CHAPTER 7

CONCLUSION

7.1. Summary Of The Study

The main purpose of this study is to find the determinants of career aspirations. The data for this study was obtained from a survey conducted in 1989 on two samples of Form 5 and Form 6 students for the University of Malaya's tracer study on "Transition from School to Work" (Chew et al., 1995).

The main method of analysis for this study is the multiple regression analysis. The dependent variables are career preference and career expectation for the Form 5 and Form 6 samples. This leads to the construction of four multiple regression models. The main independent variables are the self concept variables. Other than self concept variables, work values and also the influence of career preference on career expectation were also examined. From the multiple regression analysis, the variables having the most and least influence on career aspirations are determined. The factor analysis method is also used in this study to identify representative factors for perceived work values from a larger set of variables. These work value factors are then subsequently used in the multiple regression analysis to detect whether work values have any influence on career aspirations.

Other than the multivariate analysis mentioned above, bivariate analysis such as exploratory data analysis consisting of graphical displays and confirmatory data analysis consisting of t tests and ANOVA tests were also used. From the bivariate analysis, some reasons for career aspirations being higher for certain factors were detected.

The above analysis has enabled the fulfilment of the objectives listed in Chapter 1. The main self concept variables and the least important self concept variables influencing career aspirations, their influence on career aspirations and some reasons on why they influence career aspirations are all summarised in Sections 7.2 and 7.3. Sections
7.4 and 7.5 highlight the influence of perceived work values on career aspirations and the influence of career preference on career expectation. Comparisons between career preference and career expectation and between the Form 5 and Form 6 samples are given in Sections 7.6 and 7.7. Section 7.8 then discusses some outstanding observations found in the study and its implications on career guidance counselling. Finally, Sections 7.9 and 7.10 highlight some limitations to the study and make recommendations for future research on career aspirations.

7.2. Main Self Concept Variables Influencing Career Aspirations

The following are some of the most important variables influencing career aspirations. They are found to be important based on the fact that:

- They are relatively important compared to other significant variables in the models. (based on their standardised coefficients and t values);

- They significantly influence nearly all the models of career aspirations; and

- If they influence either the career preference or career expectation models for both the Form 5 and Form 6 samples, then they are found to be an important influence of either one of these aspects of career aspirations.

7.2.1. Academic Related Variables

The most important self concept variables influencing career aspirations for both samples are academic related variables such as prior academic achievement, the decision to further one's studies, the fact that the respondents are from the Science stream and the decision to further one's studies up to tertiary level (which influences only the Form 5 sample). All these variables have a positive influence on career aspirations.

a) Prior Academic Achievement

Prior studies deduced that academic achievement will have a positive influence on career aspirations (Gottfredson, 1981; Saha, 1982; Cook et al., 1996; Trieman, 1977). In
Malaysia too, since education is accessible to everybody and finance for education is available for deserving students, the main variable that is expected to influence a person into furthering their studies and aspiring for high prestige careers is academic achievement.

The findings of this study concur with the above expectations as they show that good results lead to high career aspirations. The bivariate analysis shows that the career preference and expectation are significantly higher for those with good results in SRP and SPM. The difference is seen to be prominent for career expectation where those with good results have career expectation that are considered of medium prestige whereas those with worse results have career expectation that are considered of low prestige. For career preference the difference is not very prominent as all have high career preference regardless of their academic achievement.

For both samples, those in the good results category are mainly Chinese, those from large towns, those from the Science stream and for the Form 5 sample also those with intentions to further their education. Therefore these respondents, when not controlled for academic achievement, may also be expected to have high career aspirations due to their good academic results. The multiple regression analysis shows that academic achievement is one of the most important variables influencing the career aspirations of both samples.

b) Stream of Study

The analysis of career aspirations for different streams of study is mainly between the Arts and Science stream students as very few students were in other courses of study such as vocational education. This is because vocational education is not favoured in the Malaysian job market (Jomo et al., 1997).

The bivariate analysis shows that Science stream students for both samples have significantly higher career aspirations compared to Arts stream students. The difference is prominent for all except Form 6 career preference. The difference in career aspirations could be due to the fact that many of the Science stream students were those who had
achieved good results. During the time of the survey, it was found that there were only about 400 scientists and technologists in Malaysia per million population. This is considered low compared to 3500 per million to 6500 per million in developed countries (Malaysia, 1991a). Hence, there was a need at that time for scientists and technologists and therefore good students were encouraged to enter the science stream.

The multiple regression analysis shows that academic achievement plays a mediating influence on the positive relationship between Science and career aspirations. However, even after controlling for academic achievement, Science students still had higher career aspirations. This indicates that, the fact that respondents were from the Science stream showed that they had high career aspirations. This could be due to the fact that many careers designed for the Science students were of high prestige.

c) School Leaving Decision Making

It is expected that respondents who intend to further their education immediately are likely to have higher career aspirations. This is related to the fact that jobs of high prestige require a higher educational level (Trieman, 1977).

The results of this study concur with this expectation. The bivariate analysis finds that those who wished to further their education immediately are ones who had significantly higher career aspirations compared to those who wished to work a while before furthering their education. Those with the lowest career aspirations were those who wished to seek employment immediately without any intentions of furthering their studies. However, there was only a small proportion of respondents in the last category as the respondents basically had intentions to further their education either immediately or after a while. The difference in career aspirations between the first two categories are found to be prominent. For the Form 5 sample, income and academic achievement play a role in determining whether the respondents wish to further their education immediately or not. Therefore it can be interpreted that Form 5 respondents from high income families and those with good results have higher career aspirations as they are the ones who intend to further their education immediately. This is not so for the Form 6 sample where nearly more than half of the respondents have intentions to further their education immediately.
The multiple regression analysis shows that after controlling for all other variables, the fact that respondents wished to further their education immediately is an important indicator of high career aspirations. It was found that if the respondents wished to further their education to the tertiary level, their career aspirations will be even higher compared to furthering only up to the sixth form or to College or Polytechnic. This could be because, in Malaysia, tertiary education is favoured compared to vocational or other education (Jomo et al., 1997). The fact that respondents intend to further their education up to tertiary level has strong influence only on Form 5 career aspiration and not Form 6. This is because for the Form 6 sample, the choice is either to further their education to university or Colleges and Polytechnic institutions and it is the choice of more 95.6% of the students to further their education up to the university. For the Form 5 sample, 45.3% of them want to pursue their education up to university level and most of the other 54.7% want to further their education up to Form 6 only and therefore it was found that Form 5 respondents wanting to further their education to tertiary level have higher career aspirations.

7.2.2. Socio-economic Status

Many studies find socio-economic status to have a highly significant influence on career aspirations (Slaney and Brown, 1983; Gottfredson, 1981; Bogie, 1976; Saha, 1982; Idowu and Dere, 1983). Of the three kinds of capital found to be important, that is financial, human and social capital (Entwisle and Astone, 1994), the human capital of parents' education was found to have a significant influence on career aspirations of both samples. Occupational status of parents and income as the social and financial aspect influences only career expectation of both samples and not career preference.

7.2.3. Demographic Factors

Of demographic variables, the main variables influencing career aspirations are gender and ethnicity.
Gender

The reason for the labour force growth in Malaysia in 1970 to 1990 was because of increased female participation. This changing attitude towards women's employment is expected to cause more girls to aim for high prestige careers and feel no longer restricted in their choices. This is argued in the studies of Marini (1978); Luzzo (1995) and Dunne et al. (1981).

In this study too it was found from the bivariate analysis that females no longer have lower career aspirations than males. In fact, they have higher career preferences for both samples and the Form 5 sample shows that they have higher career expectations. This is probably due to the fact that although there were many males and females preferring and expecting career of similarly high prestige there were also a small proportion of males preferring and expecting low prestige careers which were not aspired for by females. For similar localities and socio-economic status, this difference for both samples is found mainly in rural areas and in low socio-economic status areas where respondents are more exposed to lower prestige careers. In this situation, it is deduced that some males will aspire for low prestige careers following maybe role models such as their fathers but this is not so for females.

The multiple regression analysis also shows that after controlling for all variables, females have higher career aspiration compared to males.

b) Ethnicity

The study of Slaney and Brown (1983) find that the difference in career aspiration among different ethnic groups is due to its interaction with socio-economic status.

In this study it is found that Indians have higher career aspiration compared to other ethnic groups, and this is even so after all socio-economic status and other variables are controlled for. The difference between Indians and other ethnic groups is especially prominent for career preference where the career preference of Indians is considered of high prestige whereas the career preference of other ethnic groups is considered of medium prestige. The difference in career expectation between Indians and Chinese is
not great, with both considered of medium prestige. The high career preferences of Indians, who seem to be of similar socio-economic background as the Chinese, is found to be mainly due to their interest in a few professional careers that are considered of high prestige. Indians consist of only 10% of the sample and of this more than 60% preferred careers relating to the medical, law, teaching, engineering, accountancy and journalism line. The main interest was in Medical (13.9% for the Form 5 sample and 19.4% for the Form 6 sample) and Law (18.3% for the Form 5 sample and 20.7% for the Form 6 sample) careers.

Chinese have career preference that are insignificant compared to Bumiputera respondents and career expectations that are significantly lower. However, the positive interaction of Chinese with academic achievement which causes the difference between Chinese and Bumiputera to be insignificant, shows that the better the results the lesser the difference in career aspiration between Chinese and Bumiputera respondents. It is deduced therefore that the reason why the career expectations of Chinese are higher than Bumiputera respondents is because the Chinese respondents have much better results than the Bumiputera respondents. This interaction term is found to be relatively very important for the Form 6 sample but not for the Form 5 sample. The difference between Bumiputera and Chinese respondents' SPM results is quite great because many Bumiputera students who had done well in their SPM results did not do STPM as they would have already enrolled into matriculation programs or sponsored by the government for overseas studies.

7.3. Least Important Self Concept Variables Influencing Career Aspirations

Variables that are deemed least important are ones that have no significant influence for nearly all the career aspiration models in the multiple regression analysis.

If some of the variables show significant influence in the bivariate analysis but are not significant for the multiple regression analysis, then it is deduced that their significant
influence on career aspiration is related to some other factors included in the multiple regression model.

7.3.1. Demographic Variables

a) Locality

Prior studies find that respondents from rural areas may have lower career aspirations due to fewer role models, inadequate knowledge of occupations and lower academic ability (Cook et al., 1996; Furlong and Cartmel, 1995; Brook-Gunn et al., 1993; Rich, 1979).

In this study too, the bivariate analysis shows that rural respondents have significantly lower career aspirations compared to urban respondents and this is especially prominent in terms of their career expectations. It can be deduced that the rural respondents have lower career aspirations due to fewer role models (as in their parents being in lower status careers) and lower academic ability, but when socio-economic status and academic ability is controlled for (in the multiple regression analysis), this difference is no longer significant.

7.3.2. Family Characteristics

a) Parental Interest

In line with Poole's (1985) study, it was found that family was the main source of information in this study as most of the respondents said that they had received career guidance mainly from their parents. More than 90% of them also said that their parents had high expectations of them and encouraged them in their academic pursuit. However, when it came to spending time helping their children with their homework, less than a quarter said that their parents checked their homework very often or often. Hence, only this factor (representing parental interest) seems to have a significant influence in determining career aspiration whereas other factors show no significant influence at all whether in the bivariate or multiple regression analysis. However, even this factor is relatively not very important compared to other significant variables in the models.
j) Family Size

The bivariate analysis shows that there is significant difference in career aspirations between respondents from families of different sizes. This difference however does not seem prominent as all respondents have career preference that are considered of high prestige and career expectation that are considered of medium prestige.

The multiple regression analysis shows that after controlling for all variables, family size exerts no significant influence on career aspirations. Hence, the difference in career aspirations found in the bivariate analysis would probably be due to factors such as the fact that more Bumiputera respondents are from large families and more respondents from rural areas are from large families. These respondents seem to have fared worse academically and are from lower socio-economic status families. This outcome does not concur with Downey’s (1995) theory of resource dilution where he deduces that those from large families will have lower career aspirations due to the fact that their parents will provide them with less interpersonal and economic resources to encourage them to succeed. As has already been seen, most of the respondents regardless of their family structure, mentioned that they had received encouragement in academic achievement (interpersonal resources) from their parents.

c) Birth Order

Claxton, McIntyre and Wheatley (1995) postulate that earlier born children are exposed to more adult socialisation from their parents and therefore have higher career aspirations. This is proven to be not true as although the bivariate analysis indicates this relationship, the multiple regression analysis shows no significant relationship between birth order and career aspirations. The explanation for this is similar to that of family size where family resources are found to be an unimportant factor influencing career aspirations.
4. The Influence of Work Values On Career Aspirations

Work values were found to have only a very slight influence on career aspirations as it increases the explanation power of the models by less than 1%. It seems to have a higher influence only for Form 6 career expectation. It is found that the Form 6 respondents who do not place importance on motivators or barricades to working in rural areas, especially in terms of extrinsic factors such as financial incentives, are the ones who seem to aim for higher prestige careers.

7.5. Career Preference And Its Influence On Career Aspirations

Career preference as a precursor to career expectations (Saha, 1982) has a positive influence on career expectations. It is seen as one of the most important variables influencing career expectation. This is an indication that career expectation is strongly related to interest in a particular career. This influence is stronger for the Form 6 sample compared to the Form 5 sample.

7.6. Comparison Between Career Preference And Career Expectation

It is found that most of the factors influencing career preferences also influence career expectation. However, for the Form 6 sample, a difference can be observed in the degree of influence of the independent variables. It is found that the self concept, work value and career preference variables explain the variation in career expectation more than career preference for the Form 6 sample. This seems to follow the theory of Gottfredson (1981) which states that career preference will be slightly influenced by the self concept variables as adolescents would have already formed a self concept and prefer careers within that acceptable range whereas career expectations will be strongly influenced by the self concept variables.

Many studies find that academic achievement and socio-economic status may cause a discrepancy between career preference and career expectations (DiSabatino, 1976; Bogie and Bogie, 1976; Dillard and Perrin, 1980). Occupational status and income of parents concur with this theory in the sense that it has a significant influence on only
career expectation and does not significantly influence career preference. Hence, this causes a discrepancy in career aspirations. It was found in this study that academic achievement has a strong influence for both career preference and career expectations. The academic content of socio-economic status, that is mother's highest educational level representing parents' education, also significantly influences both aspects of career aspiration. Hence, it cannot be deduced that academic achievement causes a discrepancy between career preference and career expectation.

7.7. Comparison Between The Form 5 And Form 6 Sample

Only a few differences are observed between the Form 5 and Form 6 samples. The Form 5 respondents' career preference is positively influenced by the fact that they have a good relationship with their parents but Form 6 career preference is not influence by this fact. The Form 5 sample is also influenced by the number of responsible positions undertaken in school whereas this does not influence the Form 6 sample.

The decision to further ones studies is seen as an important indicator of high career aspirations. For the Form 5 sample, the respondents intending to further their studies are ones who are from the higher income bracket and those who have performed well academically. Hence, these factors will probably have an indirect influence on career aspirations of Form 5 respondents by influencing their school leaving decision-making. For the Form 6 sample however, these factors do not influence their school leaving decision-making.

7.8. Discussion

a) Role of academic related factors

The results of the study indicate the importance of academic related factors in influencing the career decision making of adolescents. Prior academic achievement has a strong impact on the self concept of an adolescent and seems to influence not only the careers aspired for but also decisions that will have an influence on the choice of career such as the decision to further one's studies and the stream of study. The results show that
respondents (mainly Form 5 respondents) base their decision to further their studies on their prior academic achievement. It also indicates that the students who had performed better academically are ones who chose to be in the Science stream and the ones who did not perform as well academically chose the Arts stream. It is also found that Science stream students have higher career aspirations compared to students from other streams. Another academic related factor that has an influence on career related decisions is the parents' educational level.

It is therefore suggested that the academic element be the main focus for career guidance counselling. Students who do not perform well in their exams should be shown that there are many avenues to pursue their education such as vocational education, diplomas from private colleges and others. Form 5 students should be shown that there are many high prestige careers for Art stream and other course students and not just for Science stream students. Form 5 students who seem to be influenced by their parents' income when deciding whether to further their studies or not, should also be advised on the scholarships and loans available for deserving students.

For students whose parents are not well educated should be advised on how to do well academically and also should be given the opportunity to go for motivational and study skill courses. This is because they may not have any qualified person at home to advise them on how to succeed in the academic field.

b) Role of the student's interest in a career

The results of the study seem to indicate that students' interest in a career play an important role as it can be seen that career expectation is strongly influenced by the respondents' career preference. It can also be seen that some respondents such as the Indians have higher career aspirations for reasons not related to their self concept but instead to their interest in the attributes of certain careers such as in the medical and law line.
c) Importance of role models

Role models seem to play an important role in influencing career decisions of adolescents. These role models are mainly found to be parents. Firstly, the majority of the respondents indicate receiving career guidance mainly from their parents. Results also show that parents' socio-economic status such as parents' occupational status and income have a significant influence on the career expectation of the respondents. This indicates that parents, as the respondents' role models, seem to influence the career decisions of respondents in terms of the characteristics of the parents' occupation.

Another point indicating the importance of role models, is the fact that there are differences in career aspirations between large town and other localities, but when controlled for socio-economic status and other self concept factors, these differences are no longer significant. Hence, one of the reasons for differences in career aspirations for different areas is probably due to the difference in socio-economic status of respondents from different locations. The rural and small town respondents calibrate their occupational aspirations according to the occupation of their parents or people working in their location. It was also found in this study that females in rural areas and from lower status families have higher career aspirations than males. The fact that these female respondents have higher career aspirations than males can be indirectly related to role models where the males from rural areas and low socio-economic status families have lower career aspirations probably due to the fact that they aspire for careers similar to that of their fathers. As most of the respondents in this category have mothers who are not working, the female respondents do not have a role model to base their career decisions on and this could be the reason why their career aspirations are not as low as that of the males. This argument is based on Shu and Marini's (1998)'s findings that sons are influenced by their fathers and daughters are influenced by their mothers.

7.9. Limitations Of The Study

- This study analyses career aspirations based on only one attribute of a career that is the prestige of a career. When aspiring or choosing a career, adolescents also consider other attributes of a career and these attributes should be examined.
The study assumes that the respondents are aware of the income levels and educational levels required of different occupations and the implications these factors have on the prestige and socio-economic status of a career.

1.10. Suggestions For Future Research

This study concentrates mainly on occupational aspirations in terms of prestige levels. However, the findings show that interest in a particular careers attributes are also important. For further research, it is suggested that other scales of measurement should also be used and not just the prestige scale. One suggestion is to use Holland's Vocational Preference Inventory (Holland, 1985). This is based on Holland's theory of occupational choice where according to Holland, people search for work environments that will allow them to exercise their skills and abilities, express their attitudes and values and take on agreeable problems and roles. Occupations are divided into 6 categories according to six personality types: Realistic, Investigative, Artistic, Social, Enterprising and Conventional. By using this scale, people from different social backgrounds, abilities and interest can be gauged on their occupational aspirations in terms of personality types. Comparisons can then be made with this study. Preferred work values may be a better predictor for scales such as this as different personality types would probably have different interests and therefore have preference for different work values.

The data from this study was obtained from the first stage of a longitudinal study on education and work. At that stage, the respondents were still schooling and had not yet chosen a field of study for furthering their education or entered the job market. Hence, this study focuses only on occupational aspirations. Suggestions for future research is to compare the career aspirations of respondents with their choice of higher education and their career choice which was obtained in the second stage and third stage of the longitudinal study. This is to see if there is any relationship between career aspirations and career choice and reasons for why career aspirations do not materialise into the actual choice of career.