CHAPTER 4

SAMPLE CHARACTERISTICS

4.1 Introduction

This study uses data from a survey conducted in 1989 on two samples consisting of fifth and sixth form students for the University of Malaya's tracer study (see Section 3.2). The aim of this chapter is to examine the characteristics of the Form 5 and Form 6 students in the samples. The focus is on the vocationally relevant elements of the samples and their characteristics. This influence will have implications when analysing the occupational aspirations of the respondents.

The demographic factors are examined in Section 4.2. Sections 4.3 to 4.5 deals with family characteristics, socio-economic status and academic achievement of different ethnic groups and those from different localities. This is to gauge the self concept that was developed for different groups due to their differing background and abilities. The perception on equal educational and occupational opportunities for males and females from different ethnic groups and localities are reported in Section 4.6 and 4.7. Section 4.8 discusses the source of career guidance in order to shed light on who has the most influence on the career decision making of respondents. Finally, the career aspirations of respondents are explored in Section 4.9 to have an idea on the distribution of career preference and career expectation for both samples and to make comparisons.

4.2 Demographic Variables

This section deals with the demographic composition of the samples which is shown in Table 4.1. The gender and ethnic composition gives an idea on whether all groups have an equal influence in determining the factors influencing career aspirations. The locality of the different ethnic groups shows whether respondents from different ethnic groups are

exposed to different economic situations that may have an influence on their self concept and thus their career aspirations.

4.2.1 Gender

The composition of males and females in both samples are nearly equal with the proportion of males being slightly smaller for both samples i.e., 47.0% and 42.2% for the Form 5 and Form 6 samples respectively, compared to 53.0% and 57.8% for females.

4.2.2 Ethnicity

The majority of the respondents are *Bumiputera* respondents (the main ethnic group in Malaysia), consisting of 64.3% and 62.0% for the Form 5 and Form 6 respondents, respectively. This is followed by the Chinese respondents with 27.3% and 29.8% and the Indians with 7.7% and 8.1% for the Form 5 and Form 6 samples, respectively. A small proportion of the respondents are grouped into the category of 'Others'.

4.2.3 Relationship Between Ethnicity And Locality

Many of the *Bumiputera* respondents were brought up in the rural areas i.e., 64.6% of those in Form 5 and 68.8% of those in Form 6. Many of the Chinese and Indian respondents grew up in large towns i.e., 58.4% of the Chinese and 49.9% of the Indian Form 5 respondents and 41.8% of the Chinese and 52.6% of the Indian Form 6 respondents are in this category. A larger proportion of the Chinese and Indian respondents compared to *Bumiputera* respondents grew up in small towns.

One reason for the ethnic differences in locality could be the parents' occupation. It can be seen in a later section on parents' occupation, that a high proportion of *Bumiputera* respondents for this study have parents who were working in the agricultural sector. It can also be seen that a high proportion of those from the rural areas have parents in the agricultural sector. It can therefore be deduced that a high proportion of *Bumiputera* respondents grew up in the rural areas because a high proportion of their parents work in the agricultural sector. On the other hand, a high proportion of the

parents of Chinese respondents were in the commerce or business sector and in the civil service, and a high proportion of the parents of Indian respondents were in the Civil service. It can also be seen that a high proportion of urban respondents have parents in these sectors.

Table 4.1: Distribution Of The Respondents by Ethnicity, Gender And Locality

	Form 5					Form 6				
	Bumiputera	**Chinese**	**Indian**	**Others**	**Total**	***Bumiputera***	**Chinese**	**Indian**	**Others**	**Total**
Gender										
Female	2657	1347	271	41	4316	1069	477	110	1	1657
Male	2578	874	360	14	3826	708	377	122	2	1209
Total	5235	2221	631	55	8142	1777	854	232	3	2866
Locality										
Rural	3363	384	166	7	3920	1216	209	37	2	1464
Small Town	742	536	149	4	1431	270	288	73	-	631
Large Town	1100	1293	314	44	2751	281	357	122	1	761
Total	5205	2213	629	55	8102	1767	854	232	3	2856

4.3 Family Characteristics

Family characteristics, as an influential aspect in the shaping of an adolescent's self concept, are examined. This section shows what parental resources may be lacking in the process of growing up and learning of the respondents. It examines whether the majority of the respondents received the guidance of both parents, whether they received encouragement from their parents, whether much time was spent on helping them with their school work and whether their parents had high expectations of them. In line with the resource dilution model (see Chapter 2), this section examines the distribution of birth order and family size and whether these factors influence the amount of family resources received.

4.3.1 Living With Parents Or Guardian

For both the Form 5 and Form 6 samples, 83.3% had both their parents as their guardians, 11.3% had single parents as guardians and the rest had people other than their parents as guardians with a negligible number among them having a non-relative as their guardian.

As more than three quarters of the respondents had both parents as guardians, the term parents will be used when referring to the respondents' guardians.

4.3.2 Parental Interest

Most of the parents had high expectations of their children as 90.2% of the Form 5 respondents and 96.1% of the Form 6 respondents said that their parents expected them to further their education up to the tertiary level. A high proportion of 98.0% of Form 5 and 97.8% of Form 6 respondents perceived that their parents thought it was very important or important to excel in studies. They would also boost their child's confidence in times of failure as 75.5% of the Form 5 respondents and 83.0% of the Form 6 respondents felt that their parents would either encourage them or discuss with them when they did not perform as expected. When their child excelled in studies many parents would encourage them, i.e., 93.3% of the Form 5 sample and 90.2% of the Form 6 sample mentioned that their parents would either praise them, reward them, exhibit that they are happy and proud of them or motivate them further. Only less than 10% of the respondents from both groups perceived that their parents were not bothered at all about their accomplishments in achieving good results.

Although the above results show that the parents of respondents in general had high expectation of their children and were very encouraging, when it came to time spent on education, it was found that only 23.8% of the Form 5 respondents and 15.9% of the Form 6 respondents said that their parents checked their homework very often or often.

Table 4.2: The Distribution Of The Sum Of Responses To Questions On Parental Interest

Number of responses to questions on parental interest	Form 5		Form 6	
	Frequency	Percentage	Frequency	Percentage
0	34	0.4	10	0.4
1	96	1.2	39	1.4
2	472	5.8	189	6.6
3	1888	23.2	857	29.9
4	5381	66.1	1720	60.0
5	269	3.3	52	1.8
Total	8141	100.0	2867	100.0

Combining the above parental resources into one index variable termed 'parental interest' (using the method stated in Section 3.4 of Chapter 3), Table 4.2 is obtained. The table shows that a high proportion of respondents perceived that their parents took a lot of interest in their welfare, where, in at least four instances of concern to the respondents, more that 60% from both samples perceived that their parents had high interest.

4.3.3 Family Size

The mean number of children in a family is about 5 for both the Form 5 and Form 6 samples. This means that many of the respondents are from considerably large families.

Size of family for different localities

To find out whether there is a difference in the mean number of children for different localities, the F test is used (see Section 3.5.2 of Chapter 3). The F values for both samples show that there are significant differences in the mean number of children between some of the localities.

The Scheffe test (see Section 3.5.2 of Chapter 3) shows that for both samples there are significant differences between all categories. However, the difference between the rural and the large town respondents is the highest where the mean number for rural areas is 6 and for large town it is 3 for both samples.

Size of family for different ethnic groups

The difference in the mean number of children among the different ethnic groups is also tested using the F test. The F values for both samples show that there are significant differences in the mean number of children across different ethnic categories.

The Scheffe test shows that for both samples there are significant differences in the mean number of children between *Bumiputera* respondents and other ethnic groups but no significant difference between the Chinese and Indian respondents. Table 4.3 shows that the *Bumiputera* respondents are from larger families compared to non-*Bumiputera* respondents. The mean number of children in a *Bumiputera* respondent's family is about 5 for both samples. Both the Chinese and Indian families for the two samples have a mean number of 4 children.

Table 4.3: Mean Number Of Children By Ethnicity And Locality

Ethnicity	Mean number of children		Locality	Mean number of children	
	Form 5	Form 6		Form 5	Form 6
Bumiputera	5	5	Rural	6	6
Indian	4	4	Small Town	5	5
Chinese	4	4	Large Town	3	3
Others	3	4			
F value	290.79	101.66	F- value	758.71	204.26
(p value)	(0.00)	(0.00)	(p value)	(0.00)	(0.00)

4.3.4 Relationship Between Birth Order And Family Size Versus Parental Interest

Table 4.4 presents no clear pattern for the relationship between birth order and family size with parental interest (measured in terms of number of responses for questions on parental interest). Even when examined for the individual factors relating to parental interest (which is not shown in Table 4.4), there does not seem to be a clear relationship among most of the variables. The only observation that can be made is that there is a slightly higher proportion of earlier-borns and those from small sized families from both samples who mentioned that their parents had discussions with them when they did not

achieve good results and that their parents rewarded them if they achieved good results. There was also a higher proportion of earlier-borns from both samples who mentioned that their parents checked their work very often or often but no significant relationship was observed between this variable and family size. 'Reward' can be considered as parental resources in terms of finance and 'discuss' and 'check homework' can be considered parental resources in terms of time spent. The other variables of parental interest which seem to have no relationship at all with birth order and family size are mainly parental resources in terms of parental expectation and encouragement. Therefore, it can be said that the majority of respondents received encouragement from their parents and that their parents had high expectations of them (shown in the section on parental interest), regardless of their birth order or family size.

Table 4.4: Relationship Between Birth Order And Family Size With Parental Interest

Number of responses for questions on parental interest	Form 5						Form 6					
	0	1	2	3	4	5	0	1	2	3	4	5
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Family Size												
Small size (n=747)	0.4	0.4	5.1	26.1	62.8	5.2	0.5	1.9	3.8	34.4	58.4	1.0
Average Family size (n=2490)	0.3	1.2	7.2	24.9	62.4	4.0	0.4	1.1	4.4	34.6	57.5	1.9
Large Family Size (n=4903)	0.5	1.3	5.2	21.9	68.5	2.7	0.3	1.4	7.8	27.4	61.3	1.9
Birth order												
Only child or eldest	0.3	1.2	5.9	23.3	65.2	4.1	0.1	0.9	5.2	30.9	60.8	2.0
2nd child	0.4	0.9	6.7	23.5	64.4	4.2	0.5	1.8	4.5	28.1	63.4	1.6
3rd or 4th child	0.2	1.3	5.8	22.8	66.8	3.1	0.7	1.5	7.1	30.9	58.3	1.6
5th child	0.8	1.4	4.9	23.3	67.6	2.1	0.1	1.4	8.7	29.2	58.5	2.0

4.4 Parents' Socio-economic Status

The socio-economic status of the respondents may be measured by the respondents' father's highest level of education, mother's highest level of education, parents' occupational status and income. Socio-economic status has a great impact on the self concept of adolescents and this section determines whether any particular ethnic group or any particular localities is more affected by these socio-economic status factors and which factors influence which group the most. The parents' occupational sector will show the types of jobs that different groups are exposed to.

4.4.1 Father's And Mother's Highest Level Of Education

The father's and mother's highest level of education is shown in Tables 4.5 and 4.6, respectively.

The majority of the respondents i.e., 72.0% of the Form 5 sample and 75.3% of the Form 6 sample stated that their father's highest level of education was at the primary or lower secondary level. For both samples, a large proportion of all ethnic groups regardless of whether they were from rural areas, small towns or large towns stated that their father's highest level of education was at this level. Another noted observation for both samples is that a higher proportion of respondents from large towns compared to other localities for both samples have fathers whose highest level of education was at the university level. Not much difference is observed between the Form 5 and Form 6 samples.

The majority of the respondents from both samples have mothers whose highest level of education was at the primary school level i.e, 52.8% of the Form 5 sample and 51.8% of the Form 6 sample. A larger proportion of mothers from both samples compared to fathers have no formal schooling i.e, 18.4% of the Form 5 sample and 21.1% of the Form 6 sample. In terms of ethnicity, a large proportion of all ethnic groups, regardless of where they are from, stated that their mother's highest level of education was at the primary school level. Not much difference is observed between the Form 5 and Form 6 samples.

Table 4.5: Father's Highest Level Of Education

	Form 5 (F5)					Form 6 (F6)				
	No Formal Schooling	Primary	Lower Secondary	Upper Secondary	College/ University	No Formal Schooling	Primary	Lower Secondary	Upper Secondary	College/ University
Ethnicity	%	%	%	%	%	%	%	%	%	%
Bumiputera (F5: n=4389 and F 6: n=1543)	10.0	53.4	20.7	8.5	7.5	9.9	62.9	16.9	5.8	4.6
Chinese (F5:n=1953 and F6: n=1953	3.8	43.1	27.9	15.6	9.7	4.7	45.6	24.5	17.9	7.3
Indian (F5::n=504 and F6: n=185)	4.4	28.8	35.1	16.3	15.5	3.8	24.9	35.7	25.4	10.3
Others (F5: n=49 and F6: n=3)	8.2	6.1	46.9	14.3	24.5	-	-	-	-	100.0
Total (F5:n=6895 and F6: n=2481)	7.8	48.3	24.0	11.1	8.4	7.8	54.7	20.6	10.9	5.9
Locality										
Rural (F5: n=3265 & F6:n=1274)	12.4	64.8	15.9	5.1	1.8	12.2	68.5	14.7	3.1	1.5
Small Town (F5: n=1246 and F6:n=541)	6.2	47.0	29.2	10.8	6.8	3.0	49.7	26.8	14.4	6.1
Large Town (F5: n=2353 and F6: n=658)	2.2	26.3	32.3	19.6	19.6	3.5	31.8	26.9	23.1	14.8
Total (F5: n=6864 and F6: n=2473)	7.8	48.4	24.0	11.1	8.8	7.8	54.6	20.6	10.9	6.0

Note: Only for respondents who stated that their guardian was either both parents or only father

Table 4.6: Mother's Highest Level Of Education

	Form 5 (F5)					Form 6 (F6)				
	No Formal Schooling	Primary	Lower Secondary	Upper Secondary	College/ University	No Formal Schooling	Primary	Lower Secondary	Upper Secondary	College/ University
Ethnicity	%	%	%	%	%	%	%	%	%	%
Bumiputera (F5: n=4668 and F 6: n=1580)	21.5	54.8	14.7	5.6	3.4	23.8	59.9	11.3	3.8	1.2
Chinese (F5:n=2022 and F6: n=781)	13.9	51.0	20.3	10.8	4.0	18.8	49.2	19.5	9.3	3.2
Indian (F5::n=560 and F6: n=200)	10.4	45.7	26.1	10.4	7.5	9.5	37.0	32.5	16.5	4.5
Others (F5: n=51 and F6: n=3)	7.8	23.5	35.3	21.6	11.8	-	-	66.7	-	33.3
Total (F5:n=7301 and F6: n=2564)	18.4	52.8	17.3	7.5	3.9	21.1	54.8	15.5	6.5	2.1
Locality										
Rural (F5: n=3467 & F6:n=1307)	28.0	58.6	11.0	2.0	0.5	30.7	60.6	6.7	1.8	0.3
Small Town (F5: n=1282 and F6:n=548)	15.4	59.9	16.3	5.6	2.7	15.0	57.5	20.3	6.0	1.2
Large Town (F5: n=2525 and F6: n=699)	7.0	41.3	26.4	16.0	9.3	8.0	41.9	28.5	15.7	5.9
Total (F5: n=7274 and F6: n=2554)	18.5	52.8	17.3	7.5	3.9	21.1	54.8	15.5	6.5	2.1

Note: Only for respondents who stated that their guardian was either both parents or only mother

4.4.2 Parents' Occupation Status (in terms of occupational prestige)

For both the Form 5 and Form 6 samples, the mean occupational prestige is less than 46 points, which is in the category of low prestige careers (see Section 3.3.2 in Chapter 3 for method of categorisation). The results are given in Table 4.7. Not much difference is observed in the mean occupational status between the Form 5 and Form 6 samples.

The F test for the mean difference between the ethnic categories show that there are significant differences in mean occupational prestige among some of the ethnic categories but a closer look at the mean prestige shows that all the ethnic groups are in the low prestige career category. However, the mean prestige of the Form 6 *Bumiputera* and Indians students is higher than the Form 5 sample whereas for the Chinese respondents the mean prestige is nearly the same for both samples.

The F test for mean differences also shows significant differences between the mean career prestige among some localities. The Scheffe tests shows significant differences between all categories but the highest difference can be observed between large town respondents and rural respondents. However, even for the large town respondents, their parents' mean occupational prestige is in the low prestige career category.

Table 4.7: Mean Occupational Prestige Of Parents

Mean Occupational Prestige of Parents	Form 5	Form 6	Mean Occupational Prestige of Parents	Form 5	Form 6
nicity			**Locality**		
iputera	40.84	45.14	Rural	39.65	44.89
ese	42.07	42.98	Small Town	38.31	42.14
n	39.29	44.51	Large Town	44.73	45.38
rs	49.26	68.72			
	41.12	44.44	Total	41.13	44.43
ue (p value)	10.82 (0.00)	9.37 (0.00)	F value (p value)	6.72 (0.00)	6.72 (0.00)

4.4.3 Parents' Occupational Sector

The majority of the respondents' parents were in the agricultural sector comprising of 32.6% of the Form 5 sample and 38.6% of the Form 6 sample as shown in Table 4.8. This is followed by 27.6% and 26.6% of the Form 5 and Form 6 samples, respectively, in the civil service, and 15.7% and 14.2% of the Form 5 and Form 6 samples respective, in the commerce or business sector. A high proportion of the *Bumiputera* respondents' parents were in the agricultural sector followed by the civil service. For the Chinese respondents', parents, a high proportion were in the commerce or business sector, followed by the agricultural sector and a high proportion of the Indian respondents' parents were in the civil service.

In terms of locality, a high proportion of the rural respondents have parents who were in the agricultural sector, comprising of 55.9% of rural Form 5 respondents and 63.3% of rural Form 6 respondents. Of the large town respondents, the majority were in the civil service comprising of 39.9% of the Form 5 respondents and 43.2% of the Form 6 respondents. This is followed by 24.3% of the large town Form 5 respondents and 23.1% of the large town Form 6 respondents whose parents were in the commerce or business sector.

Table 4.8: Occupational Sector Of Respondent's Parents

Form Five	Agriculture	Mining	Manufacturing	Construction	Electronics	Commerce / Business	Transport	Civil Service
Ethnicity	%	%	%	%	%	%	%	%
Bumiputera (n=4826)	40.8	0.3	5.5	4.1	1.9	9.8	7.1	30.7
Chinese (n=205)	19.1	0.7	9.2	8.4	4.7	30.4	9.2	18.2
Indian (n=568)	14.4	1.6	12.3	2.3	7.9	13.6	12.9	35.0
Others (n=49)	8.2	10.2	2.0	2.0	12.2	14.3	18.4	32.7
Total (n=7493)	32.6	0.6	7.0	5.1	3.2	15.7	8.2	27.6
Locality								
Rural (n=3647)	55.9	0.3	4.8	4.6	1.2	9.5	5.3	18.4
Small Town (n=1313)	26.0	0.5	8.1	5.4	3.4	17.2	10.6	28.9
Large Town (n=2498)	2.2	1.0	9.8	5.8	6.0	24.3	11.0	39.9
Total (n=7458)	32.6	0.6	7.0	5.1	3.2	15.8	8.2	27.5
Form Six								
Ethnicity								
Bumiputera (n=1683)	49.6	0.9	4.0	2.6	1.8	7.7	6.1	27.3
Chinese (n=818)	23.1	1.1	8.8	6.7	2.0	28.1	9.7	20.5
Indian (n=208)	11.5	0.5	9.6	1.9	6.3	12.0	13.0	45.2
Others (n=3)	-	-	66.7	-	-	-	-	33.3
Total (n=2712)	38.6	0.9	6.0	3.8	2.2	14.2	7.7	26.6
Locality								
Rural (n=1398)	63.3	1.1	2.6	3.3	1.6	7.7	5.2	15.2
Small Town (n=591)	22.5	1.4	9.0	2.5	2.2	19.1	10.2	33.2
Large Town (n=713)	3.8	0.3	10.0	5.9	3.4	23.1	10.4	43.2
Total (n=2702)	38.7	1.0	6.0	3.8	2.2	14.2	7.7	26.5

4.4.4 Income Of Parents

Table 4.9 shows that a high proportion of respondents' parents were in the low income bracket of RM501 – RM1000 i.e., 52.0% of both the Form 5 and Form 6 samples respectively. A higher proportion of Chinese and Indian respondents' parents for both samples had a higher income range of RM1001-RM2000, whereas most of the *Bumiputera* respondents' parents were in the lower income bracket of RM500 –RM1000. The rural and small town respondents too were mainly from poorer families, in the income bracket RM500-RM1000. The large town respondents however were better off with most of them (47.7%) having parents in the income range of RM1001 – RM2000. A larger proportion of Chinese compared to the other ethnic groups and those from large towns compared to other localities received a higher income of more than RM2000. These respondents are better off financially. Not much differences are observed between the Form 5 and Form 6 samples.

Table 4.9: Income Of Respondent's Parent

	Form 5 (F5)				Form 6 (F6)			
	RM0-RM500	RM501-RM1000	RM1001-RM2000	More than RM2000	RM0-RM500	RM501-RM1000	RM1001-RM2000	More than RM2000
Ethnicity	%	%	%	%	%	%	%	%
Bumiputera (F5:n=5217 and F6: n=1683)	6.1	66.2	23.1	4.6	2.8	69.9	24.2	3.0
Chinese (F5:n=2217 and F6: n=818)	10.7	23.6	48.4	17.4	3.3	21.4	62.4	12.9
Indian (F5:n=624 and F6: n=208)	9.1	41.3	41.5	8.0	5.7	29.1	56.4	8.8
Others (F5:n=54 and F6: n=3)	22.2	14.8	44.4	18.5	-	-	-	100.0
Total (F5:n=8112 and F6: n=2712)	7.7	52.3	31.6	8.5	3.2	52.2	38.1	6.5
Locality								
Rural (F5:n=3907 and F6: n=1398)	5.3	76.7	16.8	1.3	2.5	75.3	20.4	1.9
Small Town (F5:n=1430 and F6: n=591)	6.9	47.2	41.7	4.3	3.4	37.6	53.8	5.2
Large Town (F5:n=2739 and F6: n=713)	11.1	20.4	47.7	20.8	4.5	19.3	59.6	16.6
Total (F5:n=8076 and F6: n=2702)	7.5	52.4	31.7	8.4	3.2	52.2	38.1	6.5

4.5 Academic Related Influence

This section intends to delve a little on the aspect of education such as prior academic achievement, stream of study and school leaving decision making. To examine prior academic achievement, the mean *SRP* aggregate is taken as a proxi for the Form 5 sample and the mean *SPM* aggregate is taken as a proxi for the Form 6 sample. It is examined whether there is a difference in academic results for different ethnic groups and for those from different localities. The academic achievements of respondents from different streams of study are also examined. Finally, this section examines whether the decision to further one's studies immediately has any relationship with financial capabilities and academic achievement.

4.5.1 Prior Academic Achievement

To make a comparison on which sample fared better academically, it was found that the Form 6 respondents did better than the Form 5 respondents in their *SRP* examination as the Form 6 sample yields an *SRP* aggregate mean of 15.59 points which is much lower than the mean for the Form 5 sample which is 22.41 points.

Table 4.10 depicts that for both samples, the F test for mean differences in *SRP* or *SPM* aggregate show some significant differences in the mean among the different ethnic groups. The Scheffe tests show that there are significant differences between all the

categories. The Chinese fared exceptionally well for both examinations compared to other ethnic groups. For both samples, the highest difference can be seen between the Chinese and *Bumiputera* respondents.

Table 4.10 also shows that for both samples, the F test for the differences in mean *SRP* or *SPM* aggregate among the different localities is significant. The Scheffe tests show significant differences between all the localities. It can be seen that for both samples the highest difference is between rural respondents and large town respondents where the large town respondents fared much better.

For the difference between males and females, the t test for mean differences for the Form 5 sample is not significant at the 1 per cent level but is significant at 5 per cent. Table 4.10 shows that the mean *SRP* aggregate is 0.45 points lower for female respondents. For the Form 6 sample, the t test shows that the difference in *SPM* results between the sexes is insignificant.

Table 4.10: *SRP* and *SPM* Mean Aggregate By Ethnicity, Locality And Gender

	Mean *SRP* Aggregate (Form 5)	**Mean *SPM* Aggregate (Form 6)**
Ethnicity		
Bumiputera	24.57	26.09
Chinese	17.23	16.41
Indian	23.41	20.12
Others	19.1	18.50
F value (p value)	351.74 (0.00)	572.12 (0.00)
Locality		
Rural	25.29	25.13
Small Town	22.50	21.50
Large Town	18.31	18.97
F value (p value)	476.93 (0.00)	221.30 (0.00)
Gender		
Male	22.62	22.93
Female	22.17	22.44
t value (p value)	2.125 (0.034)	1.779 (0.075)

4.5.2 Stream Of Study

It can be deduced from Table 4.11 that most of the respondents were from the Arts stream i.e., 44.2% of the Form 5 sample and 74.0% of the Form 6 sample.

For both males and females alike, a larger proportion are from the Arts stream as can be seen for both the Form 5 and Form 6 samples. However, there seems to be a slightly higher proportion of males in the Science stream compared to females. Also, a higher proportion of females were in the Arts stream compared to the male respondents.

Table 4.11: Distribution Of The Respondent's Stream Of Study By Gender, Ethnicity And Locality

	Form 5			Form 6		
	Science (%)	Arts (%)	Others (%)	Science (%)	Arts (%)	Others (%)
Gender						
Female (Form 5: n=4314 and Form 6: n=1657)	25.2	47.4	27.4	15.3	82.2	2.4
Male (Form 5: n=3826 and Form 6: n=1210)	34.3	40.7	25.0	35.3	62.9	1.8
Ethnicity						
Bumiputera (Form 5: n=5234 and Form 6: n=1777)	24.6	51.1	24.3	10.5	88.6	0.9
Chinese (Form 5: n=2222 and Form 6: n=854)	42.7	26.5	30.8	48.0	47.3	4.7
Indian (Form 5: n=630 and Form 6: n=232)	24.3	48.9	26.8	36.2	60.8	3.0
Others (Form 5: n=54 and Form 6: n=3)	24.1	50.0	25.9	33.3	66.7	-
Total (Form 5: n=8140 and Form 6: n=2867)	29.5	44.2	26.3	23.8	74.0	2.2

Table 4.12 shows that the F tests for the difference in mean *SRP* or *SPM* aggregate show significant differences between the mean of some of the stream categories. The Scheffe tests for both samples show that there are significant differences between all the categories but the largest difference is between the Science stream and the Arts stream. The Science stream students fared much better in their *SRP* and *SPM* examination compared to the Arts stream students for both samples.

Table 4.12: Academic Achievement of Respondents from Different Streams of Study

	Science Stream	Arts Stream	Other Courses	Total	F value (p value)
Form 5 *SRP* Aggregate	12.47	28.30	23.93	22.41	4038.992 (0.00)
Form 6 *SPM* Aggregate	17.09	24.62	19.41	22.72	357.580 (0.00)

4.5.3 School-Leaving Decision Making

Most of the respondents expressed interest in furthering their studies after leaving school, as can be seen from Table 4.13. However, a large proportion of 50.0% from the Form 5 sample and 43.0% from the Form 6 sample mentioned that they will work for a while before furthering their studies. This is expected as the majority of the respondents were from poor families with parents in the income bracket of RM501 – RM1000. For the Form 5 sample, it can be seen that for those in the income bracket of below RM2000, a higher proportion said that they will work first before pursuing their studies but for those in the category of RM2000 and above, a higher proportion said that they will further their education immediately. For the Form 6 sample, a higher proportion in all income categories said that they will further their studies immediately. It is also observed that a higher proportion of Form 6 respondents (53.3%) compared to Form 5 respondents (38.6%) stated that they intended to further their studies immediately. This is also not unexpected as the main reason for students entering Form 6 is so that they can further their studies, mainly in local universities.

Table 4.13: School Leaving Decision of Respondents by Parents' Income

Parents' or Guardian's Income	Form 5					Form 6				
	RM0 – RM500 (n=623)	RM501 – RM1000 (n=4242)	RM1001 – RM2000 (n=2554)	More than RM2000 (n=684)	Total (n=8103)	RM0 – RM500 (n=90)	RM501 – RM1000 (n=1465)	RM1001 – RM2000 (n=1066)	More than RM2000 (n=182)	Total (n=2803)
School-Leaving Decision Making	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Further Education Immediately	41.1	34.3	40.2	55.3	38.5	51.1	50.8	54.5	70.9	53.5
Work a while	47.7	54.0	48.4	37.1	50.3	44.4	45.9	42.0	28.6	43.2
Seek Employment Immediately	5.0	5.4	4.0	3.2	4.7	4.4	2.8	2.6	-	2.6
Others	6.3	6.2	7.4	4.4	6.5	-	0.5	0.8	0.5	0.6

Note: Others include furthering studies at technical schools or trade schools and studying while working

From Table 4.14, it can be seen that the F values show that there are significant differences in mean *SRP* or *SPM* aggregate among all categories of school leaving decision making. The Scheffe test for the Form 5 sample shows that there are significant differences between all categories but the largest difference is between the category who

wish to further education and the category who wish to work for a while. This shows that for the Form 5 sample, respondents who have the intention to further their education immediately are those who have done better in their *SRP* examination compared to those who intend to work a while or those who intend to work immediately. For the Form 6 sample, although the F values are significant, the Scheffe tests show that there are no significant differences between the means of any of the categories indicating that academic achievement does not make a significant difference in the intention to further one's studies compared to other decisions.

Table 4.14: Academic Achievement Of Respondents With Different School Leaving Plans

	Further Education	Work a While	Seek Employment Immediately	Others	Total	F value (p value)
Form 5 *SRP* Aggregate	19.61	23.89	27.88	24.05	22.41	177.872 (0.00)
Form 6 *SPM* Aggregate	22.34	23.10	24.41	21.78	22.72	4.117 (0.00)

Note: Others include furthering studies at technical schools or trade schools and studying while working

4.6 Perception On Gender Equality In Education

Perception of respondents on gender equality is examined in this section. If they perceive any gender bias in the educational system, it can have an impact on their self concept, preventing them from achieving in their studies and thus preventing them from having high career aspirations. Adolescents from different ethnic groups and localities may have different perceptions due to their cultural background and exposure.

There is a general consensus among male and female respondents on the issue of equal educational opportunity. Table 4.15 shows that 85.8% and 78.1% of the Form 5 and Form 6 female respondents respective, and 64.9% and 68.7% of the Form 5 and Form 6 male respondents, respectively, agree that males and females receive equal educational opportunities. It may be expected for female rural respondents to feel denied of equal educational opportunities due to their poor financial situation and parents' preference

towards educating boys. However, this was proven otherwise by the response received by the female rural students whereby more than 80.0% of the rural females from both samples agreed that there is equal educational opportunities. In terms of ethnicity too, a large proportion of males and females from all ethnic groups agreed on this issue. This is not surprising given the equal educational system in Malaysia for both boys and girls.

Table 4.15: Perception On Gender Equality In Education

Number and proportion of respondents who agree that there is equal educational opportunities	Form 5		Form 6	
	Female	Male	Female	Male
Ethnicity				
Bumiputera	2232 (84.4%)	1511 (59.0%)	852 (80.0%)	423 (60.0%)
Chinese	1193 (89.0%)	697 (80.0%)	353 (74.3%)	312 (82.8%)
Indian	225 (83.3%)	243 (68.6%)	83 (75.5%)	94 (77.0%)
Others	35 (85.4%)	9 (60.0%)	1 (100.0%)	2 (100.0%)
Total	3685 (85.8%)	2460 (64.8%)	1289 (78.1%)	831 (68.9%)
Locality				
Rural	1374 (85.3%)	955 (61.5%)	620 (82.0%)	311 (66.9%)
Small Town	751 (84.8%)	552 (63.1%)	360 (75.9%)	223 (65.8%)
Large Town	1185 (87.1%)	722 (71.8%)	287 (73.0%)	278 (73.5%)
Total	3310 (85.8%)	2229 (64.9%)	1267 (78.1%)	812 (68.7%)

4.7 Perception On Gender Equality In Occupational Opportunities

Perception on equal occupational opportunities would probably have an impact on career aspiration. Here, it is examined whether different ethnic groups and respondents from different localities have similar views on this.

Compared to the perception of respondents on equal educational opportunities, a lesser proportion of males and females agreed that there was equal occupational opportunities for both sexes as shown in Table 4.16. Although 66.3% of the female Form 5 respondents agreed that there was equal occupational opportunities for males and females, a lesser proportion of 53.7% of the Form 6 female respondents agreed on this. In terms of ethnicity, a higher proportion of Chinese respondents compared to *Bumiputera* and Indian respondents who agreed that there is equal occupational opportunities for both

sexes. In terms of locality though there does not seem to be much difference in perception between rural and large town respondents.

Table 4.16: Perception On Gender Equality In Occupational Opportunities

Number and proportion of respondents who agree that there is equal educational opportunities	Form 5		Form 6	
	Female	Male	Female	Male
Ethnicity				
Bumiputera	1611 (61.3%)	1043 (41.0%)	521 (49.2%)	375 (53.4%)
Chinese	1011 (75.7%)	626 (72.1%)	302 (64.7%)	289 (76.7%)
Indian	184 (68.4%)	208 (59.3%)	55 (50.0%)	66 (54.1%)
Others	26 (63.4%)	8 (53.3%)	1 (100.0%)	2 (100.0%)
Total	2832 (66.3%)	1885 (49.9%)	879 (53.7%)	732 (60.8%)
Locality				
Rural	976 (61.0%)	654 (42.4%)	384 (50.9%)	250 (53.9%)
Small Town	608 (68.8%)	440 (50.2%)	218 (46.5%)	171 (50.4%)
Large Town	957 (70.8%)	610 (61.2%)	198 (51.2%)	195 (51.3%)
Total	2541 (66.2%)	1704 (49.9%)	868 (53.4%)	729 (60.8%)

4.8 Career Guidance

It cannot be resolved that the respondents were lacking in career advice and information as more than 70% of both the Form 5 and Form 6 samples mentioned that they had received career guidance. Of this, 68.9% and 30% of the Form 5 sample and 61.8% and 36.9% of the Form 6 sample said that the information received was very useful or useful, respectively (see Table 4.17).

The source of career guidance is determined to find out who plays an important role in the career decision making of adolescents. The favourite source of information for both samples were parents or relatives i.e., 36.9 % of the Form 5 sample and 23.0 % of the Form 6 sample. This was followed by teachers in schools or career guidance teachers i.e., 26.1% and 15.6% of the Form 5 sample and 28.1% and 18.2% of the Form 6 sample, respectively. 10.9% of the Form 5 sample and 19.1% of the Form 6 sample obtained information from sources such as media and 9.4% of the Form 5 sample and 9.6% of the Form 6 sample obtained information from friends. Only a small proportion of

respondents (1.2% of the Form 5 sample and 2.0% of the Form 6 sample) received information from other sources such as from seminars and religious sources. In Poole's (1985) study, it was also found that most adolescents rely mainly on their parents for help in their school-leaving decision making but the study also shows that older adolescents (i.e., those at the age of 17 years) are also influenced by peers and non-parental sources. In this study, it is found that parents still have a notable influence on the educational and career decisions of their children and that peers and other sources play a very trivial role.

Table 4.17: Career Guidance Received By Respondents

hether The Respondents Had Received Career Guidance?			Whether The Career Guidance Received Was Useful?			Source Of Career Guidance		
	Form 5 (%)	Form 6 (%)		Form 5 (%)	Form 6 (%)		Form 5 (%)	Form 6 (%)
:eived	70.1	73.1	Very Useful	68.9	61.8	Teachers at school	26.1	28.1
l not	29.9	26.9	Useful	30.0	36.9	Parents or relatives	36.9	23.0
eive			Not Useful	0.7	1.1	Career guidance teachers	15.6	18.2
			Not Useful At All	0.5	0.3	Friends	9.4	9.6
						Media	10.9	19.1
						Religious teachers, seminars and others	1.2	2.0

4.9 Career Aspirations

Career aspirations, the dependent variables in this study, are examined in detail to see if the respondents' aspirations are more inclined towards high or low prestige careers. This section compares the distribution in terms of mean and spread for career preference and career expectation of the two samples and examines whether career aspirations are generally high compared to the results of Trieman's (1977) study. This section also attempts to find out whether there is a relationship between the occupational sectors that are aspired for by respondents and factors such as the employment growth of a particular sector and parents' occupational sector.

The descriptive statistics for career preference and career expectation are shown in Table 4.18. The mean prestige point for career preference is 57.7 for the Form 5 respondents and 61.3 for the Form 6 respondents, respectively. The mean prestige point for career expectation is 44.95 points for the Form 5 sample and 48.1 points for the Form 6 sample, respectively. The mean scale score of Trieman's (1977) prestige scale (the scale in which the career aspirations are based on) is 43.3 points. This score was computed over the scores for the 509 occupations in the scale.

Table 4.18: Descriptive Statistics For Career Aspirations

	N (missing value)	Range	Minimum	Maximum	Mean	Std Deviation	Coefficient of Variation	Skewness (Statistics)	Skewne (Std Error
ference	7709 (432)	64.00	14.00	78.00	57.71	12.78	0.22	-0.347	0.028
ectation	7099 (1042)	63.00	15.00	78.00	44.95	12.32	0.27	-0.054	0.029
ference	2772 (95)	54.00	24.00	78.00	61.26	10.55	0.17	-0.47	0.046
ectation	2505 (363)	63	15	78	48.1	11.36	0.24	-0.29	0.049

To test the difference between the scores for career preference and career expectation with Trieman's (1977) mean score, the t test is used. The hypothesis to be tested is:

Ho: $\mu = 43.3$
Ha: $\mu \neq 43.3$ where: μ is the mean prestige point for career aspiration

The t values as can be seen in Table 4.19 show that the mean career preference and career expectation for both samples are significantly higher at the 1 per cent level than the mean prestige point of 43.3. If Trieman's (1977) scale is to be used as a basis for comparison, it can be concluded that the students in this study both prefer and expect jobs of high prestige. The mean career preference, however, is very much higher than 43.3 points whereas the mean career expectation is only slightly higher than this value.

Table 4.19: t Values Comparing The Mean Prestige Point of Career Preference and Career Expectation To Trieman's (1977) Mean Score

One sample t test	Test Value = 43.3			
	Form 5		Form 6	
	Career Preference	Career Expectation	Career Preference	Career Expectation
t value (p value)	98.997 (0.00)	11.262 (0.00)	89.61 (0.00)	19.22 (0.00)
Mean difference	14.41	1.65	17.96	4.54

The difference between mean career preference and mean career expectation is tested using the paired t test. Table 4.20 shows that the paired t values for both the samples are significant at the 1 per cent level. This shows significant differences between the mean score for career preference and the mean score for career expectation for both samples. As envisaged, the respondents are willing to compromise their high career preferences for lower prestige careers as can be seen in the lower mean score for career expectation compared to that for the career preference.

Table 4.20: Paired t Values For The Difference Between Career Preference And Career Expectation

Paired t test Career Preference – Career Expectation	Form 5	Form 6
t value (p value)	68.01(0.00)	48.85 (0.00)
Paired mean difference	12.82	13.59

It can also be seen that the mean career preference for both samples is about 58 which lies in the high prestige career category. The mean score for career expectation for the Form 5 sample lies in the low prestige career category and for the Form 6 sample, it lies in the medium prestige category (see Section 3.3.2 in Chapter 3 for method of categorisation).

The dispersion in career preference and career expectation for both samples can be considered not much as it can be seen from Table 4.18 that their coefficient of variation, which is the variability in the data as a percentage of the mean, are all much smaller than the coefficient of variation of 0.39 for Trieman's (1977) scale.

The distribution of career aspirations is shown in the histograms in Figure 4.1. gure 4.1 depicts that for the Form 5 sample, career preference is skewed to the left but)t career expectation. This is also shown by the skewness statistics which shows that though both career preference and career expectation have negative skewness i.e., .347 and –0.054, the value for career expectation is close to 0. For the Form 6 sample, ıe data is skewed to the left for both career preference and career expectation and the ılues of –0.469 and –0.29 show a smaller negative value for career expectation. The ɛgative skewness seems to show that the career preferences and career expectations are ıore distributed towards higher prestige careers in the scale. For both samples, it can be ɔen that career preference is more distributed towards high prestige careers compared to areer expectation.

Figure 4.1: Distribution Of Career Preference And Career Expectation

Form 5

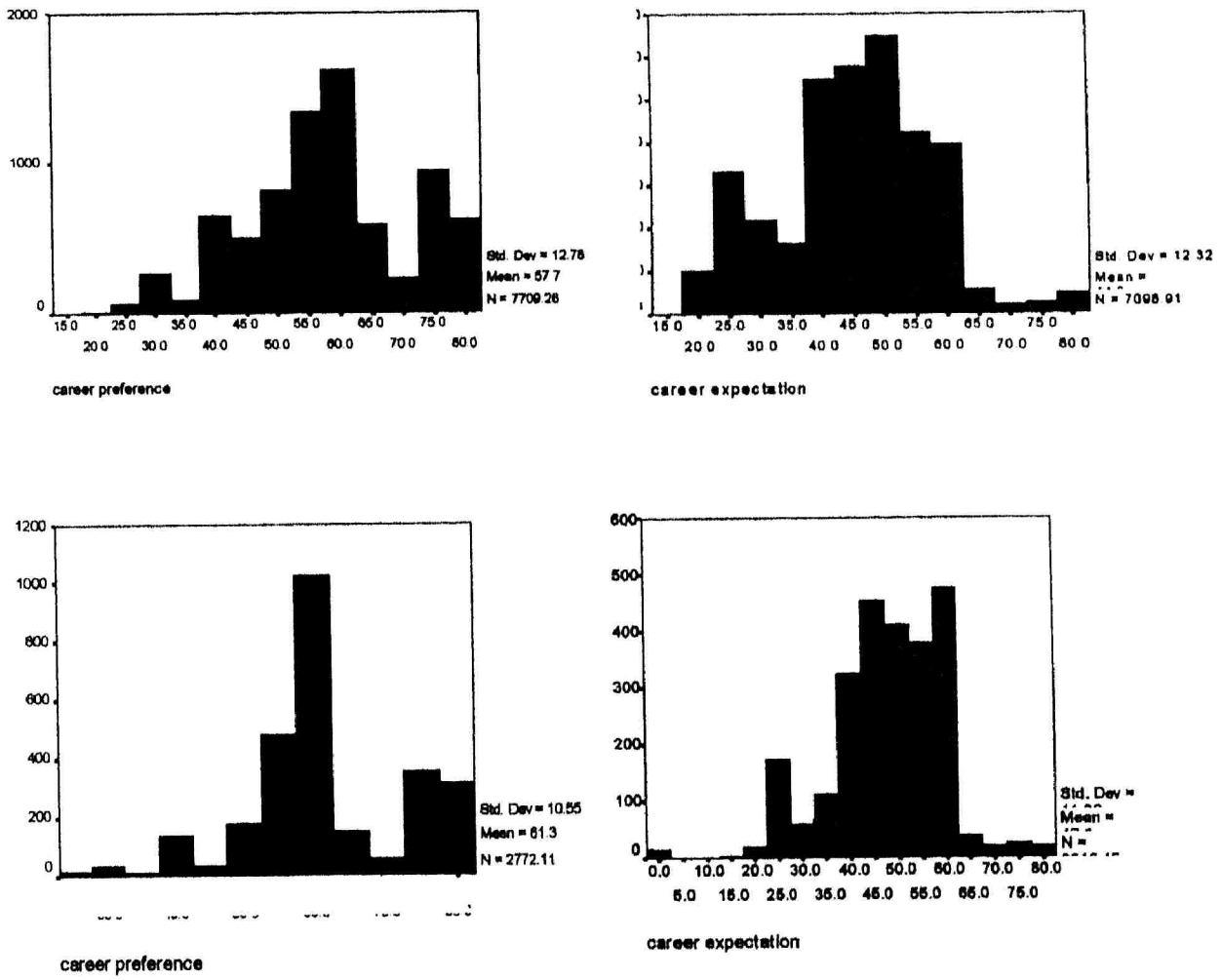

Table 4.21 shows that more than half of the Form 5 respondents and more than three quarters of the Form 6 respondents prefer professional careers. However, only a little more than a quarter from both samples expect to obtain professional careers. Other favourite sectors for career expectation are the clerical and related sectors, the sales sector and the services sector, although these sectors may not be a favourite for career preference. Table 1.2 in Chapter 1 shows that these are sectors which have experienced high growth in employment in the period 1981-1990, indicating some relationship between career expectations and employment opportunities.

It can also be seen that although the proportion of respondents preferring the production and transport sector is negligible, a small proportion of about 10% for both samples expect to obtain careers in this field. However, this proportion is very small considering that the production sector experienced the highest growth in employment of 25.2% in the period 1981 -1990 as shown in Table 1.2.

Another notable fact is that although a large proportion of respondents have parents or guardians in the agricultural sector as shown earlier, almost none of them showed indication of aspiring to join these sectors. This could be due to the shift in employment from agriculture to production which indicates that job opportunities in the agricultural sector may not be that vast compared to other sectors.

The above results indicate some relationship between job opportunities in the market and career expectation. This indicates that the respondents have some degree of awareness of the employment situation in the country. However, their career expectations also depends on the preference as although the growth in the production sector is vast, the proportion preferring and expecting to enter this sector is very low.

By observing the 'missing' or 'not sure' values from Table 4.18 and 4.21, it can be observed that there is a vast difference between the values for career preference and career expectation. For both the Form 5 and Form 6 sample, a higher number of respondents were uncertain of their career expectation compared to their career preference.

Table 4.21: Career Preference And Career Expectation By Sectors

	Form 5				Form 6			
	Career Preference		Career Expectation		Career Preference		Career Expectation	
	No.	%	No.	%	No.	%	No.	%
fessionals	5202	65.9	1825	25.3	2244	80.5	862	33.8
ministrative and Managerial Workers	234	3.0	64	0.9	84	3.0	22	0.9
rical and Related Workers	788	10.0	1573	21.8	141	5.0	630	24.7
es Workers	610	7.7	1846	25.6	158	5.7	561	22.0
vice Workers	883	11.2	658	9.1	143	5.1	134	5.2
ricultural and Related Workers	22	0.3	280	3.9	6	0.2	97	3.8
duction and Transport Workers and bourers	152	1.9	955	13.2	13	0.5	235	9.2
usewife	-	-	21	0.3	-	-	10	0.4
tal	7892	100.0	7222	100.0	2789	100.0	2550	100.0
ssing value or not sure	249		919		78			
and Total	8141		8141		2867		317	

Trieman (1977), from the ratings of occupations in his study managed to categorise the occupational sectors into two categories of high and low prestige. In this study too, the occupational sectors are classified into these categories based on Trieman's (1977) classification. Of those who aspired for professional careers, it was found that very high proportions of more than 70% and more than 50% prefer and expect professional careers of high prestige. Similarly, many respondents who aspire for other lower prestige sectors such as the clerical sector, the sales sector and the services sector, also chose jobs in these sectors which are considered more prestigious compared to other jobs in the same sector.

Table 4.22: Career Aspirations By Sector and By Prestige Points

Sectors	Form 5		Form 6	
	Career Preference	Career Expectation	Career Preference	Career Expectation
Professional				
High Prestige (58 points and above)	72.2	56.2	80.8	64.1
Low Prestige (less than 58 points)	27.8	43.8	19.2	35.9
Clerical				
High Prestige (41 points and above)	92.5	80.4	77.3	82.8
Low Prestige (less than 41 points)	7.5	19.6	22.7	17.1
Sales				
High Prestige (40 points and above)	88.1	58.1	91.8	66.1
Low Prestige (less than 40 points)	11.9	41.9	8.2	33.9
Services				
High Prestige (27 points and above)	100.0	88.1	100.0	92.7
Low Prestige (less than 27 points)	0	11.9	0	7.3
Agriculture				
High Prestige (34 points and above)	69.7	84.2	100.0	89.4
Low Prestige (less than 34 points)	30.3	15.8	0	10.6
Production				
High Prestige (38 points and above)	90.2	83.7	89.8	75.5
Medium Prestige (26-37 points)	6.2	4.8	7.5	5.5
Low Prestige (less than 26 points)	3.6	11.5	2.7	19.5

4.10 Conclusion

The sample consists of three main ethnic groups with more than 50% *Bumiputera* respondents, followed by about 30% of Chinese respondents and less than 10% of Indian respondents. The proportion of males and females are approximately equal. The majority of the *Bumiputera* respondents grew up in rural areas and a large proportion of their parents were engaged in the agricultural sector and civil service. The majority of the Chinese and Indian respondents grew up in large towns with the majority of the Chinese having parents in the commerce and business sector and the majority of the Indians in the civil service. Rural respondents are exposed more to the agricultural sector and large town respondents to the civil service and commerce and business sector due to their parents' involvement in these sectors.

The respondents are not lacking in parental guidance as more than 80% of them were living with both parents and would probably have the guidance of both parents. Furthermore, more than 90% perceived that their parents had high expectations of them and motivated them with rewards and praises while discussing with them when they did not achieve good results. Only 10% perceived their parents to be not bothered at all. Another indication of high parental interest is that the parental interest index shows that out of 5 instances, more than 60% of respondents perceive their parents to have high interest in at least 4 instances. The only instance where parental interest may be lacking is the number of times the respondents school homework is checked as less than a quarter of the respondents perceived that their parents checked their homework often.

It should, however, be observed that a large proportion of the respondents were from large families of around 5 children and this could mean less parental resources for each child in the family (see summary of the resource dilution theory in Section 2.4.4.1 in Chapter 2). If this is the case, rural respondents with a mean family size of 6 children and *Bumiputera* respondents with a mean of 5 children are the ones receiving the least parental resources. However, on examining the parental index, no indication of a relationship between this factor and family size or even birth order was found. Only a slight relationship was found between family size and birth order with parental motivational factors such as rewarding respondents when they perform well and discussing with respondents when they failed to do so. A slight positive relationship was also observed between birth order and the frequency parents checked their homework.

The majority of the respondents are found to be from low status families regardless of their ethnicity and locality. More than three quarters of them have fathers whose highest level of education is at the lower secondary level or below and 50% have mothers whose highest level of education is at the primary level or no formal schooling. A high proportion of mothers have no formal education. The mean occupational prestige of the respondents' parents were all in the low prestige category. More than 50% of the respondents have parents who were in the low income bracket of less than RM1000. The majority of the *Bumiputera* respondens' parents were in the lower income bracket of RM500 - RM1000 whereas the majority of the Chinese and Indian parents are in the

higher income group of RM1001 - RM2000. The Chinese respondents can be considered better off financially with a higher proportion of them having parents with an income of more than RM2000. Rural respondents are considered financially worse off with the majority in the RM500-RM1000 category compared to the majority of the large town respondents in the RM1001 - RM2000 category.

Judging from the *SRP* results, the Form 6 students have on average fared better academically. Among the different categories, the respondents who fared better academically were the Chinese respondents, respondents from large towns and those who had chosen to enter the Science stream. The school leaving plans of the respondents can be divided into two main plans that is to further education immediately or to work for a while before furthering education. For the Form 5 sample, those who had decided that they would further their education immediately were the ones who were better off financially or who had achieved good results. For the Form 6 sample, the majority of the respondents had intentions to further their education immediately regardless of their financial and academic background.

The final description is on the career aspiration of the respondents which is the main factor studied in this research paper. On comparing career aspirations of respondents with career ratings in Trieman's study, it is found that the respondents basically have high career preferences and career expectations. However, there is a significant difference between the career level preferred and the level expected where the mean score for career preference is much higher than the mean score for career expectation. For the Form 5 sample especially, the distinction between career preference and career expectation is clear where a high proportion seem to prefer high prestige careers. One reason for high career preferences is explained by the fact that more than three quarters of the respondents preferred professional careers which are basically rated as high prestige careers in Trieman's (1977) SIOPS scale. Also, when aspiring for careers in professional or any other sectors, the careers aspired for are those that are in the higher prestige level of these sectors. Another noticeable point is that there is some indication of a relationship between the occupational sectors expected and the employment

opportunities in that sector (measured in terms of employment growth) and also with career preference.

The above exploration in terms of the main groups involved in the career decision making process and their differing family, social status and academic characteristics, will lead to a better explanation in the later chapters on why certain self concept factors have a more significant influence on career aspirations.

The strong relationship between the stream of study and academic achievement indicates that when analysing for determinants in career aspiration the inclusion of both these variables in the multiple regression model may cause multicollinearity. Another point to note is that the Form 5 and Form 6 sample seem to have differing academic achievement levels and academic priorities with differing factors influencing their school-leaving plans leading to the expectation that different factors may influence the career aspirations for both the samples.

The final conclusion is that the obvious gap between the career preference and expectation level indicates that there may be differing self concept factors influencing career preference and career expectation.