

# **CHAPTER V**

## **PRESENTATION OF RESULTS**

### **5.0 Introduction**

This chapter presents the data and research findings. Specifically, it includes discussions of the (a) results of pilot study, (b) return rate, (c) respondents' demographic characteristics, (d) hypothesis testing results from areas of (i) financial learning and financial literacy, (ii) financial literacy and economic well-being, (iii) financial learning and financial well-being, (iv) children's contact and filial piety, (v) co-residence and parents with financial resources, (vi) time away from parents and filial piety, (vii) patterns of exchange and filial piety – parents perspective, (viii) opportunity for support and filial piety, (ix) parents' need for assistance and filial piety, (x) children's higher income and filial piety with opportunity for support, and (xi) financially literate and filial piety to achieve economic well-being. For ease of reference, however, the discussions are presented in five Sections, thus: 5.1 Results of pilot study, 5.2 Return rate, 5.3 Respondents' demographic characteristics, 5.4 Results from the hypothesis testing, and 5.5 Summary of results.

### **5.1 Results of Pilot Study**

Indexes are multi-item instruments (composite measures) used to measure a single concept with several attributes. Asking different questions in order to measure the same thing

provides a more accurate cumulative measure than does one based on a single-item. There were in the pilot study 35 respondents five of whom were rejected due to too many missing data in their responses. The reliability of the measure was established by testing for both consistency and stability. Cronbach's alpha is a reliability coefficient that indicates how well the items in a set are positively correlated to one another. Adopting from Nunnally's (1978) approach, the study has used Cronbach's alpha 0.6 and above as the acceptable level, especially for initial investigations. Establishing the goodness of data lends credibility to all subsequent analyses and findings in the present study. Wherever the index's reliability was weak, the questions were re-looked at and refined with a view to improving the degree of their reliability. Questions with high missing data were re-examined and reworded to make them more understandable and simple to elicit responses.

## **5.2 Return Rate**

In the main survey, of the 750 questionnaires (550 in English and 200 in Chinese) which were either emailed or hand-delivered to respondents, 346 (or 46.1%) were not returned, although the respondents concerned had indicated they would return them at a later date by post or by hand. Sending questionnaire to target respondents by email was much faster than by post and the response or feedback from them was also much faster (Kent and Lee, 1999). The number of questionnaires returned was, therefore, 404 representing a return rate of 53.9%. Although 404 usable questionnaires were returned, the final total number of responses for some questionnaire items was not equal to 404, but the result of the missing information on such items or demographic characteristics was not serious enough to be deduced from the various Tables referred to in this chapter.

### 5.3 Respondents' Demographic Characteristics

This section presents respondents' demographic characteristics, i.e. race, gender, marital status, education, age, income, children, housing, and employment. As shown in Table 5.1 below, the majority of the respondents were Chinese (80.4%) whilst the minority were Malays (10.4%) and Indians (7.2%).

**Table 5.1:  
Respondents' Race**

Race	Frequency	Percent
Malay	42	10.4
Chinese	325	80.4
Indian	29	7.2
Others	8	2.0
Total	404	100.0

As shown in Table 5.2 below, the majority of the respondents were female (50.7%) and the remaining 49.3% were male. Within this context, 44.3% of the respondents were married while the remaining respondents were single (51.7%), divorced (2.5%) or widowed (1.4%) respectively (not shown in Table 5.2).

**Table 5.2:  
Respondents' Gender**

Gender	Frequency	Percent
Male	199	49.3
Female	205	50.7
Total	404	100.0

As a group, the respondents were highly educated as displayed below in Table 5.3 which shows that the largest combined group (73.5%) had some tertiary education with the second

largest combined group (21.5%) having high school education, followed by those with a primary school education (3.2%) and those without any education at all (1.5%) respectively.

**Table 5.3:  
Respondents' Education Level**

Education Level	Frequency	Percent
No Schooling	6	1.5
Primary	13	3.2
Secondary	87	21.5
Tertiary	297	73.5
Total	403	99.8
Missing Values	1	0.2
Total	404	100.0

By age group, Table 5.4 (below) shows that 36.9% of the respondents were in their twenties, 31.4% between 30 to 39 years old and 14.9% between the age of 40 to 49, while the percentage of respondents who were in their fifties was 8.9%, and a small number of respondents (7.7%) were over sixty years of age. The mean age was calculated to be 32.5 years old.

**Table 5.4:  
Respondents' Age Group**

Age (Years)	Frequency	Percent
20 to 29	149	36.9
30 to 39	127	31.4
40 to 49	60	14.9
50 to 59	36	8.9
60 to 69	18	4.5
70 to 79	11	2.7
80 and Above	2	0.5
Total	403	99.8
Missing Values	1	0.2
Total	404	100.0

As a group, the respondents had reported moderate income (see Table 5.5 below). By combining categories, 65.1%) of the respondents had personal incomes less than RM5,000.00 and less than one-tenth (8.9%) of the respondents had personal income above RM10,000.00. Table 5.5 also shows that the largest group had a personal income of RM3,000.00 to RM3,999.00 (18.6%), followed by the next largest group having personal income of RM2,000.00 to RM2,999.00 (18.1%).

**Table 5.5:  
Respondents' Monthly Income Range**

Monthly Income (RM)	Frequency	Percent
Nil	6	1.5
Less than 2,000	62	15.3
2,000 to 3,000	73	18.1
3,000 to 3,999	75	18.6
4,000 to 4,999	47	11.6
5,000 to 5,999	48	11.9
6,000 to 6,999	15	3.7
7,000 to 7,999	18	4.5
8,000 to 8,999	7	1.7
9,000 to 9,999	1	0.2
10,000 and above	36	8.9
Total	388	96.0
Missing Values	16	4.0
Total	404	100.0

As shown in Table 5.6 below, the average number of financial dependents was one. 9.7% of the respondents had one dependent, and 14.9% of the respondents had two dependents. 12.6% of the respondents had three dependents, and 3.0% of the respondents had four dependents. 58.2% of the respondents had no dependents. More dependents would mean more expenditure.

**Table 5.6:  
Respondents' Number of Children**

No. of Children	Frequency	Percent
0	235	58.2
1	39	9.7
2	60	14.9
3	51	12.6
4	12	3.0
5	5	1.2
6	1	0.2
Total	403	99.8
Missing Values	1	0.2
Total	404	100.0

As displayed in Table 5.7 below, 64.4% of the respondents were homeowners, and 35.6% were renters or staying with someone. Homeownership accounts for a large portion of an individual's expenditure and has a significant impact on retirement planning.

**Table 5.7:  
Respondents' Home Ownership Status**

Home Ownership	Frequency	Percent
Yes	260	64.4
No	144	35.6
Total	404	100.0

As shown in Table 5.8 below, married and single respondents are almost equal in number or approximately 50%, when married respondents are taken as inclusive of both divorced and widowed respondents.

**Table 5.8:**

**Respondents' Marital Status**

Marital Status	Frequency	Percent
Single	209	51.7
Married	179	44.3
Divorced	10	2.5
Widowed	5	1.2
Total	403	99.8
Missing	1	0.2
Total	404	100.0

As Table 5.9 below has indicated, the majority of respondents (59.4%) work in the private sector, 14.9% in the public sector, 10.1% self-employed and 14.1% in others or informal sector (unspecified).

**Table 5.9:  
Respondents' Employment Type**

Employment Type	Frequency	Percent
Employer	41	10.1
Public Sector	60	14.9
Private Sector	240	59.4
Others	57	14.1
Total	398	98.5
Missing Values	6	1.5
Total	404	100.0

Those working in the public sector are entitled to Government pension funds whilst private sector employees are entitled to Employee Provident Funds.

#### **5.4 Testing of Hypotheses**

There are altogether 11 main hypotheses to be tested in the whole study. In view of the different complications of the problems and their different nature involved, more than half of the hypotheses were split into 2 to 4 sub-hypotheses in order to delve in the problems while the rest had remained in their original, for testing purposes. Notwithstanding these changes, hypotheses 1, 2, 3, 4, 5, 6, 10 and 11 were tested using the hierarchical regression analysis, and hypotheses 7, 8 and 9 tested using the ordinary regression analysis, whilst hypothesis 6 was tested using the stepwise regression analysis. Detailed explanations of the various steps and the testing results are to follow. Table 5.10 below summarized the explanation for the coding of each variable.

**Table 5.10:  
Explanation on Coding of Variable**

<b><u>Coding</u></b>	<b><u>Variable</u></b>
LITEXPL	Financial Literacy – Ability to explain to others
LITKNOW	Financial Literacy – Believes himself to be knowledgeable
SUBPERC	Economic Well-being - Personal perception of adequacy
BEHASS	Economic Well-being – Taken action to financially plan
FINSAT	Economic Well-being – Ability to make investment decisions
PERWELL	Economic Well-being – Ability to meet current and future expenditures
InstrSupp	Instrumental Support – Non-financial help from children
Need	Perception of parent’s need for help
SUPPO	Perception of filial piety obligations between children and parents
FilObli	Entrenchment of filial piety obligation
ContactPar	Contact by parents – travelling time and distance between homes
ResourcePar	Resources of parents – income and ability to maintain current lifestyle
AwayTime	Time child is away from parents – Contact frequency & stay distance
DAge	Dummy variable for age cohorts
DEmp	Dummy variable for employment category
DMarr	Dummy variable for marriage
DEduc	Dummy variable for educational level
F1	Income
DEthnic	Dummy variable for race ethnicity
DHome	Dummy variable for home ownership status
DChildren	Dummy variable for number of children

### **Hypothesis 1: Financial Learning and Financial Literacy**

The hypothesis was formulated in order to gain an insight into the intricacy of financial learning or financial literacy, and the best approach to this subject would be to examine the inter-relationship between financial learning and financial literacy as their inter-relationship might have an effect on financial planning for retirement purposes. The long form of the hypothesis was: *‘Controlling for demographic attributes, financial learning makes a significant contribution to financial literacy level’*

H<sub>0</sub>: Controlling for demographic attributes, financial learning does not make a significant contribution to financial literacy level.



H1: Controlling for demographic attributes, financial learning makes a significant contribution to financial literacy level

Regression analysis would be used to describe financial literacy according to demographic characteristics. The demographic variables were age dummy variable (DAge), education, ethnicity, gender, home ownership, income (F1), marital status dummy variable (DMarr1), number of children, and employment type dummy variable (DEmp). The issue of financial literacy would be examined according to the financial learning of the respondents. Financial learning variables comprised items QD1 (a to e), QD2 (a to f), QD6 and QD7. To obtain an in-depth knowledge, the financial learning and literacy would be investigated from two perspectives: (a) Financial Literacy Explanation (LITEXPL), and (b) Financial Literacy Knowledge (LITKNOW) through the testing of sub-hypotheses (H.1a and 1b). Full discussions are given below.

## **Regression Results**

### **Hypothesis 1a**

H0: Controlling for demographic attributes, financial learning does not make a significant contribution to financial literacy explanation.

H1: Controlling for demographic attributes, financial learning makes a significant contribution to financial literacy explanation.

Table 5.11 below shows the hierarchical multiple regression results on financial literacy explanation (“LITEXPL”). The Table has also shown that nine demographic characteristics have explained 18.0% of the variance of the dependent variable. The R square has suggested that there are other factors explaining LITEXPL besides the nine demographic characteristics used in this research. Since the variables, having children and income

( $b = .140$ ,  $p = .064$ ;  $b = .253$ ,  $p < .001$  respectively) are positive and significant with the latter being a relatively more significant predictor of the LITEXPL than ‘having children’ and since the financial variables ( $R^2$  change = .139,  $p < .001$ ;  $F$  change = 5.497,  $p < .001$ ) are also significant at the 0.001 level, the results indicate that the above null hypothesis should be rejected. In other words, on the issue of contribution of financial learning to financial literacy, the hypothesis which states (*Controlling for demographic attributes, financial learning makes a significant contribution to financial literacy explanation*), should be accepted.

**Table 5.11:**  
**Regression Results of Hypothesis 1a**

Model Summary	R Square	Adjusted R Square	Std. Error of Estimate	R Square Change	F Change	Sig. F Change
1 <sup>a</sup>	0.180	0.153	5.343	0.180	6.641	.000
2 <sup>b</sup>	0.319	0.270	4.959	0.139	5.497	.000

a. Predictors: DAge1, DAge2, DAge3, DAge4, DAge5, DEmp1, DEmp2, DMarr1, DEduc, Home, Gender, Children, F1, Ethnic

b. Predictors: DAge1, DAge2, DAge3, DAge4, DAge5, DEmp1, DEmp2, DMarr1, DEduc, Home, Gender, Children, F1, Ethnic, Attend, Skill, D1aA, D1bA, D1cA, D1dA, D1eA, D2bA, D2cA, D2dA, D2eA, D2fA  
Dependent Variable: LITEXPL

Variable	B	Beta	T	Sig.
Constant	8.322		5.493	.000
D1cA(Learning)	-.587	.064	-1.321	.187
D1eA(Learning)	-1.219	**-.202	-2.982	.003
D2bA(Learning)	-.621	*-.106	-2.172	.031
D2eA(Learning)	.702	.084	1.798	.073
Skill(Learning)	.303	.068	1.405	.161
Attend(Learning)	.220	** .214	4.333	.000
DEduc	.930	.071	1.391	.165
Ethnic	.873	.076	1.614	.107
Children	.612	.140	1.856	.064
DEmp2	-1.175	-.073	-1.523	.129
F1(Income)	.554	** .253	4.878	.000

\*  $p < 0.05$ .    \*\*  $p < 0.01$ .

## Hypothesis 1b

H<sub>0</sub>: Controlling for demographic attributes, financial learning does not make a significant contribution to financial literacy knowledge.

H<sub>1</sub>: Controlling for demographic attributes, financial learning makes a significant contribution to financial literacy knowledge.

Table 5.12 hereunder has displayed the regression results on financial literacy knowledge (“LITKNOW”), indicating that nine demographic characteristics have explained 9.2% of the variance of the dependent variable. The R square in the Table has also suggested that there were other factors, which have explained the independent variable LITKNOW, apart from the nine demographic characteristics. Since among demographic characteristics variables, ethnicity, education level and income ( $b = .102, p < .05$ ;  $b = -.131, p < .05$ ;  $b = .166, p < .01$  respectively) had significant coefficients (with income being a relatively more significant predictor of the LITKNOW independent variable) and the financial learning variables ( $\Delta R^2 = .151, \Delta F = 5.234, p < .000$ ) were significant at the level of 0.001, it could be concluded that the above null hypothesis must be rejected, and that the hypothesis which reads thus “*Controlling for demographic attributes, financial learning makes a significant contribution to financial literacy knowledge*” should be accepted in the area of financial education.

**Table 5.12:**  
**Regression Results of Hypothesis 1b**

Model Summary	R Square	Adjusted R Square	Std. Error of Estimate	R Square Change	F Change	Sig. F Change
1 <sup>a</sup>	0.092	0.061	4.288	0.092	2.970	.001
2 <sup>b</sup>	0.243	0.188	3.988	0.151	5.234	.000

a. Predictors: DAge1,DAge2,DAge3,DAge4,DAge5,DEmp1,DEmp2,DMarr1,DEduc,Home,Gender,Children,F1,Ethnic

b. Predictors: DAge1,DAge2,DAge3,DAge4,DAge5,DEmp1,DEmp2,DMarr1,DEduc,Home,Gender,Children,F1,Ethnic,Attend,Skill,D1aA,D1bA,D1cA,D1dA,D1eA,D2bA,D2cA,D2dA,D2eA,D2fA

Dependent Variable: LITKNOW

Variable	B	Beta	T	Sig.
Constant	8.256		6.684	.000
D1eA(Learning)	-.786	*-.171	-2.358	.019
D2cA(Learning)	.743	** .149	2.948	.003
D2eA(Learning)	.639	*.101	2.008	.045
D2fA(Learning)	.915	*.127	2.551	.011
Skill(Learning)	.374	*.110	2.123	.034
Attend(Learning)	.122	** .156	2.959	.003
Ethnic	.891	*.102	2.022	.044
DEduc	-1.312	*-.131	-2.408	.017
F1(Income)	.277	** .166	2.998	.003

\* p < 0.05.    \*\* p < 0.01.

In summary, it may be concluded that, with the testing results of the two tested sub-hypotheses in full support, the hypothesis (*Controlling for demographic attributes, financial learning makes a significant contribution to financial literacy level*) put forward at the beginning of this subsection should be accepted. In other words, financial learning enhances financial literacy which, for the purpose of the present study, is expected to make possible contribution to respondents' retirement financial planning.

## **Hypothesis 2: Financial Literacy and Economic Well-being**

There was a need to introduce a hypothesis in order to test the effect of financial literacy on economic well-being as part and parcel of the present study. The long form of this hypothesis was: *Controlling for demographic attributes and financial learning, financial literacy makes a significant contribution to economic well-being.*

- H<sub>0</sub>: Controlling for demographic attributes and financial learning, financial literacy does not make a significant contribution to economic well-being level.
- H<sub>1</sub>: Controlling for demographic attributes and financial learning, financial literacy makes a significant contribution to economic well-being level

For this purpose, the following nine demographic variables were investigated i.e. ethnicity, gender, age, marital status, number of children, home ownership, education level, income level, and employment classification. This section presents economic well-being according to respondents' financial literacy. Factor analysis has identified four main factors for economic well-being which were used as dependent variables. For an in-depth insight into the subject, however, the relationship between financial literacy and financial well-being as suggested in the above hypothesis was examined through the testing of four sub-hypotheses from the following perspectives: (a) Subjective Perception of Personal Finance (SUBPERC), (b) Behavioural Assessment of Personal Finance (BEHASS), (c) Satisfaction with Financial Situation (FINSAT), and (d) Perceived Financial Well-being (PERWELL).

## **Regression Results**

### **Hypothesis 2a: Subjective Perception of Personal Finance (SUBPERC)**

- H<sub>0</sub>: Controlling for demographic attributes and financial learning, financial literacy does not make a significant contribution to Subjective Perception of Personal Finance.
- H<sub>1</sub>: Controlling for demographic attributes and financial learning, financial literacy makes a significant contribution to Subjective Perception of Personal Finance.

Table 5.13 below shows the regression results that among the nine demographic characteristics, age, income and home ownership ( $b = .163$ ,  $p < .05$ ;  $b = .127$ ,  $p < .05$ ;  $b = .117$ ,  $p = .054$  respectively) had significant beta coefficients which had represented the relative contributions of the variables in the equation (Howell, 1992; Pedhazur, 1982). The results also show that the variable of older age cohort was a relatively more significant predictor of the subjective perception of personal finance than the other eight demographic variables.

Furthermore, the results also show that Model 1 comprising all the demographic and learning variables ( $\Delta R^2 = .211$ ,  $\Delta F = 3.637$ ,  $p < .001$ ) was significant at the 0.001 level, and that, with the input of the literacy variables in Model 2, the R square was still significant ( $\Delta R^2 = .021$ ,  $\Delta F = 4.594$ ,  $p < .05$ ) at the 0.011 level. Therefore, it could be concluded that Hypothesis 2a was fully supported. That is to say, the above null hypothesis must be rejected, and the hypothesis “Controlling for demographic attributes and financial learning, financial literacy makes a significant contribution to Subjective Perception of Personal Finance” accepted.

**Table 5.13:**  
**Regression Results of Hypothesis 2a**

Model Summary	R Square	Adjusted R Square	Std. Error of Estimate	R Square Change	F Change	Sig. F Change
1 <sup>a</sup>	0.211	0.153	1.495	0.211	3.637	.000
2 <sup>b</sup>	0.232	0.171	1.479	0.021	4.594	.011

- a. Predictors: DAge1,DAge2,DAge3,DAge4,DAge5,DEmp1,DEmp2,DMarr1,DEduc,Home,Gender, Children,F1,Ethnic,Attend,Skill,D1aA,D1bA,D1cA,D1dA,D1eA,D2bA,D2cA,D2dA,D2eA,D2fA  
b. Predictors: DAge1,DAge2,DAge3,DAge4,DAge5,DEmp1,DEmp2,DMarr1,DEduc,Home,Gender,Ethnic, Children,F1,Attend,Skill,D1aA,D1bA,D1cA,D1dA,D1eA,D2bA,D2cA,D2dA,D2eA,D2fA, LITKNOW,LITEXPL

Dependent Variable: SUBPERC

Variable	B	Beta	T	Sig.
Constant	5.078		10.248	.000
LITEXPL	.032	.114	1.893	.059
LITKNOW	.036	.098	1.706	.089
D2eA(Learning)	.282	*.121	2.367	.018
D1dA(Learning)	-.283	**-.153	-2.589	.010
D1eA(Learning)	-.258	*-.153	-2.055	.041
Home	.383	.117	1.931	.054
Gender	-.271	-.095	-1.817	.070
DAge5	.991	*.163	2.480	.014
F1 (Income)	.078	*.127	2.182	.030

\*  $p < 0.05$ . \*\*  $p < 0.01$ .

### Hypothesis 2b: Behavioural Assessment of Personal Finance (BEHASS)

H<sub>0</sub>: Controlling for demographic attributes and financial learning, financial literacy does not make a significant contribution to Behavioural Assessment of Personal Finance.

H1: Controlling for demographic attributes and financial learning, financial literacy makes a significant contribution to Behavioural Assessment of Personal Finance.

As shown in Table 5.14, among the nine demographic characteristics, education ( $b = .138$ ,  $p < .05$ ) was the only significant variable that has explained the Behavioural Assessment of Personal Finance (BEHASS) at the 0.05 level. Nevertheless, Model 1 comprising all the demographic and Learning variables ( $\Delta R^2 = .108$ ,  $\Delta F = 1.644$ ,  $p < .05$ ) was significant at the 0.05 level. Similarly, the R square in Model 2 comprising all the demographic and learning variables ( $\Delta R^2 = .032$ ,  $\Delta F = 6.313$ ,  $p < .01$ ), with the input of the literacy variables had even increased significantly compared with Model 1. From these regression results, conclusion could be drawn such that the null hypothesis be rejected, and that the hypothesis: “Controlling for demographic attributes and financial learning, financial literacy makes a significant contribution to Behavioural Assessment of Personal Finance” be fully supported.

**Table 5.14:**  
**Regression Results of Hypothesis 2b**

Model Summary	R Square	Adjusted R Square	Std. Error of Estimate	R Square Change	F Change	Sig. F Change
1 <sup>a</sup>	0.108	0.042	2.464	0.108	1.644	.029
2 <sup>b</sup>	0.140	0.071	2.427	0.032	6.313	.002

- a. Predictors: DAge1, DAge2, DAge3, DAge4, DAge5, DEmp1, DEmp2, DMarr1, DEduc, Home, Gender, Children, F1, Ethnic, Attend, Skill, D1aA, D1bA, D1cA, D1dA, D1eA, D2bA, D2cA, D2dA, D2eA, D2fA  
 b. Predictors: DAge1, DAge2, DAge3, DAge4, DAge5, DEmp1, DEmp2, DMarr1, DEduc, Home, Gender, Ethnic, Children, F1, Attend, Skill, D1aA, D1bA, D1cA, D1dA, D1eA, D2bA, D2cA, D2dA, D2eA, D2fA, LITKNOW, LITEXPL

Dependent Variable: BEHASS

Variable	B	Beta	T	Sig.
Constant	8.002		9.845	.000
LITEXPL	.034	.079	1.235	.218
LITKNOW	.097	** .171	2.821	.005
D2aA(Learning)	.367	** .139	2.612	.009
D2eA(Learning)	.344	.095	1.764	.079
DEduc	.791	* .138	2.350	.019
F1(Income)	-.109	-.115	-1.864	.063

\*  $p < 0.05$ . \*\*  $p < 0.01$ .

**Hypothesis 2c: Satisfaction with Financial Situation (FINSAT)**

H<sub>0</sub>: Controlling for demographic attributes and financial learning, financial literacy does not make a significant contribution to Satisfaction with Financial Situation.

H<sub>1</sub>: Controlling for demographic attributes and financial learning, financial literacy makes a significant contribution to Satisfaction with Financial Situation.

Table 5.15 below has depicted all the Learning and demographic variables with Satisfaction with Financial Situation (FINSAT) as well as the regression results indicating that the equation had explained 19.9% of the variance of satisfaction with personal financial situations (FINSAT). The results has also shown that two demographic variable i.e. age (b= .199, p <.01) and ethnicity (b= -.154, p <.01) was significant at the 0.01 level. The overall Model 1 comprising all the demographic and learning variables ( $\Delta R^2 = .199$ ,  $\Delta F = 3.370$ ,  $p < .001$ ) was also significant at the 0.001 level. Likewise, with the addition of the Literacy Constructs (LITEXPL and LITKNOW) in Model 2, the R square had also increased significantly ( $\Delta R^2 = .042$ ,  $\Delta F = 9.371$ ,  $p < .001$ ). Based on these findings, the above null hypothesis must be rejected, and the hypothesis which states: “Controlling for demographic attributes and financial learning, financial literacy makes a significant contribution to Satisfaction with Financial Situation” accepted.

**Table 5.15:  
Regression Results of Hypothesis 2c**

Model Summary	R Square	Adjusted R Square	Std. Error of Estimate	R Square Change	F Change	Sig. F Change
1 <sup>a</sup>	0.199	0.140	1.581	0.199	3.370	.000
2 <sup>b</sup>	0.241	0.180	1.544	0.042	9.371	.000

a. Predictors: DAge1,DAge2,DAge3,DAge4,DAge5,DEmp1,DEmp2,DMarr1,DEduc,Home,Gender, Children,F1,Ethnic,Attend,Skill,D1aA,D1bA,D1cA,D1dA,D1eA,D2bA,D2cA,D2dA,D2eA,D2fA  
 b. Predictors: DAge1,DAge2,DAge3,DAge4,DAge5,DEmp1,DEmp2,DMarr1,DEduc,Home,Gender,Ethnic, Children,F1,Attend,Skill,D1aA,D1bA,D1cA,D1dA,D1eA,D2bA,D2cA,D2dA,D2eA,D2fA, LITKNOW,LITEXPL  
 Dependent Variable: FINSAT



Variable	B	Beta	T	Sig.
Constant	5.272		10.195	.000
LITEXPL	.027	.090	1.504	.134
LITKNOW	.076	** .196	3.438	.001
Attend(Learning)	.020	.067	1.222	.223
D1bA(Learning)	-.133	-.069	-1.175	.241
D1eA(Learning)	-.252	-.142	-1.918	.056
D2eA(Learning)	.345	** .141	2.778	.006
Ethnic	-.519	** -.154	-3.021	.003
DMarr1	.434	.127	1.750	.081
DAge5	1.274	** .199	3.055	.002
F1(Income)	.058	.091	1.572	.117

\* p < 0.05.    \*\* p < 0.01.

### **Hypothesis 2d: Perceived Financial Well-being (PERWELL)**

- H0: Controlling for demographic attributes and financial learning, financial literacy does not make a significant contribution to perceived financial well-being.
- H1: Controlling for demographic attributes and financial learning, financial literacy makes a significant contribution to perceived financial well-being.

Table 5.16 below shows that the following three demographic variables [income, age and education level (b= .160, p < .01; b= .267, p <.01; b= .160, p < .01 respectively)] were significant at the 0.01 level, with the older age group (b= .267, p < .01) being a relatively more important predictor of perceived financial well-being. The Table also displayed that the equation had explained 25.1% of the variance of Perceived Financial Well-Being (PERWELL), and that the Literacy Construct i.e. LITKNOW (b= .147, p < .01) was significant at the 0.01 level. Since Model 1 with all the demographic and learning variables ( $\Delta R^2 = .251$ ,  $\Delta F = 4.557$ , p < .000) was positive and significant at the 0.001 level and since, Model 2 comprising all the demographic and learning variables ( $\Delta R^2 = .018$ ,  $\Delta F = 4.128$ , p < .05), with the addition of literacy variables, was also positive and significant at the level of 0.05, the R square was still significant. Given the above regression results, the null hypothesis

must be rejected, and the hypothesis carrying this statement: “Controlling for demographic attributes and financial learning, financial literacy makes a significant contribution to perceived financial well-being” accepted.

**Table 5.16:  
Regression Results of Hypothesis 2d**

Model Summary	R Square	Adjusted R Square	Std. Error of Estimate	R Square Change	F Change	Sig. F Change
1 <sup>a</sup>	0.251	0.196	3.352	0.251	4.557	.000
2 <sup>b</sup>	0.269	0.210	3.322	0.018	4.128	.017

a. Predictors: DAge1,DAge2,DAge3,DAge4,DAge5,DEmp1,DEmp2,DMarr1,DEduc,Home,Gender, Children,F1,Ethnic,Attend,Skill,D1aA,D1bA,D1cA,D1dA,D1eA,D2bA,D2cA,D2dA,D2eA,D2fA

b. Predictors: DAge1,DAge2,DAge3,DAge4,DAge5,DEmp1,DEmp2,DMarr1,DEduc,Home,Gender, Ethnic,Children,F1,Attend,Skill,D1aA,D1bA,D1cA,D1dA,D1eA,D2bA,D2cA,D2dA,D2eA,D2fA, LITKNOW,LITEXPL

Dependent Variable: PERWELL

Variable	B	Beta	T	Sig.
Constant	13.179		11.844	.000
LITKNOW	.124	** .147	2.627	.009
D2eA(Learning)	.491	.092	1.837	.067
D2fA(Learning)	.404	.067	1.340	.181
D1eA(Learning)	-.520	-.134	-1.843	.066
Gender	-.652	-.099	-1.944	.053
F1 (Income)	.226	** .160	2.822	.005
DEduc	1.361	** .160	2.953	.003
DMarr1	1.094	* .146	2.049	.041
DAge2	.896	.111	1.749	.081
DAge3	1.535	* .146	2.117	.035
DAge4	2.258	* .172	2.533	.012
DAge5	3.743	** .267	4.170	.000

\* p < 0.05. \*\* p < 0.01.

In summary, it could be concluded that Hypothesis 2 (Controlling for demographic attributes and financial learning, financial literacy makes a significant contribution to economic well being) was found fully supported, as the four components: (a) Subjective perception of personal finance or SUBPERC; (b) Behavioural assessment of personal finance or BEHASS; (c) Satisfaction with financial situation or FINSAT; and (d) Perceived financial well-being or PERWELL were examined through four sub-hypotheses, and all of them were found positively substantiating the aforementioned hypothesis.

### **Hypothesis 3: Financial Learning and Financial Well-being**

This hypothesis was drawn up for the purpose of determining the effect of financial learning on financial well-being as part of the retirement planning strategy. The hypothesis' long form would read as follows: *'Financial literacy will mediate the relationship between financial learning and economic well-being'*

H0: Financial literacy does not mediate the relationship between financial learning and economic well-being.

H1: Financial literacy will mediate the relationship between financial learning and economic well-being.

The issue of economic well-being would be discussed, according to the respondents' financial learning, involving a series of 13 questions on sources of learning vide Questionnaire Section D1 (a to e), D2 (a to f), D6 and D7). These questions have been used in many reputed studies (Garman, 1998; Loibl & Hira, 2005). The issue of economic well-being is divided into four components, namely: (a) Behavioural Assessment of Personal Finance (BEHASS); (b) Perceived Financial Well-being (PERWELL); (c) Satisfaction with Financial Situation (FINSAT); and (d) Subjective Perception of Personal Finance (SUBPERC), which would be examined with the support of four sub-hypotheses (H.3a, 3b, 3c and 3d).

## Regression Results

### Hypothesis 3a: Behavioural Assessment of Personal Finance (BEHASS)

- H<sub>0</sub>: Financial literacy does not mediate the relationship between financial learning and behavioural assessment of personal finance.
- H<sub>1</sub>: Financial literacy will mediate the relationship between financial learning and behavioural assessment of personal finance.

Table 5.17 appended hereunder explains the relationship between independent variables Financial Learning and dependent variable Behavioural Assessment of Personal Finance (BEHASS). The Table also shows the effect of mediating variable (Literacy) among their relationships, apart from the fact that the independent variables had explained 3.5% (Model 1), 10.8 % (Model 2) and 14.0% (Model 3) respectively of the variance of BEHASS. A significant relationship between the independent variables 'Financial Learning' and BEHASS could also be identified from the Table as explained by  $F = 2.144$ ,  $p < 0.05$ . With the input of the mediating variable LITKNOW between them, the relationship has become positive and very significant ( $F = 8.313$ ,  $p < .001$ ) at the 0.001 level. The other important information in Table 19 is the  $R^2$  change of multiple regression, which has indicated that the  $R^2$  change in Model 2 (without mediating variable) was  $R^2 = .073$ , compared to Model 3 (with mediating variable), where  $R^2$  was .032. This has indicated a certain amount of mediating effect which was significant. In view of these regression results, the null hypothesis was rejected. As such, the hypothesis with the statement: "*Financial literacy will mediate relationship between financial learning and behavioural assessment of personal finance*" must be accepted accordingly.

**Table 5.17:  
Regression Results of Hypothesis 3a**

Model Summary	R Square	Adjusted R Square	Std. Error of Estimate	R Square Change	F Change	Sig. F Change
1 <sup>a</sup>	0.035	0.002	2.516	0.035	1.057	.396
2 <sup>b</sup>	0.108	0.042	2.464	0.073	2.144	.012
3 <sup>c</sup>	0.140	0.071	2.427	0.032	8.313	.002

a. Predictors: Ethnic, DAge1, DAge2, DAge3, DAge4, DAge5, DEmp1, DEmp2, DMarr1, DEduc, Home, F1 Gender, Children,

b. Predictors: Ethnic, DAge1, DAge2, DAge3, DAge4, DAge5, DEmp1, DEmp2, DMarr1, DEduc, Home, F1 Gender, Children, Attend, Skill, D1aA, D1bA, D1cA, D1dA, D1eA, D2bA, D2cA, D2dA, D2eA, D2fA

c. Predictors: DAge1, DAge2, DAge3, DAge4, DAge5, DEmp1, DEmp2, DMarr1, DEduc, Home, F1 Gender, Children, Attend, Skill, D1aA, D1bA, D1cA, D1dA, D1eA, D2bA, D2cA, D2dA, D2eA, LITKNOW, LITEXPL

Dependent Variable: BEHASS

Variables	Beta (b) Step 1 <sup>a</sup>	Sig.	Beta (b) Step 2 <sup>b</sup>	Sig.	Beta (b) Step 3 <sup>c</sup>	Sig.
DEduc	** .152	.008	* .122	.040	* .138	.019
Home	.066	.319	.061	.351	.071	.268
Attend(Learn)			.084	.142	.053	.345
D2aA(Learn)			** .140	.010	** .139	.009
D2cA(Learn)			-.035	.528	-.062	.257
D2eA(Learn)			* .119	.029	.095	.079
D1eA(Learn)			-.096	.224	-.051	.520
LITEXPL					.079	.218
LITKNOW					** .171	.005

<sup>a</sup> demographic variables entered.

<sup>b</sup> financial learning variables entered.

<sup>c</sup> mediator variables financial literacy entered.

\* p < 0.05.    \*\* p < 0.01.

**Hypothesis 3b: Perceived Financial Well-being (PERWELL)**

H<sub>0</sub>: Financial literacy does not mediate the relationship between financial learning and perceived financial well-being.

H<sub>1</sub>: Financial literacy will mediate the relationship between financial learning and perceived financial well-being.

Table 5.18 shows that, among the demographic variables, marriage, education, income and age (b = .146, p < .05; b = .160, p < .001; b = .160, p < .001; b = .267, p < .001 respectively) were positive and significant at the level of 0.05, with the older group over 50 years old (b

= .267,  $p < .000$ ) as a relatively more important ‘PERWELL’ predictor. The Table also depicts that the independent variables had, one after another, explained 19.1% (Model 1), 25.1% (Model 2) and 26.9% (Model 3) of the variance of the perceived financial well-being (PERWELL). Additionally, as shown in Table 20,  $R^2$  has suggested (a) that the existence of other factors had explained the variance of PERWELL, (b) that, with the input of the Learning variables, the regression coefficient associated with the PERWELL variable ( $b = -.163$ ,  $p < .05$ ) in Model 2 was significant, and (c) that, with the addition of the mediating variable LITKNOW, the regression coefficient associated with the PERWELL variable ( $b = .147$ ,  $p < .01$ ) in Model 3 has, however, become less significant ( $b = -.134$ ,  $p < .066$ ). However, with the input of the mediating variable LITKNOW and LITEXPL, the relationship ( $F = 4.128$ ,  $p < .05$ ) was still significant when the knowledge construct was combined. Given these findings, the above null hypothesis must be rejected, and the hypothesis stating “*Financial literacy will mediate the relationship between financial learning and perceived financial well-being*” accepted. In other words, this positive effect might eventually be translated into higher level of financial knowledge and possibly to better quality investment or financial management for retirement purposes.

**Table 5.18:**  
**Regression Results of Hypothesis 3b**

Model Summary	R Square	Adjusted R Square	Std. Error of Estimate	R Square Change	F Change	Sig. F Change
1 <sup>a</sup>	0.191	0.164	3.418	0.191	6.659	.000
2 <sup>b</sup>	0.251	0.196	3.352	0.060	2.083	.015
3 <sup>c</sup>	0.269	0.210	3.322	0.018	4.128	.017

a. Predictors: Ethnic, DAge1, DAge2, DAge3, DAge4, DAge5, DEmp1, DEmp2, DMarr1, DEduc, Home, F1 Gender, Children,

b. Predictors: Ethnic, DAge1, DAge2, DAge3, DAge4, DAge5, DEmp1, DEmp2, DMarr1, DEduc, Home, F1 Gender, Children, Attend, Skill, D1aA, D1bA, D1cA, D1dA, D1eA, D2bA, D2cA, D2dA, D2eA, D2fA

c. Predictors: DAge1, DAge2, DAge3, DAge4, DAge5, DEmp1, DEmp2, DMarr1, DEduc, Home, F1 Gender, Children, Attend, Skill, D1aA, D1bA, D1cA, D1dA, D1eA, D2bA, D2cA, D2dA, D2eA, LITKNOW, LITEXPL

Dependent Variable: PERWELL

Variables	Beta (b) Step 1 <sup>a</sup>	Sig.	Beta (b) Step 2 <sup>b</sup>	Sig.	Beta (b) Step 3 <sup>c</sup>	Sig.
DEduc	** .165	.002	** .143	.009	** .160	.003
Gender	-.066	.205	-.097	.060	-.099	.053
DMarr1	.116	.105	* .145	.044	* .146	.041
F1(Income)	** .197	.000	** .189	.001	** .160	.006
DAge2	.125	.054	.116	.072	.111	.081
DAge3	* .721	.025	.135	.054	* .146	.035
DAge4	** .191	.005	* .174	.012	* .172	.012
DAge5	** .264	.000	** .261	.000	** .267	.000
Attend(Learn)			.052	.325	.025	.648
D2eA(Learn)			* .108	.031	.092	.067
D1eA(Learn)			* -.163	.024	-.134	.066
LITEXPL					.020	.735
LITKNOW					** .147	.009

<sup>a</sup> demographic variables entered.

<sup>b</sup> financial learning variables entered.

<sup>c</sup> mediator variables financial literacy entered.

\*  $p < 0.05$ .    \*\*  $p < 0.01$ .

### Hypothesis 3c: Satisfaction with Financial Situation (FINSAT)

H0: Financial literacy does not mediate the relationship between financial learning and satisfaction with financial situation.

H1: Financial literacy will mediate the relationship between financial learning and satisfaction with financial situation.

Table 5.19 below demonstrates the regression results of financial learning and demographic variables with Satisfaction with Financial Situation (FINSAT), where the independent variables have explained 10.3% (Model 1), 19.9% (Model 2) and 24.1% (Model 3) of the variance of the FINSAT. The Table has also indicated that, of the demographic characteristics, the most positive and significant variables were ethnicity ( $b = -.154$ ,  $p < .01$ ) and the older age group ( $b = .199$ ,  $p < .01$ ). Consequently, with the input of the financial learning variable ( $b = .168$ ,  $p < .01$ ) in Model 2, the regression coefficient was significant. Similarly, with the input of the mediating financial literacy variable ( $b = 0.196$ ,  $p < .01$ ) in

Model 3, the regression coefficient associated with financial learning was still significant ( $b = .141, p < .01$ ). Surprisingly, with the inclusion of the mediating financial knowledge variable, the relationship ( $F = 9.371, p < .000$ ) has become very significant, indicating the occurrence of significant mediating effect. Based on these regression results, it was concluded that the null hypothesis must not be accepted, and that the hypothesis carrying this statement: “Financial literacy will mediate the relationship between financial learning and satisfaction with financial situation” should be accepted, instead.

**Table 5.19:**  
**Regression Results of Hypothesis 3c**

Model Summary	R Square	Adjusted R Square	Std. Error of Estimate	R Square Change	F Change	Sig. F Change
1 <sup>a</sup>	0.103	0.073	1.642	0.103	3.381	0.000
2 <sup>b</sup>	0.199	0.140	1.581	0.096	3.117	0.000
3 <sup>c</sup>	0.241	0.180	1.544	0.042	9.371	0.000

a. Predictors: Ethnic, DAge1, DAge2, DAge3, DAge4, DAge5, DEmp1, DEmp2, DMarr1, DEduc, Home, F1 Gender, Children,

b. Predictors: Ethnic, DAge1, DAge2, DAge3, DAge4, DAge5, DEmp1, DEmp2, DMarr1, DEduc, Home, F1 Gender, Children, Attend, Skill, D1aA, D1bA, D1cA, D1dA, D1eA, D2bA, D2cA, D2dA, D2eA, D2fA

c. Predictors: DAge1, DAge2, DAge3, DAge4, DAge5, DEmp1, DEmp2, DMarr1, DEduc, Home, F1 Gender, Children, Attend, Skill, D1aA, D1bA, D1cA, D1dA, D1eA, D2bA, D2cA, D2dA, D2eA, LITKNOW, LITEXPL

Dependent Variable: FINSAT

Variables	Beta (b) Step 1 <sup>a</sup>	Sig.	Beta (b) Step 2 <sup>b</sup>	Sig.	Beta (b) Step 3 <sup>c</sup>	Sig.
Ethnic	*-.108	.039	*-.127	.015	**-.154	.003
DMarr1	.091	.228	.122	.102	.127	.081
F1(Income)	** .171	.003	*.146	.011	.091	.117
DEduc	.039	.474	.005	.934	.024	.667
DAge3	.106	.145	.084	.245	.100	.156
DAge4	.108	.133	.083	.242	.082	.237
DAge5	** .206	.002	** .194	.004	** .199	.002
Attend(Learn)			*.117	.032	.067	.223
D2eA(Learn)			** .168	.001	** .141	.006
D1eA(Learn)			**-.194	.010	-.142	.056
LITEXPL					.090	.134
LITKNOW					** .196	.001

<sup>a</sup> demographic variables entered.

<sup>b</sup> financial learning variables entered.

<sup>c</sup> mediator variables financial literacy entered.

\*  $p < 0.05$ . \*\*  $p < 0.01$ .



### **Hypothesis 3d: Subjective Perception of Personal Finance (SUBPERC)**

H<sub>0</sub>: Financial literacy does not mediate the relationship between financial learning and subjective perception of personal finance.

H<sub>1</sub>: Financial literacy will mediate the relationship between financial learning and subjective perception of personal finance.

Table 5.20 depicts the regression results of the relationship between financial learning variables and subjective perception of personal finance (SUBPERC). It also provides information showing that the independent variables have explained 14.5% (Model 1), 21.1% (Model 2) and 23.2% (Model 3) of the variance of the dependent variables, and that, among the nine demographic characteristics, those with significant coefficients were only income ( $b = .127, p < .05$ ) and older age cohort ( $b = .163, p < .05$ ), with older age cohort being a relatively more important predictor of SUBPERC. From another perspective, the regression results have indicated that, with the inclusion of the financial learning variable ( $b = .140, p < 0.01$ ) in Model 2, the regression coefficient was very significant, and that, with the input of the financial knowledge variables ( $b = -0.121, p < .05$ ) in Model 3, the regression coefficient had become less significant indicating some mediating effects. However, with input of the mediating variables LITKNOW and LITEXPL between them as displayed in the Table, the relationship ( $F = 4.594, p < .05$ ) was still positive and significant. In view of these regression results, the above null hypothesis must be discarded, and the hypothesis (*Financial literacy will mediate the relationship between financial learning and subjective perception of personal finance*) should, instead, be accepted.

**Table 5.20:  
Regression Results of Hypothesis 3d**

Model Summary	R Square	Adjusted R Square	Std. Error of Estimate	R Square Change	F Change	Sig. F Change
1 <sup>a</sup>	0.145	0.116	1.527	0.145	5.006	.000
2 <sup>b</sup>	0.211	0.153	1.495	0.066	2.173	.010
3 <sup>c</sup>	0.232	0.171	1.479	0.021	4.594	.011

a. Predictors: Ethnic, DAge1, DAge2, DAge3, DAge4, DAge5, DEmp1, DEmp2, DMarr1, DEduc, Home, F1 Gender, Children,

b. Predictors: Ethnic, DAge1, DAge2, DAge3, DAge4, DAge5, DEmp1, DEmp2, DMarr1, DEduc, Home, F1 Gender, Children, Attend, Skill, D1aA, D1bA, D1cA, D1dA, D1eA, D2bA, D2cA, D2dA, D2eA, D2fA

c. Predictors: DAge1, DAge2, DAge3, DAge4, DAge5, DEmp1, DEmp2, DMarr1, DEduc, Home, F1 Gender, Children, Attend, Skill, D1aA, D1bA, D1cA, D1dA, D1eA, D2bA, D2cA, D2dA, D2eA, LITKNOW, LITEXPL

Dependent Variable: SUBPERC

Variables	Beta (b) Step 1 <sup>a</sup>	Sig.	Beta (b) Step 2 <sup>b</sup>	Sig.	Beta (b) Step 3 <sup>c</sup>	Sig.
Home	.106	.089	.108	.079	.117	.054
Gender	-.076	.154	-.089	.094	-.095	.070
F1(Income)	** .190	.001	** .172	.003	* .127	.030
DAge3	.096	.177	.071	.321	.079	.263
DAge4	.125	.073	.104	.140	.105	.134
DAge5	** .204	.002	* .163	.014	* .163	.014
Attend			.024	.659	.016	.772
D2eA(Learn)			** .140	.006	*-.121	.018
D1dA(Learn)			**-.155	.010	**-.153	.010
D1eA(Learn)			**-.193	.010	*-.153	.041
LITEXPL					.114	.059
LITKNOW					.098	.089

<sup>a</sup> demographic variables entered.

<sup>b</sup> financial learning variables entered.

<sup>c</sup> mediator variables financial literacy entered.

\* p < 0.05.    \*\* p < 0.01.

In conclusion, it might be necessary to recap that Hypothesis 3 was fully supported and accepted, since its four relevant components, namely: SUBPERC, BEHASS, FINSAT and PERWELL were separately investigated and found showing significant coefficients in support of the hypothesis although BEHASS only has partial mediation effect.

## **Hypothesis 4: Children's Contact and Filial Piety**

For the present study, there was also a need to formulate a suitable hypothesis for the purpose of dealing with the issue of children's contact with parents under the filial piety concept. To start off, the hypothesis took the following form: *'The more frequently the children are in contact with their parents, the more support they give'*

H<sub>0</sub>: The more frequently the children are in contact with their parents, there will not be more support given.

H<sub>1</sub>: The more frequently the children are in contact with their parents, the more support they give.

This section presents the contact frequency between children and parents, according to filial piety principles of the respondents. The contact by child with parents (from the child's perspective) was measured with two items comprising the following statements, 'If you are not staying with your parents, how often do you meet them?'(QE25) and 'How far do you stay from your parents?'(QE27). The contact by child with parents (from the parent's perspective) was also measured with two items comprising the following statements, 'If you have an adult child, how far do you stay from your son/daughter?'(QE28) and 'How far do you stay from your parents?'(QE27). The last two questions were aimed at the parents. Both perspectives are discussed on the basis of the testing results of the two sub-hypotheses (H.4a and 4b), over the next few pages.

## Regression Results

### Hypothesis 4a: Filial Piety with Contact by Child from Child's Perspective

H<sub>0</sub>: From the children's perspective, there is no more support from the children who are in more contact with their parents.

H<sub>1</sub>: From the children's perspective, there is more support from the children who are in more contact with their parents.

The regression results of filial piety with the contact by child (from the child's perspective) are tabulated in Table 5.21, which also shows that the independent variables had explained 17.2% of the variance of the contact by child from the child's perspective, and that, among demographic characteristics, the two older age groups ( $b = -.206, p < .01$ ;  $b = -.319, p < .01$ ) were significant at the 0.01 level. This is the over 50 age group. Apart therefrom, no other demographic variables were significant at the 0.05 level, although the independent variables with the contact by child (from the child's perspective) were significant ( $\Delta R^2 = .172, \Delta F = 8.246, p < .000$ ) at the level of 0.001. Following these findings, the above null hypothesis must be rejected and, instead, the hypothesis with the following statement: *'For the parent's perspective, there no more support from the children who are in more contact with their parents'* be rejected.

**Table 5.21:**  
**Regression Results of Hypothesis 4a**

Model Summary	R Square	Adjusted R Square	Std. Error of Estimate	R Square Change	F Change	Sig. F Change
1 <sup>a</sup>	0.102	0.066	4.615	0.102	2.823	.001
2 <sup>b</sup>	0.172	0.129	4.455	.069	8.246	.000

a. Predictors: DAge1,DAge2,DAge3,DAge4,DAge5,Ethnic,DEmp1,DEmp2,DMarr1,DEduc,Home, Gender,Children,F1

b. Predictors: DAge1,DAge2,DAge3,DAge4,DAge5,Ethnic,DEmp1,DEmp2,DMarr1,DEduc,Home, Gender,Children,F1,Need,SUPPO,FilObli1

Dependent Variable: Contact-Child's Perspective

Variable	B	Beta	T	Sig.
Constant	10.840		5.536	.000
Home	1.130	.118	1.746	.082
DAge3	-1.668	-.125	-1.636	.103
DAge4	-3.444	**-.206	-2.700	.007
DAge5	-5.715	**-.319	-4.446	.000
FilObli1	.277	*.136	2.485	.013
SUPPO	-.410	**-.157	-2.844	.005
Need	-.130	**-.159	-2.882	.004

\*  $p < 0.05$ .    \*\*  $p < 0.01$ .

#### Hypothesis 4b: Filial Piety with Contact by Child from Parent’s Perspective

H0: From the parents’ perspective, there is not more support from the children who are in more contact with their parents.

H1: From the parents’ perspective, there is more support from the children who are in more contact with their parents.

Table 5.22 tabulating the regression results of filial piety with the contact by child (from the parent’s perspective) has also indicated that the independent variables had explained 16.8% of the variance, and that there were no demographic characteristics significant at the 0.05 level. Since the variables with the contact by child (from the parent’s perspective) were not significant ( $\Delta R^2 = .027$ ,  $\Delta F = 2.842$ ,  $p = .061$ ) at the 0.05 level, there is enough evidence to suggest that the null hypothesis (*From the parents’ perspective, there is not more support from the children who are in more contact with their parents*) must not be rejected.

**Table 5.22:**  
**Regression Results of Hypothesis 4b**

Model Summary	R Square	Adjusted R Square	Std. Error of Estimate	R Square Change	F Change	Sig. F Change
1 <sup>a</sup>	0.141	0.083	4.480	0.141	2.444	.006
2 <sup>b</sup>	0.168	0.102	4.434	0.027	2.842	.061

a. Predictors: DAge1, DAge2, DAge3, DAge4, DAge5, Ethnic, DEmp1, DEmp2, DMarr1, DEduc, Home, Gender, Children, F1

b. Predictors: DAge1, DAge2, DAge3, DAge4, DAge5, Ethnic, DEmp1, DEmp2, DMarr1, DEduc, Home, Gender, Children, F1, InstrSupp, ParPerc

Dependent Variable: Contact-Parent’s Perspective

Variable	B	Beta	T	Sig.
Constant	8.710		4.102	.000
DEduc	-1.216	-.115	-1.495	.137
InstrSupp	.201	.156	1.798	.074

\*  $p < 0.05$ . \*\*  $p < 0.01$ .

In conclusion, on the basis of the testing results as tabulated in Tables 21 and 22, it would appear, from the perspective of both the parents and the children, that the argument that the more the children are in contact with the parents the more support they would give to their parents, could only be partially true. That is to say, this argument has remained ‘unsettled’ and should not, therefore, be dismissed as the final answer. According to Kinnear and Taylor (1987) there could be other new evidence or data, the collection and analysis of which might overturn the present argument. This would justify further research into the area.

### **Hypothesis 5: Co-Residence and Parents with Financial Resources**

The hypothesis was introduced to deal with the situation of children’s co-residence with parents who have financial resources. The hypothesis would assume this form: *‘Parents with financial resources are less likely to co-reside with their adult children than those with little financial resources’*

H<sub>0</sub>: Parents with financial resources are less likely to co-reside with their adult children than those with little financial resources.

H<sub>1</sub>: Parents with financial resources are more likely to co-reside with their adult children than those with little financial resources.

Discussions here are focused on the issue of parents with financial resources and the related issue of respondents’ co-residence with parents. The parents’ financial resources scale

was measured with four items comprising F1, F2, B5A and B8. In the measurement, the Cronbach Alpha has shown the level of 0.637 indicating fairly high reliability.

## Regression Results

The regression results of the parents with financial resources plus co-residency are shown in Table 5.23 which has also shown that the independent variables have explained 14.1% of the variance of the contact by child (from the child’s perspective), The Table has also indicated that there were two demographic characteristics, which were significant at the 0.05 level ( $b = -.145, p < .05$ ;  $b = -.143, p < .05$ ), but the parents with the financial resources construct was also not significant ( $\Delta R^2 = .000, \Delta F = .071, p = .790$ ) at the 0.05 level. Consequently, the null hypothesis stating “*Parents with financial resources are less likely to co-reside with their adult children than those with little financial resources*” must not be rejected. Notwithstanding this conclusion, it must be emphasized that the non-rejection of the null hypothesis in the circumstances described above did not constitute an acceptance as there could be evidence to disapprove this theory on the basis of any new sample data which might have remained ‘uncollectible’ in the present circumstances (Kinnear & Kenny, 1987)

**Table 5.23:**  
**Regression Results of Hypothesis 5**

Model Summary	R Square	Adjusted R Square	Std. Error of Estimate	R Square Change	F Change	Sig. F Change
1 <sup>a</sup>	0.141	0.108	4.419	0.141	4.287	.000
2 <sup>b</sup>	0.141	0.105	4.426	0.000	0.071	.790

a. Predictors: DAge1,DAge2,DAge3,DAge4,DAge5,Ethnic,DEmp1,DEmp2,DMarr1,DEduc,Home, Gender,Children,F1

b. Predictors: DAge1,DAge2,DAge3,DAge4,DAge5,Ethnic,DEmp1,DEmp2,DMarr1,DEduc,Home, Gender,Children,F1,ResourcePar

Dependent Variable: ContactPar

Variable	B	Beta	T	Sig.
Constant	11.606		8.183	.000
ResourceParent	.026	.034	.267	.790
DEduc	-1.542	*-.145	-2.536	.012
DAge2	-1.443	*-.143	-2.017	.045

\* p < 0.05. \*\* p < 0.01.

## **Hypothesis 6: Time Away from Parents and Filial Piety**

As a result of global modernisation together with other uncontrollable external factors, children might be compelled to stay away from their parents not by choice but by force of circumstances. Therefore, there might be an urgent need to have an appropriate hypothesis to measure the effect on filial support being given to parents under the circumstances, within the context the filial piety concept. The measurement would be carried out by the stepwise regression, where the independent variables enter the regression equation one at time, according to Kinnear and Kenny (1987). The hypothesis would take the following format: *'The longer the children are away from the parents, the lesser will be the filial support given to them'*.

- H<sub>0</sub>: The longer the children are away from the parents, there will be no less filial support given to them.
- H<sub>1</sub>: The longer the children are away from the parents, the less will be the filial support given to them.

In view of the above, discussions are concentrated upon the filial obligations of the respondents, who spend time away from parents. According to the research findings by Ikking, Tilburg and Knipscheer (1999), the longer children were away from their parents, the less filial would be the children in the giving of filial support to their parents. In this case,



time away from parents was measured with three items comprising the following statements, (a) ‘How often are you in touch with your parents?’(QE4), (b) ‘If you are not staying with your parents, how often do you meet them?’(QE25) and (c) ‘How far do you stay from your parents?’(QE27). Filial Piety was earlier found to have three major factors: Parents Need (Need), Filial Obligation (FilObli1) and Parents Support (SUPPO). By reference to the aforementioned hypotheses, the filial piety issues would be examined, with the support of sub-hypotheses from three key perspectives, namely (a) the ‘Need’ perspective, (b) the ‘Filial Obligation’ perspective, and (c) the ‘Support’ perspective.

## **Regression Results**

### **Hypothesis 6a: Time Away From Parents and Filial Piety (Need)**

- H<sub>0</sub>: The longer the children are away from the parents, there will be no less parents need given to them.
- H<sub>1</sub>: The longer the children are away from the parents, the less will be the parents need given to them.

Table 5.24 shows the stepwise regression results of the Time Away from Parents under the concept of Filial Piety (Need). It also shows that the independent variables had explained 3.1% of the variance under the Filial Piety (Need) concept, and that there were no demographic characteristics significant enough at the 0.05 level, with the exception of the (50 - 59) age group ( $b = -.110$ ,  $p < 0.05$ ) which was significant at the 0.05 level, while the regression model in total was also significant ( $\Delta R^2 = .019$ ,  $\Delta F = 6.73$ ,  $p < .01$ ) at the 0.01 level. Consequently, the above null hypothesis must be rejected, while the hypothesis which states “*The longer the children are away from the parents, the less will be the parents need given to them*” should be accepted (where the ‘parents need’ study is related to the time spent

away from the parent). In other words, there would be less attention in the form of ‘need’ being given to parents when children are spending more time away from their parents.

**Table 5.24:**  
**Stepwise Regression Results of Hypothesis 6a**

Model Summary	R Square	Adjusted R Square	Std. Error of Estimate	R Square Change	F Change	Sig. F Change
1 <sup>a</sup>	0.012	0.009	5.793	0.012	4.234	.040
2 <sup>b</sup>	0.031	0.026	5.745	0.019	6.730	.010

a. Predictors: DAge4

b. Predictors: DAge4, AwayTime  
Dependent Variable: Need

Model Summary	Variable	B	Beta	T	Sig.
1	Constant	17.698		54.153	.000
	DAge4	-2.250	*-0.110	-2.058	.040
2	Constant	20.364		18.899	.000
	DAge4	-2.840	*-0.139	-2.563	.011
	AwayTime	-0.157	** -0.141	-2.594	.010

\*  $p < 0.05$ . \*\*  $p < 0.01$ .

### **Hypothesis 6b: Time Away From Parents and Filial Piety (FilObli1)**

H<sub>0</sub>: The longer the children are away from the parents, there will be no less filial obligation given to them.

H<sub>1</sub>: The longer the children are away from the parents, the less will be the filial obligation given to them.

The stepwise regression results of Time Away from Parents under the concept of Filial Piety (FilObli1) are depicted in Table 5.25 which has also depicted that the independent variables had explained 3.3% of the variance under the Filial Piety (FilObli1) concept. Over and above, the Table has also shown that there were no demographic variables significant at the 0.05 level. Furthermore, the regression results that for the ‘time away from parents’ variable was significant at the 0.01 level. Based on the above regression results, the above null hypothesis

must be rejected, and the hypothesis carrying this statement: *“The longer the children are away from the parents, the less will be the filial obligation given to them”* should be accepted. Once again, it has been proven that the longer period of time the children were spending away from their parents, the less attention or filial obligation would they give to their parents.

**Table 5.25:  
Stepwise Regression Results of Hypothesis 6b**

Model Summary	R Square	Adjusted R Square	Std. Error of Estimate	R Square Change	F Change	Sig. F Change
1 <sup>a</sup>	0.033	0.030	2.316	0.033	12.049	.001

a. Predictors: AwayTime  
Dependent Variable: FilObli1

Model Summary	Variable	B	Beta	T	Sig.
1	Constant	9.758		23.791	.000
	AwayTime	0.081	**0.181	3.471	.001

\* p < 0.05. \*\* p < 0.01.

### **Hypothesis 6c: Time Away From Parents and Filial Piety (SUPPO)**

H<sub>0</sub>: The longer the children are away from the parents, there will be no less parents support given to them.

H<sub>1</sub>: The longer the children are away from the parents, the less will be the parents support given to them.

Within this context, the term “support” means emotional, financial and psychological support. Table 5.26 below shows the stepwise regression results of ‘Time Away from Parents under the Filial Piety (SUPPO)’ concept. The Table has also revealed that, under the same concept, the independent variables had explained 12.7% and 21.5% of the variance in Models, 1 and 2 respectively, and that the (50 - 59) age group was the only demographic characteristic significant at the 0.05 level in one of the two Models as, for example (b = .127, p < .05) in Model 1 and (b = .075, p = .196) in Model 2. Furthermore, all the regression models as shown

in the Table were also significant at the 0.05 level as, for example, ( $\Delta R^2 = .030$ ,  $\Delta F = 9.829$ ,  $p < .01$ ) in Model 2. Based on the above results, the above null hypothesis must be rejected, while the hypothesis which states “*The longer the children are away from the parents, the lesser will be the parents support given to them*” should be accepted. Once more, it has become a proven fact that when children are spending more time away from their parents, they tend to neglect their parents’ emotional, financial and psychological aspects.

**Table 5.26:  
Stepwise Regression Results of Hypothesis 6c**

Model Summary	R Square	Adjusted R Square	Std. Error of Estimate	R Square Change	F Change	Sig. F Change
1 <sup>a</sup>	0.127	0.013	1.824	0.016	5.091	.025
2 <sup>b</sup>	0.215	0.040	1.798	0.030	9.829	.002

a. Predictors: DAge5

b. Predictors: DAge5, AwayTime

Dependent Variable: SUPPO

Model Summary	Variable	B	Beta	t	Sig.
1	Constant	5.567		51.969	.000
	DAge5	0.872	*0.127	2.256	.025
2	Constant	6.653		18.369	.000
	DAge5	0.515	0.075	1.295	.196
	AwayTime	-0.063	** -0.181	-3.135	.002

\*  $p < 0.05$ . \*\*  $p < 0.01$ .

In summary, it might be necessary to conclude that Hypothesis 6 worded thus “*The longer the children are away from the parents, the less will be the filial support given to them*” was fully supported and valid. This conclusion was reached on the basis of the stepwise regression results from the three relevant components, namely: (a) the relationship between time away from parents and filial piety from the ‘Need’ perspective; (b) the relationship between time away from parents and filial piety from the ‘FilOblil’ perspective; and (c) the relationship between time away from parents and filial piety from the ‘SUPPO’ perspective. In the hypothesis testing, all three components were found to have significant coefficients in support of the above hypothesized statement.

## **Hypothesis 7: Patterns of Exchange and Filial Piety – Parents Perspective**

In this section, the relationship between the patterns of exchange and filial piety would be examined from the parents' perspective, through the use of a hypothesis. The purpose of using a hypothesis would be to hypothetically elicit information from respondents on whether the amount of support, regardless its nature, being given by parents to their children has any effect or influence on reciprocity at certain stage/(s) of their life either within or without the context of the filial piety concept. The hypothesis would assume the form of: 'The support given by parents to children influences the support they receive'

H<sub>0</sub>: The support given by parents to children does not influence the support they receive.

H<sub>1</sub>: The support given by parents to children influences the support they receive.

It was argued that children's support given to parents was determined by reciprocity according to the filial obligations of the respondents. The Patterns of Exchange was measured with items comprising QE8 (Ikkink, Tulburg & Knipscheer, 1999), while the Filial Piety from the parents perspective was found to have two major factors, namely: instrumental support (InstrSupp) and support from parents perception (ParPerc). These two major factors are discussed as two separate components necessitating the testing of two separate hypotheses.

### **Regression Results**

#### **Hypothesis 7a: Patterns of Exchange and Filial Piety – Parents Perspective (InstrSupp)**

H<sub>0</sub>: The support given by parents to children does not influence the instrumental support they receive.

H1: The support given by parents to children influences the instrumental support they receive.

Table 5.27 tabulates the regression results of Patterns of Exchange under the concept of Filial Piety – Parents Perspective (InstrSupp), and also shows that, under the filial piety principles, the independent variables had explained 37.6% of the variance. As indicated in the Table also, four demographic characteristics i.e. ethnicity (b = .131, p < .05), 31 to 40 years age group (b = -.421, p < .000), children (b = .205, p < .05), and marriage (b = .612, p < .000) were all found to be significant. Furthermore, the overall regression model was also significant ( $\Delta R^2 = .376$ ,  $\Delta F = 8.470$ ,  $p < .001$ ) at the 0.001 level. As such, it might be concluded that the above null hypothesis would have to be rejected, and that, instead, the hypothesis stating “*The support given by parents to children influences the instrumental support they receive*” should be accepted.

**Table 5.27:  
Regression Results of Hypothesis 7a**

Model Summary	R Square	Adjusted R Square	Std. Error of Estimate	R Square Change	F Change	Sig. F Change
1 <sup>a</sup>	0.376	0.331	2.958	0.376	8.470	.000

- a. Predictors: DAge1,DAge2,DAge3,DAge4,DAge5,Ethnic,DEmp1,DEmp2,DMarr1,DEduc,Home, Gender,Children,F1,E8A  
Dependent Variable: InstrSupp

Variable	B	Beta	T	Sig.
Constant	5.504		4.164	.000
Children	0.558	*0.205	2.089	.038
Ethnic	0.936	*0.131	2.165	.032
Home	1.019	0.140	1.893	.060
DEmp2	-0.997	-0.099	-1.629	.105
DMarr1	-3.129	**0.612	-5.114	.000
DAge2	-3.278	**-.421	-5.343	.000
E8A	0.312	0.100	1.630	.105

\* p < 0.05. \*\* p < 0.01.

### **Hypothesis 7b: Patterns of Exchange and Filial Piety – Parents Perspective (ParPerc)**

H<sub>0</sub>: The support given by parents to children does not influence the support they receive from the parent's perspective.

H<sub>1</sub>: The support given by parents to children influences the support they receive from the parents' perspective.

Table 5.28 below has provided the regression results of Patterns of Exchange under the concept of Filial Piety from the parents' perspective. It has also revealed that the independent variables had explained 12.2% of the filial piety's variance, and that, of the demographic characteristics, only the number of children ( $b = .164, p < .05$ ), education level ( $b = -.239, p < .000$ ), 40 to 49 years age group ( $b = -.192, p < .01$ ) and 50 to 59 years age group ( $b = -.202, p < .01$ ) were significant at the 0.05 level. As the overall regression model was significant ( $\Delta R^2 = .122, \Delta F = 3.818, p < .001$ ) at the 0.001 level, it could be safely concluded that the above null hypothesis must be rejected, while the hypothesis with this legend, "*The support given by parents to children influences the support they receive, from the parents' perspective*" should, instead, be accepted.

**Table 5.28:  
Regression Results of Hypothesis 7b**

Model Summary	R Square	Adjusted R Square	Std. Error of Estimate	R Square Change	F Change	Sig. F Change
1 <sup>a</sup>	0.122	0.090	1.755	0.122	3.818	.000

a. Predictors: DAge1,DAge2,DAge3,DAge4,DAge5,Ethnic,DEmp1,DEmp2,DMarr1,DEduc,Home,Gender, Children,F1,E8A

Dependent Variable: ParPerc

Variable	B	Beta	T	Sig.
Constant	6.331		11.078	.000
Children	.227	*.164	1.964	.050
F1(Income)	-.063	-.091	-1.617	.107
Ethnic	-0.347	-0.095	-1.860	.064
DEduc	-.996	**-.239	-4.324	.000
DAge2	-0.501	-0.127	-1.891	.059
DAge3	-0.990	**-.0192	-2.683	.008
DAge4	-1.301	**-.0202	-2.859	.005
E8A	0.070	0.044	0.848	.397

\* p < 0.05. \*\* p < 0.01.

In summing up the above discussions, a conclusion is reached that the hypothesis with the following wordings, “*The support given by parents to children influences the support they receive*” was fully supported and justified. This conclusion was based on the results arising from the regression analysis and testing of two sub-hypotheses of (a) whether, generally speaking, the instrumental support given by parents to children could influence the instrumental support they receive, and (b) from parents’ perspective, whether the instrumental support given by parents to children could influence the support they receive. The results of the enquiry were unanimous and found to indicate significant coefficients in support of the above hypothesis.

### **Hypothesis 8: Opportunity for Support and Filial Piety**

In continuation with the discussions on the filial piety issues slightly from a different perspective, this hypothesis was intended for testing the relationship of support exchanges, if



any, between parents and children, on the one hand, and opportunities to give support, on the other hand. The hypothesis would assume this long form: *‘There is a relationship of support exchanges between parents and their children, and opportunities to give support’*.

H<sub>0</sub>: There is no relationship of support exchanges between parents and their children, and opportunities to give support.

H<sub>1</sub>: There is a relationship of support exchanges between parents and their children, and opportunities to give support.

Below are the pertinent discussions of the Opportunity for Support, according to respondents’ understanding and perception of the filial piety concept. The Opportunity for Support Scale (InstrSupp) was introduced to measure with three items comprising QE1, QE2, and QE3. It might be noted that the Cronbach Alpha was 0.963 indicating very high reliability.

## **Regression Results**

Table 5.29 has displayed the regression results of opportunity for support under the filial piety concept, apart from depicting that the independent variables had explained 37.4% of the variance of filial piety. The Table has also tabulated the outcomes of four of the demographic characteristics i.e. ethnicity (b = .133, p < .05), age (b = -.428, p < .01), gender (b = -.123, p < .05) and children (b = .198, p < .05), all of which were shown as significant. Besides, the overall regression model was also significant ( $\Delta R^2 = .374$ ,  $\Delta F = 8.421$ , p < .001) at the 0.001 level. Consequently, these regression results had led to the conclusion that the above null hypothesis must be rejected, and that the hypothesis containing this statement *‘There is a relationship of support exchanges between parents and their children and*

*opportunities to give support*” should be accepted. This conclusion was reached as there was, indeed, a relationship in the reciprocation of support exchanges between parents and children.

**Table 5.29:**  
**Regression Results of Hypothesis 8**

Model Summary	R Square	Adjusted R Square	Std. Error of Estimate	R Square Change	F Change	Sig. F Change
1 <sup>a</sup>	0.374	0.330	2.961	0.374	8.421	.000

a. Predictors: DAge1,DAge2,DAge3,DAge4,DAge5,Ethnic,DEmp1,DEmp2,DMarr1,DEduc,Home, Gender,Children,F1,SupExch

Dependent Variable: InstrSupp

Variable	B	Beta	T	Sig.
Constant	5.115		3.321	.001
DEmp2	-1.029	-0.102	-1.681	.094
Ethnic	0.949	*0.133	2.193	.030
Home	0.996	0.137	1.841	.067
Children	0.538	*0.198	2.009	.046
Gender	-0.880	*-0.123	-2.033	.044
DAge2	-3.327	**-.0428	-5.427	.000
SupExch	0.101	0.092	1.503	.134

\* p < 0.05. \*\* p < 0.01.

### **Hypothesis 9: Parents’ Need for Assistance and Filial Piety**

This hypothesis was introduced with the intention of examining the child-parent relationship in the area of filial responsibilities expected of the former by reason of the fact that children are culturally and morally obliged to provide parents with support. The long form of the hypothesis was: ‘There is a positive relationship between children and parents on expectations about filial responsibilities, sharing the view that children are obligated to provide support if their parents need it’.

H0: There is no positive relationship between children and parents on expectations about filial responsibilities, sharing the view that children are obligated to provide support if their parents need it.

H1: There is a positive relationship between children and parents on expectations about filial responsibilities, sharing the view that children are obligated to provide support if their parents need it.

In this section, the perception of the parents' need for assistance under the filial piety concept was analysed and discussed from respondents' perspective. The Parents Need for Assistance Scale (Need) was constructed to measure with six items, namely: QE11, QE12, QE13, QE14, QE15 and QE16. The Cronbach Alpha was 0.907 indicating very high reliability in this study.

## **Regression Results**

Table 5.30 provides the regression results of the parents' need for assistance (Need) as a filial piety issue, while showing that, within the filial piety context, the independent variables had explained 36.9% of the variance, and that, among the demographic characteristics, four of them i.e. children ( $b = .204, p < .05$ ), 30 to 39 years age group ( $b = -.435, p < .000$ ), ethnicity ( $b = .131, p < .05$ ) and home ( $b = .153, p < .05$ ) were significant. Furthermore, the overall regression model ( $\Delta R^2 = .369, \Delta F = 7.689, p < .01$ ) was also significant at the 0.01 level. This has led to the situation where the null hypothesis must be rejected and the hypothesis stating "*There is a positive relationship between children and parents on expectations about filial responsibilities, sharing the view that children are obligated to provide support if their parents need it*" accepted, instead. In wrapping up the discussions on the relationship between parents' need for assistance in relation to some aspects of filial piety, the best approach was to state that the tabulated regression results have indicated a positive 'parent-child' relationship about filial responsibilities as adult children must provide their elderly parents with support in the event of need; this conclusion would be in line with the research findings by Hanson and Sauer (1985) and Stein (1993).

**Table 5.30:  
Regression Results of Hypothesis 9**

Model Summary	R Square	Adjusted R Square	Std. Error of Estimate	R Square Change	F Change	Sig. F Change
1 <sup>a</sup>	0.369	0.321	2.981	0.369	7.689	.000

a. Predictors: DAge1,DAge2,DAge3,DAge4,DAge5,Ethnic,DEmp1,DEmp2,DMarr1,DEduc,Home, Gender,Children,F1,Need

Dependent Variable: InstrSupp

Variable	B	Beta	T	Sig.
Constant	7.349		5.651	.000
DEmp2	-1.069	-0.106	-1.678	.095
Ethnic	0.937	*0.131	2.085	.039
Children	0.555	*0.204	1.996	.047
Home	1.110	*0.153	1.987	.048
DAge2	-3.379	**-.435	-5.292	.000
Need	-0.031	-0.049	-0.795	.428

\* p < 0.05. \*\* p < 0.01.

### **Hypothesis 10: Children's Higher Income and Filial Piety with Opportunity for Support**

This hypothesis was vitally important for evaluating whether children's higher family income level and their high perception of filial obligation would be translated into more opportunities for providing parents with support. In this respect, previous evidence has, however, indicated that older adults with higher education had less contact with children (Greenwell & Bengtson, 1997), and that they received less instrumental support from children but gave more support than older adults with lower education (Broese Van Groenon & Van Tilburg, 2003). This issue was one of the aspects of filial piety forming part and parcel of the present study. The hypothesis would assume the following format: *'Adult children who have higher family income and a high level of filial obligation will provide more opportunity for support to their parents'*

H0: Adult children who have higher family income and a high level of filial obligation will not provide more opportunity for support to their parents.

H1: Adult children who have higher family income and a high level of filial obligation will provide more opportunity for support to their parents.

In this section, discussions would be centred upon the issues of Children's Higher Income (F) and Filial Piety (FilOblig) with Opportunity for Support (InstrSupp) of the respondents. The Opportunity for Support Scale (InstrSupp) was constructed to measure data with three items, namely: QE1, QE2 and QE3. Likewise, the Filial Obligation Scale was also constructed to measure data with another three items, namely: QE18, QE19 and QE22. Along therewith, Factor Analysis was applied in the evaluation, and the factors were reduced from five to three (KMO – 0.794).

## **Regression Results**

Table 5.31 shows the regression results of Filial Piety (FilOblig) with Opportunity for Support (InstrSupp) as well as the independent variables, which have in Model 1 explained 36.6% of the variance of Opportunity for Support. The Table has also displayed that the three demographic characteristics i.e. age ( $b = -.434$ ,  $p < .000$ ), ethnicity ( $b = .126$ ,  $p < .05$ ), and children ( $b = .203$ ,  $p < .05$ ) were significant, and that Model 1 comprising demographic variables was also significant ( $\Delta R^2 = .366$ ,  $\Delta F = 9.719$ ,  $p < .001$ ) at the 0.001 level. When, however, Children's Filial Piety (FilOblig) was added with the same dependent variables in Model 2, the regression has shown that the independent variables had explained 37.4% of the variance of Opportunity for Support but the F change was insignificant and, the combined model was also not significant ( $\Delta R^2 = .008$ ,  $\Delta F = 2.322$ ,  $p = .129$ ). When Children's Income (F1) was added with the same dependent variables in Model 3, the regression has again shown that the independent variables had explained 37.5% of the variance of Opportunity for

Support, but the regression results have, however, shown that both the F change and the combined model ( $\Delta R^2 = .001$ ,  $\Delta F = .232$ ,  $p = .631$ ) were all insignificant at the 0.05 level. Based on these results, it could only be concluded that the hypothesis (*An adult child who has higher family income and a high level of filial obligation will provide more opportunity for support to his parent*) was not mediated. The hypothesis is therefore accepted. (see discussions in Chapter VI, Section 6.1.10).

**Table 5.31:  
Regression Results of Hypothesis 10**

Model Summary	R Square	Adjusted R Square	Std. Error of Estimate	R Square Change	F Change	Sig. F Change
1 <sup>a</sup>	0.366	0.329	2.964	0.366	9.719	.000
2 <sup>b</sup>	0.374	0.333	2.954	0.008	2.322	.129
3 <sup>c</sup>	0.375	0.331	2.960	0.001	0.232	.631

- a. Predictors: DAge1,DAge2,DAge3,DAge4,DAge5,Ethnic,DEmp1,DEmp2,DMarr1,DEduc,Home, Gender,Children  
b. Predictors: DAge1,DAge2,DAge3,DAge4,DAge5,Ethnic,DEmp1,DEmp2,DMarr1,DEduc,Home, Gender,Children,FilOblig  
c. Predictors: DAge1,DAge2,DAge3,DAge4,DAge5,Ethnic,DEmp1,DEmp2,DMarr1,DEduc,Home, Gender,Children,FilOblig,F1  
Dependent Variable: InstrSupp

Variable	B	Beta	T	Sig.
Constant	5.269		3.658	.000
FilOblig	0.089	0.094	1.563	.120
Ethnic	0.902	*0.126	2.083	.039
Children	0.552	*0.203	2.063	.041
Home	0.991	0.136	1.834	.068
DEmp2	-0.995	-0.099	-1.626	.106
DAge2	-3.377	**-.434	-5.508	.000
F1(Income)	0.044	0.032	0.482	.631

\*  $p < 0.05$ . \*\*  $p < 0.01$ .

### **Hypothesis 11: Financially Literate and Filial Piety To Achieve Economic Well-being**

To wrap the whole discussions on hypothesis testing in this chapter, this final hypothesis was introduced to check whether there are any interrelationships between financial

learning and literacy variables, on one side, and filial piety variables on the other, which might have some effect on Malaysians' overall retirement financial planning. In their individual rights, these are disparate areas of study, each of which was, however, proven to possess a certain amount of direct or indirect influence on their retirement planning strategies. The hypothesis would take this form: *'Financially literate people adopt the filial piety concept in planning for their economic well-being'*.

H0: Financially literate people do not adopt the filial piety concept in planning for their economic well-being.

H1: Financially literate people adopt the filial piety concept in planning for their economic well-being.

First of all, the following nine demographic variables were investigated, i.e. ethnicity, gender, age, marital status, number of children, home ownership, education, income, and employment classification. Secondly, the financial literacy indexes were added to the equation in order to gauge the impact on the regression model. Thirdly, the filial piety index was inserted in order to complete the whole equation. Finally, the four main 'economic well-being' components (SUBPERC, BEHASS, FINSAT and PERWELL), which were all discussed earlier under separate hypotheses, were again taken into consideration as dependent variables for the purpose of testing this hypothesis. The investigation into the mediating interrelationships between the financial learning/literacy variables and the filial piety variables would invariably involve the testing of four sub-hypotheses tackling the aforementioned 'economic well-being' components, one by one. Full discussions of the regression results are found over the next few pages.

## Regression Results

### Hypothesis 11a: Subjective Perception of Personal Finance (SUBPERC)

- H<sub>0</sub>: Financially literate people do not adopt the filial piety concept in planning for their subjective perception of personal finance.
- H<sub>1</sub>: Financially literate people adopt the filial piety concept in planning for their subjective perception of personal finance.

The regression results in Table 5.32 below have indicated that, among the nine demographic characteristics, the 'over-60-years' age group ( $b = .185$ ,  $p < .01$ ), and income ( $b = .133$ ,  $p < .05$ ) had significant Beta coefficients representing the relative contributions of the variables in the equation (Howell, 1992; Pedhazur, 1982). It was further observed that, among the demographic variables, the 'over-60-years' age group was a more significant predictor of the subjective perception of personal finance (SUBPERC) than Income. Model 1 comprising the demographic variables was significant at the 0.001 level ( $\Delta R^2 = .145$ ,  $\Delta F = 5.006$ ,  $p < .001$ ). When literacy variables were added into the equation in Model 2, the R square had however increased significantly ( $\Delta R^2 = .043$ ,  $\Delta F = 9.340$ ,  $p < .001$ ) at the 0.01 level. However, when the filial piety index was added into the equation in Model 3, the R square had also increased ( $\Delta R^2 = .013$ ,  $\Delta F = 5.730$ ,  $p < .05$ ) at the 0.05 level. The input of this mediating variable for filial obligation was positive and very significant thereby indicating mediating effect. These regression results would imply that the interrelationships between the literacy variables and the filial piety variables have some mediating effect on respondents' planning for their economic well-being from the 'SUBPERC' perspective. This would also mean that the null hypothesis was rejected. In other words, people or respondents with financial knowledge have not taken into consideration the filial piety concept in evaluating their perception of



personal finance, although the filial piety concept *per se* could positively contribute to their retirement financial planning.

**Table 5.32:**  
**Regression Results of Hypothesis 11a**

Model Summary	R Square	Adjusted R Square	Std. Error of Estimate	R Square Change	F Change	Sig. F Change
1 <sup>a</sup>	0.145	0.116	1.527	0.145	5.006	.000
2 <sup>b</sup>	0.189	0.156	1.492	0.043	9.340	.000
3 <sup>c</sup>	0.202	0.167	1.482	0.013	5.730	.017

a. Predictors: Ethnic, F1, DEmp2, DAge1, DAge2, Gender, DEduc, DAge4, DAge5, Home, DEmp1, DMarr1, DAge3, Children

b. Predictors: Ethnic, F1, DEmp2, DAge1, DAge2, Gender, DEduc, DAge4, DAge5, Home, DEmp1, DMarr1, DAge3, Children, LITKNOW, LITEXPL

c. Predictors: Ethnic, F1, DEmp2, DAge1, DAge2, Gender, DEduc, DAge4, DAge5, Home, DEmp1, DMarr1, DAge3, Children, LITKNOW, LITEXPL, FilObli1

Dependent Variable: SUBPERC

Variable	B	Beta	T	Sig.
Constant	3.774		6.994	.000
Gender	-0.237	-0.083	-1.597	.111
DAge3	0.495	0.109	1.582	.114
DAge4	0.742	0.131	1.927	.055
DAge5	1.128	**0.185	2.887	.004
F1	0.081	*0.133	2.321	.021
Home	0.338	0.104	1.704	.089
LITEXPL	0.039	*0.138	2.408	.017
LITKNOW	0.043	*0.117	2.145	.033
FilObli1	0.082	*0.118	2.394	.017

\*  $p < 0.05$ . \*\*  $p < 0.01$ .

### **Hypothesis 11b: Behavioural Assessment of Personal Finance (BEHASS)**

H<sub>0</sub>: Financially literate people do not adopt the filial piety concept in planning for their behavioural assessment of personal finance.

H<sub>1</sub>: Financially literate people adopt the filial piety concept in planning for their behavioural assessment of personal finance.

Table 5.33 depicted that, among the nine demographic variables applied in the regression, only education ( $b = .148$ ,  $p < .01$ ) had a significant coefficient, which had represented the relative contribution of the variables in the equation (Howell, 1992; Pedhazur, 1982). The results had also depicted that education was a relatively more significant predictor of the behavioural assessment of personal finance (BEHASS) than the other eight demographic variables, and that Model 1 comprising the demographic variables was not significant ( $\Delta R^2 = .035$ ,  $\Delta F = 1.057$ ,  $p = .396$ ) at the 0.05 level. When, however, the literacy variables were added into the equation in Model 2, the results had indicated the significant increase in the R square ( $\Delta R^2 = .060$ ,  $\Delta F = 11.607$ ,  $p < .001$ ) at the 0.01 level. When the filial piety index was finally inserted into the equation in Model 3, the R square had decreased significantly ( $\Delta R^2 = .008$ ,  $\Delta F = 2.973$ ,  $p = .086$ ) at the 0.05 level. Given these conflicting results, it was decided that the above null hypothesis must be accepted and thereby the hypothesis (with the statement: “*Financially literate people adopt the filial piety concept in planning for their behavioural assessment of personal finance*”) is accepted. This has implied that the respondents in this study have also somehow reflected the filial piety issue in their behavioural assessment of personal finance.

**Table 5.33:  
Regression Results of Hypothesis 11b**

Model Summary	R Square	Adjusted R Square	Std. Error of Estimate	R Square Change	F Change	Sig. F Change
1 <sup>a</sup>	0.035	0.002	2.516	0.035	1.057	.396
2 <sup>b</sup>	0.095	0.058	2.443	0.060	11.607	.000
3 <sup>c</sup>	0.102	0.064	2.436	0.008	2.973	.086

a. Predictors: Ethnic, F1, DEmp2, DAge1, DAge2, Gender, DEduc, DAge4, DAge5, Home, DEmp1, DMarr1, DAge3, Children

b. Predictors: Ethnic, F1, DEmp2, DAge1, DAge2, Gender, DEduc, DAge4, DAge5, Home, DEmp1, DMarr1, DAge3, Children, LITKNOW, LITEXPL

c. Predictors: Ethnic, F1, DEmp2, DAge1, DAge2, Gender, DEduc, DAge4, DAge5, Home, DEmp1, DMarr1, DAge3, Children, LITKNOW, LITEXPL, FilObli1

Dependent Variable: BEHASS

Variable	B	Beta	T	Sig.
Constant	7.012		7.905	.000
DEduc	0.846	** .148	2.636	.009
Home	0.351	0.069	1.077	.282
DAge5	-0.737	-0.078	-1.147	.252
F1	-0.109	-0.114	-1.890	.060
LITEXPL	0.054	*0.124	2.051	.041
LITKNOW	0.100	**0.176	3.044	.003
FilObli1	0.097	0.090	1.724	.086

\*  $p < 0.05$ . \*\*  $p < 0.01$ .

### **Hypothesis 11c: Satisfaction with Financial Situation (FINSAT)**

H<sub>0</sub>: Financially literate people do not adopt the filial piety concept in planning for their satisfaction with financial situation.

H<sub>1</sub>: Financially literate people adopt the filial piety concept in planning for their satisfaction with financial situation.

The regression results (Table 5.34) indicated that, among the nine demographic characteristics, the ‘over-60-years’ age group ( $b = .188$ ,  $p < .01$ ) and ethnicity ( $b = -.165$ ,  $p < .01$ ) had a significant beta coefficient, which had represented the relative contribution of the variables in the equation, and that, followed immediately thereafter by employment, the ethnicity was a relatively more significant predictor of the satisfaction with financial situation “FINSAT” than the other demographic variables. The regression results had also indicated (i)

that Model 1 comprising the demographic variables was significant ( $\Delta R^2 = .103$ ,  $\Delta F = 3.381$ ,  $p < .001$ ) at the 0.001 level; (ii) that, with the input of literacy variables into the equation in Model 2, the R square had increased significantly ( $\Delta R^2 = .016$ ,  $\Delta F = 19.455$ ,  $p < .001$ ), and (iii) that, finally, with the input of the filial piety index into the equation in Model 3, the R square was still significant ( $\Delta R^2 = .009$ ,  $\Delta F = 6.963$ ,  $p < .01$ ). The input of this mediating variable for filial obligation was positive and very significant thereby indicating mediating effect. In view of these positive regression results, the above null hypothesis must be rejected, and the hypothesis with this statement: *“Financially literate people do adopt the filial piety concept in planning for their satisfaction with financial situation”* should, instead, be accepted. Effectively, this would also mean that Malaysians would take into account the importance of filial piety when they consider or assess the issue of satisfaction with their financial situation.

**Table 5.34:****Regression Results of Hypothesis 11c**

Model Summary	R Square	Adjusted R Square	Std. Error of Estimate	R Square Change	F Change	Sig. F Change
1 <sup>a</sup>	0.103	0.073	1.642	0.103	3.381	.000
2 <sup>b</sup>	0.193	0.160	1.562	0.090	19.455	.000
3 <sup>c</sup>	0.208	0.174	1.549	0.016	6.963	.009

a. Predictors: Ethnic,F1,DEmp2,DAGE1,DAGE2,Gender,DEduc,DAGE4,DAGE5,Home,DEmp1,DMarr1, DAGE3,Children

b. Predictors: Ethnic,F1,DEmp2,DAGE1,DAGE2,Gender,DEduc,DAGE4,DAGE5,Home,DEmp1,DMarr1, DAGE3,Children,LITKNOW,LITEXPL

c. Predictors: Ethnic,F1,DEmp2,DAGE1,DAGE2,Gender,DEduc,DAGE4,DAGE5,Home,DEmp1,DMarr1, DAGE3,Children,LITKNOW,LITEXPL,FilObli1

Dependent Variable: FINSAT

Variable	B	Beta	T	Sig.
Constant	3.911		6.934	.000
Ethnic	-0.556	**-.0165	-3.306	.001
Children	-0.138	-0.108	-1.335	.183
DAGE3	0.603	0.126	1.844	.066
DAGE4	0.670	0.112	1.664	.097
DAGE5	1.202	**0.188	2.941	.003
F1	0.058	0.090	1.580	.116
LITEXPL	0.042	*0.143	2.509	.013
LITKNOW	0.085	**0.220	4.050	.000
FilObli1	0.094	**0.130	2.639	.009

\* p < 0.05. \*\* p < 0.01.

**Hypothesis 11d: Perceived Economic Well-being (PERWELL)**

H0: Financially literate people do not adopt the filial piety concept in planning for their perceived economic well-being.

H1: Financially literate people adopt the filial piety concept in planning for their perceived economic well-being.

The regression results (Table 5.35) revealed that, among the nine demographic characteristics, income (b = .165, p <.01), education (b = .158, p <.01), the ‘over-40-years’ age group (b = .196, p < .01), and the ‘over-50-years’ age group (b = .243, p < .01) had very significant Beta coefficients, all of which had represented the relative contributions of the variables in the equation (Howell, 1992; Pedhazur, 1982). The Table had also revealed (i) that Model 1

comprising the demographic variables was significant ( $\Delta R^2 = .199$ ,  $\Delta F = 6.959$ ,  $p < .001$ ) at the 0.001 level; (ii) that, with literacy variables being added into the equation in Model 2, the R square increased significantly ( $\Delta R^2 = .039$ ,  $\Delta F = 8.888$ ,  $p < .001$ ) at the 0.001 level; and (iii) that, with the filial piety index being added into the equation in Model 3, the R square had also increased significantly ( $\Delta R^2 = .034$ ,  $\Delta F = 16.281$ ,  $p < .001$ ) at the 0.001 level. The input of this mediating variable for filial obligation was positive and very significant thereby indicating mediating effect. After having into consideration all the regression results, it was clear that the null hypothesis must be rejected and that the hypothesis with this statement: *“Financially literate people adopt the filial piety concept in planning for their perceived economic well-being”* which was fully supported must be accepted. This had further implied that Malaysians would seriously consider the filial piety issue in planning for their perceived economic well-being.

**Table 5.35:  
Regression Results of Hypothesis 11d**

Model Summary	R Square	Adjusted R Square	Std. Error of Estimate	R Square Change	F Change	Sig. F Change
1 <sup>a</sup>	0.191	0.164	3.418	0.199	6.959	.000
2 <sup>b</sup>	0.230	0.200	3.345	0.039	8.888	.000
3 <sup>c</sup>	0.264	0.233	3.274	0.034	16.281	.000

a. Predictors: Ethnic, F1, DEmp2, DAge1, DAge2, Gender, DEduc, DAge4, DAge5, Home, DEmp1, DMarr1, DAge3, Children

b. Predictors: Ethnic, F1, DEmp2, DAge1, DAge2, Gender, DEduc, DAge4, DAge5, Home, DEmp1, DMarr1, DAge3, Children, LITKNOW, LITEXPL

c. Predictors: Ethnic, F1, DEmp2, DAge1, DAge2, Gender, DEduc, DAge4, DAge5, Home, DEmp1, DMarr1, DAge3, Children, LITKNOW, LITEXPL, FilObli1

Dependent Variable: PERWELL

Variable	B	Beta	T	Sig.
Constant	9.561		8.022	.000
DEduc	1.339	**0.158	3.106	.002
DMarr1	0.866	0.115	1.689	.092
DAge2	0.909	0.113	1.828	.068
DAge3	1.814	**0.173	2.623	.009
DAge4	2.560	**0.196	3.009	.003
DAge5	3.410	**0.243	3.949	.000
F1	0.233	**0.165	3.018	.003
LITEXPL	0.033	0.051	0.927	.354
LITKNOW	0.136	**0.162	3.081	.002
FilObli1	0.305	**0.192	4.035	.000

\* p < 0.05. \*\* p < 0.01.

#### 5.4.1 Summary of Hypothesis Testing

There are altogether 11 hypotheses, which were tested (some with a multi-approach) to delve into the relevant aspects connected with the research areas. In a nutshell, the hypotheses have covered three major areas, namely: (a) the relationship between financial literacy and economic well-being; (b) the various forms of practising filial piety between parents and children or their perceptions of such issues, and (c) the effect of interrelationships between financial literacy and filial piety on respondents' retirement financial planning within the context of multi-cultural Malaysia *per se*. In order to present the testing results in a nutshell, Table 5.36 provides the necessary summary.

**Table 5.36:  
Summary of Hypotheses Testing**

Hypotheses	Condition
H.1a Controlling for demographic attributes, financial learning makes a significant contribution to financial literacy level	x
H.1b Controlling for demographic attributes, financial learning makes a significant contribution to financial literacy knowledge	x
H.2a Controlling for demographic attributes and financial learning, financial literacy makes a significant contribution to subjective perception of personal finance	x
H.2b Controlling for demographic attributes and financial learning, financial literacy makes a significant contribution to behavioural assessment of personal finance	x
H.2c Controlling for demographic attributes and financial learning, financial literacy makes a significant contribution to satisfaction with financial situation	x
H.2d Controlling for demographic attributes and financial learning, financial literacy makes a significant contribution to perceived financial well-being	x
H.3a Financial literacy will mediate the relationship between financial learning and behavioural assessment of personal finance	pm
H.3b Financial literacy will mediate the relationship between financial learning and perceived financial well-being	fm
H.3c Financial literacy will mediate the relationship between financial learning and satisfaction with financial situation	fm
H.3d Financial literacy will mediate the relationship between financial learning and subjective perception of personal finance	fm
H.4a From the children's perspective, there is more support from the children who are in more contact with their parents.	x
H.4b From the parents' perspective, there is more support from the children who are in more contact with their parents	y
H.5 Parents with financial resources are less likely to co-reside with their children than those with little financial resources	y



H.6a	The longer the children are away from the parents, the less will be the parents need given to them.	x
H.6b	The longer the children are away from the parents, the less will be the filial obligation given to them.	x
H.6c	The longer the children are away from the parents, the less will be the parents support given to them.	x
H.7a	The support given by parents to children influences the instrumental support they receive	x
H.7b	The support given by parents to children influences the support they receive from the parents' perspective	x
H.8	There is a relationship of support exchanges between parents and their children, and opportunities to give support	x
H.9	There is a positive relationship between children and parents on expectations about filial responsibilities, sharing the view that children are obligated to provide support if their parents need it	x
H.10	Adult children who have higher family income and a high level of filial obligation will provide more opportunity for support to their parents.	y
H.11a	Financially literate people adopt the filial piety concept in planning for their subjective perception of personal finance	fm
H.11b	Financially literate people adopt the filial piety concept in planning for their behavioural assessment of personal finance	y
H.11c	Financially literate people adopt the filial piety concept in planning for their satisfaction with financial situation	fm
H.11d	Financially literate people adopt the filial piety concept in planning for their perceived economic well-being	fm

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Notes      x      = hypothesis accepted  
              y      = hypothesis rejected  
              fm     = full mediator (hypothesis not rejected)  
              pm     = partial mediator (hypothesis not rejected)

## **5.5 SUMMARY**

Apart from providing some information on data analysis and return rate, the chapter has in the main provided noteworthy discussions on issues such as subjective perception of personal finances, and behavioural assessment of personal finances as well as satisfaction of personal financial situation through the testing of hypotheses and the application of statistical tools. The chapter had also extensively examined a number of filial piety issues pertaining to parents' co-residence with adult children, financial/service/moral support given to parents, parents' expectations of filial obligations, how parents' support given to children could influence the support received from them, whether time spent with parents would influence children's support for parents, and whether adult child's household income and higher level filial obligations had any negative or positive effect on the support given to parents (including the form of support). Discussions of all these issues were again made possible by reference to testing results obtained through the testing of hypotheses and the application of statistical tools as well as by reference to research findings produced by relevant authoritative research studies. Finally, the overall effect of the interrelationship between relevant issues of financial learning/literacy and relevant aspects of the filial piety concept was also investigated in the same manner. The research findings from this study are further discussed in Chapter VI.