

# Chapter 5

## PERCEPTION OF INTEREST IN S&T

### 5.0 INTRODUCTION

Having looked at the perceived knowledge in the last chapter, it is now appropriate to investigate the interest levels of the respondents on S&T and general issues. This is important as it could be assumed that a person might not have any interest in a subject if he does not know the subject matter at all. Hence, a high level of interest in S&T issues may reflect some knowledge level in any given issue. If that is so, it may be necessary to embark upon some programs to increase the levels.

With increased emphasis on S&T development, it is crucial to ensure that if there is a high interest level in S&T, it should be translated into a high knowledge level. Towards this end all related agencies especially the Ministry of Science & Technology (MOSTE) have been made responsible for the advancement of S&T activities. Hence, it is important to find out whether there has been continued growth or otherwise in the level of interest of Malaysians in S&T.

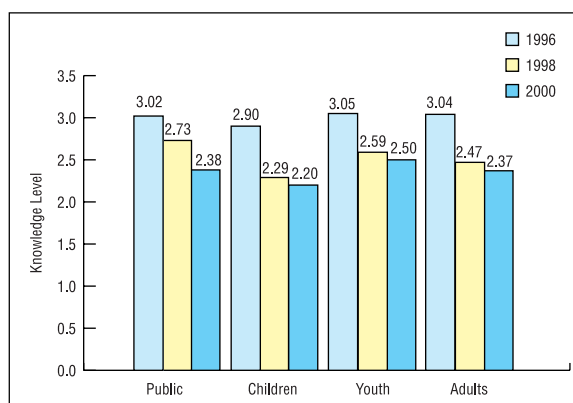
### 5.1 INTEREST IN S&T AND GENERAL ISSUES

The three studies have shown that Malaysians' interest in S&T did not only continue to be low but declined over the years with slight variations according to subject matter. Although the decline is marginal, it should be of concern to the country in the light of its aim to achieve an industrialized nation status.

The mean interest level that has gone down from 3.02 (1996) to 2.73 (1998) to 2.38 for 2000, (Figure 5.1) indicates the decline in interest over the years. This should be of concern to the government, if the objectives of the National Science Policy are to be fulfilled.

However, in all the three studies, the youth show the keenest interest, in comparison to the children and adults. At the same time, in the last two studies they continue to be most interested in the same S&T issues. One-third (33.1%) of those who participated in the survey indicates the most interest in environmental pollution followed by applications of computer technology (30.0%) (see Table A5.1). In 1998,

**Figure 5.1: Interest in S&T and General Issues by Age Group**



*Interest Level: 4 = Interested, 3 = Moderately interested, 2 = Slightly interested, 1 = Not interested*  
*Note : See Appendix Table A5.2*

it was 38.7% and 33.1% respectively. However in 1996 the applications of computer technology evoked most interest (46.3%) among Malaysians, followed by environmental pollution (41.8%).

The haze problem and the water shortage in certain parts of the country were some of the major issues faced by Malaysians prior to the previous study, which could have been the main reason for such interest. Other environmental issues that have cropped up in recent years such as soil erosions and the depletion of some forest reserves for the building of dams could be the reason for the continued high interest level.

However, what is encouraging is that applications of computer technology continues to be rated second. This provides an encouraging background for technology to develop. The encouragement to use new technologies, such as the one computer per home program and making EPF withdrawals possible for the purchase of computers, are just some of the incentives which may have awakened the public's interest in computer application. The opening up of Cyberjaya and other Multimedia Development Corporation (MDC) activities do not only stimulate the interest of Malaysians but have also become an international concern. **Table A5.1** shows the mean level of Malaysians' interest in S&T and general issues over the three study periods.

Another very encouraging observation is the fairly high interest level in the issues of new invention especially new inventions from Malaysia. Such a high interest level is in line with the country's agenda for an innovation system.

A similar pattern of interest is also observed in general issues, where the economy and business continues to evoke the most interest among Malaysians in the three studies. This can be expected because after experiencing an economic crisis (after many years of economic expansion), it would only be right for the public to be interested in signs of economic recovery.

At the same time, the S&T issue that evoked least interest in the first two studies, that is, the application of nuclear technology to produce energy also evoked the least interest among respondents in the present study. Among the general issues, it is also observed that international and foreign policies evoked the least interest in all the three studies.

## 5.2 INTEREST IN S&T AND GENERAL ISSUES BY AGE GROUP

This study again made a comparison of public interest in S&T and general issues by age group. Youths continue to rate themselves higher in terms of interest in all the S&T issues when compared to children and adults. This is again very encouraging for the country's future development in S&T so far as these interests can be translated into actual activities of S&T. The different levels of interest are clearly observable in **Figure 5.2**.

To give a better indication of the interest levels over the years, the findings for the different age groups are also compared between the years (**Figures 5.2a, 5.2b and 5.2c; and Table A5.2**). In general, children continue to rate themselves lowest in terms of interest level in the various issues discussed when compared with the youths and adults.

However, in the general issues, the adults demonstrated the highest level of interest followed by the youths and children in that order. This is demonstrated in **Figure 5.2**.

### 5.2.1 Children's Perceptions of Interest in S&T

Children's perception of interest in S&T is a good reference for drafting out programs that would help the country achieve an industrialized nation status. Coincidentally, the children's interest tallies well with their perception of knowledge level in S&T. What is worrying is that the mean interest level of the children has slipped over the years (Figure 5.1) from 2.90 (1996) to 2.29 (1998) to 2.20 (2000). However, an encouraging observation is that the applications of computer technology continues to rank second over the years, although the mean interest level has gone down slightly (Figure A5.1a and Table A5.2).

### 5.2.2 Youth Perceptions of Interest in S&T

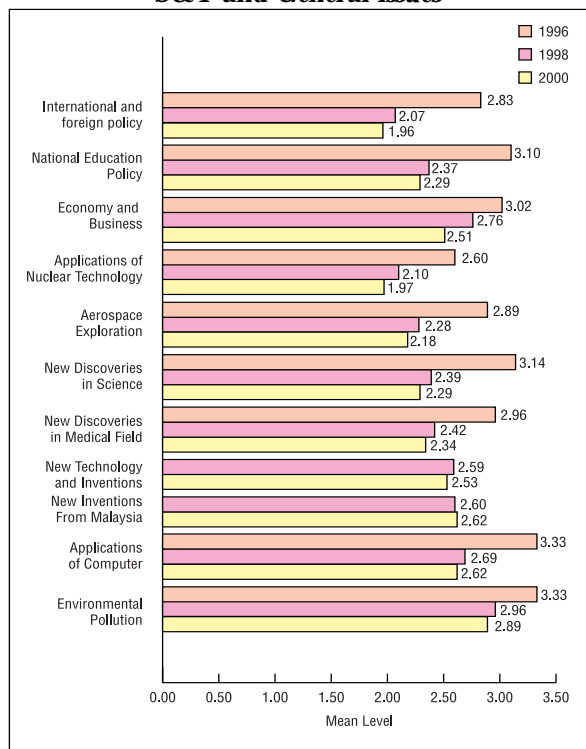
The success of nurturing interest in S&T among children will only be meaningful if it is also sustained among the youth. Data on the status of the youth group will indicate whether there is continuity in the success. Like the interest of the general public, the level of interest among the youth has also gone down over the years (Figure 5.1). However, when the interest levels of specific issues are observed, the gap between the interest in environmental pollution (highest interest) and the applications of computer technology is seen to be getting narrower (Figure A5.1b and Table A5.2). This augurs well for a country, which is giving priority to technological advancement.

### 5.2.3 Adult Perceptions of Interest in S&T

Since adults normally have a high influence on children and youths (although the opposite may also be true), it is necessary as well to find out the adults' level of perceptions of interest. Findings from the three studies indicate that the level of interest among adults has also gone down over the years (Figure 5.1). However, they continue to be most interested in environmental pollution (Figure A5.1c and Table A5.2). The mean level for this issue is 2.90, compared to 2.99 in 1998 and 3.36 in 1996. As has been explained in an earlier section, this phenomenon should not be a surprise, looking at the environmental issues that have cropped up over these years.

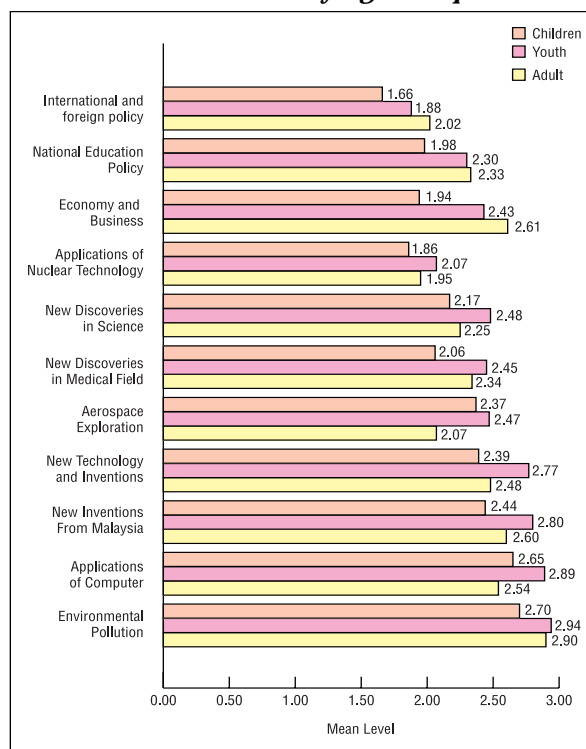
However, there is a slight change in interest in S&T issues where the adults are getting more interested in inventions from Malaysia (mean score 2.60) in

Figure 5.1a: A Comparison of Public Interest in S&T and General issues



Overall mean interest: 1996 = 2.47, 1998 = 2.47, 2000 = 2.38  
 Interest Level: 4 = Interested, 3 = Moderately interested, 2 = Slightly interested, 1 = Not interested  
 Note : See Appendix Table A5.1

Figure 5.2: A Comparison of Interest in S&T and General Issues by Age Group



Overall mean interest: 2.38  
 Overall mean level of interest: Children = 2.20, Youth = 2.50, Adult = 2.37  
 Interest Level: 4 = Interested, 3 = Moderately interested, 2 = Slightly interested, 1 = Not interested  
 Note : See Appendix Table A5.2

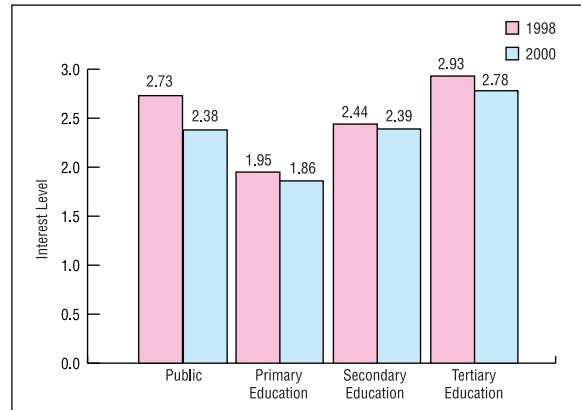
comparison to the applications of computer technology (mean score 2.54). In the previous study, the situation was the opposite, where the mean scores were 2.57 and 2.62 respectively.

### 5.3 INTEREST IN S&T AND GENERAL ISSUES BY EDUCATIONAL LEVEL

Education plays an important role in deciding the level of understanding and interest in S&T of the public. The Ministry of Education has therefore been given the responsibility to provide the right education to the people in order to steer the nation towards an industrialized status.

**Figure 5.3** compares the differences in the interest levels in S&T and general issues of the population, according to different levels of education. Like the previous studies, the issue of environmental pollution evoked the most interest among respondents of various educational levels (**Table A5.3**). It can clearly be observed that the higher the education level of the respondent, the higher is their level of interest. Hence, this confirms the importance of education.

**Figure 5.3: Public Perceived Interest in S&T and General Issues by Educational Level**



*Interest Level: 4 = Interested, 3 = Moderately interested, 2 = Slightly interested, 1 = Not interested*  
 Note : See Appendix Table A5.3

#### 5.3.1 Perceptions of Interest in S&T and General Issues for Respondents with Primary Education or less

Reflecting the lower interest in S&T among the public, interest among respondents with primary education or less has also gone down over the years. The overall mean interest has gone down from 1.95 in 1998 to 1.86 in the current study (**Figure 5.3**). The mean interest level for each of the issue is shown in **Figure A5.2a** and **Table A5.3**.

However, the ranking of interest in various categories of issues is almost similar in the different studies carried out. Environmental pollution continues to attract the most interest among respondents with primary education or less. The mean level of interest for this issue is 2.46, a slight decrease from the 2.53 recorded in 1998.

#### 5.3.2 Perceptions of Interest in S&T and General Issues for Respondents with Secondary Education

The interest in S&T among respondents with secondary education has also gone down over the years, although marginally (**Figure 5.3**). The issue of environmental pollution continues to evoke most interest among respondents with at least secondary education. The interest in this issue seems to cut cross all levels of respondents. The interest in this issue also remains high among those with secondary level of education. The mean interest level for this issue in the 2000 study is 2.91 against 2.95 in the previous study (**Figure A5.2b** and **Table A5.3**). And in ranking, the application of computer technology continues to take second place, followed by new inventions from Malaysia.

#### 5.3.3 Perceptions of Interest in S&T and General Issues for Respondents with Tertiary Education

Like the development among the general public, interest in S&T among those with tertiary education has also gone down (**Figure 5.3**). However, what elicits the most interest among the public, that is,

environmental pollution, also evoked the most interest among those with tertiary education. Apparently, this evokes the most interest among people of different levels of education over the years.

The mean score level for environmental pollution is 3.19 in the current study a slight drop from 3.30 in 1998 (Figure A5.2c and Table A5.3). The issue of the applications of computer technology (3.11) continues to rank second followed by new technology and inventions (2.96). At the same time, the issue of the applications of nuclear technology continues to elicit the least interest among this group. In fact, the mean level interest on this issue has gone down to 2.28 against 2.50 previously.

#### 5.4 PUBLIC INTEREST IN S&T AND GENERAL ISSUES BY LOCALITY

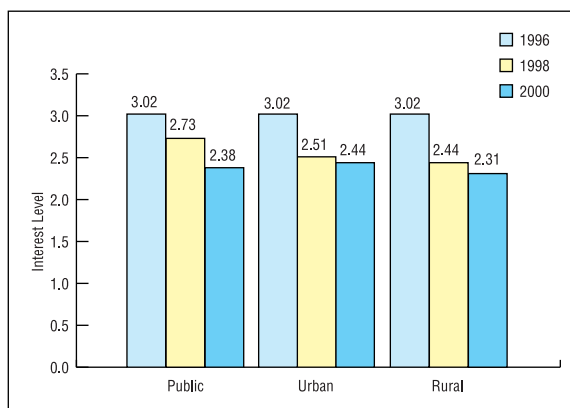
In comparing interest according to locality, the study shows that urban respondents perceived themselves to have a higher interest in overall issues presented when compared to the rural respondents as shown by the ANOVA tests carried out in Tables A5.4 and A5.4a. A higher interest level is also observable in the individual issues among the urban respondents compared to the rural ones (Table A5.4). In the last study, on the issue of the national education policy, urban and rural respondents were statistically perceived as sharing the same level of interest (Table A5.4).

##### 5.4.1 Perceptions of Interest in S&T for Respondents in Urban Areas

The level of interest in S&T among the urban respondents has gone down over the years, like that among the public (Figure A5.3a and Figure 5.4). However, while interest in almost every issue has gone down, environmental pollution continues to rank first followed by the applications of computer technology and new inventions from Malaysia (Figure 5.4a).

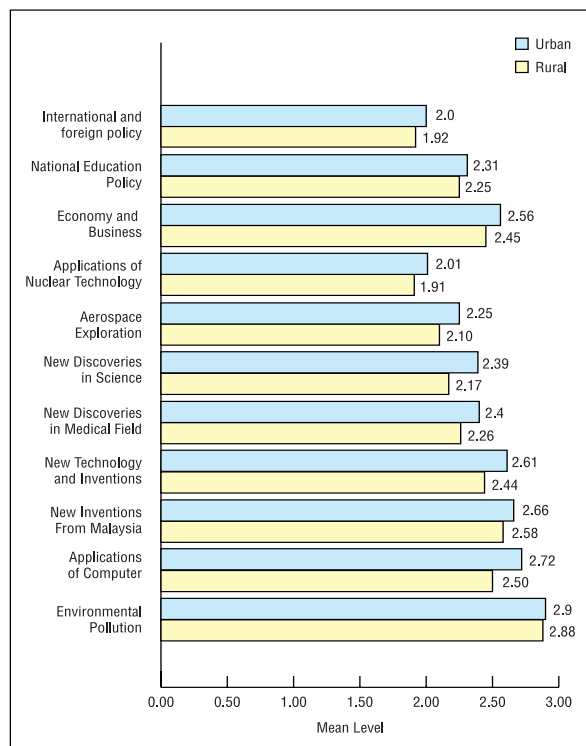
However, the level of interest continues to slip in almost every issue except in new inventions from Malaysia. For example, the mean level of interest for environmental pollution has slipped from 3.32 in 1996 to 3.01 in 1998 and to 2.90 in the current study. On the other hand, the drop in the second most attractive issue i.e. the applications of computer technology is much less. What this also means is that the gap in term of interest between the two has narrowed (2.90 for environmental pollution and 2.76 for the applications of computer technology).

Figure 5.4: Interest in S&T and General Issues by Locality



Interest Level: 4 = Interested, 3 = Moderately interested, 2 = Slightly interested, 1 = Not interested  
 Note : See Appendix Table A5.4

Figure 5.4a: A Comparison of Interest in S&T and General Issues by Locality



Level: 4 = Interested, 3 = Moderately interested, 2 = Slightly interested, 1 = Not interested  
 Note : See Appendix Table A5.4

### 5.4.2 Perceptions of Interest in S&T for Respondents in Rural Areas

The studies show that although there is a significant difference in terms of interest level between urban and rural respondents, the ranking of preferred issues of interest is almost identical.

For example, like the urban respondents, the rural respondents are not only most interested in environmental pollution, but have also ranked the applications of computer technology as their second preferred issue. The only difference is that in the rural areas the gap between the two issues did not narrow down as it did in the urban areas. Similar to the urban respondents, the level of interest in S&T among the rural respondents has also gone down over the years (Figure A5.3b).

## 5.5 INTEREST IN S&T AND GENERAL ISSUES BY GENDER

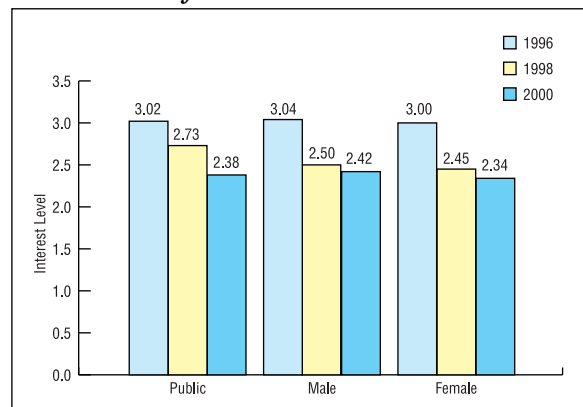
In comparing the level of interest between the male and female population in similar issues discussed previously, male respondents recorded a higher interest than the female ones as shown by the ANOVA test (Table A5.7 and Table A5.7a).

However, when individual issues were examined separately, it was noted that there is a higher level of interest among the female respondents when compared to the male respondents in the issues of environmental pollution, new discovery in medical field and the national education policy (Figure 5.5a).

### 5.5.1 Perceptions of Interest in S&T for Male Respondents

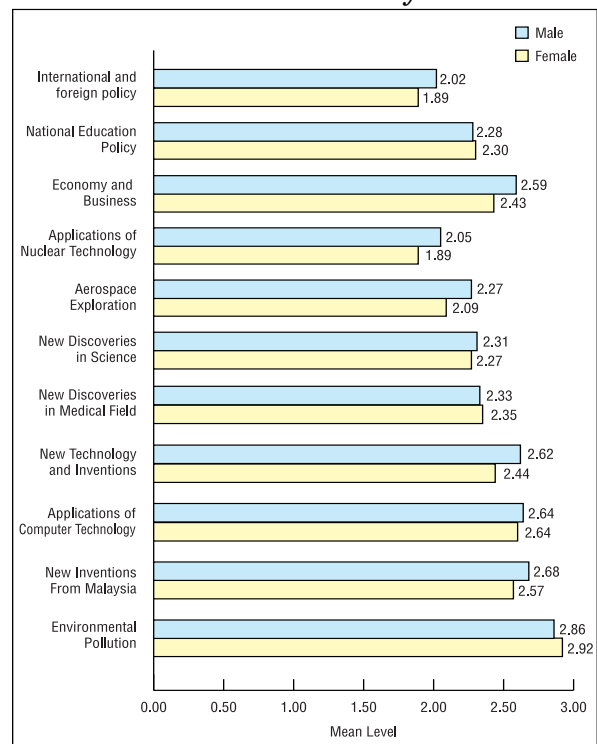
Interest in S&T among male respondents has gone down over the years, similar to that of the general public (Figure 5.5). At the same time, they continue to be most interested in environmental pollution. However, the interest level in this has gone down over the years with the mean interest level down to 2.86 compared to 3.29 in 1996 and 2.93 in 1998 (Figure A5.4a and Table A5.7). Their next preferred issue of interest has also moved from the applications of computer technology to new inventions from Malaysia. Recent discussions on the production of Nobel laureates and dialogues on an innovation system may have played an important role in this change.

Figure 5.5: Interest in S&T and General Issues by Gender



Interest Level: 4 = Interested, 3 = Moderately interested, 2 = Slightly interested, 1 = Not interested  
 Note : See Appendix Table A5.7

Figure 5.5a: A Comparison of Interest in S&T and General Issues by Gender



Level: 4 = Interested, 3 = Moderately interested, 2 = Slightly interested, 1 = Not interested  
 Note : See Appendix Table A5.7

### 5.5.2 Perceptions of Interest in S&T for Female Respondents

Female respondents also indicated less interest in S&T issues over the years. At the same time they also continue to be most interested in environmental pollution, followed by the applications of computer technology.

Similarly, the level of interest for both issues, as also in almost all the other issues have gone down slightly. The mean level of interest score for the environmental pollution issue has gone down from 3.36 (1996) to 3.00 in 1998, to 2.92 in the present study (**Figure A5.4b and Table A5.7**). For the applications of computer technology, it has gone from 3.30 (1996) to 2.73 (1998), to 2.60 currently.

## 5.6 SUMMARY

- The 1996, 1998 and 2000 studies have shown that Malaysians' interest in S&T did not only continue to be low but have declined over the years. The mean interest level has gone down from 3.02 to 2.73 and 2.38 for 1996, 1998 and 2000 respectively. This should be of concern to the government if the objectives of the National Science Policy are to be met.
- As in the previous studies, the current study also revealed that youths continue to rate themselves higher in terms of interest in all the S&T issues when comparison is made against children and adults. The youths' mean interest levels are 2.50 for 2000, 2.59 for 1998 and 3.09 for 1996 as compared to those of the children (2.20, 2.29 and 2.90 respectively) and adult (2.37, 2.47 and 3.04 respectively). Of significant concern is that the mean for the three age groups have declined over the years. In general issues, the adults demonstrated the highest level of interest followed by the youths and children in that order.
- The interest in S&T and general issues among those with primary education is declining at a significant rate. Their mean interest level has declined from 2.58 to 1.95 to 1.87 for 1996, 1998 and 2000 respectively. As for those with secondary education, the observed decline is very marginal i.e. 2.44 for 1996 and 1998 to 2.42 for 2000. However those with tertiary education showed an improved interest level i.e. 2.57 to 2.93 to 2.79 for 1996, 1998 and 2000 respectively.

- In comparing interest according to locality, the study shows that urban respondents perceived themselves to have a higher interest in overall issues presented when compared to the rural respondents. However their mean interest level has declined over the years i.e. from 3.02 to 2.51 to 2.45 in 1996, 1998 and 2000 respectively. The study shows that although there is a significant difference in terms of interest level between urban and rural respondents, the ranking of preferred issues of interest are almost identical.
- In comparing the level of interest between the male and female population in similar issues, male respondents recorded slightly higher interest levels than the female respondents, even though both recorded a decline in the mean interest level. The male interest level has dropped from 3.04 (1996) to 2.50 (1998) and 2.42 (2000), while the females' interest level has also dropped from 3.00 (1996) to 2.45 (1998) to 2.34 currently.