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Propensity to shop: Identifying who shops til they drop

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Abstract

Tourist shopping expenditure is a vital ingredient which contributes significantly to the gross domestic product (GDP) of the nation. Past research has stressed the importance of specific demographic variables related to shopping behaviour; however, it has not included interactions between or configurations among demographic variables, shopping related psychographics, and shopping destinations. This study seeks to address that gap. The data was collected from a large representative sample of 26,686 Australian domestic short-stay visitors. Binary logistic regression found that demographic variables and their specific interactions were significantly related to tourist shopping behaviours as well as psychographics, trip motivation and their shopping destination propensity, when tested simultaneously. The findings assist destination marketing managers to identify and target specific domestic short-stay tourist shoppers.

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Keywords: shopping behaviour, domestic short-stay visitors, Australian tourist destinations, segmentation, demographics, psychographics

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1. Introduction

Tourist expenditure represents a significant proportion of gross domestic product (GDP) for most nations. For example, figures released by the World Travel and Tourism Council (2011) illustrate and conclude that the world travel and tourism total contributions to GDP is forecast to US$ 5,991.9 billion in 2011, and the Australian travel and tourism component is forecast to be AUD$ 187.1 billion to GDP in total. As in many countries, tourism is very important to Australia; and in particular, regional tourism. This sector accounted for 52 per cent of domestic tourism expenditure and 22 per cent of international visitor expenditure (Department of Foreign Affairs and Trade (DFAT), 2010). It is of interest and worth of further study that, while the world economic downturn and financial crisis have resulted in a consumption expenditure decrease by domestic visitors in Australia, the international visitor consumption expenditure has slightly increased (Tourism Queensland, 2009).

According to Tourism Research Australia (2009), domestic tourism activity, which contributes 74 per cent to the tourism industry's gross domestic product (GDP), has steadily contracted over the last 11 years, at the average falling rate of 0.7 per cent annually. Australian domestic overnight trips have decreased on average 1.0 per cent each year and domestic visitor nights have also decreased on average 1.2 per cent each year (Tourism Research Australia, 2009). The underlying causes may be uncontrollable economic and financial factors, changes in government tourism policy/support, including promotional activities, state/territory tourism campaigns and local tourism business marketing activities. Therefore, the decrease in Australian domestic tourism expenditure highlights the need to

better understand of the importance to increase domestic tourism expenditure. Tourism organisations, either operate via the government, private or public enterprises, need to employ alternative strategies/approaches to attract more tourists to visit the destinations and in addition to induce and promote higher spending on each trip.

An increase in shopping tourism is an important component generating this increase in tourism expenditure and reversing recent trends. For example, a recent report from Tourism Research Australia (2010) indicates that 80 per cent of international visitors indulge in shopping for pleasure, while only 33 per cent of domestic visitors go shopping when they travel. Shopping, including gifts and souvenirs, accounted for over $12 billion in visitor expenditure in 2007-2008 or 14.1 per cent of all visitor expenditures in Australia, according to the Department of Resources, Energy and Tourism (DRET) (2009), consistent with past tourism research. For example, Lawson (1991) found that international visitors to New Zealand spent 41.4 per cent of their total expenditure on shopping. Similarly, Heung and Qu (1998) found 50.8 per cent of foreign visitors' expenditure was on shopping in Hong Kong. However, there is lack of research studying the impact of combinations of demographic variables such as gender, age, income, and life cycle on shopping behaviour and limited research on the relationship between psychographic variables (attitudes, interests and opinions (AIOs)) and visitor motivation on holiday shopping activity.

Shopping is considered as an enjoyable pastime for many tourists and visitors. It is also a lucrative source of income in many tourist destinations, particularly at destinations that are extremely well-known for value or exclusive shopping. Therefore, there are considerable differences among tourist shoppers' propensity to shop and the comparison of destinations on visitor/shopper penetration are also valuable to study. The outcomes will help to provide a better understanding of specific target market for specific destinations including travel and tourism related businesses.

This study informs current understanding of domestic short-stay tourist shoppers and their travel and shopping behaviour. For the first time, this study examines the relationships between tourist shopping behaviours and interactions of demographic variables, shopping related psychographic variables, holiday motivation and shopping destinations in the specific domestic short-stay market. The study also investigates the propensity of domestic short-stay tourist shoppers to shop at particular destinations. Domestic short-stay tourist shoppers are defined as those visitors who shop on their domestic short-stay of one-to-three-day vacations. Domestic short-stay vacations are necessarily place- and time- constrained. The authors believe that tourists, who allocate precious holiday time to shopping, are certainly committed to the activity. Studying domestic short-stay tourist shoppers will help domestic destination marketing managers gain a better understanding of the behaviour of domestic vacation visitors/shoppers and develop better marketing programs to attract these potential customers.

This study provides a literature review of tourism shopping in general and segmentation in tourist shopping behaviour to demonstrate the gap in this field, followed by a description of the data set and methodology, data analysis using binary logistic regression, insightful discussion and findings to fill research gap, and concludes with research implications and limitations of this study.

2. Literature Review

2.1 General Tourism Shopping

Tourism consumption and expenditure, in particular tourism shopping has attracted the interest of many scholars and practitioners due to the significant impact on and contribution of shopping to the national economy, the tourism industry and the retail sector (Dimanche, 2003; Kent et al., 1983; Keown, 1989; Heung and Qu, 1998; Kim and Littrell,

1999; Law and Au, 2000; Lawson, 1991; Park et al., 2010; Swanson, 2004; Yu and Littrell, 2003; Yuksel, 2004).

Kent et al. (1983) indicated that shopping was not mentioned among the most important reasons for travelling. No one recognised the important impact and contribution of shopping to the tourism industry at that time. Some travellers might have mentioned it, but not as a main reason or motivation for travel. Moreover, the past research had not included shopping or considered it to be a major holiday activity or travel motivation. However, this view of shopping has changed in travel and tourism field as researched by Jansen-Verbeke (1991). Her view was "leisure shopping as a tourist activity has always existed, but the shopping element has recently become an important instrument in the promotion of tourist places, even the solution for marketing tourism in places with a rather weak tourism profile" (Jansen-Verbeke, 1991, p. 10). In addition, she concluded that where shopping is a focus in tourism promotion, it needs to include the uniqueness and experience of a "shopping paradise" (i.e., where tourists perceive the destination as having a good variety of products and bargain prices or value for money) as a destination image, and such destinations are becoming more competitive.

Shopping is becoming more of a focus, varied only in the creation of destination images and competitive advantage. Shopping is a tourist attraction for many destinations such as Dubai, Hawaii, Hong Kong, Las Vegas, Singapore, St. Paul-Minneapolis (Minnesota), and Thailand. Many destinations are considered to be a shopping paradise (Dimanche, 2003; Keown, 1989; Heung and Cheng, 2000; Heung and Qu, 1998; Lehto et al., 2004; Mak et al., 1999; Park et al., 2010; Wong and Law, 2003). For example, Hawaii is well-known among Japanese tourists as a "shopping paradise" for good quality products in combination with lower prices. Keown (1989, p. 32) found that almost 50 per cent of desired products purchased by Japanese tourists in Hawaii had lower prices than Japan. Hong Kong and

Singapore are other popular shopping destinations. Mak, Tsang and Cheung (1999) studied Taiwanese tourists who visited Hong Kong and Singapore on their shopping criteria, experience, spending patterns, preference and behaviour to see which country is more popular. They found the differences among those places in terms of range of merchandises and honesty of retailers; and the similarity in terms of product and service quality. Similarly, Yeung, Wong and Ko (2004) presented international tourists' profiles which identified shopping expectations and shopping experiences when visiting Hong Kong and Singapore. The authors found similar conclusion to Mak et al. (1999) in terms of comparative advantage of Hong Kong over Singapore, which was not significantly different. In other words, Hong Kong was rated as dissatisfactory in terms of price and value for money for tourists in their study. In addition, Hong Kong itself as a shopping destination is becoming of interest in terms of shopping satisfaction and experience by some authors (e.g. Heung and Cheng, 2000; Wong and Law, 2003).

More shopping related studies including cross-border shopping, tax free shopping destinations and retail shopping are increasing as identified in recent research by authors such as Law and Au (2000), Dimanche (2003), and Rajagopal (2006).

Higher importance and considerations are now applied in analysing shopping behaviours this component has become an increasingly important factor in the motivation to travel (Correia et al., 2007; Rosenbaum and Spears, 2009; Sangpikul, 2008; Sirakaya et al., 2003; Yuksel, 2004) and as a holiday activity (Frost, 2006; Hsieh et al., 1992; Kent et al., 1983; Kim and Jogaratnam, 2003; Mak et al., 1999; Moscardo, 2004).

To date, shopping is viewed as having multiple roles in tourism (e.g., Dimanche, 2003; Heung and Qu, 1998; Jansen-Verbeke, 1991). The roles include (1) a tourism resource, (2) a major source of income from foreign visitors, (3) a powerful attraction to induce and

deliver visitors to the destination, for example, Hong Kong, (4) the main reason for travel, (5) the generation of sales income, (6) an important travel activity and (7) an integral part of many visitors' experience. However, knowledge of tourist shopping behaviour is still lacking (Kemperman et al., 2009; Lehto et al., 2004; Yuksel, 2007).

Given the benefits of shopping tourism, many scholars have attempted to discover the predictors that explain tourism shopping and shopping behaviour. For example, Kim and Littrell (1999) proposed a model to predict souvenir buying intentions which include personal values (hedonic value and world-mindedness), attitude toward other cultures, tourism styles (ethnic tourism and recreational tourism), souvenir attitude and purchase intentions. The model explained that personal values and attitudes toward other cultures assist in predicting two different travel patterns of recreational tourism and ethnic tourism and tourist's pleasure desire also assists to predict the likelihood of participation in recreational travel activities (Kim and Littrel, 1999, p. 160). In addition, other researchers have profiled types of shoppers in tourism, for example, Kent et al. (1983), Moscardo (2004), and Park et al. (2010), which discussed in the next section.

2.2 Segmentation in Tourism Shopping

Many research studies have categorised tourism shopping and provided insights for market segmentation. A prior or commonsense segmentation by Dolnicar (2007) is very helpful in categorising tourism shopping research studies. Researchers (e.g., Kent et al., 1983; Littrell et al.,1993; Moscardo, 2004) measured shopping as a destination attraction and investigates the role of shopping in the tourists' choice of destination.

A recent study of luxury shopping in tourism by Park et al. (2010) categorised tourists-shoppers in Miami, USA, according to the frequency and importance of shopping: infrequent shoppers (do not shop often or at all), sometimes shoppers (shop sometimes), and

frequent shoppers (shop often); and non-shoppers (not important), neutral shoppers (indifferent toward shopping), and great shoppers (important/very important). The study found the differences in this category of luxury shopping behaviour. The study only emphasised on types of shoppers' views towards products' characteristics, travel products, venues and destinations. However, it did not consider the important role of demographic interactions and psychographic variables in shopper categorisation.

Other studies in shopping tourism considered the nationalities of visitors when analysing their shopping behaviours, such as Japanese visitors (Keown, 1989; Rosenbaum and Spears, 2009; Sangpikul, 2008; Sirakaya et al. 2003), Singaporean visitors (Keng and Cheng, 1999), Taiwanese visitors (Mak et al., 1999), American visitors (Kent et al., 1983; Oh et al., 2004; Rosenbaum and Spears, 2009; Rosenbaum and Wong, 2007), Canadian visitors (Carmichael and Smith, 2004), French visitors (Jang et al., 2005), and Portuguese visitors (Correia et al., 2007).

A wide range of shopping-related destinations have been studied, but to date only three studies have been conducted in Australia. Moscardo (2004) investigated a popular Australian tourist destination, the far north Queensland region and found 29 per cent of tourist samples ranked shopping as important or very important in destination choice making-decisions. Forty nine per cent shopped for arts and crafts locally and 62 per cent shopped in general (Moscardo, 2004, p. 297). This study divides tourists into four different categories of shoppers by their important ranking of shopping opportunities (serious shoppers, non-shoppers, arts-and-craft shoppers, and not-so-serious shoppers). Gender did not result in significant differences, but age, place of residence and travel companions did in dividing these four shoppers (Moscardo, 2004, p. 208). As expected, the serious shoppers were more likely to visit most of the commercial tourist attractions (e.g. casino and Skyrail) (Moscardo, 2004, p. 302), spent more and stayed longer than other groups (Moscardo, 2004, p. 298).

Laesser and Crouch (2006) studied international tourists' expenditure in Australia regarding their travel companions, trip duration, type of accommodation, country of residence and reasons for travel. They found Asian tourists, especially from India, China, Hong Kong, Singapore, Malaysia, Indonesia and Thailand spent more money than European tourists in total. This study did not provide any specific demographic (such as age, income, gender, life cycle) or psychographic (attitudes, interests and opinions) factors of tourists related to shopping behaviour. Lastly, Frost (2006) studied heritage tourism and the relationship with shopping in the Australian Gold Rush towns of Castlemaine and Maldon. The study only highlighted the importance and benefit of combining heritage tourism and shopping to boost the economics of these two towns. No specific demographic and psychographic data were provided relating to shopping behaviour.

Other segmentation variables, especially socio-demographic, have been utilised to understand and to predict travel behaviours in general (e.g. Anderson and Littrell, 1995; Craggs and Schofield, 2009; Jansen-Verbeke, 1987; 1990; Kattiyapornpong and Miller, 2008; 2009; 2011; Lawson, 1991; Littrell, 1990; Littrell et al. 1993; Littrell et al. 2004; Wang et al., 2006) and in travel shopping behaviour (e.g. Lehto et al., 2004; Oh et al., 2004; Swanson and Horridge, 2004). For example, a study of Taiwanese outbound tourist shopping preferences and expenditure behaviours by Lehto et al. (2004) found that age and gender were important to predict travel expenditure and travel related products, for example, clothes were popular purchases among females and younger respondents respectively. Similarly, Oh et al. (2004, p. 308, 315) found that age and gender were useful predictors in profiling tourist shoppers, for example, female tourists were more interested in shopping for books, music and antiques than male tourists, while tourists aged 51 to 60 years old were more likely to shop more than any other group, especially shopping for books and music.

No previous research has included a model which includes interactions or configurations among demographic variables. The current study examines the relationship between domestic short-stay tourist shopping behaviour and the independent variables of demographics, interactions between demographic variables, trip type and psychographic variables.

3. Method

3.1 Data set

This research utilised data generated from the Roy Morgan Research Centre in Australia. The data was collected from a large representative sample of 46, 127 Australian residents, living in Australia from 2003 to 2006. The sample was continuously collected over a four-year period, which means that samples of lower incidence populations can be accumulated week by week to the desired size, both accurately and economically.

The respondents were selected using a stratified random probability sampling technique to ensure that a correct representation of all Australian states and major metropolitan and country areas were included, namely, Sydney, New South Wales country, including the Australia Capital Territory (Canberra), Melbourne, Victoria country, Brisbane, Queensland country, Adelaide, South Australia country, the Northern Territory, Perth, Western Australia country, and Tasmania. The sample was representative of the Australian population of 14 years old and over.

3.2 Data validity and reliability

Respondents were interviewed by professionally trained interviewers using face-to-face surveys. The interviewing method ensured complete and even coverage across all

electorates, with interviewers visiting different, randomly-selected clusters of dwellings. Only one person per household was interviewed.

After a face-to-face interview, respondents were asked to complete a questionnaire. Re-contacting a proportion the respondents after each round of interviewing was used as a quality control measure. Data was collected anonymously and approved by appropriate review boards. The survey included a wide range of variables, such as media habits, demographics, travel motivations, travel activities, trip type, activities, interests, and opinions travel attitudes and information on travel preferences, travel intentions over the next 12 months and travel behaviour over the last 12 months.

3.3 Data Analysis

The Statistical Package for the Social Sciences (SPSS) was used as the main tool to analyse the data. The total sample size in the dataset was 46,127. Within this sample, 26,686 respondents had taken domestic short-stay holidays within the last 12 months. Of these, 5,070 tourist shoppers (19 per cent) had undertaken domestic short-stay holidays and indicated that they had been involved in shopping activities during their trips, and therefore, they were the focus of this study. Domestic short-stay tourist shoppers were analysed rather than long trip travellers because they were more prevalent and time constrained. Shopping would likely be even more important to those who shopped during a short trip holiday, yet, domestic short-stay tourist shopping behaviour has not been previously investigated.

The analysis investigated the relationships between demographic (gender, age, income, home ownership and life-cycle) and psychographic (attitudes, activities, interests, and opinions and lifestyle) characteristics, domestic shopping destinations and trip types of the short-stay tourist shoppers compared to non shoppers.

Demographic variables, particularly, gender, age, income and life stage and psychographic variables have been discussed in previous research as particularly useful in explaining travel behaviour. Binary logistic regression was conducted to explain shopping behaviour, using the independent variables of age, income, gender and life stage plus two way interactions of gender, age, income and life stage.

The psychographic characteristics of domestic short-stay tourist shoppers were analysed. An extensive battery of Attitudes, Interests and Opinions (AIOs) items was utilised. According to Woodside and Pitts (1976), life-style (attitudes, interests and opinions) information may be more important in predicting foreign and domestic travel behaviour than demographic variables. An original list of 112 Attitudes, Interests and Opinions (AIOs) variables was selected on the basis of relevance to travel and tourism. As there are 112 variables with considerable multicollinearity, it was necessary to conduct factor analysis to reduce and determine the dimensionality of the variables and to calculate factor scores. The AIOs were measured on a dichotomous zero/one scale. Tetrachoric correlation coefficients, as discussed by Uebersax (2006) were calculated using the MPLUS program. 26 factors were derived with eigenvalues greater than one. Table 1 outlines the questionnaire items used to form those factors. There are different types of shoppers including those who just love to shop, bargain hunters and fashion shoppers.

Insert Table 1 here

Binary logistic regression was conducted to explain domestic short-stay tourist shopping behaviour using the independent variables of 26 AIO factors (see Table 3).

Australian destinations for which holiday shopping is more prevalent were identified using the data collected from 2003 to 2006. Univariate analysis identifies the differences between domestic short-stay tourist shoppers and non-shoppers.

Trip types related-shopping included '*a holiday in a vibrant, stylish, cosmopolitan place where I re-energised myself*', '*toured around by car and discovered things at my own pace*', '*a family holiday where I relaxed and the kids were occupied*', '*a very active holiday where I pursued physically challenging activities*', '*a holiday where I undertook some active outdoor pursuits*', and '*a short break to escape the grind*' were also analysed using univariate analysis.

4.   Findings and Discussion

Table 2 outlines differences between domestic short-stay tourist shoppers and non-shoppers by gender, age, income, home ownership, and life stage. The variables of gender, age, income and life stage are significant (p< .05) when tested separately.

Insert Table 2 here

Domestic short-stay tourist shoppers were younger, more likely to be female, with mid- to high-incomes, and they rented rather than owned houses. Only age and gender were found to be significantly related to shopping behaviour when all independent variables were included in the model. This is consistent with research by both Lehto et al. (2004) and Oh et al. (2004) where age and gender were found to influence shopping behaviour.

Six AIO variables in Table 3 showing the strongest relationship with holiday shopping were respondents who were '*born to shop*', '*switch alcohol brands*', '*purchase*'

stylish and fashionable clothing', were *'well-insured'*, *'do not cook at home'*, and *'eco-tourists'* (negative). These findings were consistent with the serious shoppers who tended to visit most of the destination's commercial tourist attractions (Moscardo, 2004).

Insert Table 3 here

Binary logistic regression aided explaining domestic short-stay shopping behaviour using the independent variables of these six AIO factors, trip type and gender, age, income and life stage. Age and gender were significantly related to holiday shopping as were the six AIO variables and trip type when tested simultaneously.

Table 4 illustrates the shopping propensity of the domestic short-stay tourist shoppers according to holiday destination. This analysis identified contextual influences on shopping—destinations had the highest shopping appeal. Melbourne, Perth and Hobart had high proportions of shoppers (p< .01). Shopping had less appeal to visitors to Darwin. There are push-pull factors in effect: some destinations attract shopping tourists who have prior knowledge of their shopping appeal, while other destinations motivate shoppers by using attractive merchandise. In addition, some local tourism government bodies and associations, such as Melbourne's tourism marketing strategy, support destinations by promoting them as shopping paradises.

Insert Table 4 here

Table 5 outlines the shopping propensity of the domestic short-stay holidays according to travel motivation. All trip types were significantly related to tourist shopping behaviour. Respondents who took a holiday *"in a vibrant, stylish, cosmopolitan place where I re-energised myself"* were more likely to undertake shopping activity. Those who *"toured around by car and discovered things at my own pace"* and who wanted *'a short break to escape the grind"* were also active shoppers. Lesser shopping activity was exhibited by those who *"took a very active holiday where I pursued physically challenging activities"* or *"took a holiday where I undertook some active outdoor pursuits"*

Insert Table 5 here

The interactions of gender and income and gender with life stage were significant variables while all other interactions were not so significant. These significant interactions are shown in Figures 1 and 2. The three way interactions of gender, income and life stage are illustrated in Figure 3. Single, high income females were significantly more likely to shop than any other groups while on vacation.

Insert Figures 1, 2, 3 here

The overall results indicated that age and gender were significant variables related to holiday shopping. Domestic short-stay tourist shoppers aged between 20 and 34 years old

were more likely to shop on their domestic short-stay holiday than other age groups. Domestic short-stay tourist shoppers aged over 55 years were much less likely to shop than other age groups. Female domestic short-stay tourist shoppers were more likely to shop than males. The relationship between shopping behaviour and interactions between life stage, income and age were not significant. However, the relationship between shopping behaviour and the interaction of gender and life stage and the interaction of income and gender were significant. Results are illustrated in Figures 1 and 2. These results differed from previous general traveller research where age, income and life stage plus their interactions were significantly related to travel behaviour (Kattiyapornpong and Miller, 2008). Middle income women had the highest rate of shopping on a domestic short stay holiday. When three way interactions were analysed, it was evident that single, high income women had the highest propensity to shop while on holiday. This three-way analysis reveals an important finding in profiling the high propensity domestic short-stay tourist shoppers.

As Woodside and Pitts (1976) hypothesise, life style variables are influential in explaining travel behaviour. Not surprisingly, travellers who have a love of shopping are more likely to shop on their domestic short-stay holiday regardless of time constraints. These travellers also prefer to purchase stylish and fashionable clothing and are more likely to eat out. They are not seeking for the eco-tourism experience but prefer the opportunity to go shopping. Both age and shopping attitudes independently contributed to explain shopping activities while on holiday. The results indicate that some destinations such as Melbourne have a higher shopping appeal amongst Australian tourists in contrast to than other destinations such as Darwin in Australian domestic tourism market.

5. Conclusion, recommendation and limitation

The objective of this study is to identify the high potential Australian domestic short-stay tourist shoppers using specific interactions of demographic and psychographic variables, as well as to determine their propensity to shop at domestic destinations. This study used four years of data collected from a representative cross-sectional survey of Australian residents. Comprehensive analysis of demographics, psychographics (AIOs), shopping-related travel types, shopping destinations, preferences, and behaviour were also measured. This study focused on domestic short-stay vacations of only three days or less. Even given time constraints, an average of 19 per cent (5,070) of these domestic short-stay travellers (26,686) undertook shopping activities.

This study contributes in filling the significant theoretical gaps of applying the interactions of specific demographic variables for improved market segmentations and a better understanding of domestic short-stay tourist shoppers. The interactions of specific demographic variables have not been included in shopping-related studies to date. The results reveal that demographics and their specific interactions were significantly related to tourist shopping behaviours as well as psychographics and trip types when tested simultaneously.

This study provides productive and useful findings for destination managers in order to target specific domestic short-stay tourist shoppers. The study found that the high potential shopping profile of domestic short-stay tourist shoppers is younger, more likely to be female, mid- to high-income, and rents rather than has a mortgage. These domestic short-stay tourist shoppers are considered to be shopping enthusiasts.

AIO analysis results show domestic short-stay tourist shoppers are more likely to be 'born shoppers', 'enjoy clothes shopping' and are less likely to undertake an 'eco-tourism' holiday. These domestic short-stay tourist shoppers have a clear distinct profile. They enjoy shopping, drinking and social places; they do not necessarily enjoy getting away from the

crowds. Travel communication and promotions which reinforce these characteristics and target the avid shopper are likely to have an impact.

Therefore, these insightful results address the usefulness of demographic and psychographic variables that are essential in the planning of effective integrated marketing communication to this specific target market.

Some recommendations from this study include destination marketing strategies such as marketing communication and distribution channels. For example, local merchandises which are appealing to the younger travellers and in particular, female travellers will be well received and much sought after. Australian States and Territories often target the five-star tourists who are wealthier and older. However, local retailers may not benefit by attracting these tourists. Local retailers will benefit from the targeting of the younger tourists and/or the female tourists who have a passion for shopping, who consider themselves as 'born to shop' and who will spend time shopping while on their domestic short-stay holidays.

The results were demonstrated using general tourist destinations and general shopping behaviours. Results could also be expected to vary across destinations and in different categories of shopping behaviour. For example, Melbourne is well-recognised for excellent shopping opportunities with an expansive range and variety of designers, brand names and famous shopping areas. Therefore, a specific analysis using particular tourists to particular destinations (e.g. Melbourne) would provide a richer insight.

Analysis of specific categories of purchases, such as clothing, souvenirs and jewellery, will yield additional insights. The model used in this research can also be applied to specific destinations and shopping categories and will further explain tourist shopping behaviours. However, even when tested and applied across all shopping categories and all Australian tourism destinations, this model provides valuable insight.

The use of secondary data was one of the study limitations. The secondary data was collected from 2003 to 2006; some variables and their significance of tourist behaviours may have altered. However, the data provided some insights of Australian respondents from the large data set and some trends toward domestic shopping behaviour in current market situations and future challenges such as global financial crisis, and natural or man-made disasters. Further and ongoing collection of updated or new data is essential to better provide an improved knowledge and a better application of marketing strategies when addressing the wants and needs of this specific domestic shopping market.

The list of psychographic variables were selected from available variables collected from this data set, that related to shopping attitude, interest, and opinions. It may limit to cover all possible attitudes, interests and opinions of domestic short-stay tourist shoppers. Therefore, further specific data collection is recommended.

An analysis of long-stay shopping tourists should also be conducted for Australia and other countries that are well-known for their shopping destinations such as countries in South East Asia. Furthermore, an analysis utilising travel expenditure needs to be conducted, using the existing data, in order to quantify the benefit to the destination from attracting the short- and long-stay tourists who engage in shopping activities. More specificity of the dependent variable within shopping categories and visited destinations would yield additional insight.

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Table 1 Questionnaire items used to form psychographic factors

Born to shop	I was born to shop I enjoy clothes shopping I enjoy grocery shopping I'll go out of my way in search of a bargain
Stylish and fashionable clothes shopping	I wear clothes that will get me noticed I try to look stylish It's important to look fashionable I enjoy clothes shopping
Alcohol-switching	If I hear of a new alcoholic drink I will try it (drinkers 18+) I like promotions that offer free gifts with a purchase of alcohol (drinkers 18+) I normally buy my favourite brand regardless of price (drinkers 18+) Pre-mixed spirits are good value for money (drinkers 18+)
Well-insured	I like to be well insured Recently I've cut down my spending I'm worried about interest rates at the moment I prefer to invest in something with a safe return I am very proud of my family
Eco-tourism (negative coefficient)	I like to take my holidays away from crowds I prefer to holiday where I can see nature or be in a natural setting I avoid staying at accommodation that does not have genuine environmental policies For my next holiday, I'd really like a total eco-tourism experience I'd like to holiday where I can experience the local culture
Not cooking at home	I don't have time to spend cooking I often buy take away food to eat at home I often buy frozen or chilled ready prepared meals People often complement me on my cooking (negative) If I could afford to eat out every night I would

Table 2 Respondent profiles

Demographic Variable		Shopper Proportion
Gender	Men	.15
	Women	.22
Age	20 to 24 years	.26
	25 to 34 years	.23
	35 to 44 years	.21
	45 to 54 years	.19
	55 and over	.14
Income	Under $15000	.16
	$15000 to $19999	.18
	$20000 to $24999	.18
	$25000 to $29999	.18
	$30000 to $34999	.19
	$35000 to $39999	.20
	$40000 to $49999	.20
	$50000 to $59999	.21
	$60000 to $69999	.19
	$70000 to $79999	.19
	$80000 to $89999	.21
	$90000 to $99999	.19
	$100000 to $109999	.18
	$110000 to $119999	.22
	$120000 to $129999	.22
	$130000 or More	.20
Home Ownership	Own home	.16
	Paying off	.20
	Rent	.22
	Other/not stated	.19
Life-Cycle	Single 20-34 no children	.25
	Single 20-34 children	.27
	Married 20-34 no children	.24
	Married 20-34 children	.23
	Married 35+ children	.19
	Married 35+ no children	.16
	Single 35+ children	.22
	Single 35+ no children	.17

* Differences between demographic groups are significant at the .001 level
Note: The totals are not added up to 1.0 due to the multiple-response option.

Table 3 Binary Logistic Regression of shopping behaviour of short stay tourists and psychographic factors (AIOs.)

	B	S.E.	Wald	Sig.	Exp(B)
Eco-tourism	-.27	.05	29.87	.00	.76
Stylish and fashionable clothes shopping	.47	.04	120.99	.00	1.60
Security conscious	.11	.05	4.74	.03	1.11
Work-oriented	.14	.04	11.08	.00	1.15
Risk-taking	.04	.04	1.19	.27	1.04
Alcohol switching	.53	.05	129.32	.00	1.70
Well-insured	.31	.05	43.25	.00	1.37
Love of food	.02	.04	.23	.63	1.02
Not cooking at home	.26	.05	32.42	.00	1.29
Brand loyalty	.12	.04	8.48	.00	1.13
Concern for society	.05	.04	1.62	.20	1.05
Right-wing	-.02	.05	.20	.65	.98
Drinking at home	-.19	.04	21.00	.00	.83
Born to shop	.67	.04	286.53	.00	1.96
Social life is important	-.19	.04	21.70	.00	.83
Domestic travel preference	-.15	.06	6.79	.01	.86
Economic optimism	-.14	.04	12.92	.00	.87
Not luxury spending	-.20	.04	25.13	.00	.82
Rational purchasing	.09	.06	2.40	.12	1.09
Independent travel/no travel intermediary	.08	.04	3.25	.07	1.08
Active on holiday	-.19	.04	25.95	.00	.83
Busy life	.18	.04	19.27	.00	1.19
News updating and technology adoption	-.11	.04	7.02	.01	.90
Health concern	.09	.04	5.36	.02	1.09
Traditional meals at home	.04	.04	1.29	.26	1.04
Belief in car-as-indicator-of-personality	-.13	.04	10.34	.00	.88
Constant	-1.92	.12	249.45	.00	.15

Nagelkerke R Square = .05

Table 4 Propensity of shopping destination for short-trip holiday

City	Propensity to shop
Sydney	.25
Melbourne	.29
Brisbane	.25
Adelaide	.25
Darwin	.23
Hobart	.28
Perth	.29

Note: The totals are not added up to 1.0 due to the multiple-response option.

Table 5 Propensity of shopping on a short-trip holiday by type of trip

Type of holiday	Propensity to shop
A holiday in a vibrant, stylish, cosmopolitan place where I reenergised myself	.46
Toured around by car and discovered things at my own pace	.29
A family holiday where I relaxed and the kids were occupied	.25
A very active holiday where I pursued physically challenging activities	.17
A holiday where I undertook some active outdoor pursuits	.18
A short break to escape the grind	.28
Other type of holiday	.04

Note: The totals are not added up to 1.0 due to the multiple-response option.
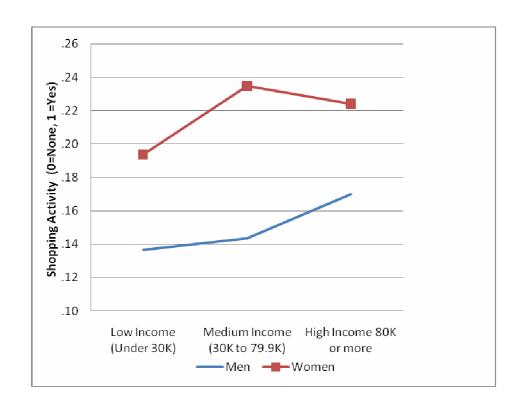
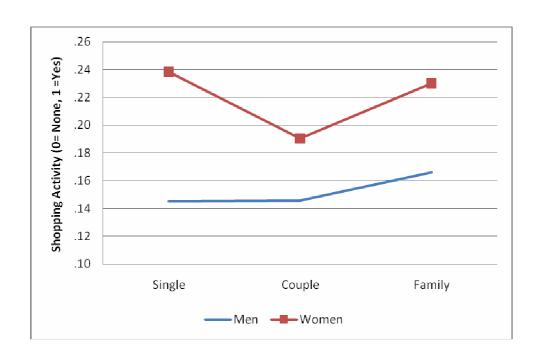**Figure 1 Interactions between gender and income with shopping activity of short stay domestic tourists**

Figure 2 Interactions between gender and life stage

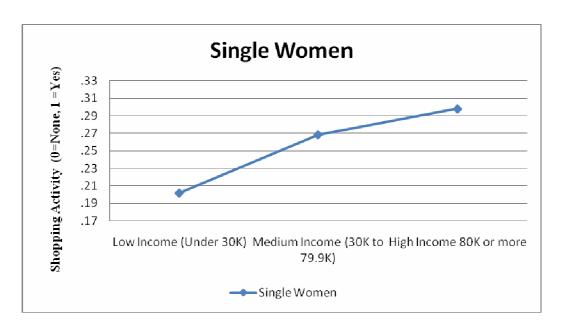**with shopping activity of short stay domestic tourists**

Figure 3 Three way interaction between gender, life stage

and income with shopping activity of short stay domestic tourists.