

CHAPTER FIVE

RESULTS

5.1 Introduction

A total of 282 respondents participated in this research. Of these, 180 were in the ARP group, while 102 were in the non-ARP group.

For the ARP group, which consisted of participants of the ARP programme, the period of involvement in the programme was as follows:

Table 5.1: Period of involvement in the ARP programme

Period	Frequency	Percentage
1 month	25	13.9%
2 months	8	4.4%
3 months	16	8.9%
4 months	4	2.2%
5 months	0	0.0%
6 months	9	5.0%
7 months	5	2.8%
8 months	9	5.0%
9 months	1	0.6%
10 months	10	5.6%
11 months	50	27.8%
12 months	11	6.1%
13 months	0	0.0%
14 months	1	0.6%
15 months	6	3.3%
16 months	22	12.2%
24 months	1	0.6%
30 months	2	1.1%
TOTAL	180	100%

In summary, more than 29% had just joined the programme, that is the period of involvement was less than 4 months, 53% had been involved in the programme for 6 months to a year and 18% had been involved for 13 to 30 months.

Further, for the ARP group, the level of involvement, that is the stage that they were at in the Programme was as follows:

Table 5.2: Level of involvement of the ARP group

Level Of Involvement	Frequency	Percentage
After registration, working towards the Bronze Award	95	52.8%
After acquiring Bronze, working towards the Silver Award	81	45.0%
After acquiring the Bronze, not proceeding with the Programme	2	1.1%
After acquiring Silver, working towards the Gold Award	2	1.1%
TOTAL	180	100%

Most of the sample , that is more than 52% had just registered and were working towards the bronze award, while 45% after acquiring the bronze, were working towards their silver.

5.2 Comparison of sample characteristics of the ARP and non-ARP group

The demographic variables of the ARP and non-ARP group were compared.

With relation to gender, the distribution was as follows:

Table 5.3: Distribution by Gender: ARP and Non-ARP group

	ARP Group		Non-ARP Group	
Sex	Frequency	Percentage	Frequency	Percentage
Male	78	43.3%	41	40.2%
Female	102	56.7%	61	59.8%
TOTAL	180	100%	102	100%

In both the ARP and non-ARP group, the females comprised the majority, that is 56.7% in the ARP and 59.8% in the non-ARP group.

With relation to race, the distribution was as follows:

Table 5.4 Distribution by Race: ARP and Non-ARP group

	ARP GROUP		NON-ARP GROUP	
RACE	FREQUENCY	PERCENTAGE	FREQUENCY	PERCENTAGE
Malays	149	82.8%	98	96.1%
Chinese	24	13.3%	0	0.0%
Indians	6	3.3%	4	3.9%
Others	1	0.6%	0	0.0%
TOTAL	180	100%	102	100%

The majority of both the ARP and non-ARP group were Malays, that is 83% in the ARP and 96% in the non-ARP group. Only, 18% of the ARP participants were non-Malays. Additionally, 77% of the non-Malays were Chinese.

With relation to age, the distribution was as follows:

Table 5.5: Distribution by Age: ARP and Non-ARP group

	ARP GROUP		NON-ARP GROUP	
AGE	FREQUENCY	PERCENTAGE	FREQUENCY	PERCENTAGE
14 years	5	2.8%	31	30.4%
15 years	21	11.7%	15	14.7%
16 years	43	23.9%	11	10.8%
17 years	81	45.0%	17	16.7%
18 years	17	9.4%	20	19.6%
19 years	7	3.9%	8	7.8%
20 years	2	1.1%	0	0.0%
21 years	4	2.2%	0	0.0%
TOTAL	180	100%	102	100%
Mean	16.74		16.04	
Std. dev.	1.26		1.75	

The ARP group was slightly older than the non-ARP group, however, their means appear comparable.

In comparing the ARP and non-ARP group, both groups appear comparable with respect to gender, race and age.

The mean and the standard deviation of the ARP and non-ARP groups overall measures were as follows:

Table 5.6: Mean and Standard Deviation of the ARP and Non-ARP Group

Variables	ARP Group Mean (n=180)	SD	Non-ARP Group Mean (n=102)	SD
Career	8.01	1.76	9.35	2.01
Political	9.46	3.16	9.89	2.77
Religious	5.30	2.25	5.10	1.46
Interpersonal	8.54	1.94	10.36	2.34
IDENTITY DEVELOPMENT SCORE	31.31	5.85	34.71	4.49
SELF-ESTEEM	34.71	4.09	32.58	2.95
SOCIAL RESPONSIBILITY	25.10	2.91	24.28	2.70
ATTITUDE TOWARDS AUTHORITY	24.60	2.62	24.10	3.12
SOCIAL SKILLS	15.84	4.46	16.52	3.66
GOAL-SETTING	63.29	7.40	61.60	6.51

For the overall identity score, the mean of the ARP group was closer to identity achievement than the non-ARP group. Additionally, the career, political and interpersonal means of the ARP group were also closer to achievement than the non-ARP group. However, in the religious domain, the non-ARP group was closer to identity achievement than the ARP group.

Additionally, the individual scores of the respondents were classified into the four statuses in accordance with Marcia's model. As the overall identity score for each respondent ranged from 20-80, those scoring 20-35 were classified as identity achieved, 36-50 as moratorium, 51-65 as foreclosure and 66-80 as

diffusion. Crosstabs analysis was then done to compare the distribution across the 4 status levels for the ARP and non-ARP group.

Table 5.7: Crosstabs: ARP and Non-ARP Group indicating distribution of participants in the 4 Identity Statuses

Group	Achievement Status	Moratorium Status	Foreclosure Status	Diffusion Status	Total
ARP	141 (78%)	39 (22%)	0	0	180
Non-ARP	62 (61%)	39 (38%)	1 (1%)	0	102

It appears in the above analysis, that the majority of the respondents, that is 78% of the ARP group and 61% of the non-ARP group were identity achieved. Comparing the ARP and non-ARP group, the latter showed greater percentage of its members at moratorium status. Archer (1989), in reviewing past research on statuses in high school as well as college students in America, found that the majority of adolescents and youth could best be described as in the foreclosure and diffusion status. Additionally, in her longitudinal research, she reported her preliminary findings that most adolescents in high school, the first year past high school (those working) as well as those in college were primarily diffused and foreclosed. Identity achievement and moratorium were found primarily among college youths, and even here she reported that the number was small.

This being the case it is suggested that the above results are rather unlikely representation of the status levels of adolescents in the sample. However, as the identity measuring instrument was new and being developed and used for the very

first time, much more testing and refinement needs to be done before it is able to more finely discriminate between the 4 status levels.

With relation to the psychological variables, the ARP group consistently scored higher on self-esteem, social responsibility and goal-setting compared to the non-ARP group. There was slight to virtually no difference in the attitude towards authority score. The exception of this general direction was in the social skills score. The non-ARP group scored higher than the ARP group in social skills. The profile of the ARP participants indicated that they generally have higher self-worth, are more concerned about the community and have clearer goals compared to the non-ARP participants.

5.3 Hypothesis Testing: ARP and Non-ARP Group

5.3.1 The hypothesis that the ARP group participants would be at a higher level of identity development as compared to the non-ARP was generally supported

5.3.2 The hypothesis that the ARP group participants would be at a higher level of self-esteem, have greater social responsibility, have a more liberal attitude towards authoritarianism, have higher social skills, have greater goal-setting skills than the non-ARP group was supported for all the variables except for social skills

T-tests were undertaken to compare the mean scores of the ARP and the non-ARP group.

Table 5.8: T-test for means of ARP and Non-ARP Group

Variables	ARP Mean (n=180)	Non- ARP Mean (n=102)	t-value	p-value
Career	8.01	9.35	5.63	0.00*
Political	9.46	9.89	1.19	0.24
Religious	5.30	5.10	0.91	0.36
Interpersonal	8.54	10.36	6.66	0.00*
IDENTITY DEVELOPMENT SCORE	31.31	34.71	5.45	0.00*
SELF-ESTEEM	34.71	32.58	5.01	0.00*
SOCIAL RESPONSIBILITY	25.10	24.28	2.37	0.02*
ATTITUDE TOWARDS AUTHORITY	24.60	24.10	1.36	0.18
SOCIAL SKILLS	15.84	16.52	1.39	0.17
GOAL-SETTING	63.29	61.60	1.99	0.05*

* $p \leq 0.05$ and less considered significant

In the tables, the lower the identity development score, the higher the level of identity achievement. For the other variables however, that is self-esteem, social responsibility, attitude towards authority, social skills and goal-setting scores, higher scores indicate higher levels of the variables concerned.

The results show that the overall identity score of the ARP group was significantly closer to identity achievement than the non-ARP group. Further, the

career and interpersonal scores of the ARP group were also significantly closer to achievement than the non-ARP group. The differences of the political and religious means were not significant.

The results show that the scores of the ARP group were significantly higher than the non-ARP group for self-esteem, social responsibility and goal-setting behaviour. The difference of means of the attitude towards authority and the social skills scores were not significant.

Three further analysis were undertaken to determine the influence of length of participation in the ARP on identity development as well as the psychological variables. Firstly, those who had just joined the programme, that is less than 4 months, were compared to the non-ARP group (Table 5.9). Secondly, the participants who had just joined the programme, that is for less than 4 months, were compared to those who had been involved longer in the programme, that is 6 to 30 months (Table 5.10). Finally, the respondents who were in the programme for more than 6 months were compared to the non-ARP group (Table 5.11).

The distribution of participants appeared to fall naturally into 3 groups, that is 1-5 months, 6-12 months and 13-30 months. An initial analysis of differences between these groups indicated greater significant differences between the two categories of (1-5) months and [(6-12 months) + (13-30 months)]. Results are reported in Tables

B1, B2 and B3 which are located in Appendix B. Based on these results it was decided to collapse the two latter time periods and subsequent analysis compared the group (1-4 months) and (6-30 months). There were no participants who had been involved for 5 months.

Firstly, those who had just joined the programme, that is less than 4 months, were compared to the non-ARP group (Table 5.9). This was done to ascertain whether the participants who joined the programme, were similar to the non-ARP group.

Table 5.9: T-test for ARP Group involved for only 1 - 4 months and Non-ARP Group

Variables	ARP Group (1-4 months) Mean (n=53)	Non-ARP Group Mean (n=102)	t-value	p-value
Career	8.40	9.35	2.80	0.01*
Political	8.70	9.89	2.65	0.01*
Religious	5.40	5.10	1.03	0.31
Interpersonal	9.00	10.36	3.80	0.00*
IDENTITY DEVELOPMENT SCORE	31.49	34.71	3.51	0.01*
SELF-ESTEEM	32.75	32.58	0.30	0.77
SOCIAL RESPONSIBILITY	24.58	24.28	0.63	0.53
ATTITUDE TOWARDS AUTHORITY	23.94	24.10	0.32	0.75
SOCIAL SKILLS	16.37	16.52	0.20	0.84
GOAL-SETTING	59.68	61.60	1.37	0.17

* $p \leq 0.05$ and less considered significant

The mean of the overall identity score as well as the means of the career, political and interpersonal subscores were in the right direction, that is they were closer to identity achievement for the ARP as compared to the non-ARP group. For the religious sub-score however, there was no significant difference.

For the overall identity score, the ARP group was significantly closer to achievement than the non-ARP group. Additionally, the ARP group was also significantly closer to achievement for the career, political and interpersonal subscores. It appears that though the participants had only recently joined the programme, their identity scores were already significantly closer to achievement compared to the non-ARP group.

In relation to the psychological variables, there were no significant difference on any of the variables scores.

Secondly, the participants who had just joined the programme, that is for less than 4 months, were compared to those who had been involved longer in the programme, that is 6 to 30 months (Table 5.10). The purpose of this analysis was to ascertain whether there continued to be improvement with continued involvement in the programme.

Table 5.10: ARP Group :T-test for means of scores between those involved from 1 -4 months and 6-30 months.

Variables	(1-4 months) Mean (n=53)	(6-30 months) Mean (n=127)	t-value	p-value
Career	8.40	7.84	1.93	0.05*
Political	8.70	9.78	2.33	0.02*
Religious	5.40	5.26	0.41	0.68
Interpersonal	9.00	8.35	2.01	0.05*
IDENTITY DEVELOP- MENT SCORE	31.49	31.24	0.27	0.79
SELF-ESTEEM	32.75	35.52	4.62	0.00*
SOCIAL RESPONSIBILITY	24.58	25.32	1.54	0.13
ATTITUDE TOWARDS AUTHORITY	23.94	24.87	2.15	0.03*
SOCIAL SKILLS	16.38	15.61	1.06	0.29
GOAL-SETTING	59.68	64.80	3.79	0.00*

* $p \leq 0.05$ and less considered significant

The mean of the overall identity score was closer to achievement for the 6-30 months group compared to the 1-4 months group. For the career, religious and interpersonal scores the 6-30 months group were closer to achievement than the 1-4 months group. However, for the political domain, the 1-4 months was closer to achievement than the 6-30 months group.

It was found that the career and the interpersonal scores of the 6-30 months group were significantly closer to achievement than the 1-4 months group. For the political domain however, there was also significant difference, with the 6-30 months group being farther from achievement than the 1-4 months group. Most importantly, there was no significant difference of means for the overall identity score. Thus while

career and interpersonal scores were significantly closer to achievement for the 6-30 months group, there was no significant improvement for the overall identity score. The earlier analysis (Table 5.9) had indicated that there was significant increase in the identity score, that is the participants with initial involvement in ARP were significantly closer to achievement than the non-ARP group. It appears that within the context of the programme, there does not seem to be any significant increase in the overall identity score with continued participation in the programme. However, the scores on the career and interpersonal sub-scales indicates that the ARP programme may be having some influence on identity development.

With reference to the psychological variables, the scores of all the psychological variables, except for social skills, were higher in the group that had been involved longer compared to the group that had just joined. Additionally, the difference in means was significantly higher for self-esteem, attitude towards authority and goal-setting scores. This possibly suggests that with continued involvement in the ARP programme, there was improvement in self-esteem, a more liberal attitude towards authority and goal-setting.

Thirdly, the respondents who were in the programme for more than 6 months were compared to the non-ARP group (Table 5.11). The purpose of this analysis was to ascertain if with continued participation in the programme for a longer period, whether there were any differences compared to the non-ARP group. In the earlier

analysis (Table 5.8), the non-ARP group was compared to the entire ARP group. Here, the non-ARP group was compared only with those who had been involved for more than 6 months in the programme.

Table 5.11: T-test for ARP Group involved for 6 - 30 months and Non-ARP Group

Variables	ARP (6-30 mths.) Mean (n=127)	Non-ARP Mean (n=102)	t-value	p-value
Career	7.84	9.35	6.12	0.00*
Political	9.78	9.89	0.28	0.78
Religious	5.25	5.10	0.63	0.53
Interpersonal	8.35	10.36	7.03	0.00*
IDENTITY DEVELOPMENT	31.24	34.71	5.07	0.00*
SELF-ESTEEM	35.52	32.59	6.32	0.00*
SOCIAL RESPONSIBILITY	25.32	24.28	2.78	0.01*
ATTITUDE TOWARDS AUTHORITY	24.87	24.10	2.00	0.05*
SOCIAL SKILLS	15.61	16.52	1.68	0.09
GOAL-SETTING	64.80	61.60	3.82	0.00*

* $p \leq 0.05$ and less considered significant

Here, for the overall identity score, the 6-30 months ARP group was significantly closer to achievement than the non-ARP group. When the non-ARP group was compared to those who had just joined the programme, those who had just joined were significantly closer to achievement than the non-ARP group. However, when those who had just joined the programme were compared to those who had been longer in the programme, there was no significant difference in the overall identity level. It is suggested that the initial difference between the ARP and non-ARP

groups, whether caused by the early effects of the programme or the sample characteristics have continued. The sub-scale scores suggest programme effect, however the non-significant difference between overall identity scores, does not allow any firm conclusion the differences are due to the programme effect.

However, for the psychological variables, there was a little variation from the previous analysis. When the total ARP group was compared to the non-ARP group the ARP group was significantly higher than the non-ARP group for the self-esteem, social responsibility and the goal-setting scores. Secondly, when those who had just joined were compared to those who had been longer in the programme, those who had been longer scored significantly higher on self-esteem, attitude towards authority and goal-setting. However, this time when the non-ARP group was only compared to those who had been involved for a longer period, there was also a significant difference of means for the attitude towards authority score. For this variable, there was no significant difference in the earlier analysis, when the non-ARP group was compared to the entire ARP group (Table 5.8). It is suggested that with continued participation, that is in the areas of community services, sports and recreation, skills development and culture, there was greater differentiation on psychological characteristics. Since the differences in psychological variables seem to be more distinct over time, it may be suggested that the differences are more likely due to the programme rather than sample characteristics.

5.4 Hypothesis Testing: Relationship of Identity Development and the other Psychological Variables

To ascertain the relationship between the overall identity score (as well as the various sub-scores) with the psychological variables, that is self-esteem, social responsibility, attitude towards authority, social skills and goal-setting, a test of Pearson correlation was undertaken.

Table 5.12: Relationship of identity score and sub-scores with psychological variables

	Self-esteem	Social responsibility	Attitude towards Authority	Social Skills	Goal-setting
Overall Identity Scale	0.23*	0.23*	0.16	0.37**	0.23*
Career	0.23*	0.27**	0.19	0.22*	0.26**
Political	0.05	0.11	0.09	0.17	0.03
Religious	0.08	0.05	0.06	0.28**	0.15
Interpersonal	0.29**	0.22*	0.22*	0.28**	0.23*

* significant at 0.01 **significant at 0.001

5.4.1 The hypothesis that high identity achievers were expected to indicate a higher level of self-esteem was supported.

A test of Pearson correlation was done to ascertain the relationship between identity development score and self-esteem score. The results indicated that there was a correlation of 0.23 at probability of 0.01. Thus, overall identity development and self-esteem were significantly related.

Further, the career, political, religious and interpersonal sub-scores were correlated with self-esteem. It was found that career was significantly related to self-esteem at p-value 0.01 while the interpersonal score was significantly related at p-value 0.001. The political and religious scores were not significantly related to self-esteem.

5.4.2 The hypothesis that high identity achievers were expected to indicate higher social responsibility was supported.

A test of correlation was done to ascertain the relationship between identity development score and social-responsibility score. The results indicated that there was a correlation of 0.23 at probability of 0.01. Thus, identity development and social responsibility were significantly related.

Further, the career, political, religious and interpersonal sub-scores were correlated with social responsibility. It was found that career score was significantly related to social responsibility at p-value 0.001 while the interpersonal score was related to social responsibility at p-value 0.01. Political and religious scores were not significantly related to social responsibility.

5.4.3 The hypothesis that high identity achievers were expected to indicate a more liberal attitude towards authority scores was not supported.

A test of correlation was done to ascertain the relationship between identity development score and the attitude towards authority score. The results indicated that there was no significant correlation. Thus, identity development and attitude towards authority were not significantly related.

Further, the career, political, religious and interpersonal sub-scores were correlated with attitude towards authority score. Except for the interpersonal score which was significantly related at p-value 0.01, none of the other sub-scores were significantly related.

5.4.4 The hypothesis that high identity achievers were expected to indicate higher levels of social skills was supported.

A test of correlation was done to ascertain the relationship between identity development scores and social skills scores. The results indicated that there was a correlation of 0.37 at the p-value 0.001. Thus, identity development and social skills were significantly related.

Further, the career, political, religious and interpersonal sub-scores were correlated with social skills scores. It was found that career and interpersonal scores were related to social skills scores at p-value 0.01 while the religious score

was related at p-value 0.001. The political score was not significantly related to social skills.

5.4.5 The hypothesis that high identity achievers were expected to indicate a higher level of goal setting skills was supported.

A test of correlation was done to ascertain the relationship between identity development scores and goal-setting scores. The results indicated that there was a correlation of 0.23 at p-value 0.01. Thus, identity development and goal setting were significantly related.

Further, the career, political, religious and interpersonal sub-scores were correlated with the goal setting scores. It was found that the career score was related at p-value 0.001 while the interpersonal score was related to goal setting at p-value 0.01. Political and religious scores were not significantly related to goal setting.

It is suggested that possibly through the ARP programme, a relationship between identity development and the psychological variables (except for attitude towards authority) developed. Thus it supports earlier findings that the strength of personal identity is significantly related to self-esteem, social responsibility, social skills and goal-setting. Thus the profile of adolescents in ARP appears to be one of significantly having an identity closer to achievement, and having significantly higher

levels of self-esteem, greater social responsibility, higher levels of social skills and higher levels of goal-setting behaviour compared to non-ARP adolescents in the study. At the level of this study, it is only possible to say that there is a correlational relationship between identity development and self-esteem, social responsibility, social skills and goal-setting behaviour. As this is only a cross-sectional study, the direction of the relationship is difficult to ascertain. However, as previous results had indicated that with increasing involvement in the programme, the psychological variables increased significantly, it is suggested that ARP could possibly contribute to the enhancement of the psychological variables.

5.5 Regression Analysis between identity scores and intervening psychological variables

To ascertain the nature of the relationship between the intervening variables and the identity score, regression analysis was done with identity score as the dependent variable.

Table 5.13: ARP Group: Regression Analysis of Identity Score and other Psychological Variables

Variables	Beta Score
Self-esteem	0.12
Social Responsibility	0.18
Attitude towards Authority	0.07
Social Skills	0.09
Goal-setting	0.33

Based on the results of the analysis, it appears that goal-setting is the most significant variable contributing to the variance in identity scores, followed by social responsibility and self-esteem. It appears that the effect of the programme is most clearly seen in the large contribution of goal-setting towards variance in the identity score. Social responsibility and self-esteem show much lower contributions in explaining the variance in identity score.

5.6 Hypothesis Testing: Identity Development and Demographic Variables

5.6.1 The hypothesis that gender is related to identity development was not supported

The t-test was used to ascertain the differences of means between the scores of males and females in the ARP group.

Table 5.14: T-test for means of male and female ARP participants

Variables	Male Mean (n=78)	Female Mean (n=102)	t-value	p-value
Career	8.24	7.82	1.54	0.12
Political	9.19	9.67	0.98	0.33
Religious	5.51	5.14	1.06	0.29
Interpersonal	8.45	8.62	0.59	0.56
IDENTITY DEVELOPMENT SCORE	31.33	31.25	0.17	0.87
SELF-ESTEEM	34.81	34.63	0.30	0.77
SOCIAL RESPONSIBILITY	25.00	25.18	0.40	0.69
ATTITUDE TOWARDS AUTHORITY	24.24	24.86	1.57	0.12
SOCIAL SKILLS	15.82	15.85	0.05	0.96
GOAL-SETTING	62.81	63.66	0.77	0.44

$p \leq 0.05$ and less considered significant

Although the mean of the overall identity score for the females was closer to achievement than the males, none of the scores were significant. This means that there are no significant differences between males and females in identity development for the sample in this study.

Similarly, there were no significant differences between males and females for all the psychological variables.

5.6.2 The hypothesis that race was related to identity development was not supported

The t-tests were also used to ascertain the differences of the scores between the different ethnic groups. The test was undertaken to compare the differences between the mean scores of the Malay and Chinese respondents in the ARP group. Instead of comparing Malays to non-Malays, it was felt that non-Malays comprised of three (Chinese, Indians and Others) racial groups and the identity development processes may be different for each group, and thus a composite grouping may not give a clear indication of identity formation based on race. Moreover, the Indians and Others comprised only 22% of the non-Malay sample.

Table 5.15: T-test for means of Malay and Chinese ARP participants

Variables	Malays Mean (n=149)	Chinese Mean (n=24)	t-value	p-value
Career	8.11	7.63	1.08	0.29
Political	9.30	10.29	0.1.14	0.27
Religious	5.01	7.25	2.56	0.02*
Interpersonal	8.73	7.50	3.92	0.00*
IDENTITY DEVELOPMENT SCORE	31.14	32.67	0.88	0.39
SELF-ESTEEM	34.35	37.08	3.67	0.00*
SOCIAL RESPONSIBILITY	24.79	26.67	2.92	0.01*
ATTITUDE TOWARDS AUTHORITY	24.56	25.27	0.94	0.36
SOCIAL SKILLS	16.13	14.42	1.63	0.11
GOAL-SETTING	62.80	65.13	1.51	0.14

* $p \leq 0.05$ and less considered significant

The overall identity score mean of the Malays was closer to achievement than the Chinese. The Malays also scored closer to achievement in the political and religious domains. However, the Chinese scored closer to achievement in the career and interpersonal sub-scores. In testing for significance of differences, the Malays were significantly closer to achievement than the Chinese in the religious domain, while the Chinese were significantly closer to achievement than the Malays in the interpersonal domain. There were no significant differences in the overall identity scores. Thus generally, it can be said that there is no significant difference in identity formation between the Malays and Chinese.

In terms of the psychological variables, the Chinese scored higher means for self-esteem, social responsibility, attitude towards authority and goal-setting while the Malays scored higher on social skills. Testing for significance of difference, the Chinese scored significantly higher means for self-esteem and social responsibility. Other differences were not significant.

However, there should be caution in the interpretation of the results as the difference in sample size is relatively large, that is 149 Malays were compared to 24 Chinese. This disproportionate distribution may affect statistical analysis.

5.6.3 The hypothesis that age was related to identity development was supported

T-test for difference of means, was also undertaken on different age groups to ascertain whether the scores were significantly different. The mean of the age group of 14-15 (the youngest) was compared with the age group 19-21 (the oldest).

Table 5.16 T-test for means of ARP participants of ages 14-15 and 19-21 years old

Variables	Age (14-15) Mean (n=26)	Age (19-21) Mean (n=13)	t-value	p-value
Career	8.46	6.46	3.94	0.01*
Political	9.85	8.15	2.05	0.05*
Religious	6.12	4.23	3.19	0.00*
Interpersonal	8.70	7.15	3.28	0.00*
IDENTITY DEVELOP- MENT SCORE	33.12	26.00	4.97	0.00*
SELF-ESTEEM	32.69	33.15	0.24	0.81
SOCIAL RESPONSIBILITY	24.42	25.00	0.51	0.62
ATTITUDE TOWARDS AUTHORITY	24.31	24.08	0.28	0.78
SOCIAL SKILLS	15.81	13.31	1.87	0.07
GOAL-SETTING	58.73	65.38	3.03	0.00*

* $p \leq 0.05$ and less considered significant

The identity score means were consistent for the different age groups. Not only was the overall identity score closer to achievement for the older group, that is the 19-21 years old, all the sub-scores were also closer to achievement for the older group as compared to the younger group. Additionally, both the overall identity score as well as all the sub-scores were significantly closer to achievement for the older group.

Two further analyses were done. Firstly, the 14-15 age group was compared with the 16-18 years old group (Table B4 in Appendix B) and secondly, the 16-18 years old group was compared to the 19-21 years old group (Table B5 in Appendix B).

In both results, the mean scores were consistently closer to achievement for the older group as compared to the younger group. However, in the 14-15 compared to 16-18 analysis, none of the differences between the older and younger group was significant, where else in the 16-18 compared to the 19-21 analysis, all the scores, that is both the overall identity score as well as all the sub-scores were significantly closer to achievement for the older group.

Age is clearly a significant factor in identity development. Additionally, it appears that there is an active maturational process between the (16-18) and (19-21) periods for this sample. This is indicated by the fact that while there was no significant difference in both the overall as well as all the subscores between the (14-15) age group and (16-18) age group; there were significant differences in both the overall as well as all the sub-scores between the (16-18) and (19-21) age group.

With relation to the psychological variables, in the above analysis (Table 5.16), self-esteem, social responsibility and goal-setting means were higher for the 19-21 year olds compared to the 14-15 year olds. However, for the attitude towards authority as well as the social skills scores, the younger group had a higher mean compared to the older group. However only one difference was significant, that is the older group scored significantly higher than the younger group in goal-setting. All the other differences were not significant.

5.7 Conclusion

From the above results, it appears that the ARP programme has in some way influenced the identity development of participants, whereby ARP participants were significantly closer to identity achievement than the non-ARP participants. Further, as predicted by past research, identity development has significant correlations with self-esteem, social responsibility, social skills and goal-setting behaviour. Thus the results indicate that ARP participants were significantly closer to identity achievement as well as significantly higher on self-esteem, social responsibility, social skills and goal-setting behaviour compared to non-ARP participants. Finally, while age seems to have a consistent influence on identity development, the influence of gender and ethnicity is less clear.