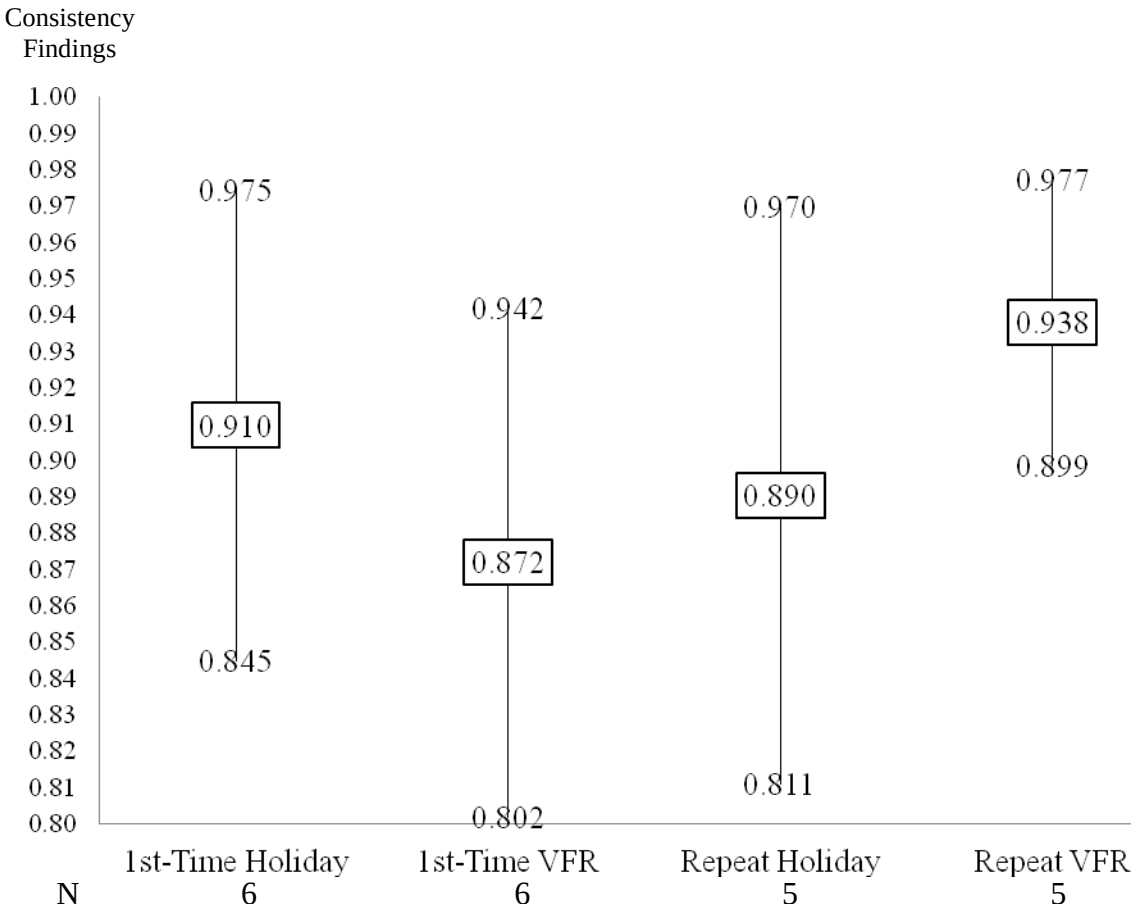
Note: Please see Appendix L, M, N, & O for detailed consistency scores.

Figure 6.5.4: Meta-Analysis of Consistency Averages of Steenkamp's Best Fitting Models by Four Purposes for Grouped Data of Visitors to Australia (Range Covering ± 1.96 Average Values for Consistency Estimates > 0.749)



Note: Please see Appendix Q, R, S, & T for detailed consistency scores.

Figure 6.5.5: Meta-Analysis of Consistency Averages of Best G·D Fitting Models by Four Purposes for Grouped Data of Visitors to Australia (Range Covering ± 1.96 Average Values for Consistency Estimates > 0.749)



Note: Please see Appendix V, W, X, & Y for detailed consistency scores.

As the figures show, the ranges of the means, plus and minus 1.96 standard errors, for first-time holiday purposes for all the four cultural theories are obviously narrower than those of the other three purposes. This means that cultural configurations are able to estimate the behaviours more accurately for first-time holiday visitors than visitors

with other trip purposes and previous experience. In other words, culture's influences are stronger for first-time holiday visitors than VFR visitors and repeat visitors.

On the contrary, Figure 6.5.5 shows the ranges of the means plus and minus 1.96 standard errors of repeat VFR purpose for the control-comparison model is much tighter than those of the other three purposes. This finding indicates the configuration of GDP per capita and home-destination distance can estimate consumer behaviour more precisely for repeat VFR visitors than visitors with other trip purposes. In other words, the control-comparison model has stronger influence for repeat VFR visitors than visitors on holiday purpose and without previous experience.

In addition, Figures 6.5.1 to 6.5.4 also show that Schwartz's theory performs more in line with previous results, is more theoretically and empirically reasonable, compared to the other three theories in explaining travel behaviour outcomes. This finding can be explained by the patterns of the four trip purposes in the findings of meta-analysis as shown in Figure 6.5.3 that not only the mean consistency scores from high to low, but also the ranges of the means plus and minus 1.96 standard errors from narrow to wide are in the order of first-time holiday, repeat holiday, first-time VFR, and repeat VFR. The findings support the theory that cultural influences are stronger for holiday visitors than VFR visitors as well as for first-time visitors than repeat visitors.

The findings of the meta-analysis shown in these five figures support the research proposition that culture has a powerful influence on the behaviours of first-time holiday visitors. On the other hand, for those who either have prior experience travelling to a foreign country or who travel on VFR purpose, other influences such as GDP per capita and home-destination distance, become stronger than cultural influence. The findings

also re-affirm the third proposition, that Schwartz's theory is more theoretically and empirically useful in explaining and predicting consumer behaviour than the other theories.

6.6 Proposition 5: National cultures affect consumer time and shopping expenditures.

The study conducts the proposition testing in three parts, to explore whether culture affects consumer behaviour and whether differences in consumption behaviour exist between Eastern and Western cultures. First, the study identifies the consumption patterns of the countries with their representative cultural configurations. Second, the study compares the findings of the Australian and American consumption data sets to see if the consumption behavioural patterns are consistent in both data sets. Third, the study uses the best-fitting models for consumption behaviour to illustrate how people from Eastern countries behave differently from their Western counterparts.

Due to the consistency of the findings relevant to the third proposition, Schwartz's cultural theory seems the most useful theory in explaining consumer behaviour in the context in the study. Consequently, this part of the analysis uses only Schwartz's cultural value configurations to analyze the consumption data.

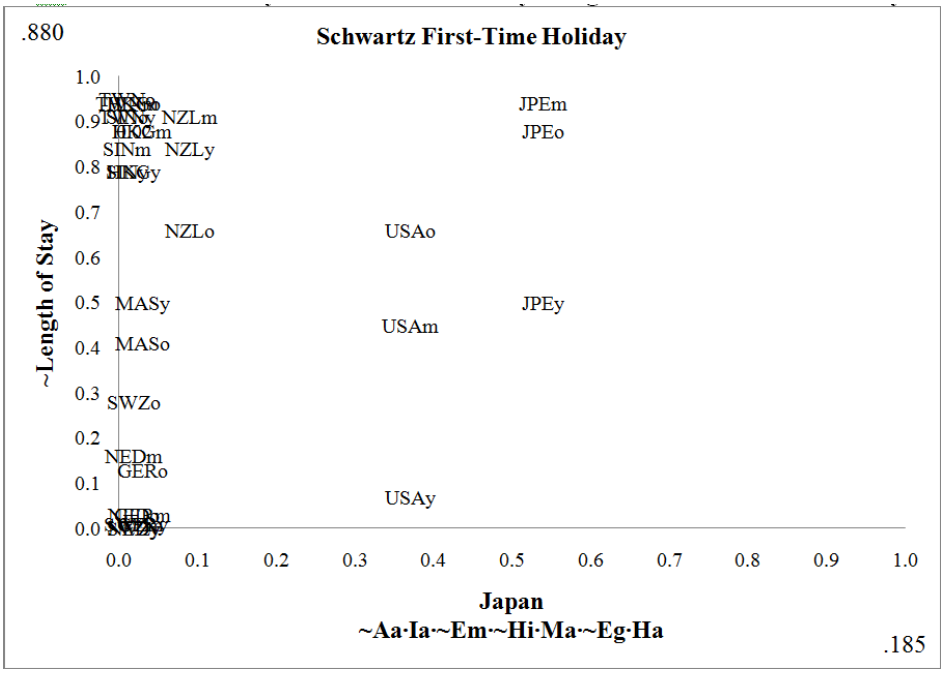
Similarly, the findings of the fourth proposition tests suggests cultural influences are stronger for first-time holiday visitors than visitors travelling on other purposes, so the study uses only the data of first-time holiday visitors to Australia. In addition, the findings of the second proposition test show that Japan and Netherlands are the most typical Eastern and Western countries among the countries in the study, thus the study

uses Schwartz's cultural value configurations for Japan and Netherlands to illustrate the influences of culture on consumer behaviour for the first two parts of the proposition testing in this section.

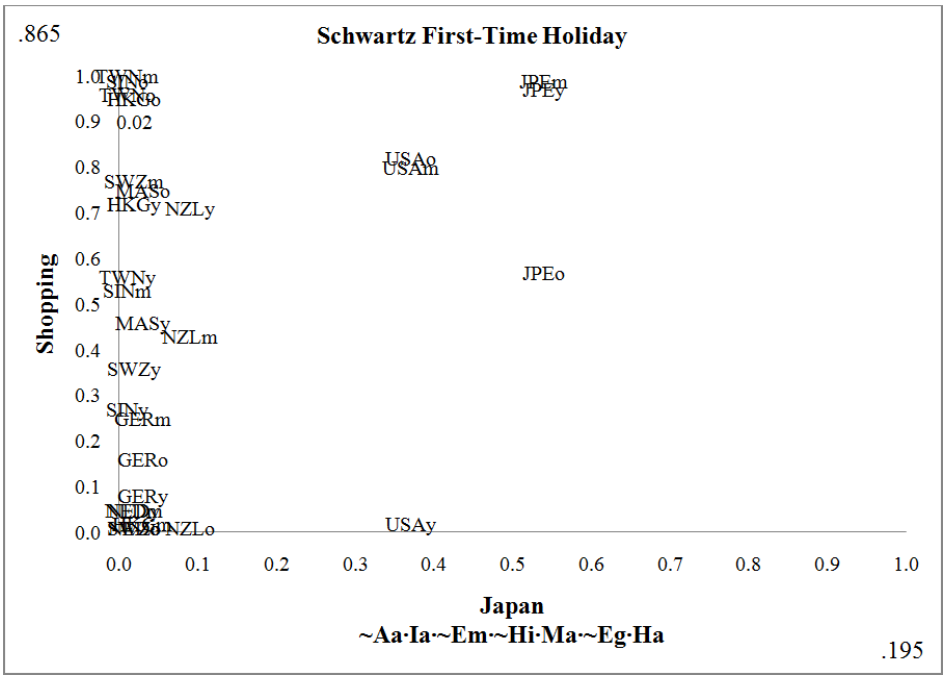
Figure 6.6.1 shows Japanese cultural configuration works well in explaining consumer behaviour for first-time holiday visitors to Australia, using Schwartz's cultural theory. Japanese cultural configuration explains and predicts that visitors with strong Japanese cultural characteristics tend not to stay long, spend much money on food and accommodations daily, buy many goods/souvenirs to bring home, and visit only a few regions during their trips to Australia. On the contrary, Figure 6.6.2 shows that Netherland's cultural configuration explains visitors with strong Dutch cultural characteristics tend to stay a long time, spend little money on food and accommodation daily, do not buy many goods/souvenirs to bring home, and visit many places during their trips to Australia.

Figure 6.6.1: Japanese Cultural Configuration for First-Time Holiday Visitors to Australia by Schwartz's Cultural Theory

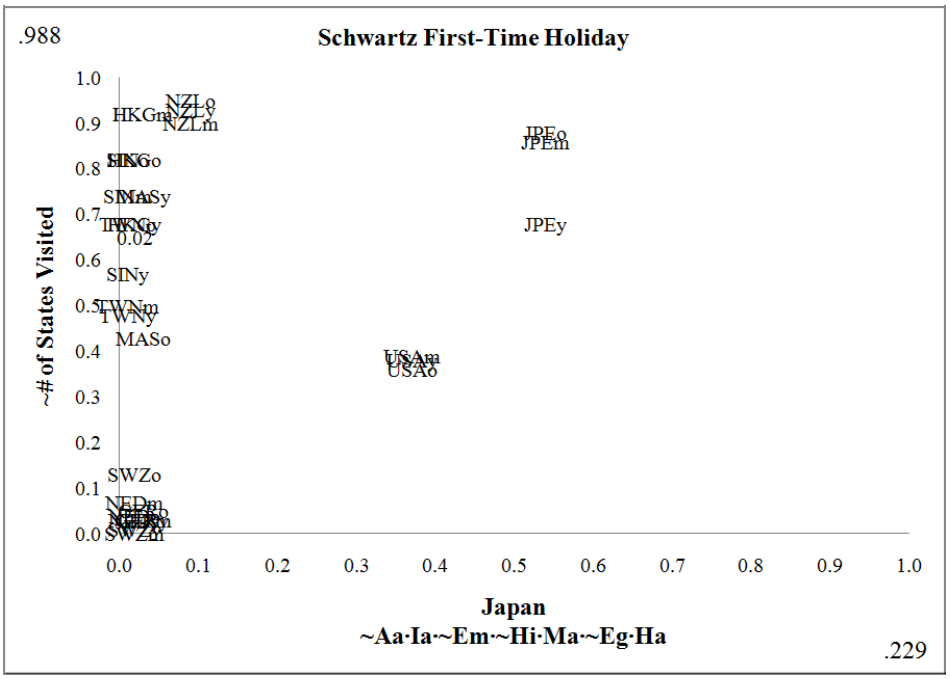
~Length-of-stay



Shopping



~Number of States Visited



Daily Expenditures

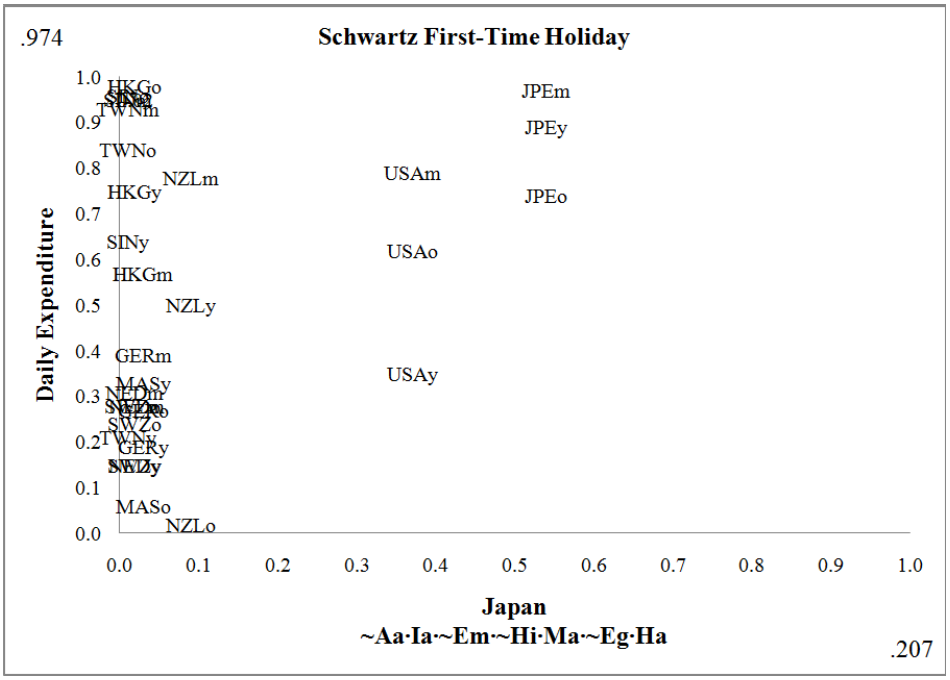
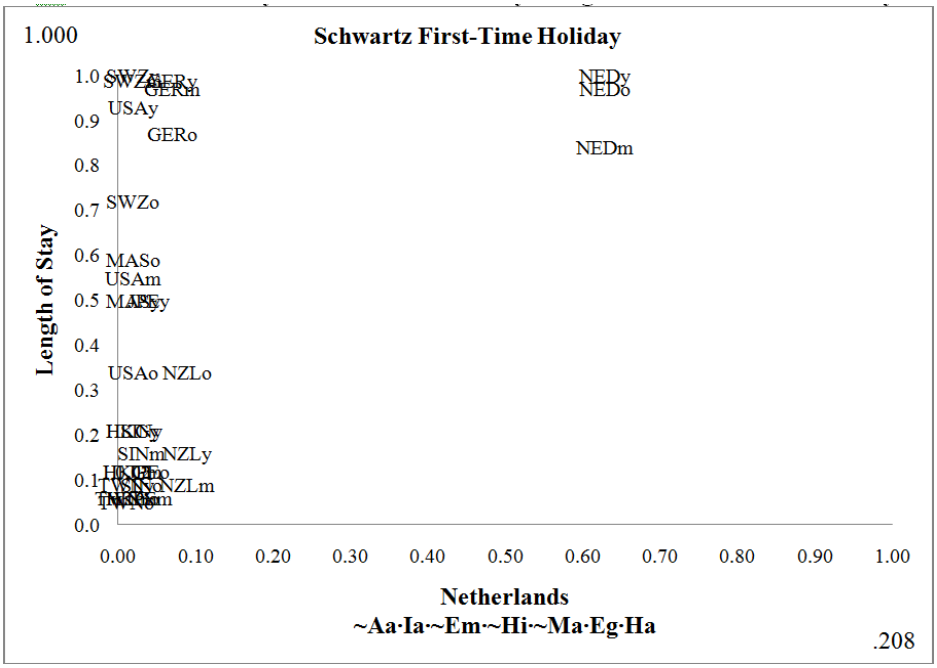
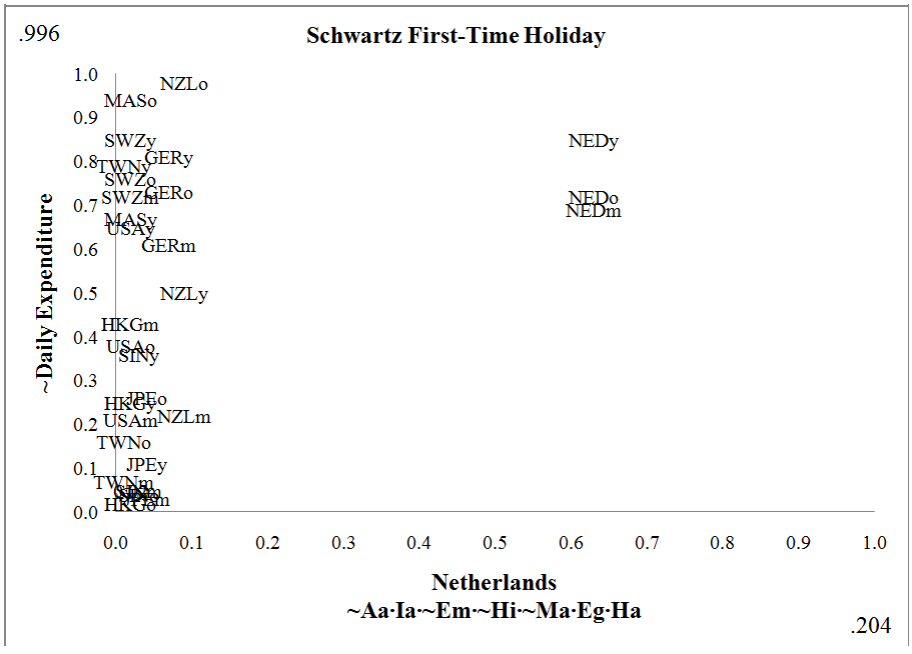


Figure 6.6.2: Netherlands Cultural Configuration for First-Time Holiday Visitors to Australia by Schwartz's Cultural Theory

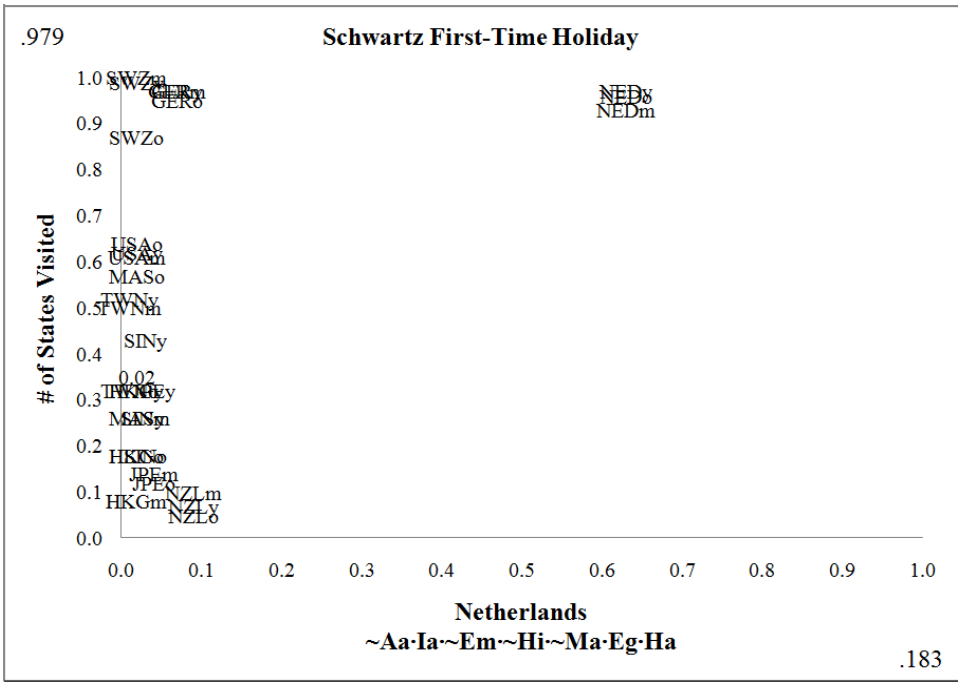
Length-of-stay



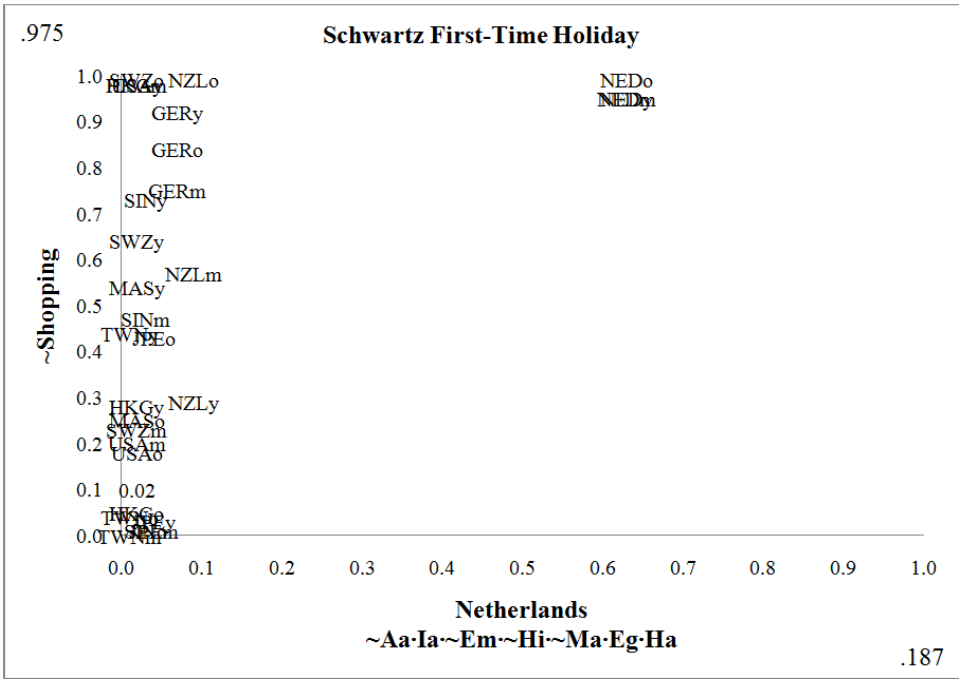
Daily Expenditures



Number of States visited



~Shopping



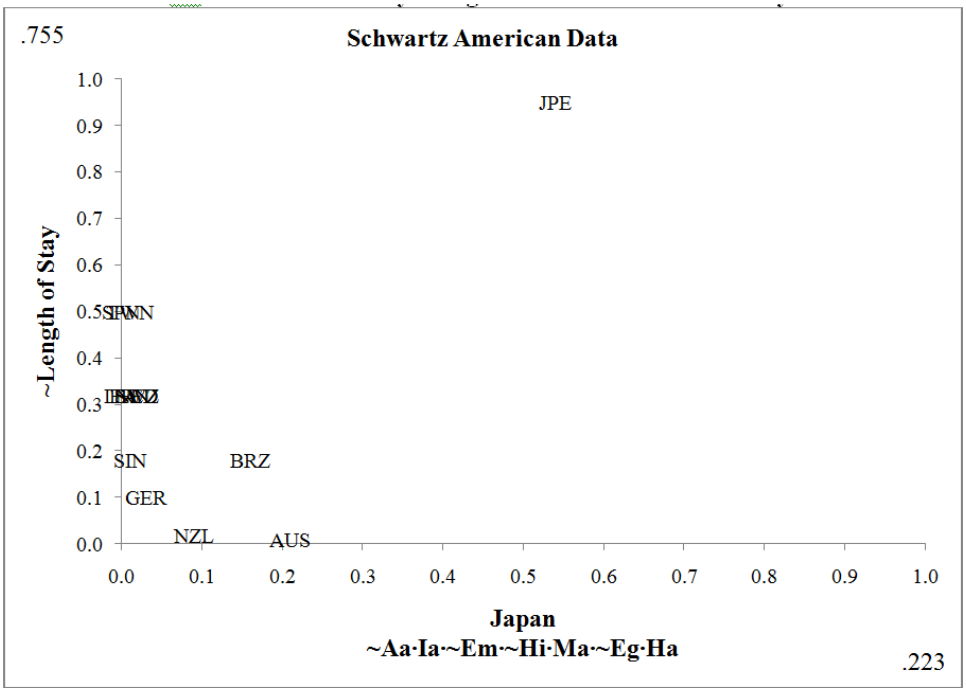
The study now includes American consumption data, to see if the consumption behaviours of Japan and Netherland's cultural configurations are consistent for international visitors travel to Australia and USA. Both Figures 6.6.3 and 6.6.4 show similar findings to figures 6.6.1 and 6.6.2.

Figure 6.6.3 shows visitors with strong Japanese cultural characteristics tend to not stay long, spend much money on shopping, visit a few states during their trips to USA, and spend little time on planning before the trips. Opposite to Japanese cultural configurations, Figure 6.6.4 shows that visitors with strong Dutch cultural characteristics are more likely to stay longer, visit many states during their trips to USA, and spend much time on planning before the trips.

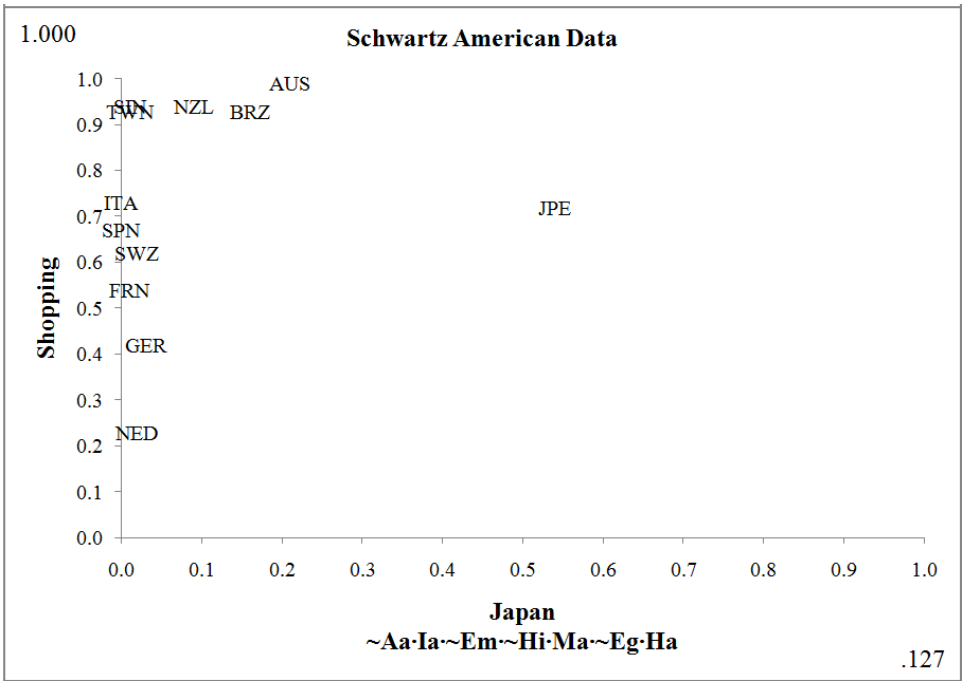
A disagreement occurs between the findings of Australian and American datasets for the shopping behaviour for Netherland's cultural configuration. Visitors with strong Dutch cultural characteristics tend to spend little money on shopping when visiting Australia, but they tend to spend much money on shopping when visiting USA. However, Figure 6.6.4 shows that Netherlands is the only exception in the shopping XY plot, which suggests Netherlanders do not spend much money on shopping.

Figure 6.6.3: Japanese Cultural Configuration for Visitors to USA by Schwartz's Cultural Theory

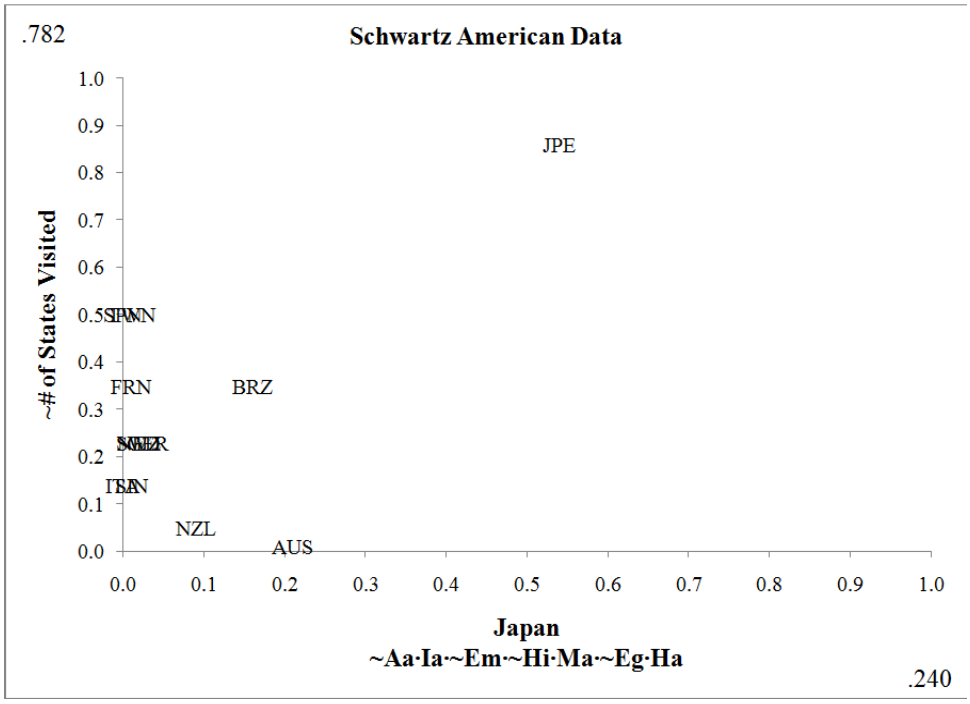
~Length-of-stay



Shopping



~Number of States Visited



~Pre-Trip Planning

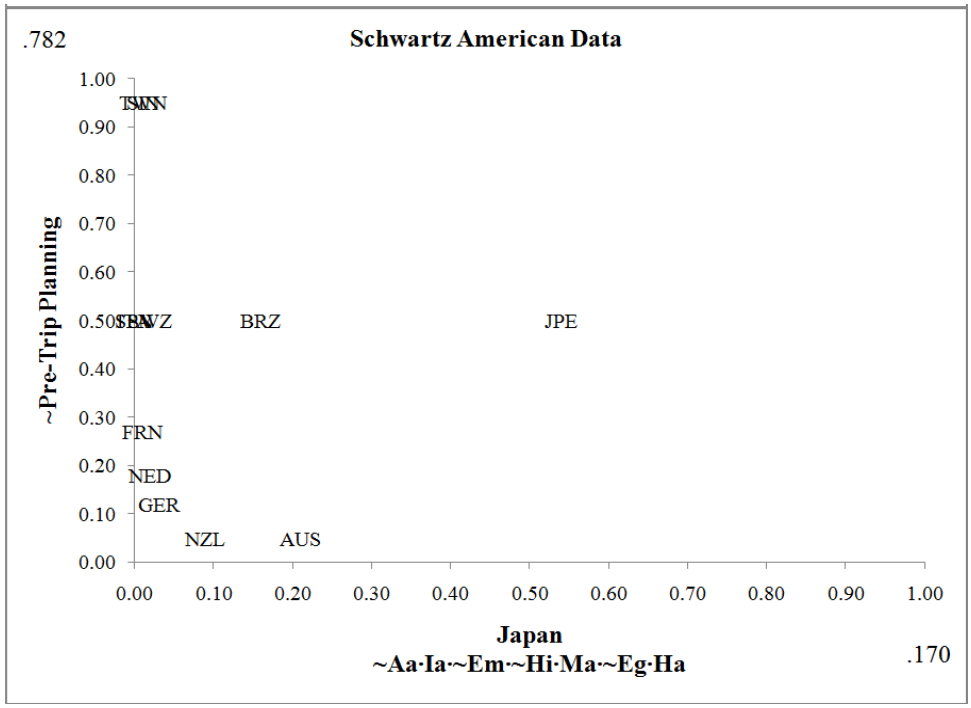
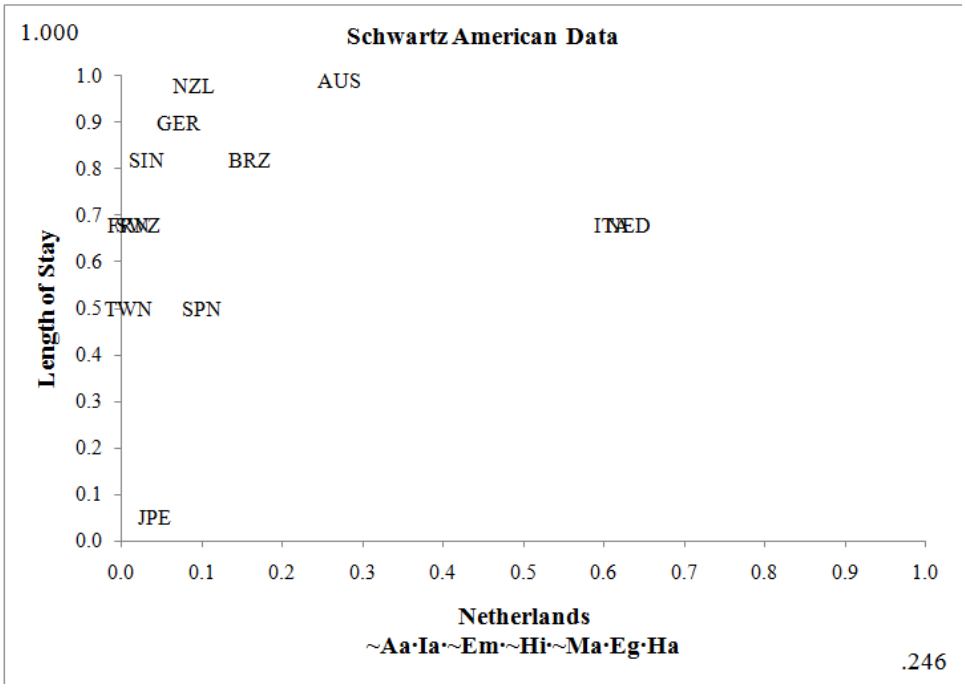
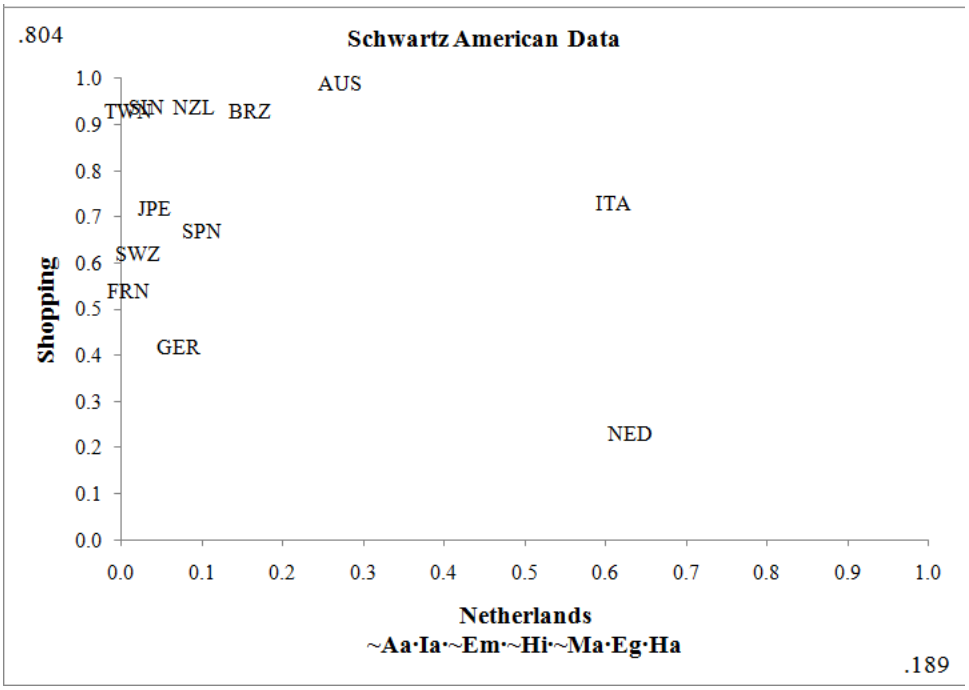


Figure 6.6.4: Netherlands Cultural Configuration for Visitors to USA by Schwartz's Cultural Theory

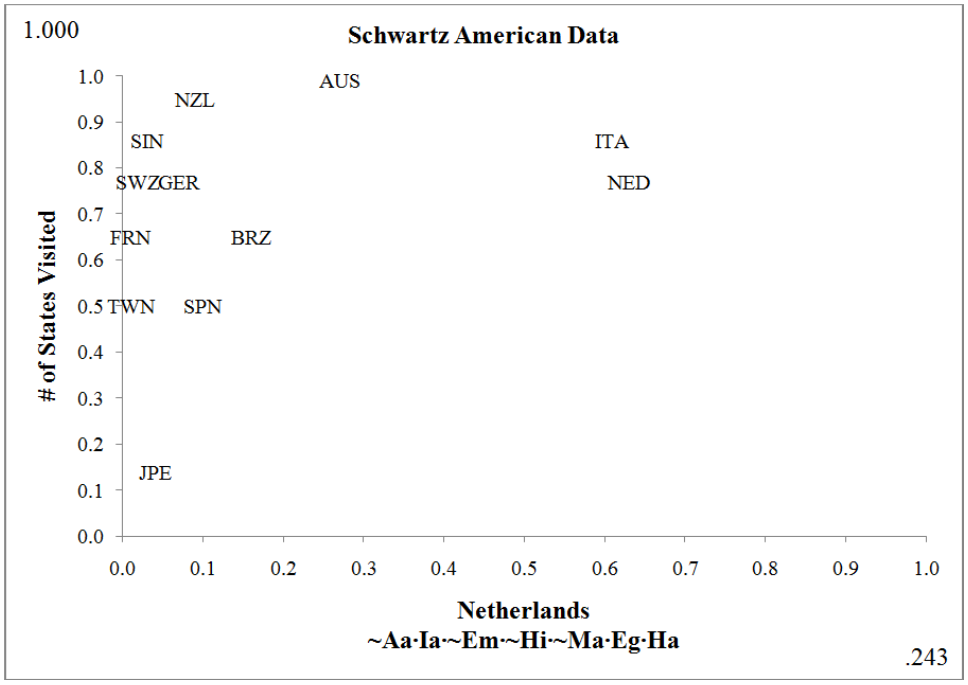
Length-of-stay



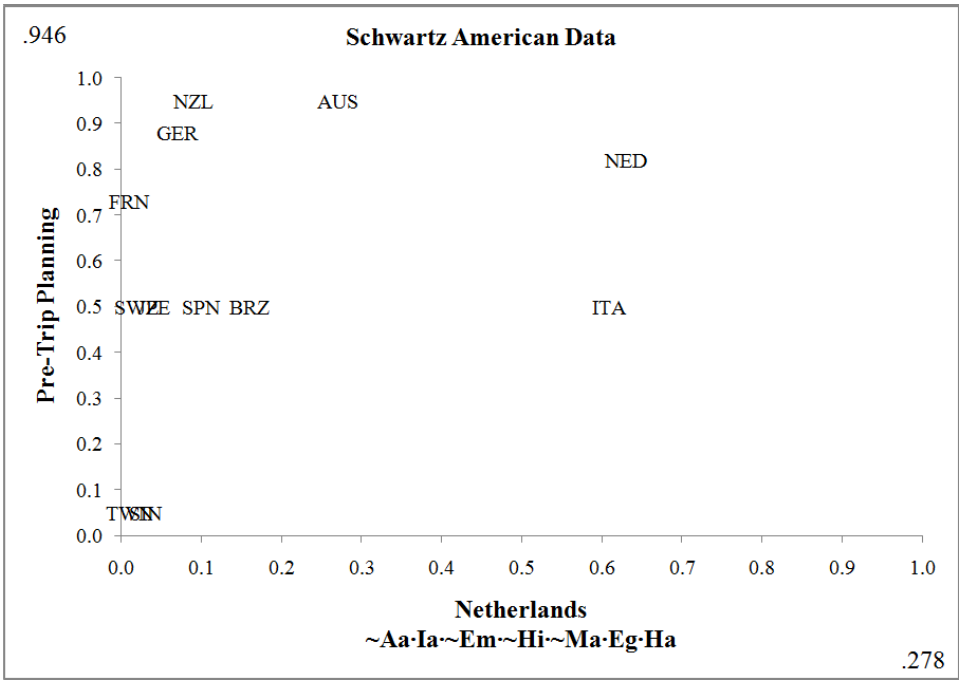
Shopping



Number of States visited



Pre-trip planning



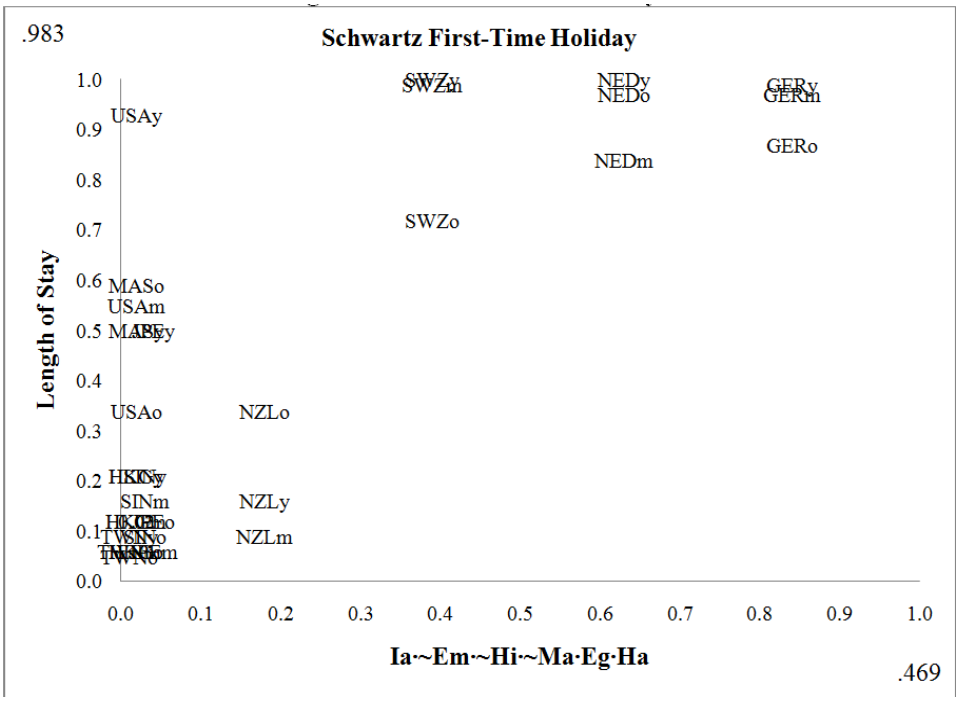
Figures 6.6.5 and 6.6.6 show the findings of Schwartz's best fitting models for visitors to Australia and USA, respectively. Figure 6.6.5 shows Western countries, such as Germany, Netherlands, and Switzerland, usually stand out on the upper right side of the plots for consumption behaviours, including length-of-stay, not daily expenditure, not shopping, and # of states visited. This explains that people from Western countries are more likely to stay more nights, spend less money on food and accommodation daily, shop for fewer goods/souvenirs to bring home, and visit more regions during their trips to Australia than tourists from Eastern countries.

On the contrary, Eastern countries, such as Taiwan, Singapore, and Japan, usually appear on the upper right of the plots for consumption behaviours, including not length-of-stay, daily expenditure, shopping, and not # of states visited. The findings explain that Eastern tourists tend to stay fewer nights, spend more money on food and accommodation daily, shop more goods/souvenirs to bring home, and visit fewer regions during their trips to Australia than people from Western countries.

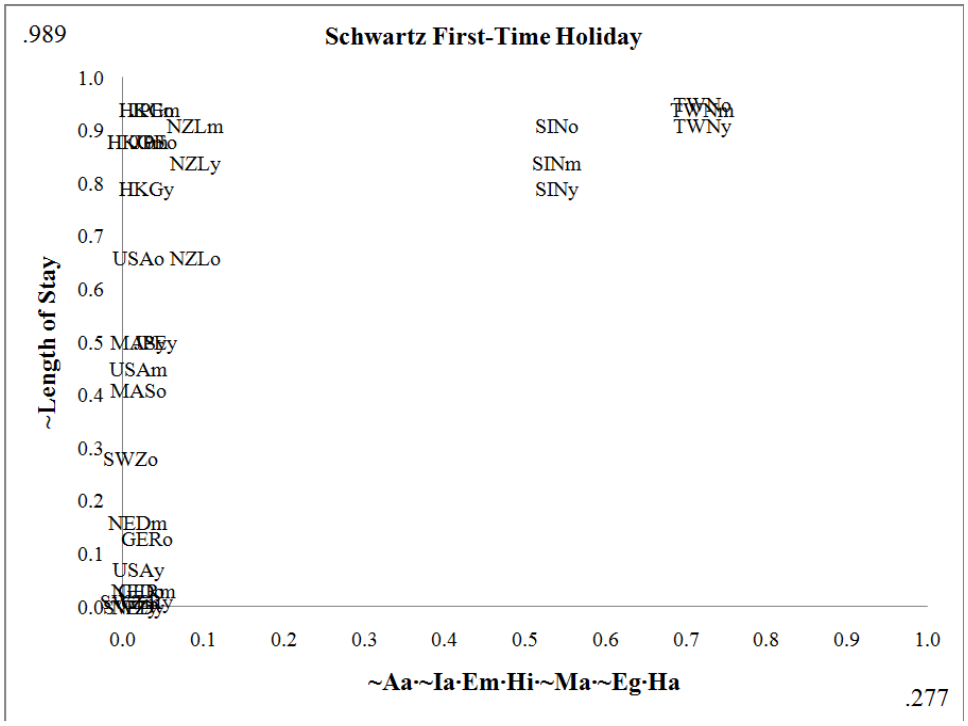
There are eight plots shown, two to a page, representing the best-fitting models for Schwartz's model for first time visitors to Australia.

Figure 6.6.5: Schwartz's Best Fitting Models for First-Time Holiday Visitors to Australia

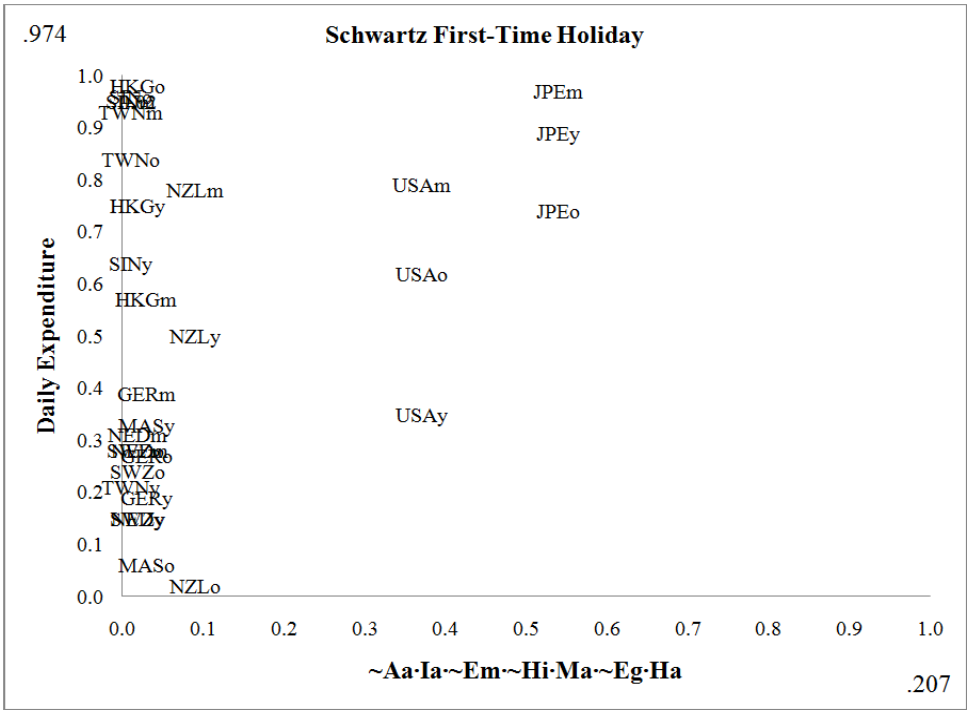
Length-of-stay



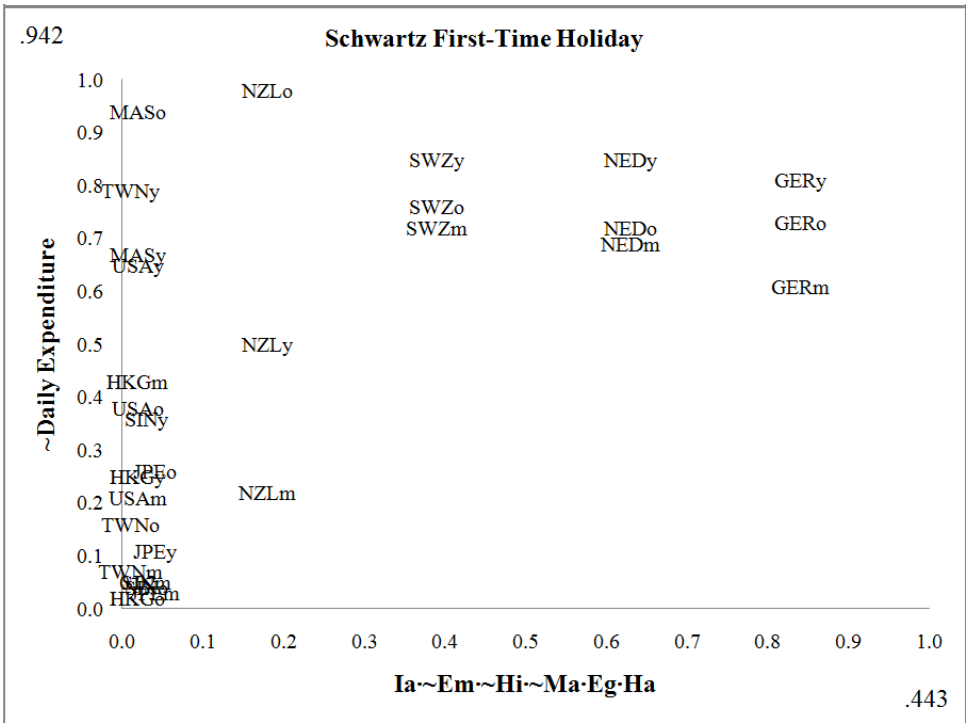
~Length-of-stay



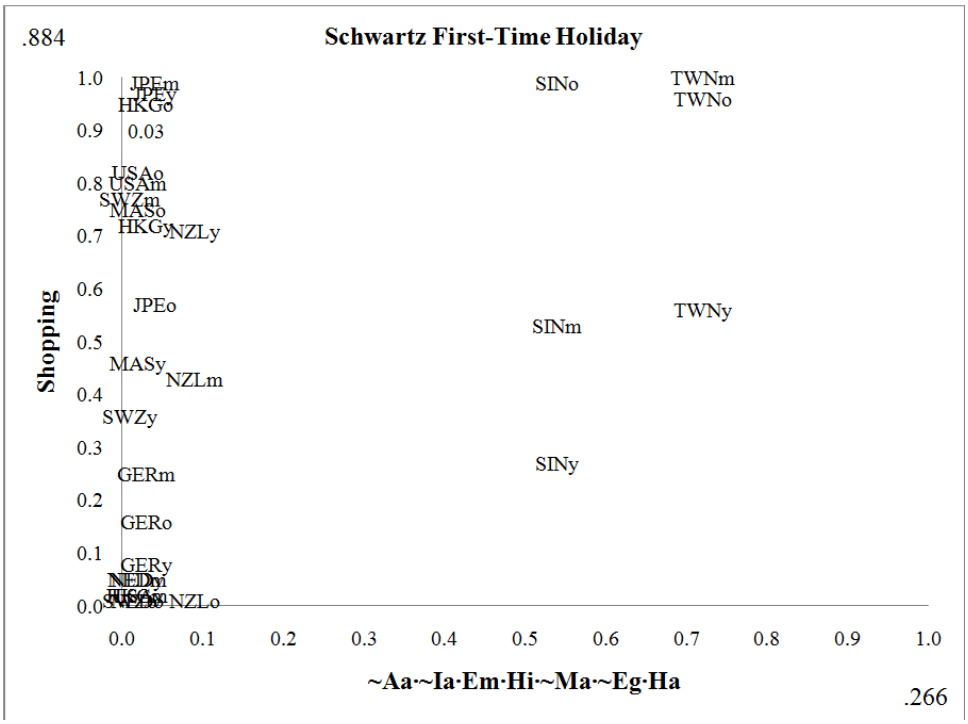
Daily Expenditure



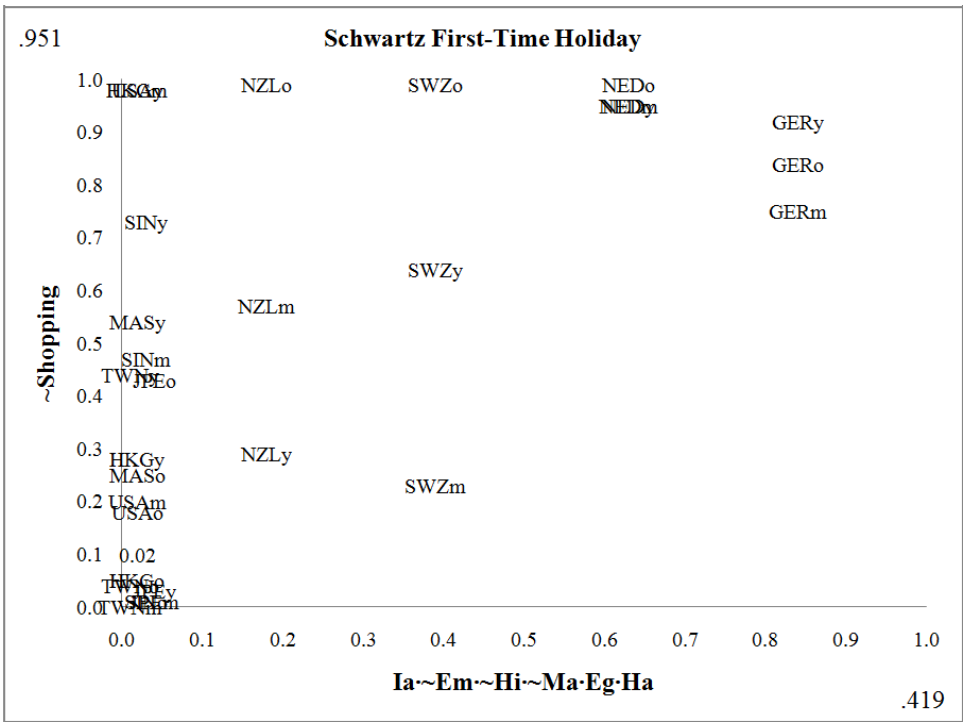
~Daily Expenditure



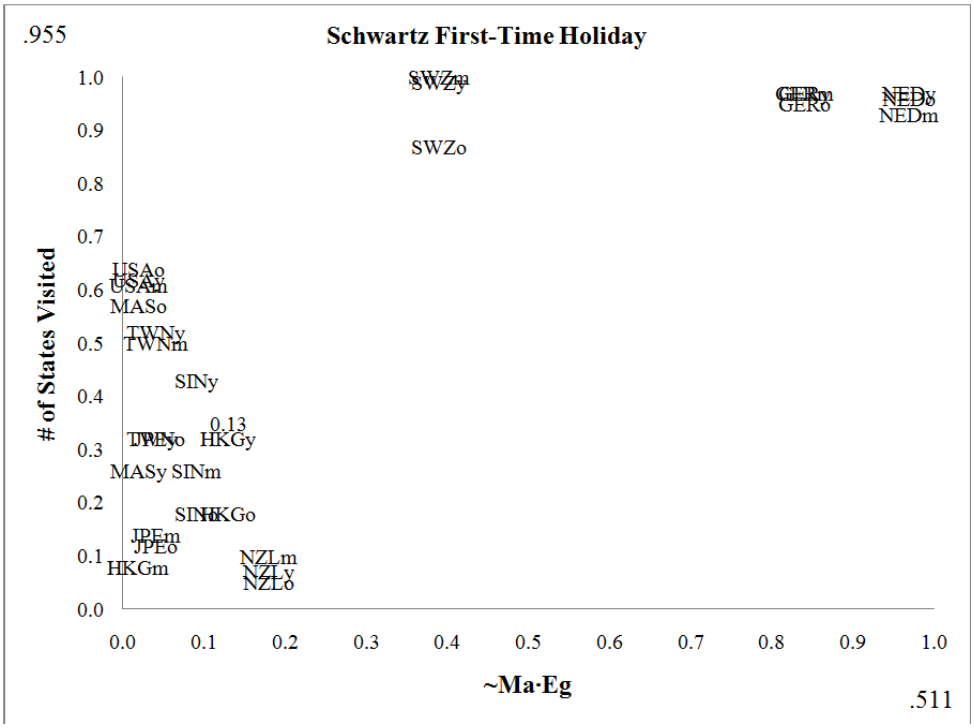
Shopping



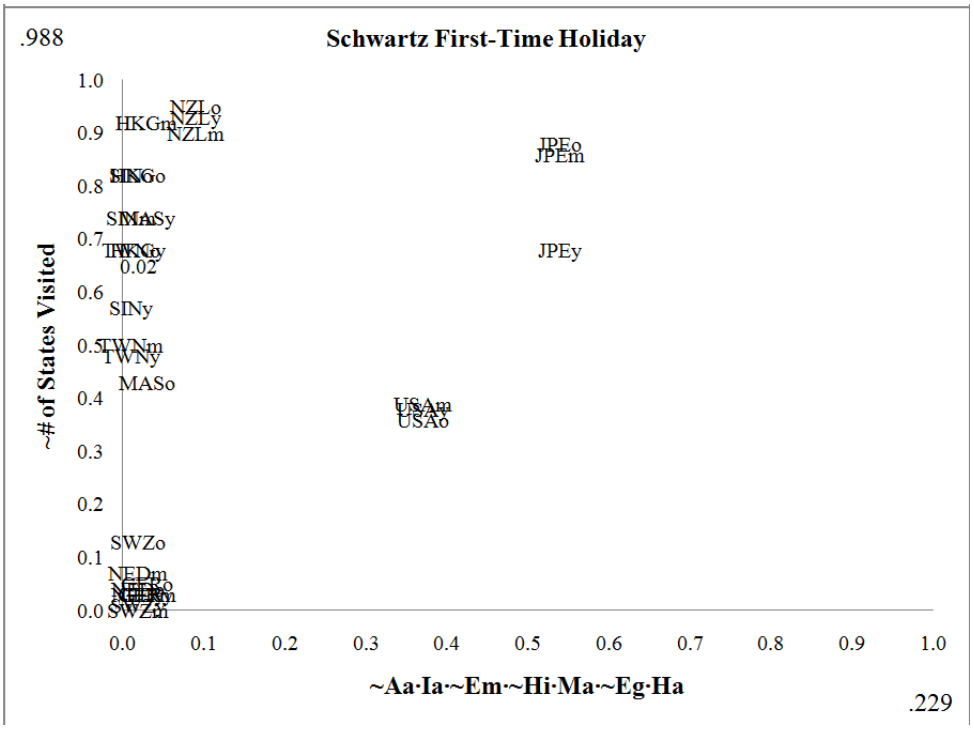
~Shopping



Number of States Visited



~Number of States Visited

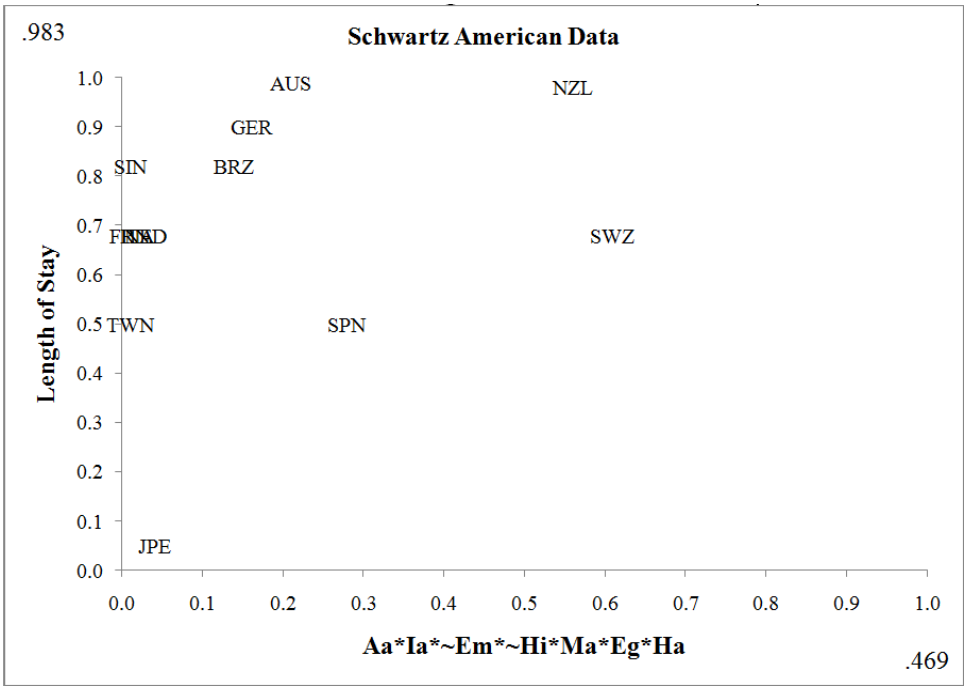


The next set of plots pertains to visitors to the United States. Figure 6.6.6 shows similar findings, that people from Western countries, such as New Zealand, Switzerland, and Netherlands, tend to stay more nights, spend less money on shopping, visit more states during their trips to USA, and spend more time on planning before their trips than people from eastern countries. On the other hand, people from Eastern countries, such as Japan, Taiwan, and Singapore, are more likely to stay fewer nights, spend more money on shopping, visit fewer states during their trips to USA, and spend less time on planning before their trips than people from western countries.

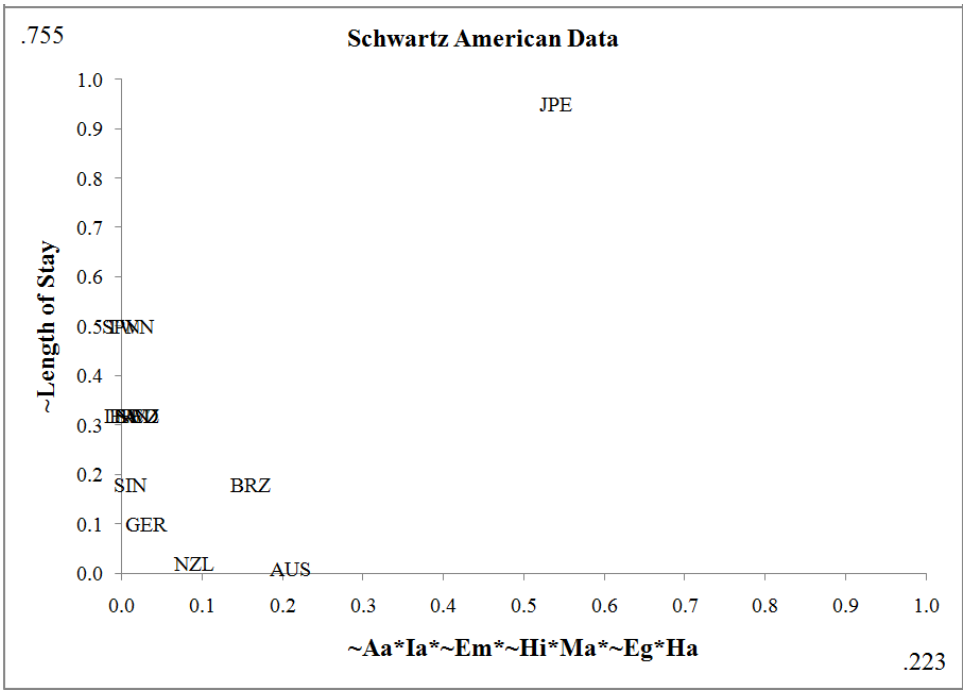
Again, eight plots are shown, two best-fitting models each for the length-of-stay, money spent on shopping, number of States visited and the extent of the pre-trip planning. This last is different to the Australian data, which doesn't include this information.

Figure 6.6.6: Schwartz's Best Fitting Models for Visitors to USA

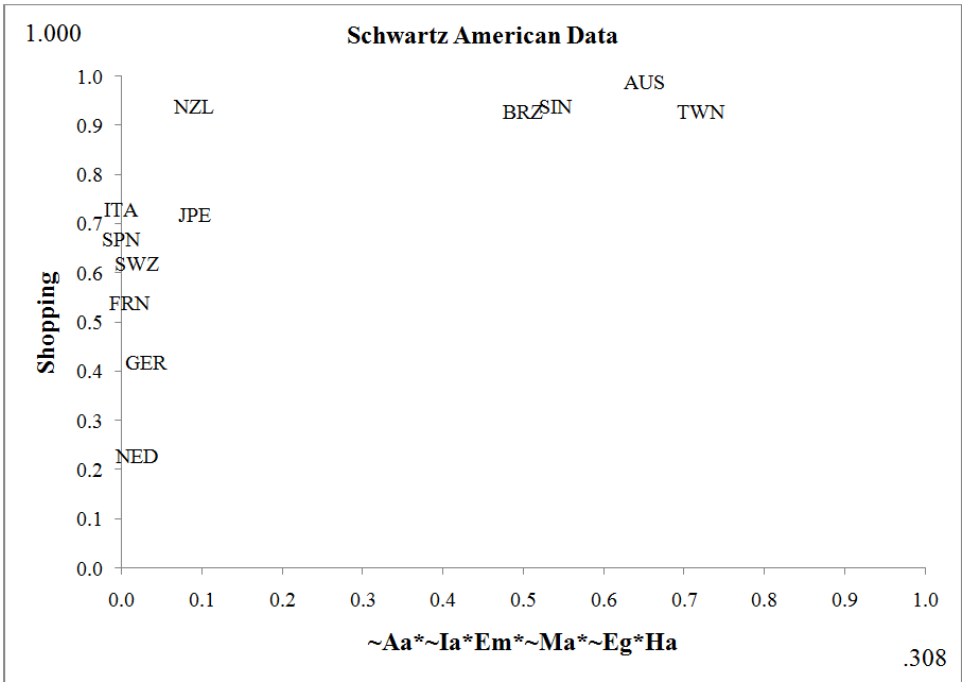
Length-of-stay



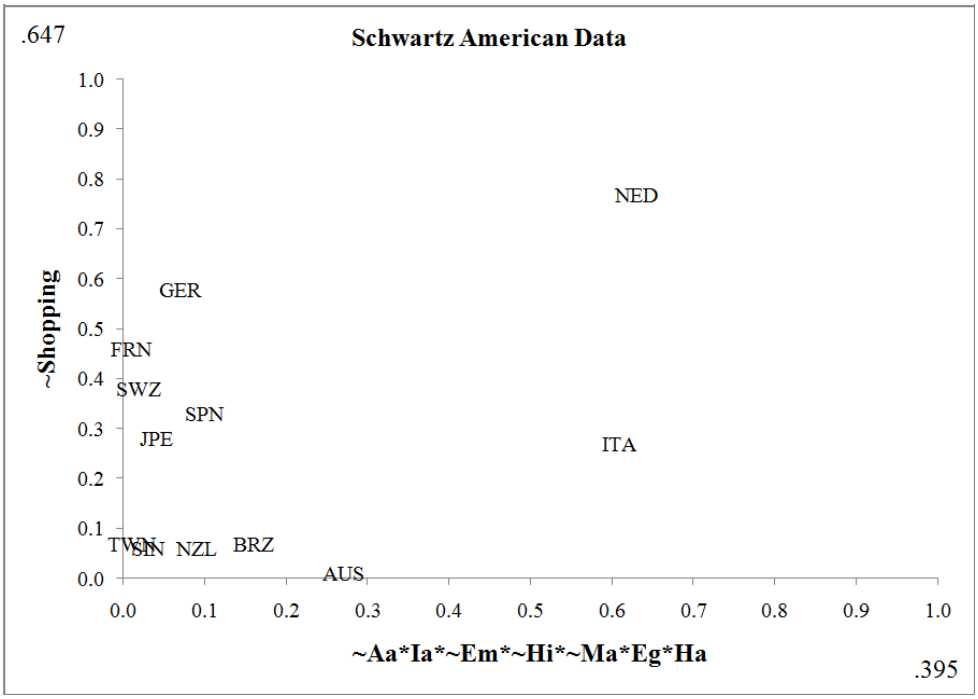
~Length-of-stay



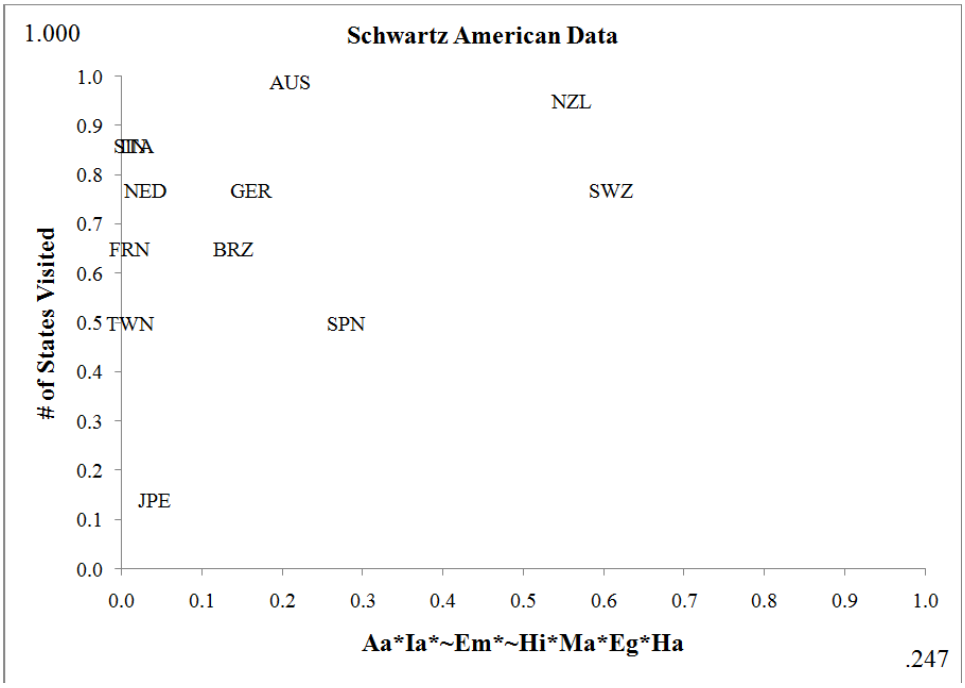
Shopping



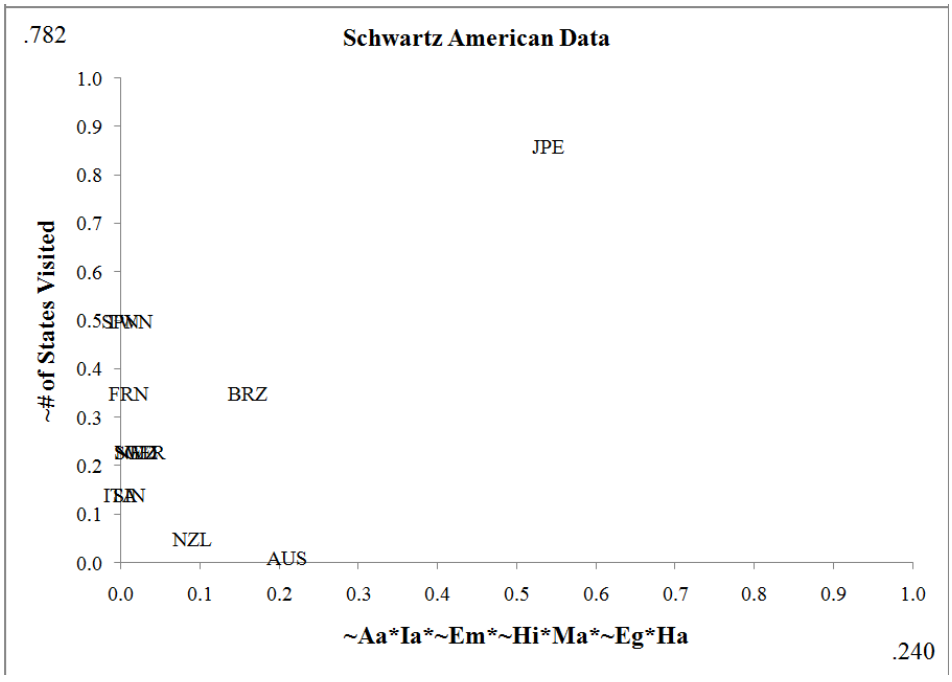
~ Shopping



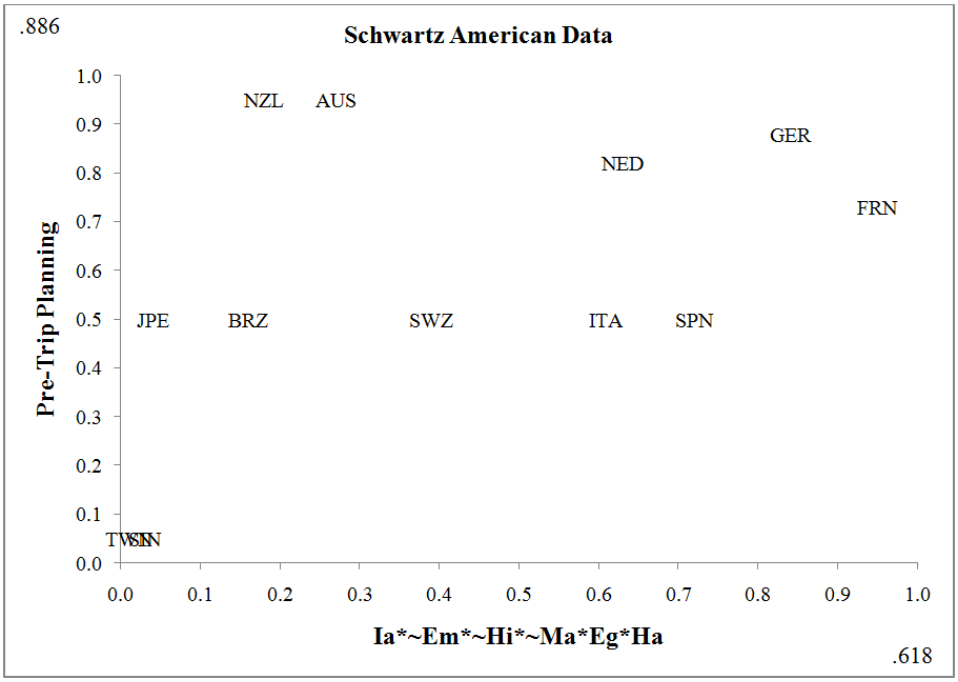
Number of States Visited



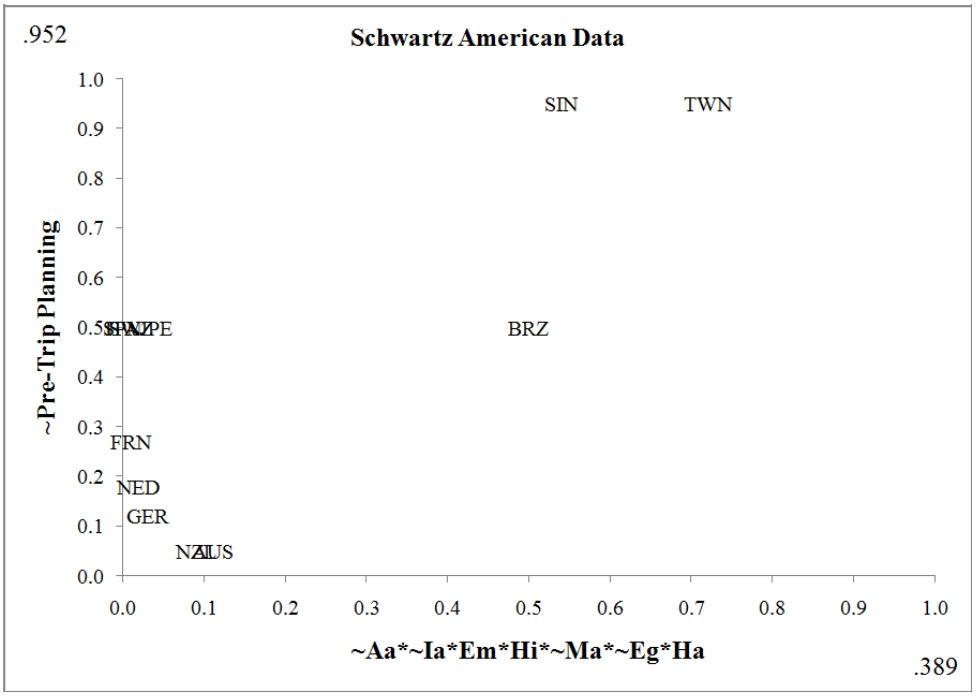
~Number of States Visited



Pre-Trip Planning



~Pre-Trip Planning



Inspection of these plots gives general support to the proposition that culture does affect tourists' behaviour, at an aggregate regional level as well as a country level. The behaviour observed for the best part echoes the known behaviour of the countries concerned, and hence offers support to Research Proposition 5.

6.7 Proposition 6: Age does not moderate the impact of national cultures on international tourism behaviour.

To remind the reader, there are two aspects to this proposition. One is that in general it is thought that older tourists are more steeped in their culture and set in their ways, thus their behaviour should be easier to predict using a cultural theory. On the other hand youth is not only less culturally set in their ways but youth today also seems to be more internationalized through media and pop culture and may be less culturally sensitized anyway. Hofstede, though, believes that national culture's roots go back so far and are so deep that even inter-generational change is not so marked.

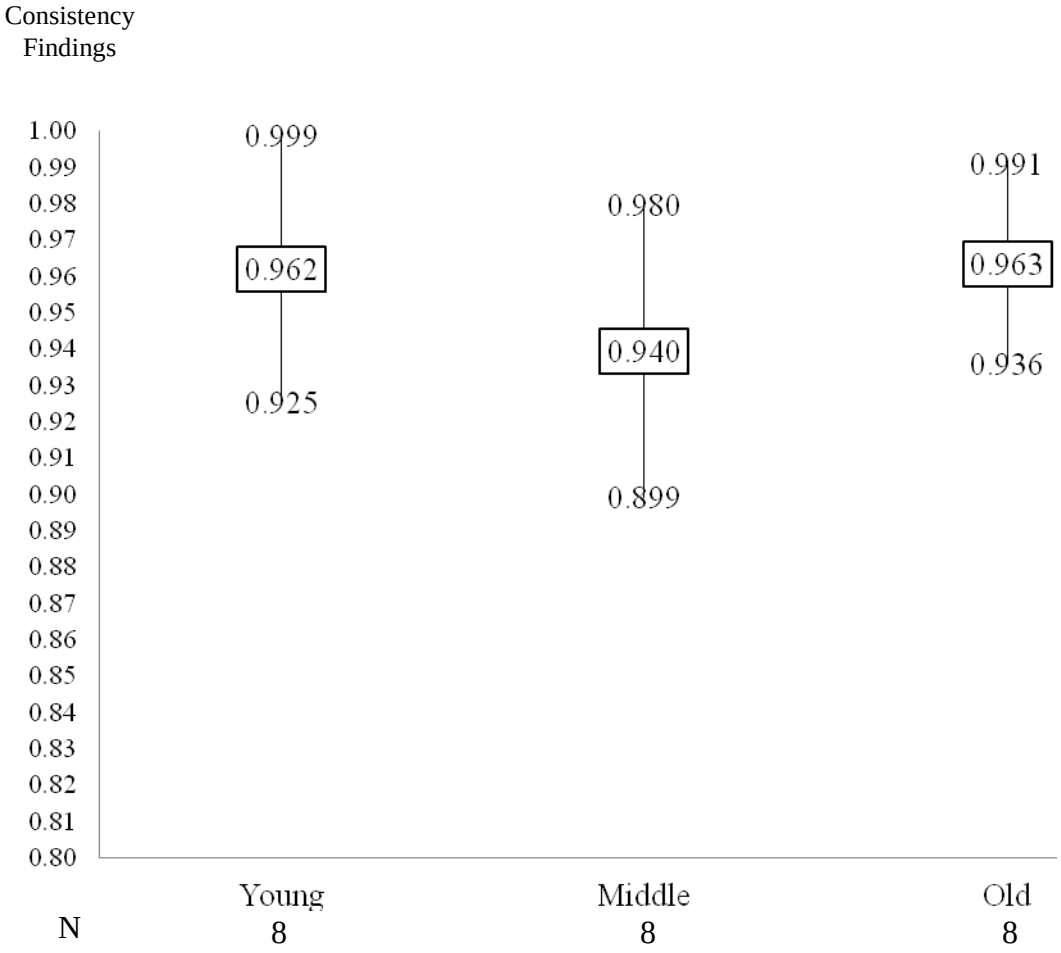
Since the findings of the third and the fifth proposition testing suggest Schwartz's theory is best used to explaining consumer behaviour and the degree of cultural influences is greater for visitors travel to Australia on first-time holiday purpose than other purposes, the study again analyzes the consumption data of first-time visitors to Australia with the best fitting models of Schwartz's theory to investigate whether or not the degree of cultural influences change by the three age groups. These groups are described as young (<30), middle (30-49), and old (50+) people.

First, the findings of a restricted meta-analysis with Schwartz's best-fitting models in Figure 6.7.1 show the mean consistency scores are 0.962, 0.940, and 0.963

for young, middle, and old people, respectively. These three mean consistency scores are all high, which indicates that culture strongly influences the consumption behaviour of all three groups, but that the influence is about equal for all the three age groups.

Figure 6.7.1: Meta-Analysis of Consistency Averages of Schwartz's Best Fitting Models by Three Age Groups for First-Time Holiday Visitors to Australia

(Range Covering ± 1.96 Average Values for Consistency Estimates > 0.749)

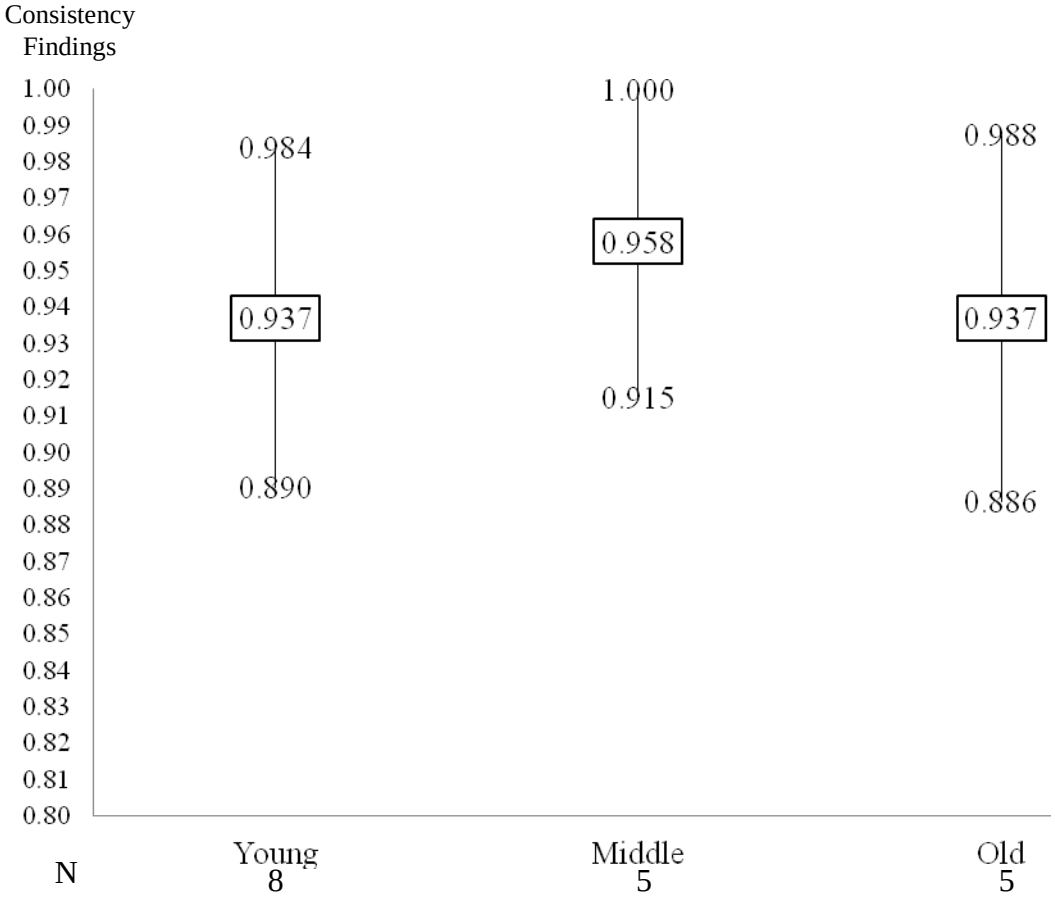


The same analysis is next applied using the control-comparison model of GDP per capita and home-destination distance. The findings in Figure 6.7.2 also suggest the

control-comparison model does influence the consumption behaviour for all the three age groups of people, but the influences do not vary by age.

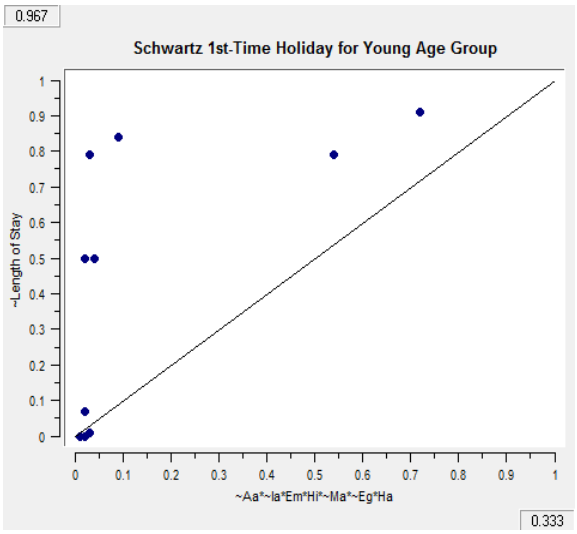
Figure 6.7.2: Meta-Analysis of Consistency Averages of G·D Best Fitting Models by Three Age Groups for First-Time Holiday Visitors to Australia

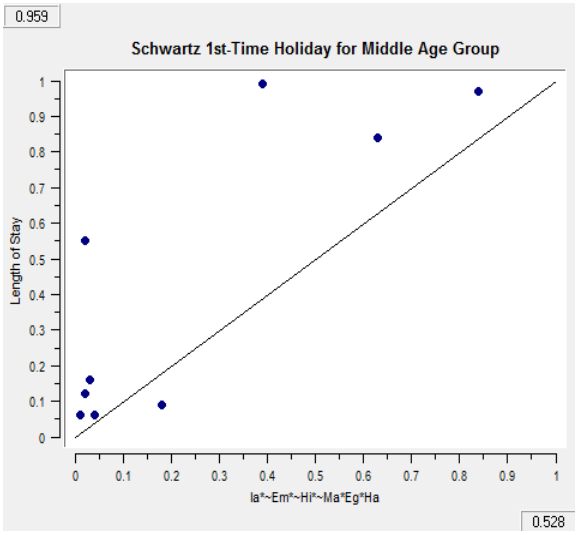
(Range Covering ± 1.96 Average Values for Consistency Estimates > 0.749)



The study now illustrates the consumption behaviours of the three age groups in Figures 6.7.3 to 6.7.10 in more detail, to gain further understandings of cultural influences on different consumption behaviours for the three age groups of people. All the consistency scores of the fuzzy set relations are high, as can be seen in the Figures.

Figure 6.7.3: Schwartz's Best Cultural Configurations on Length-of-stay for First-Time Holiday Visitors to Australia by Three Age Groups





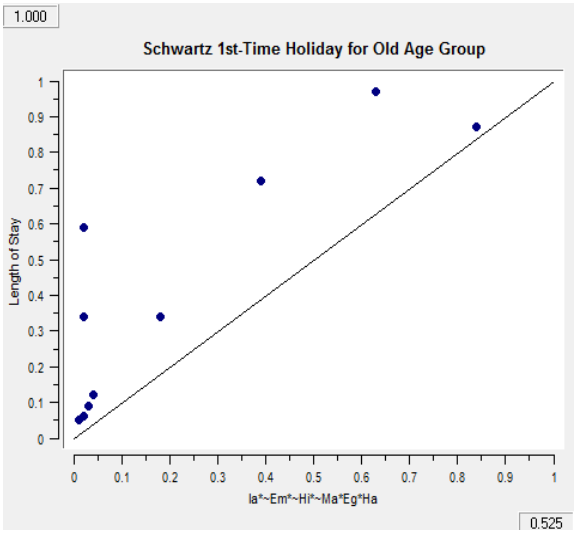


Figure 6.7.4: Schwartz's Best Cultural Configurations on ~Length-of-stay for First-Time Holiday Visitors to Australia by Three Age Groups

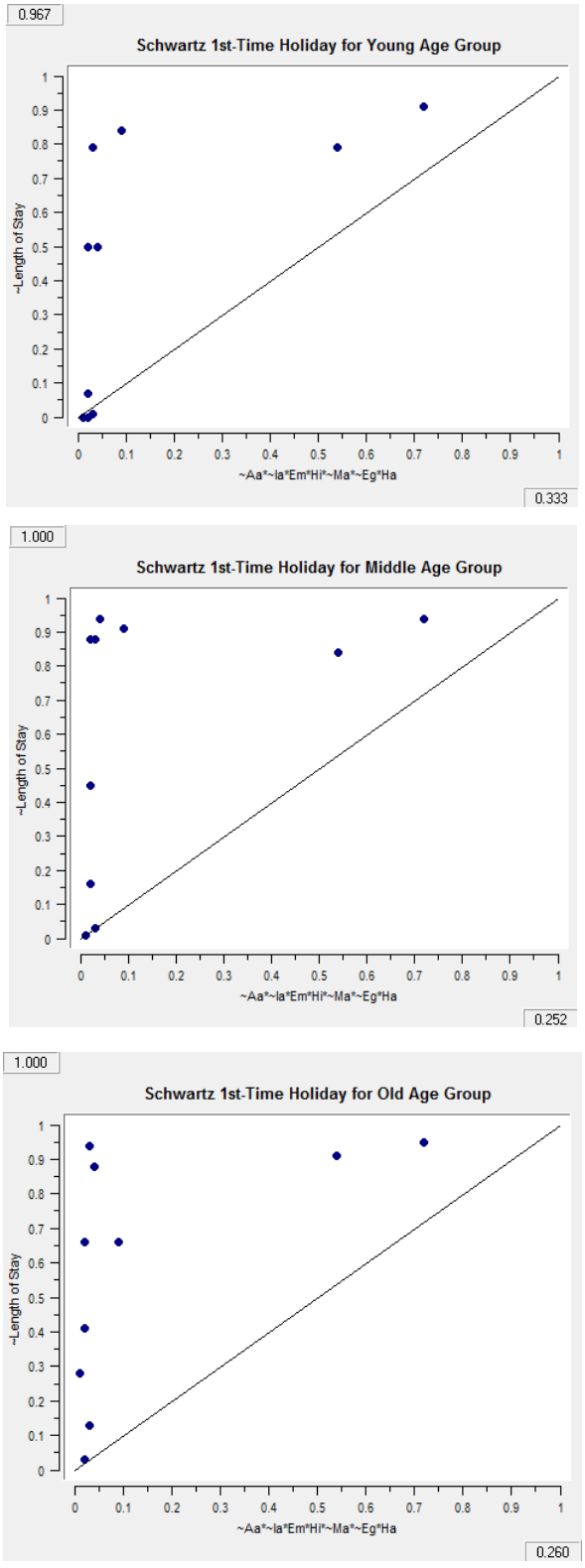


Figure 6.7.5: Schwartz's Best Cultural Configurations on Daily Expenditure for First-Time Holiday Visitors to Australia by Three Age Groups

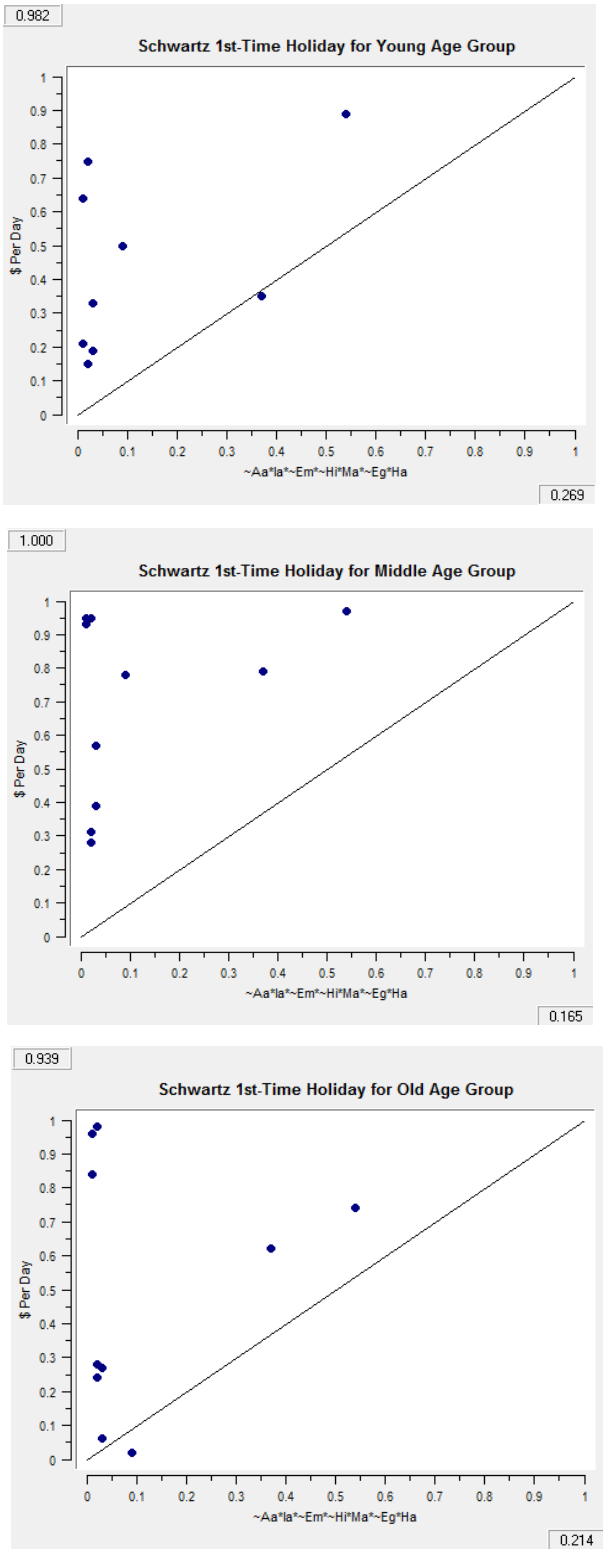
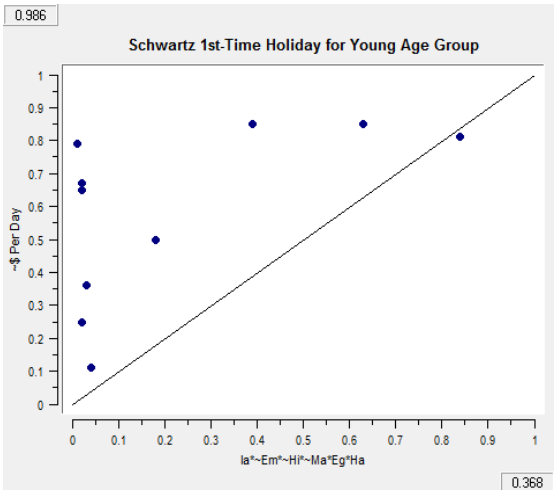
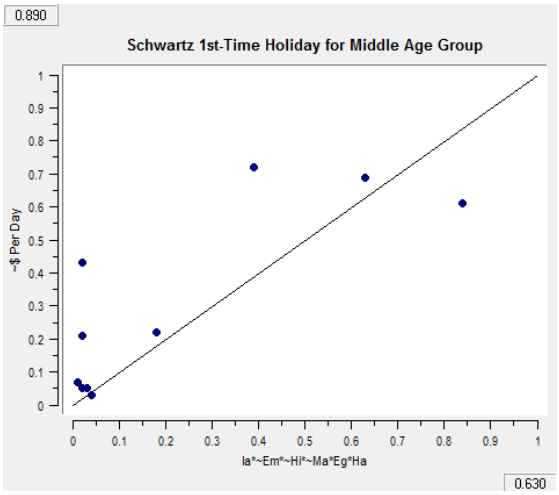


Figure 6.7.6: Schwartz's Best Cultural Configurations on ~Daily Expenditure for First-Time Holiday Visitors to Australia by Three Age Groups





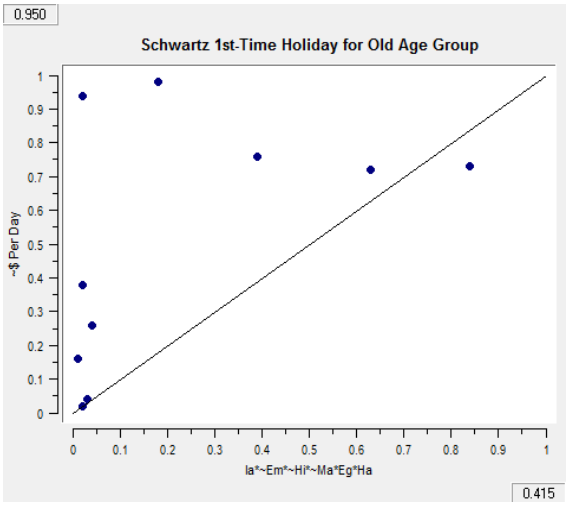
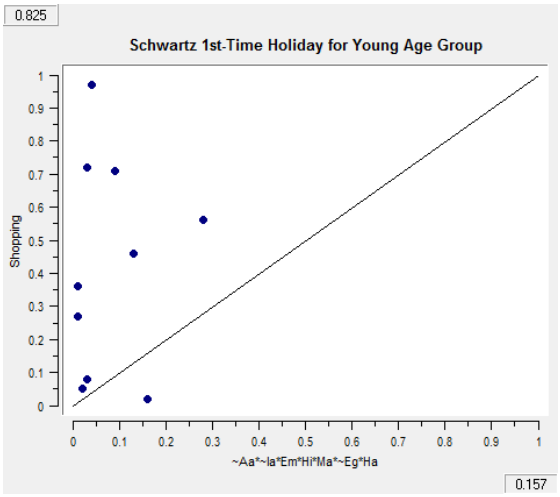
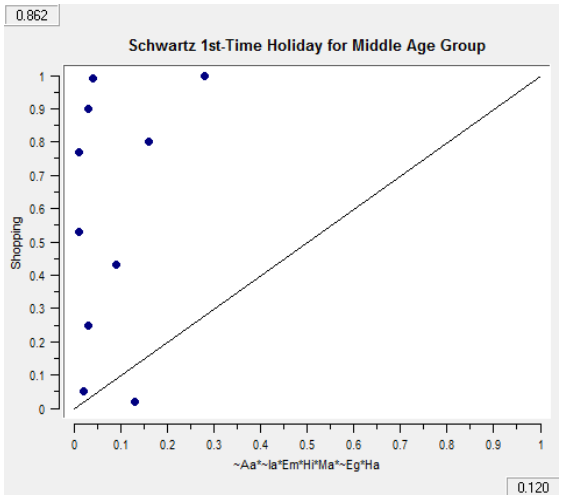


Figure 6.7.7: Schwartz's Best Cultural Configurations on Shopping for First-Time Holiday Visitors to Australia by Three Age Groups





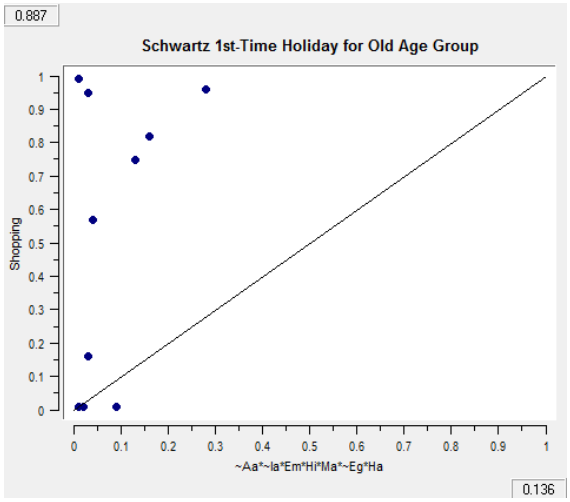


Figure 6.7.8: Schwartz's Best Cultural Configurations on ~Shopping for First-Time Holiday Visitors to Australia by Three Age Groups

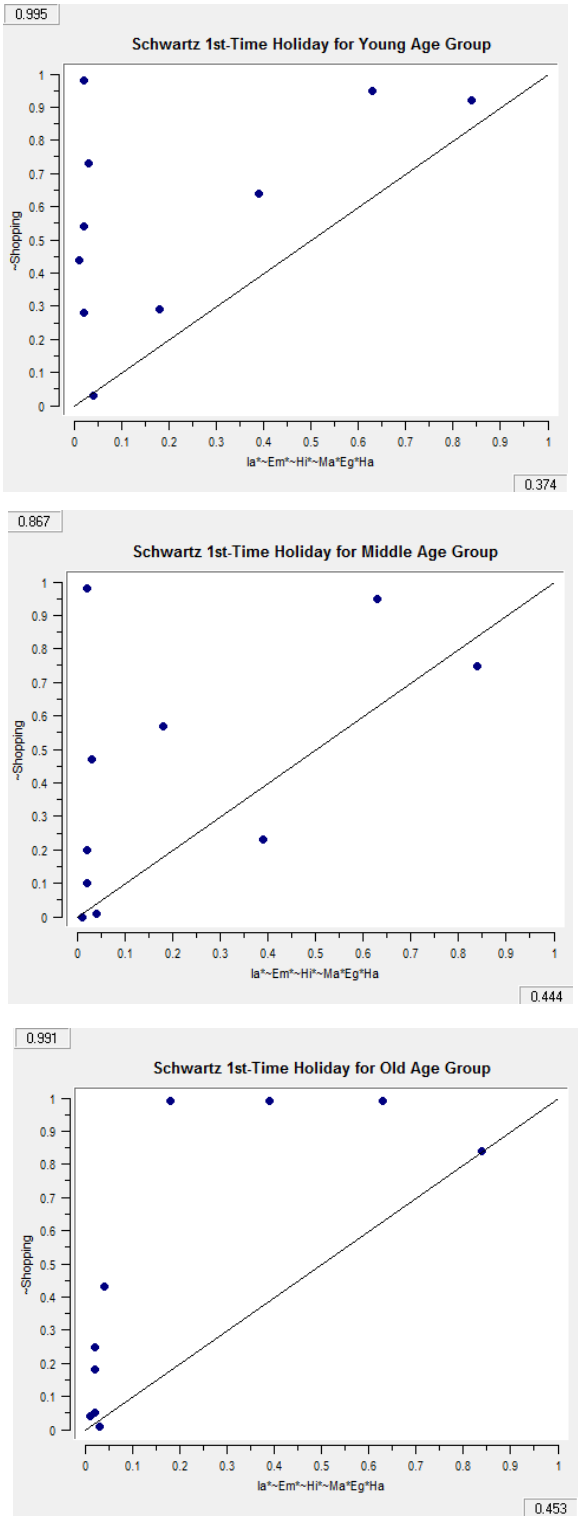


Figure 6.7.9: Schwartz's Best Cultural Configurations on # of States Visited for First-Time Holiday Visitors to Australia by Three Age Groups

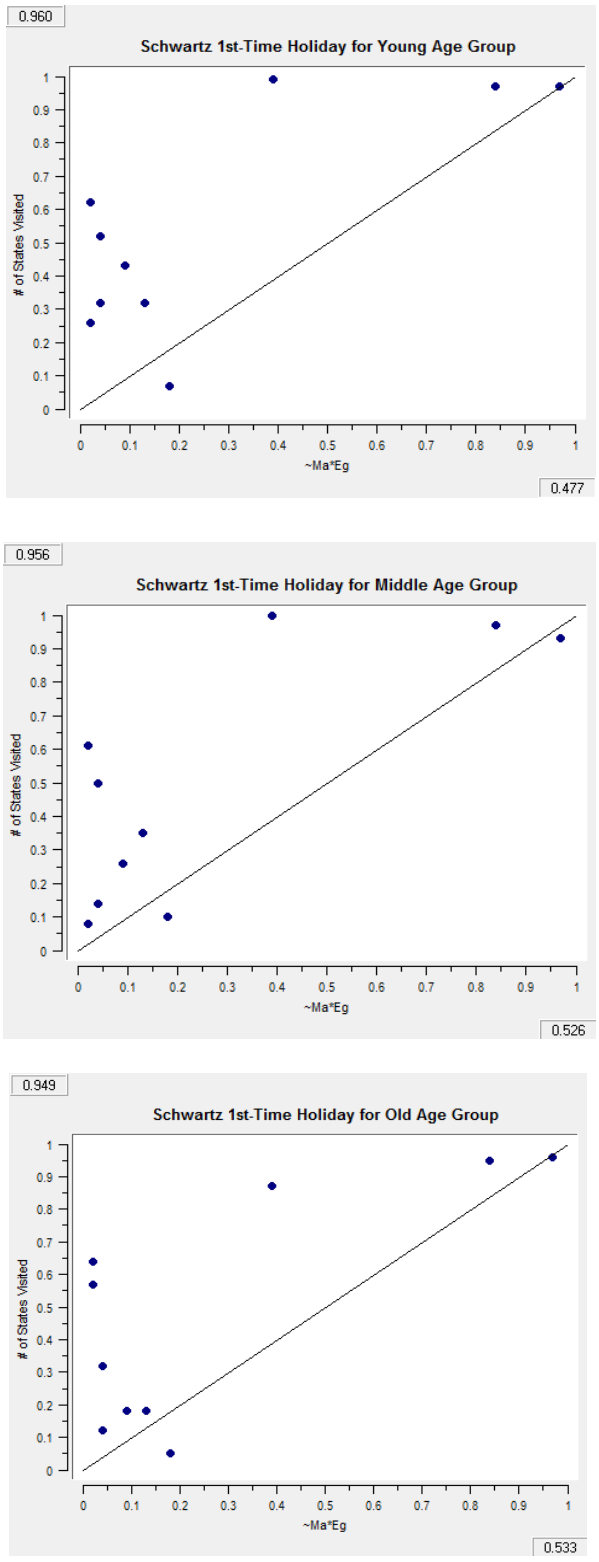
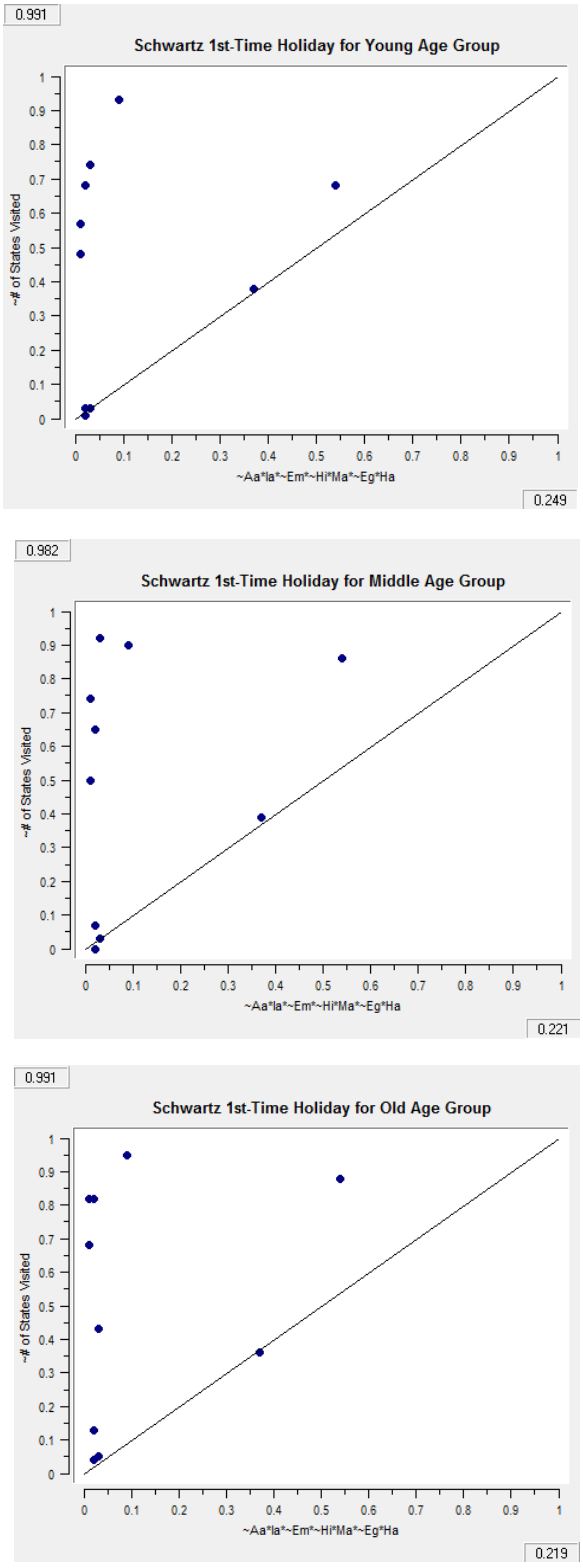


Figure 6.7.10: Schwartz's Best Cultural Configurations on ~ # of States Visited for First-Time Holiday Visitors to Australia by Three Age Groups



These findings indicate cultural influences are strong for all the three age groups of people on different consumption behaviours. However, the very slight variations of the consistency scores imply the degree of cultural influences do not change significantly by age on different consumption behaviours. In addition, similar patterns across three different age groups for each of the consumption behaviours also suggest cultural influences are similar for the different age groups of tourists. Therefore, the findings support the conclusion that cultural influences do not differ by age.

6.8 Chapter summary

The six Research Propositions are designed to support the conceptual model shown at the start of this chapter, and were drawn from the literature surveyed. All six propositions are supported, in that the fsQCA results do indicate strongly that culture has an effect on behaviour, and the effect is moderated by the purpose of the visit, but that age does not seem to make any difference. These findings are discussed in more detail in the final chapter, Chapter 7, that follows.

Chapter 7: Conclusions and discussion

7.1 Introduction

Previous chapters have introduced the issue, to determine what effect national-level culture has on the behaviour of tourists; also have reviewed the rich literature on culture theories and fragmented literature on culture's effects on tourists behaviour. The research method used, fsQCA, has been explained and the research design and procedures explained. Chapter 6 presented the analysis, which is centred on six research propositions that, in turn, support the conceptual research model shown both in Chapter 1 and in the methods chapter, Chapter 5.

This final chapter briefly summarizes the findings, once again relating them to the research propositions, then discusses the limitations inherent to the work and the consequent opportunities for future research. Finally, a discussion is conducted of the theoretical and managerial implications of the research.

7.2 Propositions

7.2.1 Proposition 1: National cultures as value configurations provide useful explanations of tourism behaviour.

The research reported here finds that this is the case, through predicting behaviour of tourists first with a single cultural value and then with a configuration of values – inevitably the configurational solution is more satisfactory. This holds true for different behavioural outcomes of tourists, in both the markets for which data is available.

This finding has several implications. First, if configurations of cultural values work better than individual values alone in explaining and predicting consumer behaviour, then studying these values one at a time could be misleading. Prior researchers frequently state that they study culture's influences on consumer behaviour; however, to date they have only studied the net effects of individual cultural values rather than cultures as complex wholes (e.g., Lynn, Zinkhan, & Harris, 1993; Gokovalia, Bahara, Kozak, 2007). Soares, Farhangmehr, & Shoham, 2007; Steenkamp, 2001).

Related to this first proposition is that the net effects method inhibits studying national culture's impacts on tourism behaviour. Unless the research method allows for the configurations of cultural values the results are suspect. Linear methods, such multiple regression analysis, are certainly useful, but they do not have the same power as the fuzzy set comparative qualitative analysis used here; at least, not for examining cultures as complex wholes—systems of value. FsQCA identifies a bundle of causal values, that Woodside (2013) and others (Ragin, 2008) term a causal recipe, that together result in a particular behavioural outcome. It is not always the case that all the variables in a particular cultural theory are relevant at the same time; but fsQCA identifies the most useful configurational models in a particular context.

7.2.2 **Proposition 2: Examining cultural value configurations at the national level offers useful explanations of why tourism behaviour various across countries.**

That nations differ in meaningful ways by a configuration of values is a contentious statement. Strong arguments appear in the literature that suggest that cultural values are best operationalised at the level of the individual, as there is so much variation within a nation (Douglas & Craig,1997; Pauwels, Erguncu, & Yildirim, 2013).

A national score on a cultural variable represents a mean. Hofstede (2002), in particular, but also other researchers (Clark (1990), Dewar & Parker (1994), Schwartz (2006), and Steenkamp (2001)) challenge this view not only with the evidence of much empirical work that has used cultural models at a national level, but also with the claim that culture changes very slowly within a country, and this fact makes between-country differences significant and stable, and thus useful to strategists.

This research provides strong support for the second group of scholars, by not only showing that patterns of national culture are clearly reflected in the behaviour of tourists into the US and Australia, but also by demonstrating that systematic few differences does not occur in the power of this influence across generations within a culture.

7.2.3 **Proposition 3: The major national culture theories do differ systematically in their usefulness in explaining international tourism behaviour of nations.**

This proposition set the four major theories of national culture against each other, and against GDP and distance between home and destination, to see which of these best predicts behaviour. In Chapter 2 the main theories were explicated, and in the light of this review the researcher thought that Schwartz's theory, or Hofstede's would probably perform best. Although some contradictory evidence occurs, in general the findings do indeed show that Schwartz's cultural theory is more theoretically and empirically useful comparing to Hofstede, Inglehart, and Steenkamp's cultural theories. Certainly the theories of national cultural values outperform the control-comparison model of GDP per capita and home-destination distance.

7.2.4 **Proposition 4: National cultures associate with international tourism behaviour most for holiday-only visitors.**

This proposition concerns a modifier to the central effect, that national cultures do have a causal effect on tourists' behaviour. The research finds the degree of cultural influences is greater for holiday visitors than VFR visitors as well as for first-time visitors than repeat visitors. Accordingly, researchers should focus more on first-time holiday visitors than visitors travelling for other purposes and repeat visitors, when studying culture's influences on consumer behaviour.

VFR visitors are likely to receive culturally related do's and do not's from friends who are living in the destination country that likely causes a dampening influence of home-country national culture influence. The findings in the present stud confirm the perspective that first-time holiday-only visitors are the least prone to be able to act a like a native (Harrison, 1995).

7.2.5 **Proposition 5: National cultures affect consumer time and shopping expenditures.**

Culture does have influences on consumer behaviour. The research demonstrates this at a national level but, in addition, obvious divergences are seen to exist in the behaviours of people from Eastern countries and Western countries. Most of these are already established in the literature, but have not been confirmed before by using this sophisticated fsQCA method. Thus, for example, Easterners tend to spend less time at a destination than Westerns and, in general, seem to spend more on shopping than Westerners.

7.2.6 **Proposition 6: Age does not moderate the impact of national cultures on international tourism behaviour.**

This proposition states that age is a moderator of the main effect. In fact it is not, as the findings show quite clearly that people in different age groups (young, middle, and old) behave in the very similar ways. In other words, cultural influences do not differ by age. As mentioned previously, this conclusion supports the belief of Hofstede (2001, 2002) and Schwartz (2006) that cultures have centuries-old roots and change very slowly. Although people may think culture is becoming less important now to the internationalised digital natives than before, culture still influences their behaviour as deeply as their parents, in this circumstance at least.

The findings of a restricted meta-analysis with Schwartz's best fitting models show the mean consistency scores are 0.962, 0.940, and 0.963 for young, middle, and old people, respectively. These three mean consistency scores are all high, which indicates culture strongly influences the consumption behaviour about equally for all the three age groups of people. The slight variation of the mean consistency scores among the three different age groups implies cultural influences do not differ by age. The same analysis applies with demographic conditions of GDP per capita and home-destination distance.

7.3 Limitations and consequent research opportunities

As is true for much research, time and resource impose limitations on the scope of this study. First, some will see the fact that the cases used in the study are on national level, instead of individual level as a limitation. Although differences exist between individuals, culture is commonly shared by the population of a country, though, and the approach here supports that of a pool of respected international national culture scholars

who all agree that focussing on the macro level of country is as valid as the micro, individual level.

Second, the study only tests four major cultural theories on consumer behaviour, even though many other cultural theories are available. There may well be other cultural theories, which have not yet been well-known or applied widely, that work better than the four theories in the study.

Third, due to the restrictions of the available secondary data, the study only examines five types of consumption behaviour, such as length-of-stay, daily expenditure, shopping expenditure, number of states/regions visited, and pre-trip planning time. The findings may not be true for other types of consumption behaviour.

Similarly, the thesis only studies international tourists from fifteen countries. Possibly of greater significance is that both destination countries, Australia and USA, in the study belong to the Western block. The question of whether tourists behave differently when visiting Eastern countries, such as China and Japan, remains unknown and offers an interesting research challenge.

Accordingly, the limitations stated above offer five research opportunities for future studies. First, researchers may replicate the study and do a longitudinal research to verify if culture influence changes over time. Second, researchers may adopt other cultural theories in their studies to discover a cultural theory that may work better than Schwartz's theory in explaining and predicting tourist behaviour. Third and fourth, researchers may include other aspects of consumer behaviour of visitors from more countries in their studies to compare international traveller's behavioural patterns. Fifth, researchers may replicate the study on visitors travelling to other destination countries to confirm whether or not the findings are similar to the present study.

7.4 Implications for theory

The major theoretical contribution of the study is to add to the vigorous debate about the appropriateness of analysing culture at a national level. The answer is strong and clear here, yes, a national level is appropriate.

Similarly, there is a strong message here about the fact that culture is rarely described by a single variable, but a cluster of variables acting in concert with each other. This not only has research design ramifications for those studying culture, but also has implications for the type of analysis that is appropriate.

The theoretical perspectives of Hofstede (1980, 1983, 2001, 2002), Inglehart and Baker (2000), Schwartz (1994, 2006), and Steenkamp (2001) clearly reflect national cultures as complex wholes of value systems. Heretofore, no study has demonstrated the configurational approach that to examine such views. The present study confirms the complex whole perspective—moving beyond a net effects view—for the first time. This outcome is the major contribution of the study.

7.5 Implications for tourism destination officers (DMOs)

Based on the findings, the study provides helpful clues for countries' destination management organizations (DMOs) and hospitality firms in designing marketing plans to attract international tourists. Host country DMOs may design different tour packages and emphasize different highlights to attract visitors from different countries instead of offer just one kind package that fits all.

In order to attract people from Eastern countries, such as Japan, Singapore, and Taiwan, tourism operators in the host country may consider to design and market tour packages based on the following suggestions. First, design short tour packages for up to 5 to 7 days with roundtrip airline tickets and 4 or 5-star hotel accommodations so that tourists from Easter countries can have a peace of mind and enjoy their time-restricted getaways in a foreign country. Second, emphasize just a few tourist attractions to fit in their short and busy schedules. Third, highlight few but quality shopping places to fulfil their shopping desires for themselves or for their family and friends at home. Fourth, marketing campaign should be executed one or two months prior to national holidays or both summer and winter vacations since they do not spend much time planning before their trips. Fifth, frequently advertise and broadcast commercials in the timeframe addressed above on all types of media to reach the target market and encourage them to make instant trip decisions.

On the contrary, to attract people from Western countries, such as Germany, Netherlands, and Switzerland, management organizations and hospitality firms in the host country may consider designing and marketing tour packages based on the following suggestions. First, design tour packages with many mid-priced range or even budget accommodation choices offering discounts for staying for a week or longer to fit their budgets of taking a long trip. Second, provide information about as many tourist attractions as possible to fulfil their desires and encourage them to visit many places in a foreign country. Third, introduce few but exotic and authentic local markets that offer affordable food and souvenirs to attract and encourage them to shop more. Fourth, make sure all the information always publicly available all year around in ads,

brochures, travel magazines, tourist information websites and all kinds of media for them to search and make their long trip plans way ahead of time.

7.6 Endnote

Conducting research about cultural values is fascinating, frustrating and difficult. The fascination comes from the fact that culture is a part of everyone's life, and to learn about other cultures is one of life's rare privileges. Frustrating because it is so very hard to access high-quality data. Survey data is often suspected, and data such as that used here, although complete and generous, is not specifically designed for this precise research purpose. The difficulty arises because culture is, indeed, not a single value, but a complex bundle of scarcely-differentiable values, acting together in subtle but powerful ways that often the individual simply does not recognise. This thesis makes a contribution to the literature in the area, but only scratches the surface of the knowledge potential.

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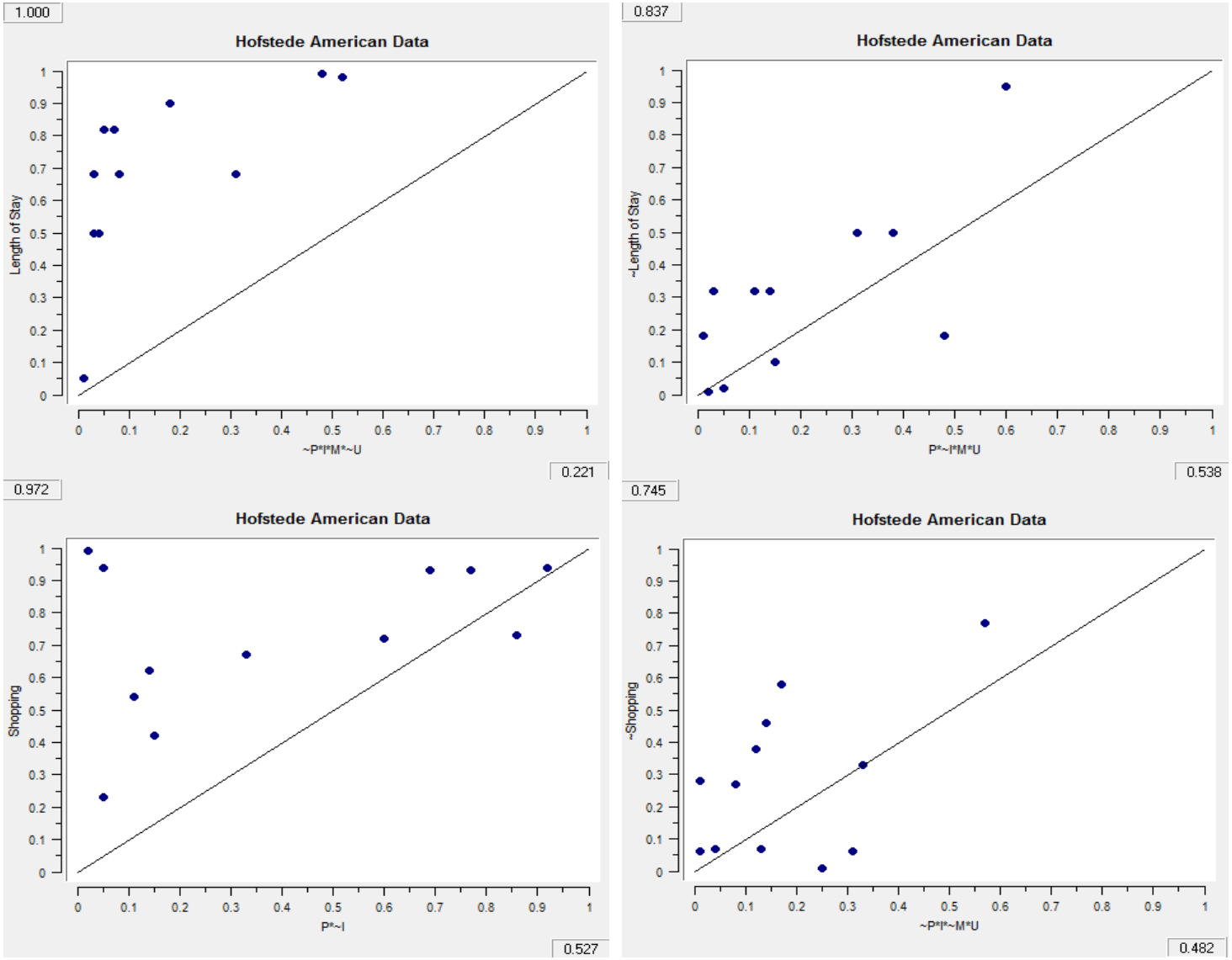
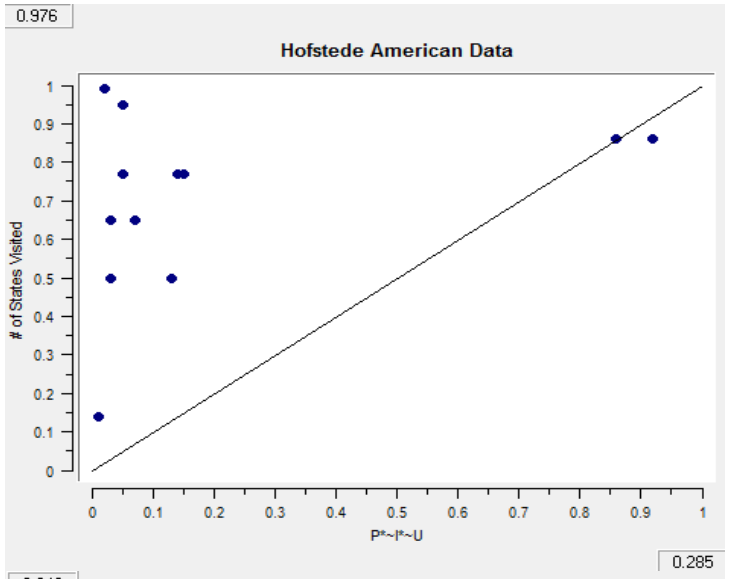
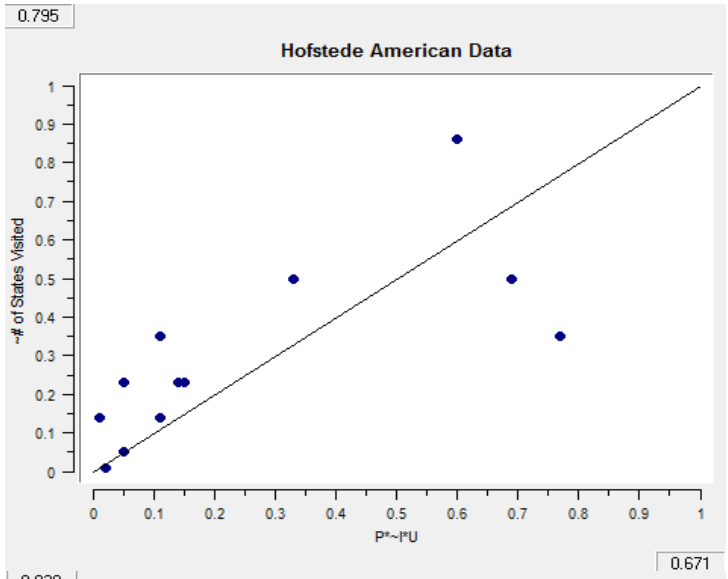
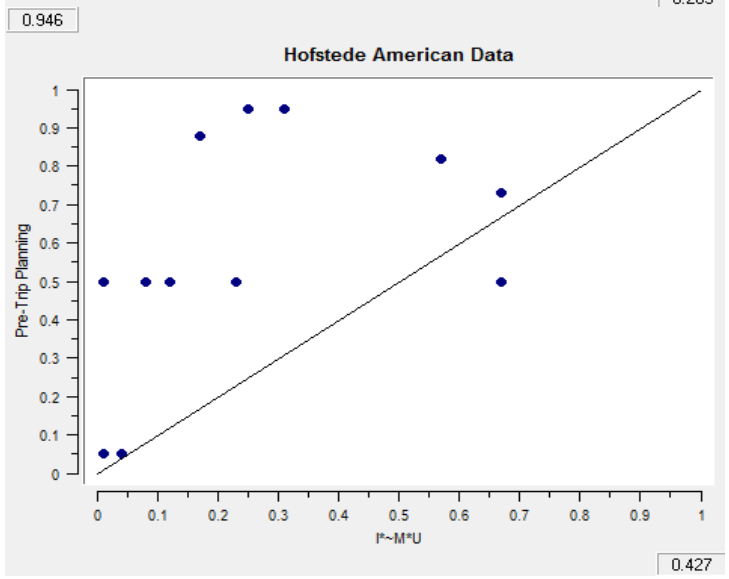
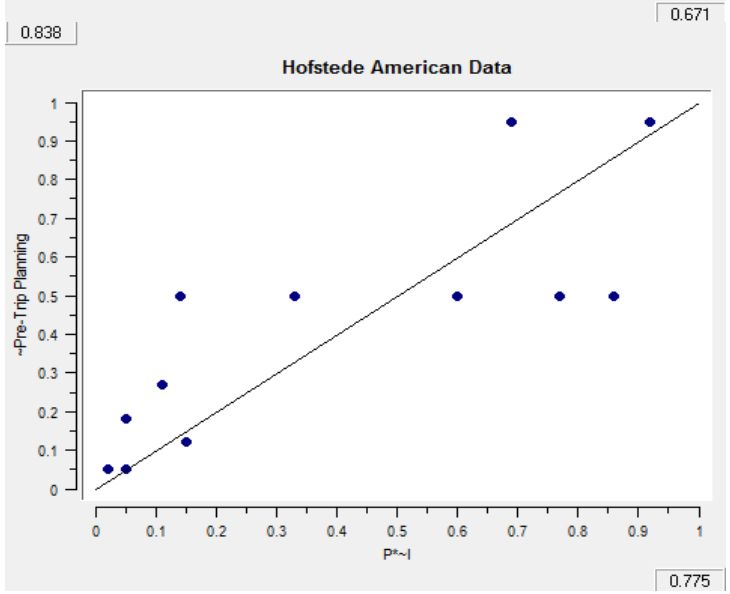
Appendix A: Hofstede's Best Fitting Models for Visitors to USA



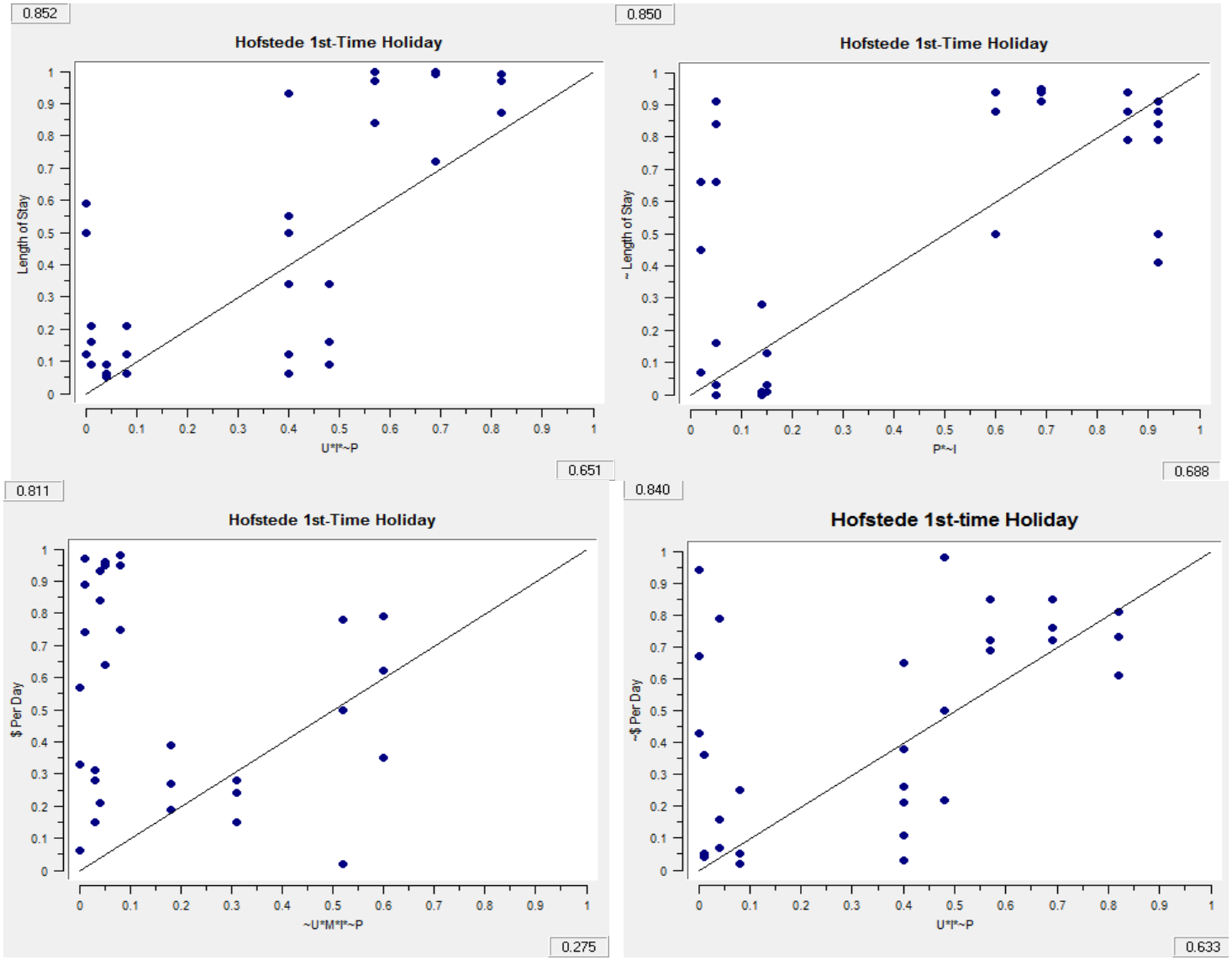

0.976
Hofstede American Data
# of States Visited
P*~I*~U
0.285

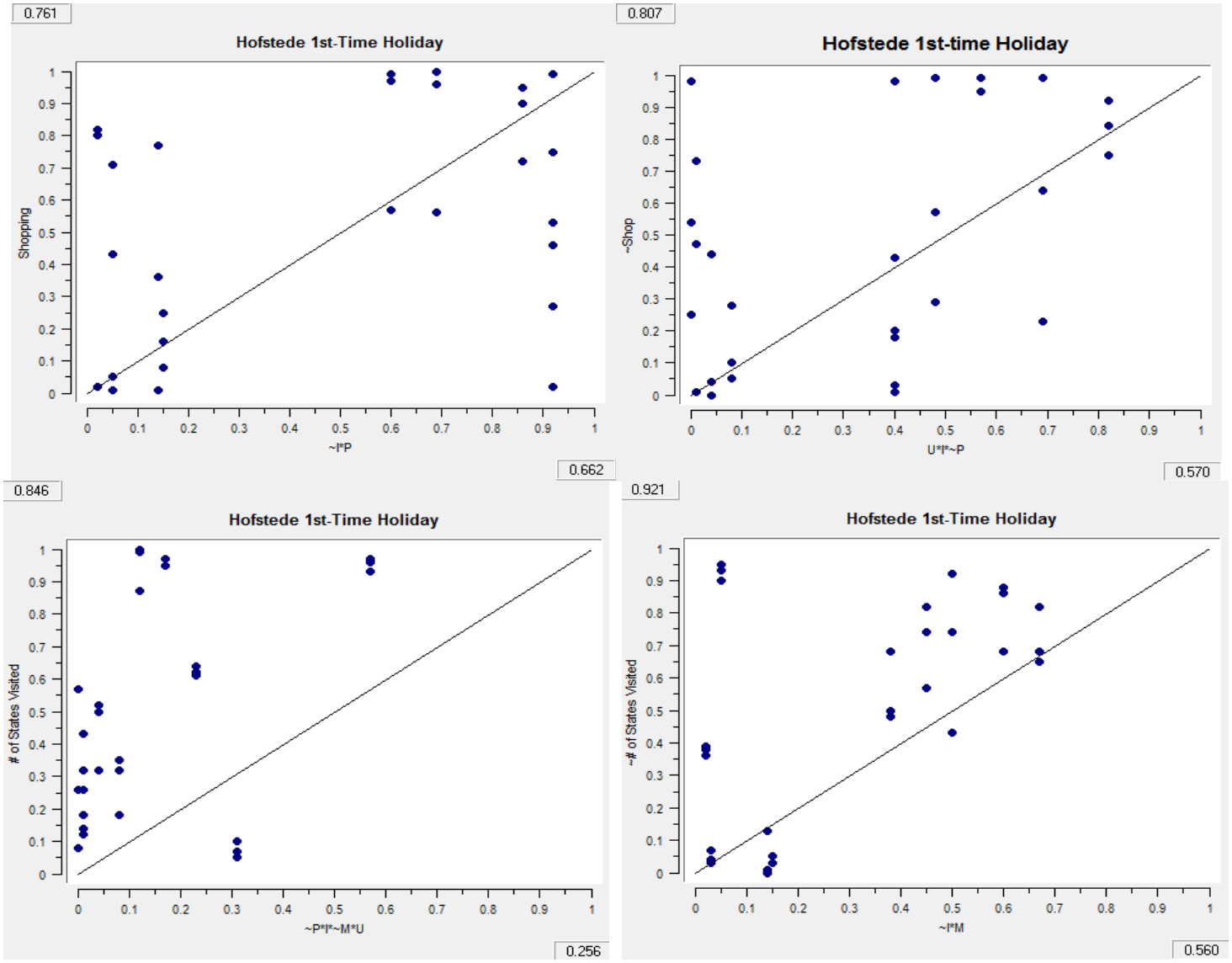

0.795
Hofstede American Data
~# of States Visited
P*~I*U
0.671


0.946
Hofstede American Data
Pre-Trip Planning
I*~M*U
0.427

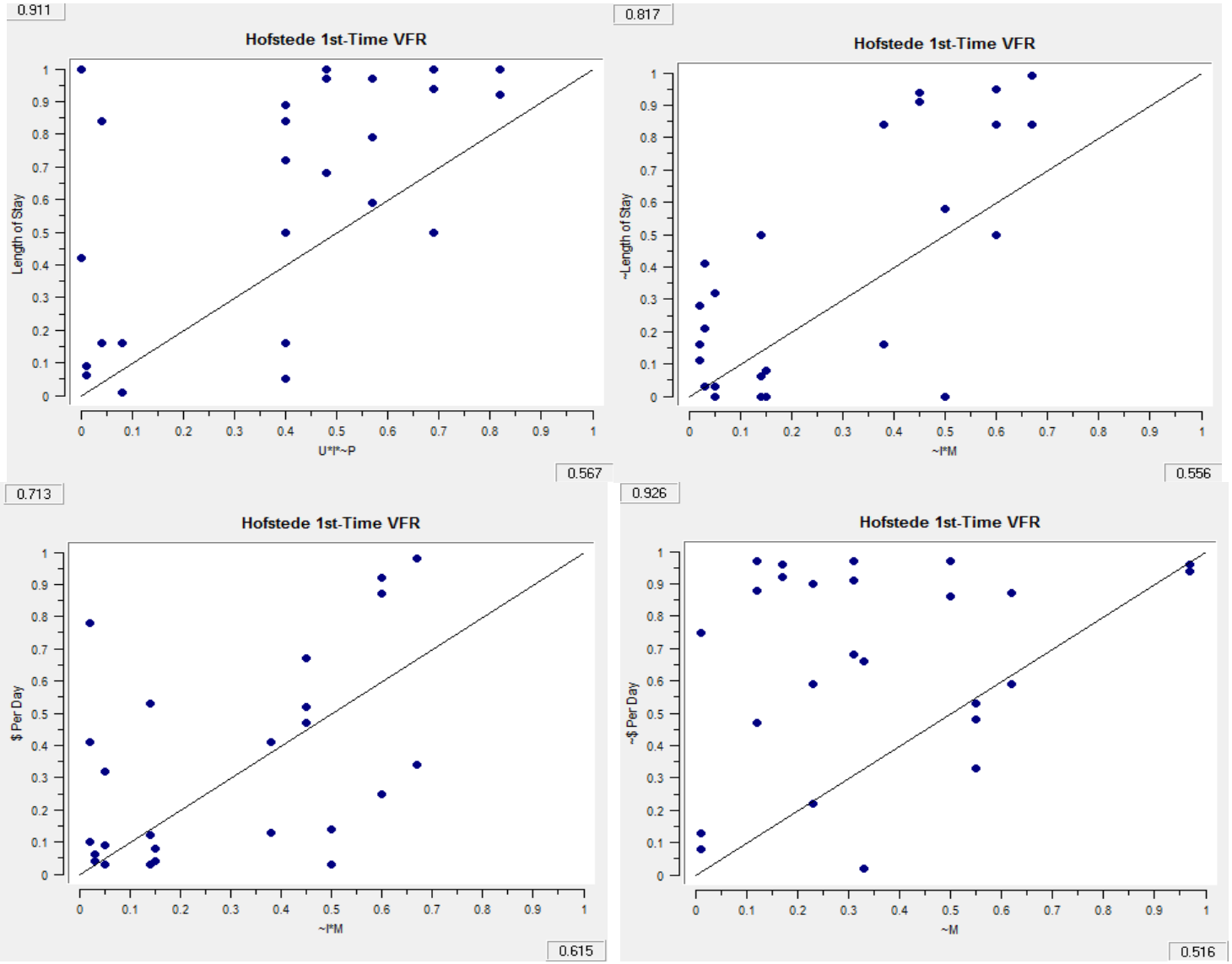

0.838
Hofstede American Data
~Pre-Trip Planning
P*~I
0.775

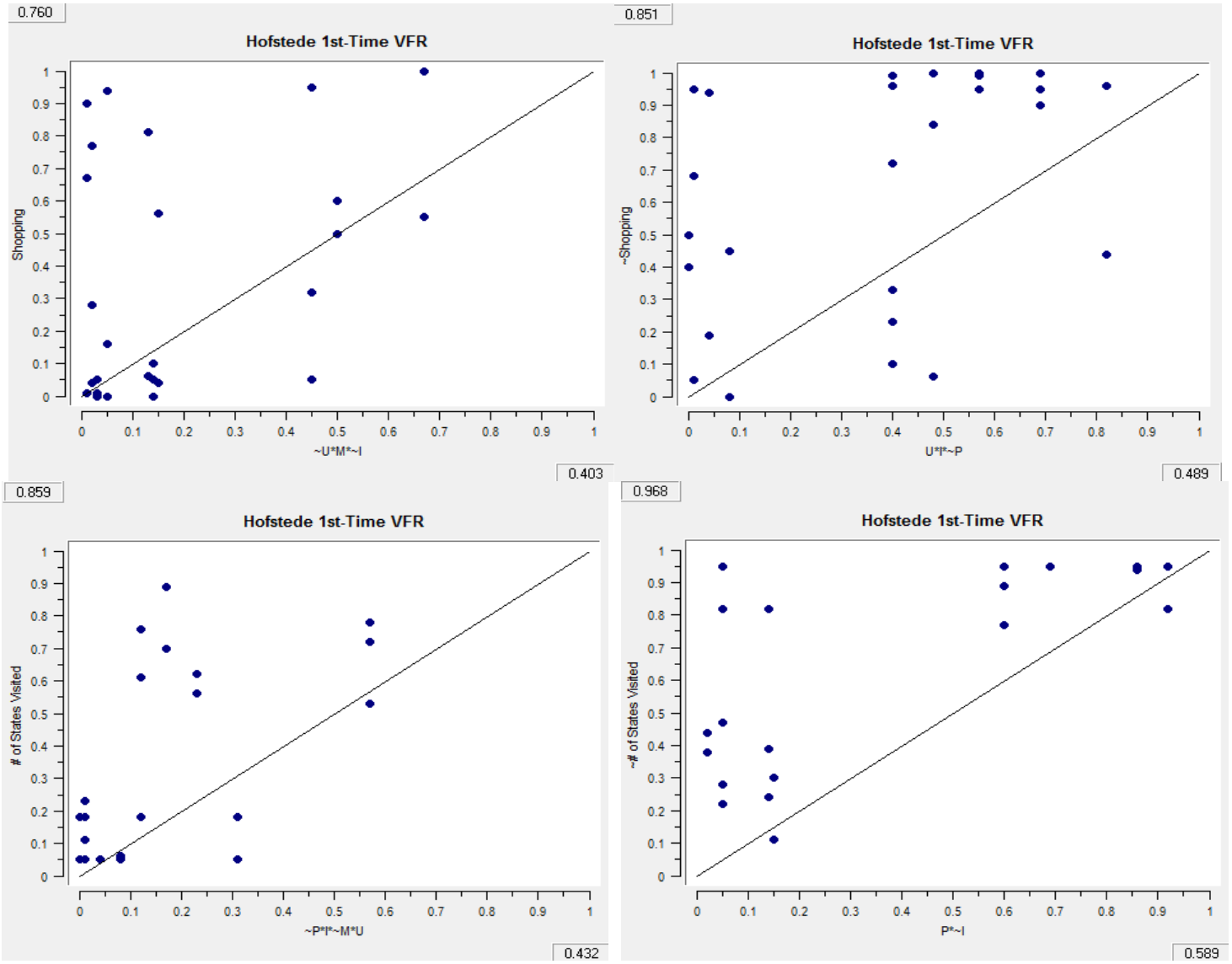
Appendix B: Hofstede's Best Fitting Models for First-Time Holiday Visitors to Australia



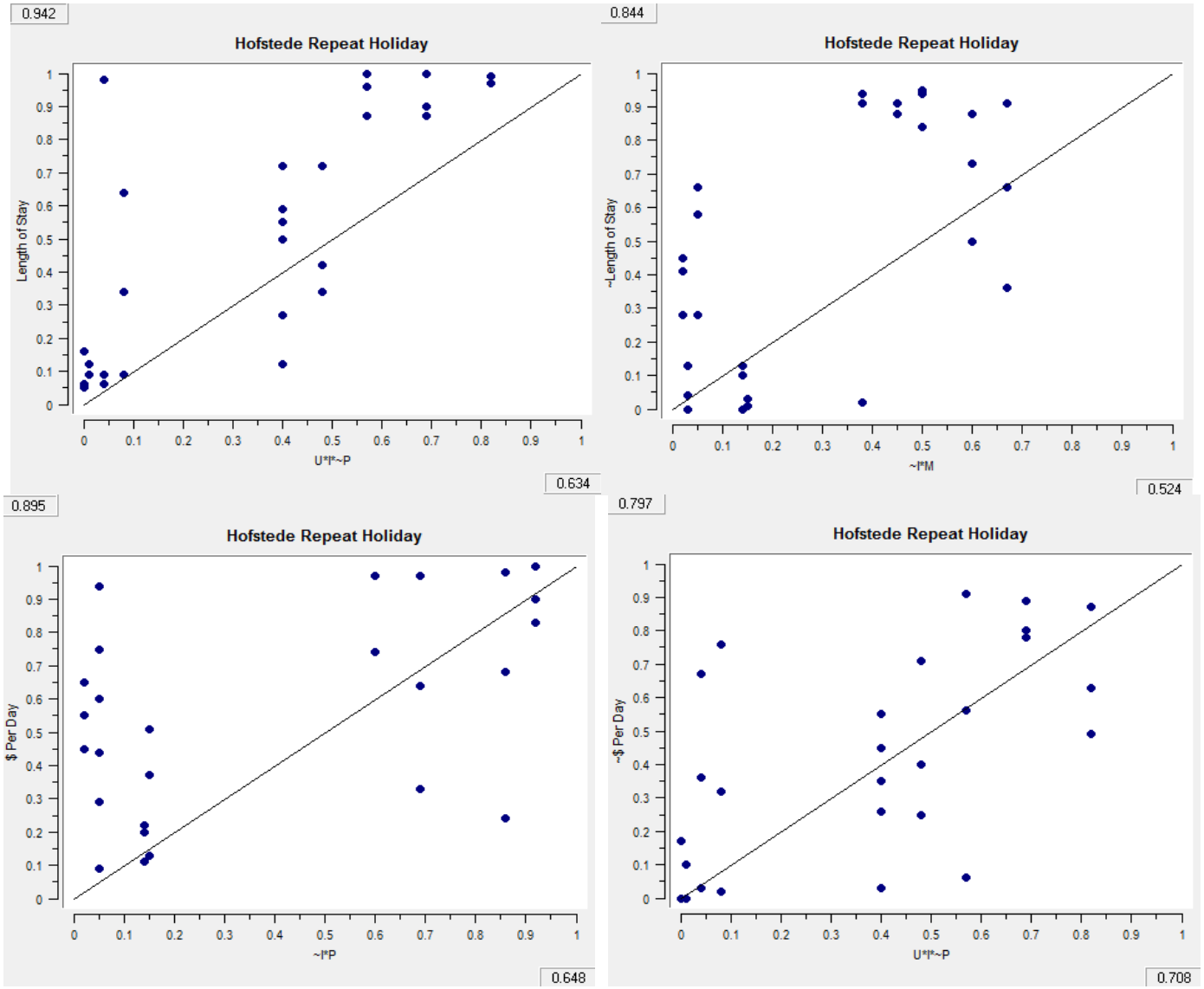

0.761
Hofstede 1st-Time Holiday
Shopping
~I*P
0.662
0.807
Hofstede 1st-time Holiday
~Shop
U*I*~P
0.570
0.846
Hofstede 1st-Time Holiday
# of States Visited
~P*I*~M*U
0.256
0.921
Hofstede 1st-Time Holiday
~# of States Visited
~I*M
0.560

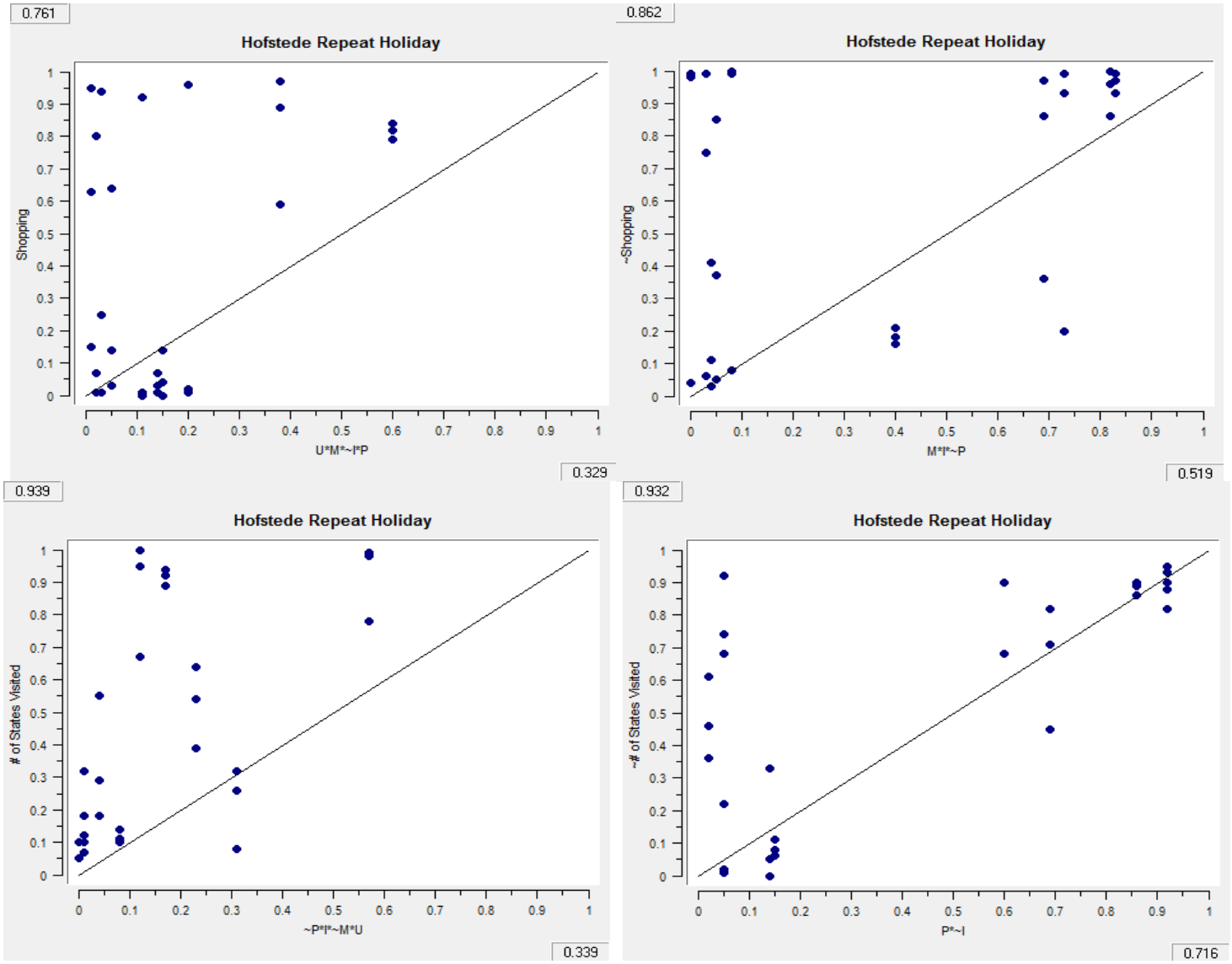
Appendix C: Hofstede's Best Fitting Models for First-Time VFR Visitors to Australia



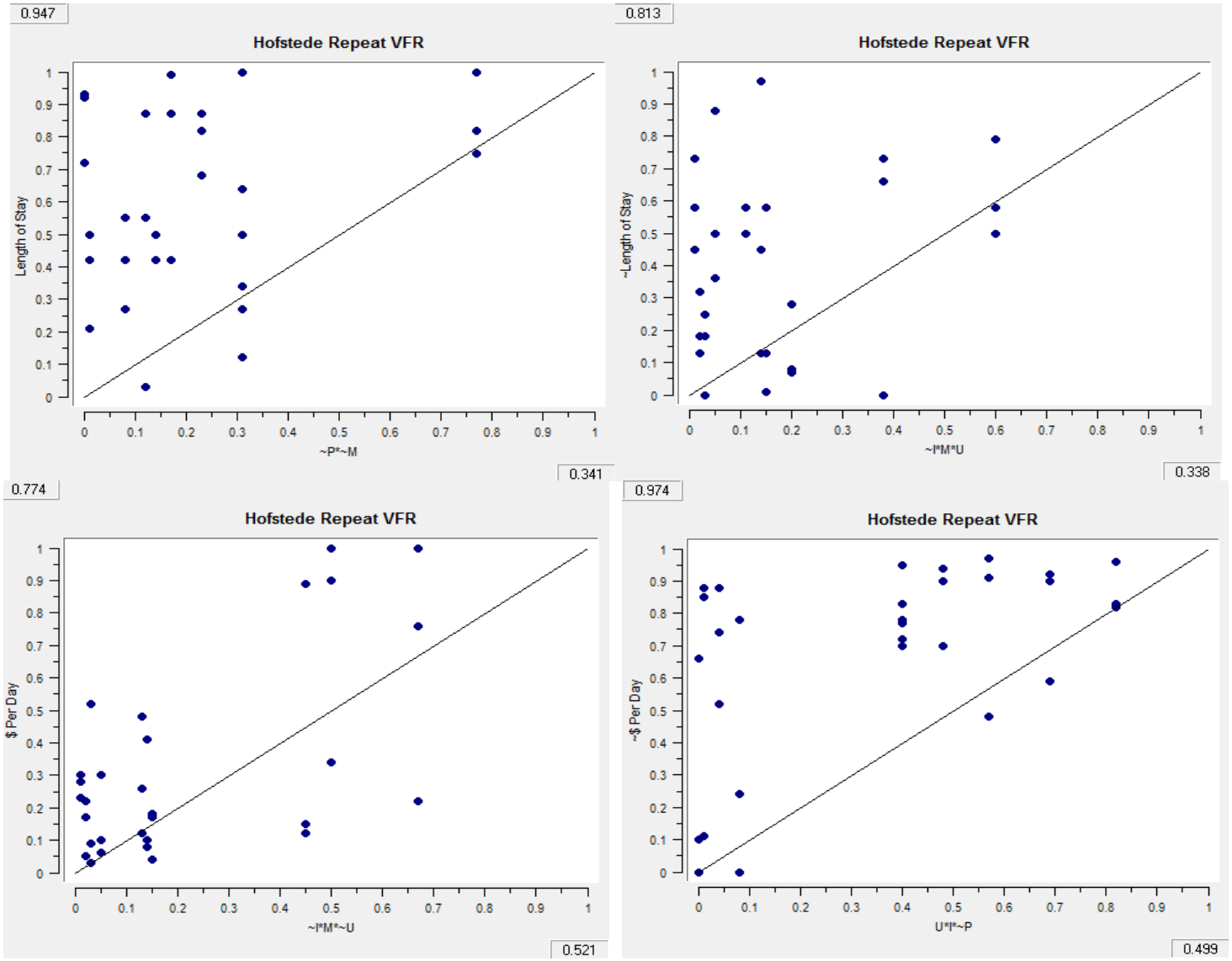

0.760
Hofstede 1st-Time VFR
Shopping
~U*M*~I
0.403
0.851
Hofstede 1st-Time VFR
~Shopping
U*I*~P
0.489
0.859
Hofstede 1st-Time VFR
# of States Visited
~P*I*~M*U
0.432
0.968
Hofstede 1st-Time VFR
~# of States Visited
P*~I
0.589

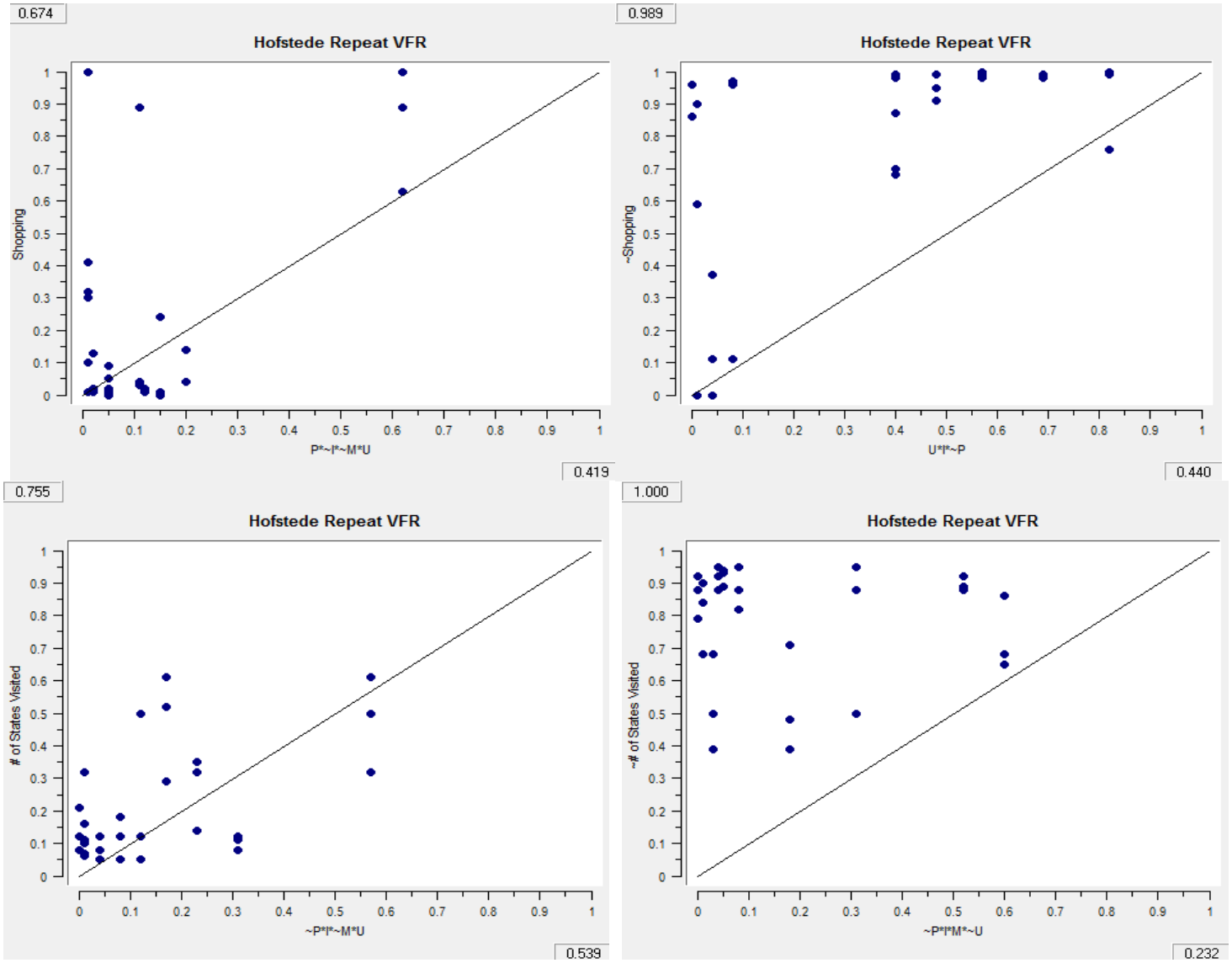
Appendix D: Hofstede's Best Fitting Models for Repeat Holiday Visitors to Australia



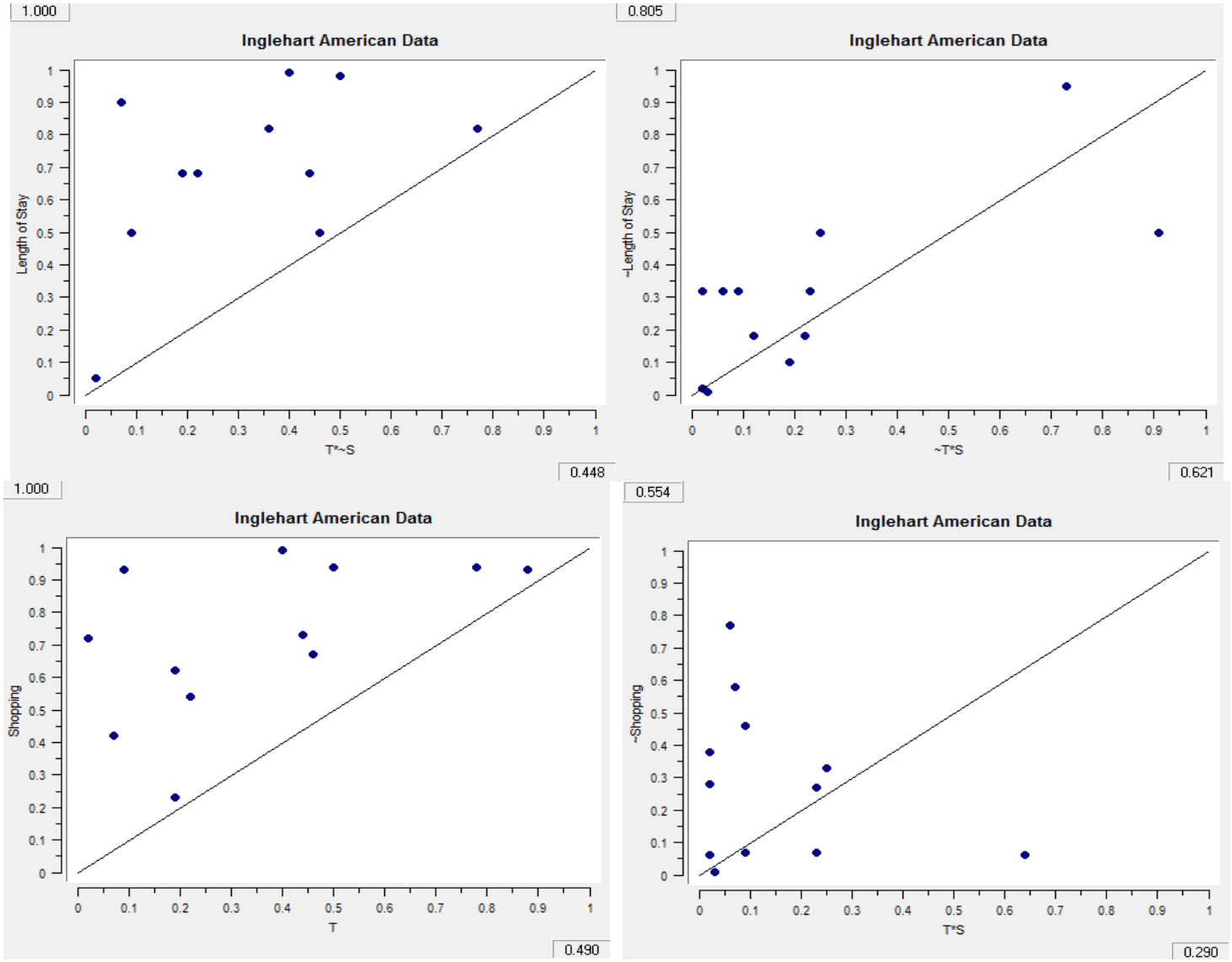

0.761
Hofstede Repeat Holiday
Shopping
U*M*~I*P
0.329
0.862
Hofstede Repeat Holiday
~Shopping
M*I*~P
0.519
0.939
Hofstede Repeat Holiday
# of States Visited
~P*I*~M*U
0.339
0.932
Hofstede Repeat Holiday
~# of States Visited
P*~I
0.716

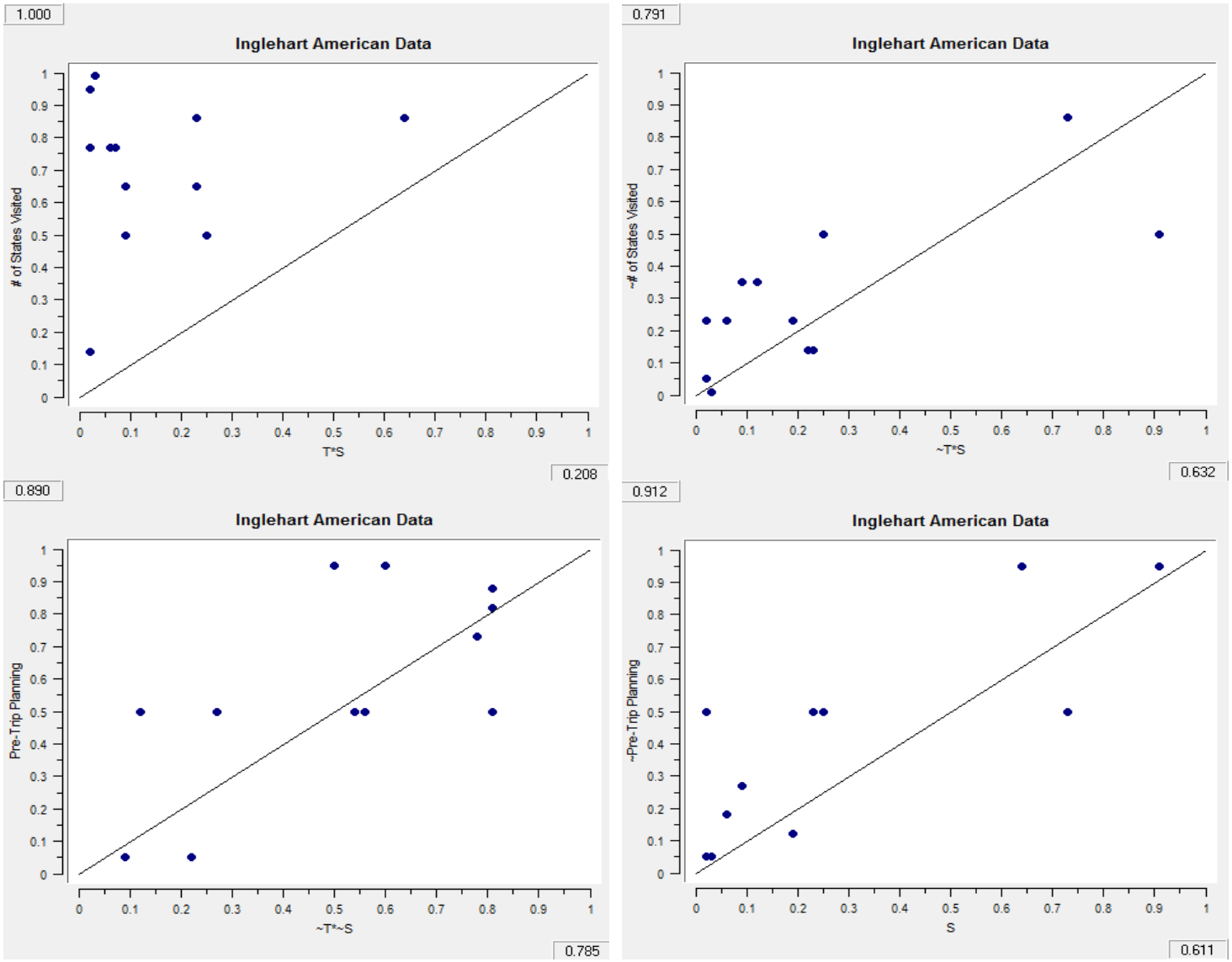
Appendix E: Hofstede's Best Fitting Models for Repeat VFR Visitors to Australia



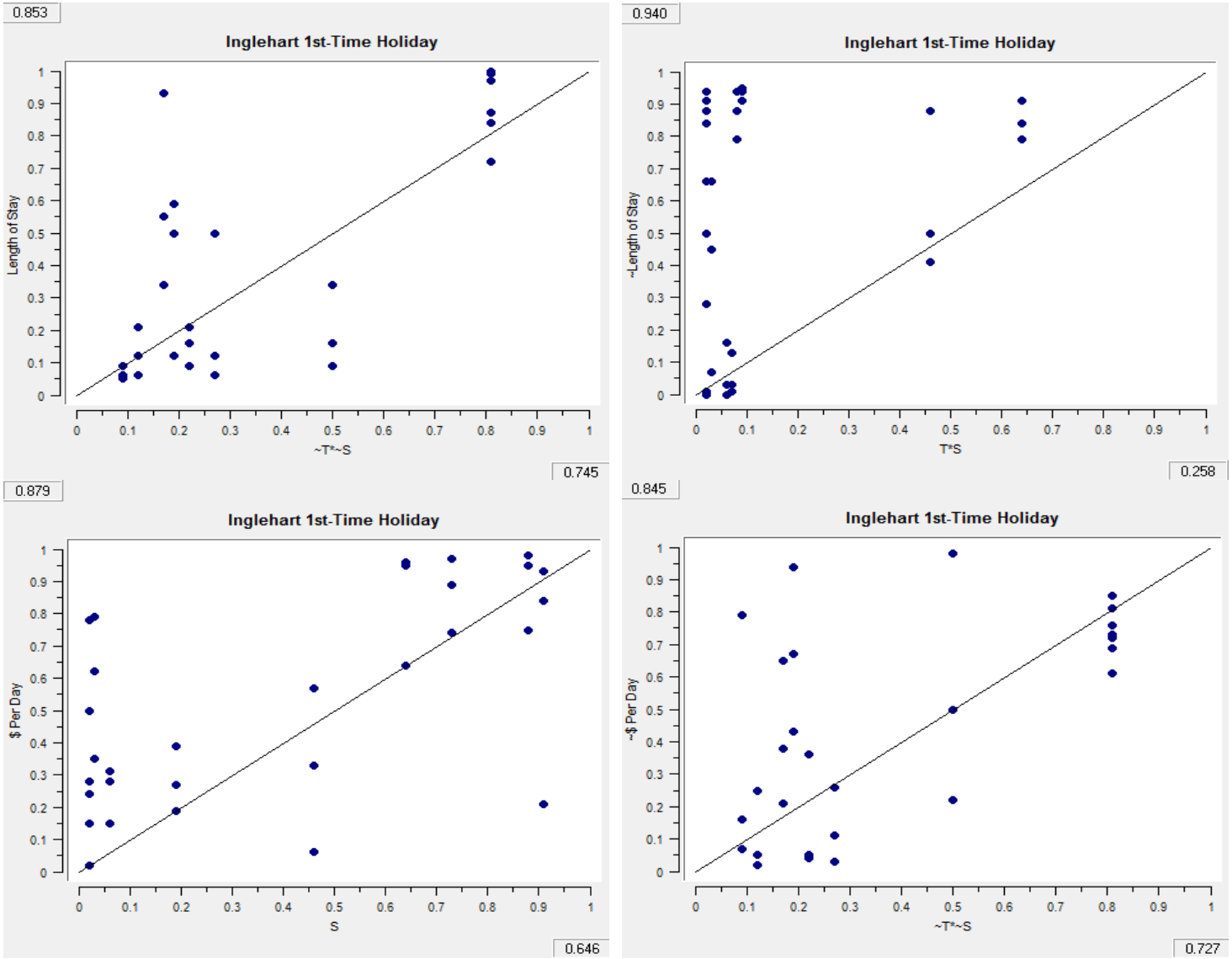

0.674
Hofstede Repeat VFR
Shopping
P*~I*~M*U
0.419
0.989
Hofstede Repeat VFR
~Shopping
U*I*~P
0.440
0.755
Hofstede Repeat VFR
# of States Visited
~P*I*~M*U
0.539
1.000
Hofstede Repeat VFR
~# of States Visited
~P*I*M*~U
0.232

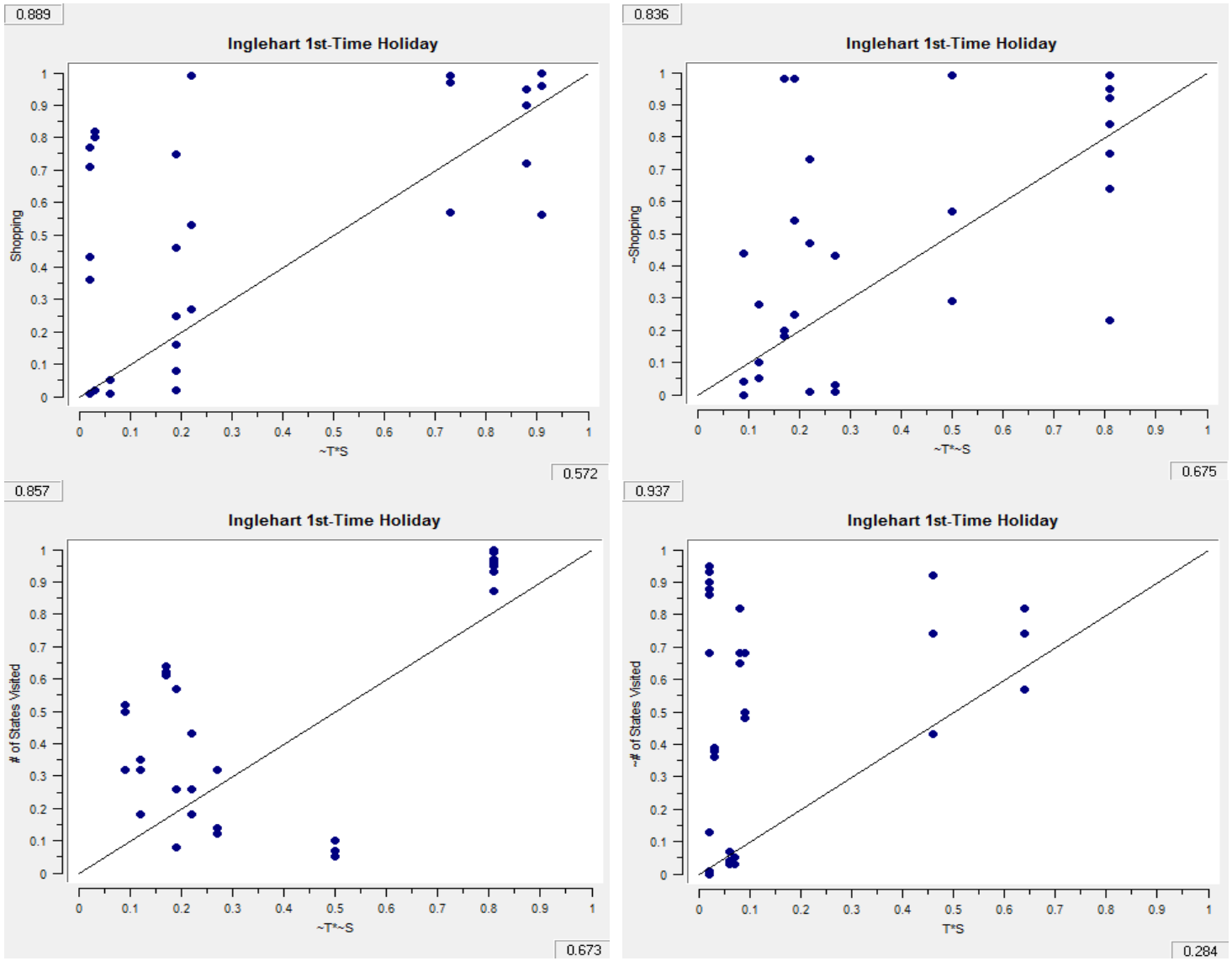
Appendix F: Inglehart's Best Fitting Models for Visitors to USA



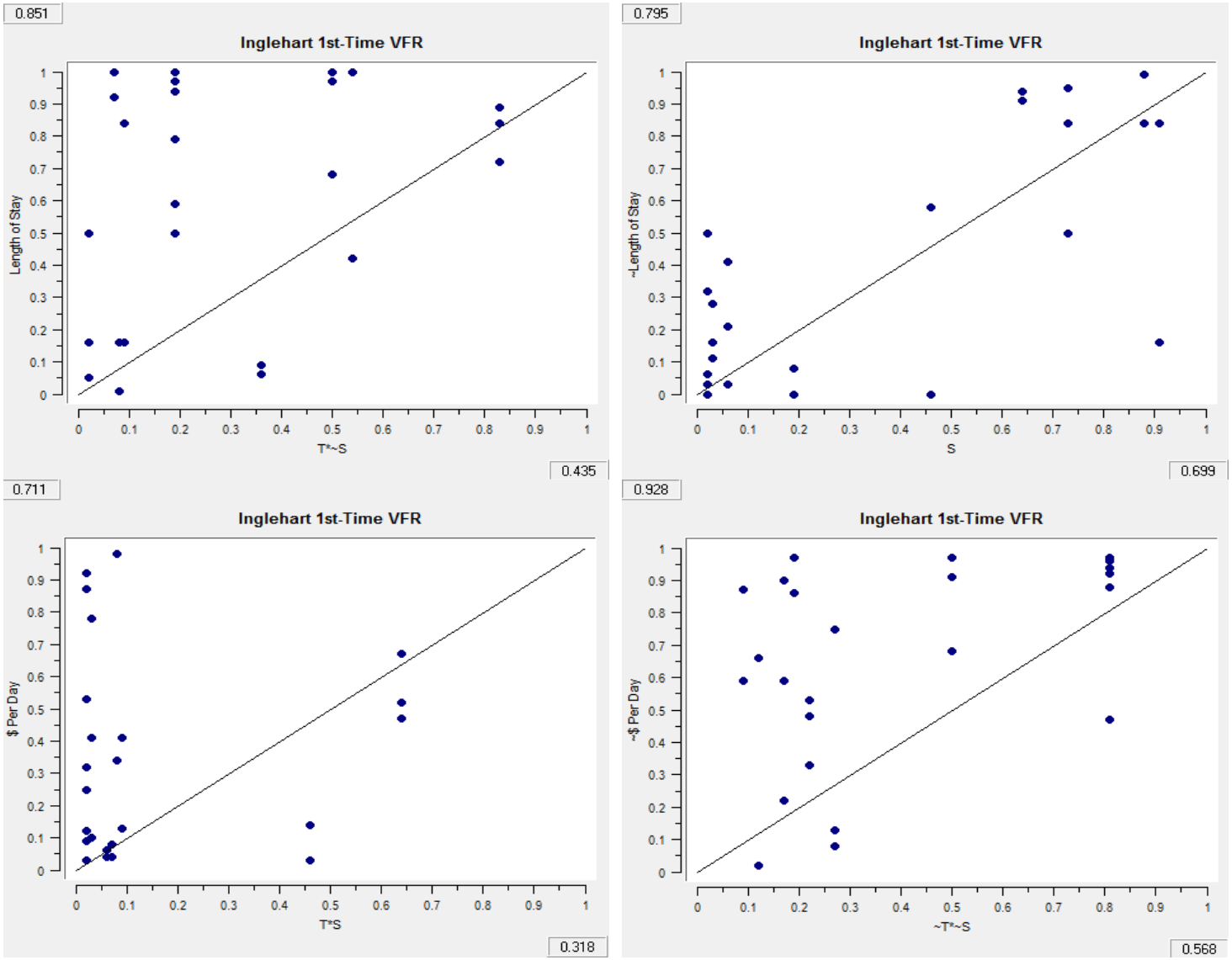

1.000
Inglehart American Data
# of States Visited
T*S
0.208
0.791
Inglehart American Data
~# of States Visited
~T*S
0.632
0.890
Inglehart American Data
Pre-Trip Planning
~T*~S
0.785
0.912
Inglehart American Data
~Pre-Trip Planning
S
0.611

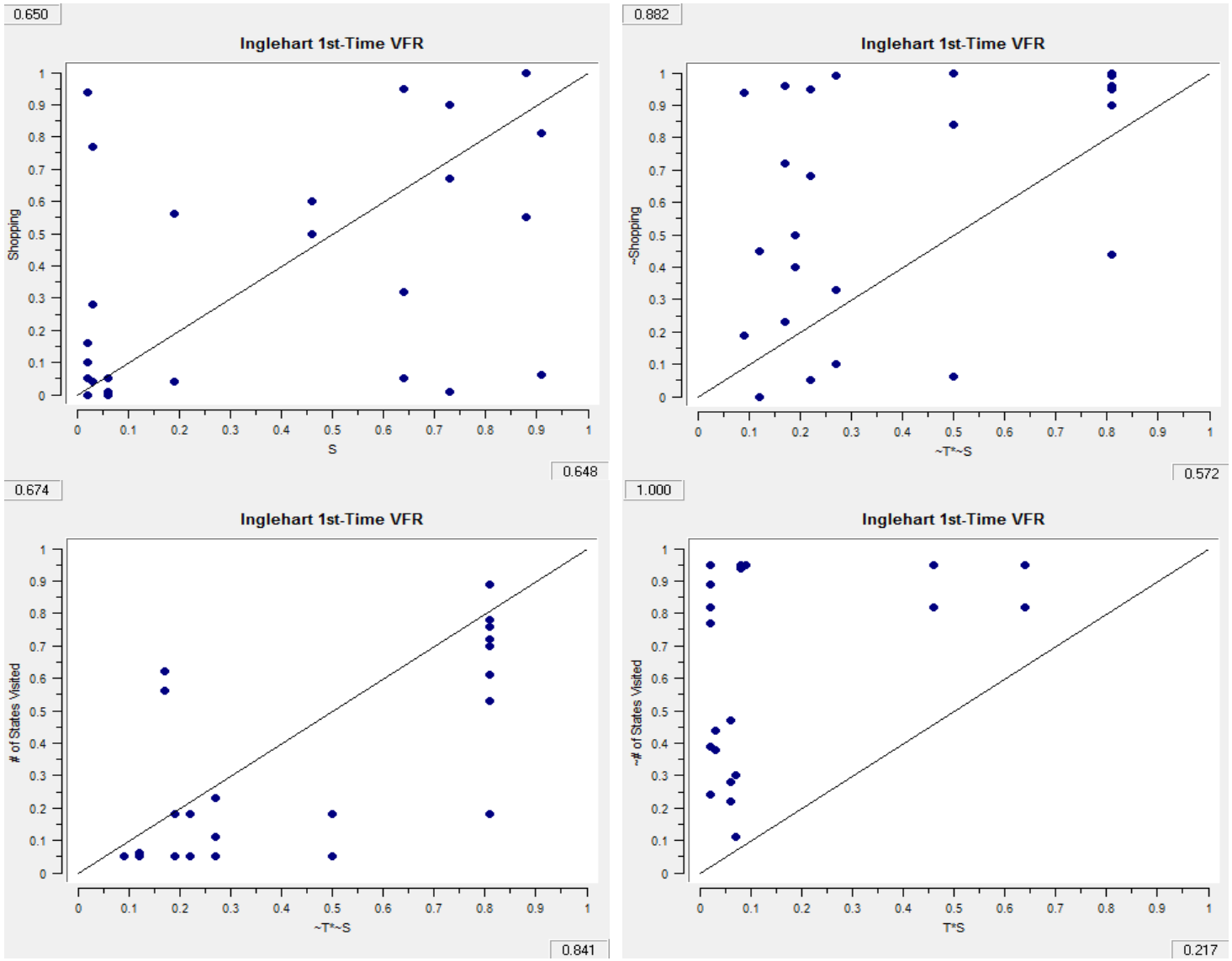
Appendix G: Inglehart's Best Fitting Models for First-Time Holiday Visitors to Australia



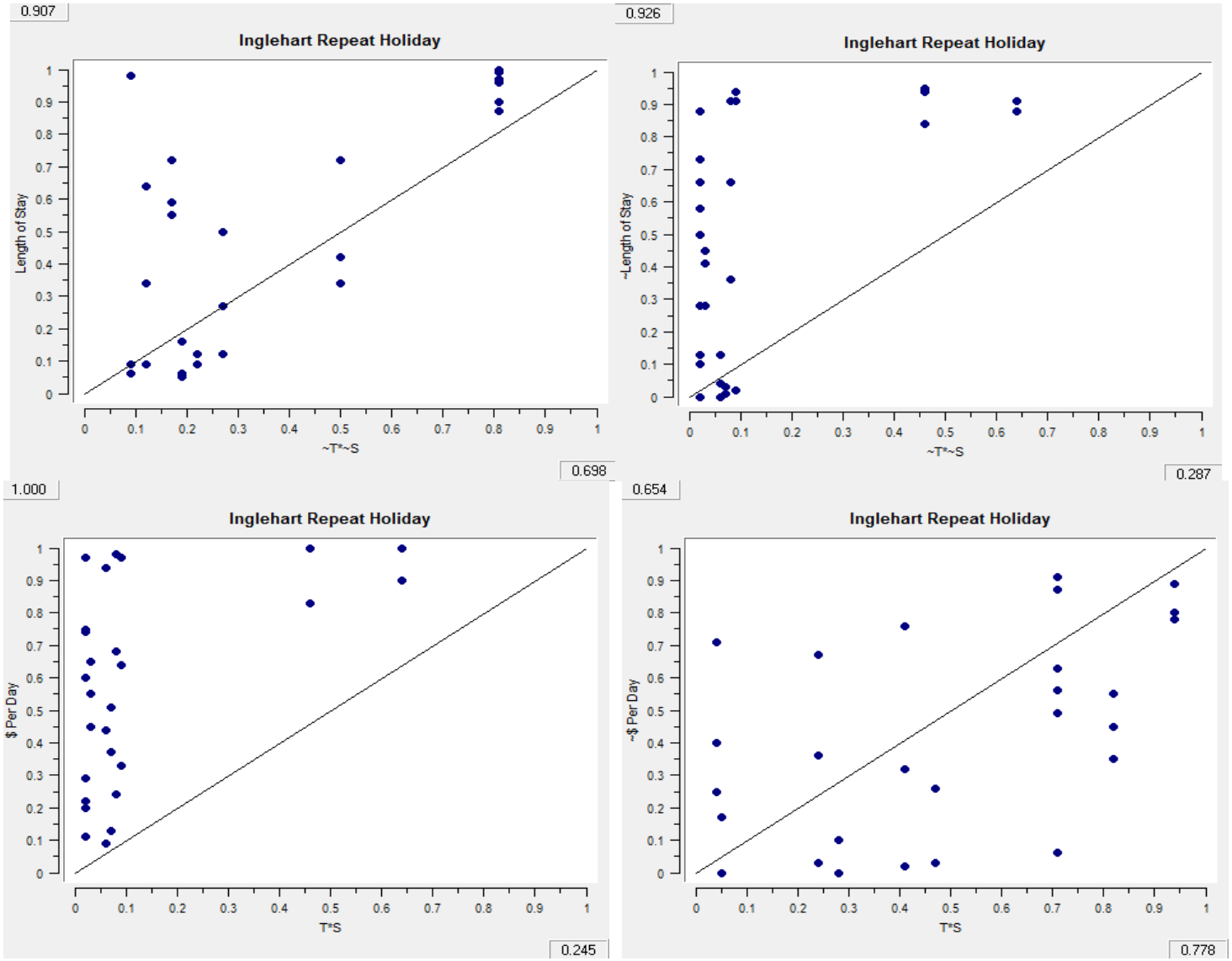

0.889
Inglehart 1st-Time Holiday
Shopping
~T*S
0.572
0.836
Inglehart 1st-Time Holiday
~Shopping
~T*~S
0.675
0.857
Inglehart 1st-Time Holiday
# of States Visited
~T*~S
0.673
0.937
Inglehart 1st-Time Holiday
~# of States Visited
T*S
0.284

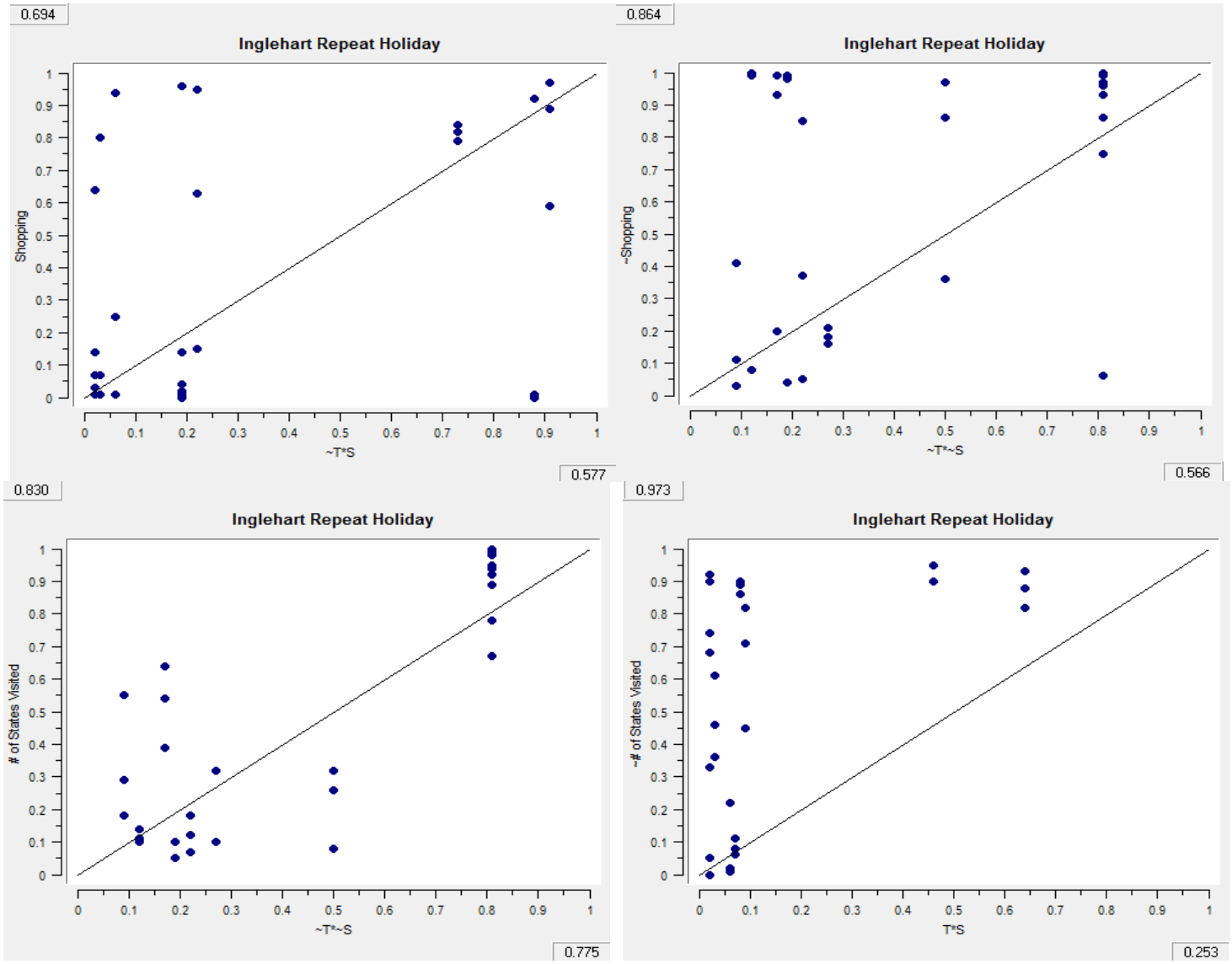
Appendix H: Inglehart's Best Fitting Models for First-Time VFR Visitors to Australia



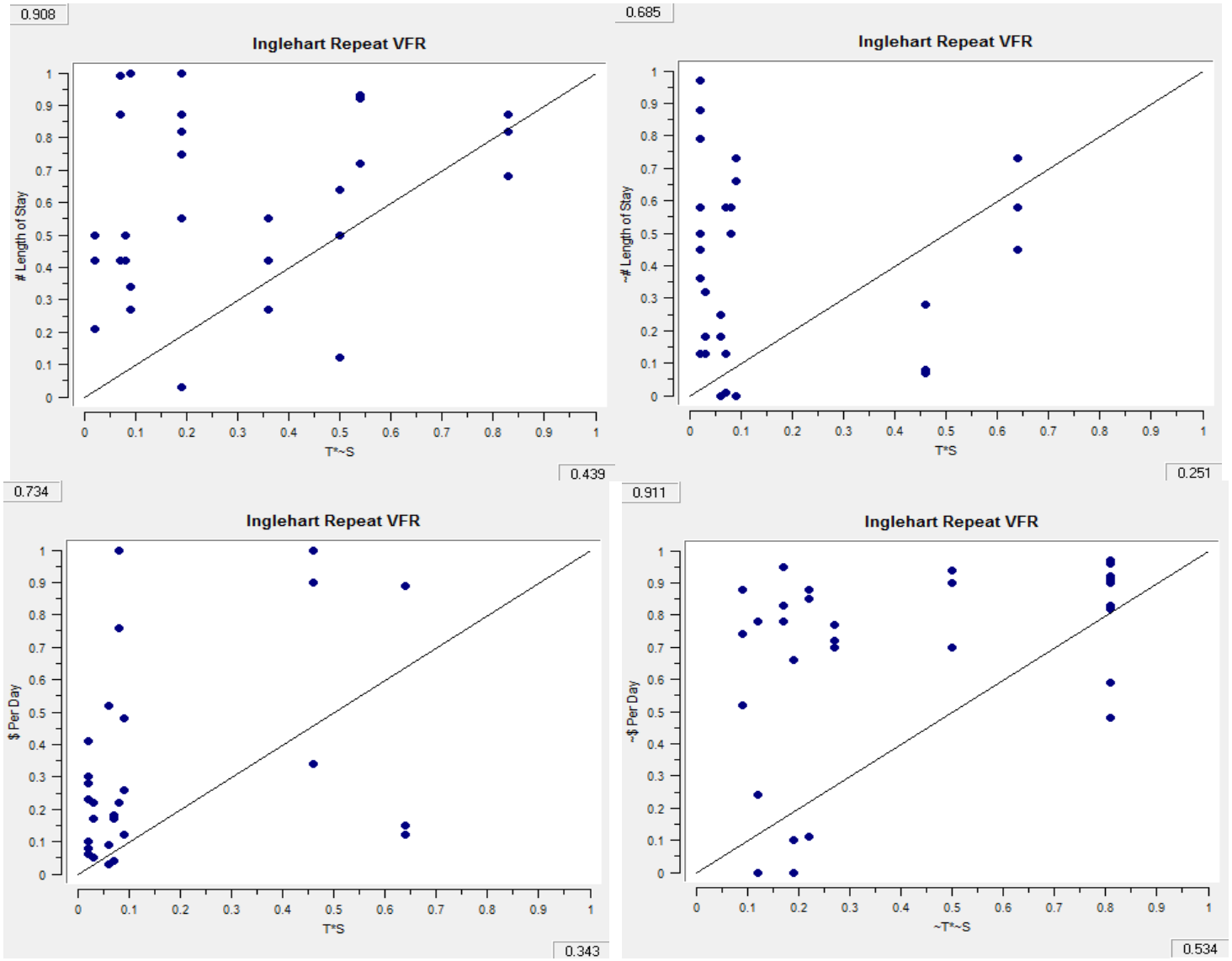

0.650
Inglehart 1st-Time VFR
Shopping
S
0.648
0.882
Inglehart 1st-Time VFR
~Shopping
~T*~S
0.572
0.674
Inglehart 1st-Time VFR
# of States Visited
~T*~S
0.841
1.000
Inglehart 1st-Time VFR
~# of States Visited
T*S
0.217

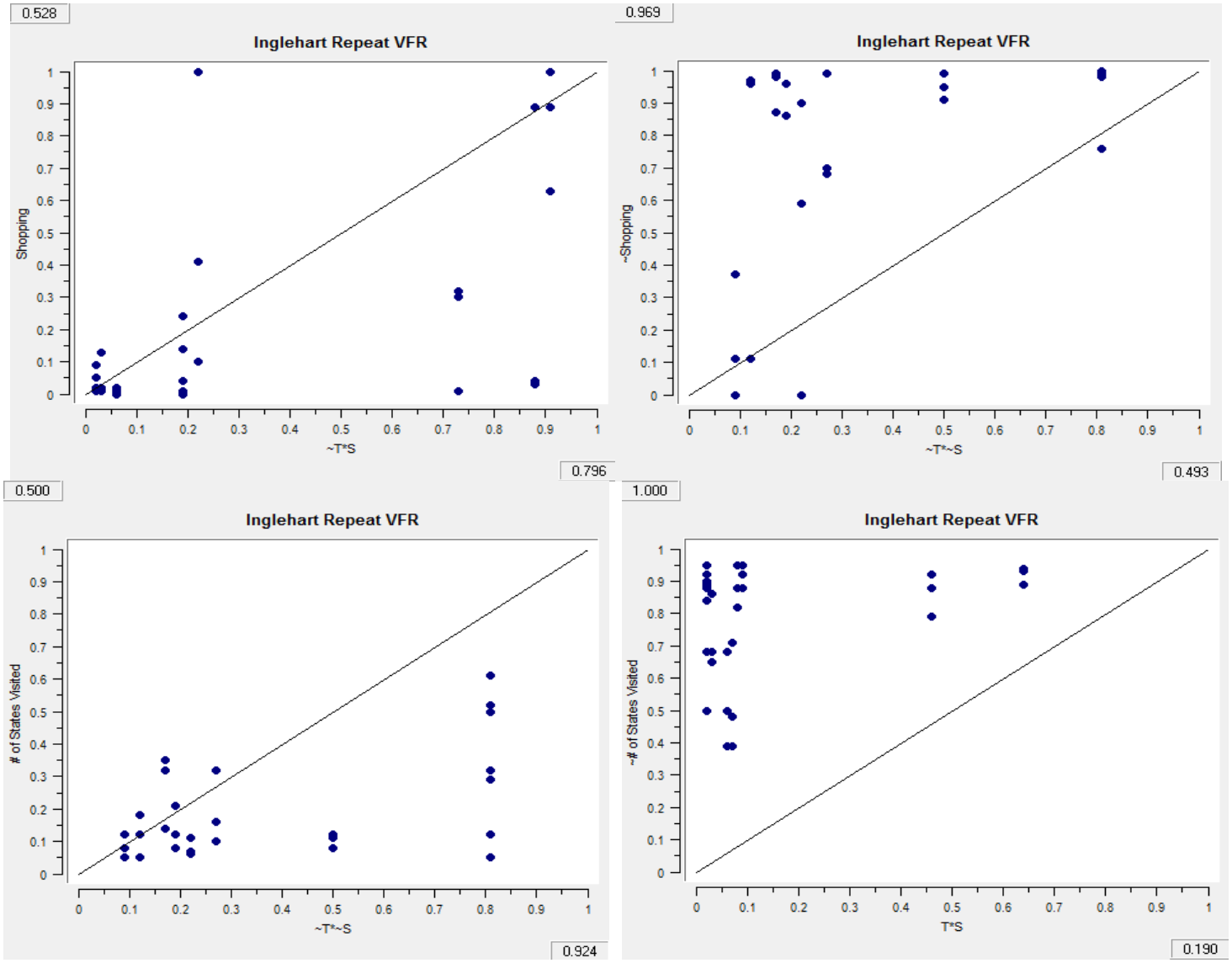
Appendix I: Inglehart's Best Fitting Models for Repeat Holiday Visitors to Australia



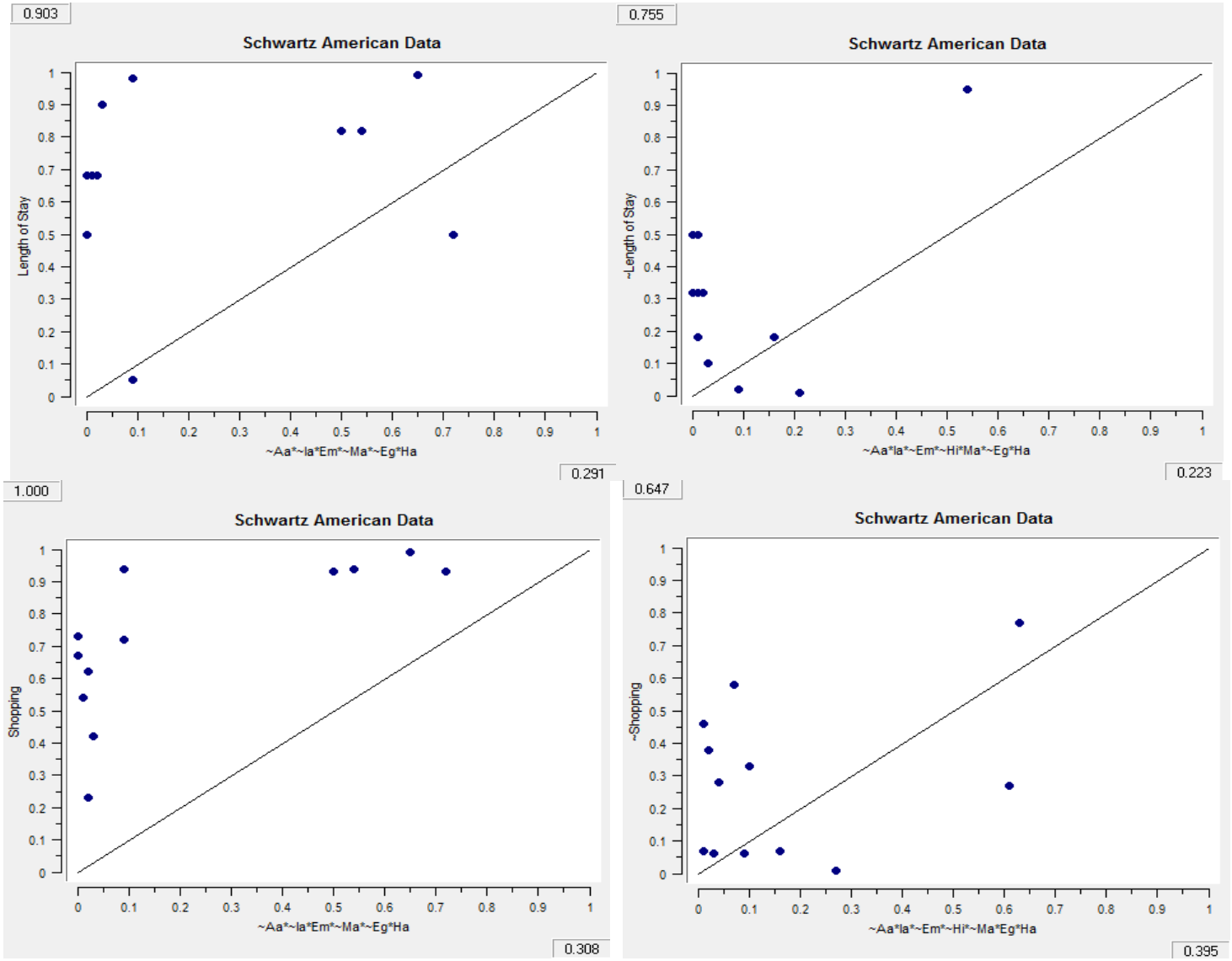

0.694
Inglehart Repeat Holiday
Shopping
~T*S
0.577
0.864
Inglehart Repeat Holiday
~Shopping
~T*~S
0.566
0.830
Inglehart Repeat Holiday
# of States Visited
~T*~S
0.775
0.973
Inglehart Repeat Holiday
~# of States Visited
T*S
0.253

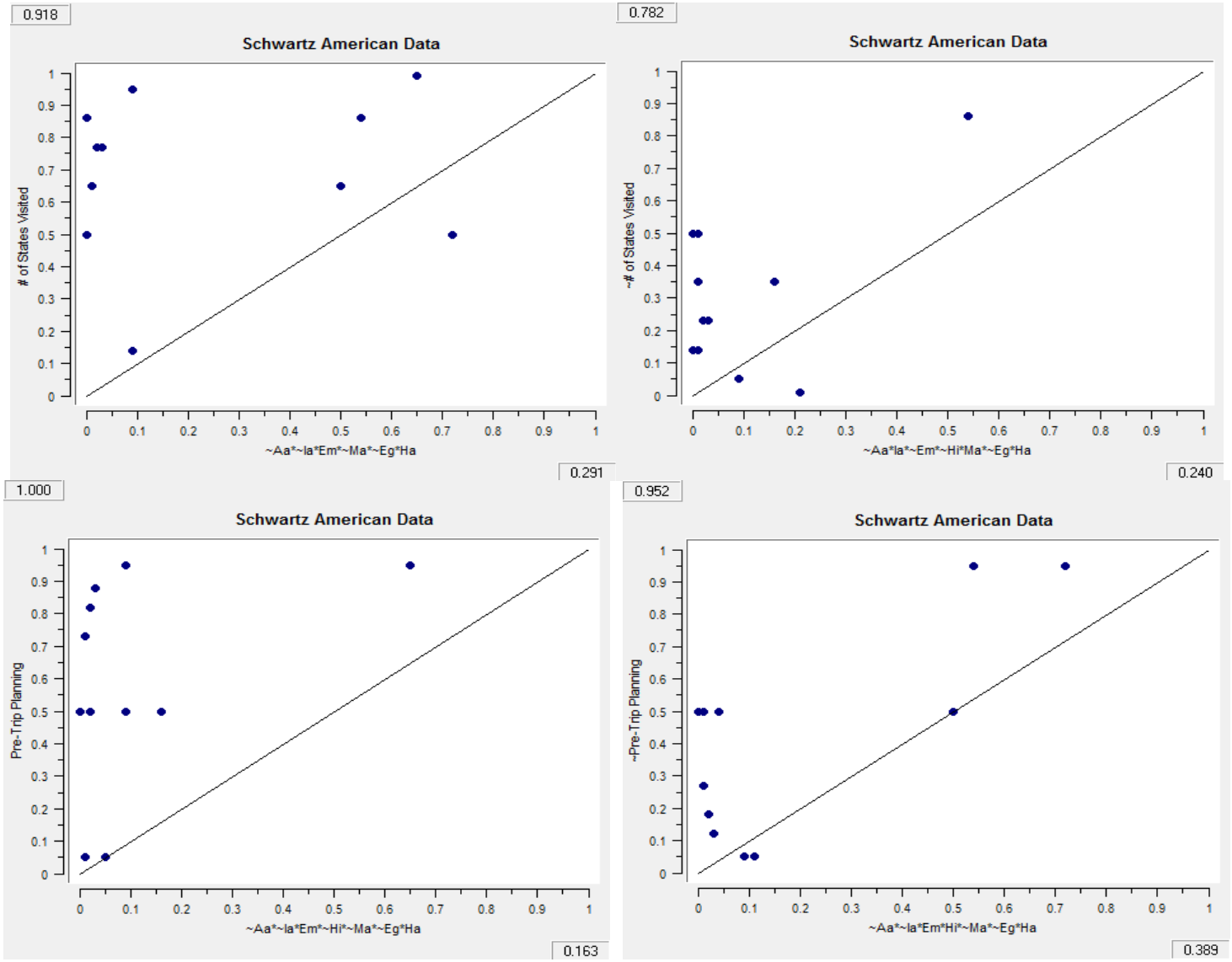
Appendix J: Inglehart's Best Fitting Models for Repeat VFR Visitors to Australia



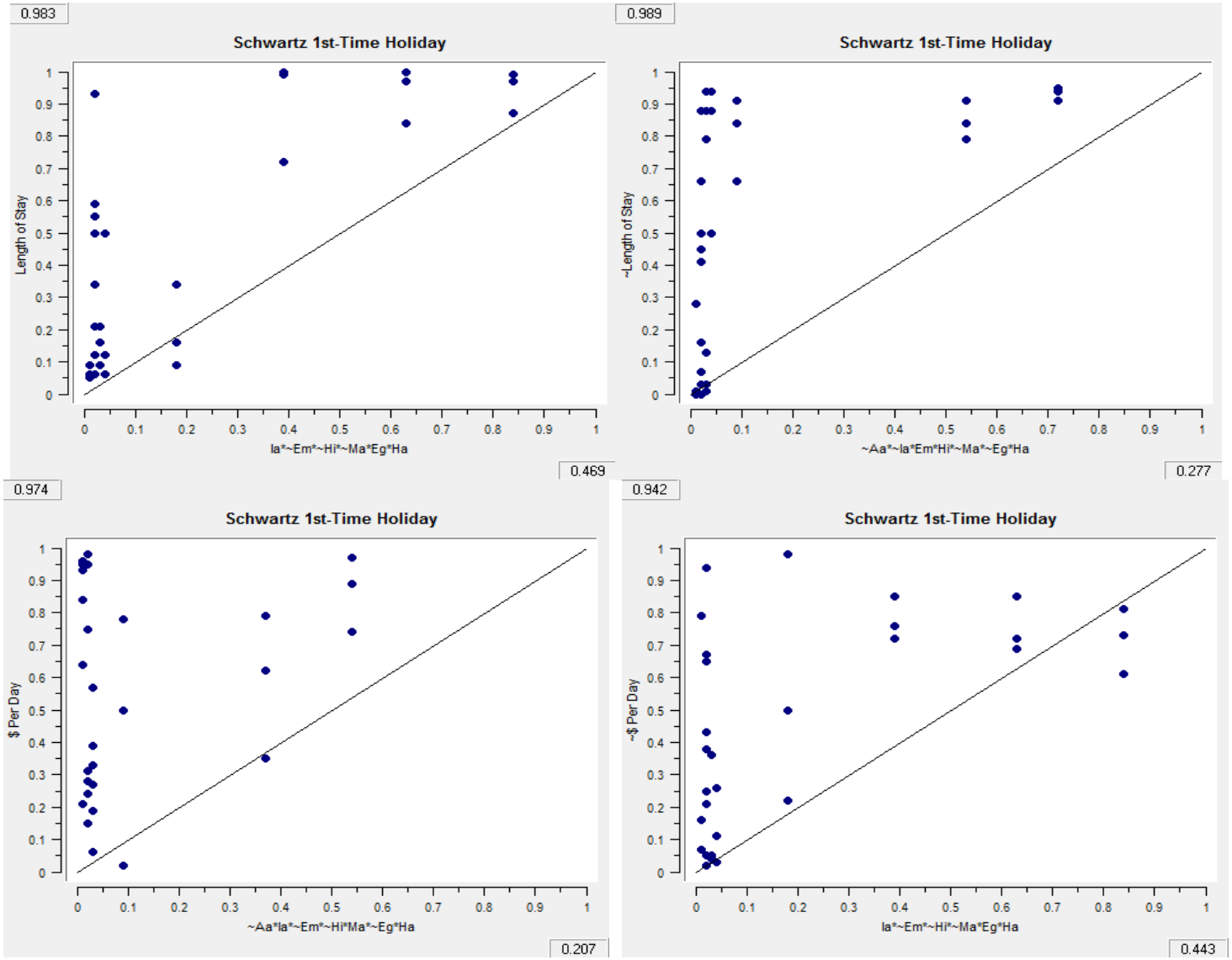

0.528
Inglehart Repeat VFR
Shopping
~T*S
0.796
0.969
Inglehart Repeat VFR
~Shopping
~T*~S
0.493
0.500
Inglehart Repeat VFR
# of States Visited
~T*~S
0.924
1.000
Inglehart Repeat VFR
~# of States Visited
T*S
0.190

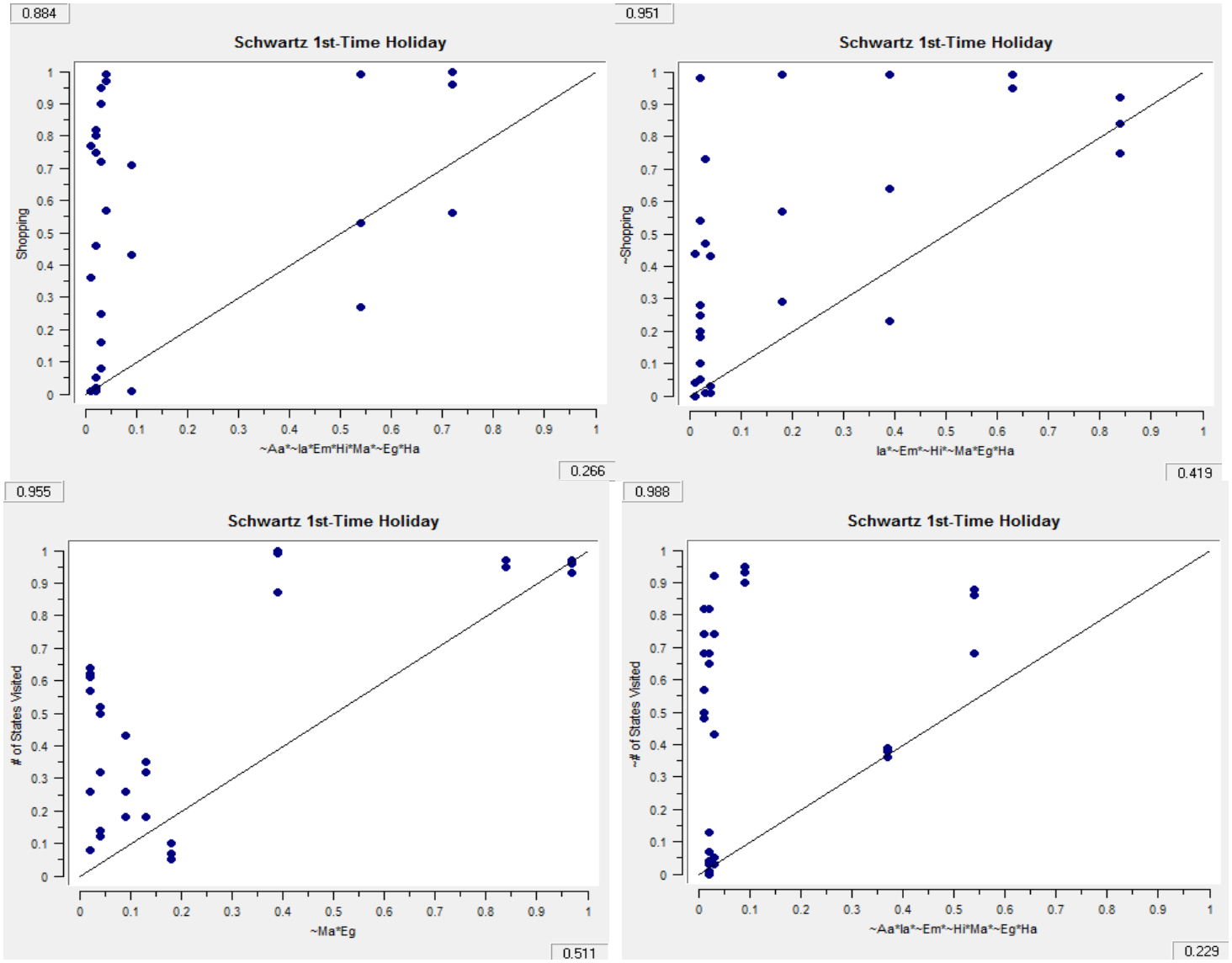
Appendix K: Schwartz's Best Fitting Models for Visitors to USA



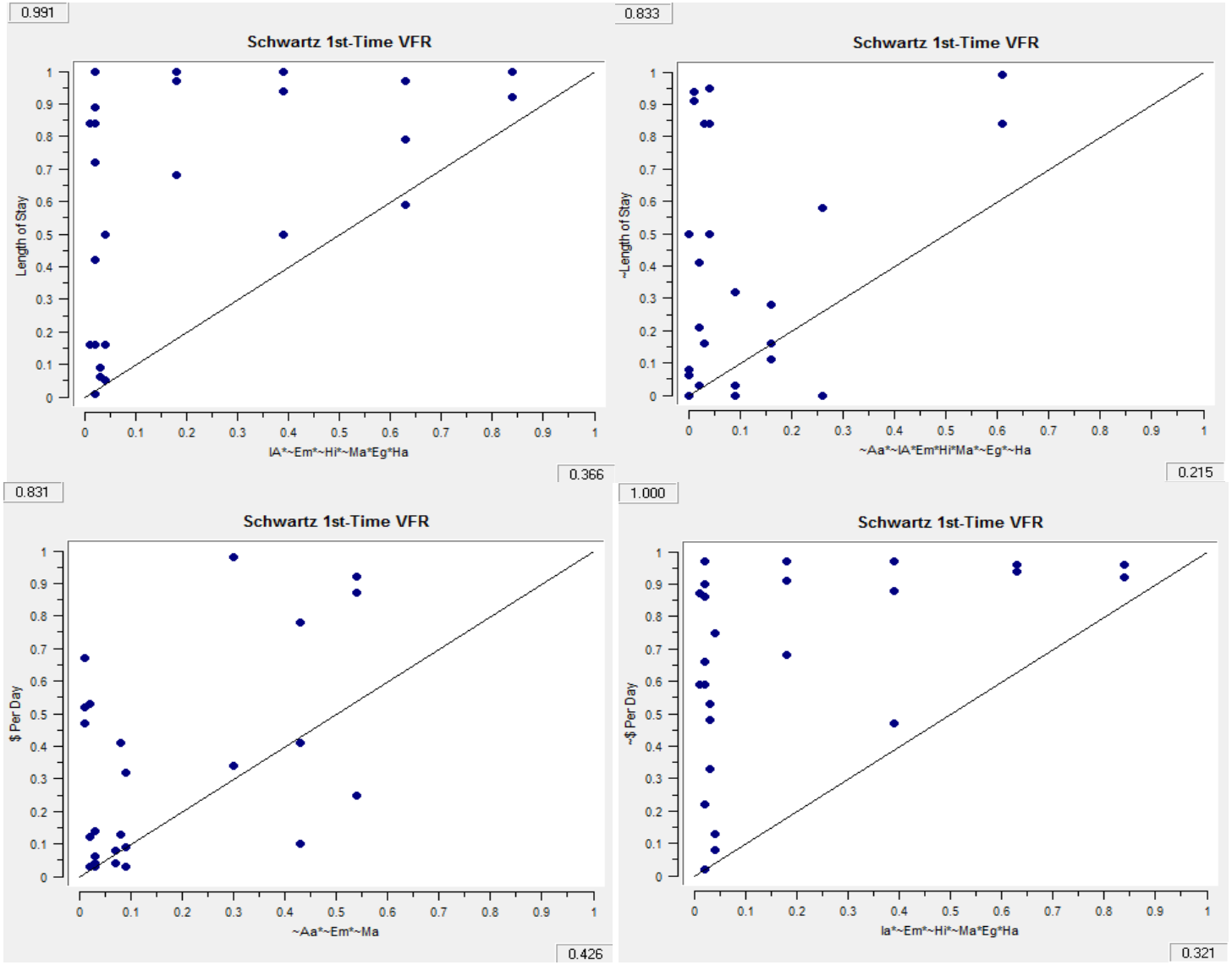

0.918
Schwartz American Data
# of States Visited
~Aa*~la*Em*~Ma*~Eg*Ha
0.291
0.782
Schwartz American Data
~# of States Visited
~Aa*la*~Em*~Hi*Ma*~Eg*Ha
0.240
1.000
Schwartz American Data
Pre-Trip Planning
~Aa*~la*Em*~Hi*~Ma*~Eg*Ha
0.163
0.952
Schwartz American Data
~Pre-Trip Planning
~Aa*~la*Em*Hi*~Ma*~Eg*Ha
0.389

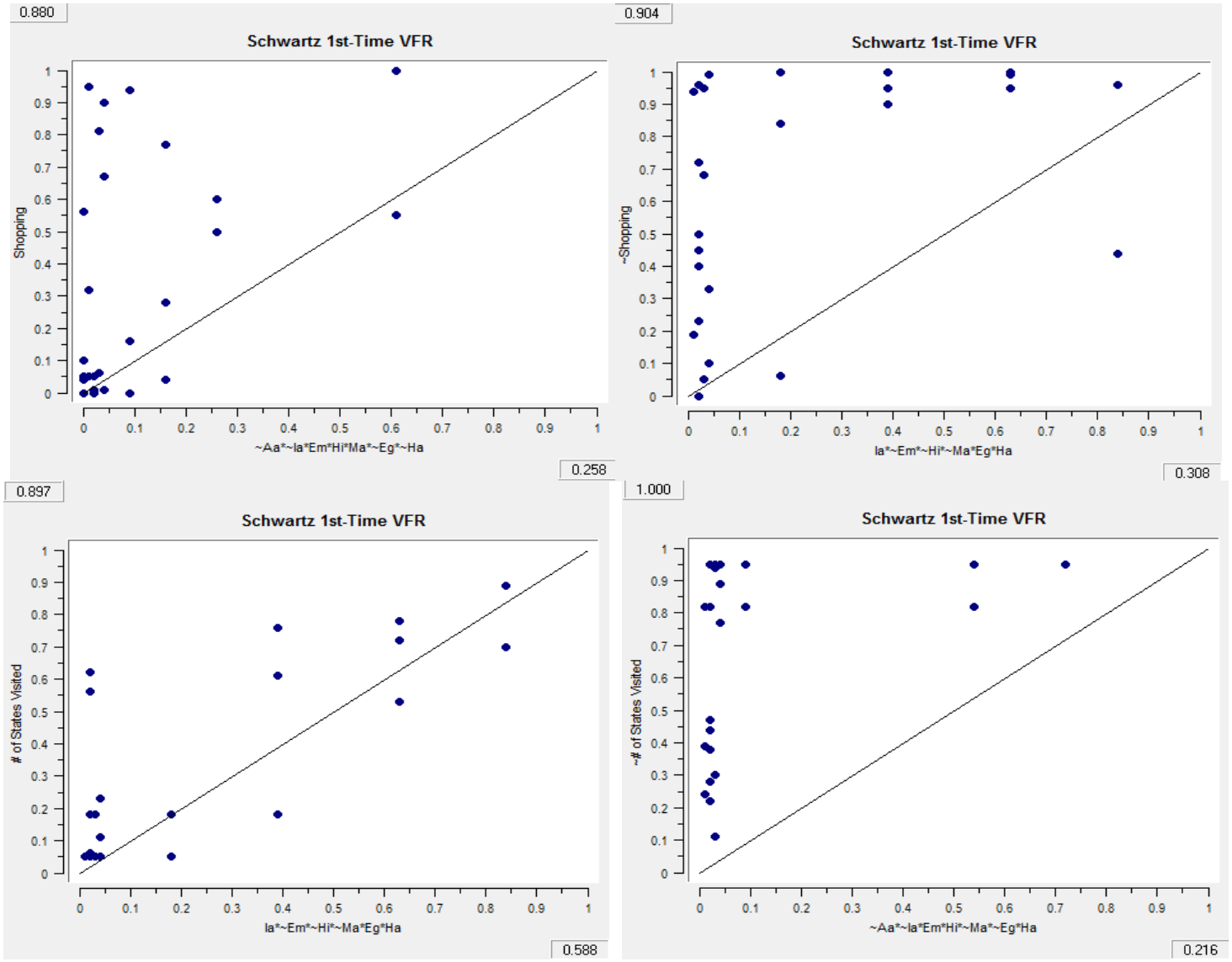
Appendix L: Schwartz's Best Fitting Models for First-Time Holiday Visitors to Australia



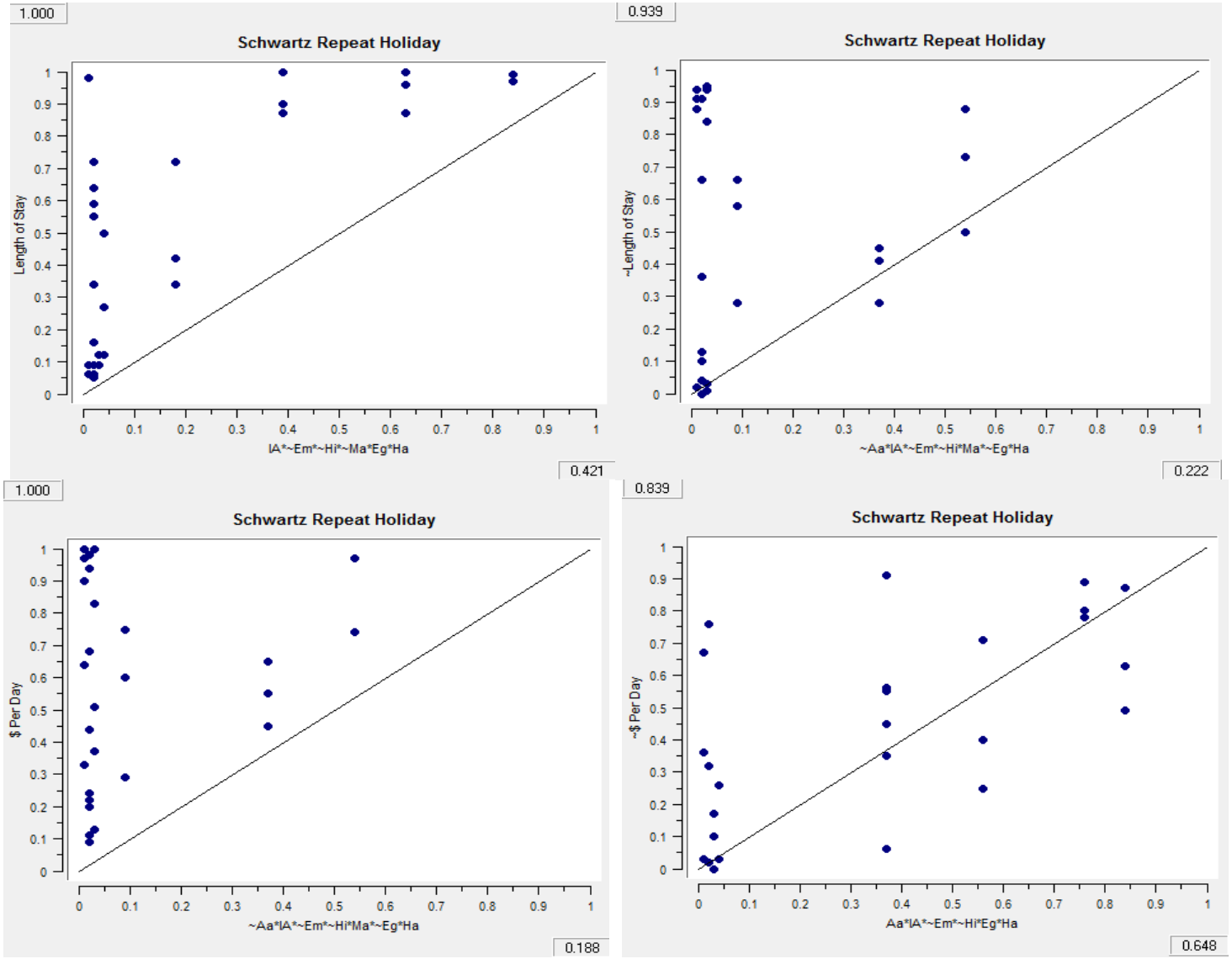

0.884
Schwartz 1st-Time Holiday
Shopping
~Aa*~Ia*Em*Hi*Ma*~Eg*Ha
0.266
0.951
Schwartz 1st-Time Holiday
~Shopping
Ia*~Em*~Hi*~Ma*Eg*Ha
0.419
0.955
Schwartz 1st-Time Holiday
# of States Visited
~Ma*Eg
0.511
0.988
Schwartz 1st-Time Holiday
~# of States Visited
~Aa*Ia*~Em*~Hi*Ma*~Eg*Ha
0.229

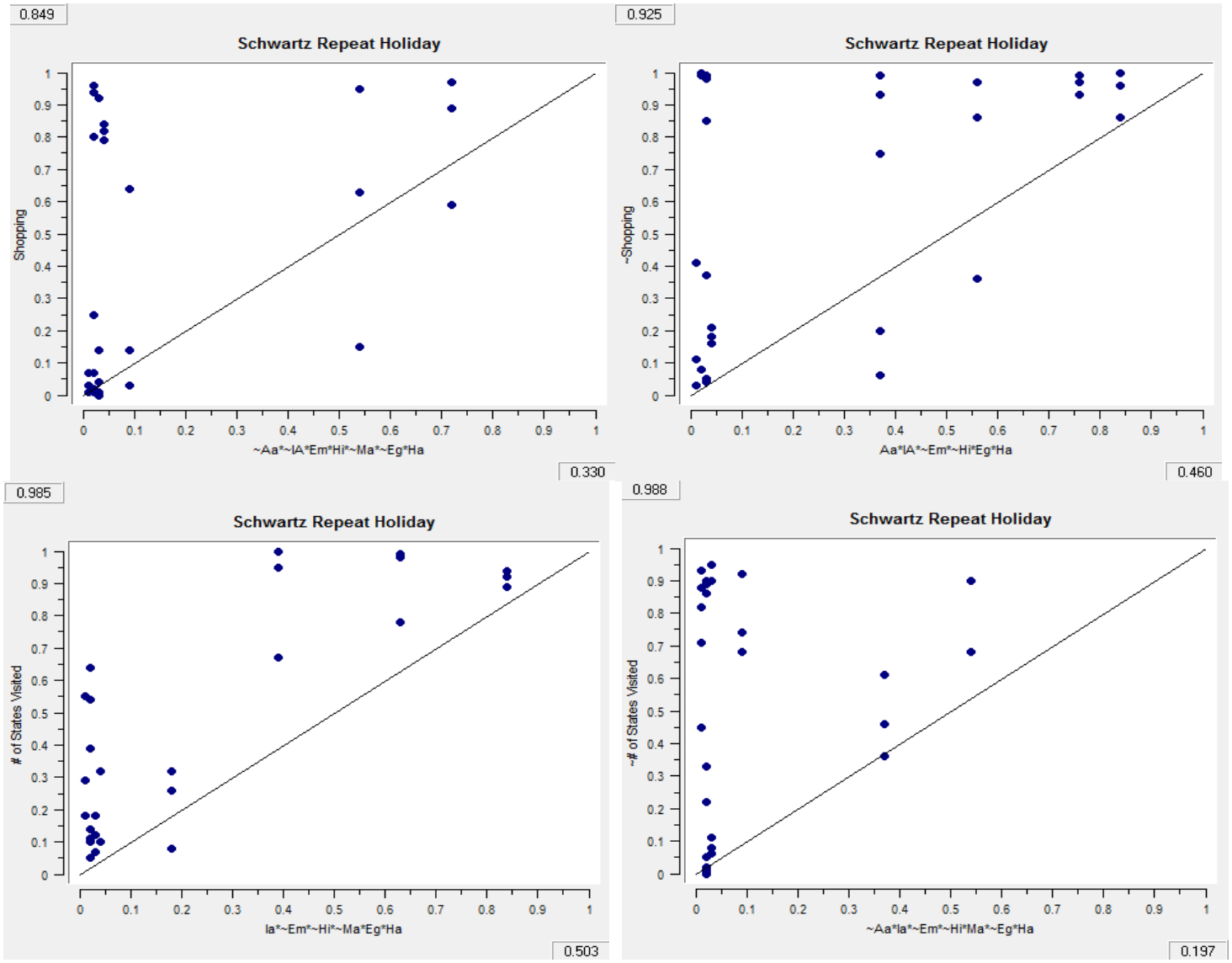
Appendix M: Schwartz's Best Fitting Models for First-Time VFR Visitors to Australia



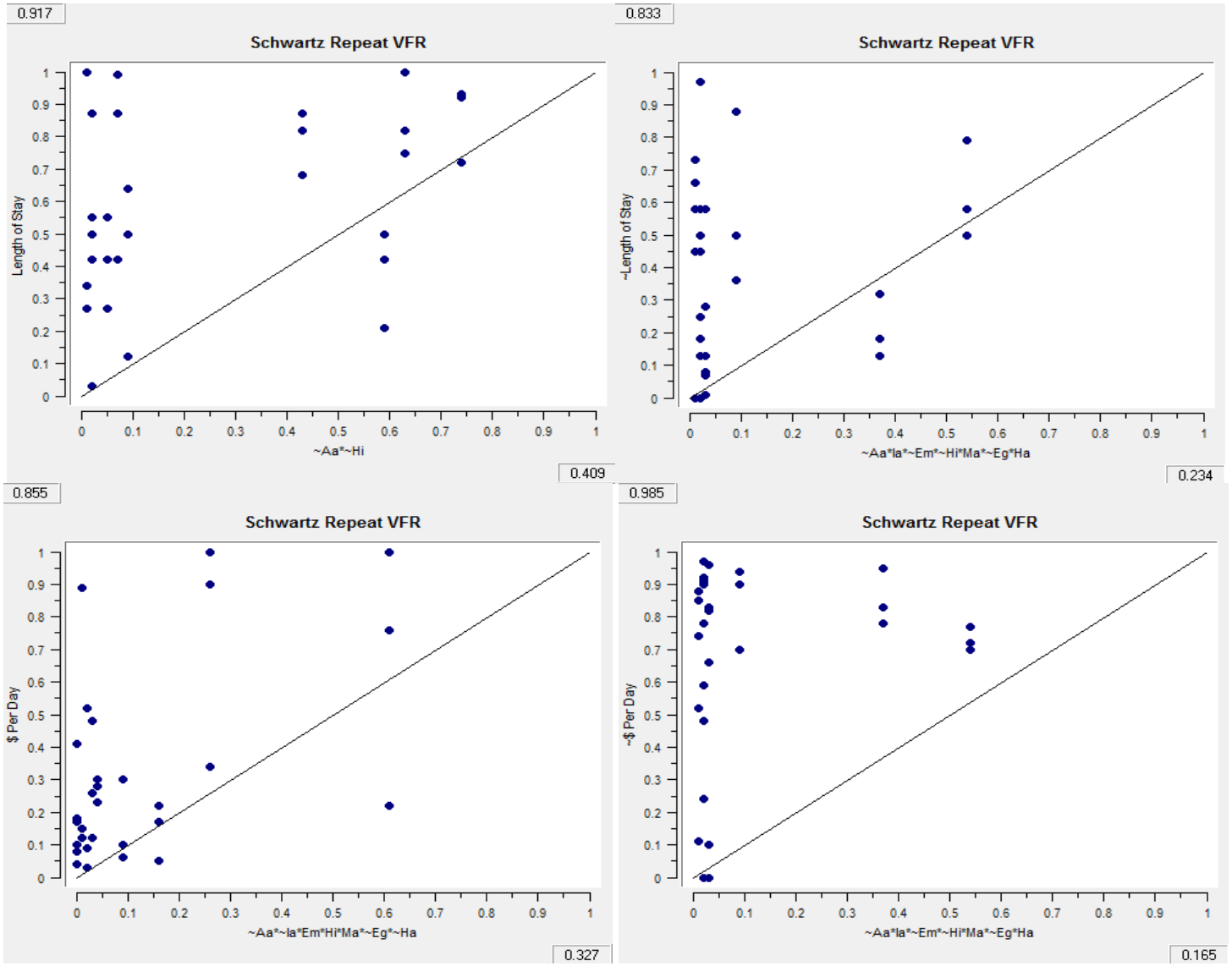

0.880
Schwartz 1st-Time VFR
Shopping
~Aa*~Ia*Em*Hi*Ma*~Eg*~Ha
0.258
0.904
Schwartz 1st-Time VFR
~Shopping
Ia*~Em*~Hi*~Ma*Eg*Ha
0.308
0.897
Schwartz 1st-Time VFR
# of States Visited
Ia*~Em*~Hi*~Ma*Eg*Ha
0.588
1.000
Schwartz 1st-Time VFR
~# of States Visited
~Aa*~Ia*Em*Hi*~Ma*~Eg*Ha
0.216

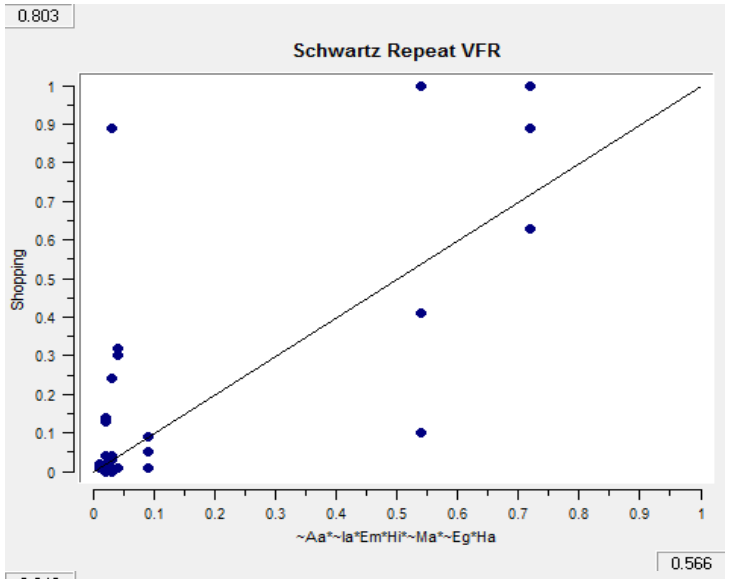
Appendix N: Schwartz's Best Fitting Models for Repeat Holiday Visitors to Australia

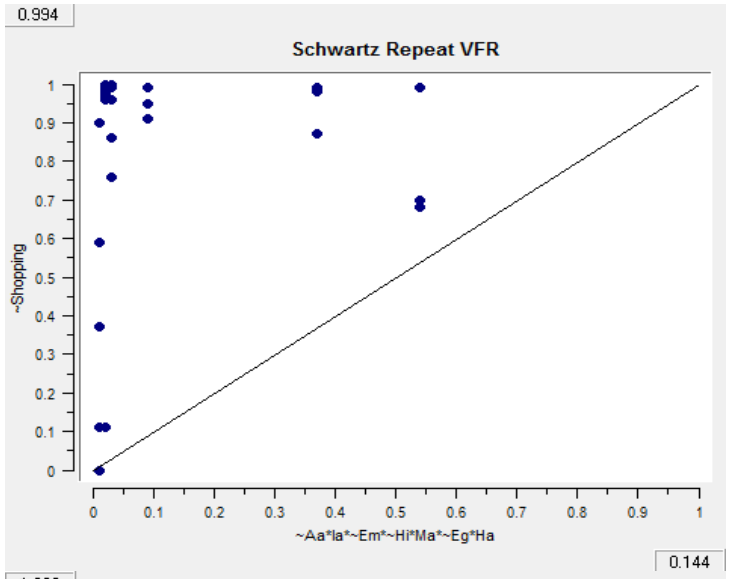


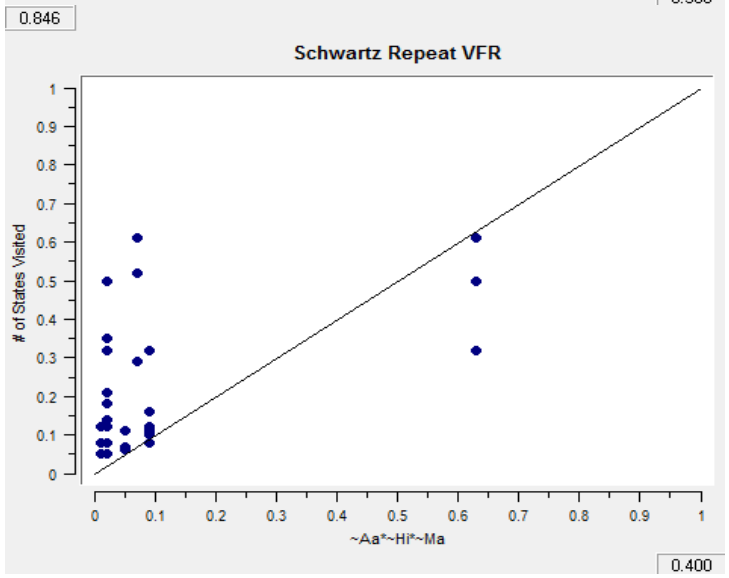

0.849
Schwartz Repeat Holiday
Shopping
~Aa*~IA*Em*Hi*~Ma*~Eg*Ha
0.330
0.925
Schwartz Repeat Holiday
~Shopping
Aa*IA*~Em*~Hi*Eg*Ha
0.460
0.985
Schwartz Repeat Holiday
# of States Visited
Ia*~Em*~Hi*~Ma*Eg*Ha
0.503
0.988
Schwartz Repeat Holiday
~# of States Visited
~Aa*Ia*~Em*~Hi*Ma*~Eg*Ha
0.197

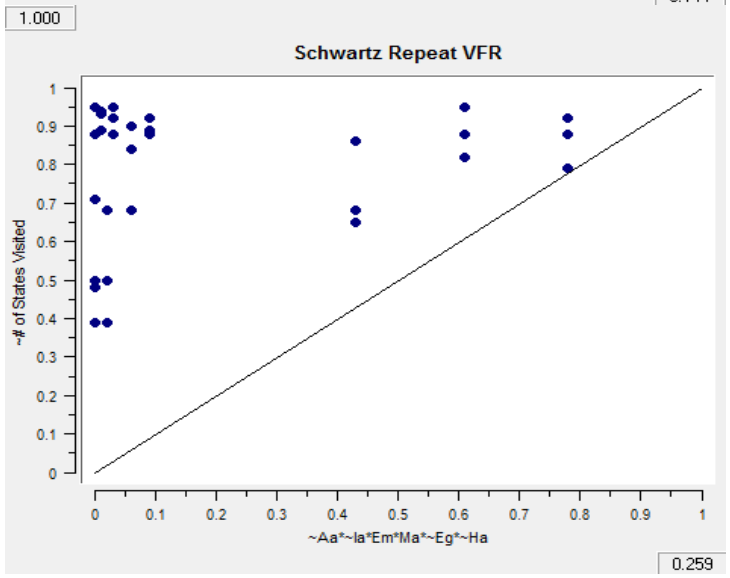
Appendix O: Schwartz's Best Fitting Models for Repeat VFR Visitors to Australia



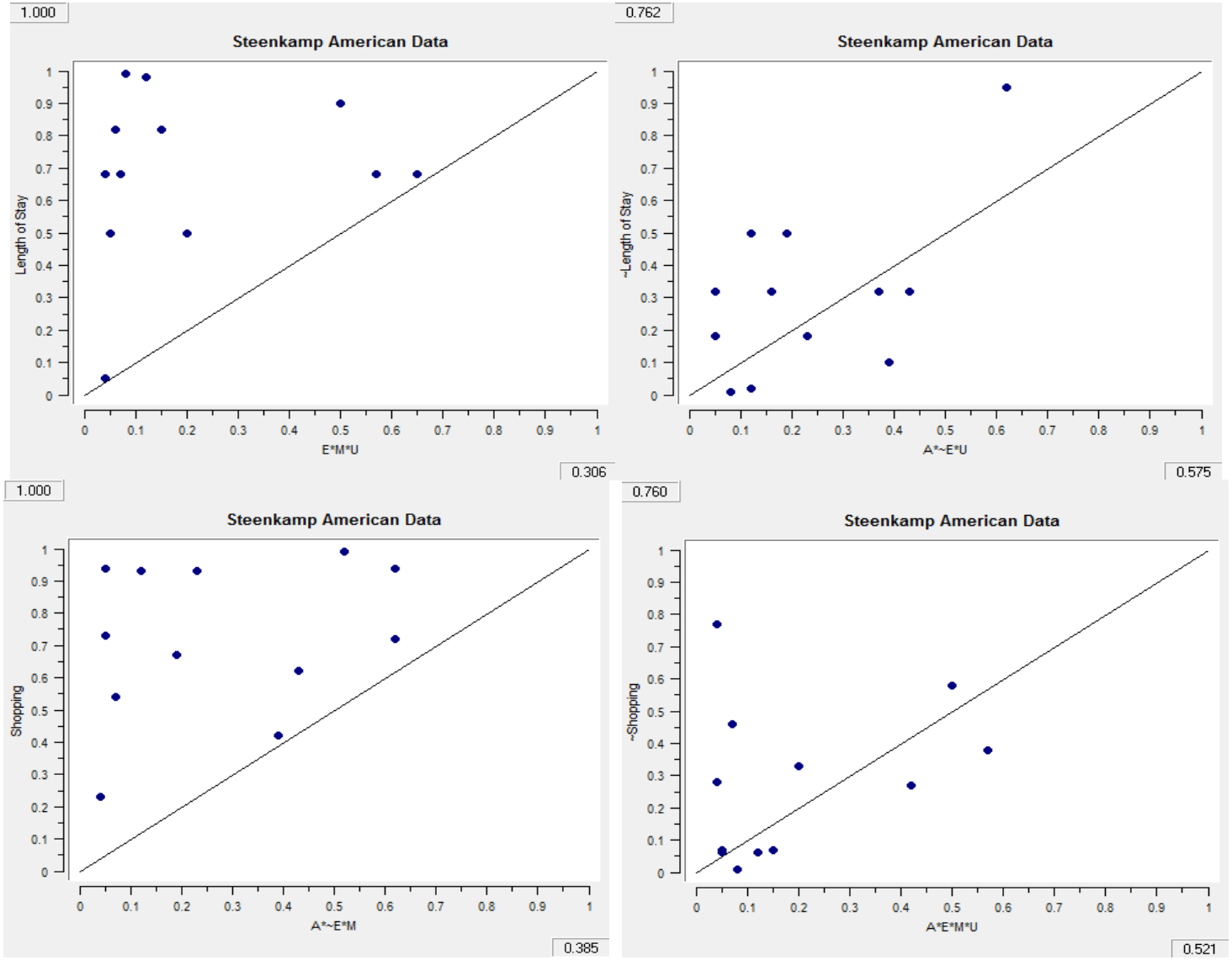

0.803
Schwartz Repeat VFR
Shopping
~Aa*~Ia*Em*Hi*~Ma*~Eg*Ha
0.566

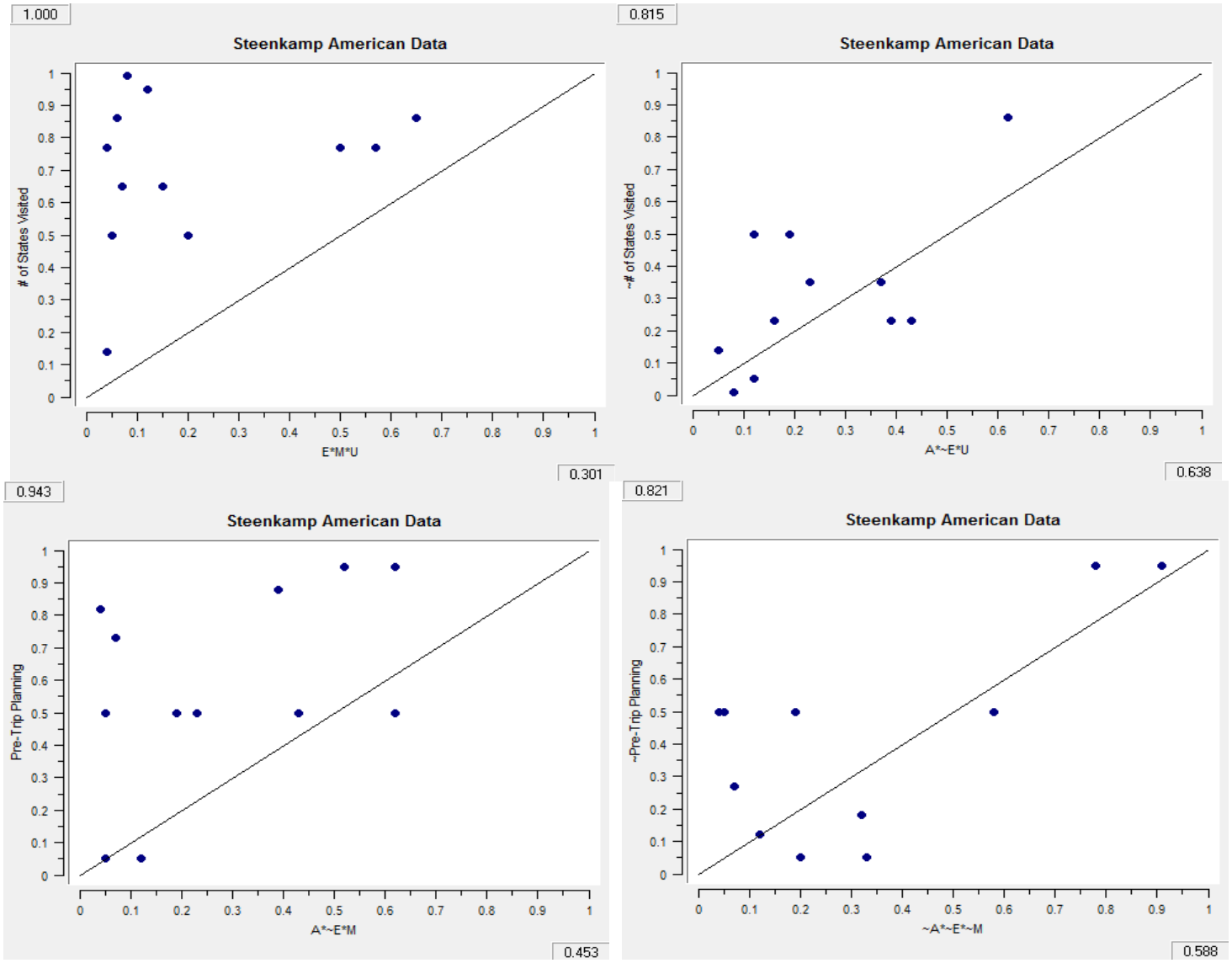

0.994
Schwartz Repeat VFR
~Shopping
~Aa*Ia*~Em*~Hi*Ma*~Eg*Ha
0.144


0.846
Schwartz Repeat VFR
# of States Visited
~Aa*~Hi*~Ma
0.400

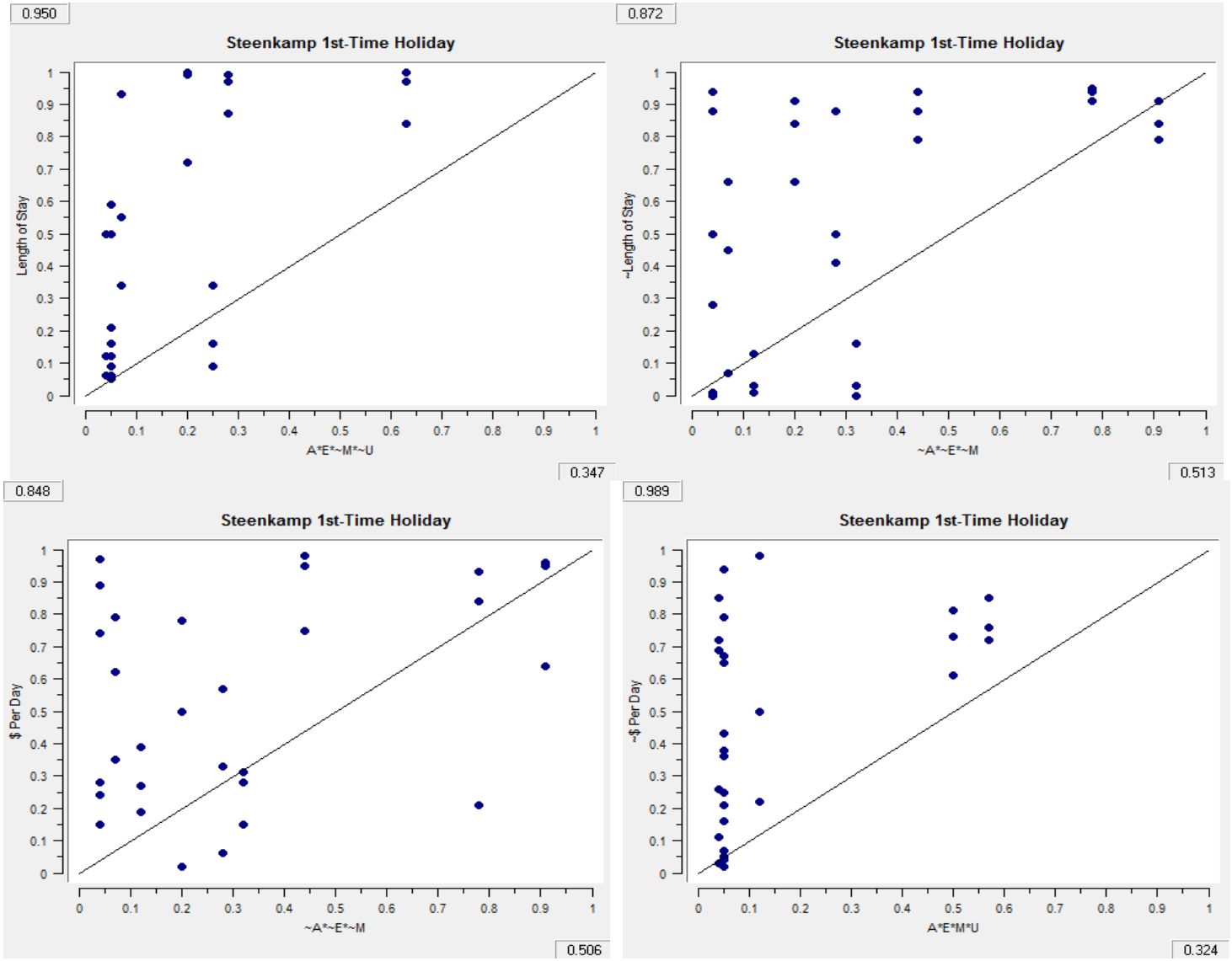

1.000
Schwartz Repeat VFR
~# of States Visited
~Aa*~Ia*Em*Ma*~Eg*~Ha
0.259

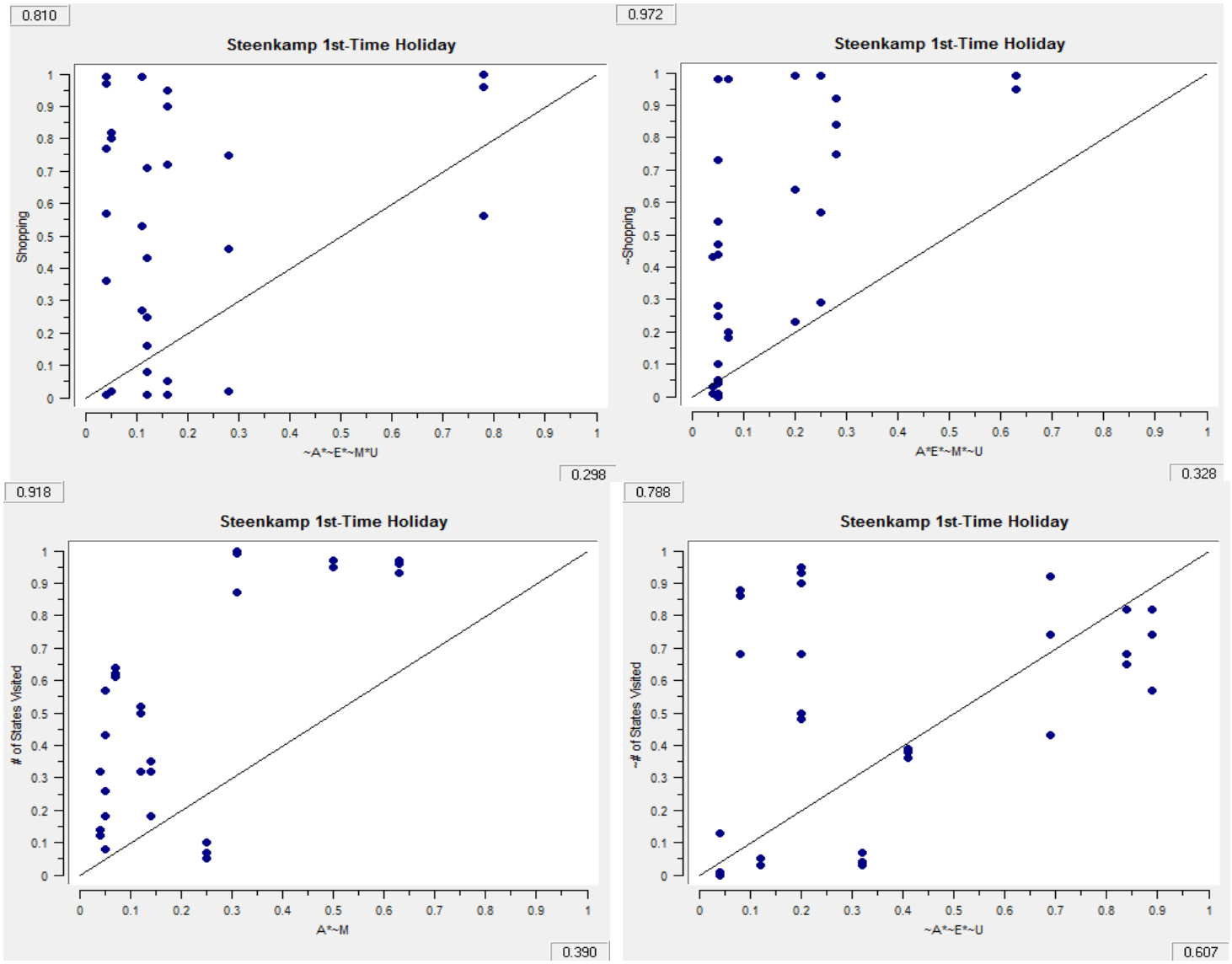
Appendix P: Steenkamp's Best Fitting Models for Visitors to USA



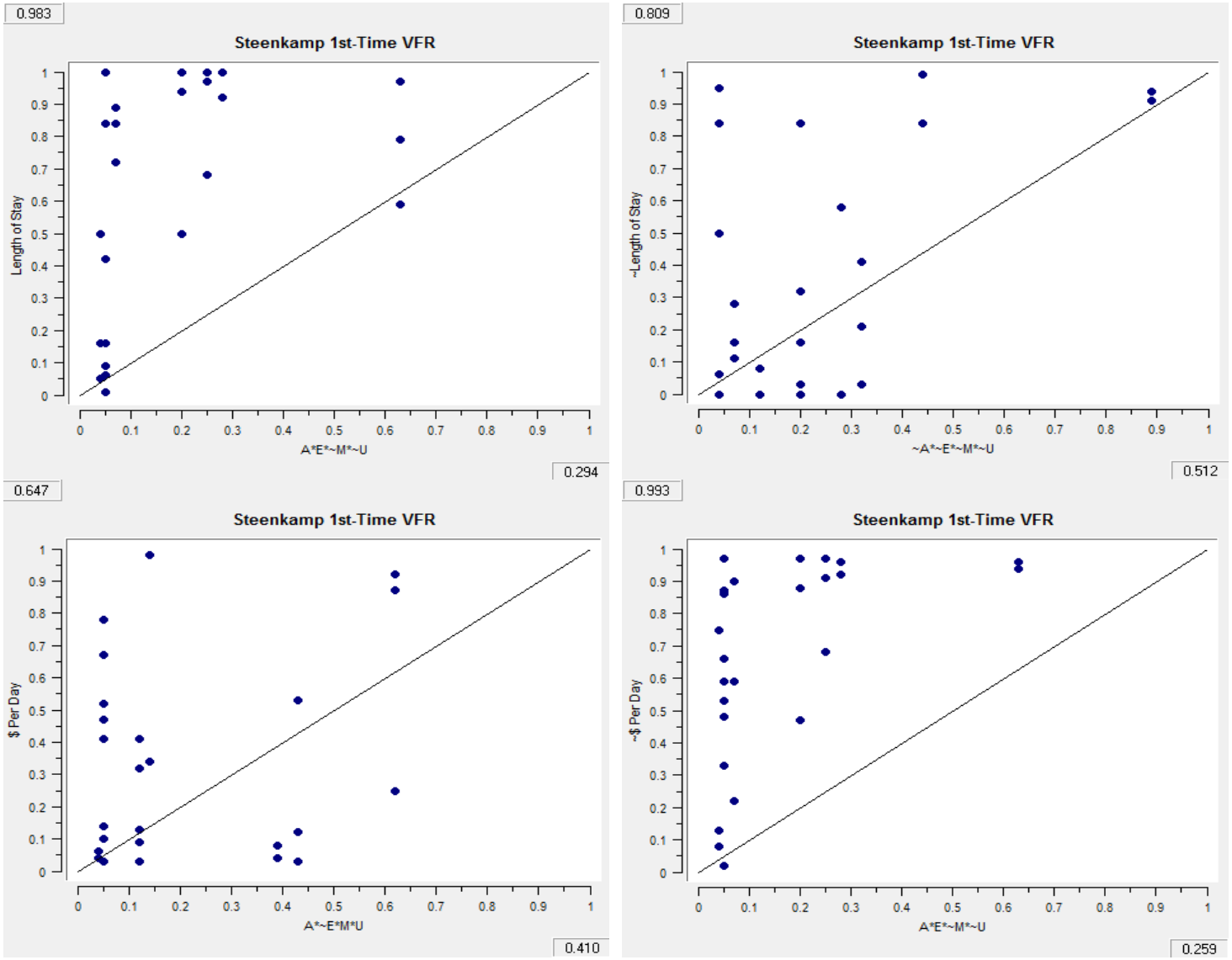

1.000
Steenkamp American Data
# of States Visited
E*M*U
0.301
0.815
Steenkamp American Data
~# of States Visited
A*~E*U
0.638
0.943
Steenkamp American Data
Pre-Trip Planning
A*~E*M
0.453
0.821
Steenkamp American Data
~Pre-Trip Planning
~A*~E*~M
0.588

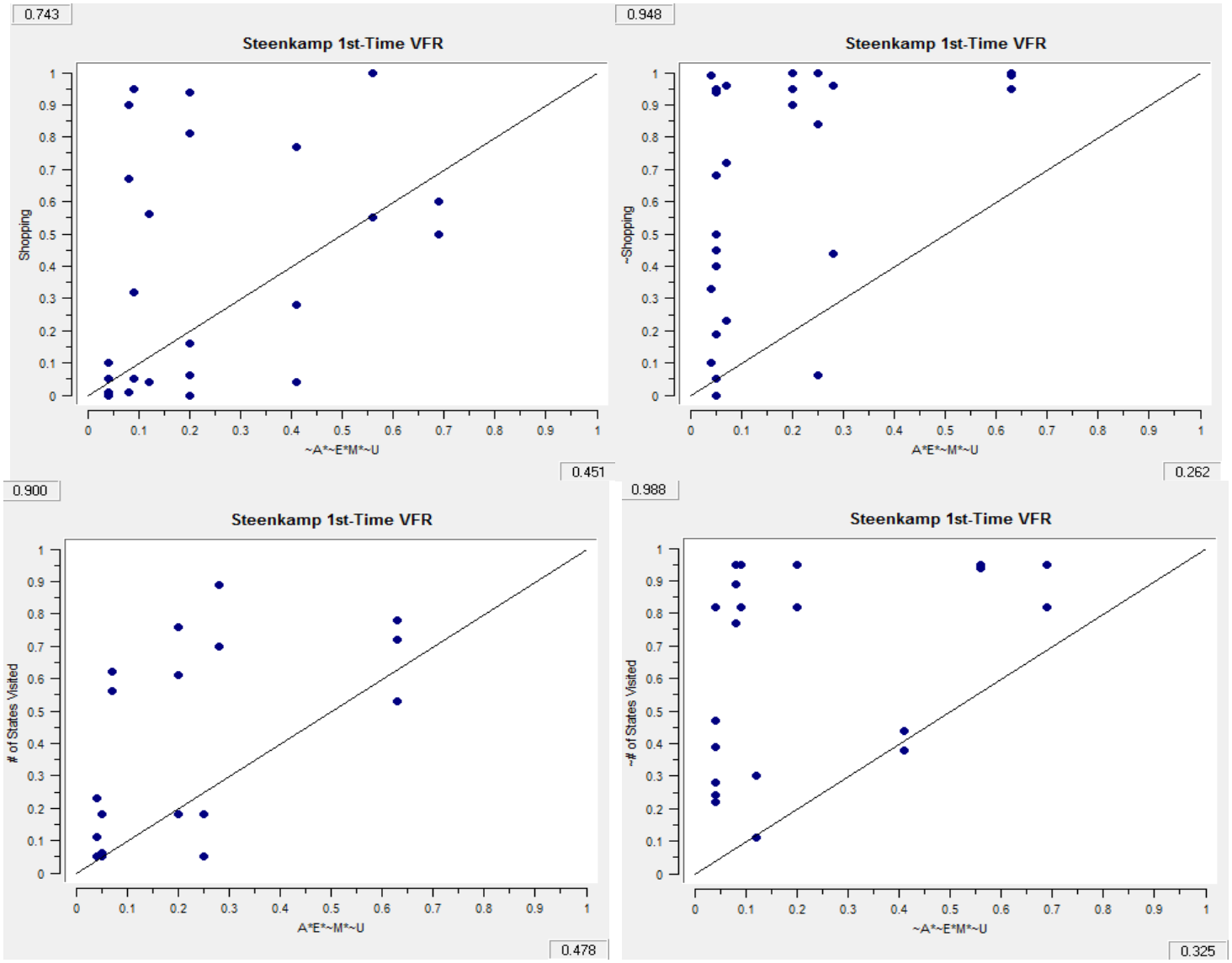
Appendix Q: Steenkamp's Best Fitting Models for First-Time Holiday Visitors to Australia



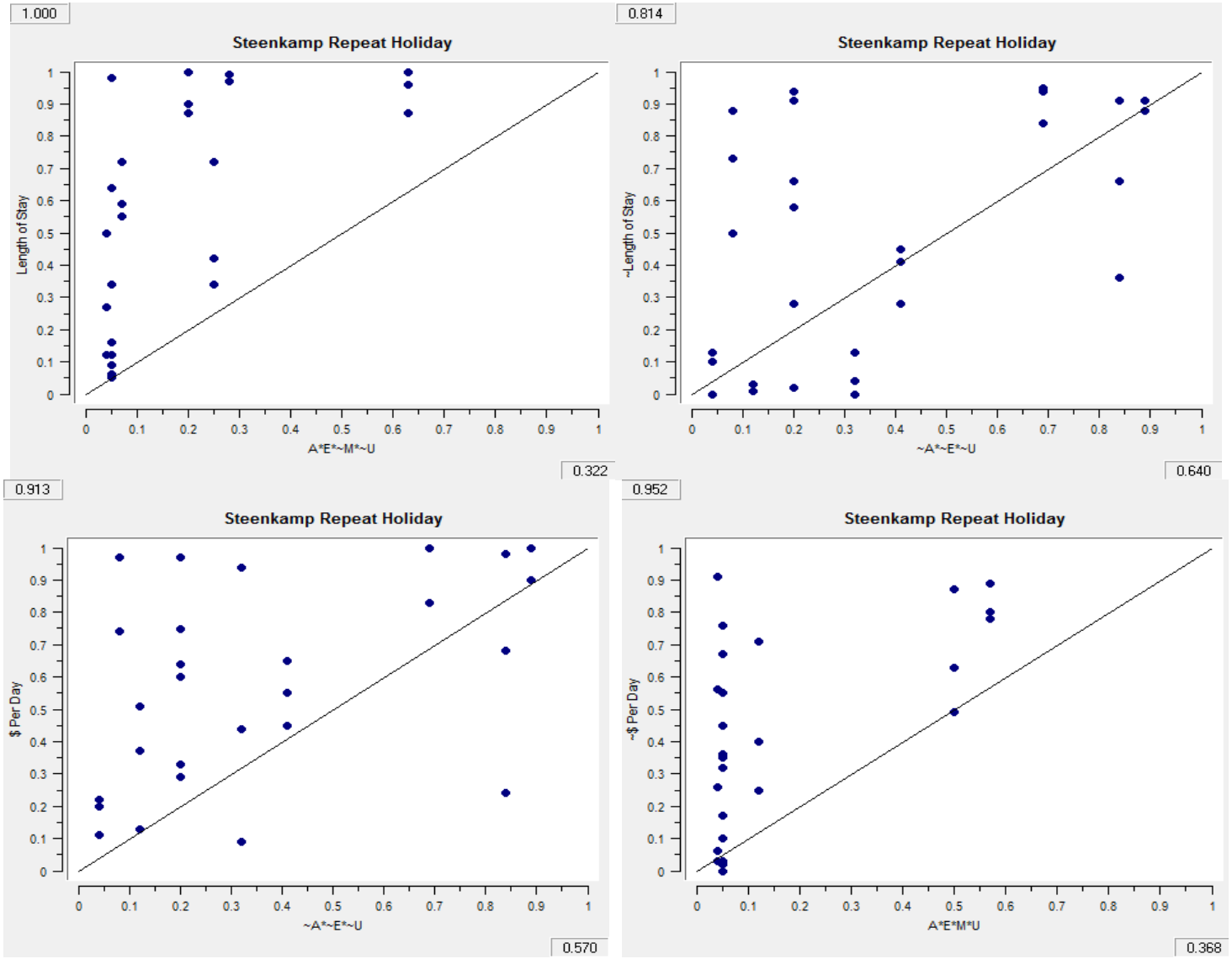

0.810
Steenkamp 1st-Time Holiday
Shopping
~A*~E*~M*U
0.298
0.972
Steenkamp 1st-Time Holiday
~Shopping
A*E*~M*~U
0.328
0.918
Steenkamp 1st-Time Holiday
# of States Visited
A*~M
0.390
0.788
Steenkamp 1st-Time Holiday
~# of States Visited
~A*~E*~U
0.607

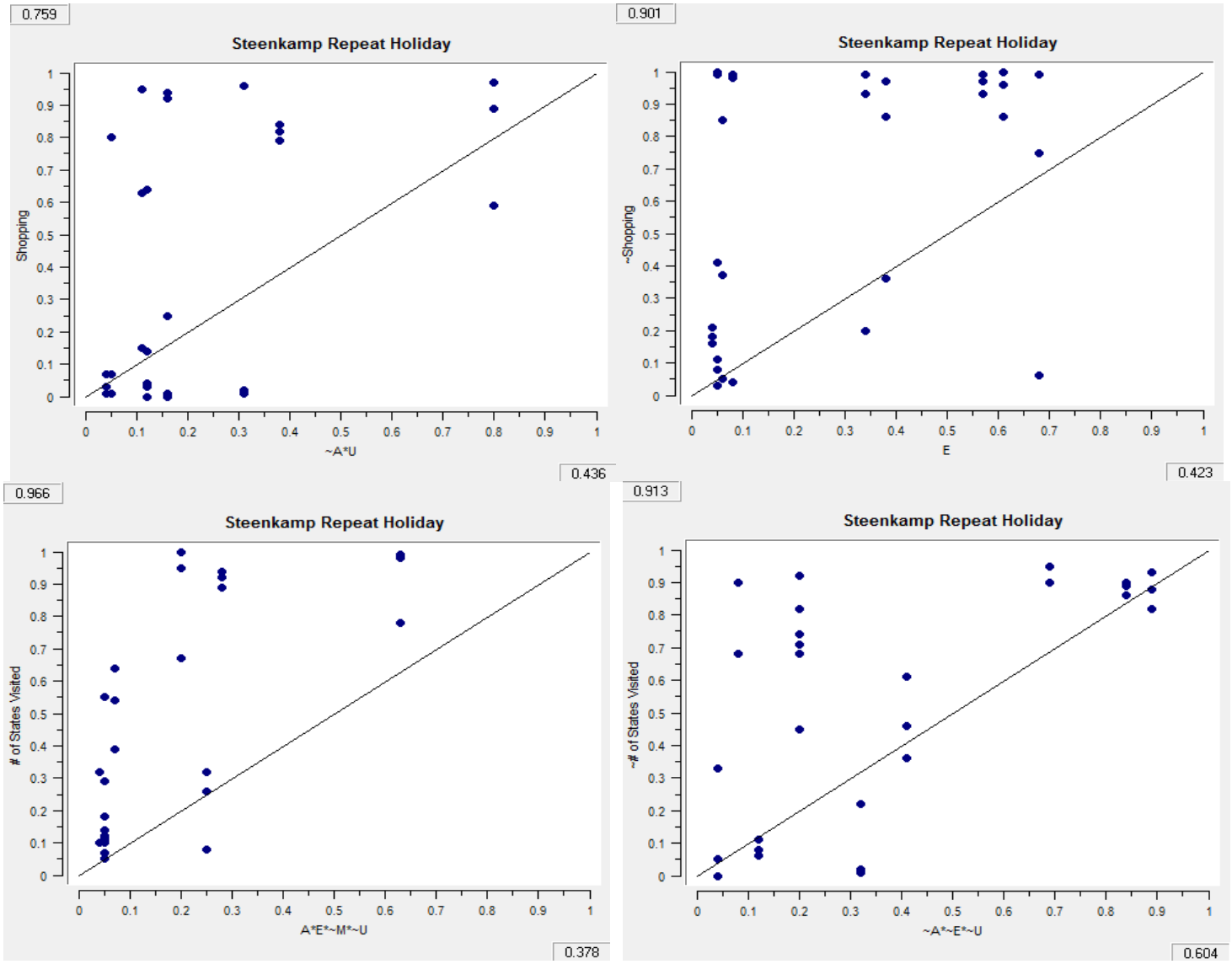
Appendix R: Steenkamp's Best Fitting Models for First-Time VFR Visitors to Australia



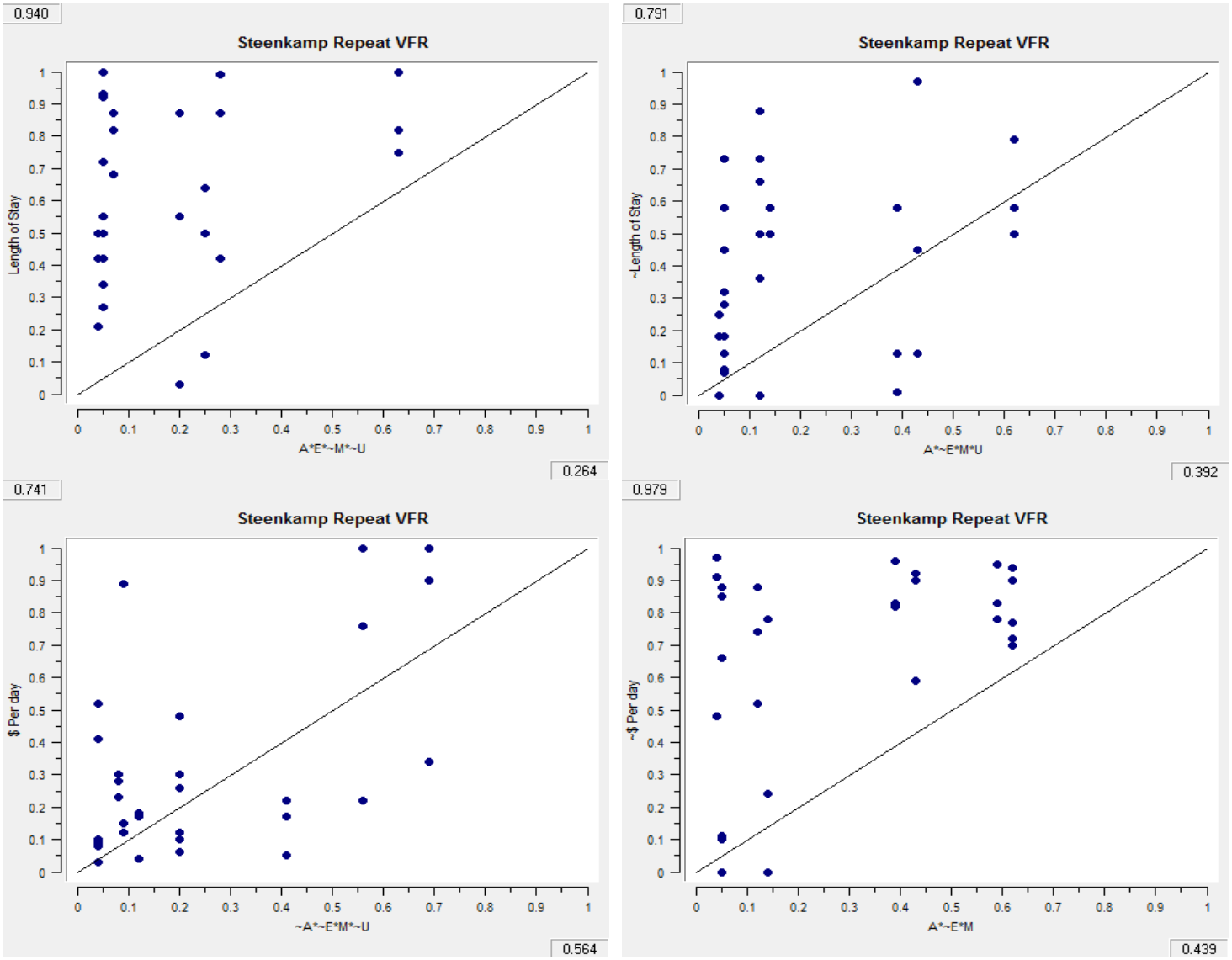

0.743
Steenkamp 1st-Time VFR
Shopping
~A*~E*M*~U
0.451
0.948
Steenkamp 1st-Time VFR
~Shopping
A*E*~M*~U
0.262
0.900
Steenkamp 1st-Time VFR
# of States Visited
A*E*~M*~U
0.478
0.988
Steenkamp 1st-Time VFR
~# of States Visited
~A*~E*M*~U
0.325

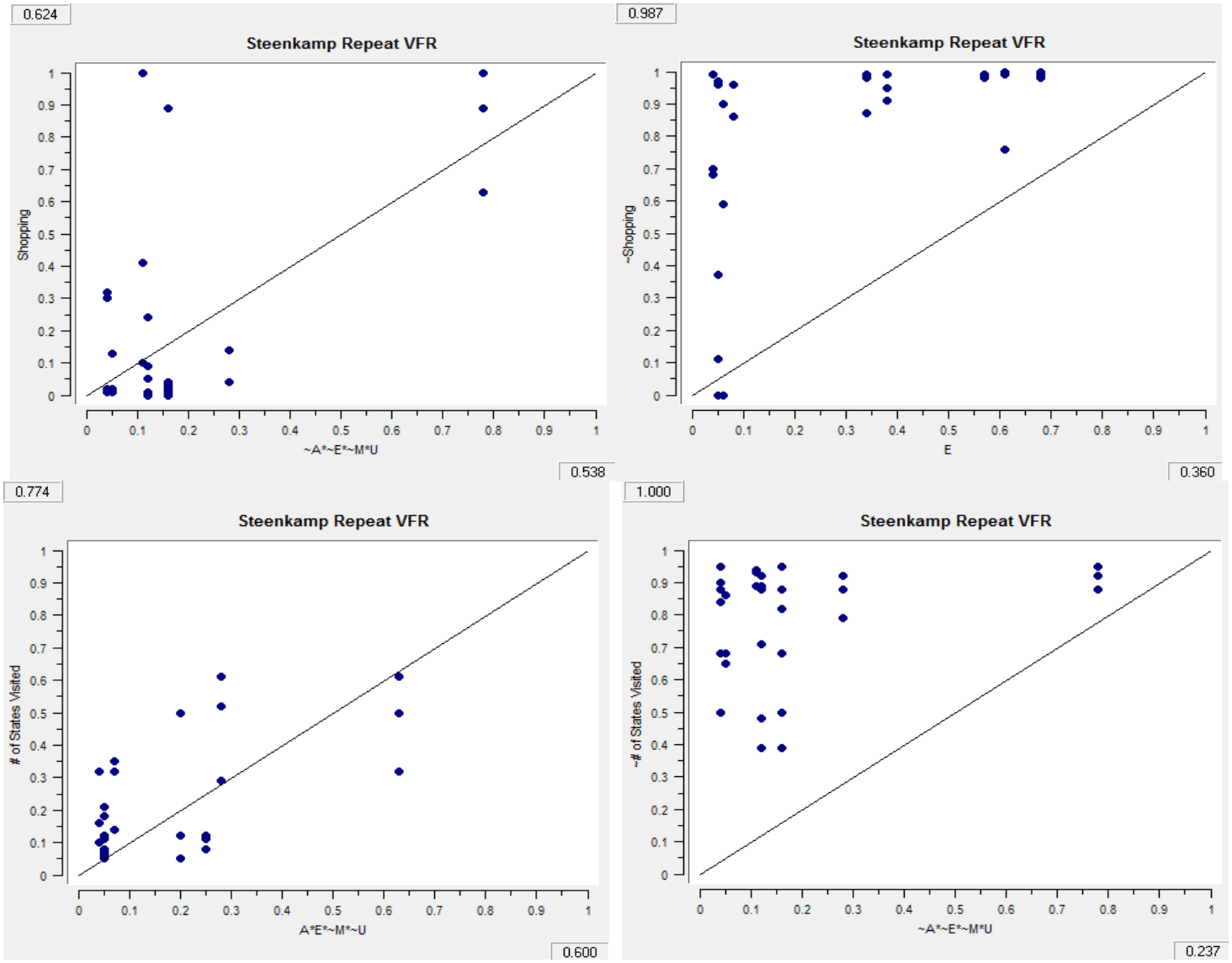
Appendix S: Steenkamp's Best Fitting Models for Repeat Holiday Visitors to Australia



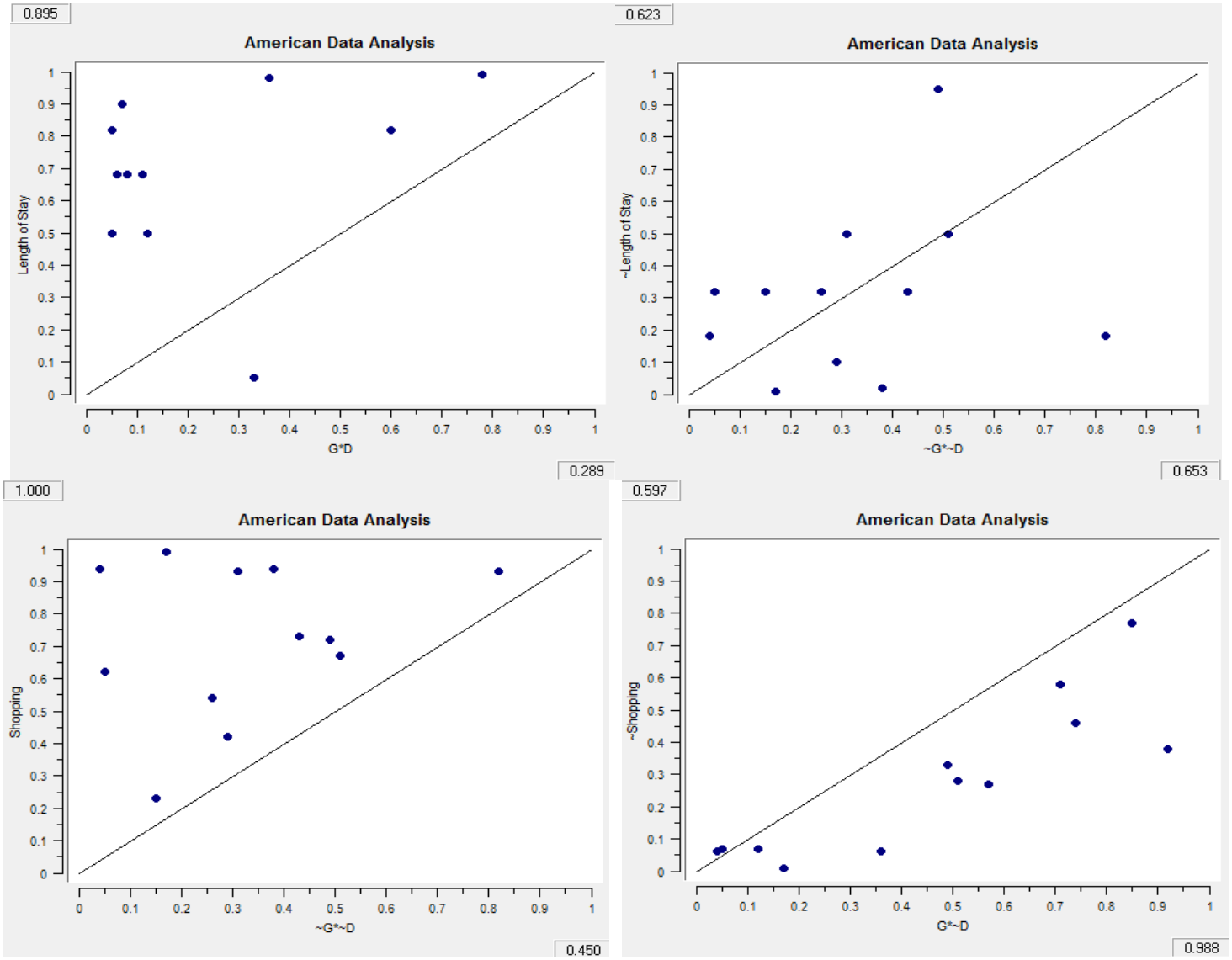

0.759
Steenkamp Repeat Holiday
Shopping
~A*U
0.436
0.901
Steenkamp Repeat Holiday
~Shopping
E
0.423
0.966
Steenkamp Repeat Holiday
# of States Visited
A*E*~M*~U
0.378
0.913
Steenkamp Repeat Holiday
~# of States Visited
~A*~E*~U
0.604

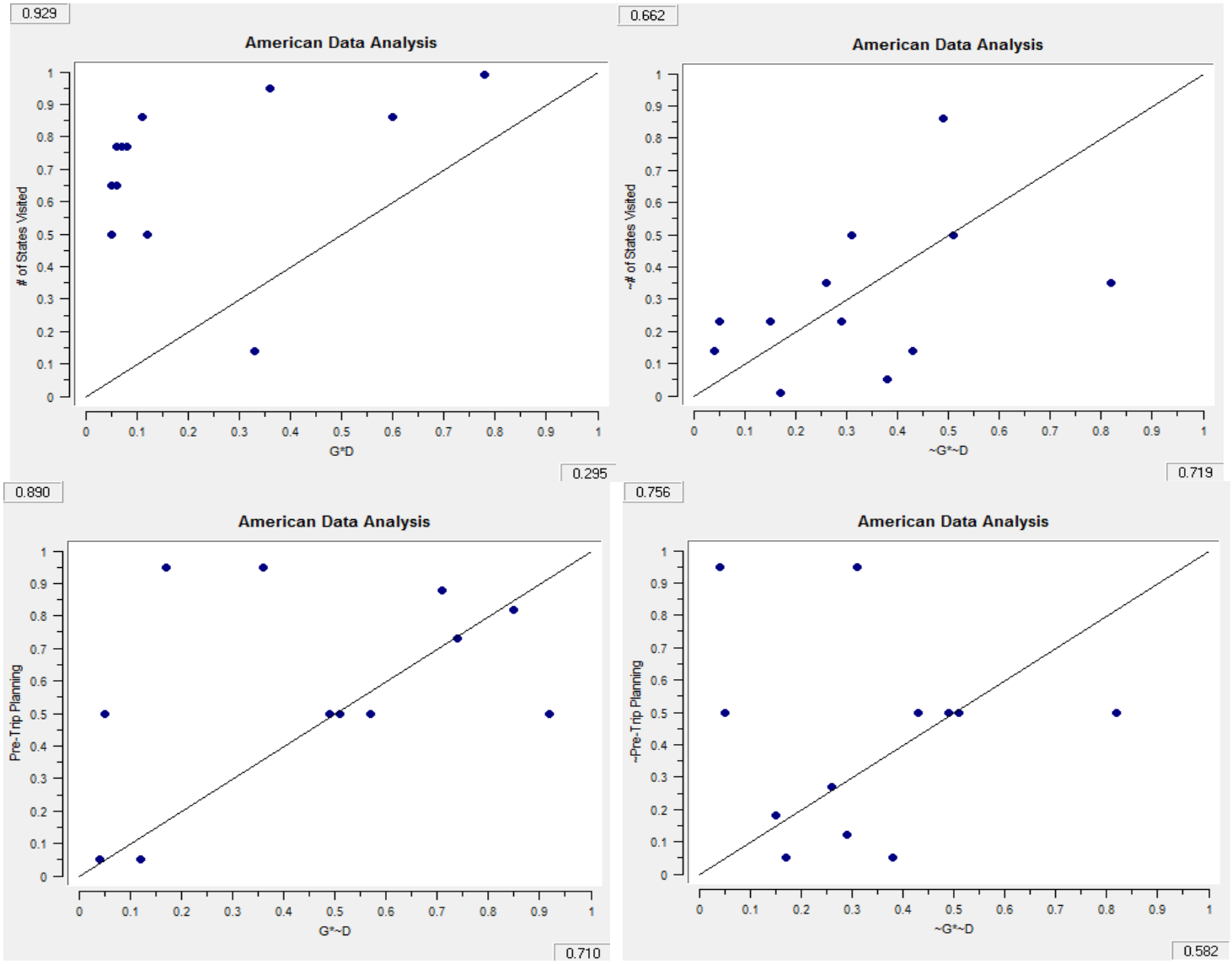
Appendix T: Steenkamp's Best Fitting Models for Repeat VFR Visitors to Australia



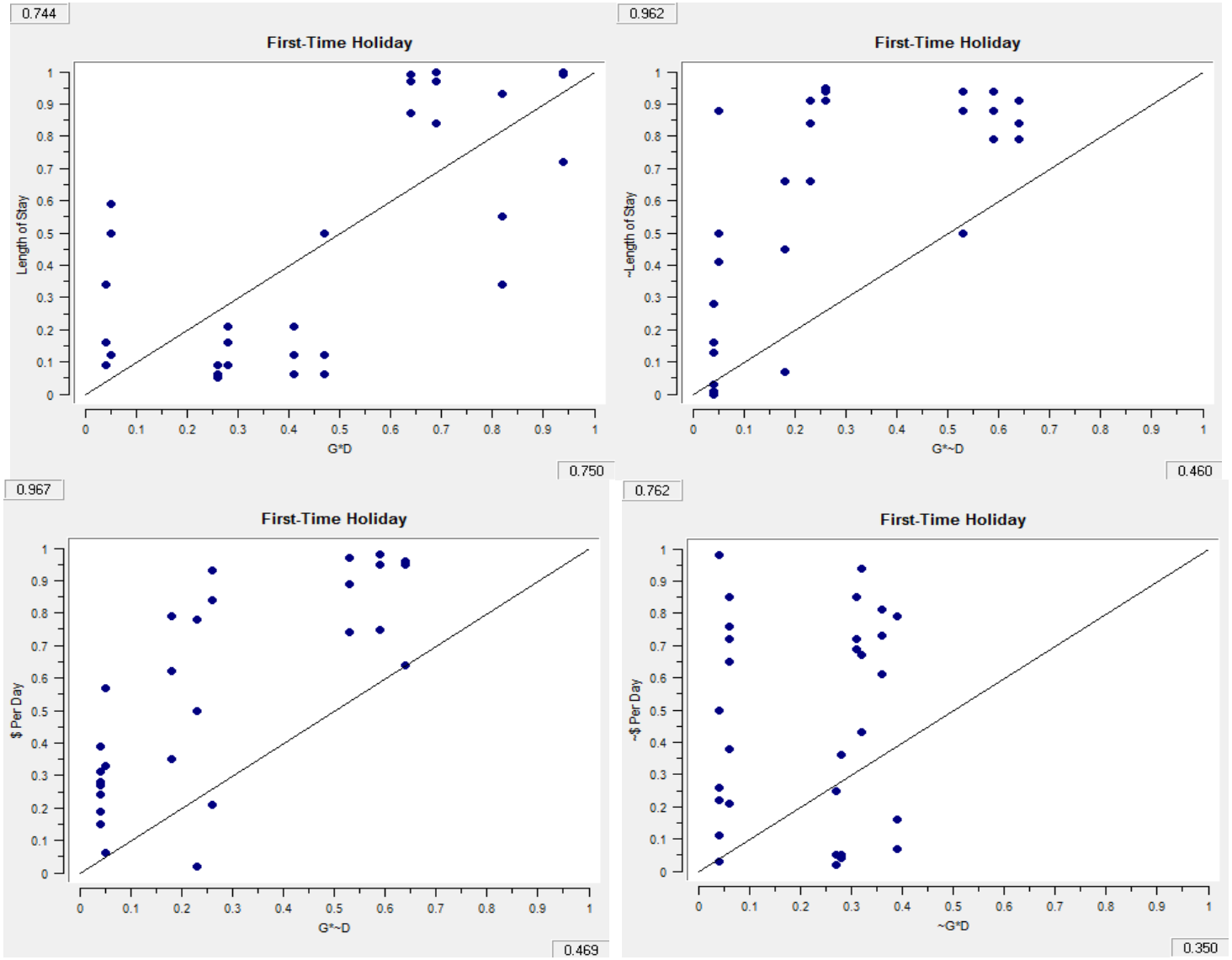

0.624
Steenkamp Repeat VFR
Shopping
~A*~E*~M*U
0.538
0.987
Steenkamp Repeat VFR
~Shopping
E
0.360
0.774
Steenkamp Repeat VFR
# of States Visited
A*E*~M*~U
0.600
1.000
Steenkamp Repeat VFR
~# of States Visited
~A*~E*~M*U
0.237

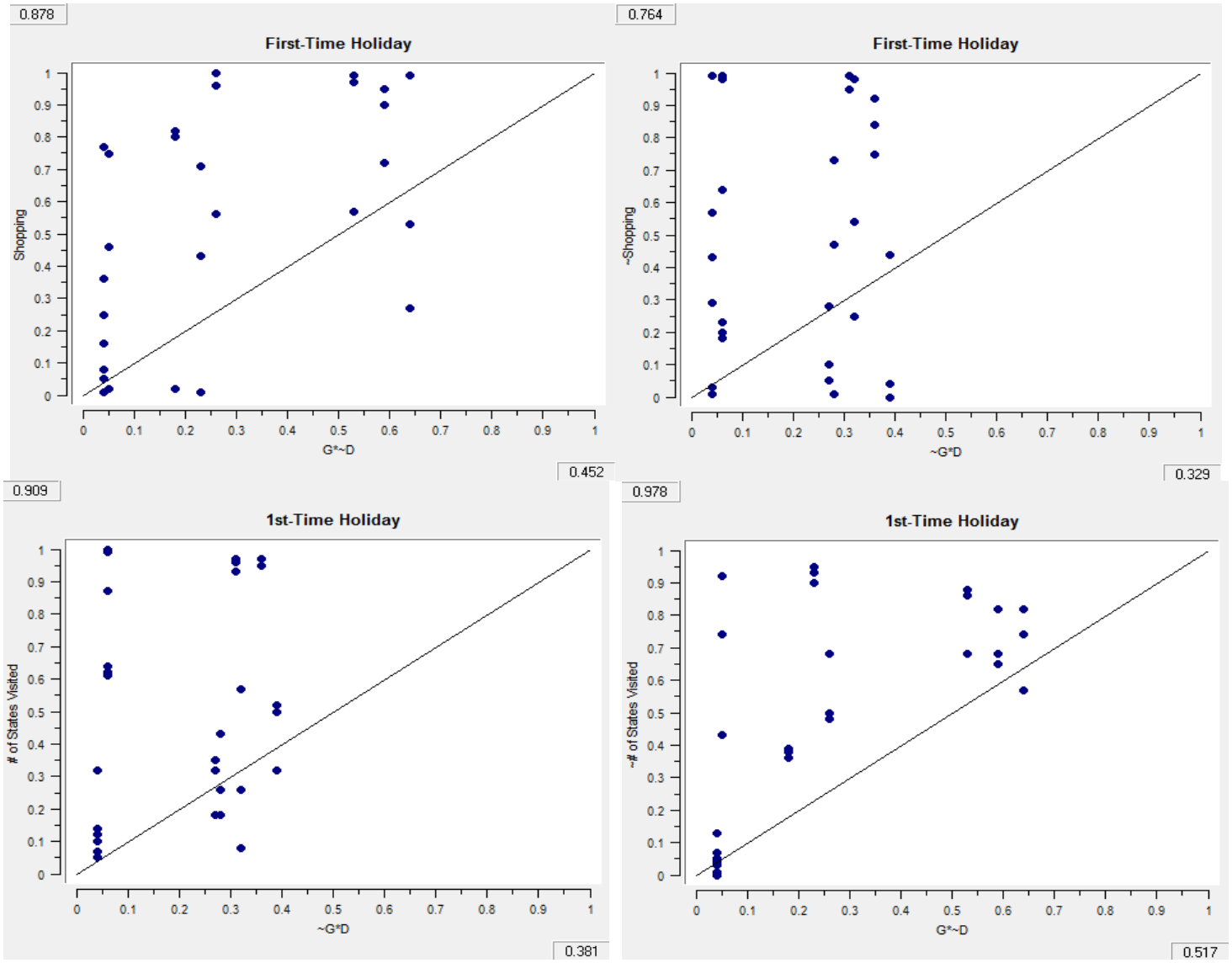
Appendix U: G·D's Best Fitting Models for Visitors to USA



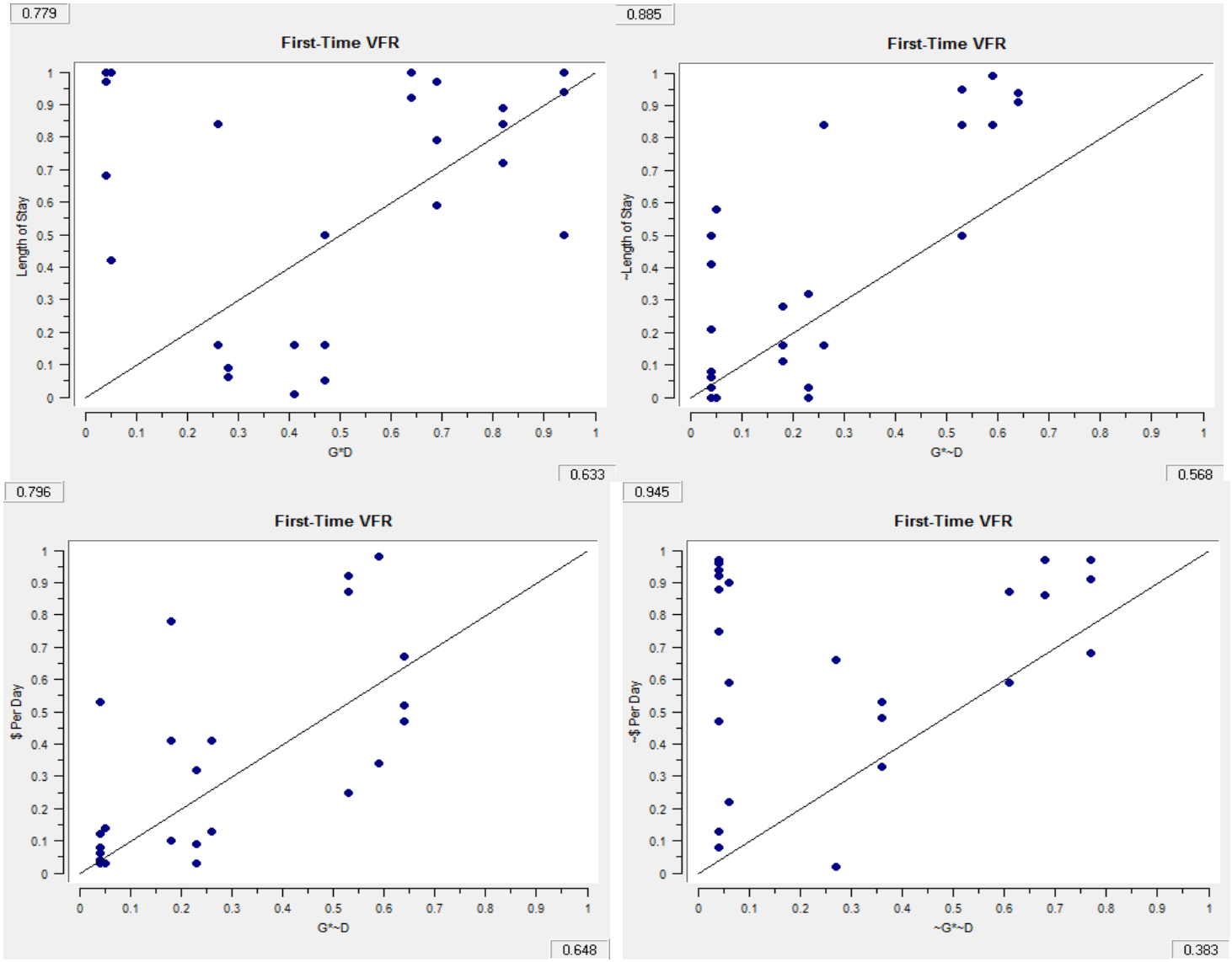

0.929
American Data Analysis
# of States Visited
G*D
0.295
0.662
American Data Analysis
~# of States Visited
~G*~D
0.719
0.890
American Data Analysis
Pre-Trip Planning
G*~D
0.710
0.756
American Data Analysis
~Pre-Trip Planning
~G*~D
0.582

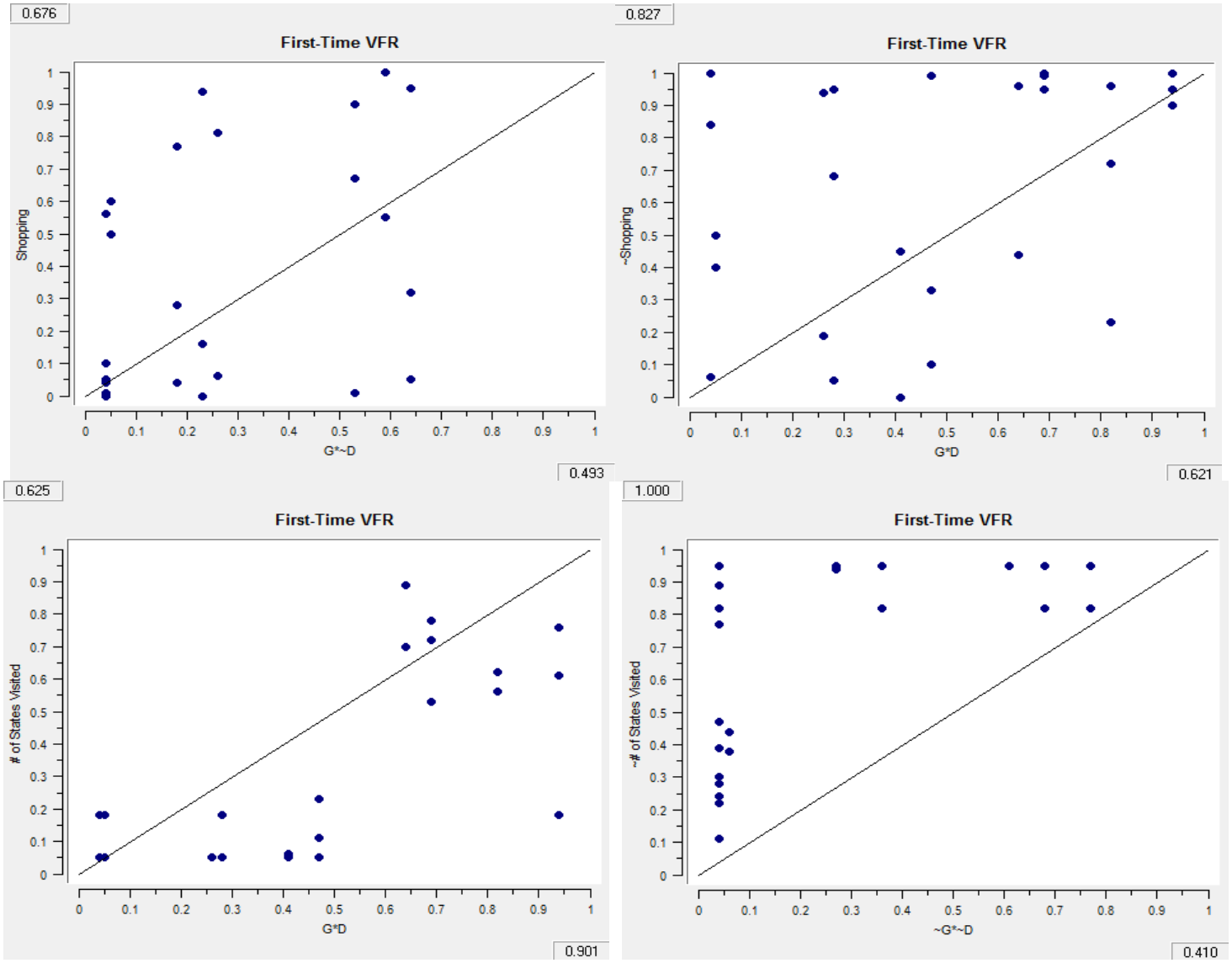
Appendix V: G·D's Best Fitting Models for First-Time Holiday Visitors to Australia



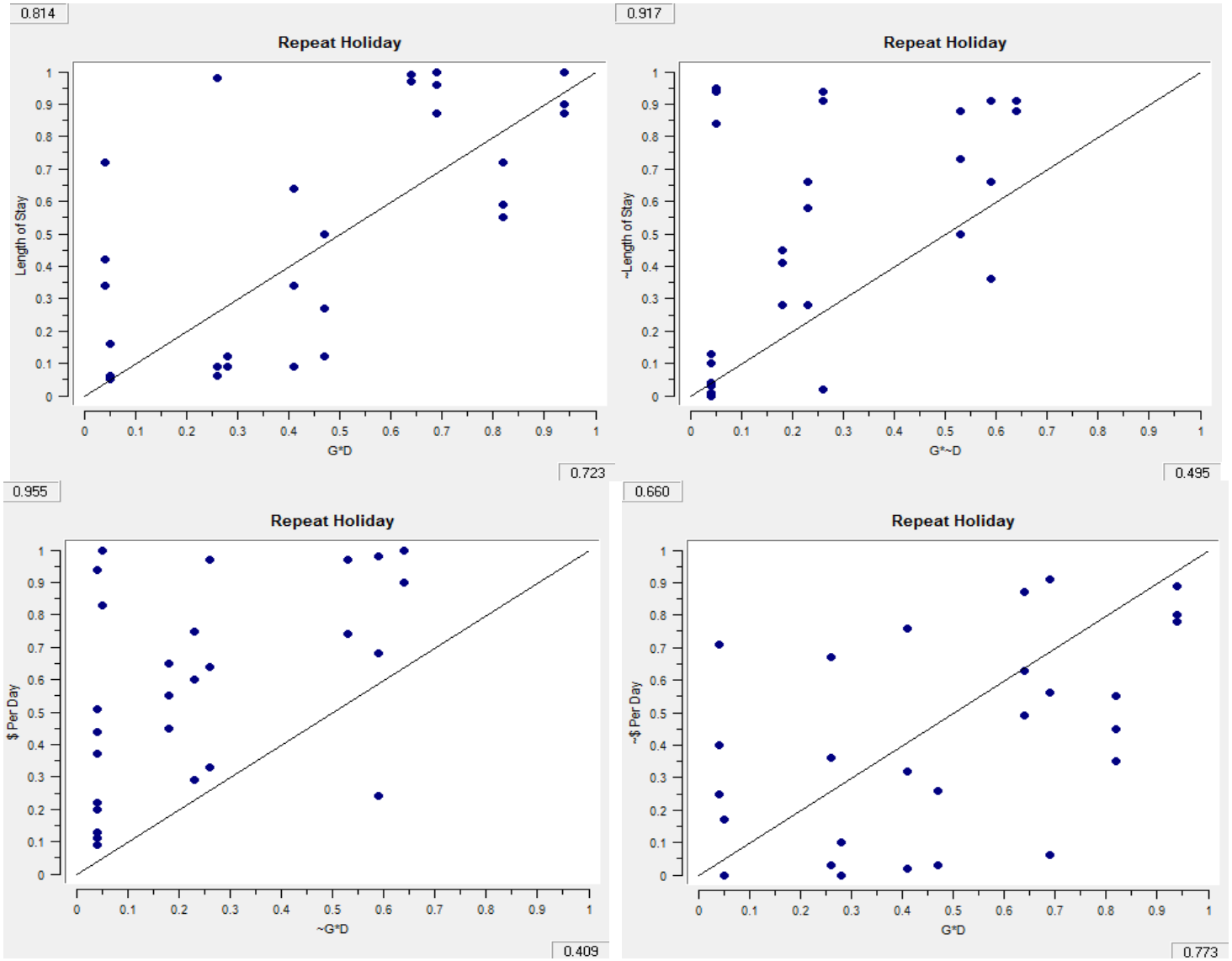

0.878
First-Time Holiday
Shopping
G*~D
0.452
0.764
First-Time Holiday
~Shopping
~G*D
0.329
0.909
1st-Time Holiday
# of States Visited
~G*D
0.381
0.978
1st-Time Holiday
~# of States Visited
G*~D
0.517

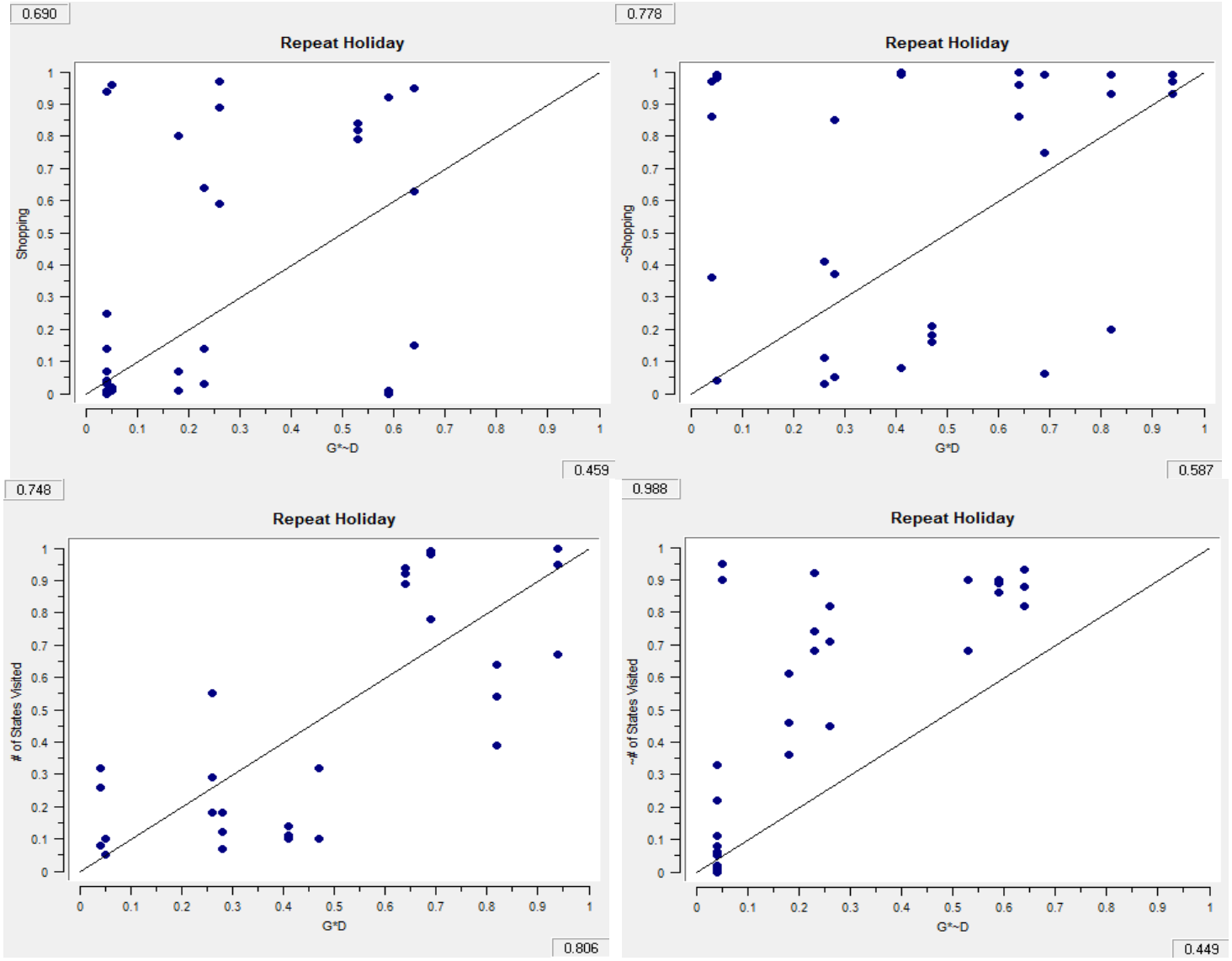
Appendix W: G·D's Best Fitting Models for First-Time VFR Visitors to Australia



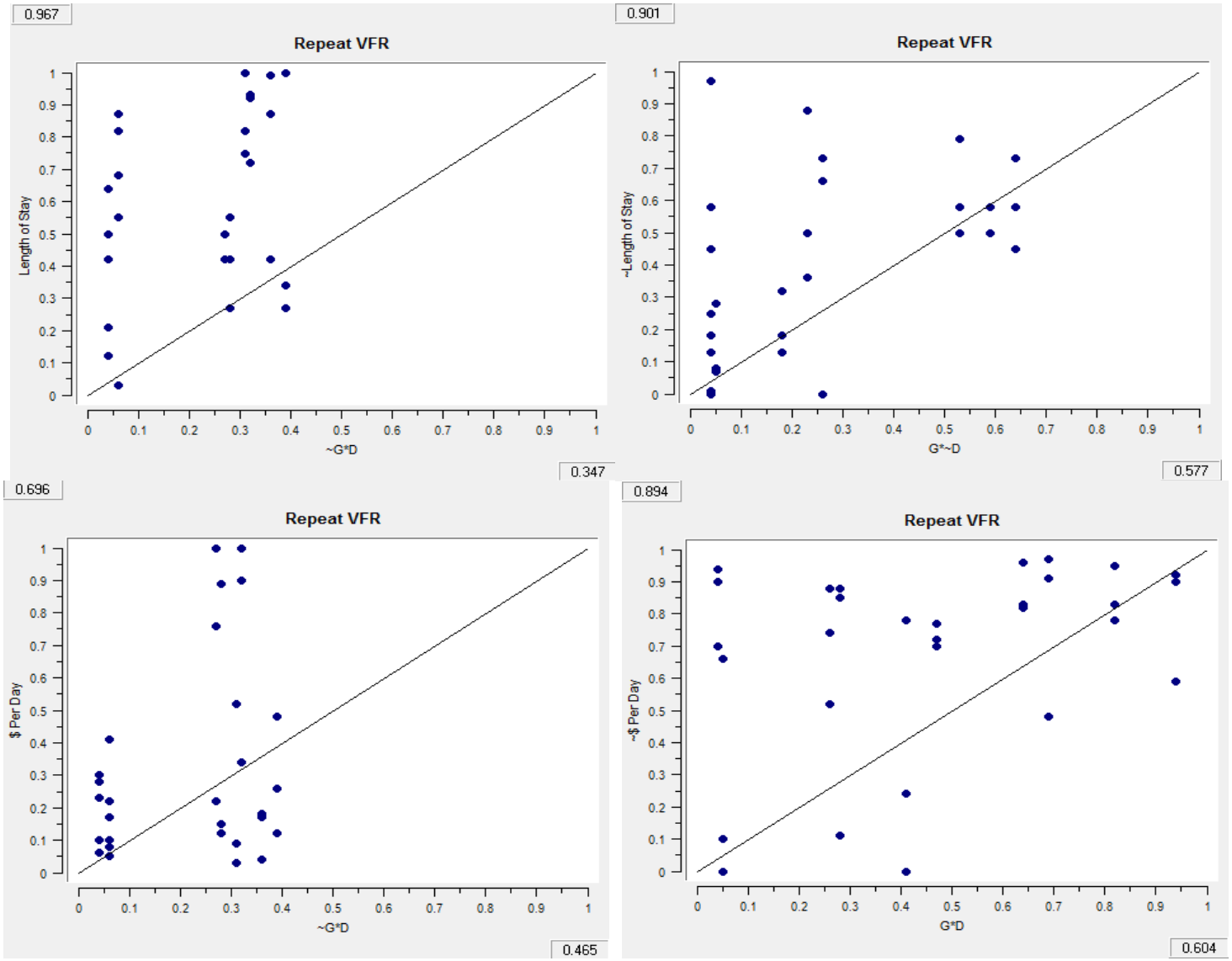

0.676
First-Time VFR
Shopping
G*~D
0.493
0.827
First-Time VFR
~Shopping
G*D
0.621
0.625
First-Time VFR
# of States Visited
G*D
0.901
1.000
First-Time VFR
~# of States Visited
~G*~D
0.410

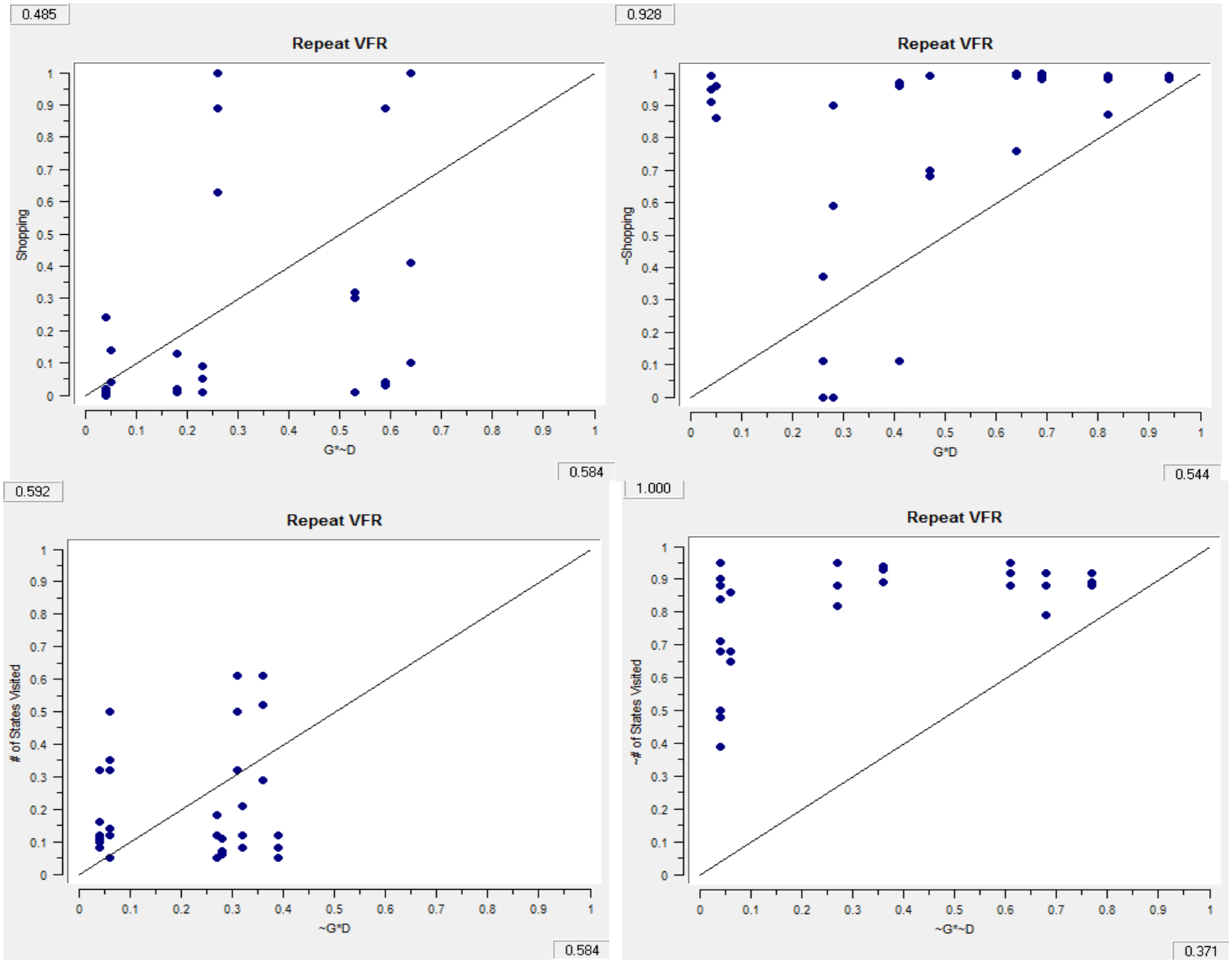
Appendix X: G·D's Best Fitting Models for Repeat Holiday Visitors to Australia




0.690
Repeat Holiday
Shopping
G*~D
0.459
0.778
Repeat Holiday
~Shopping
G*D
0.587
0.748
Repeat Holiday
# of States Visited
G*D
0.806
0.988
Repeat Holiday
~# of States Visited
G*~D
0.449

Appendix Y: G·D's Best Fitting Models for Repeat VFR Visitors to Australia




0.485
Repeat VFR
Shopping
G*~D
0.584
0.928
Repeat VFR
~Shopping
G*D
0.544
0.592
Repeat VFR
# of States Visited
~G*D
0.584
1.000
Repeat VFR
~# of States Visited
~G*~D
0.371