CHAPTER 5

STATISTICAL ANALYSIS

5.1 Introduction

This chapter presents the findings and discussions using several statistical techniques described in Chapter 3, that is proportion test, chi-square test of independence, Mann Whitney test and logistic regression. The first section analyzes the respondent effects on the influence ratings in order to find out whether the children's purchase influences vary across product type. The second section intends to find out if the demographic characteristics affect the influence ratings by the respondents. In this section, chi-square test of independence was carried out, followed by detailed analysis (mainly frequency) to show the relationship between the demographic factors and children's involvement in decision-making. Third section examines if the demographic characteristics affect the pocket money pattern. The following section studies the relationship between pocket money and children's influence. Section 5.6 examines the divergence patterns of influence between the "M/Hs" and children respondents. Finally, Section 5.7 forms a regression model to describe the effect of demographic factors toward children's influence simultaneously.

Children's influence for six selected family decisions were analyzed. These decisions are toys purchase, snacks purchase, food purchase, clothing purchase, holiday destination and finally restaurant choice. The children's influence ratings were available to us from both the "M/H" and the child. Therefore, as well as comparing the results that were obtained across product type, we could also compare

the answers given by each of them separately and thus demonstrate whether they were in agreement or not.

5.2 Influence Variation by Product Type

In order to find out whether the children's influences vary by products, a significance test of difference of proportion was carried out. The "M/Hs" ratings on their perception of children's influence and children's ratings on their own influence were recoded as 1 indicating the purchase decision made entirely by the child or as a joint-decision with the "M/H" whereas 0 indicating child did not exert any influence. The refusals were treated as missing value.

The hypothesis for proportion test is as follow:

H_0 : $p_1 = p_2$ (no different between proportion of influence and no influence)

H_1 : $p_1 > p_2$ or $p_1 < p_2$ (proportion of influence is greater than proportion of no influence or vise versa)

Where p_1 is the proportion of children who has influence

p_2 is the proportion of children who has no influence

Table 5.1 shows that children had significant influence for the purchase of toys, snacks, food and clothing but no significant influence for holiday destination and restaurant choice decision at 0.05 significant level. Similar pattern was also observed in the preliminary analysis in Chapter 4.

Table 5.1: Proportion Test

Decision	"M/H" Ratings				Child's Ratings			
	n1	p1	p2	Sig (1-tails)	n2	p1	p2	Sig(1-tails)
Toys	442	0.87	0.13	**0.0000**	402	0.89	0.11	**0.0000**
Snacks	445	0.90	0.10	**0.0000**	432	0.90	0.10	**0.0000**
Food	444	0.83	0.17	**0.0000**	430	0.85	0.15	**0.0000**
Clothing	442	0.56	0.44	**0.0083**	431	0.60	0.40	**0.0000**
Holiday Destination	441	0.47	0.53	0.0989	407	0.53	0.47	0.1486
Restaurant Choice	440	0.50	0.50	0.4616	405	0.54	0.46	0.0743

n1 and n2 : Number of respondents (n1: "M/Hs", n2: Children)
p1 : Proportion of influence p2: Proportion of no influence

5.3 Demographic Characteristics Towards Children's Influence

Next, we look at factors that may be related to the children's decision-making. Demographic factors included in this analysis are child's age, "M/H" age, gender, race, education achievement, household income, number of children and child's birth order. A chi-square test of independence was carried out to see if there is any significant relationship between the dependent (children's influence) and independent variables (demographic factors). Table 5.2 shows summary of the chi-square results from the "M/H" perception of children's influence and child's perception of their own influence ratings.

According to the "M/Hs" perception of children's influence, it was found that child's age, child's gender and "M/Hs" education achievement did not affect any of the children's decisions toward purchasing the six items. The "M/Hs" age was only significant for toys and snacks purchasing and also choice of restaurant. "M/Hs" ratings also indicate that the decision on items like toys, food, clothing, holiday destination and restaurant choice were reflected by their ethnicity.

Table 5.2: Chi-Square Test of Independence

(a) M/H's Influence Ratings Vs Demographic Factors

	Toys Purchase		Snacks Purchase		Food Purchase		Clothing Purchase		Holiday Destination		Restaurant Choice	
	χ^2	Sig	χ^2	Sig	χ^2	Sig	χ^2	Sig	χ^2	Sig	χ^2	Sig
Child's Age	7.742	0.258	2.909	0.820	6.006	0.422	3.123	0.793	8.499	0.204	6.617	0.358
M/H's Age	18.480	**0.047**	18.349	**0.049**	12.645	0.244	12.486	0.254	10.896	0.366	18.908	**0.041**
Gender	4.158	0.125	2.270	0.321	1.317	0.518	1.591	0.451	1.212	0.546	0.012	0.994
Race	25.794	**0.000**	6.498	0.165	17.107	**0.002**	32.148	**0.000**	24.136	**0.000**	35.332	**0.000**
Education	11.334	0.332	6.743	0.749	14.197	0.164	9.314	0.503	8.695	0.561	9.853	0.454
Household Income	15.233	0.124	18.848	**0.042**	25.517	**0.004**	10.791	0.374	19.975	**0.029**	30.219	**0.001**
No. of Children	14.679	0.066	24.011	**0.002**	17.559	**0.025**	27.273	**0.001**	18.325	**0.019**	26.325	**0.001**
Birth Order	13.769	**0.032**	10.327	0.112	8.078	0.232	16.427	**0.012**	18.499	**0.005**	23.356	**0.001**

(b) Child's Influence Ratings Vs Demographic Factors

	Toys Purchase		Snacks Purchase		Food Purchase		Clothing Purchase		Holiday Destination		Restaurant Choice	
	χ^2	Sig	χ^2	Sig	χ^2	Sig	χ^2	Sig	χ^2	Sig	χ^2	Sig
Child's Age	7.024	0.319	16.187	**0.013**	15.024	**0.020**	16.477	**0.011**	6.592	0.360	4.810	0.568
M/H's Age	12.954	0.226	20.448	**0.025**	20.483	**0.025**	16.374	0.089	5.368	0.865	5.409	0.862
Gender	2.194	0.334	1.523	0.467	1.619	0.445	0.625	0.732	0.797	0.671	0.632	0.729
Race	6.062	0.195	4.329	0.363	7.424	0.115	20.271	**0.000**	10.993	**0.027**	21.374	**0.000**
Education	4.068	0.944	10.040	0.437	10.773	0.375	10.785	0.375	12.824	0.234	11.450	0.324
Household Income	5.643	0.844	17.193	0.070	16.552	0.085	30.161	**0.001**	24.911	**0.006**	20.672	**0.023**
No. of Children	17.307	**0.027**	15.298	0.054	14.167	0.078	20.428	**0.009**	23.408	**0.003**	16.093	**0.041**
Birth Order	14.739	**0.022**	10.951	0.090	12.548	0.051	15.512	**0.017**	14.459	**0.025**	15.527	**0.017**

*M/H = Marketing Housewife

* Sig value in bold are Significant at the 0.05 level

Household income and size of the family significantly affect the children's decision on restaurant choice, holiday destination, food and snacks purchase. In addition, size of the family was also affecting the children's decision on the clothes purchasing. The results also show that the child's birth order was significant for toys, clothing, holiday destination and restaurant choice (Table 5.2(a)).

We now look at how the children perceived their role in decision-making on the same items and same background factors (Table 5.2(b)). Gender and "M/Hs" education level were not significant for all items similar results to those observed by "M/Hs" ratings. However, Table 5.2(b) shows slightly different relationship between the dependent and independent variables as compared to the "M/H" ratings.

The children perceived number of siblings and birth order in the family influence their decision in toys purchase. Both snacks and food purchase were affected by both the child's age and the "M/H" age. Clothes purchasing, holiday destination and restaurant choice were reflected by ethnicity, household income, number of children and size of the family. In addition, child's age also affecting the children's decision on the clothes purchasing.

Next, we examine the distribution of individual decision (mainly toys, snacks, food, clothes, holiday destination and restaurant choice) by child age, "M/H" age, gender, race, education achievement, household income, number of children and child birth order. However, discussions will mainly concentrate on the demographic factors that were significantly related to the children's influence as shown in Table 5.2. The child's and "M/H" ratings will both be shown for comparison.

5.3.1 Toys Purchase

Table 5.4 shows the distribution of toys purchase decision by demographic factors. Based on the 442 "M/Hs" and 402 children, a consistent pattern was noticed for both ratings where the joint-decision between children and "M/Hs" was the dominant category across all demographic factors. This was followed by the child's individual decision, whereas the "M/Hs" played an inferior role in deciding toys purchase for children.

Older "M/Hs" (31.25%) were more likely to let the children made their own decision on toys purchase even though joint-decision was still the dominant category (as also shown in Figure 4.6 where children's influence increased with "M/Hs" age). However, the "M/H decides" category also increased when the "M/H" age increased. This implies that there was an increasing trend where the older "M/Hs" either made the purchase decision themselves or allowed their children to make their own decision since they are old enough (Table 5.3 shows that child's age and "M/H" age were positively correlated (0.266) where for "M/Hs" aged 40 and above, majority of their children were aged between 11 to 14 years old).

Table 5.3 : Percent Distribution of "M/H" Age Towards Child's Age*

"M/H" age	Child Age (%)				Total
	7-8 years	9-10 years	11-12 years	13-14 years	% (N)
Below 30 years	45.0	25.0	25.0	5.0	100 (20)
30-34 years	32.3	36.9	21.5	9.2	100 (65)
35-39 years	23.4	34.2	22.5	19.8	100 (111)
40-44 years	18.4	27.2	26.2	28.2	100 (103)
45-49 years	6.0	27.7	26.5	39.8	100 (83)
50 years +	14.1	29.7	28.1	28.1	100 (64)

* Pearson $\chi^2 = 43.482$, P-Value = 0.000 Spearman's rho = 0.266, P-Value = 0.000

Table 5.4: Percent Distribution of Toys Purchase Decision Role Across Demographic Factors

	"M/H" Ratings*				Child's Ratings**			
	Child Decides	Joint Decision	M/H Decides	Total N=442	Child Decides	Joint Decision	M/H Decides	Total N=402
Child's Age								
7 - 8 yrs	20.45	68.18	11.36	100	21.25	67.50	11.25	100
9 - 10 yrs	21.90	70.80	7.30	100	26.19	67.46	6.35	100
11 - 12 yrs	21.30	61.11	17.59	100	19.19	64.65	16.16	100
13 - 14 yrs	23.85	60.55	15.60	100	26.80	61.86	11.34	100
"M/H" Age								
Below 30 yrs	20.00	75.00	5.00	100	37.50	56.25	6.25	100
30-34 yrs	15.63	73.44	10.94	100	13.56	74.58	11.86	100
35-39 yrs	21.62	68.47	9.91	100	21.90	68.57	9.52	100
40-44 yrs	14.71	71.57	13.73	100	20.83	69.79	9.38	100
45-49 yrs	29.63	50.62	19.75	100	30.56	52.78	16.67	100
50 yrs and above	31.25	57.81	10.94	100	29.63	61.11	9.26	100
Gender (Child)								
Male	23.68	66.67	9.65	100	26.32	64.11	9.57	100
Female	20.09	64.02	15.89	100	20.73	66.84	12.44	100
Race								
Malays	18.03	70.49	11.48	100	20.93	66.51	12.56	100
Chinese	34.40	57.60	8.00	100	30.25	63.03	6.72	100
Indians/Others	13.70	61.64	24.66	100	20.59	66.18	13.24	100
Education Achievement								
No formal schooling	33.33	46.15	20.51	100	26.47	58.82	14.71	100
Primary	24.04	64.90	11.06	100	23.56	65.97	10.47	100
Secondary/LCE/SRP	17.17	70.71	12.12	100	21.59	69.32	9.09	100
MCE/SPM	18.18	67.53	14.29	100	25.00	63.89	11.11	100
HSC/STPM	-	80.00	20.00	100	-	66.67	33.33	100
University/College	21.43	71.43	7.14	100	28.57	57.14	14.29	100
Household Income								
Up to $500	19.32	63.64	17.05	100	21.95	63.41	14.63	100
501-$1000	20.97	65.05	13.98	100	23.93	66.87	9.20	100
$1001-1500	20.51	67.95	11.54	100	26.39	65.28	8.33	100
$1501-$2000	38.30	57.45	4.26	100	26.67	62.22	11.11	100
$2001-$3000	12.00	84.00	4.00	100	18.18	72.73	9.09	100
Above $3000	22.22	61.11	16.67	100	16.67	61.11	22.22	100
Number of Children								
1	32.89	51.32	15.79	100	35.82	53.73	10.45	100
2	22.34	69.15	8.51	100	26.14	67.05	6.82	100
3	15.74	73.15	11.11	100	20.41	69.39	10.20	100
4	25.64	58.97	15.38	100	25.35	66.20	8.45	100
More than 5	16.28	69.77	13.95	100	12.82	67.95	19.23	100
Child's Birth Order								
Only child	32.89	51.32	15.79	100	35.82	53.73	10.45	100
First child	18.99	72.78	8.23	100	23.29	64.38	12.33	100
Neither first nor only child	18.44	67.38	14.18	100	14.39	74.24	11.36	100
Youngest	23.88	59.70	16.42	100	31.58	61.40	7.02	100
Total	**21.95**	**65.38**	**12.67**	**100**	**23.63**	**65.42**	**10.95**	**100**

*4 M/H respondents did not give their ratings

** 44 child respondents did not give their ratings

Table 5.4 shows that Chinese children made more purchase decision entirely by themselves (34.4%) compared to other ethnic groups. Indian "M/Hs" were more likely to make the purchase decision for their children (24.66%) compared to other ethnic groups. However, the majority (65.38%) of the children across three ethnic groups made joint-decision for toys purchase.

Child's ratings revealed that as the number of children in the family increased, the children were less likely to make the purchase decision individually (Table 5.4). It was found that the only child and the youngest child in the family made more toys purchase decision individually. This is consistent for the ratings from both parties (refer also to Figure 4.6 and Figure 4.8 for "M/H" ratings).

5.3.2 Snacks Purchase

Table 5.5 shows the percent distribution of snacks purchase decision by demographic factors. Based on "M/H" ratings, "joint-decision" (46.29%) was still the dominant category for snacks purchase across all demographic factors, but majority of the children (49.07%) were more likely to perceive it as their own decision, followed by "joint-decision" (40.51%) and "M/H decides" (10.42%). Nevertheless, the percentage for "child decides" and "joint- decision" were rather close for "M/H" ratings (43.37% and 46.29% respectively) as also clearly shown in Figure 4.5.

Although race was not related to children's influence for snacks purchase as shown in Table 5.2 (the chi-square test showed a p-value of 0.165 from "M/H" ratings and 0.363 from child's ratings), we did observe that Indian children was the group with highest percentage (52.05%) that made the purchase decision individually (Table 5.5).

Table 5.5: Percent Distribution of Snacks Purchase Decision Role Across Demographic Factors

	"M/H" Ratings*				Child's Ratings**			
	Child Decides	Joint Decision	"M/H" Decides	Total N=445	Child Decides	Joint Decision	"M/H" Decides	Total N=432
Child's Age								
7 - 8 yrs	38.20	48.31	13.48	100	34.88	52.33	12.79	100
9 - 10 yrs	44.53	46.72	8.76	100	48.84	44.96	6.20	100
11 - 12 yrs	42.73	45.45	11.82	100	53.21	36.70	10.09	100
13 - 14 yrs	46.79	44.95	8.26	100	56.48	29.63	13.89	100
"M/H" Age								
Below 30 yrs	60.00	35.00	5.00	100	75.00	25.00	-	100
30-34 yrs	35.94	51.56	12.50	100	33.87	58.06	8.06	100
35-39 yrs	42.34	51.35	6.31	100	45.87	41.28	12.84	100
40-44 yrs	34.95	55.34	9.71	100	46.00	44.00	10.00	100
45-49 yrs	46.99	38.55	14.46	100	58.23	29.11	12.66	100
50 yrs and above	56.25	31.25	12.50	100	54.84	35.48	9.68	100
Gender (Child)								
Male	46.75	43.29	9.96	100	48.88	39.01	12.11	100
Female	39.72	49.53	10.75	100	49.28	42.11	8.61	100
Race								
Malays	38.87	48.58	12.55	100	47.46	43.22	9.32	100
Chinese	47.20	45.60	7.20	100	55.28	33.33	11.38	100
Indians/Others	52.05	39.73	8.22	100	43.84	43.84	12.33	100
Education Achievement								
No formal schooling	58.97	33.33	7.69	100	44.44	38.89	16.67	100
Primary	42.65	46.92	10.43	100	52.91	38.83	8.25	100
Secondary/LCE/SRP	38.38	50.51	11.11	100	41.67	43.75	14.58	100
MCE/SPM	45.45	42.86	11.69	100	48.00	44.00	8.00	100
HSC/STPM	40.00	60.00	-	100	25.00	50.00	25.00	100
University/College	35.71	57.14	7.14	100	66.67	26.67	6.67	100
Household Income								
Up to $500	36.36	50.00	13.64	100	38.10	48.81	13.10	100
501-$1000	43.39	44.44	12.17	100	55.00	38.33	6.67	100
$1001-1500	47.44	46.15	6.41	100	51.28	37.18	11.54	100
$1501-$2000	61.70	31.91	6.38	100	54.35	28.26	17.39	100
$2001-$3000	36.00	64.00	-	100	32.00	60.00	8.00	100
Above $3000	22.22	61.11	16.67	100	42.11	42.11	15.79	100
Number of Children								
1	53.95	32.89	13.16	100	62.16	25.68	12.16	100
2	37.50	53.13	9.38	100	40.43	51.06	8.51	100
3	37.96	52.78	9.26	100	44.86	45.79	9.35	100
4	59.49	29.11	11.39	100	56.58	31.58	11.84	100
More than 5	32.56	58.14	9.30	100	45.68	43.21	11.11	100
Child's Birth Order								
Only child	53.95	32.89	13.16	100	62.16	25.68	12.16	100
First child	39.24	53.80	6.96	100	45.22	45.86	8.92	100
Neither first nor only child	42.25	45.77	11.97	100	48.53	38.97	12.50	100
Youngest	43.48	44.93	11.59	100	44.62	47.69	7.69	100
Total	**43.37**	**46.29**	**10.34**	**100**	**49.07**	**40.51**	**10.42**	**100**

*1 M/H respondents did not give their ratings
** 14 child respondents did not give their ratings

Older children rated that they had more influence but the "M/H" ratings did not show this pattern. Results show that "M/H" age is an important factor in snacks purchase decision. "M/Hs" below 30 years old tend to allow their children to make the decision individually (60% from "M/H" ratings, 75% from child's ratings). However, children's influence decreased for the group where "M/Hs" aged between 30 to 44 and increased again for older "M/Hs".

Based on the "M/H" ratings as shown in Table 5.5, household income had positive effect towards children's influence in snacks purchase. Children's influence increased as the household income increased and "child decides" became the dominant category for families with household income between RM1501 to RM2000 (61.70%). However, when the household income exceeded RM2000, their influence started to decrease and joint-decision became the dominant category again. This implies that "M/Hs" in families with higher income were more involved in deciding what snacks to buy for the children.

Majority of the only child (53.95%) tend to make their own decision in snacks purchase. Their influence seems to decreased when there were more children in the family.

5.3.3 Food Purchase

Percent distribution of food purchase decision by demographic factors is showed in Table 5.6. Food purchase had a similar overall pattern as the purchase of snacks as also shown in Figure 4.5. Majority of the "M/Hs" perceived it as joint-decision (47.07%) across all demographic factors, followed by "child decides" (36.26%) and "M/H decides" (16.67%). However, majority of the children (43.02%) perceived it as their own decision. The percentage for "child decides" and

"joint-decision" were rather close for child's ratings (43.02% and 42.33% respectively).

According to child's ratings, children's influence in food purchase increased with their age. As the age increased, they tend to make their own decision on this purchase. Besides that, children's influence increased with the "M/Hs" age. For "M/Hs" aged 45 and above, "child decides" was the dominant category (Table 5.6). This may imply that older "M/Hs" were more willing to listen to their children in deciding what food to buy.

"M/H" ratings revealed that Chinese (47.2%) and Indian (42.47%) children were more likely to make food purchase individually, whereas Malay children (50.81%) tend to make joint-decision with the "M/Hs". While household income increased, children made more purchase decision by themselves. However, when the household income exceeded RM2000, more "joint-decision" took place.

The only child in the family tends to make the purchase decision on their own. When there were more children in the family, the decision was more likely to be made jointly. This indicates that, for one child families, "M/Hs" seem to give in to the only child for what he/she likes, however, when the number of children in the family increased, "M/Hs" have to consider other children's like and dislike in making decision for food purchase.

Table 5.6: Percent Distribution of Food Purchase Decision Role Across Demographic Factors

	"M/H" Ratings*				Child's Ratings**			
	Child Decides	Joint Decision	"M/H" Decides	Total N=444	Child Decides	Joint Decision	"M/H" Decides	Total N=430
Child's Age								
7 - 8 yrs	30.34	55.06	14.61	100	29.41	57.65	12.94	100
9 - 10 yrs	38.24	47.06	14.71	100	42.31	45.38	12.31	100
11 - 12 yrs	32.73	47.27	20.00	100	49.07	35.19	15.74	100
13 - 14 yrs	42.20	40.37	17.43	100	48.60	33.64	17.76	100
"M/H" Age								
Below 30 yrs	45.00	50.00	5.00	100	65.00	35.00	-	100
30-34 yrs	34.38	45.31	20.31	100	36.51	53.97	9.52	100
35-39 yrs	31.53	53.15	15.32	100	35.51	48.60	15.89	100
40-44 yrs	29.13	53.40	17.48	100	41.00	45.00	14.00	100
45-49 yrs	41.46	40.24	18.29	100	53.85	26.92	19.23	100
50 yrs and above	48.44	35.94	15.63	100	45.16	37.10	17.74	100
Gender (Child)								
Male	38.70	44.78	16.52	100	40.36	43.50	16.14	100
Female	33.64	49.53	16.82	100	45.89	41.06	13.04	100
Race								
Malays	28.86	50.81	20.33	100	38.30	47.66	14.04	100
Chinese	47.20	44.00	8.80	100	50.81	33.06	16.13	100
Indians/Others	42.47	39.73	17.81	100	45.07	40.85	14.08	100
Education Achievement								
No formal schooling	46.15	33.33	20.51	100	40.54	35.14	24.32	100
Primary	40.00	44.29	15.71	100	47.06	41.18	11.76	100
Secondary/LCE/SRP	36.36	48.48	15.15	100	35.79	46.32	17.89	100
MCE/SPM	25.97	54.55	19.48	100	40.79	46.05	13.16	100
HSC/STPM	40.00	60.00	-	100	20.00	60.00	20.00	100
University/College	7.14	71.43	21.43	100	61.54	23.08	15.38	100
Household Income								
Up to $500	30.68	47.73	21.59	100	33.73	50.60	15.66	100
501-$1000	34.04	46.81	19.15	100	44.75	43.09	12.15	100
$1001-1500	42.31	47.44	10.26	100	47.37	32.89	19.74	100
$1501-$2000	59.57	31.91	8.51	100	53.19	31.91	14.89	100
$2001-$3000	20.00	72.00	8.00	100	25.00	66.67	8.33	100
Above $3000	22.22	50.00	27.78	100	47.37	31.58	21.05	100
Number of Children								
1	48.68	38.16	13.16	100	54.05	27.03	18.92	100
2	33.68	49.47	16.84	100	44.68	39.36	15.96	100
3	33.33	50.00	16.67	100	36.89	52.43	10.68	100
4	46.84	36.71	16.46	100	46.05	39.47	14.47	100
More than 5	22.09	58.14	19.77	100	36.14	49.40	14.46	100
Child's Birth Order								
Only child	48.68	38.16	13.16	100	54.05	27.03	18.92	100
First child	33.54	51.27	15.19	100	45.16	44.52	10.32	100
Neither first nor only child	32.39	49.30	18.31	100	36.50	45.99	17.52	100
Youngest	36.76	42.65	20.59	100	39.06	46.88	14.06	100
Total	**36.26**	**47.07**	**16.67**	**100**	**43.02**	**42.33**	**14.65**	**100**

*2 M/H respondents did not give their ratings

** 16 child respondents did not give their ratings

5.3.4 Clothing Purchase

Clothes purchasing was a decision that was less likely to be made entirely by the children as compared to toys, snacks and food purchase. As shown in Table 5.7, "M/Hs" rated it as their own decision (44.34%), followed by "joint-decision" (42.99%). Only 12.67% of the "M/Hs" rated it as "child decides". Children rated themselves had more influence, 45.71% as "joint-decision", 40.14% as "M/H decides" and 14.15% as their own decision. This may due to the fact that children aged 7 to 14 are still young and they need the "M/Hs" opinion in choosing clothing. However, for older children, the "M/Hs" either discussed with the children or let the children decide themselves.

"M/Hs" ratings shows that majority of Malay and Chinese children made the purchase together with the "M/H" whereas majority of the Indian children did not get involve in the clothes purchasing. Chinese children however made more purchase decision on their own. This pattern was also observed for child's ratings.

"Joint-decision" was a very dominant decision for families with above RM2000 household income. 76% was "joint-decision" for the families earning RM2001 to RM3000 compared to only 26.09% for families earning RM1501 to RM2000 as rated by children. Children in families earning RM1001 to RM1500 was the group that made more purchase decision individually ((Table 5.7 : 24.68%).

Table 5.7: Percent Distribution of Clothing Purchase Decision Role Across Demographic Factors

	"M/H" Ratings*				Child's Ratings**			
	Child Decides	Joint Decision	"M/H" Decides	Total N=442	Child Decides	Joint Decision	"M/H" Decides	Total N=431
Child's Age								
7 - 8 yrs	14.61	47.19	38.20	100	8.43	45.78	45.78	100
9 - 10 yrs	11.76	42.65	45.59	100	10.61	45.45	43.94	100
11 - 12 yrs	10.19	40.74	49.07	100	13.89	41.67	44.44	100
13 - 14 yrs	14.68	42.20	43.12	100	23.15	50.00	26.85	100
"M/H" Age								
Below 30 yrs	10.00	45.00	45.00	100	5.26	47.37	47.37	100
30-34 yrs	6.25	46.88	46.88	100	4.92	45.90	49.18	100
35-39 yrs	10.81	45.05	44.14	100	9.17	51.38	39.45	100
40-44 yrs	8.74	46.60	44.66	100	19.00	48.00	33.00	100
45-49 yrs	20.00	38.75	41.25	100	20.00	40.00	40.00	100
50 yrs and above	20.31	34.38	45.31	100	19.35	38.71	41.94	100
Gender (Child)								
Male	10.96	42.54	46.49	100	12.89	46.22	40.89	100
Female	14.49	43.46	42.06	100	15.53	45.15	39.32	100
Race								
Malays	9.43	46.31	44.26	100	9.36	51.06	39.57	100
Chinese	24.00	43.20	32.80	100	25.00	39.52	35.48	100
Indians/Others	4.11	31.51	64.38	100	11.11	38.89	50.00	100
Education Achievement								
No formal schooling	17.95	35.90	46.15	100	21.05	34.21	44.74	100
Primary	12.02	39.42	48.56	100	15.20	42.65	42.16	100
Secondary/LCE/SRP	10.10	53.54	36.36	100	11.58	50.53	37.89	100
MCE/SPM	14.29	40.26	45.45	100	12.16	47.30	40.54	100
HSC/STPM	20.00	60.00	20.00	100	20.00	80.00	-	100
University/College	14.29	50.00	35.71	100	6.67	66.67	26.67	100
Household Income								
Up to $500	7.95	42.05	50.00	100	11.90	45.24	42.86	100
501-$1000	11.29	40.32	48.39	100	10.00	45.56	44.44	100
$1001-1500	17.95	43.59	38.46	100	24.68	44.16	31.17	100
$1501-$2000	17.02	42.55	40.43	100	21.74	26.09	52.17	100
$2001-$3000	12.00	60.00	28.00	100	8.00	76.00	16.00	100
Above $3000	16.67	50.00	33.33	100	10.53	63.16	26.32	100
Number of Children								
1	25.00	32.89	42.11	100	27.03	35.14	37.84	100
2	12.90	41.94	45.16	100	14.89	38.30	46.81	100
3	11.11	54.63	34.26	100	13.59	53.40	33.01	100
4	13.92	37.97	48.10	100	9.09	49.35	41.56	100
More than 5	2.33	43.02	54.65	100	7.23	50.60	42.17	100
Child's Birth Order								
Only child	25.00	32.89	42.11	100	27.03	35.14	37.84	100
First child	10.13	46.84	43.04	100	13.64	48.70	37.66	100
Neither first nor only child	7.75	46.48	45.77	100	8.03	48.91	43.07	100
Youngest	15.15	37.88	46.97	100	13.64	43.94	42.42	100
Total	**12.67**	**42.99**	**44.34**	**100**	**14.15**	**45.71**	**40.14**	**100**

*4 M/H respondents did not give their ratings

** 15 child respondents did not give their ratings

As mentioned in Section 4.4 (Figure 4.6), the lesser the number of children in the family, the higher the percentage of children that make their own decision in clothes purchasing. "M/Hs" tend to dominate the purchase's role in families with more children. However, for only child families, the children will have more say for the purchase of clothes (as shown in Table 5.7, 25% from "M/H" ratings, 27.03% from child's ratings).

5.3.5 Holiday Destination

Table 5.8 shows that majority of the "M/Hs" (53.06%) and children (47.42%) agreed that "M/Hs" had more influence in deciding for holiday destination. Children's influence for this decision was very mild and was tested using proportional test (Section 5.2, Table 5.1) which indicated that children did not have significant influence for this decision. Holiday planning normally will involve the spending of large amount of money. For decisions that incur big expenses, the head of the household will normally make the decision. Therefore, influence of children may not be very significant.

Although children did not have significant influence in holiday decision, it was shown by the chi-square test of independence (Table 5.2) that race, household income, number of children and child's birth order were significant factors in influencing holiday destination decision.

Majority of the Malay (47.25%) and Chinese (46.61%) children indicated that they made joint-decision with the "M/H" in the selection of holiday destination but the "M/Hs" were more likely to take it as their own (52.67% and 44% respectively). As for Indian family, majority of the "M/Hs" (69.86%) as well as the children (63.38%) perceived it as the "M/Hs" decision.

Table 5.8: Percent Distribution of Holiday Destination Decision Role Across Demographic Factors

	"M/H" Ratings*				Child's Ratings**			
	Child Decides	Joint Decision	"M/H" Decides	Total N=441	Child Decides	Joint Decision	"M/H" Decides	Total N=407
Child's Age								
7 - 8 yrs	10.11	47.19	42.70	100	6.41	46.15	47.44	100
9 - 10 yrs	6.62	36.76	56.62	100	8.87	41.94	49.19	100
11 - 12 yrs	9.35	32.71	57.94	100	12.12	36.36	51.52	100
13 - 14 yrs	4.59	43.12	52.29	100	6.60	51.89	41.51	100
"M/H" Age								
Below 30 yrs	5.00	35.00	60.00	100	-	44.44	55.56	100
30-34 yrs	7.94	36.51	55.56	100	5.08	42.37	52.54	100
35-39 yrs	6.31	45.95	47.75	100	7.69	47.12	45.19	100
40-44 yrs	3.88	41.75	54.37	100	9.38	45.83	44.79	100
45-49 yrs	8.75	40.00	51.25	100	11.84	40.79	47.37	100
50 yrs and above	14.06	28.13	57.81	100	11.11	40.74	48.15	100
Gender (Child)								
Male	8.81	39.21	51.98	100	9.72	43.98	46.30	100
Female	6.07	39.72	54.21	100	7.33	43.98	48.69	100
Race								
Malays	5.76	41.56	52.67	100	7.34	47.25	45.41	100
Chinese	15.20	40.80	44.00	100	11.86	46.61	41.53	100
Indians/Others	-	30.14	69.86	100	7.04	29.58	63.38	100
Education Achievement								
No formal schooling	10.26	38.46	51.28	100	16.67	30.56	52.78	100
Primary	8.21	34.78	57.00	100	7.85	42.41	49.74	100
Secondary/LCE/SRP	4.04	42.42	53.54	100	4.40	48.35	47.25	100
MCE/SPM	7.79	46.75	45.45	100	10.00	45.71	44.29	100
HSC/STPM	20.00	60.00	20.00	100	25.00	75.00	-	100
University/College	7.14	42.86	50.00	100	13.33	53.33	33.33	100
Household Income								
Up to $500	5.68	43.18	51.14	100	10.00	46.25	43.75	100
501-$1000	8.65	31.89	59.46	100	6.79	37.65	55.56	100
$1001-1500	6.41	42.31	51.28	100	8.00	46.67	45.33	100
$1501-$2000	8.51	38.30	53.19	100	13.04	32.61	54.35	100
$2001-$3000	4.00	76.00	20.00	100	4.00	80.00	16.00	100
Above $3000	11.11	38.89	50.00	100	15.79	57.89	26.32	100
Number of Children								
1	15.79	34.21	50.00	100	18.57	38.57	42.86	100
2	10.75	37.63	51.61	100	12.50	36.36	51.14	100
3	4.63	47.22	48.15	100	5.94	55.45	38.61	100
4	6.41	37.18	56.41	100	2.74	45.21	52.05	100
More than 5	1.16	38.37	60.47	100	4.00	41.33	54.67	100
Child's Birth Order								
Only child	15.79	34.21	50.00	100	18.57	38.57	42.86	100
First child	6.96	41.77	51.27	100	7.48	45.58	46.94	100
Neither first nor only child	1.42	39.01	59.57	100	3.17	45.24	51.59	100
Youngest	12.12	40.91	46.97	100	10.94	43.75	45.31	100
Total	**7.48**	**39.46**	**53.06**	**100**	**8.60**	**43.98**	**47.42**	**100**

*5 M/H respondents did not give their ratings
** 39 child respondents did not give their ratings

Turning to "M/H" ratings category labeled as "M/H decides"(Table 5.8), it was found that this category was dominated across all income groups except for income between RM2001 to RM3000, where at this point "joint-decision" became more significant. However for families earning less than RM2000, majority of children perceived it as "M/H" decision alone. When the household income exceeded RM2000, more children took part in the decision-making.

As expected, the only child had more say in deciding for holiday destination (15.79% from "M/H" ratings, 18.57% from child's ratings) followed by the youngest child (12.12% from "M/H" ratings, 10.94% from child's ratings). Their influence decreased as the number of children in the family increased (also shown in Figure 4.6 and Figure 4.8).

5.3.6 Restaurant Choice

Restaurant choice is another family decision that children did not seem to have significant influence (Table 5.1). The "M/Hs" (Table 5.9: 50.23% from "M/H" ratings and 46.42% from child's ratings) made this decision.

This was the only decision where the children perceived themselves to have slightly less influence than the "M/Hs" perceptions. Only 11.11% of the children perceived themselves as the decision-maker compared to 12.05% of the "M/Hs".

Result shows that younger "M/Hs" were more dominant in restaurant choice. Older "M/Hs" were more willing to go along with their children's decision in restaurant selection.

Table 5.9: Percent Distribution of Restaurant Choice Decision Role Across Demographic Factors

	"M/H" Ratings*				Child's Ratings**			
	Child Decides	Joint Decision	"M/H" Decides	Total N=440	Child Decides	Joint Decision	"M/H" Decides	Total N=405
Child's Age								
7 - 8 yrs	8.99	46.07	44.94	100	6.49	46.75	46.75	100
9 - 10 yrs	10.95	39.42	49.64	100	10.48	45.16	44.35	100
11 - 12 yrs	11.43	33.33	55.24	100	12.12	36.36	51.52	100
13 - 14 yrs	16.51	33.03	50.46	100	14.29	41.90	43.81	100
"M/H" Age								
Below 30 yrs	5.00	35.00	60.00	100	11.11	33.33	55.56	100
30-34 yrs	3.17	36.51	60.32	100	6.78	42.37	50.85	100
35-39 yrs	18.02	40.54	41.44	100	10.68	47.57	41.75	100
40-44 yrs	6.93	43.56	49.50	100	11.22	40.82	47.96	100
45-49 yrs	17.28	34.57	48.15	100	15.79	42.11	42.11	100
50 yrs and above	14.06	29.69	56.25	100	9.80	39.22	50.98	100
Gender (Child)								
Male	11.89	37.89	50.22	100	12.26	41.51	46.23	100
Female	12.21	37.56	50.23	100	9.84	43.52	46.63	100
Race								
Malays	8.61	41.80	49.59	100	8.88	47.20	43.93	100
Chinese	23.20	38.40	38.40	100	17.50	44.17	38.33	100
Indians/Others	4.23	22.54	73.24	100	7.04	25.35	67.61	100
Education Achievement								
No formal schooling	17.95	25.64	56.41	100	13.51	35.14	51.35	100
Primary	10.68	36.89	52.43	100	11.29	37.63	51.08	100
Secondary/LCE/SRP	10.10	37.37	52.53	100	8.60	44.09	47.31	100
MCE/SPM	14.29	42.86	42.86	100	11.43	52.86	35.71	100
HSC/STPM	-	60.00	40.00	100	25.00	75.00	-	100
University/College	21.43	50.00	28.57	100	13.33	53.33	33.33	100
Household Income								
Up to $500	5.68	43.18	51.14	100	7.59	49.37	43.04	100
501-$1000	9.73	29.73	60.54	100	9.43	35.85	54.72	100
$1001-1500	15.38	38.46	46.15	100	14.29	40.26	45.45	100
$1501-$2000	17.39	50.00	32.61	100	13.04	36.96	50.00	100
$2001-$3000	16.00	52.00	32.00	100	12.00	64.00	24.00	100
Above $3000	33.33	38.89	27.78	100	21.05	63.16	15.79	100
Number of Children								
1	25.68	28.38	45.95	100	22.54	33.80	43.66	100
2	11.70	43.62	44.68	100	12.22	41.11	46.67	100
3	7.41	43.52	49.07	100	8.08	50.51	41.41	100
4	15.38	34.62	50.00	100	8.45	42.25	49.30	100
More than 5	3.49	34.88	61.63	100	5.41	41.89	52.70	100
Child's Birth Order								
Only child	25.68	28.38	45.95	100	22.54	33.80	43.66	100
First child	11.39	43.04	45.57	100	11.56	44.22	44.22	100
Neither first nor only child	5.67	34.75	59.57	100	4.84	43.55	51.61	100
Youngest	11.94	41.79	46.27	100	9.52	46.03	44.44	100
Total	**12.05**	**37.73**	**50.23**	**100**	**11.11**	**42.47**	**46.42**	**100**

*6 M/H respondents did not give their ratings
** 41 child respondents did not give their ratings

Once again, Chinese children exerted more influence than the other two groups as what we saw in the purchase of toys, food, clothing and holiday destination. Chinese "M/Hs" rated "joint-decision" and "M/H decides" as equal dominant (both with 38.40%) in this decision whereas Malay (49.59%) and Indian (73.24%) "M/Hs" indicated it was more of the "M/Hs" decision. Majority of the Chinese (44.17%) and Malay (47.20%) children perceived it as joint-decision.

Turning to household income, both "M/Hs" and children thought that children had less influence in this decision (i.e. restaurant choice). This is reflected by the low percentage for both groups. However, as household income increased, the "M/Hs" ratings was higher for the children. In other words, "M/H" perceived that in the higher income groups, children were given an opportunity to make a choice of the place they wanted to go and eat. And also, both parties (i.e. "M/Hs" and children) agreed that "M/Hs" were the decision maker in families with more children. As expected, the only child had the privilege in deciding the restaurant they wanted to go to as compared to those with siblings.

5.4 Allowance and Saving Pattern

Pocket money is a form of allowance that children will get from their parents, grandparents or relatives. In this section, we intend to find out whether children receive any form of pocket money and if so, how much. Do they save the pocket money and what are the factors affecting their allowance and saving amount. Hence, their allowance and saving pattern were examined in this section.

Table 5.10 shows the distribution between pocket money received and the amount saved from it. Result shows quite a natural trend that is the more money the children received, the more likely that they will save the money (76.3% of children received RM2 and above saved their pocket money). Table 5.10 also reveals that the bigger the amount they received, the more money they would save (positively correlated with Spearman's rho =0.224). This relationship is also reflected by the chi-square test of independence carried out for these two variables (p-value 0.000). The test is highly significant indicating relationship between the two factors.

Table 5.10: Relationship Between Pocket Money Received and Saved

Pocket Money Received	Pocket Money Saved (%)				Total (%)
	Did Not Save	Below RM1	RM1 - Below RM2	RM2 and above	
Below RM1	33.6	66.4	-	-	100
RM1 - Below RM2	34.0	45.0	21.0	-	100
RM2 and above	23.7	26.3	18.4	31.6	100
Total	**32.8**	**57.8**	**6.6**	**2.8**	**100**

Pearson $\chi^2 = 194.30$ P-value = 0.000 Spearman's rho = 0.224 P-Value = 0.000

Next, we look at pocket money, saving together with the demographic factors as shown in Table 5.11.

Table 5.11: Percent Distribution of Pocket Money Received and Saved According to Demographic Factors

	Pocket Money Received					Pocket Money Saved*				
	No Pocket Money	Below RM1	RM1-Below RM2	RM2 and above	Total	Don't Save	Below RM1	RM1-Below RM2	RM2 and above	Total
Child'a Age[a]										
7 - 8 yrs	6.7	78.7	12.4	2.2	100.0	40.7	55.6	2.5	1.2	100.0
9 - 10 yrs	4.4	69.3	21.9	4.4	100.0	37.4	58.8	2.3	1.5	100.0
11 - 12 yrs	4.5	66.7	18.9	9.9	100.0	26.9	63.5	4.8	4.8	100.0
13 - 14 yrs	0.9	46.8	34.9	17.4	100.0	26.9	52.8	16.7	3.7	100.0
Gender										
Male	3.9	66.8	21.6	7.8	100.0	35.6	56.6	5.5	2.3	100.0
Female	4.2	63.1	23.4	9.3	100.0	29.8	59.0	7.8	3.4	100.0
Race[b]										
Malays	2.4	69.8	21.0	6.9	100.0	34.6	59.2	4.6	1.7	100.0
Chinese	8.0	47.2	32.8	12.0	100.0	31.9	51.3	10.6	6.2	100.0
Indians/Others	2.7	79.5	9.6	8.2	100.0	28.2	63.4	7.0	1.4	100.0
Education[c]										
No formal	10.3	59.0	20.5	10.3	100.0	45.7	42.9	11.4	-	100.0
Primary	2.4	61.6	26.1	10.0	100.0	36.9	51.7	7.9	3.4	100.0
Secondary/LCE/S	5.1	77.8	11.1	6.1	100.0	29.8	62.8	4.3	3.2	100.0
MCE/SPM	3.9	64.9	26.0	5.2	100.0	23.3	71.2	4.1	1.4	100.0
HSC/STPM	-	80.0	20.0	-	100.0	40.0	60.0	-	-	100.0
University/Colleg	6.7	40.0	33.3	20.0	100.0	7.1	78.6	7.1	7.1	100.0
Total	**4.0**	**65.0**	**22.4**	**8.5**	**100.0**	**32.8**	**57.8**	**6.6**	**2.8**	**100.0**

* 18 respondent from no pocket money group were excluded

Table 5.11: Distribution of Pocket Money Received and Saved According to Demographic Factors *(continue)*

	Pocket Money Received					Pocket Money Saved*				
	No Pocket Money	Below RM1	RM1-Below RM2	RM2 and above	Total	Don't Save	Below RM1	RM1-Below RM2	RM2 and above	Total
Household Income[d]										
Up to $500	3.4	67.0	21.6	8.0	100.0	45.9	49.4	3.5	1.2	100.0
$501-$1000	3.2	69.3	20.6	6.9	100.0	34.1	59.8	4.5	1.7	100.0
$1001-1500	6.4	66.7	20.5	6.4	100.0	27.4	60.3	11.0	1.4	100.0
$1501-$2000	4.3	48.9	29.8	17.0	100.0	26.7	51.1	11.1	11.1	100.0
$2001-$3000	-	72.0	16.0	12.0	100.0	20.0	64.0	12.0	4.0	100.0
Above $3000	10.5	36.8	42.1	10.5	100.0	11.8	76.5	5.9	5.9	100.0
Number of Children[a]										
1	5.3	56.6	21.1	17.1	100.0	16.9	63.4	11.3	8.5	100.0
2	6.3	58.3	26.0	9.4	100.0	32.6	59.6	5.6	2.2	100.0
3	2.8	64.2	24.8	8.3	100.0	34.9	54.7	7.5	2.8	100.0
4	3.8	65.8	24.1	6.3	100.0	31.1	62.2	5.4	1.4	100.0
More than 5	2.3	80.2	15.1	2.3	100.0	45.2	51.2	3.6	-	100.0
Child's Birth Order[a]										
Only child	5.3	56.6	21.1	17.1	100.0	16.9	63.4	11.3	8.5	100.0
First child	2.5	59.7	28.3	9.4	100.0	27.5	60.1	9.8	2.6	100.0
Neither fisrt nor	4.2	76.1	16.2	3.5	100.0	37.0	60.7	1.5	0.7	100.0
Youngest	5.8	63.8	23.2	7.2	100.0	53.8	40.0	4.6	1.5	100.0
Total	**4.0**	**65.0**	**22.4**	**8.5**	**100.0**	**32.8**	**57.8**	**6.6**	**2.8**	**100.0**

a indicates that the demographic factor was related to pocket money received and saved significantly at 5% significant level
b indicates that the demographic factor was related to pocket money received significantly at 5% and pocket money saved significantly at 10% significant level
c indicates that the demographic factor was related to pocket money received significantly at 10% and pocket money saved significantly at 15% significant level
d indicates that the demographic factor was related to pocket money received significantly at 20% and pocket money saved significantly at 5% significant level

Majority of children received below RM1 (65%), with 4% had no pocket money at all. Only 8.5% received RM2 or more pocket money. Table 5.12 shows that child's age was positively correlated to the pocket money received (Spearman's rho = 0.281), which indicates that as the children were older, the more pocket money they received. This is also reflected by the decreased in frequency for pocket money below RM1 as they were older (Table 5.11). Furthermore, older children received more allowance than the younger ones. 17.4% of children aged between 13 to 14 years old received RM2 and more but among the younger group aged 7 to 8, only 2.2% received the same amount of pocket money. The percentage of those with no pocket money decreased as the child's age increased, which implies that older children will somehow receive some pocket money from the parents.

Table 5.12: Correlation Coefficients for Pocket Money Received and Saved by Selected Demographic Factors

Demographic Factors	Pocket Money Received (Spearman's rho)	Pocket Money Saved (Spearman's rho)
Child's Age	0.281*	0.183*
Household Income	0.068**	0.209*
Number of Children	-0.124*	-0.188*

* Significant at the 0.01 level ** Significant at the 0.15 level

Figures in Table 5.11 shows that 32.8% of the children did not save their pocket money and only 2.8% saved RM2 and above. This may be due to the small amount of pocket money they received, which was just enough to buy their meals in school. However, about 58% of them saved about RM1 or less. Similar pattern was observed as pocket money received, whereby as they grow older, they tend to save more of their allowance. This was also shown by Table 5.12 where the child's age was positively correlated to the pocket money saved (Spearman's rho = 0.183).

Looking at the allowance and saving pattern by gender, it was observed male and female children received about the same amount of pocket money. This is so for all income categories. Males saved less compared to the female children. The percentage of saving across all saving categories for male children was lower than female children. In addition, 35% of male children did not save their pocket money while only 29.8% of female children in this category.

Table 5.11 shows that majority of Indian children (82.2%) received less than RM1 per day or no pocket money and only 8.2% received RM2 and above daily pocket money. Malay and Chinese children received bigger amount of allowance compared to Indian children. 27.9% of Malay children received more than RM1 while 44.8% of Chinese children were in this category. However, although Indian children received less amount of pocket money, but they made up the group with the highest saving ratio among the three groups (71.8%). Looking at the Chinese children, noticed that not only they comprised the highest percentage of those with no pocket money, but at the same time, they were also the largest group (12%) that received more than RM2 pocket money (Malays : 6.9%, Indians : 8.2%).

It was expected that household income would have positive effect towards pocket money received. As shown in Table 5.11, majority of children received below RM1 except for the group where household income was above RM3000. 42.1% of children in this income group received between RM1 to RM2 pocket money. However, the chi-square test of independence (Table 5.11) showed that household income was not significantly related to pocket money received at 0.05 level. In addition, the Spearman rho correlation coefficient (0.068 as shown in Table 5.12) was also not significant at 0.05 level, which implies that household income was only mildly correlated (positively) to the pocket money received.

More children saved their pocket money when the household income increased. There were 88.2% of children in families with household income above RM3000 saved their pocket money but only 54.1% of children in the families of household income below RM500 saved their pocket money. This may due to the fact that children in higher income families received more pocket money (Table 5.12).

It was expected that when the number of children in the family increased, the amount of pocket money received by each of the child decreased. Table 5.11 and Table 5.12 support this view. Table 5.11 shows that for families with more than 5 children, 80.2% received below RM1 and only 2.3% received RM2 and above, whereas only 56.6% of children in one child families received below RM1 and 17% received RM2 and above. Spearman's rho correlation coefficient (-0.124 from Table 5.12) further justified this finding where the negative value indicates that as the number of children in the family increased, the children received less pocket money.

Since the children in one child families received more pocket money, their saving ratio was also higher (83.1%). This pattern was also shown by Table 5.12 (Spearman's rho = -0.188).

Table 5.11 shows that "only child" was the group where more children (17.1%) received RM2 and above. On the other hand, "youngest child" was the group with higher percentage of not receiving any pocket money. However, more than half (53.8%) of the youngest child who received some form of allowance did not save their money.

5.5 Pocket Money Towards Children's Influence

Table 5.13 shows the relationship between various decisions and the pocket money received. Based on the "M/H" ratings, children who did not receive any pocket money tend to have more influence than the other children across all decision items except for restaurant choice. They were the group with highest percentage in making decisions on their own for all the five decisions (i.e. toys, snacks, food, clothes and holiday destination). This implies that the "M/Hs" for this group of children perceived shopping with children as the only way for the children to get what they want. Therefore they were more willing to go along with their children's decisions. However, this interesting pattern was not shown in the child's ratings. Children who had no pocket money seem to perceive themselves to have less influence than the other children. This may due to the fact that without pocket money, the children felt that they have to depend on the parents to make the purchase.

For toys purchase, the percentage of "child decides" increased as the pocket money increased. For snacks purchase, RM2 and above was the group where more "M/Hs" made the purchase decision (23.68% from "M/H" ratings, 26.32% from child's ratings). Children received RM1 to below RM2 were more likely to perceive that they had more influence in snacks purchase (52.04%). Holiday and restaurant choice were the purchase where the decision was mainly made by the "M/Hs". However, "M/Hs" tend to discuss with the children in the selection of holiday and restaurant as they received more pocket money. These indicate that the allowance received will only affect the children's influence for less expensive products such as snacks and toys. Decisions such as holiday destination and restaurant choice were not affected by the children's pocket money.

Table 5.13: Percent Distribution of Purchase Decision Role by Pocket Money Received

	"M/H" Ratings				Child's Ratings			
	Child Decides	Joint Decision	"M/H" Decides	Total %	Child Decides	Joint Decision	"M/H" Decides	Total %
Decision : Toys Purchase								
POCMREC[a]								
No Pocket Money	31.25	68.75	-	100	14.29	85.71	-	100
Below RM1	19.10	65.28	15.63	100	21.79	65.76	12.45	100
RM1- Below RM2	29.00	65.00	6.00	100	26.60	67.02	6.38	100
RM2 and above	21.05	65.79	13.16	100	32.43	51.35	16.22	100
Total	21.95	65.38	12.67	100	23.63	65.42	10.95	100
Decision: Snacks Purchase								
POCMREC[b]								
No Pocket Money	44.44	44.44	11.11	100	17.65	70.59	11.76	100
Below RM1	43.94	46.37	9.69	100	50.18	41.22	8.60	100
RM1- Below RM2	42.00	51.00	7.00	100	52.04	38.78	9.18	100
RM2 and above	42.11	34.21	23.68	100	47.37	26.32	26.32	100
Total	43.37	46.29	10.34	100	49.07	40.51	10.42	100
Decision: Food Purchase								
POCMREC								
No Pocket Money	41.18	52.94	5.88	100	41.18	41.18	17.65	100
Below RM1	35.99	47.75	16.26	100	41.37	45.68	12.95	100
RM1- Below RM2	35.00	50.00	15.00	100	48.98	36.73	14.29	100
RM2 and above	39.47	31.58	28.95	100	40.54	32.43	27.03	100
Total	36.26	47.07	16.67	100	43.02	42.33	14.65	100
Decision: Clothing Purchase								
POCMREC[c]								
No Pocket Money	33.33	53.33	13.33	100	17.65	58.82	23.53	100
Below RM1	8.30	40.83	50.87	100	9.29	43.57	47.14	100
RM1- Below RM2	19.00	46.00	35.00	100	20.83	52.08	27.08	100
RM2 and above	21.05	47.37	31.58	100	31.58	39.47	28.95	100
Total	12.67	42.99	44.34	100	14.15	45.71	40.14	100
Decision: Holiday Destination								
POCMREC[d]								
No Pocket Money	13.33	53.33	33.33	100	6.67	60.00	33.33	100
Below RM1	5.56	36.46	57.99	100	5.34	38.17	56.49	100
RM1- Below RM2	10.00	44.00	46.00	100	15.96	52.13	31.91	100
RM2 and above	13.16	44.74	42.11	100	13.89	58.33	27.78	100
Total	7.48	39.46	53.06	100	8.60	43.98	47.42	100
Decision: Restaurant Choice								
POCMREC[e]								
No Pocket Money	18.75	56.25	25.00	100	13.33	53.33	33.33	100
Below RM1	8.01	33.45	58.54	100	7.31	37.69	55.00	100
RM1- Below RM2	22.00	41.00	37.00	100	20.43	47.31	32.26	100
RM2 and above	13.51	54.05	32.43	100	13.51	59.46	27.03	100
Total	12.05	37.73	50.23	100	11.11	42.47	46.42	100

a indicates M/H's rating significant at 10% significant level, child's rating at 20% significant level
b indicates M/H's rating significant at 15% significant level, child's rating at 5% significant level
c indicates M/H's rating significant at 5% significant level, child's rating at 5% significant level
d indicates M/H's rating significant at 10% significant level, child's rating at 5% significant level

5.6 "Marketing Housewives" Versus Children's Ratings

"M/H" ratings and child's ratings were recoded with 1 representing "M/H" ratings, 2 representing child's ratings. Chi-square test of independence was then carried out to test the relationship between the two ratings to find out whether "M/Hs" and children's perceptions towards children's influence are similar for the six decisions. Results of the test show non-significant at 0.05 significant level, which means their perceptions were rather similar (Table 5.14).

Table 5.14: Chi-square Test of Independent

Decision	Group*	
	Pearson χ^2	Sig.
Toys Purchase	0.792	0.673
Snacks Purchase	3.233	0.199
Food Purchase	4.189	0.123
Clothing Purchase	1.636	0.441
Holiday Destination	2.708	0.258
Restaurant Choice	1.976	0.372

* 1:"M/Hs" ratings 2: Child's ratings

"M/H" and child's ratings for the six decisions were further analyzed using Mann Whitney Test to see whether there were differences in their ratings. Using Mann Whitney Test, the mean rank of the two independent samples was compared for significant differences.

Results show that in general, "M/Hs" and children's perceptions were consistent at 0.05 significant level. The mean ranks for children's were lower for all the six decisions as shown in Table 5.15. These indicate that although disagreement did not exist significantly towards the decision-making for these items, children tend to perceive that they had more influence than the "M/Hs".

Table 5.15 : Mean Rank of Children's Influence Ratings by "M/Hs" and Children

Children's Influence	"M/H" (Mean Rank)	Child (Mean Rank)
Toys	428.17	416.27
Snacks	449.95	427.72
Food*	452.38	422.14
Clothing	446.69	427.06
Holiday Destination	436.19	411.84
Restaurant Choice	428.84	416.66

Note: 1=Child decides 2= Joint-decision 3= "M/H" decides. * indicates 0.10 significant level

Discriminant analysis was also carried out to further justify the results observed from the chi-square test of independence and Mann-Whitney test. The discriminant model was form as follow:

$$\text{Group} = \text{Constant} + c_1\text{Toy} + c_2\text{Snack} + c_3\text{Food} + c_4\text{Clothing} + c_5\text{Hol} + c_6\text{Rest}$$

However, none of the variables are significant enough to discriminate the child and the "M/H" in their ratings on how the child perceived themselves and how the "M/H" perceived the children behavior. This reveals that differences in perceptions did not exist between the "M/Hs" and the children in most cases. However, detail analysis for different subgroup and demographic factors were done to gain a better understanding of decision made between the two parties. Mann Whitney Test was applied for this purpose. Table 5.16 summarized the results.

Table 5.16 shows there was differences in the perception for nine demographic subgroups. For children between aged 11 and 12 years old, the differences between "M/Hs" and children were related to food, whereas for children aged between 13 and 14 years old, the disagreement was on clothes purchasing. Interestingly, "M/Hs" aged between 40 to 44 years old had different perception on

children's influence as compared to their children in the purchase of food and clothing for no clear explanation. According to Table 5.3 (Section 5.3.1), more than 50% of the children for this group of "M/Hs" were in the aged range of 11 to 14 years old. This may indicate that the differences between "M/Hs" and children's perceptions in food and clothing purchase was mainly among "M/Hs" aged between 40 to 44 years old and children aged 11 to 12 and 13 to 14 respectively.

Table 5.16: Disagreement Between "M/H" and Child's Perceptions

Demographic Subgroup	Purchase Decision	Mean Rank From "M/H" (Child's) Ratings
Children Aged 11-12	Food*	118.11 (100.73)
Children Aged 13-14	Clothing*	119.10 (98.81)
"M/Hs" Aged 40-44	Clothing*	110.16 (93.60)
	Food**	108.13 (95.68)
Female Children	Food*	224.14 (197.42)
	Snacks**	222.26 (201.49)
Malays	Food*	255.09 (226.26)
	Snacks*	253.19 (230.28)
Indians	Clothing**	78.86 (67.06)
	Toys**	76.12 (65.51)
Household Income M501-RM1000	Food*	197.01 (172.52)
	Snacks*	196.98 (172.42)
More Than 5 Children	Clothing**	90.98 (78.80)
	Food**	91.40 (78.37)
First Child	Food*	167.14 (146.66)

* Significant at 0.05 level ** Significant at 0.10 level

The disagreement in perceptions between female children and the "M/Hs" was for food. The result reveals that Malay children had difference of opinion in decision relating to food and snacks purchase, whereas Indian children were in disagreement with the "M/Hs" for the purchase of clothing and toys.

Families with household income of RM501 to RM1000 had conflict between the children and the "M/Hs" in the purchase of food and snacks. Children in this income group tend to believe that they had more influence in deciding what food and snacks to buy, however, the "M/Hs" thought it was joint-decision (refer also Table 5.5 for snacks purchase and Table 5.6 for food purchase).

First child was found to have different perception towards their influence as compared to the "M/Hs" perception in food purchase. Furthermore, children with 5 or more siblings also have different perception as compared to the "M/Hs" in the purchase of food and clothing. As shown in Figure 4.8, only child and the youngest child had more influence for all the six decision. Therefore, this disagreement may be due to biases that exist in the families with more children.

5.7 Logistic Regression

In order to further examine the effect of independent variables (such as child's age, race, household income, gender, pocket money and birth order) toward children's influence on various family decisions simultaneously, logistic regression was carried out.

The dependent variable for the logistic regression model is the dichotomous variable, indicating whether children have influence in the family decision-making (1 = has influence, 0 = no influence). Therefore, for each of the decision, the decision made entirely by the child or as joint-decision with the "M/H" was coded as 1 and no decision was coded as 0.

The independent variables included for the analysis are child's age, race, household income, child's birth order, pocket money and child's gender. The variables in the model are defined as follow:

Age : age of the child, range from 7 to 14

Malays[a] : 1 if the child is a Malays and 0 otherwise.

Chi[a] : 1 if the child is a Chinese and 0 otherwise.

Inc1[b] : 1 if the household income was below RM500 and 0 otherwise.

Inc2[b] : 1 if the household income was between RM501 to RM1000 and 0 otherwise.

Inc3[b] : 1 if the household income was between RM1001 to RM1500 and 0 otherwise.

Inc4[b] : 1 if the household income was between RM1501 to RM2000 and 0 otherwise.

Inc5[b] : 1 if the household income was between RM2001 to RM3000 and 0 otherwise.

Ochild[c] : 1 if the child was the only child in the family and 0 otherwise.

Fchild[c] : 1 if the child was the first child in the family and 0 otherwise.

NFNO[c] : 1 if the child was neither the first nor the only child in the family and 0 otherwise.

PocM1[d] : 1 if the child had no pocket money and 0 otherwise.

PocM2[d] : 1 if the child received below RM1 as pocket money and 0 otherwise.

PocM3[d] : 1 if the child received RM1 to below RM2 as pocket money and 0 otherwise.

Male[e] : 1 if the child was a male and 0 otherwise.

The logistic model can be written as follow:

$$Z = \text{Const} + c_1\text{Age} + c_2\text{Malay} + c_3\text{Chi} + c_4\text{Inc1} + c_5\text{Inc2} + c_6\text{Inc3} + c_7\text{Inc4} + c_8\text{Inc5} + c_9\text{Ochild} + c_{10}\text{Fchild} + c_{11}\text{NFNO} + c_{12}\text{PocM1} + c_{13}\text{PocM2} + c_{14}\text{PocM3} + c_{15}\text{Male}$$

where c_i = regression coefficient for i^{th} independent variables, with i = 1,2,3,....15

$$P(\text{child has influence} = 1) = 1/\ 1+e^{-z}$$

There are six regression models to be fitted, one for each of the decision (toys, snacks, food, clothes, holiday and restaurant choice)

Notes:

a Indians was the dummy group

b Income above RM3000 was the dummy group

c Younger child was the dummy group

d Pocket money above RM2 was the dummy group

e Female child was the dummy group

Table 5.17 shows that the chi-square model was significant at 5% significant level for all the decisions except for snacks purchased. These results indicate that the coefficients for each of the regression model were significantly different from zero and had some influence on the model. In other words, these five logistic models were appropriate at 5% significant level.

Table 5.17: Chi-square Model and Overall Prediction of the Logistic Regression Model

Purchase Decision	Chi-square Model	Sig	Overall Prediction (Percent Correct)
Toys	43.402	0.000	88.01
Snacks	23.782	0.069	89.66
Food	27.444	0.025	83.33
Clothing	42.588	0.000	63.35
Holiday Destination	40.164	0.000	58.96
Restaurant Choice	62.843	0.000	65.00

Table 5.18 shows the coefficient for independent variables in the logistic model. The asterisk indicates that the respective independent variables made a significant contribution to the logistic model. As we could observe for toys purchase, child's age, race, income, birth order and gender were the variables that could significantly predict the probability of the children to have influence. Pocket money was the only predictor variable that made a significant contribution to the model for snacks, whereas race and pocket money could predict the probability of a child to have influence in clothing and restaurant choice. The model for holiday destination could only be predicted by race and income. As for food, the predictor variables (i.e. race, income and pocket money) made a significant contribution to the logistic model.

Table 5.18: Regression Coefficient for Independent Variables

	Regression Coefficient (B)															
	Const	**Age**	**Malay**	**Chi**	**Inc1**	**Inc2**	**Inc3**	**Inc4**	**Inc5**	**Ochild**	**Fchild**	**NFNO**	**PocM 1**	**PocM 2**	**PocM 3**	**Male**
Toys	1.335	*-0.187	*1.030	*1.057	0.557	1.013	1.338	*2.184	2.359	0.453	*1.075	0.588	6.010	-0.425	0.721	*0.661
Snacks	-0.518	0.080	-0.365	0.213	0.269	0.384	0.974	1.106	6.504	-0.057	0.458	-0.064	1.261	*1.475	*1.661	0.085
Food	-0.525	-0.043	0.007	*0.943	0.715	0.912	*1.533	*1.641	*1.894	0.847	0.474	0.262	1.926	*1.063	*1.085	0.015
Clothing	0.658	-0.070	*0.961	*1.202	-0.233	-0.044	0.428	-0.022	0.988	0.187	0.113	0.141	0.789	*-0.870	-0.267	-0.208
Holiday Destination	0.357	-0.079	*0.857	*0.990	0.322	0.068	0.505	0.087	*1.965	-0.039	-0.228	-0.399	0.230	-0.704	-0.212	0.038
Restaurant Choice	1.300	-0.077	*1.135	*1.159	-0.636	-0.916	-0.142	0.021	0.388	-0.101	-0.075	-0.487	0.200	*-1.032	-0.265	-0.022

*Significant at 5% significant level

The coefficient for age is negative and only significant at 5% level for toys purchase decision. This indicates that with all other variables remain constant, the probability of a child to have influence on toys purchase decreased as child's age increased. This finding was different from what we observed in the previous section where children's influence increased with age (Section 4.2 and Section 5.3.1). This may be caused by the recoding process where we included the joint decision for logistic analysis, whereas for previous section, we only considered the child's individual decision.

Race has the coefficient that was significant at 5% level for all decisions except for snacks. The coefficient for Malays and Chinese were positive, which means Malay and Chinese children had higher probability to exercise their influence than Indian children in family decisions making. Looking at Malay and Chinese children, it was found that Chinese children had more influence since the coefficients for Chinese were higher for all the six decisions.

Coefficient for Inc3 (income RM1001 to RM1500), Inc4 (income RM1501 to RM2000) and Inc5 (income RM2001 to RM3000) were significant at 5% level for food purchase. The positive value of the coefficients indicate that children in the families with household income RM1001 to RM3000 had higher chances to involve in the decision-making for the purchase of food than children in families with household income above RM3000. Among these three income groups, probability for children's influence in Inc5 (RM2001 to RM3000) was the highest, followed by Inc4 (RM1501 to RM2000) and Inc3 (RM1001 to Rm1500). In other words, children's influence in food increased with household income, as also shown in Section 5.3.3. Children in Inc4 (RM1501 to RM2000) also had significant influence

on toys purchase, whereas children in Inc5 (RM2001 to RM3000) had significant influence on holiday destination.

Children received below RM1 (PocM2) and between RM1 to RM2 (PocM3) daily pocket money had significant influence on both snacks and food purchase. The positive value for the coefficients show that children received below RM1 and between RM1 to RM2 had higher chances to have influence in these decisions than children who received RM2 and above pocket money. Coefficient for PocM3 (between RM1 to RM2) is higher than PocM2 (below RM1) in both snacks and food model, which means children received PocM3 had higher probability to involve in these purchase decision than children received PocM2. Children received PocM2 (below RM1) also had significant influence in making decision for clothing and restaurant choice. However, the negative values indicate that children received below RM1 had lower probability to exercise their influence than children received RM2 and above in making decision for these two items.

Gender only had significant influence on toys purchase at 5% significant level. The positive value for the coefficient shows that male children had higher probability to have influence on toys purchase as compared to female children. This may be due to the fact that male children were more persistent in getting the toys that they want. Birth order only contributes to the toys model where the probability of first child to have influence on toys is significantly higher than youngest child in the family.

The probability that a child has influence in family decision-making can be calculated based on the coefficient presented in Table 5.18. For example, for a Chinese child age 9, first child of the family with RM1501 to RM2000 household income and received below RM1 daily pocket money, the probability for him/her to

have influence on toys purchase decision is 0.972. In other words, 97.2% of such individual could be expected to have influence on toys purchase.

Calculations were also done for other decisions for Malay and Indian children based on the same background. The result is presented in Table 5.19.

Table 5.19: Probability Children Had Influence in Family Decision-making

	Expected Probability (Chinese)	Expected Probability (Malays)	Expected Probability (Indians)
Toys	0.972	0.971	0.923
Snacks	0.969	0.947	0.962
Food	0.961	0.907	0.906
Clothing	0.610	0.552	0.320
Holiday Destination	0.447	0.415	0.231
Restaurant Choice	0.663	0.658	0.382

*Value for the remaining independent variables was zero

Once again, result shows that Chinese children had higher probability in exercising their influence than Malay children for all the six decisions. Indian children had the least influence among these three groups. However, for snacks purchase, Indian children had higher probability to have influence than Malay children.