

## The Relationship between Consumer Decision-Making Styles on Purchase Involvement: The Case of Choosing a Restaurant for Hosting Dinner

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### Abstract

This study aims at segmenting consumers using Consumers Style Inventory (CSI) and to examine the CSI segments with the effort and motivation of restaurant-choice decision. Firstly, K-mean Cluster Analysis was utilized to create a cluster of Australian consumers using CSI. Secondly, ANOVA Analysis was conducted to examine the consumer clusters with the effort and motivation when choosing a restaurant for hosting dinner. Five clusters of CSI were found: Smart-Overloaded data; Smart-Fashion; Brand-Fashion; Apathetic-Smart; and Smart-Enjoy. There are differences between each cluster in aspects of the effort and motivation of restaurant-choice decision. For the effort toward shopping, the Smart-Enjoy seem to be the most enthusiastic whereas the Apathetic-Smart represent their passivism. For motivation, when choosing a restaurant for hosting dinner for other people, all clusters tend to concern about their image as seen in all clusters are significant in ‘Image Conscious’, but in a different degree. There are 3 groups with high scores of Habitual/Brand Loyal such as Smart-Enjoy, Smart-Overloaded, and Brand-Fashion were motivated to choose ‘Convenient and Secure’ choice. Lastly, the only fashion-concern group such as Smart-Fashion and Brand-Fashion utilized the motivation of ‘Self Perception’ for their choices.

Cluster Analysis which is the tool for segmentation is considered as the subjective technique arbitrarily used by researchers. Also the respondents were limited only the working people, so the students or unemployed people were underrepresented. Lastly the data has been collected within one cultural context, Australia, so the results could not be generalized to other contexts. This study can be utilized as a tool for restaurant managers in order to plan their marketing strategy more effectively. Empirically, it is not oftenly found a study about segmentation via CSI which was linked

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to the behavioural factors such as effort and attitudinal factors such as motivation. Thus this study can bridge such a gap.

**Keywords:** Consumer behavior, market segmentation, consumers decision-making style inventory

## ความสัมพันธ์ระหว่างรูปแบบการตัดสินใจของผู้บริโภคและระดับความ เกี่ยวข้องในการซื้อ ในกรณีการเลือกภัตตาคารเพื่อเลี้ยงอาหารค่ำให้กับแขก

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### บทคัดย่อ

การศึกษานี้มุ่งไปยังการแบ่งส่วนทางการตลาดโดยใช้รูปแบบการตัดสินใจของผู้บริโภคที่เรียกว่า Consumers Style Inventory (CSI) และเพื่อที่จะทดสอบส่วนตลาดที่แบ่งออกมายังว่ามีความสัมพันธ์อย่างไรต่อระดับความเกี่ยวข้องในการซื้อ ได้แก่ ความทุ่มเท และ แรงจูงใจ ในการเลือกร้านอาหารเพื่อเลี้ยงอาหารค่ำให้กับแขก กระบวนการวิจัยเริ่มจาก การใช้การวิเคราะห์ K-mean Cluster Analysis เพื่อที่จะแบ่งกลุ่มผู้บริโภคชาวอสเตรเลีย 638 คน ตามรูปแบบการตัดสินใจของผู้บริโภค (CSI) ตามมาด้วยขั้นที่สองการวิเคราะห์ ANOVA Analysis เพื่อที่จะทดสอบกลุ่มผู้บริโภคที่แบ่งได้จากขั้นตอนแรกว่า มีความแตกต่างอย่างไรในความทุ่มเท และแรงจูงใจในการเลือกร้านอาหาร ผลการวิเคราะห์แบ่งกลุ่มผู้บริโภคออกเป็น 5 กลุ่ม คือ กลุ่มผู้บริโภคชาญฉลาดแต่สับสนด้วยข้อมูลที่มากเกินไป (Smart-Overloaded data), กลุ่มผู้บริโภคชาญฉลาดและมีรสนิยม (Smart-Fashion), ผู้บริโภคนิยมตราสินค้าและมีรสนิยม (Brand-Fashion), ผู้บริโภคที่เฉื่อยชาแต่ฉลาด (Apathetic-Smart), และกลุ่มผู้บริโภคชาญฉลาดและมีความสุข (Smart-Enjoy) ซึ่งพบความแตกต่างระหว่างแต่ละกลุ่มทั้งเรื่องความทุ่มเทและแรงจูงใจในการเลือกร้านอาหาร สำหรับความทุ่มเทในการเลือกร้านอาหาร กลุ่มผู้บริโภคชาญฉลาดและมีความสุข (Smart-Enjoy) จะเป็นกลุ่มที่มีความกระตือรือร้นมากที่สุด ในขณะที่กลุ่มผู้บริโภคที่เฉื่อยชาแต่ฉลาด (Apathetic-Smart) กลับแสดงตรงกันข้าม สำหรับแรงจูงใจในการเลือกร้านอาหาร ทุกกลุ่มต่างก็ใส่ใจกับภาพลักษณ์ของตน ซึ่งสะท้อนในผลวิจัยที่แสดงนัยสำคัญในส่วน “ความคำนึงถึงภาพลักษณ์” (Image Conscious) แต่ต่างกันไปในระดับความเข้มข้น มีอยู่ 3 กลุ่ม ที่มีระดับคะแนนสูงใน “ความเคยชิน/ความภักดีต่อตราสินค้า” (Habitual/Brand Loyal) ได้แก่ กลุ่มผู้บริโภคชาญฉลาดและมีความสุข (Smart-Enjoy), กลุ่มผู้บริโภคชาญฉลาดแต่สับสนด้วยข้อมูลที่มากเกินไป (Smart-Overloaded data), และผู้บริโภคนิยมตราสินค้าและมีรสนิยม (Brand-Fashion) ซึ่งถูกกระตุ้นให้เลือกร้านอาหารตาม “ความสะดวกและเป็นทางเลือกที่ปลอดภัย” (Convenient and Secure choice) สุดท้ายมีเพียงกลุ่มที่มีรสนิยม ดังเช่น กลุ่มผู้บริโภคชาญฉลาดและมีรสนิยม (Smart-Fashion), ผู้บริโภคนิยมตราสินค้าและมีรสนิยม (Brand-Fashion) ที่มีการใช้แรงจูงใจแบบ “การรับรู้ของตนเอง” (Self-Perception)

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ข้อจำกัดในงานวิจัยนี้ เริ่มจากการวิเคราะห์ Cluster Analysis ซึ่งเป็นเครื่องมือที่ใช้ในการแบ่งส่วนตลาดเป็นเครื่องมือที่อาจจะถือได้ว่ามีความเป็นจิตวิสัยค่อนข้างมาก เพราะอาศัยวิจารณญาณของนักวิจัยเป็นหลักในการวิเคราะห์ผล และในการเก็บข้อมูลยังมีข้อจำกัดเฉพาะกลุ่มคนทำงานเท่านั้น กลุ่มนักเรียน นักศึกษา หรือ คนที่ว่างงาน/ไม่มีอาชีพไม่ถูกรวบรวมในการเก็บข้อมูล สุดท้ายข้อมูลถูกเก็บในบริบทของวัฒนธรรมเดียวเท่านั้น คือ ประเทศอสเตรเลีย ดังนั้นผลการวิจัยจึงอาจจะไม่สามารถนำไปใช้ในบริบทอื่นได้ก็ว่างวางแผนก็ต้องแต่ต้องรับรู้ถึงความต่าง ผลการวิจัยครั้งนี้สามารถนำไปปรับใช้สำหรับผู้จัดการวัตถุการเพื่อที่จะนำไปปรับใช้ในการวางแผนกลยุทธ์การตลาดให้มีประสิทธิผลมากขึ้น นอกจากนั้น การศึกษาในลักษณะนี้ยังเป็นการศึกษาที่ยังหาได้น้อยที่จะแบ่งส่วนตลาดโดยใช้รูปแบบการตัดสินใจของผู้บริโภค (CSI) และมาเชื่อมโยงกับปัจจัยทางพฤติกรรม ดังเช่น ความตั้งใจทุ่มเท และปัจจัยทางทัศนคติ เช่น แรงจูงใจ ซึ่งถือได้ว่าเป็นประโยชน์ ในการศึกษาอีกด้วย

**คำสำคัญ:** พฤติกรรมผู้บริโภค การแบ่งส่วนตลาด รูปแบบการตัดสินใจผู้บริโภค

## Introduction

Consumer Decision-Making Style Inventories (CSI) can be seen as one of the well-established tool for “Psychological” segmentation. After Sproles and Kendall (1986) was coined this tool in 1986, then numbers of researchers have examined the CSI for the purpose of distinguishing consumers into groups named as segmentation. The CSI definition is “a mental orientation characterizing a consumer’s approach to making choice” (Sproles & Kendall, 1986). Haverila (2012) found that there are five inter-market segments among five countries (Finland, UAE, China, Canada, and New Zealand) with distinct profiles named as “All Important”, “Middle of the Road”, “Traditionalists”, “Price Conscious”, and “Minimalists”. For fashion-apparel segments, there were four segments divided by values and consumer decision marking styles named as “Wild Boars, “Monkeys”, “Sheep” and “Bears” as mentioned by Sarabia-Sanchez, De Juan Vigaray, and Hota (2012). For store-apparel selection, Narang (2011) identified four psychographic clusters such as “Get Going Adopters”, “Disinterested Introverts”, “Confused Followers”, and “Independent Life Lovers”. In generation Y, Bakewell and Mitchell (2003) reported five meaningful and distinct decision-making groups: “Recreational quality seekers”, “Recreational discount seekers”, “Trend setting loyals”, “Shopping and fashion uninterested”, and “Confused time/money conserving”. While Hanzaee and Aghasibeg (2010) classified six distinct generation Y female groups using Sproles and Kendall’s consumer styles inventory in Iran (Sproles & Kendall, 1986).

Originally the CSI consists of eight types: Perfectionism/High-Quality Consciousness, Brand Consciousness, Novelty-Fashion Consciousness, Recreational-Hedonistic Shopping Consciousness, Price and Value-for-Money

Shopping Consciousness, Impulsiveness, Confusion from Over-Choices, and Habitual/Brand-Loyal Orientation. However, in the study of Mitchell and Walsh (2004), one more style “Time-Energy Conserving” was proposed. The profiling of these nine types is described in a table A below.

**Table A:** CSI Descriptions

Type of CSI	Description
1. Perfectionism/High-Quality Consciousness	Seeking for the very best quality and also be expected to shop more carefully, systematically and comparison.
2. Brand Consciousness	Believing in “Price equals quality” so a higher price imply a better quality. Buying more expensive, well-known national brands, and prefer to shop in department/specialty stores.
3. Novelty-Fashion Consciousness	Likely to gain excitement and pleasure from seeking out new things. Keeping themselves up-to-date and being in style are preferred.
4. Recreational-Hedonistic Shopping Consciousness	Shopping is pleasant, fun and becomes a recreation/entertainment.
5. Price and Value-for-Money Shopping Consciousness	Looking for sale prices, but also looking for the best value of money, then being a comparison shopper.
6. Impulsiveness-Careless Consumer	No plan when shopping and unconcerned about their spending or the best buys.
7. Confusion from Over-Choices	Experiencing information overload from collecting many brands and stores.
8. Habitual/Brand-Loyal Orientation	Having favorite brands/stores and repeating their purchasing pattern until become a habit.
9. Time-Energy Conserving	Shopping quickly with unconcerned about their purchasing for saving times and energy.

**Sources :** Adapted from: Sproles and Kendall (1986) and Mitchell and Walsh (2004)

## Mitchell and Walsh (2004)

All along these few decades, CSI have been applied in segmenting various fields such as financial services (Howcroft et al., 2003), domestic and imported clothing (Wang, et al., 2004), automobile (Nayeem & Casidy, 2013), retailing (Lysonski et al., 1995), Gen Y (Anic et al., 2012; Bakewell & Mitchell, 2003; Kavkani et al., 2011), culture (Fan & Xiao, 1998; Hafstrom et al., 1992; Hiu et al., 2001; Leo et al., 2005; Mitchell & Bates, 1998). However, from the extensive literature review of CSI as a tool for segmentation, there is a limited study trying to examine the differences in actual behavior of each segment. Nayeem and Casidy (2013) examined the CSI segmentation with the importance of sources of information (car dealers, friends/family, test-drive experience and other media) and effort when making decision for purchasing car in Australia. They found three clusters named “innovative-informed”, “rational-confused”, and “traditional-habitual” which differed from each other in term of the effort on car dealer, the effort on researching final decision and the importance of friends/family members (Nayeem & Casidy, 2013). For the effort on car dealer, the rational-confused cluster who represents logical buyers gathered enough important information but sometimes confused by overloaded information seems to spend less time with car dealers than the traditional-habitual cluster. For the effort on researching final decision, the innovative-informed cluster who reflects well-informed buyers opening to new product ideas and choices was found to spend less time researching about cars before making the final decision than the traditional-habitual cluster. For the importance of friends/family members, the rational-confused cluster concerns less importance on consulting with friends/family members than do the innovative-informed and the tradition-habitual purchasers. It is also worth noting that the tradition-habitual cluster that depicts as conservative buyers preferred to buy the brands they have had experiences with was found to put their highest effort of searching information on car dealers, researching of cars’ information and consulting from friends/family members than the other two clusters because of their perfectionism characteristic. Nayeem and Casidy (2013) also notified that the innovative-informed cluster who was expected to be the most spending on researching about car than the others tends to strike back such expectation because they would like to simplify their decision making and

avoid any possible confusion which may arise as they spend more time researching about cars.

This study aims at to segment consumers using Consumers Style Inventory (CSI) and to examine the linkage of CSI segments with the level of involvement, namely effort and motivation of restaurant-choice decision.

## Methodology

Data of 638 consumers were collected via web-based questionnaire in Australia. To be able to generalize the results and limit effects from culture context, all respondents will be screened out if they were students (Burns, 2006; Lysonski et al., 1995; Sproles & Kendall, 1986) or unemployed or living outside Australia. The questionnaire consists of 3 parts: Consumer Style Inventory (CSI), Involvement of choosing a restaurant for hosting dinner, and Demographic Profile. For an appropriateness of the context in this study, the measurement of original CSI (Sproles & Kendall, 1986) was adjusted in wording and one item was excluded (“I should plan my shopping more carefully than I do”), then 39 items were applied in the first part of this questionnaire. In the second part, 19 items of effort and motivation when making decision of choosing a restaurant for hosting dinner were developed from relevant literatures (Beatty et al., 1991; Laroche et al., 2004; Qian et al., 2007). Last but not least, demographic profiles such as genders, ages, incomes, marital status, educations, and frequency of dining-out were in the last part of questionnaire.

There are two parts of this study: part one clustering consumers with their decision-making styles (CSI) and part two-examining the differences between each decision-making style (CSI) with the external factors such effort and involvement when choosing a restaurant for hosting dinner. Firstly, Exploratory Factor Analysis, K-mean Cluster Analysis, and Discriminant Analysis were utilized for clustering consumers into groups. The 39 items of CSI were subjected to principal components analysis (PCA) using SPSS version 20.0. Prior to performing PCA, the suitability of data for factor analysis was assessed. Inspection of the correlation matrix revealed the presence of

many coefficients of .4 and above. The Kaiser-Meyer-Oklan value was .838, exceeding the recommended value of .6 and Barlett's Test of Sphericity reached statistical significance, supporting the factorability of the correlation matrix. Principal components analysis revealed the presence of nine components with eigenvalues exceeding 1, explaining 16%, 14%, 8%, 7%, 5%, 4%, 3.7%, 3.6%, 3.3% and 2.7% of the variance respectively.

Applying K-mean Cluster Analysis, this tool was used to classify respondents based on their scores on consumer decision-making styles inventory in case of large sample. A five-cluster solution emerged using the initial inputs from the hierarchical analysis as illustrated in the agglomeration table (Table B). To validate the final cluster solution, Discriminant Analysis was applied. It was found that the distribution of discriminant scores for each cluster is substantially separated. The model fit is evaluated with Wilks' Lambda =0.073 was found for the first discriminant function, which suggests that the model splits cases into groups effectively with the proportion of total variance in the discriminant scores not explained by differences among the groups at 72%. All 5 clusters are depicted as the following:

**Cluster 1:** Smart-Overloaded data: With the highest in “Perfectionistic” and the lowest in “Novelty-Fashion” are described as a smart consumers who hardly follow the trend of fashion and brand which quickly come and go, but try to collect information as much as possible including price in order to make the best decision as of a perfectionist. However they also have high scores on “Confused by Over-choices”, “Impulsive” and “Habitual”. Due to collecting too much data, so they are confused by over-choices and overloaded of information which finally leads to making decision on impulse or habit. This group is the only group consisted of the highest number of females and who have more income than males, so this group might be seen as “Women Breadwinner”.

**Cluster 2:** Smart-Fashion: “Perfectionist” dominates this group accompanied with “Recreation” and “Novelty-Fashion”, but the lowest in “Impulsive”, “Brand-Conscious” and “Confused by Over-choices”. It can be interpreted as a smart consumer who enjoy shopping and concerned about the trend of fashion, but not focus on any

brand. They collect information including price, but not overloaded by those information, so hardly to be confused and hardly to purchase impulse and habitual. This group consisted of females in equal number as male with moderate income, so this group can be represented as “Middle-Class Typical Shoppers”

**Cluster 3:** Brand-Fashion: Comparing with all styles, “Novelty-Fashion”, “Brand Conscious” and “Recreation” are high outstandingly. They try to conserve their time/energy, do not pay attention much on price, so they buy purely on impulse. The lowest on “Habitual” can illustrate their variety-seeking behavior. This group tends to be younger, more male than female who has income for enjoying their trendy life.

**Cluster 4:** Apathetic-Smart: This group illustrates low score in all shopping styles, particularly lowest in “Novelty-Fashion”, “Brand Conscious” and “Recreation”. They seem not to be involved in shopping if not necessary. Even though they have not received the highest score on “Perfectionist” and “Price Conscious”, they are also smart enough, not to be impulse and confused shoppers when they have to go shopping. This group represents male more than female with higher ages and incomes.

**Cluster 5:** Smart-Enjoy: This group represents the highest score in all shopping styles. They are smart shoppers who collect a lot of information as “Perfectionist” and “Price Conscious”. They also enjoy shopping and being trendy as “Novelty-Fashion”, “Brand Conscious”, and “Recreation”. Meanwhile they would like to shop fast as “Conserving Time/Energy”. They collect too much data, so “Confused by Over-choices”, “Impulsive” and “Habitual” becomes their ways of shopping as well. Their demographic can explain their two dilemma as they are still young but successful in their career and income. Being smart and wealthy, they love shopping for their social trendy lives thus indulge themselves when shopping.

Table B: K-Mean Cluster Analysis with ANOVA

CSI	Cluster					Cluster			Error			Sig.
	1	2	3	4	5	Mean	df	Mean	df	F		
Smart-Overloaded (n=219)	Smart-Fashion (n=118)	Brand-Fashion (n=117)	Smart-Apathetic (n=109)	Smart-Enjoy (n=75)	Mean Square	df	Mean Square	df				
F1_Perfectionistic	5.03	5.47	4.48	4.71	5.61	23.662	4	0.730	633	32.393	0.00	
F2_Brand Conscious	3.18	3.00	3.63	2.39	4.34	48.554	4	0.675	633	71.981	0.00	
F3_Novelty Fashion	2.26	3.86	4.44	1.54	5.30	264.225	4	0.641	633		0.00	
F4_Recreation Hedonistic	3.76	4.24	4.17	3.34	4.70	26.494	4	0.643	633	41.201	0.00	
F5_Price Conscious	4.94	4.92	4.33	4.48	5.00	11.139	4	0.763	633	14.603	0.00	
F6_Impulsive	4.20	2.58	4.16	2.31	5.31	157.473	4	0.890	633		0.00	
F7_Confused Over-Choices	4.38	3.23	3.88	2.55	4.95	95.421	4	1.055	633	90.419	0.00	
F8_Habitual Brand-Loyal	4.47	3.98	4.01	3.69	5.03	26.163	4	0.904	633	28.932	0.00	
F9_Time Energy Conserving	3.79	3.64	3.84	3.23	4.41	16.191	4	0.548	633	29.522	0.00	

**Table C:** Discriminant Analysis-Tests of Equality of Group Means

	Wilks' Lambda	F	df1	df2	Sig.
F1_Perfectionistic	.830	32.393	4	633	.000
F2_Brand Conscious	.687	71.981	4	633	.000
F3_Novelty Fashion	.277	412.338	4	633	.000
F4_Recreation Hedonistic	.793	41.201	4	633	.000
F5_Price Conscious	.916	14.603	4	633	.000
F6_Impulsive	.472	176.902	4	633	.000
F7_Confused Over Choices	.636	90.419	4	633	.000
F8_Habitual Brand Loyal	.845	28.932	4	633	.000
F9_TimeEnergy Conserving	.843	29.522	4	633	.000

**Table D:** Demographic Profile of 5 Cluster

Demographic Profile	Clusters				
	1	2	3	4	5
Smart-Overloaded	Smart-Overloaded	Smart-Fashion	Brand-Fashion	Smart-Apathetic	Smart-Enjoy
n=219 n=118 n=117 n=109 n=75					
<b>Gender:</b>					
Female	52% (114)	50% (59)	46% (54)	41% (45)	45% (34)
Male	48% (105)	50% (59)	54% (63)	59% (64)	55% (41)
<b>Age:</b>					
Below 24 years old	6% (14)	8% (9)	18% (21)	2% (2)	20% (15)
25-34 years old	18% (39)	18% (21)	24% (28)	18% (20)	25% (19)
35-44 years old	24% (52)	25% (30)	31% (36)	27% (29)	36% (27)
45-54 years old	29% (64)	32% (38)	20% (23)	23% (25)	7% (5)
55-64 years old	21% (46)	16% (19)	8% (9)	30% (33)	12% (9)
65 years old and above	2% (4)	1% (1)	0	0	0
<b>Annual Income:</b>					
Less than \$20,000	4% (9)	2% (2)	7% (8)	3% (3)	4% (3)
\$20,000 to \$41,000	19% (42)	17% (20)	16% (19)	16% (17)	9% (7)
\$41,000 to \$60,000	19% (42)	19% (22)	13% (15)	20% (22)	11% (8)
\$61,000 to \$90,000	29% (64)	19% (22)	26% (30)	26% (28)	28% (21)
\$91,000 to \$110,000	16% (34)	15% (18)	19% (22)	13% (14)	25% (19)
\$110,000 to \$150,000	10% (21)	18% (21)	13% (15)	11% (12)	17% (13)
more than \$150,000	3% (7)	11% (13)	7% (8)	12% (13)	5% (4)

	Clusters				
	1	2	3	4	5
Demographic Profile	Smart-Overloaded n=219	Smart-Fashion n=118	Brand-Fashion n=117	Smart-Apathetic n=109	Smart-Enjoy n=75
Marital Status:					
single	29% (63)	28% (33)	42% (49)	31% (34)	31% (23)
De-facto	15% (32)	17% (20)	15% (17)	10% (11)	16% (12)
Married	57% (124)	55% (65)	44% (51)	59% (64)	53% (40)
Education:					
Secondary School	34% (74)	24% (28)	27% (32)	26% (28)	27% (20)
Diploma/ TAFE	39% (85)	31% (37)	37% (43)	42% (46)	27% (20)
Undergraduate	17% (38)	19% (22)	17% (20)	14% (15)	24% (18)
Postgraduate	10% (22)	26% (31)	19% (22)	18% (20)	23% (17)
Total	100% (219)	100% (118)	100% (117)	100% (109)	100% (75)

In part 2, the five consumer decision-making style clusters were further examined with the effort (9 items) and motivation (10 items) when making a decision in the case of selecting a restaurant for hosting dinner for close friend/ family member. Beforehand all 19 items of effort and motivation were tested using Exploratory Factor Analysis (EFA) with Varimax rotation. Inspection of the correlation matrix revealed the presence of many coefficients of .4 and above. The Kaiser-Meyer-Oklin value was .873, exceeding the recommended value of .6 and Barlett's Test of Sphericity reached statistical significance, supporting the factorability of the correlation matrix. Principal components analysis revealed the presence of four components with eigenvalues exceeding 1, explaining 34%, 13%, 9%, and 6% of the variance respectively. The result was confirmed about 4 dimensions: one dimension of the effort and three dimensions of motivation such as Motivation of Self-Perception, Image Conscious, and Convenience & Secure as shown in Table E. A one-way ANOVA between-groups analysis of variance was conducted to explore the impact of CSI on the effort and 3 types of motivation: Self Perception, Image Conscious, and Convenience and Security. There were statistically significant differences at  $p < .05$  level with all external influencers as in Table E. Despite reaching statistical significance, the actual difference in mean scores between the groups was quite small. In short, all shopping involvement factors were statistically significant for all clusters at  $p < .00$ , only the "Motivation of Self-Perception" was significant at  $p < .05$  with  $\text{sig.} = 0.037$ .

Table E: Examining the shopping involvement for 5 clusters using One-Way ANOVA

Shopping Involvement		Sum of Squares	df	Mean Square	F	Sig.
Effort toward Shopping	Between Groups	61.422	4	15.356	14.188	0.000
	Within Groups	685.085	633	1.082		
	Total	746.507	637			
Motivation: Self-Perception	Between Groups	7.939	4	1.985	2.575	0.037*
	Within Groups	487.929	633	0.771		
	Total	495.869	637			
Motivation: Image Conscious	Between Groups	98.318	4	24.58	20.584	0.000
	Within Groups	755.876	633	1.194		
	Total	854.195	637			
Motivation: Convenience & Secure	Between Groups	20.649	4	5.162	4.145	0.003
	Within Groups	788.31	633	1.245		
	Total	808.96	637			

\*significance at  $p < 0.05$

**Table F:** Rotated Component Matrix

	Component			
	1	2	3	4
Effort : Cronbach's alpha 0.884, EV=6.451, VAR=33.953				
Q106 I really have to do research on the restaurants in order to find out what is good and bad about them.	.813			
Q108 I put a lot of time and effort into my choice of restaurant.	.800			
Q95 I collect a lot of information about restaurants before making a final choice	.766			
Q104 I search for more information about restaurants than what was provided by media.	.728			
Q102 The amount of time I spend comparing restaurants is worth the effort.	.666	.403		
Q96 I consider restaurant reviews from leading magazines/newspapers before making a final choice	.662			
Q115 I choose a restaurant very carefully.	.659			
Q117 It is important to initially check out the restaurant before deciding to go there.	.578			
Q97 I rely on others' recommendations before making a final restaurant choice for hosting dinner				
Motive:Self-Perception : Cronbach's alpha 0.740, EV=2.415, VAR=12.711	.472			
Q89 I choose the restaurant which I think my guest may like.	.821			
Q90 I choose the restaurant which both I and my guest like.	.796			
Q88 I choose the restaurant which I like	.679			

	Component			
	1	2	3	4
Q93 I choose the restaurant which reflects my feeling toward the guest.	.563	.407		
Motive:Image-Conscious : Cronbach's alpha 0.734, EV=1.664, VAR=8.759 Q118 About going to a particular restaurant expresses who I am as a person.	.851			
Q114 Choosing the right restaurant can help me to attain the type of life I strive for.	.847			
Q92 I choose the restaurant which reflects my guest's personality and status.	.455	.510		
Q105 A restaurant's advertisement is important for my choice. Motive: Convenience&Secure : Cronbach's alpha 0.735, EV=1.106, VAR=5.822	.409	.489		
Q101 When choosing a restaurant for hosting dinner, I am inclined to choose a restaurant which I have previously visited	.853			
Q100 I tend to take my guest dining out in my favourite restaurant		.815		

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Post-hoc comparisons using the Turkey HSD test was utilized in order to indicate the specific differences for the shopping involvement aspects among Cluster 1 to 5. For the “Effort devoted toward shopping”, “Cluster 5: Smart-Enjoy” was found to have the top score followed by Cluster 2: Smart-Fashion, Cluster 1: Smart-Overloaded, Cluster 3: Brand-Fashion, and Cluster 4: Apathetic-Smart respectively. For the “Motivation of Self-Perception”, only one relationship was significant. “Cluster 2: Smart-Fashion” was found to utilize this motivation when making decision for others more than “Cluster 3: Brand-Fashion”. Regard to the “Motivation of Image Conscious”, “Cluster 5: Smart-Enjoy” was specified to be the most concern about their image when choosing a restaurant for others followed by Cluster 2: Smart-Fashion, Cluster 3: Brand-Fashion, Cluster 1: Smart-Overloaded, and Cluster 4: Apathetic-Smart respectively. The last factor “Motivation of Convenience & Security” was implied most by “Cluster 5: Smart-Enjoy”, Cluster 1: Smart-Overloaded, and Cluster 3: Brand-Fashion respectively.

## Discussion

The five CSI segments can be utilized as a predictive tool of the actual market. When the decision-making of retailing such as selecting a restaurant to host a dinner for a closed-guest (closed-friend or family-member) is needed, all segments are agreed to put their purchase involvement both effort and time searching for information or recommendation from all sources, but in different levels. As of its name, the Smart-Enjoy perform as the most enjoyable group when shopping, so this group seems to put their effort the most. The Smart-Fashion, Smart-Overloaded, and Brand-Fashion put their efforts as the 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> ranking respectively. The last group, as its name, the Apathetic-Smart is the one who hardly to enjoy shopping, so, when needed, they perceive shopping as a task which they have to do. As a result, they are seemingly forced to put their effort and time to perform the task, thus this group put the least effort and time to spent.

Another purchase involvement in this study is the motivation. There are three types of motivation which each segment are examined: ‘Motivation from Image Conscious’, ‘Motivation from Self-Perception’, and ‘Motivation from Convenient and

Secure'. All five segments are motivated from Image Conscious. However the level of image conscious is different. When selecting a restaurant for hosting dinner, the Smart-Enjoy held the highest conscious about their image, then the Smart-Fashion, Brand-Fashion, and Smart-Overloaded. The lowest image conscious is the Apathetic-Smart. This result might be reflected on their effort and time when searching information. The more consumers care about their image, the more information of restaurants they searched for in order to confirm such image. For the motivation of Self-Perception, only two segmentations: Smart-Fashion and Brand-Fashion, applied to their consideration. Both segments tend to select a restaurant mainly by focusing on their own perception called egocentric such as preferences and feeling. This might be results from 'Fashion' value of both segments which illustrated excitement for new things as well as up-to-date/trendy lifestyle. For the motivation of convenience and secure, only three segments: the Smart-Enjoy, Smart-Overloaded, and Brand-Fashion which show high scores in 'Habitual/Brand Loyalty', employed this motive when choosing a restaurant for hosting dinner. While the Smart-Enjoy and Brand-Fashion would like to show-off their favorite restaurant for their guests, the Smart-Overloaded might choose their favorite restaurant as an easy and safe choice because they can be confusing with too much information about other restaurants.

## Limitations and Future Research

This study possesses certain limitations. Cluster Analysis which is the tool for segmentation is considered as a subjective technique arbitrarily used by researches (Hoek et al., 1996; Quinn et al., 2007). Only the employed people, not students, was surveyed their decision making styles for the suitability of the context of selecting a restaurant for hosting a dinner, so the cluster proposed might be only for the employed adult segment. Besides the data has been collected within one cultural context, Australia, so the results could not be generalized to all contexts. Future research might be replicated this study in other cultures in order to examine the differences of consumer-decision-making style across cultures (Barnes, 2007; Sojka & Tansuhaj, 1995). Particularly, consumers in the ASEAN region, where the face and relationship are more concerned than for the Westerners as of categorically named as the collectivists (Hofstede, 1988).

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