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AN INVESTIGATION INTO THE SOCIAL AND PERSONAL CHARACTERISTICS OF THE BANGLADESHI JUNIOR CHILD IN TOWER HAMLETS, LONDON

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THESIS PRESENTED FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY
IN THE CITY UNIVERSITY, LONDON

Department of Social Science and Humanities 1981

ABSTRACT

The aim of this study was to investigate the social, personal and scholastic dimensions relating to the adjustment problems of Bangladeshi children living in Tower Hamlets, London. The total Bangladeshi sample of 200 was subdivided according to sex, and length of schooling (more than 2 years and 1-2 years); and the social and personal adjustment test scores, as well as the test scores on various ability, attainment, attitude, interest and personality variables of these groups of Bangladeshi children were compared with one another. A group of 100 indigenous children from the same schools and living in the same geographical area has acted as control group.

Adjustment was assessed using the California Test of Personality which comprises twelve subtests, six of which relate to personal adjustment and six to social adjustment, in order to build up a full picture of each child's adjustment level. The other tests used were the Coloured Progressive Matrices for non-verbal intelligence, Crichton Vocabulary Test, Eysenck's Personality Questionnaire, the School Questionnaire Attitude Scale (N.F.E.R.) and for 'Interest' school records were used. The annual school report has provided information for the assessment of each child's academic and non-academic performance, and the Rutter Behaviour Scale was also completed by the class teacher.

Statistical analyses consisted of one-way ANOVA carried out between the various groups, and 3-way ANOVA was used with the Bangladeshi group in respect of length of schooling, sex and age.

Bangladeshi children were found in general to have a low level of adjustment; and although a non-verbal intelligence test was used, the Bangladeshi children were less successful at it than indigenous children. Also school attainment and interests were found to be lower among the Bangladeshi children than among the indigenous children, but in general their attitudes towards all aspects of school were more positive than those of the indigenous children. The Bangladeshi children's performance on nearly all the tests was improved a great deal by increased length of English schooling. In most cases Bangladeshi girls scored less well on adjustment, extroversion and on some tests of attitudes than Bangladeshi boys; however, it was encouraging to find that in many test scores there were no differences at all between the sexes,

most noticeably so in proficiency in English language,in attitudes towards the school class and their relationships with teachers. This similarity between the Bangladeshi boys and girls was also to be found in their academic and non-academic performance.

These findings show that with increased length of enriched schooling, even starting from a position of considerable disadvantage, Bangladeshi children, especially the girls, progress quickly in their new environment, although the Bangladeshi children with more than two years English schooling still do not attain the same level of performance as the indigenous children. Finally, some proposals are put forward suggesting means by which the process of improvement might be furthered.

ACKNOWLEDGEMENTS

My greatest debts of gratitude are due to my supervisor, Dr. Margaret E. Wood. Her encouragement, understanding and immense kindness have been throughout the greatest support. She has given me the benefit of her wide experience regardless of time and the demands of her own work and also much helpful advice. Without her advice it would have been impossible to complete my thesis.

I would like to thank [redacted], Department of Mathematics for his advice with regard to the statistical and computing aspects of my research. I would also like to thank the members of the Department of Social Sciences and Humanities (Psychology) and the members of the Computer Unit.

The research among pupils in the Tower Hamlets area could not have been undertaken without the permission of the Inner London Education Authority's Research and Statistical Group. I would also like to express my warmest thanks to the Head teachers, staff and above all the pupils for their co-operation, sympathy and patience. I am grateful to the social and community workers, variously involved, for their valuable suggestions, and to the Tower Hamlets Institute of Adult Education for co-operation throughout my research. I am also indebted to the staff of the libraries of Senate House, the Institute of Education, the Commission for Racial Equality, the ILEA, the Department of Education and Science and Whitechapel Library. My warmest thanks are due to my friends for all their patience and support.

Last but by no means least, I owe my deepest and warmest gratitude to [redacted]; my work would have been impossible without their encouragement and support.

CONTENTS

ABSTRACT ii

ACKNOWLEDGEMENT iv

PART I

Chapter 1 INTRODUCTION 1

Background to the present study 6

Reasons for studying Bangladeshi junior children 8

Bangladeshi, Pakistani and Indian communities compared 11

Objectives of the present study 16

Immigrant children at school in the U.K. .. 21

The value to the immigrant child of education and adjustment 30

PART II

Chapter 2 HISTORICAL BACKGROUND TO IMMIGRATION IN BRITAIN 45

Immigration to Great Britain 46

Emigration from South Asian Countries 59

Emigration from Pakistan including Bangladesh 66

Immigration into Tower Hamlets, especially from Sylhet, Bangladesh 71

Chapter 3 RACIALISM IN BRITAIN 76

Prejudice 78

Racial conflict - past and present in Tower Hamlets 85

Chapter 4 THE EDUCATIONAL SITUATION OF IMMIGRANT CHILDREN 90

Number and distribution of immigrant children in British schools 92

Educational problems arising from the presence of immigrant children in U.K. schools 108

Education in Bangladesh 119

Bangladeshi children in Tower Hamlets 127

Chapter 5 REVIEW OF PREVIOUS RELEVANT RESEARCH 123

PART III

Chapter 6 AIMS AND OUTLINE OF THE PRESENT STUDY 146
Aim 146
Pilot study 147
Hypothesis 148
Sample 166
Description of groups 167
Schools 168
Selection of Tests 171
Procedure 183
Methodology 184
The test of adjustment 186

PART IV

Chapter 7 RESULTS 195
Analysis and commentary of results 195

PART V

Chapter 8 FINDINGS
Discussion of unexpected findings 242

Discussions of findings on the effect of length of schooling and sex differences .. 261

Chapter 9 DISCUSSION
Discussion of the overall results 271

Profile of the Bangladeshi children with more than two years of English schooling and Bangladeshi girls in Tower Hamlets .. 315

PART VI

Chapter 10 CONCLUSIONS AND RECOMMENDATIONS
Conclusion 317
Implications and suggestions 325
Suggestions for further research 334

BIBLIOGRAPHY 336

APPENDICES

APPENDIX I
West Indian, Indian, Pakistani (including Bangladeshi) immigrants in the U.K., and the total forecast on population, 1965-2015 .. 350

APPENDIX II
Estimated Future Populations, Five Major Immigrant Groups, 1971-86 351

APPENDIX III
Acceptances for settlement, Indian, Indian Sub-Continent 1973-76 352

APPENDIX IV
India, Pakistan and Bangladesh: Showing the areas from which Indians, Pakistanis and Bangladeshis have emigrated to the U.K. 353

APPENDIX V
Locations of Indian, Pakistani and Bangladeshi settled in the U.K. 354

APPENDIX VI
Recent research reported in The Guardian 355

APPENDIX VII
Results and findings 356

Index 358

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i. Tables in Appendix VII are identified by number and letter.

ii. Tables in the remainder of the text are identified by number only.

PART - I

INTRODUCTION

CHAPTER 1

INTRODUCTION

> "The home of successive waves of immigrants, from the Huguenots in the seventeenth century to the Jews in the nineteenth and the Bangladeshis today, London's East End has been the scene of its worst poverty and exploitation, and has inspired its greatest philanthropists, reformers and radicals. The East End is, and always has been, a place where conditions are tough, crime violent and work hard, but in which Cockney optimism and love of life are proverbial."
>
> - William J. Fishman (1979, back cover).

For many years London has been a cosmopolitan city and the Borough of Tower Hamlets has been especially noted for its cultural diversity. It has a long history as an area especially favoured by immigrants from the 17th century Huguenots, through the period of Jewish immigration in the 1890's and 1930's up to the present wave of settlers from Bangladesh. Today, the Bangladeshis constitute the largest single ethnic minority community in Tower Hamlets. "The Spitalfields Project" (1975) mentioned that the largest group of residents was that of the Pakistanis but the report did not distinguish between those born in the then East Pakistan who now consider themselves Bangladeshis and those who continue to consider themselves Pakistanis. The number of Bangladeshis in Tower Hamlets has increased from an estimated 3,500 in 1971 (2.1% of the total population) to between 10/15,000 in 1979 (10% of the total population), (Commission for Racial Equality and Manpower Services Commission, 1980). Dan Jones, Secretary of the Tower Hamlets Trades Council, estimates the current figure (1981) to be between 20/25,000 (personal communication to the writer).

It has been reported by the Commission for Racial Equality Report (1979) that '... the greatest concentration of Bengalis existed in the Spitalfields ward ...' (p.15). It was indicative of this concentration that the recent 'Arts of Bengal' exhibition was held at the Whitechapel Gallery in, as was stated by the organisers, 'an area with the largest Bengali population in Britain'.

Adam (1976), who has undertaken valuable work in community relations among the Bangladeshis in East London, states in the very first three lines of her pamphlet called 'They sell cheaper and they live very odd' that, 'The Aldgate area of East London has been for many centuries, a "point of arrival" for refugees and immigrants notably Huguenots, Irish, East European Jews, and Bengalis' (p.5). The current large Bangladeshi population in the area represents the latest peak in a flow of immigrant population into the East End of London which started in the 15th century. In the Nursing Mirror, October 25, 1979, a feature on the health problems of Bangladeshi immigrants mentioned that 'The East London Borough of Tower Hamlets has England's largest settlement of Bengali immigrants' (p.35).

An estimate of the percentage of Pakistani residents in the London Boroughs was made following the 1971 Census. This percentage, however, included Bangladeshis who were unfortunately subsumed under the general heading of 'Pakistanis'. Though the author (Wallis, 1974-75) used the word 'Pakistani' in her paper to cover Bangladeshis as well as Pakistanis, the high proportion of 'Pakistanis' in Tower Hamlets are in fact mainly 'Bangladeshis' and the cultural differences between the 'Pakistanis' of Waltham Forest and Tower Hamlets can be judged by the widely divergent sex ratio. However, this does not detract from the fact that 11.8% of the total Pakistani population of all the 32 London Boroughs lives in Tower Hamlets (Table 1).

Table 1 : London Boroughs showing largest Pakistani populations (including Bangladeshi).

BOROUGH	PER CENT	SEX RATIO (men to women)
Brent	5.5	2:1
Wandsworth	5.7	1.4:1
Ealing	6.5	1.5:1
Newham	6.7	2:1
Waltham Forest	9.9	2.1:1
Tower Hamlets	11.8	6.6:1

Source: Wallis (1974 - 75) "Pakistanis in Britain", New Community, Vol. lV, No. 1, Winter/Spring.

The Borough of Tower Hamlets has many of the characteristics of a declining inner city area. The general provision of civic amenities is low and the population suffers from high unemployment and low wages stemming from industrial decline and a high incidence of under-achievement amongst its school leavers.

Of the six boroughs mentioned above, therefore, the greatest need for additional resources is to be found in Tower Hamlets where the Bangladeshi population seems to experience unique problems, such as poverty, cultural alienation, a feeling of insecurity and the object of racial abuse and attacks.

A notable feature of the area is that despite a well-established history of settlement from overseas, there has been a long tradition of opposition and hostility to the newcomers. The Bangladeshis who are the latest arrivals live mainly in the West and South West of the borough and originate from one particular area of Bangladesh i.e. from the rural district of Sylhet.*

*95% of Bangladeshi immigrants to the UK came from Sylhet. This seems to be due to a historical accident: the chance arrival of a British merchant navy 'recruiting officer' in Sylhet and the enthusiastic response of local people, who eventually reached Britain as seamen.

This small area of London, therefore, provides a ready gauge of the temperature of race relations throughout the country and is a classic example of the conflict which results from the confrontation between a demoralised white population living in an area of social and economic decline and a disadvantaged black minority. In this respect the following quotation from the Commission for Racial Equality Report (1979) 'Brick Lane and Beyond' is worth noting '... Tower Hamlets is a touchstone of the deepening racial conflict and violence which has come to characterise the relationship between 'oppressed' blacks and many whites whose present lifestyles and future welfare are severely threatened by the spate of economic and industrial crises which have weakened the social and moral fabric of western societies ... (A community worker in Tower Hamlets)', (p.4).

In recent years open violence and intimidation have become commonplace in the area. One of the reasons for social unrest in the area is that the Bangladeshi community is well-defined and highly visible. Their skin colour, physique, language, day-to-day habits and also their distinctive cultural identity mark them out as a close-knit group which intends to maintain its identity vis-à-vis the rest of society. It is likely that these distinctive features mark out the Bangladeshi community for the attention of the violent elements which have traditionally been present in the East End. In the Borough of Tower Hamlets no other ethnic minority is thought to stand out so distinctly, and so draws upon itself the attention of the violent elements in the district.

Bangladeshis are physically small, and the women especially often lack confidence in their dealings with the white community. A certain discomfiture is sometimes evident in their physical bearing, and they are further marked out by their distinctive fashions and colour preferences in their clothing. In Spital-fields the Bangladeshis constitute a major part of the population and are thus especially noticeable.

It is said that the East End of London is traditionally a 'high crime' area, (Report by Bethnal Green and Stepney Trades Council, 1978) and over the past eight or nine years the Bangladeshis have willy-nilly become the targets for physical attacks and harassment. The tense and fragile racial situation today in the East End of London, particularly the Brick Lane area, is a matter of deep concern for those who are working hard to maintain racial harmony, such as the Commission for Racial Equality: it has caused a sense of fear and anxiety among the Bangladeshis living in Britain and is of much deeper concern among their brethren at home and abroad. Consequently, the local Bangladeshi community feels anxiety about the deteriorating race relations situation. The depressing reality of life in East London has led many Bangladeshi familites to accept without protect acts of racial abuse and sometimes physical violence. This had almost become a part of day to day existence in Britain. It was stated in 'Blood on the Streets' that '... the Bangladeshi community in Tower Hamlets ... has borne the great brunt of racist attacks in the East End'. (Bethnal Green and Stepney Trades Council, 1978, p.6).

Thus, the Bangladeshis in Tower Hamlets are a single ethnic minority living and working in a deprived inner city area, and their children form an educational priority group. The objective criteria which constitute such an area are outlined in the Plowden Report (1967), and included in these criteria are factors which relate to the kinds of provision parents can make for their children. However, Plowden also mentions the negative factors which make it difficult for parents to make such provisions available; these include large families where children receive insufficient parental time and attention, and parents who have unskilled or semi-skilled jobs and who receive low wages.

Children of these immigrants may be eligible for free milk and school meals but the majority of them are unable to take advantage of the free meals because they like to avoid ritually unclean and unfamiliar foods. Poor housing conditions in which families are cramped and overcrowded, poor school attendance, and inability to speak English adequately are all characteristic of the children in the area. Other criteria suggested in the report were incomplete families and a high proportion of handicapped children in ordinary schools. Areas showing a high degree of deprivation measured according to these standards are singled out for special help from central government.

BACKGROUND TO THE PRESENT STUDY

It has been observed (Jones, 1969) that schools in areas with a high concentration of immigrants consequently have a large immigrant enrolment. Not unexpectedly, therefore, the increase in the Bangladeshi population settling in Tower Hamlets gave rise to a corresponding increase in the number of Bangladeshi children attending school in the area.

In spite of the obvious handicaps which the Bangladeshi children suffer there has been as yet no research into the precise educational consequences of these handicaps as far as the Bangladeshi Junior school child is concerned. A lack of detailed information has been one of the main problems encountered by educational decision-makers in Tower Hamlets.

Since the number of immigrant children coming into Great Britain from the New Commonwealth countries has increased during the early 60's, the adjustment children of different ethnic origins with problems relating to different language, religion, educational and geographical background has become one of the major problems for British educationalists. As the number of immigrant children increased the problems associated with them increased proportionately. As a belated

response to the problems evinced by such children, various research projects were introduced to try to alleviate them; but during that early period empirical research into the social difficulties faced by children arriving from relatively backward New Commonwealth countries was practically non-existent. Tomlinson (1977) pointed out in 'Race and Education in Britain 1960-1977: an overview of the literature', that 'the relatively short period in which black children have been present in schools plus the lack of interest evinced by many academics for race generally as an area of enquiry, has meant that there is as yet no comprehensive study of race and education in Britain. The literature that exists to date is a very mixed production indeed (p.3) ... ranging from a small amount of rigorous and expensive research, through less rigorous research, to descriptions and comments that extend from the useful to the oversimplistic ... ' (p.21). However, since the mid-1970's more comprehensive studies of the immigrant child in British school have been published such as Milner (1975), Taylor (1976), Bagley and Verma (1978, 1979) and Verma and Mallick (1978 and 1981) among others.

Although there were studies of immigrants with respect to their different problems, most of them have mainly been concerned with general topics on the immigrant population as a whole. Also, although there are some studies dealing with West Indians, Indians and Pakistanis, it is still difficult to find data derived from the empirical research based on large samples of Indian and Pakistani children. Unfortunately, specific issues concerning the Bangladeshis have received little attention. There are few studies of Bangladeshis, and most to date have been descriptive rather than objective. They consist mainly of subjective accounts of field experiences with no empirical discussion of the educational experiences of Bangladeshi children. In 1967 Harris pointed out in her report 'East Pakistanis in London', that although there had been a few studies on Pakistanis, no research was carried out into the socio-economic conditions of Bangladeshis in East London. It should be mentioned that this group is one of the largest single immigrant communities in this country.

A piece of research which has some bearing on this study is that of Bari (1973) who examined certain educational issues of secondary school children. (Bari's study is described on page 127). He had drawn his sample from a dispersed geographic area, whereas the present study was designed to examine children from a single geographic area in London (Tower Hamlets). These children also have a homogenous ethnic identity in that they all came from one district of Bangladesh (Sylhet).

REASONS FOR STUDYING BANGLADESHI JUNIOR CHILDREN

As pointed out in the earlier section, some empirical studies concerning the education of immigrants and children of immigrants other than the Bangladeshis have been done, but the educational problems of the Bangladeshi children and the relationship between their culture and the educational difficulties they experience has received scant attention in the literature. Therefore, the writer felt that there was an urgent need for a systematic study of these children. Given the social and economic deprivation of these children such a study would seem to be justified and worthwhile. The project was designed to examine the various educational and social conditions of Bangladeshi children. As previously stated, the Bangladeshis of East London make up one of the largest single immigrant groups in the whole country, and the current state of ignorance regarding them is most unsatisfactory. It was the intention of the writer to provide some hard data on the education of these children and thus try to fill the gap in the present state of knowledge.

The writer herself, being a Bangladeshi, has been concerned about the various problems of the East London Bangladeshi community, especially as it includes a significant number of children.

The writer had the advantage of getting access to the community for the purposes of study. Access was obtained through the schools which represent the children's only

prolonged contact with the host community during their formative years. She was able to visit homes and schools which made it possible to administer tests; and interview individual children. She was able to develop a good rapport with children involved in this research. The wearing of a 'saree' also helped to gain the confidence of Bangladeshi children, especially girls. The comments of one head teacher, as reported by Townsend and Brittan (1972), are relevant here: 'Our remedial teacher is from Ceylon, and her wearing a sari does boost the morale of some of the Indian girls' (p.97).

In summary, the factors which encouraged the present researcher to do an investigation in this particular field were:

a) In the 'Select Committee on Race Relations and Immigration', session 1972-73 it was stated that the exact number of dependents of immigrants entitled to enter the U.K. is unknown. In Dacca (Bangladesh) it is thought that about 80% of those persons in the U.K. eligible to apply for their dependents had not yet done so. The total number may be several tens of thousands. As only about 3,000 entry certificates are issued annually, of which about two-thirds are for children, it is not unreasonable to expect that about the same number will enter annually over the foreseeable future and those still to come are likely to have minimal English, and their education may create problems for them as far as their life in Britain is concerned. Consequently, this may leave them in a state of confusion, living in bewilderment between two worlds which may cause them severe adjustment problems. Most of them are likely to settle in areas where members of their community already live in high concentration. Thus in order to prepare for their arrival findings based on some empirical studies may be relevant in guiding those who have to make the necessary arrangements for them.

b) The writer has been a tutor in this area of London, teaching literacy in their mother tongue to these children and also acting as an interpreter. She was also involved in home visits and home tuition, which gave her the opportunity of establishing contact with parents and children. This contact gave the writer a unique opportunity to make an in-depth inquiry into the East End Bangladeshi community, a close-knit society, which does not admit foreigners easily. Having a common religion, culture, language and being a female of the same nationality enabled the writer to observe the effects of inner city deprivation on family and community life as a whole. Thus being a Bangladeshi she had the opportunity to obtain access to the families and she was accepted by them as a member of the group and was able to talk with them freely and discuss their problems. The establishment of such rapport is, inter alia, likely to increase the validity of the study.

c) There is a high concentration of Bangladeshi children in a single area which enabled the present researcher to use a large sample in carrying out the research in order to make some valid generalisations.

d) As mentioned already, there has been practically no objective, empirical research on the educational problems of this particular immigrant group, living in the Tower Hamlets area.

e) The ever-present atmosphere of racial tension in the Spitalfields area is an important element in the shaping of the new general of Sylhetis, and the concern for their future motivated the writer, a Bangladeshi herself, to examine some of these problems.

f) The Bangladeshi community is in many ways different from both the Indian and Pakistani communities, even though the problems they experience may have some

common element, such as speaking an alien language, having a different cultural background, a different educational system, as well as experiencing racial prejudice. Effective solutions to these problems must be shaped according to the particular needs of any one of the specific communities discussed, and hence the value of studying the Bangladeshi child becomes apparent.

With all these considerations in mind, the writer considered that there was a need to carry out detailed research on this particular group of immigrant children.

BANGLADESHI, PAKISTANI AND INDIAN COMMUNITIES COMPARED

It is popularly assumed that Asian immigrants are all similar in background, but in fact the members of different communities are sharply distinguishable from one another. In the matter of distinctions between coloured immigrant communities Allan (1971) comments that 'It is frequently assumed that coloured immigrants to Britain are all the same. Distinctiveness between Indians and Pakistanis are often not made and all West Indians are thought of as Jamaicans. The category "coloured immigrant" is almost a meaningless one, in view of the great differences between the ethnic groups and also within them.' (p.86). She further added that the word 'coloured', as used in Britain, includes migrants from Africa, Asia, the Caribbean and some from the Middle-East, as well as the native British born of non-white or mixed parentage. The word, therefore, applies to people of many different ethnic origins and backgrounds. The common British belief that 'all Indians are pretty much alike' is highly misleading if applied to the discussion of the methods appropriate to the teaching of children from Asian minority groups.

It is reasonable to suggest that young Indians are likely to describe themselves as Indians if called upon to identify themselves to foreigners. This does not, however, mean that they consider themselves to share a common background

with others in the same school who come from the Indian sub-Continent unless they come from the same family, village or at least have a common language and religion. Belonging to a particular social group such as family, village or religious sect has much greater meaning than affiliation to a nation state.

Thus the use of the word Asian is scarcely helpful as it embraces those from India, Pakistan, Bangladesh, Sri Lanka, Malaysia, Hong Kong and Kenya whose cultural variety is as great as those of different European nationalities. Some British teachers can distinguish between Bangladeshis, Indians and Pakistanis, but few can grasp the considerable cultural differences between Pakistanis and Indians. Yet the differences in background are likely to affect the relationships of the parents of immigrant children with the school. In a complex industrial society there will be differences in norms and values between members of different sexes and status groups, between children even of the same ethnic group born in different parts of the world, between religious groupings, and between people living in different residential areas and having different kinds of education. In view of these points of difference it is hardly surprising that the Bangladeshis identify themselves as a distinct group within the general mass of the Asian community. This identification is of great value to a child in orientating himself to the wider society and informing his self-image, which is necessary for the formation of a satisfactory pupil-teacher relationship. The example, stated by Ghuman (1975) is worth noting here, ' ... the placing of one small Pakistani boy in a class of forty Sikhs, by a well-meaning Head who thought that because he "looked the same" he belonged to the group, caused the child to suffer a miserable isolation which was only ended when he was removed to an ordinary class comprised of several nationalities where he no longer stood out as the odd one! ' (p.12). If a Bangladeshi child had been placed in such a class it would have caused him untold

misery because not only are the two cultures and languages different, but attitudes towards life, personal values and social needs in the two communities differ widely.

Although teachers are likely to be aware of the different social and intellectual experiences of indigenous children of different social classes, the problems which children coming from diverse cultures and sub-cultures have to overcome as members of a British school community are not always appreciated by the British teachers (Verma and Ashworth, 1981). It is too frequently assumed that the findings of studies with Indian children will, by implication, be applicable to Pakistani and Bangladeshi children, as they are from the same sub-Continent. The tolerant religious background of the Sikh Punjabis enables families to adjust their codes of behaviour more easily than can Muslims, who have strict standards which conflict on many occasions with the established patterns of behaviour in school and even in out-of-school hours. Muslim children, especially girls, feel the effects of this quite strongly. Thus the general term 'Indian' does not mean Bangladeshi or Pakistani. As an example of this there is a notion which exists in the U.K. that all the South Asian restaurants can be regarded as Indian in spite of the fact that almost all of them are run by Bangladeshis.

Morrish (1971) showed that East Pakistanis (now Bangladeshis) live exclusively apart from West Pakistanis (now Pakistanis). It is worth mentioning here the study by Rose et al. (1969) which points out the differences between Pakistanis and Bangladeshis. Historically, Pakistanis and Bangladeshis until 1971 coexisted in one state 'Pakistan' (until 1971) although the two wings of Pakistan were separated by more than 1,000 miles and there was very little communication between them except at the official level and among businessmen. Migrants from Bangladesh and Pakistan have little in common except their religion and their previous sense of belonging to the same nation. Geographical conditions, culture and language are as great a barrier as distance. The two people differ from one another in physique, the Pakistanis being on

whole taller and fairer than the Bangladeshis. There is a great difference in the climate of the two regions which is reflected in differences of diet: rice, fish and vegetables being the staple diet in Bangladesh ; wheat, maize, milk products and meat in Pakistan. Bangladesh is an alluvial country lying within the deltas of two great rivers, the Ganges and the Brahmaputra; it is a tropical rice-producing area. By contrast, West Pakistan is a dry country and no part of it lies in the tropical zone. The two wings of Pakistan were, when one state, completely isolated, being physically entirely separated by the Indian territory. Allan (1971), quoting Campbell (1963), has emphasised the differences between the two peoples and wrote, 'Except for religion and political membership of the same state, there is little in common ethnically, culturally, or linguistically between the two groups of Pakistanis ... (they) had no common language, they dressed differently, ate different foods; they had lived under different forms of government. It is hard to imagine a more heterogeneous nation' (p.89).*

These environmental and cultural factors emphasise the distinct differences between the two peoples. However, at least one common element is shared with the West Pakistanis and that is religion which is Muslim; when comparing the Bangladeshi and Indian communities there is, indeed, even less common ground.

These differences strengthen the social, linguistic and religious sub-groups at the expense of the cohesion of the ethnic groups as a whole. There are even differences between Bangladeshis of urban and rural origin and these tend to coincide with class differences. Those people originating from rural areas have tended to remain as manual workers after immigration while those of urban origin are predominantly in white collar occupations. Class differences provide yet another dimension to the social organisation within the ethnic group. The lifestyle of the middle class Bangladeshi is quite different from the lifestyle of the Bangladeshi of peasant origin.

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* For a description of the differences in more detail, see R.D. Campbell, Pakistan, Emerging Democracy (Princeton, N.J.: Van Nostrand, 1963).

The Bangladeshis differ from Indians and Pakistanis in their native cultures, pattern of settlement, and in their reaction to life in the U.K. Bentley (1972-73), discussing the differences between Bangladeshi and Pakistani communities, has stated that the lack of economic development in Sylhet during the period of a unified Pakistan has had two major effects on Bangladeshi immigration to the U.K. First, there is an absence of a professional, educated elite among the Bangladeshi immigrants and consequently the class base is relatively homogeneous when compared with that of Pakistani immigrants. This, combined with the large number of all-male households resulting from the wish to keep the woman at home in Bangladesh, led to the formation of extremely stable areas of settlement. The male population experienced less need to find larger accommodation in the absence of their families. Indians, particularly Sikhs, are much more likely to be found outside their main areas of settlement. Because most immigrants from India (Punjab and Gujerat) are skilled and semi-skilled (Verma and Ashworth, 1981) they are able to employ their skills where they choose to live, whereas migrants from Bangladesh are mostly unskilled, and have to find work where factory labour is required.

The writer, relying on her extensive personal knowledge of the Bangladeshi and Pakistani communities settled in this country (and, to a less extent, of the Indian communities) is aware that there is very little desire among the senior Bangladeshis to settle permanently in this country and they remain oriented towards Sylhet, (see also Bethnal Green and Stepney Trades Council, 1978). Much money is sent back to Bangladesh for the support of dependent relations or to buy land or build a house there for the future. Investment in material comfort by the senior Bangladeshis population in this country is minimal in comparison with that made by other Asians. Watson (1977) has commented on this with reference especially to the Sikh community. The values and norms of the villages remain relatively undisturbed by the desire for the purchase of consumables so prevalent in this country. This creates difficulties for Bangladeshi children who are caught between

two generations. Their attitudes and patterns of adjustment to school are unavoidably affected by parental attitudes and values. Their parents' desire ultimately to return home has a very significant influence on behaviour and attitudes, although there are signs of change among the younger generation.

Bangladeshi women do not go out to work as many Indian women do, and parents, while allowing their children to attend English schools, prefer their children, especially daughters, to remain within their own community which alone can fulfil the religious and cultural prescriptions of their society. Sylhetis enforce the rules of purdah* more strictly than Muslims from within Mirpur or Campbellpur (Rose et al., 1969). Bangladeshi parents are reluctant to send their adolescent daughters to school as they want their daughters to look after younger siblings and help their mothers with household work. Parents look upon their boys as prospective wage earners. It is only because they have to conform to the law of compulsory education and are obliged to send their children to school until they are sixteen that they do so. Attitudes of these adults are likely to affect the education of the young who are less likely to seek further education than are the younger generation of Indians and Pakistanis.

OBJECTIVES OF THE PRESENT STUDY

From a perusal of previous studies concerning immigrant children from underdeveloped parts of the world now in Britain it is evident that when a child is moved from his native environment into a western culture and into a scholastic environment there is an increase in various test scores of adjustment, ability and attainment, and this increase seems to be related to length of schooling in the host country. The findings of Saint (1963), Inner London Education Authority Report (ILEA 959, 1967) and Little et al.(1968), Ashby (1968), Haynes (1971),

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*Purdah: literally meaning 'curtain', this is a Persian word widely used in South Asia. One usage of the word refers to the separation of the women's world from that of the men and the concealment of women. Purdah is an important element in Islamic tradition which considers socially heterodox behaviour on the part of women as likely to lead to sexual licentiousness.

Sharma (1971), Ghuman (1975) and from other studies, confirm that with increasing experience of English education there is an improvement in performance on various test scores. To the best of the writer's knowledge there has been no research on Bangladeshi children in particular which can substantiate these findings. The writer was very much aware from her personal knowledge of the strength of the influence of the traditional Bangladeshi family on children and also of the effects on children of the accompanying robust and rigid beliefs, attitudes and behaviour which their parents hold. It could not be assumed that Bangladeshi children's test scores would improve similarly.

Bangladeshis are so closely bound to their own religion, language and culture that they identify the dominant western culture as a threat to their way of life. This leads to great difficulties in adjusting to a lifestyle which they seem to have rejected in their attempts to preserve their own traditions. Children are faced with an acute problem when they are confronted by the dominant western culture at school. The degree of freedom allowed to them for the purpose of developing their abilities is great compared with the more rigid traditional life in which the standards of behaviour are clearly stated and obedience is expected without question.

After a period of schooling in Britain in an environment which is socially, emotionally and physically different from anything experienced within their own culture, the daily encounter with a more stimulating atmosphere could, therefore, be expected to make an appreciable impact on the development of Bangladeshi children despite the restrictions of their home environment.

The writer was concerned, therefore, to discover the effects on Bangladeshi children of schooling in Britain started at the primary stage.

Although some studies (e.g. Little et al.,1968; Haynes, 1971 and Ghuman, 1975) on various aspects of children's attainment in school have been carried out with immigrant children of primary school age there have been no empirical studies as mentioned earlier with a population of primary school children from Bangladesh living in one specific community in Britain. Although tests of ability and attainment are useful indicators of a child's progress in school, the development of other aspects of behaviour is also of interest. It seemed important, therefore, that the present study concerning itself with the effects of schooling in Britain on Bangladeshi children should examine other possible changes which might have taken place due to contact with the indigenous culture transmitted through the school.

One of the main interests of the writer lies in the degree of adjustment, both social and personal, which increasing length of schooling may bring about. As mentioned before, it is known that the home has a great influence on these children; the traditional values, norms, culture and religion of the family are all highly influential, but at the same time they are experiencing a richer and more stimulating environment at school. Thus on the one hand the child experiences a restricting home life and on the other hand a more open and exciting environment at school. Bangladeshi parents are generally suspicious of the permissive attitudes in English schools which undermine their own ability to maintain discipline in their own homes. It becomes more difficult for them to maintain their position of unquestioned authority. Consequently, attempts are made by the parents to reduce this effect by organising religious and cultural instruction for the children to reinforce the traditional codes of behaviour seen to be under attack from the norms and values of multi-racial schools.

Within the family it is expected that children should show respect to their elders and not put their own self-interest before that of others. This contrasts with school, where the child is expected to show self-reliance and to assert himself by making reasoned responses.

Bangladeshi parents place great value on academic achievements (Baker, 1978) but it is reasonable to assume, judged by their behaviour towards their children, that they do not realise that the freedom which children experience in British schools encourages a child's natural desire to discover, and that at least this aspect of the social value of the white society, which the parents reject, cannot be separated from the academic learning which the society provides and of which the Bangladeshi parent approves.

Even those children whose attitudes and abilities have been modified during their period of British schooling have no real wish to defy their parents and betray their expectations by becoming overtly westernised. The loyalty to the family is very strong and overt conflict may appear only briefly in adolescence, i.e. during a period of development when rebellion against parental authority is not unusual.

There are thus contradictions in the child's experiences which must be resolved or otherwise accounted for in his personal and social adjustment. The writer examined other areas of behaviour, attitude, interests, ability and attainments in order to find out how these conflicts are manifested in the lives of young children and how they are modified with time. For this reason two groups of Bangladeshi children were examined, i.e. those with more than two years of British schooling (>2) and those with between one to two years of schooling only (<2), so that the development of a number of personal, social and school-related variables could be traced. If there are significant positive differences between the two groups then it will have shown that the influence of increased length of schooling in Britain has had a beneficial effect on the former group of children. Such changes, however, are not likely to occur evenly across the full spectrum of development.

In addition, the writer has drawn on personal knowledge of Bangladeshi family life as lived in villages of Bangladesh.

In such families, girls and boys are treated very differently in matters relating to religion, social expectation and schooling. The traditional attitude to girls is that they should play a subordinate role in the family and especially in society. They must be modest in dress and restrained in behaviour, avoiding any physical and sexual contact with men until safely married. The rules of purdah require seclusion from men. Men, on the other hand, are not bound to keep to the same standards and contact with women outside the family is not frowned upon.

Men are often very keen to impress upon non-Muslims the exulted position of women in Islam when compared with the supposed corrupt and debased European standards, but the intended effect of this may well be to warn against any attempts by outsiders to loosen the restrictions of purdah.

From an early age rural Bangladeshi girls are expected to share responsibility for domestic chores with their mother. From the time that they arrive in the U.K. and first experience of the new school environment, their home life and activities outside school in most cases tend to remain as they were in villages of Bangladesh. Boys, on the other hand, are encouraged to some extent to show more interest in education in order to prepare them for future employment so that they can earn money for the family. Parents are generally ambivalent towards the education of their daughters and, while recognising that it may help them to secure better husbands, they also fear the corrupting influences of co-educational schools and the possibility that their daughters may want to do things which are not compatible with the traditional role of wife and mother.

The conflicting demands of home and school can cause considerable stress to Bangladeshi (Sylheti) girls in Tower Hamlets, especially if parents react to the situation by enforcing an even stricter standard of discipline than they would otherwise have done.

This piece of research, therefore, also attempted to investigate the possible divergence in adjustment, abilities and attainments and other personality variables between Bangladeshi boys and Bangladeshi girls in order to identify any lagging effect in the girls which might be attributable to the traditional differences in the treatment of boys and girls.

In order to provide a contrast groups with which to compare Bangladeshi children, the same tests were applied to a group of indigenous children of similar ages from the same schools who were living in the same geographical area as the Bangladeshis.

IMMIGRANT CHILDREN AT SCHOOL IN THE U.K.

Acute practical problems associated with large numbers of immigrant children in British schools are relatively recent in this country. During the 1950's there were some schools which were highly cosmopolitan but where little difficulty was experienced in providing both a satisfactory education and an impetus towards adjustment. However, at this time the children were predominantly from Eurpean backgrounds and did not have to face the complex problem of colour prejudice in addition to the other difficulties they had to deal with.

Since the 1960's when immigration from the New Commonwealth countries began in earnest there has been an inevitable increase in the number of immigrant children attending British schools, and problems relating to the education of such children began to emerge. Children had to be introduced to British schools at all stages in the school career and at all times during the educational year which gave rise to both social and educational problems. To compound the problem, their parents had tended to cluster together in distinct ethnic groups because employment was only available for new immigrants in specific areas in Britain, with consequent problems for the children's education service. This meant that their children were sent en bloc to relatively few schools, whereas European immigrants tended to be dispersed throughout the country.

It has been increasingly recognised by educational policymakers and administrators that the arrival in the past 20 years of immigrant children from New Commonwealth countries calls for the reappraisal of established educational practices and the formulation of new strategies to deal with the problems which have arisen. Verma and Mallick (1981) state that "Immigrants in any society face many kinds of social, personal and educational problems", (p.51). 'Official British thinking' is aware that a simplistic view of social adjustment as far as the immigrant child is concerned can no longer be sustained. The problem which the immigrant child has of establishing a personal identity is related to his ability to adjust to the norms, habits and values of the host community. Milner (1975) has described how confused such identity formation can be. In his experimental work with Asian and West Indian 5-8 year old children he found that these children seemed to identify themselves with a white doll showing a clear preference for the indigenous ethnic group. Through school and home these children are members of two ethnic groups, and the establishment of a clear parental identity is therefore difficult for them. (Milner's research is further discussed on page 134).

Schools in London and the other large conurbations experienced acute difficulties when the numbers of such children increased sharply. The problem has two dimensions, albeit interconnected. The first is the need to make school life both intelligible and of positive value to children whose cultural, linguistic and religious backgrounds are different from the indigenous children; the other side of the problem is to provide an educational environment which is conducive to mutual understanding and which may help to foster racial harmony. This is a necessity in schools where there is a small proportion of immigrant children or they form a large part of the school population if future racial problems are to be avoided.

As was pointed out in an earlier section, these children are not evenly distributed in Britain. London has the highest concentration followed by South Lancashire and the West Midlands.

The areas where New Commonwealth immigrants settled tended to be poorer and less well provided for. Consequently, the schools often became over-crowded.

As families tend to favour certain localities, within a single education authority with a high percentage of immigrants there will often be an uneven distribution of children across the schools. Verma and Mallick (1981) refer to the high concentration of immigrant children in urban areas of Britain. Throughout England and Wales over 50% of the 28,500 schools had no immigrant children at all in 1973 and 6,600 had 5 or less. 900 schools had more than 25, and the vast majority of these were in London in 4 of the 10 Inner London division and 6 of the Outer London Boroughs (Watson, 1977). Hill (1970) referred to the fact that immigrant children in Haringey were mainly under 11 years of age and so concentrated in infant and junior schools. They were also unevenly distributed in that there were 11 schools with more than 50% immigrant pupils while in 15 schools there were less than 5%. The manner in which the picture can change dramatically in a short time is described below.

The London Borough of Ealing which takes in Southall admitted 60 immigrant children per month in 1965 but this had risen to 250 by 1968 (DES, Education Survey 13, 1971).

A survey of Bangladeshis in Oldham* published in 1978 showed the rapidity with which changes could occur in the ethnic origins of the school population. The variety of distribution of Bangladeshi pupils in the schools of East London is very marked and may vary in neighbouring schools from a very low percentage to up to 90%. Again a variety of distribution may be observed with regard to the situation in the inner and outer London Boroughs. In 1972 immigrant pupils constituted 17.3% of pupils in the ILEA area and 9.9% in the outer Boroughs.

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*Oldham Council for Racial Equality.

Within these areas the distribution is also uneven, immigrant pupils tending to concentrate in a few schools. The number of such schools where there is a heavy concentration is increasing and even those authorities with only a few of these children have schools with a high proportion of such children. In addition, as stated by Verma and Ashworth (1981) "the statistics (for London) for 1975 showed that 23% of all births were to New Commonwealth mothers (Multi-Ethnic Education, 1977)", (p.241). Thus these schools must adjust to a much more urgent need to overcome the resulting educational problems. The schools which had to cope with these first were situated in the 'twilight' inner city zones. These areas of environmental and social decline were also the homes of indigenous children who often required intensive educational effort to make up for their many deprivations. Some of these areas were recommended by the Plowden Committee as requiring additional resources, and they were later designated 'Educational Priority Areas' by the Government (Central Advisory Council for Education, 1967, HMSO).

The schools of Tower Hamlets fall into this category and Bangladeshis are by far the largest ethnic minority in the schools. Almost all the children come from a single district in Bangladesh, i.e. Sylhet, and are concentrated in a small area of Tower Hamlets. The distribution of Bangladeshi pupils is, however, irregular within this district.

The numbers of these children have increased very sharply over a number of years. They arrived at all ages and at all periods throughout the school year. The extreme concentration of Bangladeshis from Sylhet in the Spitalfields area has led to their isolation and the formation of a physical and cultural 'ghetto' which has allowed the community to exclude many of the unwelcome influences of the wider society. Thus, the children suffer from both the disruption of their education caused by the continuing need for schools to adjust to large numbers of new arrivals, and the isolation of their own community, which does not aid the schools' attempts at helping the children to adjust always successful.

In spite of this, a policy in favour of racial harmony is very important. As has already been mentioned, it must be recognised fully and stated openly that special educational problems exist, solutions to which have not yet been developed. One of the prerequisites for beginning to solve such problems is to establish a body of objective research which at present scarcely exists. Further positive action is required if the urgent and serious educational problems which these Bangladeshi children face are to be fully understood and some means developed for helping them more effectively and educating future generations more successfully. The Department of Education and Science as described by Tomlinson (1977), has also recognised the problems which exist for immigrant children, and in 1974 produced a White Paper which noted that, 'the education service has important contributionsto make both to the well-being of immigrant communities in this country and the promotion of harmony between the different ethnic groups of which our society is now composed' (DES, 1974, p.1). The dangers involved in allowing the situation to drift were recognised earlier, and in 1969, Cousins in a speech to careers officers, drew their attention to what might be the outcome: "If we are content to have a group of people untrained and unemployed, they will become unfriendly", (quoted by Tomlinson).

The educationalists dilemma, as reviewed by Tomlinson, is that while education is often regarded as a vehicle for social change and a means of overcoming social stress, educational strategies are executed in an environment laced with racial prejudice, inequality and discrimination. Such prejudice includes, for example, the schools' lack of expectations as far as Asian adolescents are concerned. Verma and Ashworth (1981) have discussed the education of young Asians in Britain particularly in relation to the adolescents' vocational aspirations. They discuss the problems which are inherent in translating such aspirations into actual vocations. They refer to the difficulties experienced by young Asians, for instance, the economic and social deprivations suffered by their families which lower the adolescents''self esteem, motivation and academic achievement'. They also stress

discrimination and prejudice on the part of teachers and later employers. Verma and Ashworth conclude that the British educational system fails the South Asian child.

In general, Bangladeshi children are subject to similar pressures to those felt by the Asian children studied by Ashby (1968). The pattern of education is alien to them and the demands which they face at school are quite unexpected. Added to the problem of cultural shock is the difference in the physical environment of school, class and teaching techniques which encourage children to explore, to reason and to make positive contributions to class work. In addition, there is the need for consistent attendance in school. Many of these factors also expose the children's lack of language skills. Usually no encouragement is given in rural Bangladeshi schools for children to explore their own surroundings and develop their potential. In Britain, together with the strong prejudices which the other children may show towards them and the inner conflict caused by discrepancies in the values of home and school, all combine to form an almost intolerable burden.

Bangladeshi children, like other Asian children, are usually quite unprepared for these problems, and to quote Edson, ' ... his (the Asian child's) first reaction on arriving in this country is inevitably a feeling of shock and bewilderment. His eyes and ears are assailed by a welter of new sights and sounds as well as experiencing the physical shocks of the rigours of an alien climate. Once in school he has to come to terms with yet another set of conditions, where differences will affect him more intimately and where the mastering of a new language is only one of the problems he has to face' (Edson, 1966, as quoted by Ashby, ibid.).

Because the background of the Bangladeshi pupils, like that of Asian pupils in general, is vastly different from that of their English peers and the style of life in the U.K.

is so alien to them, many suffer psychological as well as cultural shock on their sudden transference into a new social environment. Therefore, not only do these children share with the indigenous children the demands of school, but their cultural estrangement places further burdens upon them. These problems are compounded by their lack of knowledge of the English language.

Asian children (including Bangladeshi) because they do not speak English at home (Verma and Mallick, 1981) probably never really master spoken or written English and tend to fall behind in their schoolwork. Even where the child has some command of English he may still be unable to follow many of his lessons completely. In this situation he may be assessed as less able than an indigenous child because of his lack of adequate English and may be placed in a low stream. This problem has been noted by the Central Advisory Council for Education (1967) who reported thus: 'It is difficult to discriminate between the child who lacks intelligence and the child who is suffering from "culture shock" or simply from inability to communicate. As a result, few immigrant children find places in selective schools. In one borough with nearly six per cent of immigrants in its school population, not a single child was selected for a grammar school in 1966. Children with high mathematical or technical ability are at a disadvantage because of their poor command of written English', (p.70). In addition, the children's lack of adequate English hinders the relationships in school and in the outside world, and leads to an inability to communicate with the teacher or anyone else either in school or in the community. To an extent, this applies not only to the child who is an immigrant, but also to those who came here at an early age and to children born here. The latter, as will be discussed, speak their mother tongue almost exclusively before going to school and their knowledge of English is also inadequate when they go to school.

The reaction of the majority of the host population to their colour, religion and culture must be recognised as an additional factor which is likely to retard their adjustment. The concentration of Bangladeshi families within a small area reduces the necessity for contact with English people, and facilitates the maintenance of the Sylheti lifestyle. This is further encouraged by the host community's lack of interest in integrating with the new migrants. Loneliness and lack of security are avoided in a foreign land by sticking together and keeping alive the customs and characteristics of Sylheti language and culture. None of the formal organisations, such as mosques and Bangladeshi Welfare Associations, which have emerged within the area, has effectively moved across the ethnic boundary, and membership of all has been confined to those people originating from the same area of emigration and sharing a common language.

The deprived environment of Spitalfields is manifested in the poor standard of housing and home maintenance, the overcrowding and the insufficient area of open space. It can be seen that lack of intellectual stimulation in this environment tends to establish a vicious circle in which the allowances made by teachers for the shortcomings of the children's background tend to reduce their expectations which in turn depresses the children's motivation and leads to poor performance. This point has also been made by Hobbs (1976) with regard to teaching in the wider multiracial field. Later in their school career and after leaving, this may lead to anger and resentment at their inability to improve their prospects and escape the physical, social and economic deprivation which surrounds them.

Thus, the Bangladeshi child is called upon to make both social and emotional adjustments of the deepest kind; however, he is never required to relinquish the past and is expected to learn to live in two worlds simultaneously. This is a very stressful process and the necessity of accommodating to two cultures and languages, together with the demands of the school sub-culture imposes a tremendous strain on these children.

This is magnified by the disapproval often shown by parents towards the indigenous culture and values, and the disincentive to adjustment posed by the strength of traditional values and the often pronounced desire to return home. Although the adolescent Punjabi appears to be successful at school (Taylor, 1976) it does not follow that the same success can be expected of the primary school Bangladeshi child.

The writer noted in the field that young Bangladeshis are now looking for new ways of acting which, while building on the standards and culture of their parents and making slight changes to them, still do not accept the idea of integration into the host culture and losing their cultural identity. There are at times problems inside the family caused by lack of understanding between the generations, which sometimes leads to disagreement. A number of studies have investigated intergenerational conflict in Asian communities, for example, the Community Relations Commission (1976) study 'Between Two Cultures'; Taylor's (1976) 'The Half-way Generation'; and Ballard's (1979) 'Second Generation South Asians'. While they are still at school Bangladeshi children suffer because of the social and psychological gap between their parents' and their own experiences. Most of the formal and informal Bangladeshi institutions in Spitalfields, on the other hand, try to preserve the parental culture. For example, the mosques with their social and religious functions, and the cinemas, restaurants and food shops, all bear witness to these attempts. However, the more tenaciously the older generation clings to the home culture the more difficult they find it to adjust to the host society.

This conflict between the two cultures undoubtedly affects the adjustment of the children, as they exist both in their parents' world when at home and in another world when at school. Verma and Mallick (1981) refer to the Community Relations Commission Report (1977) which considered that young West Indians and Asians are ' ... at a considerable disadvantage, being caught between their minority cultural origins and their experiences of growing up in a white racist society', (p.56).

When the Bangladeshi child starts school he finds himself in a milieu which allows a measure of intellectual choice for the growing child. This contrasts with the situation in Bangladesh where strict adherence to explicitly stated norms and values is required. In Bangladesh a formally structured type of education is favoured whereas in England the child may encounter a completely different, stimulating unstructured environment at school which at first he may find very difficult to cope with. As the child gains experience of the English system however, he may begin to achieve better results than heretofore. Watson (1977) has noted this effect, 'Research has shown that while non-English speaking children do not catch up with their brighter English-speaking schoolmates at primary school, many are able to achieve good to average results after several years at school, (McEwan et al., 1975). Certainly there needs to be far more research done in this field ...', (p.4).

THE VALUE TO THE IMMIGRANT CHILD OF EDUCATION AND ADJUSTMENT

In the research to be described in this thesis an attempt was made to fill the research gap in relation to the adjustment, behavioural characteristics and level of attainment and ability among Bangladeshi children in Britain. None of the empirical studies of immigrant children in Britain carried out so far has focused on the question of the adjustment of the junior school South Asian children, nor have any studies considered the wide range of factors involved in the immigrant child's adjustment process. As mentioned on page 17, one of the major interests of the writer was to study the adjustment achieved by the Bangladeshi junior child while in this country. If a multi-racial society is to function harmoniously it is essential that members of different ethnic communities should be able to understand each other's way of life. Though this will involve some adjustment on the part of members of the host community, without doubt greater efforts have to be made by the immigrant groups who are entering a culture with its own established norms and values. Much of this mutual adjustment has to be effected in the schools.

Many urban schools are already multi-racial and educational questions and the finding of appropriate answers to these questions are central to the future of persons of diverse cultural backgrounds if they are to feel happy and lead fulfilled lives. Recently Verma and Mallick (1981) in their concluding remarks relating to " ... the complex factors which contribute to a consideration of the social, personal and academic adjustment of ethnic minorities in British schools', refer to the fact that the educational problems of ethnic minority children cannot be considered apart from the larger social issues. These social issues are separate from, but additional to, the social deprivation also suffered by indigenous children living in decaying inner city areas. However, education is able to " ... has a marked effect on the social and personal development of the individual. It can both exacerbate and relieve the problems of plural societies", (Verma and Mallick, 1981, (p.63), quoting Bagley, 1973).

However, because education, to be effective, has to be related to the needs of specific immigrant children, the present study has concentrated on the effects of British education on Bangladeshi primary children. Watson (1977) stated that the problem of how best to educate children has confronted many nations of the world for years, and this is thus not a new phenomenon. Specific British attempts at ad hoc solutions to this problem are being increasingly called into question. Concern for the effects of a lack of coherent policy and clearly articulated ideology on present and future generations was an important factor in the choice of children to be studied within their school environment as the subject of this present investigation.

Social theorists such as Hill (1965), Little (1968), Bagley (1973) and Verma and Mallick (1981) have also recognised the central importance of education in the encouragement of tolerance and respect between racial and cultural groups. They were of the opinion that only proper education could solve the 'colour' problem without violence. A UNESCO statement (quoted by Baily, 1966) on race and racial prejudice

is as relevant today as it was then: "The school and other instruments of social and economic progress can be one of the most effective agents for the achievement of broadened understanding and the fulfilment of the potentialities of man".

Educational institutions may be regarded as important agents in bringing about the necessary changes and co-ordination in pupils' behaviour and in shaping the future citizens so that the large number of immigrant children may be able to participate fully in the life of the country. As long ago as 1968 Bowker pointed out that education for immigrant children has a twofold purpose: firstly to give them appropriate knowledge which will enable them to compete for jobs and secondly, to help them 'resocialise', i.e. to learn an additional set of social rules and customs so that they can play a full part in the life of the host country. Indeed, 'adjustment' can be regarded as the ability to learn such rules, though a fuller definition of adjustment is given on page . Neither of these above mentioned aims can be separated from the crucial issue of the child's personal adjustment to a 'strange' environment which poses a tremendous test of character, conditions the child's response to learning, and affects his performance. The writer agrees with St. Romain's observations (St. Romain, 1973) that although school is only one of the many socialising agencies it is the most important force in the formation of relationships which can improve the adjustment and socialisation of immigrant pupils. Observations and discussions with teachers and parents suggest that in spite of parental distrust and fear it is recognised that 'education' is likely to be the best road to the realisation of the hopes that they had for their children when they first came to this country, and which have become dulled through the day-to-day experiences of hostility from a white, largely racist society. A good relationship with a teacher helps the child to communicate with other people who do not belong to his own ethnic and cultural group. Even though the school is only one of a number of socialising agencies there is some evidence that pupils' social relationships can be improved by positive experiences at school.

Youngman and Lunzer, based on their joint research project, (1977) have emphasised the strong influence that school life exerts on pupils. There is a wide variety of influences present in school and it is only to be expected that a child's adjustment to the environment will affect his ability to function successfully in it. Schools are potentially one of the most valuable ways of educating future citizens about the culture of the indigenous society; however, the education they offer should also enable children to understand members of other ethnic groups.

The problems which education in a foreign culture causes the immigrant children, and the solution to these problems, cannot be separated from a variety of more general problems which the immigrant child meets in the wider society in which he lives. His adjustment to the educational environment is likely both to mirror and directly affect his social adjustment to living in the host community. This kind of adjustment has been found to be of crucial importance by educationalists and psychologists. Verma and Mallick (1981) have discussed the relationship of educational problems of black and Asian children to the larger social issues connected with living as an ethnic minority group. Bhatnagar (1970) discusses the adjustment problems of West Indian and Cypriot children frequently found among those children who came to this country at a particular age, and who experience extreme tensions resulting from the contrast between their home life and the norms and values of the host community. Their lives at home are bounded by attitudes which have their origins in a tropical rural society where social ties are strong and where religion is a very powerful force, but the contrast between these and the impersonal demands of an advanced western society leads to ambivalent and confused feelings among the immigrant children which in turn cause serious problems of adjustment. Martell (1976) has noted this difficulty in his research with Asian children and writes that immigrants face enormous problems of adjustment, and life in this country is a test of their character and ability to adjust.

Adjustment to life in school is an important goal to be achieved by all children but for the immigrant child it becomes a problem which he cannot escape.

As newcomers they feel the need to adjust to a great variety of conditions which make up school life, and they have to do this at each stage in their school career. Their ability to adjust may be rather limited when they confront the gamut of educational experiences, including language, peers, teachers, layout of classrooms, teaching aids, and the other aspects of the whole system. Thus the present writer has concentrated on this central issue in the education of immigrant children. There are, however, other reasons also for focusing on adjustment.

One of the most serious difficulties which the children experience in their adjustment process is their lack of familiarity with the English language. This has been expressly stated by most researchers dealing with the education of immigrant children. In the DES Education Survey 13 (1971) it is stated that, 'The most urgent single challenge facing the schools concerned is that of teaching English to immigrant children', (p.9). Saint (1963),commented that 'Here are children of an Asiatic, immigrant, largely illiterate minority within a working class English community... almost all lacked aural-oral skill in this language. This lack of facility with the vital means of communication in the new educational and social environment is, of course, the key factor in their problem', (p.34). It is the lack of facility with the English language which can be considered to be the major factor that contributes to the general backwardness of Asiatic immigrant groups. Verma and Mallick in their recent study (1981) also comment on the fact that these Asian immigrant children who have a problem speaking English ' ... minimise their language disadvantage by living in areas with a high concentration of fellow countrymen', (p.55). The fact that most Asian children do not speak English at home can be considered a hindrance for them when they try to learn English at school. Verma and Mallick quote a study by McEwan, Gipps and Sumner (1975) which

showed that Asian children aged between seven and eleven ' ... who spoke some English at home had a distinct advantage in terms of general language skills and scholastic achievement over those who had never or had hardly ever done so', (p.55).

The children who are not advantaged in this way are unable to manage day-to-day class work and cannot speak to their teachers or understand what they say. The codes and discipline of school life are administered in the new language in addition to the new subjects they must learn, while their life at home is carried on in their mother tongue. Life frequently becomes fraught with difficulties for the child and he becomes miserable and dejected.

The necessity of the immigrant child becoming an effective user of the English language is clear. However, there are a number of problems associated with the teaching of English to immigrant children at school. Derrick (1966, 1967 and 1968) has discussed this subject extensively. She holds the view that immigrant children whose English is inadequate do not benefit as much as they might from formal English lessons at school because too often they do not become participants in the educational process but remain passengers. Derrick (1966) also states that 'There is no doubt that intensive language teaching is the most effective, and that the biggest gains are made when the teacher sees his pupils often', (p.17).

The DES, in a publication entitled "English for Immigrants" (1963) comment on the necessity for teaching English to pupils whose command of the language is poor. The necessity for "a carefully planned, intensive course making full use of modern methods of language-teaching", (p.15), is stressed. "Such special classes should be staffed by teachers with some knowledge of modern methods of teaching English as a Second Language", (p.15). Recommendations for such teaching applies to children in both primary and secondary schools.

However, it is now generally recognised that such teaching of English is not in itself adequate. Hoyle (1981) has written on the positive effect which (formally) teaching children their own language has for their general development. This seems particularly important for such children whose parents speak no English at home. Hoyle is of the opinion that if the child's own language is ignored by the school then it is tantamount to holding this language in low esteem; and Hoyle continues " ... then the child that uses that language will be held in low esteem and, indeed, might well be confused into holding himself in low esteem", (p. 2). He considers that respect for the child's language " ... coupled with a positive attitude to his/her background and culture, will make all the difference to that child's self-respect, and thus to his/her performance and behaviour in the classroom", (p. 2). This entails the teacher getting to know the language of the children he is teaching. Such advice is, of course, a counsel of perfection, but Gaarder (1972) has also discussed the many advantages which a bi-lingual education gives the Mexican-American child whose education he described. Such advantages, however, can also apply to children from those ethnic groups whose parental language is not English. Some of these advantages have been discussed earlier; an additional advantage mentioned by Gaarder is that an awareness by the school of the advantage to the child of both the child and his teacher knowing the child's parental language "facilitate(s) a strong, mutually-reinforcing relationship between the school and the home community", (p.69). Further incidental advantages to the child are that he will be literate in two languages and, as far as the ethnic community is concerned, the values, norms and culture of the community are kept alive from one generation to the next. Conte (1979) has also pointed out that a child is more likely to progress fast academically if he is given opportunities to practice his own tongue. This should also help him to be better adjusted both socially and academically. With reference to this Verma and Mallick (1981) have described the initiative taken by the European Economic Community. Experiments in teaching migrant children their

traditional language, culture and religion have been carried out in British schools as part of this scheme, though Verma and Mallick mention that there is still not wide-spread acceptance of this policy by British teachers.

Culture shock associated with language difficulty is another severe problem which the child must face when immigrating to this country. Within the larger context of culture shock children come up against a radical difference in educational practices from those to which they were accustomed at home. A mode of learning which demands an active involvement on the part of the child, who must discipline and pace his own work in creative projects and form his own ideas and translate them into activity, is incomprehensible to a child used to an authoritarian and rigid system. Children faced with this situation find themselves quite at a loss. This educational problem has been noted by other writers, and a statement from Morrish (1971) is worth mentioning here, ' ... many of their (Pakistani) children find it very difficult to adjust to a system which demands that they shall enter into a programme entailing self-discipline, personal involvement in heuristic approaches to knowledge and truth, and the opportunity to participate in creative project work. Many young Pakistanis, as well as other coloured immigrants, when faced with the problems of active engagement in the learning process, have suffered a temporary 'culture shock'. They find themselves quite unable to initiate thought and action after having lived under a regime of authoritarianism and submission', (p.229).

The difficulties of culture shock are made worse by colour prejudice. Research has shown that colour prejudice has a significant effect on the adjustment process. Children who find difficulty in meeting the demands of two cultures may become socially distanced and unco-operative as Sing (1962) has stated.

As far as colour prejudice is concerned, Jeffcoate (1979) considers that immigrant children have to face a racist society, and he suggests that this requires from the schools " ... a total response", (p.4).

Brittan (1976), in her report on multiracial education, comments on the paradoxical answers teachers gave to some of the questions on a questionnaire on teachers' opinions on whether the percentage of immigrant children in a school should be restricted. She found that " ... a relatively low proportion of teachers find multiracial classes more satisfying to teach", (p.190), but " ... a high proportion felt that the schools were enriched by being multiracial in composition", (p.190). She suggests that there is a divide between what teachers feel and desire, and what they think they are able to manage in reality in the classroom. It is likely that there is no overt prejudice on the part of most teachers in British schools, but that the teachers' unfamiliarity with the language, customs, norms and values of their immigrant pupils, coupled with a lack of support from the education authorities, makes it difficult for them to carry out multi-racial activities in class which could benefit all the children of whatever ethnic origin. Bagley (1975) does however, suggest that teachers' views on " ... deviant children are affected by the children's apparent country of origin"; however he also refers to the possibility that this may be due to the teachers rationalising "this apparent deviance in terms of the difficulties surrounding migration", (p.288).

There is evidence, though, mostly from the U.S.A., of the undoubted prejudice exhibited by some white teachers towards the black child. Milner (1975) quoting Hoehn (1954) wrote that "When children are seen as problematic by the teacher, there is much greater likelihood of friction and unsuccessful relationships between them. And when a whole social class or racial group is construed in this way <u>in advance</u> difficulties arise from the outset", (Milner, p.175).

As far as Great Britain is concerned, because many of the children have arrived here quite recently the contrast between the new and the old is still fresh in their memories. The complexity of life here makes an initial involvement difficult, a problem which is compounded by the reticence engendered by the sense of loss which they feel. Plainly

these emotional and practical handicaps prevent children from adjusting happily to the school environment. In the classroom situation, they cannot behave as they are expected to by the teacher even if he is not already prejudiced against them, which undoubtedly affects their whole educational performance.

The Bangladeshi community in Tower Hamlets faces the general problems which all other immigrants have to face, and in addition some especially face severe problems arising from the historical background of the area where they have settled. The tension between their own strong roots, coming as they do from a remote and rather backward are of Bangladesh, and the realities of life in East London, impose additional strain. In consequence, the adjustment problems which the children face are especially great.

Every sphere of Bangladeshi children's lives changes utterly on their arrival in this country. The difference in physical environment is the first problem they have to face. They find the weather cold and unpleasant. They are forced to spend most of their time indoors whereas back home in Bangladesh they are free to roam around and have plenty of room in which to play, and there is no heavy traffic to deal with. In England the native people seem cold and indifferent to them and find their customs strange. Thus these children find themselves living in a strange and alien world.

The most important formal institution in a child's life is his school. The greater part of his day is spent in a place where he confronts the host culture directly. Adjustment to this stressful and anxiety-provoking situation is crucial for Bangladeshi children starting school in Britain, if their experience is not to be a traumatic one. Most Bangladeshi children are also under pressure from their parents to achieve some measure of success, and to obey the teacher while at school even though they are expected to abide by their own customs out of school hours. The stresses and strains in the lives of these children have been noted by St. Romain (1973): they not only find it difficult to measure up to the classroom work, but also find the general stresses and strains of school

life in a strange environment difficult to deal with. Whether the child adopts to the new environment or withdraws from it is highly relevant to his social and psychological adjustment.

Problems of the kind discussed above are often associated with immigration and cause especially severe adjustment difficulties for these Bangladeshi immigrant children. Anxiety, which is the product of the tension between the two cultural and physical environments, combined with the experience of violence and intimidation, is likely to influence the Bangladeshi child's educational attainment and social and emotional adjustment. Whether the child is able to adjust to his new life in the U.K. may depend to a very great extent on his experiences at school. The school is a bewildering microcosm of the larger English society and one in which the child is forced to participate; thus his social and psychological adjustment to it is absolutely essential if he is to adjust into British society. The ability to function effectively in school prepares the child for his future in the outside world.

In addition to the difficulties facing immigrant children in school, there are other factors present in their lives which can affect their adjustment ability. These include whether the child has attended school in his own country, the prevailing attitudes towards children there and whether the child has accompanied his parents to this country, joined them later, or was born here (St. Romain, 1973). The attitude of the host community to them is also not uninfluential in effecting adjustment. Milner (1975) quotes several examples of the prejudice of the host community towards non-white citizens in Britain. Thus from a survey conducted in 1969 (Rose et al.) it was found that West Indians were shown prejudice in relation to job applications, motor insurance and housing. It is not unlikely that such prejudiced attitudes towards the children's parents and the difficulties which the parents thus face could lead to problems for the children also.

Thus such children suffer a more complex form of

deprivation than native-born children living in the same environment into which they were born because immigrant children stand between two cultures. They require a very sensitive response from the people who are to teach them, a response based on the understanding of these problems, and their education must help them to adapt to conflicting social, cultural and emotional demands, 'Their education must involve social, cultural and emotional adjustment of a special kind' (Education Survey 13, 1971, p.5).

One of the most important functions of a school is to enhance the social development of the child in a broader way than is possible in the context of the family. The development of social skills, i.e. the ability to recognise and respond appropriately to the behaviour of others, necessitates some process of adjustment to the demands of the outside world. Thus, alleviation of the problems of social adjustment in these children must be considered a high priority. The process of adjustment relates to the need for every child to find a personal and social identity. Verma and Mallick (1981) have referred to the problems of adjustment which the children of immigrants face, because for them growing up in Great Britain presents problems of identity formations. Verma and Mallick quote such children as saying "Am I English or not?", "Am I a West Indian?", "Am I a Pakistani?", (p.52). All children have to adjust to the adult society which they meet at school, learning the social skills required for this, but the child "Between two Cultures" (Watson, 1977) has to face greater adjustment problems.

Smith as long ago as 1950 pointed out that among the many aims which schools should have, two are outstanding: to help every child find personal security and to help the child develop the ability to function within groups. The child must learn the meaning of behaviour within a new social context and must be able to initiate social activity with confidence and learn to develop a well-integrated personality.

Psychologists have discussed the concept of life adjustment

as a balance between personal and social adjustment, but these are interlinked, as personal adjustment is assumed to be based on a feeling of personal security and social adjustment on feelings of social security. So, for a complete picture of an individual's ability to adjust, both dimensions should be considered.

There are particular aspects of personal and social adjustment which have a special significance in the lives of educationally disadvantaged immigrant children. These feature in their domestic and community lives, as well as in their school lives. The role of the school in aiding immigrant children to make the appropriate adjustment is of great importance.

In a general sense education can be regarded as individual development in the direction of socially approved goals. This process can hardly take place unless some social adjustment is made. It is frequently said that one of the teachers' most important tasks is to help pupils develop well-balanced personalities, able to function in and adapt to various social situations. Thus the role of the teacher in school is vital in this process, and the guiding of children in the direction of good social development is essential if their education is to have any value at all. Verma and Mallick (1981) have stressed the "real contribution (which teachers) make in multi-cultural education", (p.65).

The process of adjustment for Bangladeshi children, although affected by all the variables discussed, additionally differs significantly from that of other immigrant groups. The particular cultural characteristics of the Bangladeshis introduce other dimensions to the problem. The Bangladeshi family, and indeed, the whole community, normally as mentioned earlier remain a very close-knit and self-sufficient group, and this, it is assumed, must present adjustment problems to the child. The problem of adjustment for the Bangladeshis is further aggravated by their recent arrival and the complete and utter contrast between their old and new social and physical

environment. The complexity of life in England when compared with the rural life in an Asian country increases the initial sense of loss which the child experiences.

Thus the present research was primarily concerned with the exploration of various factors of adjustment by the Bangladeshi child to the demands of the host society and community, and further to ascertain the kinds of adjustment these particular immigrant pupils do make; and through the present study it is hoped to provide insights into the social and personal dimensions of adjustment, and also indicate where additional positive action might be taken to help those who are particularly disadvantaged in this way.

So the present study was designed especially to inquire into certain aspects of the personal and social adjustment of Bangladeshi immigrant children in the junior schools in the Borough of Tower Hamlets, East London. For this purpose the California Test of Personality (CTP) was administered. (Details of the CTP's suitability, and a detailed discussion of all the tests used in this study are given in Chapter 6).

It is, however, not adequate merely to obtain measures of the personal and social adjustment of such children. In order to understand some of the crucial problems underlying adjustment, it was necessary to examine other aspects of the development of the Bangladeshi junior school child attending school in Tower Hamlets. Though the main concern of the present study has been the process of adjustment, other factors were considered essential and could not be ignored if a balanced picture of the child's life is to be built up.

The present study attempted to compare a group of indigenous children with a group of Bangladeshi immigrant children on a number of psychological dimensions, using the indigenous group as a control group. As mentioned earlier, both groups attended the same schools and have a similar physical environment and socio-economic status. Both groups come from the same educational priority area.

In order to gauge the effects of a period of schooling in this country on the variables under investigation at the primary school stage Bangladeshi children of more than two years schooling in the U.K. were compared with Bangladeshi children who had only had between 1 - 2 years English schooling. The results obtained from the various tests have been analysed in terms of the length of schooling experienced by the Bangladeshi children. In addition, because of the pronounced differences in the manner in which Bangladeshi girls are treated at home when compared with their brothers, a separate analysis has been made according to the sex of the children.

It should also be pointed out that the Bangladeshi children tested for this investigation represented, by virtue of their cultural and geographical homogeneity, a unique sample.

No research findings can be said to be final and the writer does not claim that her study will show conclusive results. If it is to serve any useful purpose, the findings should be able to suggest some ways of tackling the intricate problem of adjustment which Bangladeshi immigrant children in British schools face.

PART - II

CHAPTER 2

HISTORICAL BACKGROUND TO IMMIGRATION IN BRITAIN

The aim of this chapter is not only to introduce the subject of immigration from Bangladesh but to set it in the overall context of white and coloured, and particularly Asian immigration to this country since the Second World War. This chapter comprises four sections:

Immigration to Great Britain
Emigration from South Asian countries
Emigration from Pakistan including Bangladesh
Immigration into Tower Hamlets, especially from Sylhet, Bangladesh

For much of the information contained in this chapter the author has drawn extensively on the following authors, particularly Rose et al. (1969) 'Colour and Citizenship.'

1) Bowker, G. (1968), 'Education of Coloured Immigrants', London: Longmans.

2) Desai, R. (1963) 'Indian Immigrants in Britain', Oxford University Press.

3) Rose, E.J.B. et al. (1969) 'Colour and Citizenship' - Institute of Race Relations, London: Oxford University Press.

IMMIGRATION TO GREAT BRITAIN

The migration of peoples has been a universal trait throughout human history and the resulting relations between distinctive communities a major force in the development of civilisations. There has always been a tendency for man to migrate in search of better living conditions and immigration as a distinctive movement is simply that tendency as it is perceived by those already resident in the host country.

Successive waves of immigrants over the past two hundred years have formed the basis of modern British society. This process has continued steadily up to the present day, encouraged latterly by the poverty, deprivation and over-population prevalent in the tropical Commonwealth countries. In spite of legal restrictions now imposed on migrants, the movement still seems likely to continue.

History reveals that in the last 300 years a wide variety of immigrants have arrived in this country, for example, Huguenots fleeing from religious persecution, East European Jews in this century; Spanish nationals during the civil war; and Europeans during during World War 2. These peoples left their own countries for some of the most common of the reasons which account for large scale migrations, i.e., the necessity to seek shelter from religious and political persecution and to escape hopeless poverty. But whatever the cultural differences between these diverse groups, compared with the recently arrived immigrants from the tropical Commonwealth, they appear as a homogeneous, uniform European group. It is unfortunate that the cultural differences between groups of Commonwealth immigrants have also become marked as they are seen solely in terms of skin colour. In fact, the influences acting on these cultural groups vary very widely indeed and affect the nature of their response to their new environment.

Ethnic groups in Britain are commonly classified in four main categories (Lobo, 1978):

- Negroes - The West Indians, Africans
- Asians - Indians, Pakistanis, Bangladeshis, Sikhs
- Chinese
- Italians, Cypriots and Greeks, Poles, Hungarians.

There are now about three million immigrants, about half of them white Europeans, Irishmen or from the Old Commonwealth. The other half have come from the New Commonwealth countries of Asia and Africa, and from the South East Asian countries in which 'overseas Chinese' have settled. It was estimated that there are 1,433,000 white immigrants including 615,000 Irish and 265,000 Mediterranean, 618,000 Asians, 236,000 West Indians, 30,000 Africans and 81,000 Chinese in Britain (Humphrey, 1979, quoted in Lobo, ibid). The Franks Report found that there were 1.9 million people from the New Commonwealth and Pakistan living in the U.K. or one in every 30 of the general population, (Lobo, ibid.).

A coloured population is not an entirely new phenomenon in Britain. In fact, the first coloured 'immigrants'

were likely to have been brought in in the sixteenth century by John Hawkins and John Lok, the first of the African slave traders. By the middle of the seventeenth century the number of 'black-a-moors' had risen considerably owing to the current fashion among the nobility of owning a black servant. During the Queen Anne period of the eighteenth century small black boys were frequently employed as attendants for fashionable ladies (Bowker, 1968).

By the mid-eighteenth century the Negro population of London was estimated to be as great as 14,000-20,000 (Field and Hawkins, 1971) and consequently a Negro on the streets of London could not be counted an uncommon sight. There were also Negro populations in the major seaports, like Liverpool and Bristol.

Although the slave trade was abolished in 1807, it was not until 1834 that the condition of slavery was abolished by statute. However, a notable case in the history of the British and the slave trade had occurred as early as 1772 when a Negro boy called James Summersett, who had been recaptured after an attempted escape from his master, was discharged by a judge, Lord Mansfield, thereby creating a legal precedent, so that the freedom of slaves had been upheld by the courts much earlier than 1834.

However, many former slaves chose to stay with their masters and those who did choose freedom had to face a life in the poorer areas of the big cities where disease was rife and few opportunities of employment were available. While some died from lack of medical attention, most of them became peddlars and beggars. At the start of the nineteenth century there were many Negro beggars to be seen in the streets of London and they were popularly known as 'St. Giles Blackbirds' because many of them lived in the St. Giles Rookeries. The Poor Law Authorities set up a Committee for the Relief of the Black Poor.

The black population of England was reduced when numbers of Negroes left Britain as free labourers bound for the

West Indies. Also, in 1786, 411 Negroes and 60 white prostitutes were sent to Sierra Leone in West Africa to settle in what is now Freetown. By the mid-nineteenth century the coloured population had been reduced considerably. It was now concentrated in a few areas and had begun to merge gradually with the local population so that it was becoming less and less visible.

Little is known of the lives of the remaining few slave descendants, although it is thought that they made their living as peddlars and small traders, or found work as crossing sweepers and domestic servants. By the end of the nineteenth century this group had virtually disappeared except for the familiar figure of the turbaned Indian travelling salesman.

Negroes, and Asians recruited from India, now began to appear in the merchant Navy as stewards and ordinary seamen. Thus at the end of the nineteenth century the second wave of coloured settlement began. These were almost entirely discharged seamen who lived in the seaport areas of London, Liverpool, Cardiff, in Tiger Bay, and Bristol. Before the First World War there were a number of African students at the universities of London and Liverpool. However, the foundations of the present coloured community were laid largely after 1914 when black members of the Armed Forces were demobilised in the U.K., and sailors whose ships were requisitioned found themselves stranded here. Coloured workers were also recruited specifically for work in munitions and chemical factories in London, Manchester and similar large cities, because of these industries' labour shortage, joining new women workers.

The first adverse reaction to the new wave of coloured settlements, in which Negroes were attacked, occurred during the period of widespread unemployment in the 1920's. Disillusionment and long periods of unemployment led many to abandon the sea or seek repatriation under official schemes. Further settlements were discouraged by the Special Restrictions (Coloured Alien Seamen) Order 1925 which

required seamen to register as aliens despite the fact that they were coloured subjects.

This attitude was reversed during the Second World War when the labour shortage in Britain became acute. Coloured seamen, skilled and semi-skilled workers from the West Indies were welcomed especially to Northern towns and cities to contribute to the War effort. These people were no longer confined to the seaports and fringe areas but moved freely in the country to wherever their labour was required. Thus it was possible for some of the British to begin to meet coloured people and no longer to see them as objects of curiosity.

A most successful scheme, carefully planned by the RAF and Ministry of Labour in which 7,000 West Indians were recruited as ground personnel for the RAF, had a great deal of influence on subsequent immigration to Britain from the West Indies. Mr. Learie (later Lord) Constantine acted as welfare officer for these schemes. At the start there was difficulty in persuading other employers to accept West Indian labour and in obtaining accommodation for the workers, but these problems were eventually solved. Although the vast majority of these workers and the demobilised airmen did return to the West Indies in 1947 when the scheme was wound up, the worsening of the chronic unemployment at home through increases in the cost of living led a large number to think of returning to Britain.

Prior to 1952 when the McCannon Walter Act was passed, Jamaicans had been able to migrate to the U.S. relatively easily. In fact, between 1911 and 1921 the U.S. was the main receiver of Jamaican migrants both temporary and permanent. As in Britain, thousands of workers were recruited for undermanned sections of the economy during the Second World War; and nearly 50,000 agricultural workers went to the U.S. in this period. After 1952 immigration was restricted to 1,000 per annum and Britain became the only major industrialised country open to large scale West Indian immigration.

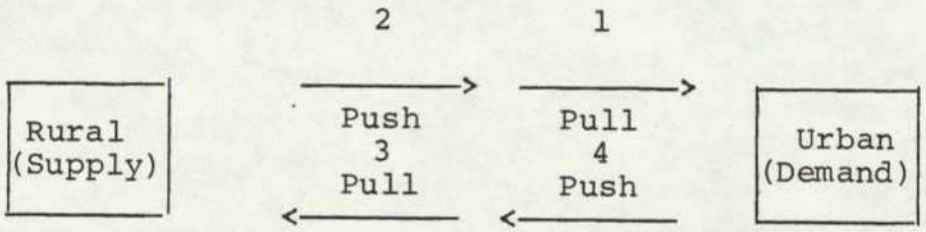
Britain was uniquely attractive to West Indian immigrants because during their colonial past their way of life and the values of their society had been modelled on those of Britain. It was known in the West Indies that there was employment and opportunities of advancement in Britain and many West Indians took their first chance to come to England. This came in June 1948 when a former German pleasure cruiser, the Empire Windrush, called at Kingston on her return to Europe from taking European emigrants out to Latin America. The liner was booked to capacity with 492 people, mainly Jamaicans who had served with the RAF. The sudden arrival of this comparatively large number caused questions to be asked in Parliament and an outcry in the Press. Hasty arrangements were made to attend to the welfare of these migrants and they found work without much trouble.

At this time the number of immigrants was still small and did not reach 1,000 per year until 1951. Rising from an estimated level of more than 3,000 in 1952 and 1953, by 1954 West Indian and especially Jamaican immigration had reached a numerically significant level at between 10-11,000 persons and it reached its first plateau in 1956. From 1955 the Home Office has maintained records of all Commonwealth arrivals and departures so that the net number of arrivals for any one year could be calculated. In fact, the level for all Commonwealth immigrants increased from a few thousands in the early fifties, to about 42,000 in 1955 and by 1961 had reached 136,000. A large number of these individuals were students, mainly from Asia and Africa - the number of students rose steadily to reach 35,729 by 1961.

The West Indians were followed by two other groups, firstly by the West Africans who began to arrive immediately after the War, and secondly by Asians from India and Pakistan. The Indians, Pakistanis and Bangladeshis (formerly Pakistanis), who had been seamen gradually moved from the port areas after 1945 to find work in the industrial inland areas.

The reasons for migration are of two kinds and in most cases both operate to a greater or lesser extent. There are the factors which attract potential immigrants such as availability of work, higher standard of living and greater opportunities in a new country, and those factors such as poverty and lack of a secure future because of wars, religious persecution, political unrest or endemic unemployment which force a settled population to think of moving elsewhere.

A simple theoretical model of this type of immigration is provided by the push-pull hypothesis which relates the factors of supply and demand. The model as stated by Islam (1976) supplied by Wilson (1972) is most appropriate in that it assumes two areas, one of which is rural and the other urban, i.e.:



The urban labour market exerts an attracting force (1) on rural people wishing to improve their standard of living (2). There is in forces 3 and 4 an opposite effect caused by the desire of the migrant to return home and to maintain links with traditional society which provides security. There is also the tendency for industries to shed labour at their own convenience and thus drive the worker back to his old home.

The partition of India and Pakistan had caused considerable upheaval in border areas where many Sikh Punjabis

lost their land: Sikhs had always been adaptable, enterprising and willing to travel and consequently many came to work in the U.K. as they had earlier taken the opportunities to go to British colonial East Africa. The mainly Hindu Gujeratis also came from India to seek opportunities for education and outlets for their enterprise unavailable in their densely populated state;(they too had a previous pattern of migration). The Muslim immigrants from both East and West Pakistan were mainly from poor hill districts. Almost all the immigrants from the subcontinent in the 1950's were young men, and few of them brought their wives and families.

Until the mid-fifties there remained a large shortfall in the number of unskilled labourers required to fill the vacancies in British industry. These had not been filled either by the Southern Irish or the European volunteer workers so that when the first West Indians arrived they were able to find work quickly. With the economic downturn at the end of 1955 and consequent fall in the demand for labour, Caribbean immigration fell markedly, remaining below the level of 1956 until 1959. However, rumours that the British Government intended to apply restrictions to the numbers entering caused a sudden panic. In the 1960's immigration leapt to a new high from 1959 when there were about 126,000 West Indians living in the U.K; by 1961 the numbers of West Indians entering had risen to 66,300 and from 1961 to 1962 net arrivals amounted to 98,000. This sudden increase in the numbers of West Indians and Asians helped accentuate many of the social problems that were already prevalent in the areas in which they had settled (Bowker, 1968).

A similar but even more dramatic increase can be seen in the numbers entering from India and Pakistan (including Bangladesh). In 1961 migration from India increased fourfold over the previous year and migration from Pakistan tenfold. Before the threat of controls, migration from the sub-continent had remained at a fairly low level, although fluctuations

could be observed. In 1959 the figure for both countries was only 3,800 while in 1961 the number of Indians rose to 23,750 and Pakistanis to 25,100.

More than half the Indians and about three-quarters of the Pakistanis living in Britain before control arrived in the eighteen month period from January 1961 to June 1962 in contrast to the West Indians, a third of whom arrived during this period.

In this period there were two censuses, in 1951 and in 1961. The earlier census shows clearly how numerically small was the coloured population born overseas. The number amounted to hardly more than 75,000, only 1.7 persons per 1,000 of the total population. In 1961 the coloured population amounted to 7.3 persons per 1,000 of the population. This represented a third of a million persons born overseas, half of whom were from the West Indies.

It was felt, as time went by and the numbers continued to increase dramatically, that restrictions were called for. The proposed changes in the immigration law were brought into effect with the Commonwealth Immigrants Act of 1962 which significantly altered the pattern of immigration into the U.K. The Act introduced a system of admission by vouchers applicable to all Commonwealth citizens wishing to work and settle in Britain. The entry of all but the following specific categories was restricted:

a) Students and visitors
b) Immigrants settled in Britain and returning from abroad
c) Spouses and dependants of immigrants already here
d) Persons who were issued 'employment vouchers'
e) Individuals who had already secured an offer of employment in the U.K.

Immediately following the Act, the number of immigrants arriving declined sharply, but by 1963 the number began to rise again as dependants, wives and children began to join

men already settled in this country. In 1963 98% of the West Indians who arrived were women and children and in 1964 the figure was 90%. The percentage of dependants from India rose from 38% to 60% and East and West Pakistan from 21% to 60%. By 1967 50,000 of the 55,000 non-white Commonwealth immigrants who entered the country were dependants.

In August 1965 a White Paper was issued entitled 'Immigration from the Commonwealth' (HMSO, 1965) which proposed instituting a quota of 8,500 Commonwealth immigrants holding work permits. Further restrictions were introduced in 1968 following the sudden influx of Asian immigrants from East Africa. These were contained in the 'Commonwealth Immigrants Act 1968' (HMSO, 1968) which, for the first time, imposed controls on U.K. citizens who were neither naturalised or registered (under the 1948 and 1964 Nationality Acts) in the U.K. This effectively covered the Kenyan Asians.

In the mid-sixties it was estimated that there were just over a million Commonwealth immigrants with a total U.K. population of 54,744,100 (HMSO 68, 30 June 1966). At that time the number of Pakistanis was 150,000. The vast majority of the B vouchers issued to those possessing special skills or qualifications went to Indians and Pakistanis (Deakin, 1970). Gish (1969), as quoted by Deakin, showed that the number issued to doctors increased from 42% of the total number in January-May 1968 to 71% for the period June-December 1968.

The Commonwealth Immigrants Act 1968 restricted the right of entry for dependants to those under 16 years of age with at least one parent who was a Commonwealth citizen resident in this country or seeking to enter the country with the dependant. A medical examination now became a condition of entry. A further 1,500 vouchers per year were to be made available to U.K. citizens allowed by this legislation to enter Britain if they wished to do so. The Act imposed heavy fines or imprisonment on those responsible for bringing immigrants into the U.K. illegally.

A Home Office study (Report of the Select Committee on Race Relations and Immigration, Vol.IV, pp.3-5, HMSO, 1969) made in 1968 showed that a high proportion of the dependants arriving at this time were joining heads of households who had migrated in 1963 or earlier, 51% of West Indians and 41% of Asians. Thus, as the number of new migrant heads of households decreased, the proportion of dependants among the immigrants increased and among those the proportion of children increased to form the largest group. The numbers of Asian dependants were much higher than those from the Caribbean. Calculations by Eversley and Sukdeo (1969) suggested that the maximum number of dependants likely to enter was under 250,000. The largest group of these, an estimated 100,000, would be from Pakistan. Their prediction, that the rate of entry of dependants would start to decline, is supported by the figures for 1968 and the first half of 1969 shows a further drop. Further confirmation is shown by a written answer to a question in the House of Commons in February 1970 when Mr. Callaghan stated that in 1969 36,557 Commonwealth citizens had been admitted for settlement of whom 29,454 had been dependants. This showed a decline of approximately one third, including dependants. Preliminary figures for 1970 released by the Home Office show a decrease of a little more than 20% compared with January 1969.

Even then it was felt that control should be imposed on Commonwealth immigrants. The Immigration Act 1971 was enacted to impose further control on immigration. The Act came into force on the first day of January 1973. It introduced the concept of 'patriality', only the patrials have 'right of abode' and even citizens of the U.K. and Colonies are now subject to control.

The Act has empowered the Home Secretary to make rules as to the practice to be followed in the administration of the Act. The dependants of those already settled here are still allowed to come here. They include the wives, children under 18 (if they are dependent and not married), dependent parents over the age of 65 (or a dependent widowed mother). The husbands and fiances can still come for settlement but the latest rule (H.C. 394) provides that only such women can sponsor husbands or fiances who are citizens of the U.K. and Colonies having been born in the U.K.

Students and visitors are still allowed if they can satisfy the authorities of the genuineness of their purpose. Businessmen can settle as before but under the new rules they must now be able to bring in £10,000 from abroad and must be able to support themselves without employment or recourse to public funds. Those immigrants who were not settled here on 1st January 1973 must prove ability and willingness to support the dependants they want to bring in. Returning residents are readmitted if they were ordinarily resident here within the preceding two years. The right of appeal introduced by the Immigration Appeal Act 1969 has been retained in the 1971 Act. Close relatives in distress can, however, be admitted if they qualify for exceptional compassionate circumstances.

Prospective immigrants can still apply for 'work permits' to the Department of Employment which are normally issued for a maximum of twelve months (extendable).

Doctors, dentists, Ministers of Religion, etc. can be admitted without the requirement of holding a work permit though they are coming for employment.*

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*Sources in respect of immigration laws:

1. Immigration Act 1962, HMSO.
2. " " 1968, "
3. " " 1971, "
4. " Appeals Act, 1969, HMSO.
5. 'Statement of changes in the Immigration Rules' (from time to time) made by the Secretary of State under authority of the Immigration Act 1971, HMSO.

The first Commonwealth immigrants were mainly young, single men from peasant backgrounds. Some had left families in their homelands and many were illiterate, unskilled and with no capital behind them. The West Indians had some advantage in knowing English already, but all suffered when it came to the English climate. The men congregated in centres of industrial activity where they found largely arduous, unpleasant and poorly paid jobs with no prospects of advancement. They lived together in groups according to their cultures and bore the expenses of food and housing and amused themselves together. Eventually these men found homes of their own and sent for their families.

The coloured immigrants' environment has been overwhelmingly urban. The 1961 Census showed that 80% lived in towns of more than 50,000 inhabitants and half in the ten largest cities of Britain. The movement of the indigenous population away from the central areas of cities to new housing estates on the edge of the towns and of the middle class element to leafier suburbs left a void of aging, low-quality property, which was available often at excessive rents. Thus the ghettoes began.

The distribution of immigrants even within London has been uneven, and particular areas are known for their ethnic minorities, e.g. West Indians in Lambeth, Paddington and Notting Hill, were originally attracted to those areas by the proximity to their jobs in transport, catering, cleaning, hospitals and factories. Similarly Indians and Pakistanis settled close to industries in Southall and North West London (Lobo, 1978). As mentioned below, the Bangladeshis remain concentrated in the East London docklands.

The Immigration legislation seems to have ended the possibility of further large-scale primary immigration and the immigrant communities in Britain will now consolidate themselves.

EMIGRATION FROM SOUTH ASIAN COUNTRIES

Unlike some other societies where historically emigration has been essential for survival, such as Ireland, the countries of South Asia, India, Pakistan and Bangladesh from which the bulk of Asian immigrants to the U.K. have come, are virtually unaffected by the small proportion of their population which has migrated overseas. The total population of these countries in the mid-1970's was approximately 700 million while the total number which emigrated and settled elsewhere reached only about 5 to 6 million.

However, this is not to say that emigration is not significant in the few areas of the sub-continent from where the vast majority of the emigrants come, i.e. the Punjab, Gujerat and half a dozen small areas in Pakistan and Bangladesh.

Before the Second World War there were fewer Indians than other coloured immigrants living in the U.K., and these were mainly seamen living in ports (as discussed in the previous chapter). During the war, the number of Indian seamen jumping ship increased and they moved to inland industrial areas looking for factory work. The number of Indians living in Birmingham, for example, grew from about 100 in 1939 to 1,000 in 1945 and the bulk of this increase can be attributed to the arrival of ex-seamen in the city. Even after partition, jumping ship remained an avenue of immigration for Pakistanis (including Bangladeshis).

During these early years there were also middle class Indians who settled in Britain. Before 1951 there was a substantial number of doctors and students who had arrived during the war and subsequently stayed. Desai (1963) noted, '... some Indians were sent by the Government of India to acquire skills and help in the war effort. Some, who came as students, particularly doctors, stayed over as a result of the war' (p.3).

The new immigrants arrived entirely independently of the existing small Sikh community, mainly peddlars, who had arrived during the First World War and the 50's. However, the settlers in the early fifties who were able to make a comparatively comfortable living working in British industry often sent for kinsmen and fellow villagers. These prospective immigrants needed a sponsor who might contribute part of his fare and would find him employment and shelter on his arrival in the U.K. East Pakistani (now Bangladeshi) restauranteurs, often arranged for their fellow villagers to come over and were repaid by them on their arrival by periods of work in the restaurant, for board, lodging and nominal wages.

Thus immigration from the sub-continent reached significant proportions after 1952 when the bulk of European immigration had finished. These immigrants were not primarily seamen, although many from East Pakistan were forced to become sailors in order to obtain exit documents as their government would only issue passports with difficulty and delay. Indian and Pakistani immigration into the U.K. has been continuous since 1952 and consists in the main of people wishing to better their economic conditions.

There are considerable difficulties involved in establishing the size of the immigrant population in the U.K. The British Government keeps no record of the number of immigrants who are Indian and Pakistani by origin and neither do the governments of these countries, unlike the West Indian governments. What information exists is further confused by the tendency of British agencies to consider Indians and Pakistanis as a single ethnic group. All estimates are therefore speculative, although fragments of the whole picture have been obtained from sources such as shipping company records for ships sailing out of the ports of India and Pakistan and employment exchange records (Desai, 1963).

However, of the three categories of South Asian

immigrants that Desai described, the first two are numerically insignificant. The first category, consisting of the ex-seamen living in the port areas, does not amount to more than 500 persons. They originated from areas now in Pakistan and have only tenuous links with the society of origin. They are usually living with non-Indian women and have little or no contact with newer immigrants as they live in different areas.

The second category consisting of Sikhs and other Indian peddlars which includes some of the earliest immigrants to this country, and they number between three and four thousand, which includes their wives and children.

The third and largest category comprises the most recently arrived immigrants who gravitated to the industrial areas and are now concentrated in various parts of London, the West Midland conurbation, Southall, Bradford, etc. In contrast with the first and second groups it was announced in the House of Commons that in the first ten months of 1961 the total net immigration from Pakistan had reached 19,280. Amongst these are a second group of Sikhs, displaced from the Punjab to India as a result of partition in 1947 but unable to settle down there. Reports of job opportunities and the progress made by Sikhs already in Britain made emigration attractive.

An important factor which helps to explain this large movement of people from rural areas on the Indian sub-continent was the activity of the local travel agents. In the early stages they were confined to ports and large towns but within only a few years they had extended their influence to more isolated towns. Dahya (1968) mentions that Pakistani agents had established offices in Mirpur town in 1956-57 and this undoubtedly contributed to the ability of the population to respond to the threat of controls and reach the unprecedented high levels of immigration of 1961 and the first half of 1962. It is well known that these agencies often employed illegal methods

to evade restrictions imposed by their own government. These practices continued after controls came into being in 1962 but decreased after the issuing of C vouchers (see p. 72) for unskilled workers was stopped.

The proportion of South Asian women was lower than that from the West Indies. In the late 1950's it was estimated that 4% of the Sikhs living in Southall were women, although fear of impending restrictions in the early sixties encouraged many men to bring their wives to England. During that period, the number of women in the Pakistani community before 1962 was extremely low. The 1961 Census showed that in an area in Bradford with a high concentration of Pakistani immigrants there were 3,376 men but only 81 women.

The men who came to the U.K. during the mid-fifties had been sponsored by former seamen and were mainly married. Moreover, those who had arrived just before the controls in 1959-1962 tended to be younger and single and thus it is the latter group who have brought over their wives since controls were instituted.

Generally speaking, the introduction of a successive series of controls since July 1962 has had these effects. The source of emigration of new immigrants changed from the Caribbean to India and Pakistan and migrants now tended to include more skilled or professional workers than unskilled workers, and more dependants than wage earners.

It is appropriate to divide the series of immigration into three distinct phases; the first running from January 1955 to December 1960 inclusive; the second running from January 1961 to June 1962, the period which includes the bulk of all immigrants; and the last, from July 1962 to the end of 1967, in the period of control. Generally speaking, each of these time periods accounts for about one third of the sum total of net immigration from the three areas considered; however the balance between the West Indians and

Asians has shown a very striking change.

Controls have had a much more marked effect on West Indian immigration and more than half the total immigrant population came to the U.K before 1960. The reverse is true of Indians and Pakistanis entering the country. In the period since control more than half of the Indian total and almost half of all the Pakistanis arrived.

The 1962 Commonwealth Immigration Act introduced a selective system of regulation through employment vouchers issued by the Ministry of Labour. These were tailored to meet the current demand for labour. Applicants were issued one of three types of vouchers; an A voucher for those who had a specific job to come to; a B voucher for those with special skills or qualifications and lastly, a C voucher would be given to an unskilled worker without a definite prospect of a job. This latter type of voucher in fact ceased to be issued after August 1964 although this was not formally announced until the White Paper (Cmnd, 2739) was issued in August 1965. It is clear that the enormous demand for these vouchers led to this decision being taken. There were over 300,000 applications during the first 18 months of the scheme and these were mainly from India and Pakistan.

During this period nearly three-quarters of the 40,000 C vouchers went to Indians and Pakistanis (including Bangladeshis) and only about one-tenth to West Indians. From the introduction of control up to the end of 1967 India and Pakistan were allocated 72,940 vouchers of all kinds, while the West Indies and Guyana only received 14,590. For a variety of reasons the number of voucher holders entering the U.K. was actually lower than the number issued. During the period from control until December 1967, 120,000 vouchers were issued but only 73,270 voucher holders entered and of these, Indians and Pakistanis took up 42,450. From 1965 when the White Paper was issued, the proportion of doctors, engineers and scientists from India and Pakistan

who entered under the B voucher scheme was very high.

A shift has in more recent years taken place from a high number of wage earners to a high number of dependents entering the country. There is evidence of this trend in the body of immigrants from India, Pakistan, West Indies and the rest of the Commonwealth. There are, however, differences in the ratio of women to children arriving from these three main sources. Previously the number of Indian wives accounted for 40% of the total number of New Commonwealth immigrants, but in 1966-67 there was an increase in the number and proportion of children arriving. The usual practice was to leave girls behind with their mothers while boys joined their fathers in the U.K. The entry statistics do not differentiate between the sexes but a survey carried out by International Social Service at London Airport in January and February 1967 showed that out of 387 children under 16 arriving alone from Pakistan and India (proportionately 80% and 20%), only four were girls.

The following table (taken from Census data) shows the main shift in number of immigrants over the period 1960-71 among the three main groups of Asian settling in Britain. This shows clearly the number of women entering the U.K. from these Communities has tended to increase in the later years covered by the table among the Indian and especially among the Pakistani groups, reflecting the increasing proportion of dependents amongst the settlers.

Table 2. Settlers from India, Pakistan and Kenya, 1960-71.

	INDIA		PAKISTAN		KENYA	
	M	F	M	F	M	F
1960	6,515	3,750	3,335	430	650	590
1961	11,765	5,545	10,210	635	835	615
1962	10,945	5,420	9,400	920	1,065	820
1963	11,090	5,110	9,800	1,350	900	810
1964	9,055	6,740	6,910	2,080	1,950	1,395
1965	10,885	9,945	5,215	2,460	2,850	1,785
1966	10,615	10,595	6,420	3,315	2,860	2,245
1967	11,910	11.230	9,580	4,100	4,300	3,520
1968	11,525	12,525	5,480	4,420	6,255	5,600
1969	5,830	8,295	6,400	5,350	2,955	2,955
1970-71	7,055	10,050	7,785	7,115	4,280	4,600

Source: Figures taken from Census, Country of Birth Tables.

N.B. These figures are net. They indicate the numbers settled in Britain in 1971. They do not represent the numbers arriving, of whom a proportion returned to India of Pakistan or moved on to North America or elsewhere. The Kenya figures are not exclusively those of Asian settlers, though it is reasonable to assume that they account very largely for the totals; certainly from 1967 onwards. (Tinker, 1977).

EMIGRATION FROM PAKISTAN INCLUDING BANGLADESH

When comparing the immigrants of Pakistani origin to those from the West Indies who clearly regarded the U.K. as their mother country and were similar in religion and language, one is forced to examine their reasons for emigrating to a country so completely alien to them. Popular English belief emphasises the attraction of wealth and social services to those in lands thought to be suffering generally from poverty, deprivation and over-population. This view ignores both the value of migrant labour to the host community and the wide range of economic and social conditions to be found in nations such as Pakistan. When taken to its logical conclusion this belief suggests that immigration would continue as long as some societies remain at a lower level of material development.

However, it is certainly true that the usual reason for migration by Pakistanis is the desire for a higher standard of living, the original impetus having been disturbance and disruption at home; but the first generation never regarded themselves as settlers and merely wished to be left alone to pursue their economic goals before returning home.

The loyalties of these people were first and foremost to their kinsmen and then, in descending order of importance, to their village region and nation. These kinship loyalties set the pattern of migration and were further institutionalised by British immigration procedures and labour practices in Pakistan. Settlements in British cities grew around single families and their kinship groups. Their cohesiveness allowed Pakistanis to keep their social and cultural links with their homelands.

The emergence of the travel agents as a strong force and the system of sponsorship and patronage restricted emigration to well defined areas and to certain villages. This process was made possible by the success of the earliest

migrants, mainly former merchant seamen who encouraged their kinsmen in the merchant navy to desert ship also. Eventually the number of recruits became too large and the Pakistani authority reduced the number of passports issued.

The ability to join the merchant navy was controlled by the seamen who favoured their own kinsmen and so confined the emigration to the original areas; Sylhet in East Pakistan, and Mirpur in Azad Kashmir in the Western part of the country.

Both these areas are remote and rather inaccessible hill districts in the most northerly parts of Bangladesh and Pakistan. In both these areas agriculture is not well developed, families either own and work the land jointly, or work for large landlords or as small peasants farmers. There is little or no industry, and traditionally the sons of the farmers have been forced to seek employment elsewhere to support themselves and improve the standard of living of the people left behind.

The network of travel agents which developed in Pakistan during the early years of immigration was originally set up to avoid restrictions imposed by the Pakistani government. This was occasionally done by supplying misleading documents and sending pilgrims to Britain via the Middle East. This traffic was strongly dependent on the existence of established immigrants who could act as sponsors for jobs and houses. The effect of the 1962 Commonwealth Immigration Act was to solidify the established patterns and eventually reduce the number of new heads of households.

A common tendency was for a married man arriving alone in the U.K. to go to a place where there was already a relation or fellow villager. He would stay in a boarding house run by another Pakistani. The prevailing conditions in these establishments were harsh and overcrowded.. The new immigrants tried to save as much money as possible to

buy a house of their own so that their families could join them. They then repeated the cycle by letting their own house to other newly arrived immigrants. In this early phase migration was predominantly male and this pattern was reinforced by Muslim cultural norms, through the seclusion and subordination of women in the home.

Although Pakistanis share many features of culture, religion and patterns of behaviour in their lives, they certainly cannot be regarded as a homogeneous group. Pakistan is one of the largest Muslim states with an area about equal to that of Britain, France and the Low Countries combined, and naturally there are differences of language and culture within the country. These differences help to explain the unwillingness of Pakistanis to mix with Pakistani communities other than their own, even in situations of great housing shortage. There was little contact between East and West Pakistanis in particular, although there are further religious divisions within Islam which cut across the geographical boundaries.

The differences between East and West Pakistanis are great. The physique of the people is noticeably different, the people from the West being taller and fairer than the Bengalis. The Western country does not lie within the tropical zone and is dry and hilly with an irrigated plain which merges into desert. The diet of this country is wheat, maize, meat and milk products. By contrast, the Eastern sector (now Bangladesh) consists of alluvial deltas of the Ganges and Brahmaputra. Diet is traditionally rice, fish and vegetables.

The two wings of the country were 1,000 miles apart and the people had little in common save religion and membership of the same nation. Cultural contact was slight because of the barrier of language. Urdu never became current in the Eastern sector (now Bangladesh) and the majority of the migrants from the West speak Punjabi.

Yet however great the differences and the unwillingness

to mix, certain patterns of behaviour are common to immigrants from both regions. The dominant theme is a great urge to pursue economic objectives whatever the cost in personal comfort. During the early days of immigration the men lived in dormitory houses costing about 15s. per week. Food was bought in bulk at wholesale rates and a man could live on £2.10s. per week with 2s. for flour, 7s. for milk, 16s. for groceries and 10s. for bus fares. Every penny was saved to pay back debts and to support families at home. In 1963 remittances up to £26 million or more than the taxes raised in East Pakistan were sent home (Rose et al, 1969)*.

Pakistanis established themselves quickly in entrepreneurial roles, particularly in providing services to their own community. In Bradford in 1967 there were 51 Pakistani groceries and butchers compared with only two in 1959 (Rose et al, ibid). The Glasgow population of 7,000 Pakistanis is served by 100 retail groceries and 25 wholesale stores (Elahi, 1967).

The present generation of immigrants from Pakistan has no intention of losing its separate identity. They believe that they have come to work, earn money and go back home and hence their adjustment need not be complete. They only want to be left alone to pursue this aim and have no desire to engage in activities which might jeopardise them (Hashmi, 1967). The community described in this study, the Sylhetis of the East London dockland, developed in a way which is typical of the process described above. The original seamen were recruited by the Merchant Navy from Sylhet which has a population much used to emigration.

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* "Why a Federation" Organising Committee, National Federation of Pakistani Associations, London (1964); and a report in 'Oldham Evening Chronicle and Standard', 18th January 1964.

The Partition of India at Independence added to the pressure on Bangladeshi sailors. The two main labour recruiting seaports during the time of the Raj were Calcutta and Bombay and the Indian Government made it difficult for the Bangladeshis to enter this labour market. The increasing difficulty experienced in obtaining work on ships together with the hard life on board and the poverty of the subsistence economy back home gave a further impetus to those thinking of jumping ship in a British port. Crews were normally discharged in Calcutta but occasionally seamen left their ships in the Port of London and sought shelter with the Imam of the Seamen's Mosque in the East London dockland. One of the original sailors who came to the U.K. in this way is still living in East London, and when interviewed by Islam (1976) stated that the Bangladeshi sailors used to desert their ships at Tilbury and the East India docks of the Port of London. From there they found jobs in clothing factories, and also lodgings, and formed the nucleus around which the Bangladeshi community was to grow.

A number of the earlier settlers started curry restaurants after they had saved a small amount of capital and either these restauranteurs or other factory workers passed the news of the affluence to be found in Britain on to their family and friends back home in the village. Slowly they were able to help others to settle as well. Thus they gradually brought their kith and kin to the U.K. to take up available jobs, and the London docks became the home of a reasonably large number of Bangladeshis.

Although the majority of Sylheti seamen came ashore at the Port of London some also landed in Cardiff and Liverpool and got jobs there. In these areas, and the South East and Midlands, there were still many unpleasant, unskilled jobs available which the native population preferred not to do.

IMMIGRATION INTO TOWER HAMLETS, ESPECIALLY FROM SYLHET, BANGLADESH

Tower Hamlets, formerly the Metropolitan Boroughs of Stepney, Poplar and Bethnal Green, has long been an area for settlement by newcomers.

During the last century the area was a rapidly expanding industrial area, naturally attracting a large mobile workforce. The construction of the new dock systems was an important factor in this growth. At this time world trade increased enormously and with it the movement of population. To cope with this sudden increase in population density new houses were thrown up almost overnight to house the Jewish tradespeople and the Irish dock labourers. The rapid deterioration of much of this housing together with the intensive bombing of the dock areas during the Second World War and the consequent need for wholesale redevelopment has done little to improve a bleak and dilapidated environment. The social class structure of the district (Table 3) shows a concentration of manual workers and considerable disparity within the GLC area with respect to the distribution of socioeconomic groups {Brick Lane and Beyond (CRE report, 1979)}.

Table 3. Socio-economic status in Tower Hamlets.

Social Class	I	II	IIIa	IIIb	IV	V
	Higher Professional	Other Prof. & Tech.	Other Non.Man.	Skilled Manual	Semi-Skilled Manual	Unskilled Manual
Tower Hamlets	1.2	5.2	12.7	38.6	20.5	21.8
GLC	6.1	13.9	23.5	32.7	13.4	10.6

Source: Annual Abstract GLC Statistics, 1973.

The main unskilled manual workforce in local manufacturing industry is Asian. A survey of returns to the Stepney Employment Exchange in 1978 showed that nearly 4,600 jobs out of a total of 6,200 were in the clothing industry which

is heavily dependent on manual labour.

The creation of new towns and the encouragement given to industries wishing to move away from the area have contributed to the overall loss of vigour. The largest overall increase in the age structure of the community occurred in the 65 and over age groups and the smallest in the 5-14 range. The 15-44 group increased by only 0.4%. Thus the overall direction of change was towards an increasingly elderly population.

The most recent immigrants to arrive in this increasingly run down area are from Bangladesh, more particularly from Sylhet. Recent estimates (1981) suggest that there are 20-25,000 Bangladeshis living there (see p. 1). Earlier estimates (Bethnal Green and Stepney Trades Council, 1978) of the immigrant populations of Tower Hamlets suggested that there were about 2,000 other Asians, 1,000 Maltese, 3,000 West Indians, a substantial Irish population and a small number of Somalis, Cypriots and Moroccans. The ethnic minority population is thought to be 13-15%, which is lower than many other inner London Authorities and the GLC area as a whole. The fact that a large percentage of the black community is young, 85% of Asians are under 25 years, is reflected by the large proportion of live births to parents born overseas but now resident in Tower Hamlets, e.g. 27% in 1975.

The Sylheti community is little known outside the areas where the majority of its members has settled, and is reckoned by the Tower Hamlets Social Services Department to be the most socially disadvantaged ethnic group living there. They face difficulties in housing, language, employment and education of a higher magnitude than their numbers would suggest and greater than those of other minorities. Some discussion of the contrast of urban and village life in Bangladesh and in the London Borough of Tower Hamlets, historically conditioned as it is to the presence of foreign minorities, is necessary if the problems peculiar to Bangladeshis are to be understood.

Sylhet background

Sylhet is a relatively poor area in the North East of Bangladesh bordering on the Indian state of Assam. It has historically been linked with various states at different times.

Sylhet: Territorial Changes

Early 14th century	Sylhet conquered by Muslim army.
1784	Sylhet becomes part of newly created province of Assam by British.
1905	Sylhet becomes part of newly created province of East Bengal and Assam.
1947	With Partition, Sylhet rejoins East Bengal to form Eastern wing of Pakistan but loses some territory to India.

With Partition, of course, there was a great upheaval, and this provided a strong impetus to leave.

A further link may have been the presence of many British owned tea estates in the area. When the colonial tea plantation owners and workers came home, some of them brought their Sylheti servants with them.
Source: Bonamy, D (1978), 'Immigrants from Bangladesh'.

With the secession of East Pakistan in 1971 and the creation of the new nation state of Bangladesh, Sylhet found itself part of an area now recognised as having a culture of its own. However, Sylhet remains a distinctive area with its own dialect far removed from Bengali proper, and has no written tradition in the region, and the majority of the people are illiterate, especially the women.

Agriculture is the most important economic activity in Bangladesh as a whole, occupying 85% of the labour force and accounting for 57% of the GDP, and Sylhet is not unusual in being a land of small family, holdings, supporting subsistence farmers. The land itself is somewhat hilly as it adjoins the Assam Hills, and, although the wettest region of the country, is not prone to large scale flooding. However, the farmers are never free from the threat of natural disaster as much damage is done to standing crops

by the heavy rain.

The pressure of increasing populations on the limited land resources is the main reason for emigration, and has been for many years. There is a strong tradition of emigration within the sub-continent and overseas to satisfy the need to support themselves and escape the endemic unemployment of Sylhet.

The East India Company recruited dock hands for the Chittagong docks from Sylhet, Chittagong and Assam and eventually they were taken on as sailors in the merchant navy where they were known for many years as 'Lascars'. Up to 1962, when the Immigration Act was introduced, British Companies continued to recruit in Sylhet. Just before the Act came into force there was a rush to join. During the early 1950's these workers formed the nucleus of the Bangladeshi community in London where they settled in the area surrounding the East India docks.

Deep family ties and family structure are central to Sylheti society. The people are very dutiful towards their families, and the web of kinship is very extensive. They put strong emphasis on religious belief.

Women usually observe the rules of purdah which strictly speaking means the obedience which a woman must show to her husband. According to these rules a wife can only be seen by other men with the permission of her husband and this may extend to the complete covering of head and body with a sari or burqua. The system of purdah is closely observed in the villages but has broken down in the cities, especially among the middle class.

The actual practices of purdah vary according to the circumstances of the family or even a whole village. There are some close-knit villages where unrelated males are allowed to enter others' houses and speak alone to the women but even then the women will maintain proper purdah

by covering their heads with their sari and by shyness and hesitancy. The more affluent peasants are able to have special apartments for women and guest rooms where they can entertain each other.

Children are regarded with much love and affection and parents do the best they can for their children, although discipline and loyalty is expected in return by the family. The family is responsible for the child's early social and religious education which commences while they are still quite small. Both boys and girls learn to read the Holy Quran with the help of their parents, although in some areas there are mosques where children can go for religious instruction during the early morning.

CHAPTER 3

RACIALISM IN BRITAIN

It seems necessary when discussing immigration to Great Britain to refer to racialism, and to the prejudice which is often experienced by the incoming population.

With the Colonial expansion of the late 16th century, Britain developed an awareness of race and colour and with the growth of the Empire, domination of the non-white races by the white came into effect.

By the start of World War II Britain's population was 47 million with a further 480 million in its Colonies (Leontyev, 1965 as stated by Islam, 1976) . This meant that when a white man came into contact with a non-white, it was more than likely that he would have been a member of the ruling free group and the non-white a member of a subjugated group. It is therefore natural to assume that the white minority considered themselves of a higher status than the non-white. With this history Britain was already permeated with racist ideas when the coloured immigrants started entering the country in large numbers.

Prof. O.C. Cox*(n.d.) has defined racialism as '...the social attitude propagated among the public by an exploiting class for the purpose of stigmatising one group as inferior so that exploitation can be justified', (p.30). This would seem to be a rather harsh criticism of a nation whose history has been responsible for its racial attitudes.

Segal (1967), as quoted by Jacobs(1969) maintained that only a nation which had maintained such a vast empire and permitted a slave trade to continue for so long, could now experience a racialism which has permeated the major political parties, to the extent that domestic policies

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*Prof. O.C. Cox (no date), quoted in 'Blood on the Street' (1978), Bethnal Green and Stepney Trades Council(p.30.)

reflect its importance. Another interesting historical factor is that in the shipping industry even to the present day, a distinction is made between seamen on a racial basis (Merchant Shipping Act 1894).

Islam (1976) indicated that hostility towards immigrants has been shown publicly by a number of politicians such as Sir Cyril Osborne, Duncan Sandys and Enoch Powell, all of whom were members of the Conservative Party, in speeches in and out of the House of Commons. Sir Cyril Osborne stated in 1961 that Britain was a white man's country and that it should remain so (the Daily Mail, 1961). But Enoch Powell campaigned most powerfully against coloured immigration and is renowned for his famous speech in Birmingham in the 1960's when he warned that in the near future a situation was bound to arise when the rivers of blood would flow in the streets of Britain (Smithees and Fiddick, 1969).

Powell voiced the feelings of many white people who watched the ever growing numbers of coloured immigrants flowing into the country, with fear and suspicion. His credibility as a politician at that time also encouraged smaller political parties to re-establish themselves, the most prominent of which is The National Front. More disturbing, however, is the support Mr. Powell enjoyed from large sections of the working classes, particularly when thousands of dockers marched to Westminster in 1968 when he lost his seat in the Shadow Cabinet as a result of his speeches against immigration. There were other demonstrations such as the Smithfield meat porters protest against the government's decision to accept the Asian refugees fleeing from Uganda under Amin. Later in 1972 the British Campaign to Stop Immigration awarded a certificate of merit to Batley Trades and Friendly Club for operating a colour bar (Hanna, n.d.) as stated by Islam (1976) and many Working Mens Clubs were still operating a colour bar until taken to court and fined.

Several sociologists, as stated by Jacobs (1969) have investigated the area of racialism in Britain,

and have stated that there was a 'colour problem' which revealed itself in the way in which whites behaved towards non-whites in a prejudicial way. In 1968 Hepple wrote that most of the coloured labour force which was brought into the country during the Second World War was repatriated afterwards, and of those who remained, more were unemployed than whites. Whites tended to class coloured groups into the lower social classes, which he attributes to the historical attitudes of the empire and slave trade, mentioned earlier. Another study undertaken by Richmond in 1954 shows that West Indian immigrants coming to Liverpool were considered in mostly detrimental terms by the whites, who held preconceived ideas about them. Prejudice was most pronounced where employment was concerned. Rex and Moore in 1967 found from their research that there was a growing tendency for immigrants to become segregated in city areas where they would be more vulnerable in the face of anti-immigrant policies and racial hostility. Lord Elton (1965) in his book 'The Unarmed Invasion' likened the mass immigration of the sixties to a crisis similar to that of the Industrial Revolution, inasmuch that both created insoluble problems which have changed the character of Britain. These problems in the multiracial society are not just related to conflicting cultural differences, but can be traced to the long established historical attitudes of whites to non-whites.

Prejudice

Prejudice can be examined within both the disciplines of sociology and psychology.

Psychologists tend to analyse the characteristics of the bigot looking specifically at authoritarianism, while the sociologists have emphasized the social environment as a determining factor of racial prejudice. Looking at the approaches of both groups it would appear that they have equal relevance to the problem.

It is essential to understand the distinction between prejudice and discrimination when dealing with this subject. Prejudice could be regarded as an attitude , whereas discrimination is an action resulting from prejudice, both of which are of a negative nature. Prejudice is an unfavourable attitude which is held in the face of substantiated evidence to the contrary (Bagley, 1970). Allport (1954) as stated by Bagley, is of the opinion that prejudice is manifestly a value-orientation. It can be, and should be, studied at the level of personality system, at the level of social system, and at the level of cultural system. Prejudice can thus be looked at on three levels: psychological, examining hypothetical correlates of prejudice, for example, an individual's relationship with his family group in early life, or his response to authoritarianism directed at him. This approach to prejudice is well demonstrated in Adorno's study on Authoritarianism (1950) which has withstood methodological criticism and been validated in a British setting (Warr, Faust and Harrison, 1967).

Stagner (1961) states that 'the psychology of personality seeks principles which explain pattern of differences between persons' (p.15). Personality studies on racial prejudice make distinctions between the factors which contribute to a person being more or less prejudiced (Jacobs, 1969).

The second level looks at the interrelationship between individuals performing in social institutions and the main work has been done by Rex and Moore, (1967), Bagley, 1970).

The third level is concerned with the cultural values of society. Hence the culture is a cause of prejudice since every generation absorbs particular beliefs and attitudes towards other groups, which do not have to be experienced at the individual level since the cultural heritage of a person has ready-made evaluations of groups outside their own.

The following description in regard to the incidence and form of racial prejudice in Britain is taken from Deakin (1970).* He describes how, in societies where a racial hierarchy exists, active prejudice is not apparent with the same intensity and is often absorbed by the conformity of cultural and social norms provided by different ethnic stratas in the society. Where a society does not have this ethnic stratification, racial hostility is perpetrated on an individual level and is not able to be measured sociologically as a social force. Britain fluctuates between the individual prejudice and prejudice as a social force, and prejudice is, therefore, difficult to measure. Dr. Mark Abrams undertook a survey of Race Relations in which he looked at the effect of immigration in Britain on social attitudes, particularly in terms of what happened when the majority and minority groups met.

The 'Survey of Race Relations in Britain' in 1966 employed several social scientists to investiate colour prejudice amongst whites in the London Boroughs of Lambeth and Ealing as well as in Nottingham, Wolverhampton and Bradford, these having a high percentage of coloured immigrants living in them. In each place a sample of 500 inhabitants were selected giving a total of 2,500 in all. Four basic issues were selected from a possible 50 questions which were thought to measure racial hostility. A control of 2,250 white adults was used on a national basis. Incidence of unfavourable attitudes were as follows:

Tolerant (No hostile answer) 35%
Tolerant-inclined (One hostile answer) 38%
Prejudice-inclined (two hostile answers) 17%
Prejudiced (three or four hostile answers) 10%

It was found that in areas with high level of coloured people more than one third of whites showed no signs of prejudice and 2/5ths gave one prejudicial reply. In addition one-sixth could be regarded as having prejudicial attitudes although they would be prepared to

*His work based on the massive Institute of Race Relations Report, 'Colour and Citizenship' (Rose et al., 1969).

make exceptions in a true British fashion. The remaining tenth of the sample showed unconditional antipathy towards coloured people.

The survey showed that the pattern of scores remained more or less constant in each of the boroughs used and did not vary when sub-divided into social classifications of sex, class, age or type of accommodation.

The 10% of the sample who showed a response of extreme hostility were from all the above categories of whites irrespective of whether that group registered high or low prejudice levels. The conclusion therefore to be drawn from this evidence is that social hostility stems from the personality of the individual. This fact is supported to some extent by the difference between prejudiced and unprejudiced people, i.e. social potency and authoritarianism, both of which are personality measures using a psychological theory. The individual who has a need to submit to authority feels hostility towards any group outside his own. Adorno et al.(1950) maintain that this 'springs from underlying hostility towards in-group authorities, originally the parents. The individual strives to keep his hostility in check by overdoing in the direction of respect, obedience, gratitude towards the in-group authorities and by displacing the underlying hostility towards these authorities on to "out-groups"',(jacobs, 1969).

The team then concentrated on finding out what attitudes there were towards the British as opposed to other nationalities. Few of the sample felt that the British were inferior or superior to Americans or other Europeans except in particular fields. Two thirds of the sample considered British superior to Asians and Africans .53%

of the sample considered coloured immigrants as inferior, 5% felt them to be superior. 31% said they were equal and 11% did not know.

When considering the large amount of research on Racial prejudice which has been carried out the extensive work of Bagley and Verma (1979) is very significant. The writers have examined prejudice within the social system, and in particular what effect various roles and statuses have on levels of prejudice. They suggested that the highest degree of prejudice can be found in the middle-aged working class man with minimum education; they also found that men tended to be more prejudiced than women and the strongest relationship was found between age and prejudice.

In another study undertaken by Richmond in 1965 it was found that the attitudes towards coloured immigrants were closely related to attitudes against other groups of immigrants, for example, Poles, Italians, Jews, Catholics and Irish earlier on, which implies that colour was not a factor. This is of particular relevance to Spitalfields where successive waves of immigrants of different origins had settled and all experienced prejudice.

Looking at the position from the point of view of the coloured immigrant, in respect to social interaction and employment, research projects undertaken by Daniel (1968) found that colour was a prominent factor in hostility. This was substantiated by the Employment Bureaux who stated that most employers would not take coloured applicants whether they were qualified or not, unless there was an acute labour shortage or they needed manual workers. Discrimination was found to be the most disturbing factor of life in Britain for West Indians, Indians and Pakistanis, whereas Cypriots were disappointed in other facets of British life (Jacobs, 1969).

In housing, coloured immigrants suffered more discrimination than say the non-coloured immigrant used as a control. In applications in reply to advertisements for accommodation coloured people fared far worse than European applicants. This was also found when coloureds wanted to buy property: out of 42 agents, 27 were proved to discriminate (Milner-Holland Report,(1965) as quoted by Jacobs, 1969).

The same results were found with insurance companies by Hepple in 1968, when many coloured people were refused insurance or quoted higher premiums. He also found that the children of immigrants suffered the same discrimination and were unlikely to expect any improvement in the future.

Unexpectedly, Bagley and Verma (1979) found, when considering status hierarchies in relation to prejudice, that people with a low status with regard to income, education and occupation were considerably more prejudiced than those in any of the other groups considered.

Whites had previously thought of themselves as having a higher status because they are white, but this is being challenged by the Blacks through the Race Relation Laws which seek to make colour an irrelevancy in the search for housing and jobs.

Bagley and Verma (1979) have pinpointed some findings of Daniel (1968), McIntosh and Smith (1974) which found that Blacks and Asians, who were Christians, have not been accepted as equal- in the Christian churches. As a result, Blacks have founded their own churches.

This further supports the evidence that in Britain discrimination is based on grounds of colour, and not on cultural differences.

In considering the influence of the Mass Media on racial attitudes, it is worth mentioning what Bagley and Verma (1979) have suggested, that is, that television is more likely to have a greater influence if it has a negative bias than the Press; however, it is often the racially prejudicial letters to the Editor which are printed and which have a greater influence on the reader than the editorial and ordinary reporting. The mobilisation of public opinion by the Mass Media could ultimately affect politicians, such as in passing the Racial Equality and Immigration Laws.

However, Bagley, Verma, Mallick and Young (1979) have examined prejudice in a cross-cultural context in order to find out why British respondents appear to show higher levels of prejudice than other groups, particularly the Dutch. They suggest that the cross-cultural differences are clearly related to the historical attitude of the British to the Coloured Empire.

It would appear from the various studies undertaken in this field that much of the prejudice and consequent discrimination experienced by coloured immigrants from the white British results from the deep-rooted attitude of their superiority from the days of slavery and the Empire. This leaves one with a rather pessimistic view of future attitudes to race in Britain.

Racial conflict - past and present - in Tower Hamlets

Since the time of the Huguenots in the late 17th century, successive waves of foreign settlers have revitalised both the local economy and social order of the East End by bringing with them new skills and the impetus to achieve. The reactions of the local population to each newly arrived group gradually changed until the fear and hatred so common in modern times emerged.

During the Tudor period colonies of foreigners were encouraged by the Crown but envied and resented by the local population. The arrival of the French Protestant Huguenots, who were accomplished weavers, brought to life the struggling silk industry, '... they made Spitalfields, abutting on the city wall, their main base and turned out larger quantities of lustrings, velvets, brocades, damasks' (p.7, Brick Lane and Beyond, CRE report, 1979).

The Huguenots were so successful that local people either tried to imitate their names so that their own products would sell as profitably or became bitter and resentful.

These feelings turned to contempt and hostility two centuries later when the Irish were attracted to work in the new docks at Wapping and the Isle of Dogs, and reached a peak during the period of Eastern European Jewish immigrants in the late 19th century. The potential effect of this local problem on anti-semitism in the whole country was a great cause for concern in the Jewish community. In 1888, the Jewish Chronicle made a plea to Jews in the East End (Brick Lane and Beyond, CRE report, 1979).

Similar expressions of hatred have been shown recently towards Commonwealth immigrants in a number of cities. And in many instances the hostility has been expressed in terms of physical violence. The historical roots of this

violence are well known in the area and have been expressed thus by Murray and Keys Bethnal Green and Stepney Trades Council (1978): 'The East End of London, which was infested with the poison of racism and fascism in years gone by, is suffering again from the prejudices, provocation and terrorism of the bully boys of the National Front and their allies' (p.63).

It is above all the Bangladeshi community which has borne the brunt of these attacks, although Sikhs and Pakistanis have also suffered to some extent. Interviews with representatives of local community organisations have shown that it is the Bangladeshis who are thought to be the most noticeable coloured minority and also the most victimised, and that although the motives for the attacks might vary considerably, the targets would be predictably a Bangladeshi or other Asian either alone or in a group. The poorest and least able to defend themselves, the Bangladeshis have been isolated still further by the violence which has become a constant feature of their lives. The cases which hit the headlines are merely the gruesome tip of a much larger iceberg. However, a number of incidents have become notorious; the skinhead 'Paki-bashing' episodes in the early 70's, the attacks at the time of the 'Malawi Asians' story, the Kingsley Road speech, and the murder of two coloured students in Mile End in 1976, riots and fighting in Brick Lane, the deaths of Altab Ali in Whitechapel, Kenneth Singh in Newham and Ishaque Ali in Hackney during 1978 (Bethnal Green and Stepney Trade Council (1978), 'Blood on the Streets'.

There is a constant campaign of violence against Asians and their property and in 1978 the secretary of the Brick Lane Mosque investigated 33 incidents of attacks on Bengalis during the first four months of the year. Bethnal Green and Stepney Trades Council examined in detail more than 110 attacks on Asian people and property which have taken place, especially during the autumn of 1977. An analysis of attacks (based on information from 'Blood on the Streets', 1978) finds the following pattern:

1. About a quarter (21.5%) of all recorded attacks took place during 1976 with a similar proportion of all 'serious to fatal' ones happening during that period.

2. In 1977 the number of 'serious to fatal' attacks declined to about one third of the previous year's in spite of the fact that there was an overall increase in the number of attacks of all kinds.

3. In 1978 the attacks were most severe. 46.3% of all attacks and over half of all 'serious to fatal' attacks were recorded.

4. The attacks which had started at the outer edge of the Borough moved nearer to the heart of the Bangladeshi community in Spitalfields where they became most frequent and intensive.

This pattern coincides with the movement of Bangladeshis towards the centre of their community in the Brick Lane area.

Bangladeshis living outside London have also been subject to spasmodic attacks on their property and physical assaults on their persons.

The concentration of Bangladeshis in low paid and exploitative forms of employment in the locality is reinforced by the attacks made on workers on their way to and from work. Men prefer to work locally with their fellow countrymen and travel together for protection in minicabs or taxis and especially when on foot. Jobs which involve travelling long distances and those where there are no other Bangladeshi-speaking workers are likely to be refused. Men are taken on as 'outworkers', working long hours in the honeycomb of sweatshops covering Aldgate and Whitechapel (p.12).

There are some Bangladeshis who work in catering, office cleaning, and in 'Indian' restaurants which are actually predominantly Sylheti establishments.

The problems of obtaining satisfactory housing are greatly aggravated by the climate of intimidation and racism. There are some estates which are not safe for Asians to enter and become 'no-go' areas. Families on these estates try to get a transfer to the E.1. district or in desperation may be forced to squat in derelict tenements closer to the heart of the Bangladeshi community. Families board up their smashed windows and doors in the cold, draughty blocks and attempt to lead their lives behind barricades. Parents fear for children if they play outside and are reluctant to leave their flats at all for fear of break-ins. Lights to landings and stairways are constantly smashed, contributing to the hazards and insecurity.

Many of the children in this study come from families forced to leave council homes elsewhere in the Borough and squat in Pelham Buildings, in Spitalfields. The GLC have been asked to rehouse 27 families from there and reports in the press have highlighted the fact that there are just no safe places in the Borough for Bangladeshis to go to.

Information gained during interviews shows that Bangladeshi women are especially vulnerable to victimization because they are thought to 'stand out' by reason of their dress and manner. It is certain that these women suffer even greater stresses than their menfolk and may live in almost total isolation dependent on the male members of the family for their dealings with the outside world. The vast majority of Bangladeshi men arrived well before their wives and children and had picked up enough of the English language and custom to survive in this country by the time they decided to send for their families. The combination of 'culture shock', the traditional restrictions on women's activities and the emphasis on modesty in Islamic society, and the fear of intimidation and hostility, serve to isolate

the women in their homes especially after their children have started at school. The children adapt more readily to the host community and sometimes take on the role of interpreters and negotiators, leaving their mothers trapped behind the barriers of race, language and lack of education. A social worker in London reported that the separation of the Bangladeshi women from the support of the traditional family resulted in their consequent isolation.

The only form of paid employment open to the women is in the taking of outwork from the clothing trade. Firms exploit their fear, ignorance and isolation to pay rates which are abominably low. Bangladeshi women living in Tower Hamlets who are keen to supplement the family income take on poorly paid homebased work.

The original Bangladeshi immigrants generally had gentle and rather passive natures, preferring to avoid trouble at all costs as their sights were set on returning home in the future. The new generation of young Bangladeshis has a more positive attitude to life in this country and very much wishes to defend the interests of their community, both politically and physically. There is much interest in the martial arts and techniques of self-defence. Their more outgoing attitudes can be regarded as a healthy and vigorous sign.

CHAPTER 4

THE EDUCATIONAL SITUATION OF IMMIGRANT CHILDREN

This chapter has four sections:

A. Numbers and distribution of immigrant children in British schools.

B. Educational problems arising from the presence of immigrant children in U.K. schools.

C. Education in Bangladesh.

D. Bangladeshi children in Tower Hamlets.

The writer is indebted to the following authors, among others, for the detail contained in this chapter:

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2) Bhatnagar, J. (1969) 'A study of adjustment of immigrant children in a London school', PhD thesis, University of London.

3) Department of Educational Science (1967 to 1973) 'Statistics of Education' for the year 1966-1972 inclusive, Vol.1, Schools, London, H.M.S.O.

4) Department of Education and Science (1971) 'The Education of Immigrants' - Education Survey 13, London, H.M.S.O.

5) Select Committee on Race Relations and Immigration, (1972-73) 'Education', Vol.1, HMSO.

6) Inner London Education Authority (1967), 'The Education of Immigrant Pupils in Primary Schools' 7.11.67, (ILEA 959) Report of a working party of members of the inspectorate and school psychological service.

7) Little, A. (1975) 'Oxford Review of Education', Vol.1, No.2 pp.117-135, 1975.

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9) Taylor, F. (1974) 'Race, School and Community' N.F.E.R. Publishing Company Limited.

10) Tomlinson, S. (1977) 'SAGE' Race Relations Abstracts, Vol.2, No.4., November 1977.

11) Townsend, H.E.R. (1971) 'Immigrant Pupils in England: The LEA Response, Slough: N.F.E.R.

A. NUMBERS AND DISTRIBUTION OF IMMIGRANT CHILDREN IN BRITISH SCHOOLS

The children of immigrants from New Commonwealth countries started to arrive in the late 1950's, although the number remained small until the 1960's. The children of West Indian immigrants were first to join the school population. The majority of the large number of West Indian women who came to this country were forced to leave children at home in the Islands because they could not afford to pay their fares. When, later on they were in a position to send for them after settling down in this country, there followed a large influx of children of these immigrants.

Although in 1958 isolated schools had experienced an unexpected increase in the number of South Asian children, the real magnitude of immigration from the Indian sub-continent was not revealed until after the Commonwealth Immigrant Act when statistics first became available. It was evident that a substantial number of dependants were to follow their parents who entered this country immediately before the immigration restrictions were imposed. There were already a few schools which had a wide range of nationalities among their pupils, but when only a relatively small number of immigrant children had come into British schools they were easily accepted by the native majority. The most dramatic increase was noticed in the early 1960's (Jones, 1967) but the schools to which the immigrant children came had made no preparation to handle this sudden influx.

The local authorities have tried to solve the administrative, educational and social problems caused by this unforeseen increase in the number of immigrant pupils in schools which were already overcrowded and understaffed, trying to make the best use of scarce resources and dilapidated buildings. The Ministry of Education Pamphlet No. 43 (1963), set out the problems that schools could expect when dealing with these children, advising flexibility in cultural matters

and outlining some administrative procedures which could be used in teaching the children. The recommendations were not and could not have been based upon any empirical study, since such evidence was not available. However, as pointed out by Townsend (1971), the collection of statistics on this subject by the Department of Education and Science has only taken place since 1966. There was no reliable information on the earlier period, i.e., before 1966, concerning the growth of the immigrant population in schools, although one or two local Education Authorities (LEAS) anticipated the action of the Department and collected their own statistics for some years prior to 1966.

At the end of 1964, the 5 year Survey of Race Relations estimated that there were about a quarter of a million immigrant schoolchildren, and information obtained from the census showed that the numbers had approximately doubled from 1951 to 1961 and had trebled by 1964.

Statistics collected by the Department of Education and Science during 1966-69 on the total numbers of children from overseas or of immigrant parentage in state-maintained primary and secondary schools, give an idea of the rapid increase in the numbers of such children entering school during this period (DES, Education Survey 13, 1971).

A major problem in collecting statistics is that of defining the term 'immigrant'. The Department has used the following definition in Form 7(i):

i) who have come to this country with, or to join, parents or guardians whose countries of origin were abroad; and

ii) children born in the United Kingdom to parents whose countries of origin were abroad and who came to the United Kingdom on or after 1st January 19 .

The year quoted in this clause has in each year been ten years earlier than the date of collection of the statistics, so that in January 1973 the appropriate date was January 1963.

The returns do not include (a) children from Northern Ireland or Eire, or (b) children of mixed immigrant and non-immigrant parentage.

Tomlinson (1977) gives a description of the different political factors affecting the collection of educational statistics. According to her, the area has been a focus of debate for different shades of opinion, between liberals who have seen the idea of keeping statistics based on colour as discriminatory, administrators who have seen them as a useful tool for management (especially when areas of high ethnic minority concentration began to be favoured in resource allocation), and those supporters of immigration control who have used statistics to underline their hostility to the immigrant population. Thus, in the early 1960's the problem was defined as one of visibility; 'too many' Asian or West Indian children in one school was considered bad for the education of the white children (Boyle, 1963), while DES (1965a) Circular 7/65 suggested that serious strains would result if the proportion of immigrant children in a single class or school rose to over one third.

The DES began the formal collection of statistics in 1967 on the basis of the definition of immigrant children mentioned earlier. However, increasing numbers of second generation immigrant children born in Britian made this an unsatisfactory indicator of 'colour' in the statistics, and the House of Commons Select Committee on Race and Immigration recommended that this method of collecting statistics should cease (HMSO, July 1973). They also advised in a special report that a new formula be devised (HMSO, February 1972). The problem is confused by the policy-makers' refusal to concede that they are referring to 'colour'. There is still no official central collection of statistics but many LEA's

now collect their own statistics based on their schools' assessment of ethnic origin.

The available statistics dealing with immigrant pupils in maintained schools are given below in tabular form.

Table 4. Numbers of immigrant pupils attending maintained schools in England and Wales from 1966 to 1972.

YEAR	ALL PUPILS	IMMIGRANT PUPILS	IMMIGRANTS AS A PERCENTAGE OF ALL PUPILS
1966	7,183,165	148,000*	2.1
1967	7,328,110	183,776	2.5
1968	7,541,969	220,212	2.9
1969	7,753,002	249,664	3.2
1970	7,958,848	263,710	3.3
1971	8,167,009	270,745	3.3
1972	8,366,333	279,872	3.3

Source: The statistics for this table were derived from the DES' 1967-73 (inclusive) Statistics of Education for the years 1966-1972 (inclusive), Vol.1, Schools, London: HMSO.
*Estimated from data for schools with over 10 immigrant pupils.

The above table shows that the number rose from 148,000 in January 1966, to 279,872 in January 1972 and since 1966, the proportion of immigrant pupils in schools has increased from 2.1 per cent to 3.3 per cent.

Immigrant children are extremely unevenly distributed among the schools and LEA's; the percentage in LEA's ranging from zero to almost 30 per cent. Townsend (1971) points out that 67 out of the 146 LEA's in England have over 5,000 immigrant pupils but that only 9,907 of the 20,523 state schools in England and Wales had any immigrant pupils at all in January 1969 while 4,680 of these had less than 2 per cent.

In 1971/2 there was a dramatic rise of 9,127 in the total number of immigrant children in state primary and secondary schools in England and Wales giving a total of 279,872 in January 1972. This was the same percentage rise

(3.3%) in the total roll as in the previous two years combined. 259,487 (13.4%) were concentrated in schools with 10 or more immigrant pupils (DES, 1973 , Statistics of Education, 1972).

The total number of immigrant children in all state schools in 1972 was 279,872, which is approximately 3.3 per cent of all pupils. Included in this figure were pupils from Europe, North America and Australia (Table 5).

Table 5.. Demonstrating the number of immigrant pupils by origin in all maintained schools, and their percentage of total immigration in January 1972.

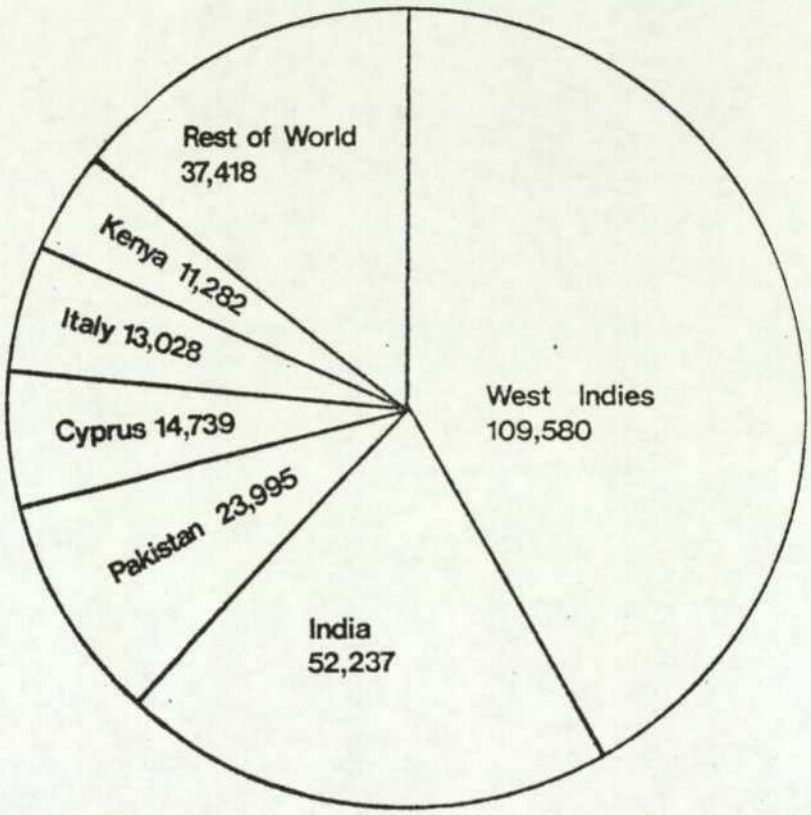
COUNTRY	NUMBER	%
Australia, Canada and New Zealand	2,455	0.9
Cyprus (Greek)	9,504	5.0
(Turkish)	4,461	
Gibraltar, Malta	1,252	0.4
Kenya (Asian origin)	17,340	6.2
(African origin)	1,385	0.5
Other Commonwealth countries in Africa	14,444	5.3
India	56,193	20.1
Pakistan	30,629	10.9
Other Commonwealth countries in Asia	8,008	2.9
West Indies (including Guyana)	101,898	36.4
Non-Commonwealth countries:		
Italy	12,009	4.3
Poland	1,958	0.7
Spain	3,275	1.2
Other European countries:	5,908	2.1
Rest of the world	9,081	3.2
TOTAL	279,873	100.0

Source: Figures provided were derived from the DES (1973) Statistics of Education, 1972, Vol.I, Schools, London: HMSO.

As is clear from these figures there was a sharp and rapid rise in the number of immigrant children admitted into British schools during the 1960's. In London alone the strength of immigrant children in schools went up from an estimated 8,000 in 1956 to nearly 38,000 in 1964, representing an increase of 30,000 in eight years. In Bradford, a city of high immigrant population, the number of children in September 1964 was estimated at 1,500 which had risen by almost one third only six months later (Taylor, 1974).

In 1965, the authority was admitting immigrant children into the schools at an average rate of 18 a week; this increased to 23 by 1966 and just over 30 by 1967. The number had fallen to 13 by mid-1968 but went up again to 30 by April 1969. Figure 1 shows, in a little more detail, the sizes of the groups according to countries of origin.

Figure 1. Countries of origin of immigrant pupils, January 1970.



Source: Ayres (Townsend, 1971), Immigrant pupils in England, the LEA Response, NFER, England and Wales.

The DES (Education Survey 13) report mentions that one Birmingham school had a single coloured pupil in September 1958 but by 1961 Commonwealth immigrants made up 30% of the total school roll. Goldman and Taylor (1966) also noted the uneven distribution of immigrant pupils in Birmingham. Immigrants made up only 5% overall of the state school population but 22 primary schools had between 16%-70% coloured pupils. The DES statistics showed that a survey undertaken in Wolverhampton in 1962 found approximately 1,000 immigrant children in the city's schools. By January 1967 there were 4,500 immigrant children in the schools; and this figure increased to 5,566 (nearly 12%) of the

total school population by January 1969. Lee (1965) found that four Southall schools had more than 30% and one had nearly 60% immigrant children.

Rapid and continuous growth in the number of immigrant pupils during this period made it far more difficult for the school authorities to organise teaching for these children in an effective way. This is well illustrated by the trend observed in one London borough. In 1957 the London Borough of Ealing (then Southall) had only one teacher for all the immigrant children. Ten years later in 1967 the number of teachers it had to engage to teach these children stood at 50. In 1965 roughly 60 immigrant children a month were admitted to its schools, but by 1968 the number of admissions of such children had increased to 250 a month.

In London alone the percentage of immigrant children in the primary schools increased from 10.8% in January 1964 to 14.8% in September 1965.
So during this period there was a substantial increase in the number of immigrant pupils in primary schools, as the following figures show.

Table 6:

PRIMARY (INCLUDING NURSERY)	Jan 1964	Sep 1965	Sep 1966
No. of pupils on roll	233,575	232,780	236,968
No. of immigrant pupils	25,244	34,431	35,035
Percentage of immigrant pupils	10.8	14.8	14.8

Source: Inner London Education Authority, "The Education of Immigrant Pupils in Primary Schools, (ILEA 959), 1967.

The ILEA report on "The Education of Immigrant Pupils in Primary Schools (ILEA 959) indicated that changes in the definition of the term 'immigrant' may conceal a larger increase in numbers of immigrant pupils between January 1964 and September 1966 than the statistics show, and an increase in the overall percentage of immigrant children between September 1965 and 1966. The figure for January 1967 shows

a further increase to 15.8% of the primary roll. The following table shows the increase between January 1964 and September 1965 in terms of countries of origin (data for later years are not strictly comparable in this respect).

Table 7 .

ORIGIN	No. of immigrant pupils in school aged under 5 to 10+				TOTAL
	W. Indies	Cyprus	India or Pakistan	Other	
Jan 64	10,871	5,646	2,393	6,334	25,244
Sep 65	16,640	6,416	2,963	8,330	34,349
% of increse	53	13.6	24	31	36.1

Source: Inner London Education Authority, 'The Education of Immigrant Pupils in Primary Schools" (ILEA 959), 1967.

The actual number in the primary schools may be slightly higher than this because of the retention of a few pupils of 11+ age. It will be observed that the largest percentage increases during that period was in West Indian pupils.

The report also described how immigrant pupils are very unevenly distributed across the Authority's primary schools, about half the schools having fewer than 10 per cent of such pupils on their roll. The percentage for the remaining schools varies and in some cases goes up to about 68 per cent. The number of primary schools with different proportions of immigrant children in September 1966 was:

Under 10 per cent.....	437	schools
10-19 per cent.....	194	"
20-29 per cent.....	110	"
30-39 per cent.....	70	"
40 per cent and over.....	70	"
	881	"

Table 8 . Immigrant pupils in maintained primary schools in England and Wales, 1967-1972.

YEAR	PUPILS IN MAINTAINED SCHOOLS		IMMIGRANTS AS A PERCENTAGE OF ALL PUPILS
	ALL PUPILS	IMMIGRANT PUPILS	
1967	4,495,259	123,131	2.7
1968	4,646,582	145,371	3.1
1969	4,788,871	164,892	3.4
1970	4,914,220	174,903	3.6
1971	5,023,130	176,776	3.5
1972	5,114,907	178,466	3.5

Source: Data for the year 1967 to 1972 inclusive are taken from DES, 1968-1973 inclusive, Statistics of Education 1967 to 1972, Vol.1, Schools, London: HMSO.

If one looks at the parallel table for secondary schools then one can see that the percentage of immigrant pupils in maintained secondary schools in 1967 was 2.1%; by 1972 this had risen to 3.1%.

Table 9 . Immigrant pupils in maintained secondary schools in England and Wales, 1967-1972.

YEAR	ALL PUPILS	IMMIGRANT PUPILS	IMMIGRANTS AS A PERCENTAGE OF ALL PUPILS
1967	2,832,851	60,645	2.1
1968	2,895,387	74,841	2.6
1969	2,964,131	84,772	2.9
1970	3,045,974	88, 807	2.9
1971	3,143,879	93,969	3.0
1972	3,251,426	101,406	3.1

Source: Data for the year 1967 to 1972 inclusive are taken from DES (1968 to 1973) Statistics of Education 1966 to 1971, Vol., Schools, London, HMSO.

The DES study (Education Survey 13) noted that within the space of a few years the source of intakes of some schools changed radically and also visibly because of the increase in the number of coloured immigrants. For instance, one ILEA secondary school increased its number of coloured pupils from 12 out of 1,100 in 1964 to one fifth of the roll in 1969. Another London school in 1967 had an immigrant population making up 60% of the 1,000 pupils, covering 26 nationalities speaking 21 languages. Overall figures for

immigrant pupils in January 1969 show West Indians as the largest group (42.5%) and Indians and Pakistanis together following them, (28.0%) with Cypriots forming the smallest group (6.1%).

In the long term the number of pupils born overseas entering school will fall. The number of work vouchers issued annually had dropped from 30,125 in 1963 to 4,978 in 1969. The number of dependent wives and children arriving in this country has also dropped but it will be some years before the number of children becomes insignificant. These children together with those who are, for the purposes of the DES statistics, counted as immigrants although born in this country, will maintain the number of immigrant children roughly constant at the present level. The education of immigrant children has also been badly affected by the tendency of immigrants to settle in certain parts of the country. They are inclined to congregate and concentrate in large conurbations which provide the job opportunities and housing facilities which they need. Primary settlers are followed by subsequent arrivals in these areas mainly because they find a sense of identity and a certain measure of protection and comfort living among their countrymen. In consequence, the immigrant pupils are inevitably found in considerable numbers in schools in these areas. Greater London and the West Midlands constitute the chief centres for immigrants and their children. Three-quarters of the immigrant pupils in schools with more than 10 such children on their roll in January 1967 were in these two areas. Other areas with substantial numbers of immigrant pupils included the South East, the North West, the East Midlands, Yorkshire and Humberside. These are taken together accounted for about 85 per cent of Commonwealth immigrant pupils. This explains why in 1969 the immigrant children were found to be present in only 9,907 of the 28,528 schools in England and Wales and also only in certain areas the immigrant school population is far in excess of the national average of 3.2%.

According to the 1972 Statistics of the Department the

proportion of immigrant children in the primary and secondary schools of the Outer London Boroughs of Brent and Haringey were 25.2% and 26.5% respectively. In the Inner London Boroughsof Islington and Hackney the proportions were 20.7% and 22.3% respectively. In Tower Hamlets/City of London the proportion was 10.5%. The County Boroughs do not have such high percentages as Inner and Outer London, but nevertheless Leicester reached a figure of 14.4%, followed closely by Wolverhampton at 12.7%.

Table 10. New Commonwealth Immigrant children in London and County Boroughs with populations of 50,000 or more where they exceed 10 per cent of all pupils in maintained primary and secondary schools (1971, 1972):*

January	1971* Primary & Secondary	1972† Primary & Secondary
Inner London Boroughs		
Hammersmith	16.0	15.7
Kensington & Chelsea	12.0	13.6
Camden	10.7	11.7
Westminster	13.2	14.0
Islington	20.1	20.7
Hackney	21.6	22.3
Tower Hamlets/City London	9.0	10.5
Lewisham	13.5	14.0
Southwark	12.7	12.8
Lambeth	18.5	19.8
Wandsworth	15.0	16.6
Outer London Boroughs		
Brent	25.8	25.2
Ealing	20.5	21.6
Haringey	26.6	26.5
Newham	15.8	17.3
Waltham Forest	11.4	11.2
County Boroughs		
Bradford	10.5	11.4
Birmingham	9.5	9.4
Derby	6.4	6.4
Huddesfield	12.5	12.4
Leicester	13.5	14.4
Wolverhampton	13.0	12.7
Warley	10.6	10.5
Preston	9.8	11.0

Source: *DES (1972) and Runnymede Trust Newsletter (April,1972).
†DES (1973) Statistics of Education, 1972.

In England as a whole, according to Ayres (Townsend, 1971), approximately a quarter of a million immigrant pupils were on the roll in January 1970 in the maintained primary and secondary schools out of a total of some seven and a half million pupils. The actual figures were 262, 279 immigrant pupils out of a total number of 7,477,247, which represents 3.5% of immigrant pupils for the whole country.

For LEA's as a whole, **Table** 11 shows the distribution in terms of percentages of immigrant pupils on the school rolls. It will be noticed that just about half of the LEA's have less than one per cent.

Table 11. Immigrant pupils as a percentage of all pupils in LEA's, January 1970.

IMMIGRANT PUPILS	NO. OF LEA's
Less than 1%	72
1.0 - 2.9%	28
3.0 - 6.9%	22
7% and over	24
TOTAL	146

Source: Ayres (Townsend, 1971).

In January 1970 there were 569 schools with over a third of the pupils of immigrant parentage (out of a total number of schools in England of approximately 26,000). Most of the schools with much higher numbers of immigrant children were concentrated within relatively few LEA's (46 out of a total 146 LEA's). Some of these schools had a much higher percentage of immigrant pupils with an exceptionally high percentage of immigrant children in a small number of schools, as shown by table 12.

Table 12. Schools with high percentages of immigrant pupils, January 1970.

IMMIGRANT PUPILS AS A PERCENTAGE OF ALL PUPILS IN THE SCHOOL	NO. OF SCHOOLS
33.3 - 50	352
50 - 60	121
60 - 70	61
70 - 80	33
80 - 90	2
Over 90	
TOTAL	569

Source: Ayres (Townsend, 1971).

Ayres (Townsend, 1971) also pointed out that the distribution of pupils of ethnic minority origin varies greatly from school to school but this bears no relation to the ethnic groups' distribution in the LEA as a whole. In some schools in one Outer London Borough nearly all immigrant pupils come from Asian families although in the borough as a whole one quarter of pupils from ethnic minority groups were of West Indian origin. This contrasts with other schools where there was a majority of West Indian pupils.

Southall was one of the areas which first attracted national attention early in 1964 b ecause of the very large rise in the proportion of immigrant children during the years 1960-64 in the school population from 1% to 15% (1130) by January 1964 (Martell 1976).. In 1964-65 two Southall schools, Beaconsfield Road Junior Modern and Infants school had 59% and 58% immigrant (mainly Asian) pupils respectively. Of the other 18 schools in Southall 3 had between 25% and 35% immigrant pupils, 12 between 10% and 24% and the remaining 3 had 3%, 2% and 0.9% respectively (Harrison, 1974). Teaching difficulties were accentuated because the majority of these immigrant pupils were non-English speaking Indians (mainly Sikhs) and because the different ethnic minority groups were diverse and unevenly concentrated.

There are two points worth noting with regard to both the pattern of immigration and the statistical information which may affect the future position (Ayres,

(Townsend, 1971)}.

Firstly, in a number of Outer London Boroughs the pattern of immigrant settlement can be seen as an extension of a larger and older settlement spreading from the Inner London areas. Thus some Outer London Boroughs are mainly affected by the presence of immigrant pupils in areas adjoining the ILEA. Many pockets of immigrant settlement, such as that of the Cypriots in North London or the Italians in Bedford and in the Lea Valley in Enfield, are isolated units.

The second point concerns the definition of an immigrant pupil which has been selected. Officially, a child born in the U.K. of immigrant parentage remains an immigrant until his parents complete a 10 year residence period. His status then changes to a non-immigrant. However, his educational needs will change very gradually without this abrupt distinction. On the other hand a child who has been born overseas continues to be classified as an immigrant throughout his school life in this country, despite his educational performance.

Although it may appear that there are more immigrant children in primary school than there are in the secondary schools, it is likely that many of the primary immigrant children will no longer be classified as immigrant pupils when they reach the level of secondary school. This is irrespective of the fact that they may still need special educational attention.

Table 13. Distribution by age of immigrant pupils in maintained primary and secondary schools in 1972 and percentage of all pupils in such schools.

Ages	Number	%	Ages	Number	%
Under 5	9,848	3.7	12	19,056	2.9
5	30,615	3.9	13	19,569	3.0
6	29,854	3.7	14	19,690	3.1
7	27.909	3.5	15	16,759	3.8
8	25,686	3.3	16 and		
9	24,156	3.2	over	14,540	4.1
10	21.848	3.0	All ages		
11	20,342	2.9	(Total)	279,872	3.3

Source: DES (1973) Statistics of Education - 1972, School, Vol.1, London: HMSO.

The decreasing numbers in size which takes place for individual age groups between primary and secondary schools also takes place between the total number of pupils in maintained primary and secondary schools.

In the ILEA area, 60% of so-called immigrant pupils are enrolled in schools with less than 20% immigrants and only one immigrant pupil in six is in a school with over 50% immigrants. In the country as a whole less than 150 schools had more than 50% of pupils on their roll who were defined as immigrant in 1971. In 1972,279,872 pupils were termed as immigrants. The highest i.e., 36.4% of these were of West Indian origin (including Guyanan), second highest (20.1%) Indian, about 11% were Pakistani (including Bangladeshi) and 6.2% were Kenyan (Asian origin).

So, in the last two decades immigrants from the New Commonwealth have been arriving in the U.K. in increasing numbers, with the result that the nature and composition of certain school populations has undergone a radical change in character. It can hardly be over-emphasized that this has led to a number of educational problems which were difficult to cope with under the existing educational system. This problem is made greater by the fact that all schools do not suffer to the same extent because of the uneven distribution of immigrant children. Little's (1975) explanation very clearly indicated the crucial problem with

which the educationalists are confronted, and this relates to the extent to which, and the manner in which, the conventional educational system and its practices can best be adapted so that these pupils may enjoy the benefit of equal opportunity and performance in schools. This uneven distribution has created a situation in which some schools and some areas more than others are hard pressed to cope with educational issues arising from the special needs of pupils with alien backgrounds. In these areas a twofold approach to the problem is called for: what is primarily required is a recognition of the fact that the education of children of minority communities is an important issue of the day. Therefore it has to be tackled on the basis of a positive commitment on the part of both local and central government authorities to deploy more resources in these areas.

Another important consideration which Little (ibid) draws attention to is the fact that the educational needs of the people with New Commonwealth backgrounds and the under-privileged section of the indigenous community, appear to be similar, stemming from the common factor that they both live in deprived areas and have all the characteristics of social and economic disadvantage. Despite this similarity there are fundamental differences between the two. However, it is important that these differences should not be allowed to influence the policy which the schools and local authorities adopt in order to solve the educational issues that emerge in schools. These issues should be considered, and appropriate solutions for these found on the basis that they are solely and primarily educational.

B. EDUCATIONAL PROBLEMS ARISING FROM THE PRESENCE OF IMMIGRANT CHILDREN IN U.K. SCHOOLS

Language problem

The most immediate problem as far as educational policy in the early 1960's is concerned, presented by immigrant children, was that of language difficulty - in the words of the DES Survey 13(1971)'A knowledge of English is essential if the immigrant child is to develop self-confidence in his new social relationships, to grow culturally in his new environment, to become part of his new community. (p.9).

The survey goes on to discuss the fact that the language problem for immigrant children has many different aspects. First and most obvious there is the difficulty of learning a third subject in a foreign language. Imagine, for example, the equivalent difficulties of an English speaking child being taught maths in French. This would require quite an extensive specialised vocabulary as well as a fluent command of basic everyday spoken French. Some immigrant children will not be literate in their own language and so may have to learn not only different linguistic skills but the whole new conceptual experience of learning to read and write. Others who are literate may have to cope with an entirely new alphabet and form of writing. Finally, some writers have emphasized the difficulties of adjusting to the structures of a foreign language because of the way in which language structures are linked to concepts and patterns of thought. Nor can language problems in schools be seen in isolation, divorced from their setting and consequences. Immigrant children may fail to comply with school rules and codes of behaviour because they fail to understand them, or they may use their language difficulties as a defence and a form of self-protection. The bilingual situation itself can be very bewildering for immigrant children, producing psychological

and emotional insecurity, which hinders the expression of their real ability.

For schools the main problem is one of adjusting to the vast range of different languages, literacy and age presented by their immigrant pupils and to their very different levels of previous exposure to a British way of life and schooling system.

The DES survey, 'Statistics of Education',(1971) gives some idea of the extent of need for special tuition in English amongst immigrant pupils in maintained schools in England and Wales. According to this, in 1971 as many as 42,138 out of a total 270,745 immigrant children required special tuition.

Ayres (Townsend, 1970) arranged LEA's in terms of the percentages of their immigrant pupils who were weak in English according to the Form 7(i) criteria and found that the LEA's with the highest percentages corresponded with those with the highest proportion of Indian or Pakistani pupils. For instance, the LEA with the single highest percentage of pupils weak in English (45.7%) also had 533 out of 545 immigrant pupils of Indian or Pakistani origin. However, Townsend's results show a great variation amongst LEA's, with the average for the whole country of pupils with language difficulties being only 16.4%. ILEA and Birmingham LEA have the largest number of immigrant pupils and apart from these, the actual numbers of immigrant pupils who were weak in English did not exceed 2,000 for any LEA. The distribution of numbers of such pupils is given in Table 14.

Table 14. Numbers of immigrant pupils weak in English according to the Form 7(i) criterion, January 1970.

IMMIGRANT PUPILS WITH WEAK ENGLISH	NO. OF LEA's
Less than 50	77
50-99	10
100-199	17
200-499	20
500-999	10
1,000-1,999	10
Over 2,000	2
TOTAL	146

Source: Ayres (Townsend, 1971).

Thus it appears that language may be a major factor in the difficulties of immigrant children at school and that it affects any assessment of ability and performance. Though much research has already been done in this area, an understanding of the precise problems which arise from a language deficiency is still vital to an understanding of the situation of the immigrant child at school.

Culture Shock

The majority of immigrant children come from slow-moving, peaceful rural societies. The transition to the pace, noise and complexity of modern urban industrial societies comes as an emotional shock.

The first main contact with the host society comes through school. They may find school bewildering. Asian children, for example, have grown up with an authoritarian school system entirely different from the schools they attend now in the U.K. Entire school environments, including teachers, classroom settings, equipment, rules and regulations are all also very much unlike those they used to know. The sudden and total change in behaviour required of them may generate considerable anxiety.

South Asian children suffer particularly from anxiety created by insecurity and lack of communication. According to Edson, quoted in Martell(1976), 'the Asian immigrant child is usually quite unprepared for his uprooting and his first reaction on arriving in this country is inevitably a feeling of shock and bewilderment. His eyes and ears are assailed by a welter of new sights and sounds as well as experiencing the physical shocks of the rigours of an alien climate. Once in school he has to come to terms with yet another set of conditions, where differences will affect him more intimately and where the mastering of a new language is only one of the problems he has to face' (p.145).

However superficially successful the immigrant child becomes at conforming at school he/she will still be expected to play a traditional role at home. Asian families may disapprove of children going out in the evening to youth clubs or forming social relationships with English children. An Asian girl may see her own mother hardly even leaving the home, may be taught at home that modesty in women is a valued quality but may find that the opposite quality, flirtatiousness and sexual precociousness is valued amongst

her peers at school. Thus the degree of experimentation and lack of structure which immigrant children encounter at school may conflict dramatically with their experience at home, and the combination of this with the problems of moving from childhood to early adulthood common to all adolescents may cause great confusion. The adolescent from an immigrant culture may thus have to go through a phase of identity searching more difficult than that of his English contemporary.

The anxiety created by culture shock is often heightened by the experience of racial prejudice. Immigrant children experience white hostility and aggression at school from the standpoint of those who already know they are a vulnerable and isolated minority in a hostile society. It would indeed be surprising if the resulting tension did not disturb the learning process in immigrant children.

Some have suggested that immigrants chose to come to the U.K., hence it is their responsibility to adapt to British customs and methods. But a sensitive consideration of the position of the immigrant child indicates that this is an oversimplified view which ignores the real difficulties of young immigrants at work and school.

These various problems are, of course, exacerbated for the child who arrives in this country as a teenager.

Lack of specialised training for teachers

Training teachers to cope with immigrant pupils' specialised needs has been a longstanding problem. For instance, the Central Advisory Council for Education (England) (1967) commented: 'Teachers have generally not been trained during their courses at colleges of education to teach immigrant children. They, therefore, lack knowledge of the cultural tradition and family structure that lie behind the children's concepts and behaviour. Experienced teachers of

immigrant children testify that they have found it of great help to know about family tradition and habits of worship, and about food, clothing and customs which differ from our own.' (p.70). Individual teachers in some schools in areas where there is a particularly high concentration of non-immigrants, seem to have made efforts to learn about the culture of the children they teach. But there has been no systematic change in training policy. Nor has there been any attempt to introduce a unified language teaching system for immigrant pupils. Teachers have worked out their own ad hoc methods (some using the Peake series (1961-63) developed for Asians in Kenyan schools). Some LEA's have been forced to develop a co-ordinated policy in their areas but there is still no national policy or system of in-service training.

Two further problems for immigrant pupils connected with the teaching situation concern class size and the timing of immigrant children's entry to school.

Class size

Schools with a high proportion of immigrants will require smaller classes and more teachers (DES) since their immigrant pupils will need a lot of individual attention to help them overcome their language difficulties. The Department of Education has recognised this problem and in 1965 increased staffing quotas in schools serving areas with a substantial immigrant population (HMSO 1965). However, immigrant groups have had little option but to settle in poor inner city areas where schools are housed in old and decaying buildings. Inevitably such schools fail to avoid staff shortage and high staff turnover, in spite of the added salary inducements paid by the DES in Education Priority Areas (HMSO, 1967).

Immigrant children's entry into school

The arbitrary effects of immigration policy and entry clearance regulations may cause problems for both schools and pupils. Immigrant children may enter throughout the school year as the family arrives in England. They may leave after a short spell, as the families move from temporary accommodation in Immigrant Reception Centres to settle permanently elsewhere. The resulting disruption in schools is difficult for the individual pupils, while the schools are faced with wildly fluctuating numbers leading to administrative and planning problems.

Lack of school-parent contact

The importance of parental involvement in schooling affecting educational performance has been well documented by the research of Douglas (1964), Musgrove and Floud, Halsey and Martin (Jones, 1969). The need to involve parents is now fairly generally accepted amongst policy-making bodies like the ILEA, who rejected the policy of dispersing immigrant pupils on these grounds, and amongst teachers generally.

However, as the evidence to the Select Committee on Race Relations shows, where schools have tried to make contact with immigrant parents they have not always succeeded. There are difficulties on both sides - teachers, lacking any special knowledge of the home background and attitudes of immigrant parents may find it difficult to make contact with them or to understand their anxieties and aspirations concerning their children. Immigrant parents may well find teachers, a professional, articulate, middle class group, quite threatening to approach. Many Asian mothers speak no English at all. In an area like Tower Hamlets where, being predominantly in the 'rag trade' factories, many men speak their own language at work as well as at home, neither parent may speak fluent English and an interview with a

teacher may be a difficult and taxing experience which they wish to avoid. Many immigrant parents may also find it difficult to understand the teaching methods now used in English schools which are so different from schools in their home country, and those who came from a stable agricultural background may not understand the high value placed on literacy and education by employers in a rapidly changing urban industrial society.

Racism amongst teachers

The racial prejudice of individual teachers is a further problem faced by immigrant pupils. Several studies quoted in Abdul Bari (1973) have referred to this - for example Freely (1965):

> 'The view of the staff ranged from the sympathetic to the intolerant; from the teacher who was glad to have a brighter child to teach, to the teacher who felt that newcomers should be "...put on a boat and sent home" (words which a teacher in another school echoed, but added "...and torpedoed in mid-Atlantic"). Some teachers praised the spirit of adventure exhibited by immigrants, others resented them in a tersely zenophobic manner.'

For obvious reasons it is difficult to establish the extent of racial prejudice amongst teachers. However, it seems likely that many teachers do harbour unconscious fear of alien cultural groups - Holbrook (1964) blamed these fears as an element in the teacher's inability to communicate with children below the 'A' forms and 'The Teacher' quotes the Head of the department of immigrant children in Birmingham as saying that teachers are sometimes frightened of immigrants (The Teacher, May 21st, 1965).

Dispersal: schools policy

Some of the features of schools with high immigrant populations, which have already been mentioned, such as poor facilities and buildings, large classroom size, staff shortage and high staff turnover, point to two underlying problems, the concentration of large numbers of immigrants in a few schools, and their location overwhelmingly in decaying urban areas. Political pressure on LEA's from English parents in these areas, worried that their children might suffer educationally from the large number of non-English speaking pupils in local schools encouraged the central government to try to solve the problems by adopting a policy of dispersal. In 1965, the DES (1965a) Circular 7/65 recommended dispersal for LEA's where the percentage of immigrant children in the schools population was over 33%. Where individual schools within LEA's had over 33% immigrant pupils the circular recommended sending some of the children to other schools. Southall was the first LEA to attempt dispersal. But overall the circular had a mixed reception with many objections that the circular, in lumping together English and non-English speaking immigrant was implicitly discriminatory. The Plowden Report urged that children should be given special consideration on account of their language difficulties rather than their colour and the NUT rejected the idea of using an arbitrary percentage figure to determine when a school had 'too many' immigrant pupils. The DES (Education Survey 13) reported that by 1971 little dispersal had in fact taken place in about two thirds of the 64 LEA's with substantial concentrations of immigrant pupils and that only 11 LEA's operated a systematic policy of dispersal. Townsend's (1971) studies indicated that only three LEA's operated dispersal on a large scale. However, Deakin (1971) concluded that the circular had had an effect in confirming popular views about the danger of falling standards in schools with large concentrations of immigrant pupils.

The political aspects of immigrant education

The literature (on immigrant education) contains conflicting opinions both about means and ends of immigrant education. Tomlinson's (1977) explanation with regard to 'Race and Education in Britain 1960-77' indicated that in the 1960's education seemed to be regarded as a vehicle for assimilation in line with the model of harmonious race relations which was then generally held. 'A national system cannot be expected to perpetuate the different values of immigrant groups' (Commonwealth Immigrants Advisory Council, 1964). In the 1970's, however, there was a move to advocate cultural diversity and pluralism as desirable goals. There has also been a shift between emphasizing the similarities between the situation of immigrants and other disadvantaged groups in the host society (Plowden, 1967, Halsey, 1972) to emphasizing the differences introduced by the race factor. Where Plowden pointed to the housing problems, unemployment, poor physical environment and social stress similarly experienced by black and white disadvantaged groups alike, subsequent research has concentrated on their different heritages of language, culture and attitudes and on the effects of racial hostility and discrimination. There has been emphasis on the schools' possible role in the fostering of a strong 'identity' and favourable self-concept among ethnic minorities. This has influenced changes such as the move towards a 'multicultural' curriculum.

To sum up, immigrant children have suffered from a number of obvious disadvantages in the English education system - many do not speak the language and are often concentrated in schools with poor facilities and staffing difficulties and taught by teachers who have little knowledge of their culture. Further, no overall national policy has been formulated, and schools have had to react to the changes in their population on an ad hoc basis. There also has been an emphasis on the less tangible difficulties of immigrant pupils - problems of adapting to conflicting cultural norms, poor self-image and the stressful effects of racial hostility.

In recent years there has been a move to broaden the curriculum, to understand and to foster cultural diversity. It is difficult to predict how far this approach will be taken in the future or whether it will help immigrant pupils in their performance at school.

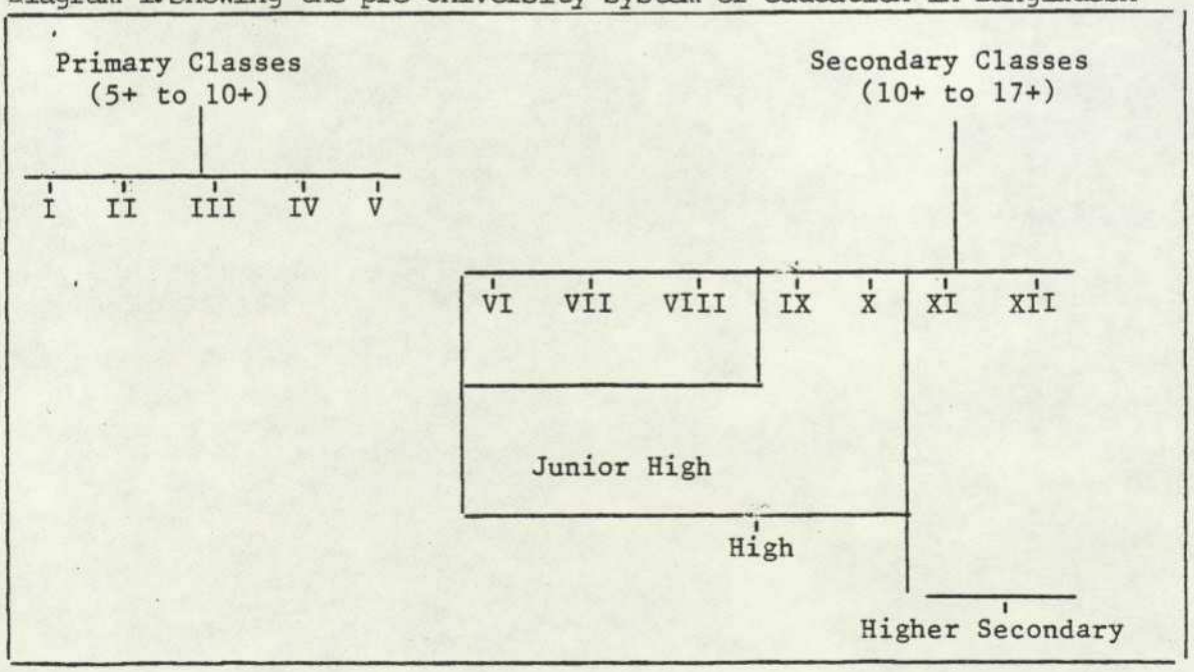
C. EDUCATION IN BANGLADESH

The present system of education in Bangladesh is based on that set up by the British under the Wood's Education Despatch of 1854 {Richey, (1922), quoted in Abdul Bari (1973)}. This has determined two striking features of the current system: a high degree of centralisation (both educational policy making and executive control rest with the government) and an extremely rigid curriculum.

This British system was entirely geared towards pupils passing the matriculation examination and going on to university. The vocational needs of individual pupils were not taken into account and many pupils who had no academic bent passed through the university treadmill because they had no other skills.

The schools continued to place great emphasis on public examinations. The Matriculation Examination has now become the Secondary School Certificate Examination taken at the end of Class X in secondary school, and there is another examination, the Higher Secondary Certificate Examination at the end of Class XII (the Diagram 1 shows the structure of the pre-university system in Bangladesh).

Diagram 1. Showing the pre-University system of education in Bangladesh



Source: Abdul Bari (1973) 'A comparative study of Attitude and Reasoning Abilities of a group of East Pakistani children in East Pakistan in the age group 13-14 years', PhD thesis, University of London.

There is still a rigid system of promotion through classes by passing internal examinations. As in the French education system, many pupils are held down and made to repeat classes. One class can contain children of varying ability, motivation and age. There is no provision for remedial teaching of any kind and the normal course is for parents who can afford it to engage a private tutor for their slow-learning child. The majority of children, however, do not progress very far in the school system (Abdul Bari , 1973).

The Select Committee on Race Relations, from their visit to Dacca and Sylhet (Bangladesh) in 1973, gave an estimate that only 60% of children of primary school age go to school. Only 36% of these reach class V (official age 9). Only 15% of secondary school children go to school at all. Since East Pakistan became Bangladesh , Bengali has been the language of instruction in schools and English has received less emphasis. Although children learn English, it is by rote and few can manage more than a couple of words. Most are more familiar with written than spoken English. The Report of the Select Committee on Race Relations on a visit to Bangladesh in 1972 quotes a pre-independence survey which showed that while 70% of secondary school students could read simple written English, only 35% could talk in simple English and only 2% showed reasonable fluency. They also reported that teacher training was very poor, lasting only one year, with three months unsupervised work in the schools. There was a shortage of textbooks, and no visual aids as such. 'Teaching was often by the "chant" method - almost medieval' (p.67).

Most recently, Bangladesh has been trying to overhaul the education system, attempting to establish universal education and to orientate it towards training a skilled productive workforce. The main focus is a campaign against illiteracy - at present only 24.3% of the population is literate. A crash two year programme has been launched to stamp out illiteracy.

D. BANGLADESHI CHILDREN IN TOWER HAMLETS

Employment prospects in Tower Hamlets are intimately bound up with education and culture. Most Bangladeshi school leavers, as the CRE Summary Report* found, have little option but to go into the clothing trade. Yet the clothing trade is a contracting and underpaid industry with very poor prospects. In appraising the factors in the education system which are failing to meet the needs of Bangladeshi school leavers, and failing to provide them with a wide range of options, the following factors were noted.

First, consider language: since in English schools English is the medium through which all pupils are taught, a non-English speaker may miss out on other basic subjects. Recommendations based on the CRE Summary Report urge that ILEA should provide more intensive and specialized English as a second language (ESL) teaching immediately young Bangladeshis who arrive in the schools for the first time. This would speed up the time when they are able to cope with the mainstream curriculum. In the meantime, the recommendations urge, other subjects should be taught by 'team teaching' in English and Bengali.

Second, in terms of parental aspirations; as first generation immigrants, Bangladeshi parents come to Britain to earn money and expect their children to play their part in doing this too. They may not appreciate the need for continuity in education and English reading and may take a child back to Bangladesh for a year or more. In Bangladesh children are already burdened with many responsibilities by their middle teens; in Tower Hamlets a boy may be expected to earn money in a clothing factory, a girl to look after younger brothers and sisters at home. To broaden the options for young Bangladeshi school leavers, parents must be involved in discussions and counselling, both in the careers and education welfare service. The Commission for Racial Equality report urges that Bengali speakers are recruited

* Commission for Racial Equality and Manpower Services Commission (1980).

into the careers service and that parents are included in counselling sessions, since the report notes that young Bangladeshis do not always make their own decisions on careers. The recommendation also advocates the introduction of 'Link courses' which provide an introduction to different occupations for young Bangladeshis so they are at least aware of other options than the clothing industry.

Finally, a third major problem in Tower Hamlets after lack of parental involvement and language problems, is racism. Experience seems to show that a strong line on racism taken by the head of a school tends to reduce the fears and tensions in schools; yet many teachers are afraid to single out a particular group for special attention or protection in case it fuels the differences between that group and the school as a whole. Confusion among teachers about the right way to approach racial hostility permits it to grow and flourish.

Many workers in Tower Hamlets feel that the ILEA's greatest mistake has been to see the problems of Bangladeshi children as essentially temporary, ending when the last generation of non-English speaking Bangladeshi-born children moves through the schools. But this is far from the truth - it is already evident that British-born children of Bangladeshi parentage are not going to be able to compete academically and linguistically on equal terms with white children. Indeed they may well find that they cannot speak either English or Bengali and have neither the skills to live in the U.K. nor to return to Bangladesh.

CHAPTER 5

REVIEW OF PREVIOUS RELEVANT RESEARCH

This literature review ranges from a consideration of studies which are descriptive to detailed empirical studies, and will consider previous investigations which are found to be relevant, and which are mostly concerned with immigrant children's abilities and attainments; with their personal, social adjustment; their self-esteem and identity; and with racial prejudice and violence on the part of the host community. The review will refer also to other writers' comments on the suitability of various test materials and on teachers' attitudes and expectations. Some research studies to be described have a direct bearing on the present work, whilst others will be indirectly relevant.

The history of research on immigration has been well documented by Rose et al.(1969). In the early years (c.1960) of New Commonwealth immigration there was little research undertaken and what was done mainly concentrated on Caribbean immigrants rather than Asians. At that time some research was carried out by the Institute of Race Relations and the rest by postgraduate students (Rose et al., 1969, research details unspecified). However, in the 1950's some distinguished work was done; this was mainly concerned with Negroes from West Africa and the West Indies.

To date, although there have been quite a number of studies concerned with the education of South Asian immigrant children, there has only been one such extensive study (Bari, 1973) devoted to Bangladeshi children as far as the writer is aware. However, there have been a number of other studies which are related to the present investigation, such as those by Ashby (1968), Bhatnagar (1970), Sharma (1971), Ghuman (1975), Verma and Mallick (1981) and others.

Abilities, including intelligence and attainment

One of the early researchers in this field was Saint (1963) who studied immigrant children's performance in British schools. The aim of his research was twofold: firstly, to study certain characteristics, such as intellectual capacity and educational achievement and secondly to investigate the immigrant child's emotional adjustment through his attitude to school and social contact with English children. Saint administered a variety of tests and obtained a general report of the children's attitude to school and also information on the relationship between Punjabi and English boys. His sample consisted of boys attending secondary schools in Smethwick. The results of this study showed that the Punjabi children were failing mainly because of their facility in the use of the English language. This also lowered their score in non-verbal intelligence tests; however, there was a significant positive correlation between the period of residence in the U.K. and the standard of their responses to the I.Q. test administered. The study also indicated a positive relationship between the period of schooling and the children's performance on the test.

Despite their educational backwardness the Punjabi boys seemed to have adjusted well to school life. Although there were in the scores achieved no signifcant differences in the attitude to school between different schools, age groups or lengths of schooling, there appeared to be a social cleavage between the majority and minority subgroups in the classes studied. However, as the social class background of the English and Punjabi boys was not matched, and none of the Punjabi boys had received an English primary education the results of this study are questionable.

Akram (1964) made a study of the relationship between intelligence and social class and the kinds of moral judgements made by Indian and Pakistani children (6 to 15 years old) in Stepney (lower social class) and Hampstead (upper social class). Social class and intelligence were not found to be as important

as the length of stay in the U.K., the education of parents, and authoritarianism at home in relation to the moral judgements made by the children.

A comparative study of achievement between indigenous children and different groups of Punjabi immigrant children was carried out by Dosanjh (1967). The aim was to compare the intellectual potentials of the various groups using non-verbal tests, i.e. Alexander's version of Koh's Block Design test and the Raven's Coloured Progressive Matrices (sets: A, AB, B).

Length of schooling and residence in the U.K. seemed to have affected the scores significantly in a positive direction. Punjabi boys had a higher score than the girls, but the indigenous children score higher than the Punjabi children of both sexes.

A relevant study of ability and attainment, attitudes and aspiration in 59 Indian and Pakistani immigrant children was carried out by Ashby (1968). The factors studied were mainly related to length of stay and sex, and parental attitudes to the host culture, the latter affecting girls in particular. 150 Scottish children provided the control group for comparison.

When comparing immigrant children born in the U.K. and those who had been here from their early primary schooling, with the Scottish children, no significant differences were found. However, children who had come recently were found to differ significantly from the three groups of children discussed above.

Butt (1969) studied the relationship between background factors and academic achievement and vocational interests in Asian immigrant children, and whether these factors affected immigrant and indigenous children similarly. The sample consisted of 50 immigrant and 50 indigenous boys from a secondary modern school in West London. The results indicated the beneficial effect of length of residence in the U.K. on

scholastic progress. Bath (1970) (quoted by Ghuman, 1975) investigated the relationship between length of stay and performance in various tests, i.e. non-verbal intelligence (Raven's Matrices) and Schonell Reading and Spelling Test in Punjabi secondary boys. He found that there was a correlation between length of stay and scores on the Raven's Progressive Matrices Test but not between length of stay and scores on the Schonell Reading and Spelling Tests.

Haynes (1971) carried out research into the learning ability of immigrant children, particularly with respect to language and cultural handicap. One of the main aims was to devise a new type of test of learning ability. She used a sample of 125 Indian junior school children and 40 English children of comparable age (seven to eight years). The children were tested individually; information regarding variables thought likely to have an effect on learning ability was obtained, and questionnaire rating scales as well as a teachers' attitude scale were used in order to analyse statistically the relationship between educational achievement and other personal and social variables. The results indicated that intelligence tests were less valid predictors of school achievement than tests of learning, and that length of schooling was significantly related to language ability but not to test scores of perceptual or conceptual abilities. It was also found that the Indian children had a more favourable attitude towards school and their class teacher, but were significantly less well adjusted socially when compared with the indigenous children.

A study carried out by Sharma (1971) is more specifically relevant to the present study. In that study Indian junior Punjabi children (long-stay and short-stay) in the U.K., and in India were compared with one another and with a control group of indigenous children. The main purpose of the study was to assess the degree of association between intelligence and ability, and length of exposure to the British environment. The children were given a variety of tests, including the WISC

performance tests and Raven's Coloured Matrices Test. The results of these tests showed that the long-stay Indian children did not perform as well as the indigenous children on the Block Design, Coding, Picture Arrangement, Object Assembly and WISC I.Q.; however, in the Picture Completion, Digit Span and Raven's Matrices Tests such a difference was not present. When long-stay and short-stay Punjabi children were compared, long-stay children showed significantly better scores on all the tests; so the results of Sharma's study gave evidence for the fact that Indian children, when they experience increased English schooling, could reach substantially the same level of attainment as English children. With regard to sex, Sharma stated that 'Both boys and girls show this type of improvement over a period of time though boys progress faster than girls and catch up with their English counterparts on most of the skills. Both boys and girls lag behind on skills involving spatial relationship', (p.190). Because of this lack of basic skills and their deficiency in certain manipulative and perceptual skills, Sharma suggests that practice in ' ... these should be provided at the same time as experience in spoken and written English', (p.191).

Clearly this study is of importance to the present study, as the children are of comparable age, of Indian sub-Continent origin, and were tested for performance and intellectual ability.

A study of Bangladeshi children was undertaken by Bari (1973), which looked at the attitudes and reasoning ability of 13-14 year old Bangladeshi children in Bangladesh and in Britain. (This is, incidentally, to date the only empirical study of Bangladeshi children in this country.) The sample of this study consisted of 95 Bangladeshi children at school in the U.K. and 200 Bangladeshi children in Bangladesh. The author used two verbal reasoning tests, a non-verbal reasoning test and two attitude questionnairs (on school and arithmetic), which the writer had developed himself. The New Junior Maudsley Inventory (Furneaux and Gibson) and a specially adapted version of the graded A-M (attainment) test of Vernon were used to assess personality and attainment.

The results, as the author himself writes, were 'suggestive rather than conclusive', largely because of the specially constructed tests whose reliability and validity are unknown, and the unrepresentative nature of the Bangladeshi sample in Bangladesh. However, his findings were that on the non-verbal reasoning test there was a significant difference in favour of the Bangladeshi children living in the U.K. when compared with those living in Bangladesh, but on the verbal reasoning test there was no difference in the performance of the children from these two groups. The significant difference which was found in favour of the homeland Bangladeshi children in attainment in arithmetic is explained by the author by the suggestion that the latter children benefit by being taught in their mother tongue, whereas the immigrant children are taught in English. It would seem from this study that the immigrant children's standard of English makes it difficult for them to benefit from the education offered by British schools. There was no difference between the two groups in their attitude to school. Using the NJMI it was found that there was no significant difference between the two groups on the extroversion scores obtained, but on the neuroticism scale over half the Bangladeshi immigrant children were "neurotic" according to the norms for British children established by Eysenck.

A comparative analysis of the scores on all the tests administered shows that there was a significant difference in scoring between the children of 2 years residence in this country and those of 3 years and more.

A possibly more helpful study of the effects of emigration on mental processes was carried out by Ghuman (1975). The aim of his project was: (a) to assess the influences of English schooling on the thinking processes of British Punjabi boys by comparison with Punjabi boys in Punjab and English boys in the U.K.; (b) to relate thinking processes in Punjabi boys in India to their social nucleus in order to assess the degree of aculturisation of Punjabis in Britain and relate it to their intellectual abilities, and (c) to compare actual

scholastic achievement and attitudes to school of British Punjabi boys and the English group.

Two age groups were taken - a junior (9-/9+) group and a senior group (11+) - comprising seventy children, each divided almost equally between English, British Punjabi and Indian Punjabi children. Age and social class were matched. A battery of tests was administered, which included WISC Block Design; Raven Matrices; Vygotsky Block; Conservation of Weight and Area; and Equivalence Test.

The findings indicate that the Punjabi boys with full schooling in the U.K. had thinking processes very similar to the English boys, but the thinking processes of the indigenous Punjabi boys were 'markedly different, both qualitatively and quantitatively', (p.104), from those of the British Punjabi boys. Ghuman considers that these different effects occur because of cultural and educational factors, which, according to Ghuman, for these children, were entirely provided through their contact with the school.

Kroeger's (1977) recent studies of cognitive development in migrant children and the role of training in the assessment of learning attempted to show that scores on tests such as the Inhelder-Piaget multiple classification matrices between different cultural groups can be improved by training. A sample of 156 boys from the second grade of London schools (66 British, 56 U.K.-born Indian and 34 Indian children born abroad) was tested, trained and retested on the Inhelder-Piaget matrices, and the prediction was made that these groups 'would differ in their reactions to pre-test, training and post-test because of their different cultural backgrounds', (p.2).

The overseas-born group scored significantly lower in school subjects such as mathematics 'general' and 'mental problems' and in reading age than the U.K.-born group. The British and the U.K. born Indian children differed only in scores in the Crichton Vocabulary Test.

If the test score of all children whose parents belong to social classes III and IV/V are considered then there is no initial difference between these groups of children, but the Indian children tend to learn more during training. It would seem from this study that certain immigrant children's tests scores can be improved by training.

Ellis (1977) carried out a study of the indigenous, West Indian and Other Immigrant children in a secondary school in an Educational Priority Area. Ellis found that indigenous children were more adjusted to Social Relationships and to "Reality" than Other Immigrants . The indigenous children not only had greater scholastic aptitude than the West Indian children, but were more successful than all the immigrant children in the G.C.E./C.S.E. examinations, even allowing for the differences in scholastic aptitude. This would seem to indicate that personality factors affected performance in examinations, and such factors were indeed found to be influential with the Other Immigrant children but not with the children from a West Indian background. The deprivations which define an Educational Priority Area appear to minimise the differences in the indigenous and the immigrant pupils' aptitude, attainment, personality and attitudes, at least according to this study.

Aspects of Adjustment

Bhatnagar (1969) studied the adjustment of West Indian and Cypriot secondary school children in North London using indigenous children as a control group. Adjustment was found to be closely related to the status of the ethnic group as assigned by the host community. Indigenous children were the best adjusted, followed by Cypriot and lastly the West Indian children. Length of stay and age at the time of emigration were found to have no correlation with adjustment. Immigrant children had lower scores in attainment in school subjects and I.Q. test scores. There was no correlation between intelligence test score and adjustment, but there was between adjustment and academic achievement. Proficiency in written, but not spoken, English, was related to adjustment.

There was very little sign of ethnic integration in the children's patterns of friendship.

It is of interest that neither length of stay in Britain, nor age, nor I.Q. scores achieved were found to be related to the children's degree of adjustment; but the fact that proficiency in writing English and in academic achievement were so related perhaps indicates no more than that one is here dealing with a tautology: adjustment must mean, inter alia, (see p.186 - 90) a desire to adopt at least some of the norms and values of the host society, and these norms and values include a desire to be able to write in English and do well at school work.

Bhatnagar has recently (1981) edited a collection of papers concerned with the education of ethnic minorities. These papers examine the adjustment of immigrant children at school, particularly focusing on issues such as their self concept, the impact of high concentration of immigrant pupils in a particular school, the effect of linguistic problems on adjustment at school, and the social relations of immigrant children, as well as the relationship between this and the children's personal and academic adjustment. Verma and Mallick's article is especially relevant to the present study. They identify language difficulties as a crucial factor in the educational problems of Asian children. They argue that a gradual introduction to the speaking of English, combined with mother-tongue teaching, can enhance the child's identity. They reject 'assimilation', and emphasise that multicultural education implies a deep understanding of the social and cultural background of children, and a constant effort on the part of the teachers to help the children respect each other's cultures in a plural society. 'Pupils from ethnic minority groups do not need to bargain away their identity to pay the price of an adequate education', (p.62). They feel that British teachers, though appearing to support 'integration', are in practice working towards 'a naive kind of "assimilation"' while a significant proportion holds hostile stereotypes of minority ethnic groups. However, Verma and Mallick conclude that education can have a crucial effect on mitigating the

problems of plural societies, and suggest that providing adequate training for teachers in order to help them understand their pupils' backgrounds, and the recruitment of more teachers from ethnic minority groups should be a priority for all educational authorities who have ethnic minority group children in their area.

Taylor's study (1976) published under the title 'The Half-Way Generation' concentrates on young Punjabis in Newcastle-upon-Tyne who entered Britain as children, (the titles implies the status of these children is half-way between their parents' first generation Punjabi culture and the British culture of the wider society). Taylor attempted to assess the adjustment of his sample using Gordon's Assimilation Variables as a basis. He has acknowledged the difficulties in defining the concept of 'assimilation'. According to him it is value-laden and leaves open the question of which strata of a class-divided society to choose as a model for assimilation. He found that his sample remained culturally distinct despite a strong desire to succeed academically and economically in British society. They continued to speak Punjabi at home with their parents, to see themselves as Indian or Asian and 40% of the sample felt that nothing in the traditional ways should be changed. Taylor concluded that respondents who did want changes favoured changes which were marginal to the traditional culture. However, Taylor found a difference between the Hindu and Sikh groups, on the one hand, and the Muslim group on the other with respect to cultural transition: the latter had made the least cultural transition of these groups. (This may be relevant to the present study in which the sample is all Muslim and seems to have made virtually no cultural transition.) Taylor's findings echo those of the Ballard (1972-3), Thompson (1974) and others, implying some degree of cultural pluralism with a continuing acceptance of an Asian identity and traditions. Taylor's work suggests that his respondents remained particularly attached to their strong family ties while accepting some English cultural values.

'Between Two Cultures' (ed. Watson, 1977) is a collection

of studies which examined race relations through an anthropological approach of minority communities. The studies concentrate on immigration as a dynamic process. In the two studies of Asian groups - Ballard and Ballard on the Sikhs, and Khan on the Mirpuris of Bradford - the researchers have examined the history of migration and the development of the community in Britain through several phases, particularly the interaction between the host society and the migrants, and its effects on the culture of the migrant group. Both studies suggest that first generation South Asian migrants retained their culture and were guided by the values of their homelands, but did not reproduce exactly the structures of their communities in the homeland, i.e. they adopted some western habits in the context of their own culture. The second generation Punjabis remained culturally distinct from the British culture, in part because of the lack of acceptance by the host society. They may develop wider loyalties to the overarching South Asian group rather than remaining attached to the particular loyalties of the homelands. The Mirpuri community studied by Khan (1977) appeared to be more like the Tower Hamlets' Bangladeshi community than the Sikhs, since both are Muslim communities relatively recently (c.1960) established in Britain. She has described some of the conflicts between home and school affecting Mirpuri children, problems caused by parents with unrealistically high expectations for their children: parental anxiety over their daughers' behaviour threatening their marriage prospects and worries at home over the children's loss of mother-tongue fluency as their English improves.

Self concept and self esteem

Every child has, as he grows up, to develop a concept of how he is valued and accepted by others, which becomes linked to a concept of the esteem in which he feels others hold him. As he approaches adolescence particularly he also has to form a self-identity, which must inevitably be rooted in the norms and values of the society in which he lives. For the child from a non-white culture growing up in Great Britain the consciousness of having his roots in a different

culture would seem to lay open the possibility of his developing an identity crisis.

In recent years, a number of major studies have been published relating to the immigrant child's self esteem and self concept and also to the possible identity crisis which living "between two cultures" can cause. Milner's book 'Children and Race' (1975), contains a study of identity preferences in black and white children. His sample of 300 children of white English, West Indian and Asian origin, aged five to eight years, were shown dolls or pictures representing their own racial group and the indigenous group. A relatively high percentage of the black children in the sample said that the doll which looked like them was 'bad' (58% West Indian children and 45% Asian children) and 'ugly' (82% West Indian and 77% Asian), while a substantial proportion of black children chose a white doll to represent themselves, (48% West Indian children, 24% Asian children). Milner expands his findings to a general conclusion that Black British children show a preference for the white group and tend to devalue their own group. Such a devaluation, if indeed this is what is happening here, cannot help the development of self-esteem, which must rest to a large extent on a child's acceptance of himself as he is. The development of self-esteem in coloured children living in the U.K. has been discussed by Verma and Mallick (1978) who "... found that Asian and white pupils have higher self-esteem than black pupils, and that black girls have higher self-esteem than black boys", (p.150). On the other hand Louden (1978) did not find any significant differences in self-esteem between Asian, West Indian and English adolescents, but did find considerable sex differences both between the two sexual groups, and within the ethnic groups as far as the two sexes were concerned. Thus the girls in all the ethnic groups had a significantly lower self-esteem than the boys, and the West Indian girls were found to have a higher self-esteem than the Asian girls, who in turn had a higher self-esteem than the English girls. However, it is of interest to note that Verma and Mallick (1978) found in their study that the black girls had a higher self-esteem than the black boys.

However, the Louden (1978) study concerned itself with adolescents, and the reasons given by the author for the findings are only suggestive and not very convincing. ('The higher self-esteem among West Indian girls may be also due to the orientation, values, attitudes and behaviour problems that the parents of these adolescents have evolved towards British society') (p.226).

One could assume, therefore, that there is no overwhelming reason to suggest that immigrant primary school children need necessarily suffer, as a group, from a lower self-esteem than the indigenous children, though the Milner (1975) study of younger children on doll play would, as described earlier, suggest that lack of identification with one's own ethnic group at an early age may lead to problems in forming a self concept. Both Milner (1975) and Verma and Mallick (1978) suggest that the British school has a role to play in helping such children form both a balanced self-esteem and an identity concept which is not at the mercy of an over-identification with the values of the host community. Marbell (1976), in an examination of the social position of Asian immigrants in this country in relation to the varying educational provisions made by the L.E.A.s, states that the Asian cultural values should be reinforced by the school system from which the children are prepared for life in a multi-cultural society. Brittan (1976) has commented that 'Teachers perhaps feel that schools should be enriched by the cultural diversity represented in them but that this is difficult for them to realise in practice', (p.191). She says that probably teachers 'feel unprepared and unaided in the task of bringing this about', (p.191).

If it were possible to provide such a multicultural environment within the school environment pupils would be able positively to enjoy each other's cultural activities (McQuillan, 1977). Such a multicultural environment might also help the immigrant child to develop an assured self-esteem as a member both of the community in which he lives and of the ethnic group to which he also belongs traditionally. It has not

been impossible for European children, especially Jewish children, to develop a satisfactory self concept in not entirely dissimilar situations.

However, it is possible that teachers' attitudes to children who come from a variety of ethnic backgrounds may well affect the way in which such children are able to develop a balanced self concept while living between two cultures.

Teachers' attitudes and expectations

Because it is assumed that the teachers' attitudes and expectations towards immigrant children must also be influential in affecting such children's achievement in school, many studies have sought to investigate this factor. For example, in the Haynes' (1971) study mentioned earlier it was found that the teacher's attitude towards Indian children was closely associated with the children's achievement in school. It is important in this respect to differentiate those studies which have sought to show that teachers' positive expectations affect an increase in children's I.Q. scores from those studies in which a teacher's attitude would appear to affect a child's school achievement. Rosenthal and Jacobson (1968) are purported to have shown that teachers' expectations can have an effect on children's I.Q. scores. In fact, there is every reason to distrust such findings and there is no real evidence for the hypothesis that teachers' expectations have this effect. Vernon (1979) has reviewed the studies undertaken by Rosenthal and Jacobson (1968), and he also refers to the summary of nine other studies reviewed by Elashoff and Snow (1971) "which entirely failed to demonstrate any teacher expectancy effects", (p.26). However, Vernon does suggest that self-fulfilling prophecies may well play a part in affecting children's achievement grades (Rist, 1970). Driver (1977) refers to the intercorrelation which is significant at the 0.001 level as far as his study is concerned of teachers' rating of 4th Form (Secondary School) pupils' social behaviour and academic ability. This inter-correlation held for both English and West Indian boys and girls, but "the intercorrelation statistic was twice as high in the case of West Indian boys as for the other three pupil

categories just mentioned', (p.357). This relationship between perceived social behaviour and academic ability gives some information on the manner by which teachers' expectations about pupil ability are formed.

Pidgeon (1970) has also commented on the possible influence of the teachers' expectations in motivating children to achieve the highest performance they are capable of achieving. The effect of the teachers' expectations seem to be more influential on younger than on older children (Rosenthal and Jacobson, 1968). It is possible that older children are much more influenced by their peers than they are by adults, whereas younger children are more susceptible to adult influence than older children are.

A study by Driver (1977), to which reference has already been made, has shown how a teacher's view of a child's social behaviour in school is strongly correlated with the teachers view of the same child's academic ability. Milner (1975) describes Katz's (1968) and Hoehn's (1954) researches which seem to indicate that Negro teachers describe Negro pupils in terms quite different from those used by white teachers, also when children are seen as "problematic" in advance there are relationship difficulties between pupils and teachers from the outset. Milner also mentions one of Katz's other studies in which reference is made to Negro pupils' inferior performance after being told that their scores on a previous test had been the same as the average white scores. The given explanation is that the Negro children ' ... set their goals lower on the next series of tasks, presumably to a more"'appropriate'"level' (Milner, p.173). This last comment does seem to indicate that sometimes research evidence can be interpreted in a manner appropriate to the researcher's own prejudices. Is it necessary to assume that these children 'set their goals lower', or may it be that they were actually not able to perform better? There is little doubt that to an extent expectation can at times influence performance, but the teacher's expectation is only one of several factors influencing the immigrant child's achievement in school.

With reference to the Driver (1977) study, the teachers in this study seemed to have an insufficient range of cultural skills with which to manage a classroom which contained a minority group of West Indian children, and it would seem that indirectly the lack of these skills determined the teachers' concept of their West Indian pupils' academic ability.

Teachers' training

A discussion of teacher expectation naturally leads to a discussion of how teachers in Britain are trained to be able to teach children from a variety of ethnic backgrounds. Jackson (1979) in his examination of 6 children with different cultural origins in one Huddersfield school says that even in a very good school 'The teachers simply do not know about the children's homes, backgrounds, pre-school years' (p.136). This lack of knowledge on the teachers' part means that such children 'do not make sense in school'.

Bagley (1979), also in reviewing the reasons why Jamaican children achieve less well than indigenous children in school, cites many different reasons for this, none of which imply that these children are inherently less capable than indigenous children. There is always, however, the possibility that such children are, indeed, less inherently capable, and that the environmental disadvantages they suffer are not the only reason for their inability to do well at school. The research programmes of the genetically-oriented researchers in this field are sophisticated (Urbach, 1974), and there is much evidence to indicate that there are genetic factors in operation in relation to ethnic group I.Q. differences. Jensen's work comparing American Negro groups with American white groups (various but see 1969) seems to leave little doubt that even though the American Negro mostly lives in a more deprived environment than the American white, these environmental differences cannot alone account for the observed differences in I.Q. And the many other possible contributory factors to these results, such as tester and test bias, have been found to be unimportant (Vernon, 1979), (see also page 140 for further discussion). However, such findings, if further

substantiated, should mean that the black child should receive even more compensatory help in school than he does at present. But Bagley (ibid) considers that the black child is, instead of being especially helped in school, in fact alienated from the education system, and that educational reform should aim at "pluralism" in school, which takes account of the language, culture and social and religious traditions of all the different ethnic groups being educated together.

The educational reform to which Bagley refers must start with a change in the manner in which teachers are trained. As it is not unlikely that a teacher will at some time during his professional life be teaching in a multi-cultural classroom, his teaching should prepare him for this experience. At present the teacher training curriculum does not give a high priority to helping teachers to deal with multi-cultural classes of children. Schools with children of more than one ethnic background have special problems which are not fully recognised either by the relevant educational authorities or by the teachers themselves (Brittan, 1976). Verma and Mallick (1981) stress how important it is for in-service training programmes to help teachers understand something of the historical and cultural background, and the present situation of the countries from which minority ethnic groups have emigrated. Until such changes to the teachers' training programme are effected teachers will continue to find it difficult effectively to teach children from foreign ethnic backgrounds to the detriment of the children's school experience.

One way in which many teachers' lack of expectation of the abilities of children from ethnic-minority groups is exemplified is through the teachers' seeming inability to recognise that it is necessary for such children to achieve a good command of the English language (the Bullock's Report, 1975). This low expectation is then in part at least reflected in the children's lack of ability to express themselves adequately in English. Bullock makes the point that for overseas children for whom English is a foreign language, the teaching of English as a second language must be undertaken by the school. There is a shortage of teachers able to do this. Also, such teaching must start early in the child's school life.

Without such teaching a plateau is reached early in life and teachers then do not expect non-indigenous pupils to rise above this plateau.

Suitability of various western test materials on the immigrant children

The question of how adequately the various tests employed on children from immigrant communities are suitably employed on such a population is a moot one. Vernon (1979) discusses the cultural bias in intelligence tests. He makes the point that two separate aspects of test materials are often confused: one is about the nature of the test material itself, which may be unfamiliar to the testees, and the other is that much of this material is complex. He summarises the findings of many studies by saying that ' ... black (American) difficulties with tests depend far more on the complexity of mental processing than on unfamiliar content or conditions of administration', (p.317). It seems, as far as studies in the United States are concerned, that many of the variables which were thought to affect the black adult or child's test performance cannot be said to be due to unfair culture biased tests. Despite the use by many Negroes in the States of black dialect the culture in which the American black lives is an American culture, largely shared with whites of the same socio-economic status as themselves. However, this cannot be said of the immigrants to Britain. Many of the children who have been the subjects of the various studies discussed were not born here, and even when they were, they are first-generation citizens, brought up by parents who were themselves reared in a non-white culture. Also, the groups which have been studied are themselves highly diverse, ranging from urban West Indians whose parents had a good deal of contact with white culture in the West Indies, to rural Bangladeshis, who had had no such contact at all. Verma (1979) in discussing attitude measurement in a multi-ethnic society, has pointed out that in Britain immigrant groups have both a geographical location as well as a distinct cultural-ethnic background. Thus there is, for example, a Manchester Pakistani who may be ' ... more like other Mancunians, other Pakistanis, (or) others for whom English is a second language',

(p.461). Verma argues that a test need not necessarily be a standard instrument. Tests could be "... constructed by and validated for different ethnic groups", (p.461). The development of such tests need not mean that comparability between members of different culture and ethnic groups would not be possible. Tests could be devised which were parallel to one another yet each would be fair to the group being measured. Hegarty and Lucas (1978) have shown "... that culture fairness in assessment is no simple matter", (p.26). They draw attention to the fact that the ability to learn is relevant to achieving an educational goal, and "... that tests based on the notion of learning ability ...", (p.26) would seem to be more relevant than most tests at present in use. However, neither Verma's proposed culture and location orientated tests nor Hegarty and Lucas' learning ability test are at present available.

Racial prejudice, violence and other disadvantages suffered by the immigrant

In a study of immigrant children it is not possible to avoid a consideration of the possible effect of racial prejudice and racially induced violence on the children. This is because the general social atmosphere in which the children are growing up consists in part at least of prejudice against the black and coloured citizens. This atmosphere is bound to affect the children's attitudes to the society within which they live, to the school they attend, and to themselves.

Research carried out by Hubbard (1965) showed that children even of 5 or 6 years of age were aware of differences in skin colour, and were also aware of the social disadvantages that result, particularly in play situations. However, prejudicial attitudes were not found to be related to sex, age or social class, or academic ability. It is of interest to note that children of this young age, while aware of colour differences and their social implications, are not prejudiced against children of another colour. Another study, however, found ethnic prejudice among children as young as seven years. Kawwa (1965) took a sample of 750 English, Cypriot and West Indian children, aged 7-17 years, from one primary and one secondary school to study the interaction between indigenous and immigrant children with special reference to ethnic prejudice. He found

that in the secondary school there were definite splits between the different ethnic groups in the patterns of friendship, and that already in the primary school there were friendship patterns based on ethnic origins. Kawwa also writes 'Both English and non-English children were found to harbour a measure of hostility towards children and people who were not ethnically similar to themselves. Of the immigrant groups, coloured (black) children were found to be the most" hostile "towards the English', (p. 2).

Bagley and Verma have completed a series of major studies of racial prejudice from a psychological and sociological viewpoint. In 'Personality, Self-Esteem and Prejudice' (Bagley, Verma, Mallick and Young, 1979) the authors concentrate on personality variables, taking personality and self-esteem as a central aspect of prejudice. This book also gives some consideration to 'social system variables' which the authors believe mediate prejudice, and this theme is expanded in their second book. In 'Racial Prejudice, the Individual and Society' Bagley and Verma (1979) concentrate on the interaction of cultural, social and personal factors in producing prejudiced attitudes. Thus they attempt to examine such factors as, inter alia, the influence of social class, age, educational background and housing conditions on the individual's history, in order to ascertain which factors foster either prejudice or tolerance respectively.

They consider that the media transmit a pervasive institutionalised racism, and suggest that prejudice may be an important means of enhancing social status, especially in individuals experiencing downward social mobility. It is possible that in schools contact between different ethnic groups may increase prejudice because these groups come to form part of a highly stratified system. They quote a survey by Marsh in 1976, in which 25% of respondents were classified as extremely hostile to Asian and black minorities, to support an overall conclusion that hostility to black minorities is increasing. Because the degree of education is inversely related to the holding of racially prejudiced views they suggest

a greater ability of further and higher education to the whole population, as well as changes in the educational system, such as providing a less ethnocentric curriculum, and the development of self-understanding through counselling.

If Bagley and Verma are right in suggesting that levels of education are inversely related to racial prejudice, this may help to explain the tradition of racial hostility in East London, which for generations has been an educationally and socially deprived area and is largely populated by working-class families. Lord Scarman's recent report (1981) on the Brixton (London) riots where there is also a high proportion of working-class families in the population and overall educational levels are low, would support the explanation offered by Verma and Bagley.

The racial incidents which have occurred in East London, and the continuous racial violence directed at individual persons, was well documented in a local publication, 'Blood on the Street', (Bethnal Green and Stepney Trades Council, 1978). This study points out that although it is the isolated incident of 'Paki-bashing' which makes the headlines in the media, this takes place against a background of constant harassment, insult and physical intimidation of Bangladeshis in the area. This book contains a detailed list of over a hundred incidents of racial violence against the local minority communities from 1976 to mid 1978; and these incidents represent only some of the racially-violent happenings which took place during this period. The author of the C.R.E. report, 'Brick Lane and Beyond' (1979) also discusses racial strife and violence in Tower Hamlets. It is highly probable that living in such an atmosphere will deeply affect the Bangladeshi children's development.

Islam (1978) carried out a study of the Bangladeshi community within the British social class structure. Although this study is unrelated to education and prejudice, it provides ample evidence of the exploitation of the Bangladeshi workers and their lonely, underprivileged position in the class structure.

As far as minority ethnic groups in general are concerned, the Commission for Racial Equality report on 'Urban deprivation racial inequality and social policy' (1977) describes the various disadvantages suffered by ethnic minority groups in relation to housing, employment and education when compared to the general population. For example, living accommodation is more densely occupied, with fewer baths and/or hot water per dwelling than the mean for Great Britain. As far as employment is concerned, the proportion of West Indians who were unemployed in 1971 " ... was twice as high as the proportion of the total population"; (p. 6). The differences in job levels are also of interest: 58% of Pakistanis and Bangladeshis are in semi-skilled or unskilled manual labouring jobs, compared to 18% of white men, Smith, (1976).

As the concern of this study is with an immigrant population of children from the Indian sub-Continent, it is of interest to note that the conditions under which immigrants live are likely to change within a generation. Ghodsian and Essen (1980) have analysed the differences in the standard of living enjoyed by the first and second generation immigrants respectively from various countries. The Asian community showed the greatest difference between those who were first and those who were second generation immigrants. It is reasonable to assume that as most second generation immigrants, despite having parents who were unfamiliar with the culture of the host community, have themselves become to a large extent native members of this culture, while simultaneously sharing with their parents the values and habits of the parental community. For this reason they do not suffer all the many disadvantages which first generation immigrants suffer.

Much of the research work reviewed in this chapter has looked at research relating to African and West Indian children as well as Asian children. It is important to recognise that the problems experienced by all these children are to an extent similar, and among these problems is the nature and quality of the schooling they experience, and how they are served by, and respond to, British education. Most immigrant children are

badly served by the British educational system in that, (i) insufficient and continuing attention is given to English teaching as a second language; (ii) the teachers often have low expectations of the children's potential; (iii) there is inadequate in-service training for teachers in relation to multicultural teaching; (iv) the school curriculum is not wholly suitable for immigrant children, and (v) there is racial prejudice on the part of some teachers. (It must, however, be recognised that many teachers, particularly young teachers, are idealistic and not racially prejudiced and it is the writer's personal experience from visiting schools in Tower Hamlets, East London, that most teachers teaching the Bangladeshi primary children are anxious to be helpful.)

However similar such school experiences may be for all immigrant children there are also significant differences in the way children from different ethnic groups respond to British education and to life in a country which is culturally different from that of their parents. The Bangladeshi primary child comes from a rural, unsophisticated community into an urban, sophisticated society. It is even more difficult for this child to adjust to those aspects of the host community's norms and values which are relevant to life in Britain while retaining those aspects of the Bangladeshi culture which are traditionally important. However, the children studied in the present investigation are much younger than the secondary school children with whom most of the previous studies reviewed here have been concerned, and this complex task should possibly, therefore, be easier for them. The degree to which this is likely to be so and the various factors which may affect their achieving the adjustment required for living in this country are examined in detail in the present study.

PART III

CHAPTER 6

AIMS AND OUTLINE OF THE PRESENT STUDY

Aims

The aim of the present work was to carry out a comparative study of the social and personal adjustment of Bangladeshi and indigenous junior schoolchildren in Tower Hamlets. The children were taken from the same geographical area, had roughly similar socio-economic status and attend the same schools.

The Bangladeshi population of Tower Hamlets, particularly in Spitalfields, is of particular interest because they are a single ethnic minority group and a very tightly-knit community large enough to be self-sufficient in many respects. Also, they have very little contact with the indigenous population because of the language difficulty, lack of inclination and partly because of the high level of racial tension. The school is the only place where contact can be made. The adjustment of Bangladeshi children was compared with indigenous children in the area, many of whom could also be described as deprived. It is also intended to compare the two samples on a number of other variables covering a range of abilities, attainments, attitudes, interests and aspects of personality in order to build up a full and balanced picture of the children's abilities and personalities.

The central aim of the present study is to compare differences in the test scores in all the above-mentioned variables between Bangladeshi children who have experienced an English school environment for more than two years {Bang.(>2)} and those who have experienced between one and two years of schooling {Bang.(<2)} in order to assess the effect of length of schooling on these children. The other comparison will be made according to the sex of the children, the aim of which is to evaluate the influence of Bangladeshi cultural values and parental attitudes on their children's behaviour and achievement according to sex.

A further factor, age, will only be considered in passing. As many Bangladeshi children have interrupted English

schooling or may have arrived in this country at an advanced stage in their primary schooling, the actual age of the child is considered to be of lesser importance than length of schooling. Other studies, e.g. Bhatnagar (1969) have found that age at the time of arrival in this country is not a factor of great significance.

PILOT STUDY

For a number of reasons an initial pilot study was carried out in Tower Hamlets. It was necessary to have preliminary information before deciding on the suitability of schools and the size of the samples, and evidence was needed as to the suitability of the tests which were intended for use in the study. In the (Tower Hamlets) pilot study the comparison of the sample of children, and the schools used were exactly the same as in the main study. An estimate of the time needed to complete the fieldwork was also needed.

A study was carried out in Bangladesh to assess the possibility of carrying out further comparisons between Bangladeshi children in their own country and those living in the U.K. The author went to the villages in Sylhet where the majority of the children come from, but the lack of suitable tests so severely hampered the work that it was decided to abandon this aspect of the study. The author carried out this pilot study in 1977-78 when the Institute of Education in Dacca, Bangladesh, was still suffering from the after-effects of the disruption of the war of independence and none of the suitable educational tests devised in Bangladesh could be obtained. Brief testing of children's interests was carried out in the Sylhet villages, but nothing more was practicable. During this period some time was spent visiting schools and talking to teachers and children to gain additional background knowledge.

HYPOTHESES

The writer is aware that research work exists on the effects of British schooling on a variety of variables in relation to immigrant children. However, (1) no detailed studies have been carried out on Bangladeshi children of junior school age in Britain. In addition, no research exists which has sought to establish (2) the effects on such children of 1-2 years English schooling when compared with over 2 years schooling. Also no research exists which (3) has compared the differential aspects of English schooling on Bangladeshi boys and girls of this age. (4) As far as the writer is aware one descriptive investigation (St. Romain, 1973) has been carried out on the social relations and adjustment problems of primary children from the Indian subcontinent. Finally, no research exists which has investigated the effects of length of schooling and sex on a group of children who form such a homogeneous socio-economic group, and whose parents all emigrated from village communities in Sylhet, Bangladesh.

As mentioned before, it has become clear from other investigations of children from various parts of the world now resident in the U.K. that there is a significant relationship between length of schooling and a child's adjustment, abilities, attainments and personality variables as the immigrant child begins to benefit from English education; it may be expected that with increased length of schooling the test scores on a number of personal, social and school-related variables of such children would change. The possible reasons for such changes have already been discussed in the introduction.

With regard to sex differences, as mentioned in the introduction, Bangladeshi parents, particularly from the rural areas, hold different views about the relative importance of boys' and girls' education. Research work on the differential effects of a British education on immigrant boys and girls respectively exists, but no work has been done on such effects on junior children living in a

specific area of London who have all come from a homogeneous rural area from a particular district in Bangladesh.

Thus, although the writer is familiar with the findings of the many studies carried out on immigrant children in Great Britain, these findings were only of marginal value in helping to formulate her hypotheses. The hypotheses were therefore, formulated in part following the study of the relevant literature, but also through the writer's knowledge of the Bangladeshi communities in Sylhet, and by drawing on her experiences as a mother-tongue tutor to a particular group of Bangladeshi children living in Tower Hamlets, London. In addition, the writer was also able to obtain the views of teachers, and social and community workers, both English and Bangladeshi, who are directly and indirectly involved with this particular immigrant group on the difficulties experienced in school by this group and on the changes, as these workers see them, which take place in the children because of their exposure to English education. These experiences led to the formation of specific ideas about the changes which are likely to occur with regard to a number of social, personal and scholastic variables, but particularly on aspects of adjustment in Bangladeshi children of junior age who are experiencing English schooling. The findings of the pilot study also helped to formulate hypotheses and finalise the experimental design.

The hypotheses which were formulated were tested through the administration of appropriate tests and questionnaires and these are described in Chapter 8.

Previous work into other (almost always older) immigrant children seems to have found that length of schooling, regardless of the age of the child, was the predominant variable which affected a variety of test scores; the writer, therefore, has made no firm predictions regarding age in relation to her Bangladeshi sample. However, this variable was nevertheless statistically examined.

As length of schooling is a major variable it is necessary to test not only the difference between Bang. (>2) and Bang.(<2) but also the difference between indigenous and Bang.(>2). Differences between the indigenous and the Bang.(>2) group and the Bang.(>2) and Bang.(<2) group will give some indication of the degree of the effect of the length of schooling on the various variables tested.

The scores on the various tests obtained by the indigenous boys and indigenous girls were compared in order to check whether differences between the Bangladeshi boys and the Bangladeshi girls were the result of sex differences as such or whether they were peculiar to the Bangladeshi sample. Otherwise, however, the hypotheses which were formulated and tested applied to the indigenous and Bangladeshi samples in comparison with one another and to specific groups within the Bangladeshi sample. For example, within the Bangladeshi sample comparisons were made in respect of length of schooling and sex, i.e. between a) Bang.(>2) and (<2) children and b) Bangladeshi boys and Bangladeshi girls. No separate hypotheses were made relating to Bangladeshi boys and indigenous boys; nor between Bangladeshi girls and indigenous girls.

The reasons for formulating each of the hypotheses are given together with the individual hypothesis:

I. ADJUSTMENT

1. Total Adjustment
   a. Total Social Adjustment
   b. Total Personal Adjustment
   (The Social Adjustment and Personal Adjustment tests are subtests of the 'Total Adjustment' Test. Scores of these two sub tests contribute to the Total Adjustment score).

It was anticipated that since Bangladeshi children find themselves in a culturally alien environment they will experience difficulties in both social and personal adjustment. Consequently Bangladeshi children will be significantly less well adjusted than indigenous children.

Similarly, Bangladeshi children with more than two years schooling will be better adjusted than those with less than two years schooling. Because of differential parental attitudes to their boys and girls, Bangladeshi boys will be better adjusted than Bangladeshi girls.

(a) SOCIAL ADJUSTMENT

(The tests (i-vi) discussed below are subtests of the Social Adjustment Test.)

i. Social Standards

The fact that Bangladeshi children have lower self-confidence and inner resourcefulness is also likely to be reflected in their reduced ability to form the generalised precepts which are tested here. It is expected that they will have significantly lower scores in the Social Standard test.

As their experience of the English environment broadens, so their understanding of the social standards expected will significantly increase. Bangladeshi girls are likely to be significantly more backward in their understanding of this because of the restricted opportunities outside school for play or any other undomestic activities.

ii. Social Skills

Bangladeshi children cannot be expected to show great social skill in an alien culture and therefore it is expected that they will have a significantly lower score than indigenous children.

Bangladeshi children understand quite well the need to subordinate their own desire to those of the group, but in the school context are likely to have difficulty in dealing with English children and teachers because of language problems but it is expected that, with the varied experience of English schooling, the Bangladeshi chlldren will significantly improve in time. Bangladeshi girls suffer from shyness and will be significantly less successful than the Bangladeshi boys in developing social skills at school.

iii. Antisocial Tendencies

Bangladeshi culture requires that children be docile, quiet and obedient, so fighting and quarreling are very much discouraged. They are very fearful of the consequences of being disobedient and exhibiting anti-social behaviour, and they are not therefore likely to show signs of anti-social tendencies. It is suggested that indigenous children will have a significantly higher Antisocial Tendency score than Bangladeshi children.

The Bangladeshi family is so strong that it is not anticipated that increased length of schooling will significantly change the children in this respect. There is unlikely to be any significant difference between Bangladeshi boys and Bangladeshi girls in the scores on this test because antisocial or destructive tendencies are so strongly discouraged in both sexes.

iv. Family Relations

Although Bangladeshi children experience a particularly close relationship with their families, it was nevertheless anticipated that even in the social 'twilight' area in which this study was carried out, the indigenous children of junior school age would not experience significantly less good family relationships. It was hypothesized, therefore, that there would be no significant difference between

Bangladeshi and indigenous children on these test scores.

Nor would increased length of schooling have a significant effect on family relations, nor will there be any significant difference between Bangladeshi boys and Bangladeshi girls.

v. Social Relations

Bangladeshi children do require a little time to build up good relationships at school and with their teachers even though parental attitudes are so strongly in favour of school but this is compensated by the efforts of their teachers to build up good relations right from the start of their school career. Beside this it is suggested that Bangladeshi children are likely to have good relationships at school because the large number of Bangladeshi children in the classes enables them to develop culturally normal patterns of friendships. This particular test largely concentrates on relationships with schoolmates and teachers. Bangladeshi children do regard their teachers highly. So it is not expected that there will be any significant difference between indigenous and Bangladeshi children in this test, nor that there will be any significant change in time in respect of the length of schooling nor a significant difference on test scores between Bangladeshi boys and girls.

vi. Community Relations

Both Bangladeshi and indigenous children are likely to be equally intolerant of each other because of the high level of racial tension in the area in which they live; therefore there will be no significant difference between Bangladeshi and indigenous scores on the Community Relations test, and this is likely to remain constant with time. There is unlikely to be any significant difference between Bangladeshi boys and Bangladeshi girls in this respect.

b. PERSONAL ADJUSTMENT

(The tests (i-vi) discussed below are subtests of the Personal Adjustment Test.)

1. Self Reliance

Bangladeshi children are not encouraged to act independently and, therefore, will be significantly less self-reliant than indigenous children.

Increased length of schooling will significantly enhance Bangladeshi children's self-reliance because of the emphasis which is placed in English schools on learning by doing and exploration.

Bangladeshi girls will show significantly less self-reliance than Bangladeshi boys because this attribute is positively discouraged in the Bangladeshi culture. Girls are not allowed to act independently, direct their own activities or depend on their own judgement.

ii. Sense of Personal Worth

Bangladeshi children lack confidence in their dealings with the host society because of their language difficulties and the feeling of uncertainty arising from cultural shock and will have a significantly lower sense of personal worth than indigenous children.

Bangladeshi children are not encouraged to behave in an individualistic way among their own people and such ideas as personal success may have little meaning. As they settle in at school their sense of personal worth will significantly increase as they feel able to function effectively in the school environment. Bangladeshi girls are so much restricted in their ambitions by their culture that a sense of personal worth has even less meaning in the context of their lives than is the case for their brothers. Bangladeshi parents do regard their sons' education as considerably more important than their daughters', whose

future lives will be defined almost entirely by the traditional values of the community.

iii. Sense of Personal Freedom

Bangladeshi children are rather restricted in their activities outside school for reasons of culture, and now also for fear of racial attack. It is hypothesized that their approach to decision-making will not be very decisive, partly because they are not given regular pocket money in the way that indigenous children are, and are not allowed the freedom to choose even minor details of their lives, such as selection of clothes etc. Their sense of personal freedom will thus be significantly lower than that of the indigenous children.

Exposure to English school life is likely to increase the Bangladeshi children's sense of personal freedom because of the greater independence of thought and action expected in English schools. Bangladeshi girls will have a significantly lower sense of personal freedom than Bangladeshi boys.

iv. Feeling of Belonging

Although Bangladeshi children have a strong feeling of belonging as far as their own families are concerned, because of the hostile environment in which they live, their reactions and feelings about 'belonging' might be altogether different; the hostility of the host community is likely to significantly reduce this in comparison with the Feeling of Belonging experienced by the indigenous children.

Exposure to the English school environment will significantly improve their feelings of belonging as they come to understand what is expected of them and fully participate in school life. Bangladeshi girls will have a significantly weaker feeling of belonging than Bangladeshi boys, because in spite of their close relationships within the family they have less self-confidence than the boys in

their ability to interact with the outside world.

v. Freedom from Withdrawal Tendencies

Since it is hypothesized that Bangladeshi children have lower self-reliance, a lower sense of personal worth, a lower sense of personal freedom and less feeling of belonging it is likely that their consequent lack of an active orientation towards the outside world and also their inability to communicate effectively will increase their tendency to withdraw into a world of their own.

As their experience of English schooling increases the tendency to withdraw will significantly decrease as they become used to the school environment and are able to function in it. Their even greater lack of experience and confidence in dealing with the outside world will significantly tend to increase the Bangladeshi girls' tendency to withdraw when compared with the Bangladeshi boys' tendency.

vi. Freedom from Nervous Symptoms

The difficulties which Bangladeshi children experience in adjusting to their new language and environment tend to aggravate their lack of self-confidence and resourcefulness and their tendency to withdraw. So it is expected that they will suffer from significantly more Nervous Symptoms than the indigenous children.

As their experience of English schooling increases their nervous symptoms will subside significantly as they come to terms with their new environment. Bangladeshi girls, however, are likely to suffer from significantly more nervous symptoms than Bangladeshi boys because they are discouraged from learning to deal effectively with new situations.

II. NON-VERBAL INTELLIGENCE, VOCABULARY AND PROFICIENCY IN SPOKEN ENGLISH

a. Non-verbal Intelligence

As no language skills are required for this test it is anticipated that there will be no significant difference between Bangladeshi and indigenous children, nor between Bangladeshi (>2) and (<2) nor between Bangladeshi boys and girls.

b. Vocabulary and
c. Proficiency in Spoken English

Since Bangladeshi children suffer many difficulties caused by their lack of English language, it is anticipated that there will be significant differences between Bangladeshi and indigenous children's vocabulary and proficiency in spoken English. Even after several years of English schooling their proficiency will not reach the same level as that of the English children.

It is anticipated that newly arrived Bangladeshi children (<2) will not score well in the Vocabulary Test nor in the Spoken English Test, so their scores will be significantly poorer than the Bangladeshi (>2) children, and it is thought that their proficiency will develop with increasing length of schooling. It is also anticipated that Bangladeshi boys will be significantly better than Bangladeshi girls because of the parental attitudes and the girls' even greater restricted opportunities for practising English outside school.

III. PERSONALITY

This test comprises the two dimensions of Extroversion and Neuroticism.

a) Extroversion

It is hypothesized that the restrictive parental handling of the Bangladeshi children is likely to repress any extroversion tendencies these children may have, and so there is likely to be a significant difference in the scores of the Bangladeshi and indigenous children on this test.

It is anticipated that Bangladeshi children's extroversion score will significantly increase after two or more years of experiencing a less restricted environment, at least in school.

It is expected that Bangladeshi girls' scores will be significantly less than the Bangladeshi boys' scores because of the even greater cultural restrictions applied to Bangladeshi girls.

b. Neuroticism

In this test individuals with a higher than average score are judged more likely to be worried, anxious, or overtly inert than non-neurotic subjects. It is hypothesized that Bangladeshi children, especially those suffering from lack of language skills, are more likely to show these signs than indigenous children and therefore will have a significantly higher neuroticism score than the indigenous children.

It is expected that with time and greater experience of English schooling Bangladeshi children will evince significantly less emotional responses, so that the scores of the Bangladeshi (>2) children on this test will be significantly higher than the scores of the Bangladeshi (<2) children. It is thought that Bangladeshi girls will score significantly higher on this scale than the Bangladeshi boys because the nature of their upbringing makes it more difficult for them to cope with new experiences.

IV. SCHOOL QUESTIONNAIRE REGARDING CHILDREN'S 'ATTITUDES SCALES'

In the 'School Questionnaire' test there is a category of tests which refers to the children's general attitudes to class and school, including relationships with teachers and classmates, and schoolwork, including academic self-image and anxiety in the class.

a. Attitude to School

Bangladeshi children's attitude to school is usually very favourable because of their parents' approval of schooling. So it is not anticipated that there will be any significant difference between Bangladeshi and indigenous children. It is unlikely that Bangladeshi boys and girls will differ significantly in their responses to this questionnaire.

b. Interest in Schoolwork

Bangladeshi children require time to build up their proficiency in English before they can participate in class work fully. It is therefore expected that their interest in schoolwork will be significantly less than that of the indigenous children. When length of schooling is considered the Bang.(>2) will have significantly more interest in schoolwork than (<2) children. Bangladeshi boys are likely to have a significantly greater interest in schoolwork than Bangladeshi girls because of their socially greater handicap already referred to which, despite parental formal interest in schooling, nevertheless is likely to restrict the girls' actual ability to be able to show such an interest.

c. Importance of Doing well

Bangladeshi parents encourage their children to do well at school but since they themselves have little experience of studying and the children's interest in schoolwork is reduced by their lack of understanding of English

the children, although enjoying school, are not strongly motivated to achieve highly. Therefore, there will be a significant difference between Bangladeshi and indigenous children in favour of the indigenous children.

It is anticipated that as Bangladeshi children come to understand their schoolwork better and as their experience of English schooling increases they will feel the importance of doing well significantly more strongly: so there will therefore be a significant difference between Bang.(>2) and (<2) children. The Bangladeshi boys are also likely to feel the importance of doing well significantly more strongly than the girls, since the education of girls is not regarded as being of very great importance.

d. Attitude to Class

This test relates to the identification of the child with his own particular class in school; usually Bangladeshi children have a good relationship with their teachers and classmates, so their attitude to class is bound to be favourable. It is not therefore anticipated that there will be any significant difference between Bangladeshi and indigenous children.

Within the total Bangladeshi sample attitude to class will not be significantly affected by either increased length of schooling or sex.

e) Relationship with teacher

This test indicated the teacher's perceived degree of concern for the child rather than the child's liking for the teacher.

It is not anticipated that there will be any significant differences between all the groups, since the teachers feel that they take equal care with all.

f. Anxiety in Class

Bangladeshi children do feel some stress, anxiety, fear or worry at school because of their lack of facility in the English language, because they are in a completely alien environment and their inability to express frustration and difficulty; therefore, it is anticipated that there will be significant differences between the scores of Bangladeshi and indigenous children.

With increasing length of schooling some of their anxiety and tension is likely to be reduced; therefore, it is expected that there will be significant differences between Bangladeshi (>2) and (<2) children. In every respect, Bangladeshi girls are much more disadvantaged than Bangladeshi boys, so there will be a significant difference between Bangladeshi boys and girls.

g. Social Adjustment

This test is mainly concerned with getting on with classmates and since Bangladeshi children are able to mix freely with other Bangladeshi children in their class, there is unlikely to be any significant difference between Bangladeshi and indigenous children; Bang.(>2) and (<2); and Bangladeshi boys and girls in this test.

h. Academic Self-Image

This test measures the child's self-image reflected in terms of his schoolwork. Bangladeshi children are not likely to have a good academic self-image because in their families there is very little understanding of the process of English education. Parents have only their own memories of school days in Bangladesh by which to judge their children's progress and therefore they can do little to enhance their children's confidence in their schoolwork. So the Bangladeshi children's score will be significantly lower than the indigenous children on this attitude test.

However, increased length of schooling in this country will significantly improve the Bangladeshi children's academic self-image as they gradually find that they are able to cope with schoolwork, so it is anticipated that Bang.(>2) children will score significantly higher than Bang.(<2) children.

It is expected that Bangladeshi girls will have a significantly less favourable academic self-image because of the lack of encouragement they receive. They are never encouraged to think of themselves as successful at school as any achievement in that direction contradicts what is thought to be normal behaviour in girls.

V. INTEREST

The children's 6 tests of 'Interests' fall mainly under the headings of 'Interest in School Subjects', 'Interest in Creative Activities' and 'Interest in Physical Skills'. Creative activities can be divided into three categories, i.e. descriptive, constructive and participatory, and 'Physical Skills' consists of body skills and hand skills.

'Total Interests' is the sum of all these 6 tests of Interests.

1. Total Interests

It is expected that there will be no significant difference between Bangladeshi and indigenous children; Bangladeshi (>2) and (<2); Bangladeshi boys and Bangladeshi girls. In the five tests of creative and physical activities no language skill is required so no significant differences were expected, but in 'Interest in School Subjects', one of the components of the 'Total Interests' Test, some language skills are required; however, as a whole, no significant difference is expected in the scores achieved in the 'Total Interests'.

a. Interest in School Subjects

This test consists of four elements: spoken and written English, reading, and mathematical skills. It is anticipated that all groups of Bangladeshi children will be inferior to indigenous children in the first three but better than indigenous children in mathematical ability. On balance, however, indigenous children will do better in the total test, i.e. in 'School Subjects'.

However, it is thought that there will be a significant improvement in Bangladeshi performance as their experience of English schooling increases. So Bang.(>2) children will score higher than (<2) children.

Bangladeshi girls will not do as well as Bangladeshi boys because of their parents' attitude towards the girls' education, so there will be a significant difference between Bangladeshi boys and girls.

b. Interest in Creative Activities

Since no language abilities are required in these activities it was anticipated that there would be no significant differences between the Bangladeshi and indigenous children; and the Bangladeshi (>2) and (<2) children; nor in respect to Bangladeshi boys and girls.

c. Interest in Physical Skills

As this test does not require any language proficiency it was anticipated that there would be no significant differences between Bangladeshi and indigenous children.

There will not be a significant change in Bangladeshi children's interest in body skills as their experience at school increases because no language skills are required. But it was expected that because Bangladeshi girls are very shy and bashful that they would have significantly less interest in body skills when compared with Bangladeshi boys.

This shyness is probably related to ideas of modesty and purdah in women. It is a matter of great concern in Bangladeshi families to maintain the high reputation of their women as the honour of the men depends on it.

VI. ACADEMIC AND NON-ACADEMIC PERFORMANCE

1. Academic Performance

This consists of tests of English and mathematics. It is expected that there will be a significant difference between Bangladeshi and indigenous children in favour of indigenous children. The reason for this is that although Bangladeshi children are quite good at mathematics, this test includes three different measures of proficiency in English - oral, written and reading skill and their lack of facility in English will depress the overall result.

It is anticipated that exposure to English schooling will significantly improve academic performance with respect to English language. Bangladeshi girls will show a significantly reduced academic performance for the same cultural reasons outlined in the previous hypotheses.

a. English

As this test requires a high degree of language skill it is anticipated that there will be a significant difference in favour of the indigenous children when compared with Bangladeshi children.

It is obvious that recently arrived Bangladeshi children will not do well in English and it is thought that their scores will significantly improve with increased English schooling. Bangladeshi girls get fewer opportunities to practise their English and therefore they will do significantly less well than Bangladeshi boys.

b. Mathematics

It is well known that Asian children are generally good at mathematics, therefore it is expected that there will be a significant difference in favour of Bangladeshi children when compared with indigenous children.

Increased length of schooling will not significantly effect Bangladeshi children's mathematical skills. Bangladeshi girls have little chance to practice their mathematical skills outside school, especially as they hardly ever handle money and keep accounts and so it is not anticipated that the Bangladeshi girls will be able to achieve any significantly better results than the Bangladeshi boys.

2. Non-academic Performance

As no verbal skills are required for this test it is not anticipated that there will be significant differences between any of the groups.

VII. RUTTERS BEHAVIOURAL SCALE

It is expected that Bangladeshi children will produce a significantly higher neuroticism score than indigenous children. The reason for this can be found on p.141. It is anticipated that indigenous children will score significantly higher on the 'Antisocial Behaviour' scale than the Bangladeshi children (see p.135).

Similarly, Bang.(<2) will score significantly higher on the neuroticism scale than Bang.(>2) children and Bangladeshi girls significantly higher than Bangladeshi boys. But there will be no significant differences between Bang.(>2) and (<2) children, nor between Bangladeshi boys and Bangladeshi girls on the Antisocial Behaviour Score.

Therefore the total 'Behavioural Problem' test score, which is the sum of these two tests, will not show any significant differences between any of the groups.

SAMPLE

A large and representative sample is necessary in this type of research because it improves the quality of the conclusions which can be drawn from the results. Exact size, however, tends to be decided by statistical and practical considerations as was the case in the present study. The necessity to test the majority of Bangladeshi children individually because of language difficulties made this study very time-consuming because a relatively large sample was taken.

The total sample was 300 junior boys and girls aged between 7+ and 11+ and of these 200 were Bangladeshi (Table 15).

Table 15. Distribution of sample according to length of schooling (for Bangladeshi sample) and sex.

	BOYS	GIRLS	TOTAL
BANGLADESHI (>2)	60	42	102
BANGLADESHI (<2)	60	38	98
TOTAL	120	80	200
INDIGENOUS	60	40	100
		TOTAL	300

It was possible to test almost the entire Bangladeshi population of five junior schools. Some children were excluded because they changed school or went back to Bangladesh during the experimental period. Those very recent arrivals were excluded because such recent disruption of the children's lives is likely to distance their responses and therefore the test results would be less valid. The Bangladeshi sample was chosen from children born in Bangladesh or the U.K. who had completed at least one full school session in this country.

A small number of children were excluded because they had mixed parentage (English mothers) and were therefore not strictly part of the homogeneous, religious, socio-economic, cultural and educational background. It was

necessary that all children should belong to the Bengali-speaking Muslim community from Sylhet, Bangladesh.

The indigenous sample (100) was selected at random for use as a control group. An attempt was made to match Bangladeshi and indigenous groups on the basis of sex, age, class and physical environment. Both Bangladeshi and indigenous children were taken from the same geographical area with a roughly similar socio-economic group. This matching of the two samples avoided the necessity of making adjustments for differences in home circumstances.

The Bangladeshi sample was divided into four groups according to the length of schooling, i.e. those who had more than two years of schooling in this country and those who had schooling between 1 and 2 years, and according to their sex, and the indigenous children divided only according to sex. The present study was carried out mainly with these six groups.

DESCRIPTION OF GROUPS

As described earlier, this thesis is concerned with the differential test results of Bangladeshi children who have experienced British schooling for more than two years (Bang.(>2)) when compared with Bangladeshi children who have experienced schooling for 1-2 years only (Bang.(<2)). It is further predicted that because of the rigid attitudes of the parents towards the girls' education, as mentioned in the introduction, this is likely to have a crucial differential effect on the way in which Bangladeshi boys and Bangladeshi girls respond to English schooling.

The total Bangladeshi sample will also be compared with children born to the indigenous population (indig.) in order to provide a control group of similar age, from the same school, living in the same geographical environment and coming approximately from the same socio-economic group as the Bangladeshi children. In addition, a comparison is

made in relation to all the variables tested between the Bangladeshi boys and the indigenous boys; and the Bangladeshi girls and the indigenous girls. Thus, between the Bangladeshi and indigenous groups there will be three sets of comparisons, i.e. total Bangladeshi and total indigenous children; Bangladeshi boys and indigenous boys; and Bangladeshi girls and indigenous girls. Within the Bangladeshi group, children will be compared in relation to length of schooling, i.e. Bang.(>2) and Bang.(<2); sex, i.e. Bangladeshi boys and girls; and age, i.e. 7 to 11 years old.

Previous work into other immigrant children seems to have found that length of schooling, regardless of the age of the child, was the predominant variable which affected a variety of test scores, as mentioned earlier; hence it is predicted that age is of less significance in relation to the Bangladeshi sample. However, this variable will be statistically examined. An additional comparison is undertaken to examine the degree of improvement in the test scores of Bang.(>2) children as compared to Bang.(<2) when seen in relation to the comparison of the Bang.(>2) with the indigenous children.

An analysis of the sex differences between indigenous boys and indigenous girls (another additional comparison) will also be carried out in order to ensure that any differences found between Bangladeshi boys and girls were not sex differences as such, but sex differences peculiar to this Bangladeshi sample. No prediction is made on these two additional comparisons (i.e. the Bang. (>2) and the indigenous children and indig. boys and girls).

SCHOOLS

The enquiry for the present study was confined to five primary schools (junior section) in Tower Hamlets where there is a high concentration of Bangladeshi immigrant children. All these schools may be regarded as multiracial in character; thus the schools from which the data for the present study were obtained, had at least 10% immigrant pupils from Bangladesh (this description of a multiracial

school can be found in Watson (1977), '... a school is only classified as multiracial if it has more than 10% of immigrant pupils on its roll',(p.2) although the percentage of such pupils in the schools included in the study varied from more than 10% to 90%. One Headmistress of the infant section of one of these schools emphasized that she has about 99% Bangladeshi children in some of her infant classes. These schools had been designated by the ILEA index as being in an Educational Priority Area {Plowden (1967); Little and Mawbey (1971)} for which additional allowances had been made to help to overcome some of the deprivation. There are arrangements for remedial classes for the language handicap for the non-English speaking immigrant. Children are drawn from all parts of the catchment area of the school and so their education can be regarded as similar since variations between schools are not considered to be important.

Out of five schools, one school is a modern building, the other four are traditional buildings. The houses in the neighbouring catchment area consist of mainly council buildings, flats; very few flats or houses are available for private lettings. Most of this accommodation is let to the working class indigenous population and a large number of mainly Bangladeshi immigrants.

As stated earlier, Bangladeshis have a tendency to choose a home in an area where there is already a large Bangladeshi population because not only are friends and relations close at hand but their jobs, shops and mosques are all within easy reach. The area thus develops a strong cultural identity. There is no policy of dispersal of Bangladeshi children by 'busing', so that parental choice leads to the local schools also reflecting this distinct identity. Silverstone (1978) stated that parental choice is normally exercised in favour of schools with a large proportion of Bangladeshi children attending and/or good links with the Bangladeshi community, so the distribution of Bangladeshi children is extremely uneven. A community worker has stated that in Brick Lane there is a maintained junior

school with 99% of Bangladeshis on the roll and 200 yards from Brick Lane is another maintained Church Junior school with no Bangladeshi children at all. Similarly two secondary schools, equidistant from Brick Lane, have respectively a 50% Bangladeshi roll and a 5% Bangladeshi roll.

The schools chosen used various teaching methods, including open plan, team teaching and formal styles. In almost all schools Bangladeshi children are taught side by side with indigenous children and only those who were felt to be in need of remedial teaching were given additional tuition in English. Almost without exception the head teachers and their staff showed great sympathy towards the Bangladeshi children and were helpful to the writer, in spite of the extensive testing demanded by this study.

The schools were chosen as being especially suitable for this study for a number of reasons, the major reason being that the primary school years are of particular importance to immigrant pupils. Primary age children can learn English much more easily than any other age group, and these years are the foundation of their future education and hence of their later opportunities.

St. Romain (1973) refers to the fact that during these years many problems of social adjustment become apparent and it was found by Palermo (1959) that 'a high level of anxiety can be detected' and by Deutsch (1960) that self-doubt and confusion can become established, and may lead to lower motivation and aspirations.

Ward (1971) also quotes Wiles (1968) who has emphasized the importance of the primary school years in relation to immigrant children. It was noticed by other researchers that if a child has had a complete primary education in this country, he is likely to achieve a similar attainment to that of indigenous children.

SELECTION OF TESTS

It must be said from the start that there are no tests which are truly culture-free, not even abstract tests or non-verbal tests can be said to be entirely culture-free. The problem of choosing suitable tests is aggravated by the fact that the processes of adjustment in the Bangladeshi children in relation to social, emotional and material aspects of their lives are still incomplete. Also their standard of spoken English especially may not be good, but still a measure of their various skills and abilities is necessary so that the children's deficiencies according to western standards can be remedied.

There are a number of extrinsic factors which are likely to introduce a cultural bias into a test. The extrinsic factors include relationship between subject and examiners, established patterns of work, relevance of test material, way in which test is administered and above all, the cultural background which determines which skills are developed and how the individual will react to the test situation.

It is not possible to construct truly culture-free tests for the variables chosen for this study since they cannot be imagined outside a cultural setting. It remains then to decide which of those available would be most suitable. It is also possible in cross cultural studies to use a test known to be culturally biased if it is useful in dealing with a particular culture. For an Asian group living in the U.K. a test known to be biased in favour of indigenous children does show up where change is needed if the children are to compete with those of the host community.

The best that can be said is that all available tests can be graded in a continuum ranging from those where the test is relatively free from bias to those which are highly culture bound.

For the present study the tests were selected keeping in mind their suitability for use over a wide range of ages and abilities. Although some of these tests are not culture-free they were chosen because they had been widely used in research in different countries and cultures and by researchers of differing ethnic backgrounds. The tests which were selected were those which were easily available and some had previously been used by LEA's.

All the variables of the present study were selected on the basis of a number of factors - pilot work, writer's survey and contacts, existing research and literature in this field, personal contact and discussion with teachers about the problems of immigrant children and above all, the writer's relationship with immigrant children as a mother-tongue teacher.

A wide range of variables was chosen deliberately to give a clear overall picture of the children's qualities. The study was as broadly based as was practicable.

All the tests which were applied are well known and generally accepted and are used by many educationalists in relation to other ethnic groups.

The problem of the validity of tests which measure human characteristics is known to be a great one because of the difficulty of defining such characteristics and the further difficulty of finding suitable measures by which to assess these characteristics. All the tests used are assumed within an acceptable margin to measure the characteristics they are supposed to measure.

In the present study, among the various tests which have been chosen, the norms are given for indigenous children of various ages for some of the tests but not for others, as the main focus of this study is the comparison between a sample of indigenous children with Bangladeshi children living in the same geographical area. No comparison has been made between the standard norms and those obtained

by either the indigenous or Bangladeshi children.

The tests were also chosen for ease of administration and convenience of the scoring; however, the most suitable tests for measuring adjustment and attitudes had a laborious scoring procedure which took considerable time; nevertheless, it was felt advisable to use an established test. The questionnaire used divided into two categories: the few completed by the teachers and the rest which were completed b y the writer. The test completed by the teachers were assumed to be reliable in spite of the danger of subjectivity because the teachers had known the children for some time and were well aware of their behaviour in school and academic ability.

It is interesting to note that to the writer's knowledge no other systematic testing of Bangladeshi children has been carried out for some years in Bangladesh. Tests either standardized in Bangladesh or translated into Bengali are not available because of the disruption of war.

The following variables were chosen for testing in order to obtain the most complete profile possible for the two groups of children:

A. Variables tested by the researcher:
1. Adjustment
2. Non-verbal Intelligence
3. Vocabulary
4. Personality
5. Attitudes towards School
6. Interests

B. Variables tested by the teacher:
7. Proficiency in Spoken English
8. Academic and non-academic Performance
9. Behavioural Scale (Rutter's)

All these tests were broadly categorized into seven sections consisting altogether of 42 tests and subtests.

The tests were all devised so that a high score indicates a high level in that test and, in all but 4 tests i.e. Neuroticism (personality dimension), total Behavioural Problem Scale, Neurotic Behaviour and Anti-social Behaviour (last two are dimensions of total Behavioural Problem Scale) a high score is favourable.

I. Adjustment

The importance of adjustment in this study is such that a full discussion of the subject has been given separately (p. 169)

II. Non-verbal Intelligence, Vocabulary and proficiency in Spoken English

This section comprises three tests, the first two carried out by the writer and the last by the teachers.

The first question to arise in the choice of suitable tests for non-verbal intelligence and verbal intelligence is again whether a culture-free test exists or could ever be devised. It is highly unlikely that a test will ever be developed that is valid for all children irrespective of ethnic or cultural background. There is some value in giving children of dissimilar cultural backgrounds living in the U.K. a test standardised in Britain and then using the result as a measure of reorientation rather than intelligence.

The Raven's Coloured Progressive Matrices (RCPM) tests (196) was chosen to assess non-verbal intelligence for a number of reasons. The test itself involves matching and choosing coloured shapes and designs and so minimises the need to know English. The test is suitable for young children, is readily available and has been used in numerous studies of non-western children. Many researchers used CPM in relation

to South Asian children.

There is some doubt as to how culture fair the test is. Researchers working with communities of people with little acculturation to western values were more critical than those who used the test to compare subgroups within a western society who found among other things that the test results had less relationship with socio-economic status than many others and showed negligible loadings on verbal and numerical factors. The study with the greatest similarity to the present work is Saint's research (1963), on Punjabi boys, where the RCPM was used. Saint found that there was a definite correlation (.422) between high score and length of stay. Although this is perhaps a limiting factor in the overall conclusions which can be drawn from the test results it does indicate that the test can be used constructively to measure acculturation and change after a period of exposure to English schooling.

'The three sets of twelve problems constituting the CPM are arranged to assess the chief cognitive processes of which children under 11 years of age are usually capable. The three sets together provide three opportunities for a person to develop a consistent theme of thought, and the scale of thirty-six problems as a whole is designed to assess as accurately as possible mental development up to intellectual maturity' (Raven, 196 , "Guide to Using Coloured Progressive Matrices, p. 2).

The Crichton Vocabulary scale (Raven, 1961) was designed for the use of measuring verbal intelligence. It is constructed to cover as closely as possible the same range of intellectual development and age range. The words were taken from the Mill Hill vocabulary scale. However, in the present study no attempt was made to assess verbal intelligence but rather the children's knowledge of English. The Crichton Vocabulary scale does not seem to be suitable for use with Bangladeshi children as a measure of intelligence.

'The Crichton Vocabulary Scale consists of 80 words arranged in two approximately parallel sets of 40 words each. The order of the words in each set is based on the frequency with which children under eleven years of age were able to explain their meanings. Set One consists of the first 40 words of the Mill Hill Vocabulary Scale, arranged as a single set. Set Two consists of 40 words selected from an initial sample of 160 words. These 40 words are arranged so that, with slight exceptions, the frequency with which children are able to explain them is approximately the same as for the equivalent words in the Mill Hill Scale. The initial words are intentionally a little more easy for young children to explain. Towards the end, the words of Set Two are slightly more difficult to explain than the equivalent words of Set One.' (Raven, 1961, Guide to using "The Crichton Vocabulary Scale", p 1).

Proficiency in Spoken English

This consists of an assessment of spoken English by the class teacher as recorded annually on the school record.

III. Personality

Human behaviour frequently falls into recognisable patterns and this is particularly true of certain aspects of personality. Psychologists have looked for possible dimensions of personality and one which has found much favour has been Extroversion-Introversion. Although the concept was first suggested by Jung this dimension has been incorporated into many personality inventories.

Considerable problems, as already discussed, arise on the use and selection of questionnaires in cross-cultural research, although some have been used succesfully in a wide range of cultures. For this study the Junior Eysenck Personality Questionnaire (EPQ) was used. This

test is a development of the earlier Maudsley Personality Inventory (MPI) which has been widely used for children of other lands and cultures, i.e. Japan (Iwawaki et al. (1964); Chile (Bolardos, 1964), India (Jolta, 1965; Rao, 1966, Jolota, 1969) etc. The JEPQ was used for a number of reasons; firstly, as already mentioned, it is suitable for non-English children, secondly, for a wide range, and lastly, it is easily available and easily scored. Only the scores from the Extroversion and Neuroticism dimensions were taken, as they are likely to be most relevant in a comparison of Bangladeshi and indigenous children.

The EPQ manual describes the typical extrovert to be sociable, likes parties, has many friends, needs to have people to talk to, and does not like reading or studying by himself. He craves excitement, takes chances, and is often an impulsive individual. He is carefree, easy-going, optimistic, and likes to 'laugh and be merry'. He prefers to keep moving and doing things, tends to be aggressive and lose his temper quickly; altogether his feelings are not kept under tight control, and he is not always a reliable person.

Eysenck (1962) has suggested that neuroticism is a much more 'internal' phenomenon than extroversion, being much more difficult for an observer to detect. He identifies the typical high Neuroticism scorer as being an anxious, worrying individual, moody and frequently depressed. (He is likely to sleep badly, and to suffer from various psychosomatic disorders. He is overly emotional, reacting too strongly to all sorts of stimuli). If the high neurotic individual has to be described in one word, one might say that he was a worrier (Manual).

IV. School Questionnaire for Children's Attitude Scale

Attitudes are those predisposing factors which influence a person's feelings about a thing, a situation or another person and have a definite effect on reaction

towards these things. Strong positive attitudes tend to encourage and are more likely to lead to satisfaction then negative ones which equally feed on themselves until the child only notices discouragement and becomes thoroughly disheartened. Academic success is often correlated with positive attitudes. A child's attitudes are very likely to influence his ability to adjust to his environment.

The importance of attitudes are shown by the wide range included in the chosen test (School Questionnaire). Eight separate Scales were used out of a possible 10 - the two which were discarded were not found to be relevant to the children in question - they were: 'other' image of class and conforming versus non-conforming pupil.

The tests include - 1) Attitude to school; ii) Interest in schoolwork; iii) Importance of doing well at school; iv) Attitude to class; v) Relationship with teacher; vi) Anxiety in the classroom situation; vii) Social adjustment (getting on well with classmates); viii) Academic self-image.

The test had originally been developed by Lunn (1970), for use in a large research project started by NFER in 1966 to investigate the effects of streaming and non-streaming in junior schools. No tests were found to be suitable and so empirical scales were devised as a means of measuring and describing widely important attitude differences. They are intended for the 9-11 age range but in this study younger children were also included - that is, from 7 to 8. Despite this, and also despite its laborious scoring method, the pilot study proved the test to be so suitable for those children that it was decided to use this test. It is anticipated that the individual testing of all the younger children would make the giving of the test not unsuitable for the younger age group.

The scale was derived empirically and each is made up of 6-10 statements expressed in the language of children and carefully selected after factor analyses and scalegram analyses. For each scale the aim has been to achieve homogeneity of content and where possible a cumulative structure.

V. Interest

For the purposes of testing interests were equated with attraction to a particular activity. Curiosity, and desire to learn are also involved, although degree of interest in the subjects assessed is likely to contribute to the child's adjustment and success in academic and non-academic performance.

It was difficult to find a test suitable for this age range and also because of the particular problems that the Bangladeshi children in the study have. An unsuccessful attempt to develop a test was made but finally the writer's assessment on a five point scale as used in the annual school record was made.

The test consisted of three groups:

1) School subjects: a) attainment in English language and b) mathematics;

2) Creative activities: a) painting, drawing, writing, etc. (descriptive); b) modelling, building, craftwork, etc. (constructive); and dance, music, drama etc. (participatory).

3) Physical skills: a) body skills (sports, dance, gymnastics, etc.) b) hand skills (tools: instruments, scissors, pens, etc.).

'Total interests' isthe sum of the foregoing individual tests.

VI. Academic and Non-academic Performance

Academic performance applied to those subjects normally thought to form the core of the curriculum and was defined as the ability to perform well in them as assessed by the teacher. Academic achievement has some importance because of the frequently observed relationship between academic achievement and future career success.

In all these subjects the teacher was in the best position to be able to assess the child's family. Haynes (1970) found that ability ratings carried out by teachers were good predictions of performances on the Staffordshire Arithmetic Test and on the two Holborn comprehensive scales. In this test the teachers' assessment on a five point scale was taken from the school record. The subjects assessed were i) attainment in English language, both oral and written, reading and ii) mathematics.

Similar 5 point ratings were carried out by the teachers for non-academic achievement but these included i) painting, drawing; ii) modelling, building, craftwork; iii) dance, music, drama; iv) body skills; and v) hand skills. The teachers' longtime observation of the children throughout the year on non-academic performance has some predictability value.

VI. (Rutter's) Behavioural Scale (completed by teachers)

The Scale was developed by Rutter as a first step in the evaluation of behavioural problems for screening or survey purposes. There are versions available for completion by both parents and teachers, but in this case the teachers' version was preferred because of the importance of the child's behaviour at school and the opportunity that teachers have for long term observation and comparing between different groups of children. It was obviously out of the question to use the test to be completed by parents.

The test performances served a useful function in making teachers conscious of their observation and was designed to be used for children of junior school age to distinguish between different behavioural and emotional disorders, that is, between the children who exhibit certain behaviour and those who do not.

There are, however, some qualifications to be made regarding the element of unreliability introduced by variations between teachers. Halo effects, subjectivity and uncertainty over the interpretation of the meaning of the ratings all combine to reduce the reliability of the results. In order to check these effects, the researcher assessed the scores of both antisocial tendencies and neuroticism in the rating battery of tests to provide an interesting comparison. The following descriptions have been taken verbatim from the manual of the Rutter Behaviour Scale.

CHILD SCALE B2 (TEACHERS)

The scale (which is a slightly modified version of the original B) consists of twenty-six brief statements concerning the child's behaviour to which the teacher has to check whether the statement 'certainly applies', 'applies somewhat', or 'doesn't apply' to the child in question. These are given a weight of '2', '1' and '0' respectively to produce a total score with a range of 0-52 by summation of the scores of the twenty-six items. A 'neurotic' sub-score is obtained by summing the scores of items 7, 10, 17 and 23 ('often worried, worries about many things', 'often appears miserable, unhappy, tearful or distressed', 'tends to be fearful or afraid of new things or new situations', 'has had tears on arrival at school or has refused to come into the building in the past twelve months'). An 'antisocial' subscore is obtained by summing the scores of items 4, 5, 15, 19, 20 and 26 ('often destroys or damages own or others' property', 'frequently fights or is extremely quarrelsome with other children', 'is often disobedient', 'often tells lies', 'has stolen

things on one or more occasions in the past twelve months', 'bullies other children').

The selection of children with neurotic or antisocial disorders by means of the scale is a two-stage procedure: 1) children with a total score of 9 or more are designated as showing some disorder; (2) of these children, those with a neurotic score exceeding the antisocial score are designated 'neurotic' and those with an antisocial score exceeding the neurotic score are designated 'antisocial'. The children with equal neurotic and antisocial subscores remain undifferentiated.

PROCEDURE

One of the most important and significant objectives was to establish a good rapport with the children since without strong and cordial rapport no valid and reliable result is possible. This was easily facilitated because the writer is Bangladeshi herself. She was able to communicate with the children in their own language, and she shared with them a common culture.

Very friendly relations with the children were established, and they seemed to feel able to talk freely, showed much curiosity regarding the writer's own life and wanted her to play and take part in other activities with them. She was actually known earlier to them through mother tongue classes run after school by the Adult Education Institution and as an occasional interpreter for visits to hospitals and clinics.

The tests were administered in the familiar surroundings of their own school library. The testing was to be carried out at different times of the day to suit the various school and class timetables. All the 7, 8 and 9 year old children, all the Bangladeshi girls and those with 1 and 2 years of English schooling were tested individually because of their language difficulties and shyness, but all the other children, i.e. older Bangladeshi boys with more than two years of schooling and older indigenous children, were tested in groups. All other details, such as name and age were taken from the class registers, although the children were asked their names informally before the testing began. Care was taken to ensure that the children understood the questions and that all questions had been answered. On a few occasions when children were tired or preferred to chat or play with the researcher the testing was postponed until another day. In order to maintain the children's interest and attention, it was necessary at times to modify the researcher's approach to the whole test situation since a stimulating

and exciting atmosphere was found to elicit the most complete response. If this was not present the children tended to become lethargic and showed insufficient interest for a reliable test score to be obtained. Children were also given assurances that all information in this report will be kept strictly secret. However, the high level of interest and co-operation which the children showed during the study was noteworthy.

Rapport with indigenous children took a longer time to establish and the testing was not begun until this was felt to be securely established. Considerable time was taken to get to know the teachers and the individual schools well before the testing began. At first some of the teachers were very helpful in building up a relationship with the indigenous children but gradually, as the researcher came to have a legitimate place in the school, teaching the Bangladeshi children songs and telling stories to them, the indigenous children also wanted to join in, singing the Bangladeshi songs and also getting to know the experimenter.

METHODOLOGY

The comparative method was used in the study with the indigenous children as a control group. The procedure involved two steps; firstly, an evaluation of differences in the results between the scores of the indigenous and Bangladeshi children, and secondly, to examine the effect of the factors of length of schooling, sex and age within the Bangladeshi sample.

The most appropriate statistical technique for the analysis of the results obtained for this type of data is analysis of variance. Because the number of separate statistical tests is low the likelihood of error is also reduced.

In this study the various ways in which the children were classified makes ANOVA a straightforward method of

comparison of the performance of children from different groups. One-way ANOVA was used for analysis between indigenous and Bangladeshi groups and within the total indigenous group and three-way ANOVA was used within the Bangladeshi group in respect of length of schooling, sex and age. Furthermore, efficient statistical computing packages for the computation involved in ANOVA were available.

It is to be the convention that a test would be called significant if the significance level $P<.05$ and not significant if $P\geq.05$.

THE TEST OF ADJUSTMENT

The historical development of the concept of adjustment has been traced by Wilson (1969). The idea of adjustment has been present in psychological writing since at least the development of child psychology in the latter part of the 19th century. The theories of Herbert Spencer played an important part in creating interest in the relationship between the normal and the abnormal, between adjustment and maladjustment. At that time it was recognized that there were no sharp divisions between the two, but rather a continuum of adaptation between the child and his environment. The important environmental factor was acknowledged in the work of the British Child Study Association which was founded in 1893 by Sully (1892), a contemporary of Spencer. He saw that the development of a stable personality and mental life depended much on the individual's progress in adjusting to his environment during childhood.

Wilson has also described how from these beginnings the concept of adjustment has developed with the different schools of psychology. The idea itself involves a wide range of variables and is capable of definition in innumerable ways. Some concept of normality is necessary to every school of psychological thought but its chief chracteristics will tend to be described in terms of those qualities thought to be most central to their own particular theory of human motivation and mental and emotional processes. Thus the Behaviourist school (Watson) relates adjustment mainly to kinaesthetic motor responses, whereas psychologists such as Maslow and Rogers relate adjustment to the achievement of self-actualisation. These are two extreme examples, ranging from emphasising the normally unconscious physical adjustments carried out by our nervous system to the highly subjective and self-conscious idea of 'self-actualisation'. Between these two extremes are a range of definitions containing individual, physical and social elements. Some descriptions of the features of a well-adjusted personality are so vague and all-embracing as to be nearly meaningless.

Nevertheless, the concept of adjustment is a valuable one as it can relate the individual's needs, feelings and behavioural expressions to the physical and social environment in which he must operate. Difficulties in adjusting to the external world are very likely to have emotional repercussions to the individual.

The social dimension of adjustment leads inevitably to the discussion of the relationship between adjustment and social norms. There is a point of view which sees adjustment as the acceptance of social conventions which prevents individual patterns of behaviour predominating to the detriment of the social fabric of society. The position of the immigrant child vis-a-vis this theory provokes some interest. Is it possible for a child to be adjusted if he must accommodate his idiosyncracies to at least two sets of conflicting norms? It is clear that this view must be widened to take into account the role of personality and the dynamic quality of the adjustment process. The gaining of social acceptance is not sufficient evidence for the assumption of an adjustment, although the observation of behaviour over a period of time is clearly of some importance. A child must also gain personal satisfaction and value from his own person, thoughts, emotions and actions and will tend 'to feel more at ease where there is some harmony between his own desires and feelings and those which are generally approved' (Jahoda, 1961). Maladjustment in these circumstances indicates a lack of 'fit' between the two which may be manifested as anxiety or in a number of other ways.

Even for children subject to only one dominant set of social norms these may include apparently contradictory or conflicting criteria by which the child is expected to act, for example, in the expression of aggressive feelings which are regarded as appropriate in some situations but not in others or those which require girls to be weak and submissive and boys to be strong and not show their emotions regardless of the personality of the child.

The children of cultural or ethnic minorities suffer not only from conflicting demands within their own culture but from two distinct sets of social norms. One of the greatest of these conflicts which confronts the Bangladeshi child in an English school is the value placed there on independence of thought and action which are definitely not encouraged at home. The process of adjustment to this and other situations remains largely unknown. If adjustment is seen as the ability of an individual to function effectively and happily in a social environment then persons belonging to minority ethnic groups will encounter special problems. This type of definition is unavoidably culture-linked and those experiencing the conflicting demands of more than one culture will inevitably face a more severe test of personal and social adjustment than those living within the mainstream of the dominant society.

The writer has used a working definition of adjustment which has extracted a number of different variables from the wide range of theoretical material available, but as the present study deals with the particular case of Bangladeshi children, the writer preferred to select those traits of personality and behaviour which from experience in the field appear to be most appropriate. The profile of a well-adjusted child used corresponds substantially to that of Whittaker (1966), i.e. self-knowledge, self-esteem, freedom from tension and hypersensitivity and ability to give and accept affection, satisfaction of bodily desires and ability to be productive and happy. It was decided that the well adjusted Bangladeshi child would have self-reliance, sense of personal worth, freedom from withdrawal tendencies, possess social standards and social skills and have a satisfactory relationship with his social environment, i.e. school, family and community.

Considerable difficulties were encountered in finding a test suitable for assessing these characteristics. To the writer's knowledge the only test of adjustment devised in this country is Stott's social adjustment scale. This

test was unsuitable because it was designed for use by teachers to find the proportion of children rated as unsettled on a scale of six pointers. It was felt that it would be unsatisfactory to have all social adjustment tests completed by the teacher with the consequent likelihood of errors arising from a desire on the teacher's part to be generous or due to the halo effect and for that reason the California Test of Personality (CTP) 1953* Revision, was preferred in spite of the fact that it has been used for many years without substantial revision, since its detailed tests and subtests cover the range of characteristics listed above.

Studies have been carried out using Rutter's Behavioural Scale as a measure of adjustment (Kallarackal, 1976). This would be quite inappropriate for use as a test of adjustment as it does not cover a wide enough range of factors.

The advantages of the CPT are many: firstly, the test is suitable for a wide age range from kindergarten to adult†; secondly, it is easily available; thirdly, there are twelve test variables overviewing a very wide aspect of a child's characteristics by which to describe social and personal adjustment and lastly, the test has been widely used on immigrant children and found satisfactory (e.g. Nikome and Deshpande (1967) carried out research on Indian subjects).

The CTP was chosen for use in the present study as it identifies characteristics of personal and social adjustment. The test recognises implicitly that personality cannot be separated from ability or achievement, and can be evaluated through the manner in which the individual deals with social and personal problems, and also

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*The authors: Thorpe, Louis, P. (Northwestern), Clark, Willis, W. (South California), and Tiegs, Ernest W. (Minnesota).

† For the present study Primary and Elementary Questionnaire (Form AA) was used.

indirectly in the way that he is viewed by others Past achievements cannot be discounted since they will undoubtedly affect the individual's ability to cope with problems in an intelligent way. The term 'personality test' refers to a tool for building up a picture of the complex web of feeling, thinking and acting which makes up the individual personality.

The CTP is especially suitable because it acknowledges the 'wholeness' of the adjusting child and is intended as an instrument with the help of which the teacher can judge the progress of the child's education. This test differs from others in that central to the test is the aim of showing how the child is adjusting to situations and difficulties which he is encountering, also whether he is still able to find personal satisfaction, happiness, and also whether he has a socially effective personality.

The test is designed as a tool for the teacher to explain a range of responses to social and personal problems with the purpose of locating areas where adjustment may be either unsatisfactory or inappropriate. The total test scores for the sections are less important than finding the grouping of any imbalance in social or personal adjustment, and these can then become the subject of further guidance.

The test is divided into two sections; the first of which is intended to explain the social dimension of adjustment; these should reveal how pupils function in the social sphere of life, their knowledge of social standards, social skills, freedom from antisocial tendencies, and their attitudes to family, school and community relationships; the second part consists of questions explaining how the pupil feels and thinks about himself, his self-reliance, estimate of his own work, his sense of personal freedom and feeling of belonging. Any tendency to withdraw or a likelihood of nervous tension, which appear to be fairly common in Bangladeshi immigrant children (personal observation) will be revealed.

This allows a total adjustment score to be computed from the two sub-totals referring to personal and social adjustment. The particular components of personality which are examined allow evaluation of whether the child's fundamental needs are being satisfied in an emotionally secure environment and whether an acceptable balance has been struck between self-realisation and social acceptance.

The CTP is so constructed that a high score indicates a high level of adjustment.

California Test of Personality (CTP) Form AA

The following description has been taken verbatim from the Manual of the CTP.

The California Test of Personality is organized around the concept of life adjustment as a balance between personal and social adjustment. Personal adjustment is assumed to be based on feelings of personal security, and social adjustment on feelings of social security. The items in the Personal Adjustment half of the test are designed to measure evidences of six components of personal security; the items in the Social Adjustment half of the test of six components of social security.

ORGANISATION OF THE CALIFORNIA TEST OF PERSONALITY

1. TOTAL ADJUSTMENT: A balance between personal and social adjustment.	a. Social Adjustment: Based on feelings of social security.	i. Social Standards ii. Social Skills iii. Freedom from anti-social Tendencies iv. Family Relations v. School Relations vi. Community Relations
	b. Personal Adjustment: Based on feelings of personal security.	i. Self-reliance ii. Sense of Personal Worth iii. Sense of Personal Freedom iv. Feeling of Belonging v. Freedom from Withdrawing Tendencies vi. Freedom from Nervous Symptoms

Definitions of the Components

The following components are not names for so-called general traits. They are, rather, names for groupings of more or less specific tendencies to feel, think and act. The first half of the test measures Social Adjustment and the other half Personal Adjustment.

a. Social Adjustment

i. Social Standards - The pupil who recognizes desirable social standards is the one who has come to understand the rights of others and who appreciates the necessity of subordinating certain desires to the needs of the group. Such a pupil understands what is regarded as being right or wrong.

ii. Social Skills - A pupil may be said to be socially skillful or effective when he shows a liking for people, when he inconveniences himself to be of assistance to them, and when he is diplomatic in his dealings with both friends and strangers. The socially skillful boy or girl subordinates his or her egoistic tendencies in favour of interest in the problems and activities of his associates.

iii. Anti-social Tendencies - A pupil would normally be regarded as anti-social when he is given to bullying, frequent quarreling, disobedience, and destructiveness to property. The anti-social child is the one who endeavours to get his satisfactions in ways that are damaging and unfair to others. Normal adjustment is characterized by reasonable freedom from these tendencies.

iv. Family Relations - The pupil who exhibits desirable family relationships is the one who feels that he is loved and well-treated at home, and who has a sense of security and self-respect in connection with the various members of his family. Superior family relations also include parental control that is neither too strict nor too lenient.

v. School Relations - The pupil who is satisfactorily adjusted to his school is the one who feels that his teachers like him, who enjoys playing with other children, and who finds the school work adapted to his level of interest and maturity. Good school relations involve the feeling on the part of the pupil that he counts for something in the life of the institution.

vi. Community Relations - The pupil who may be said to be making good adjustments in his community is the one who mingles happily with his neighbours, who takes pride in community improvements, and who is tolerant in dealing with both strangers and foreigners. Satisfactory community relations include as well the disposition to be respectful of laws and of regulations pertaining to the general welfare.

b. Personal Adjustment

i. Self-reliance - A pupil may be said to be self-reliant when his actual actions indicate that he can do things independently of others, depend upon himself in various situations, and direct his own activities. The self-reliant boy or girl is also characteristically stable emotionally, and responsible in his behaviour.

ii. Sense of Personal Worth - A pupil possesses a sense of being worthy when he feels he is well regarded by others, when he feels that others have faith in his future success, and when he believes that he has average or better than average ability. To feel worthy means to feel capable and reasonably attractive.

iii. Sense of Personal Freedom - A pupil enjoys a sense of freedom when he is permitted to have a reasonable share in the determination of his conduct and in setting the general policies that shall govern his life. Desirable freedom includes permission to choose one's own friends and to have at least a little spending money.

iv. Feeling of Belonging - A pupil feels that he belongs when he enjoys the love of his family, the well-wishes of good friends, and a cordial relationship with people in general. Such a pupil will as a rule get along well with his teachers and usually feels proud of his school.

v. Withdrawing Tendencies - The pupil who is said to withdraw is the one who substitutes the joys of a fantasy world for actual successes in real life. Such a child is characteristically sensitive, lonely and given to self-concern. Normal adjustment is characterised by reasonable freedom from these tendencies.

vi. Nervous Symptoms - The pupil who is classified as having nervous symptoms is the one who suffers from one or more of a variety of physical symptoms such as loss of appetite, frequent eyestrain, inability to sleep, or a tendency to be chronically tired. Children of this kind may be exhibiting physical expressions of emotional conflicts.

Attention is called to the fact that these components are not names for so-called general traits. They are, rather, names for groupings of more or less specific tendencies to feel, think, and act.

PART- IV

CHAPTER 7

RESULTS

ANALYSIS AND COMMENTARY OF RESULTS

The tables in this section will show the results of the following analyses between and within group comparison, together with a commentary on the results. The relevance of the findings which were contrary to the formulated hypotheses are discussed on pages 242 - 270.

1. Between Bangladeshi (Bang.) and indigenous (indig.) groups (one-way ANOVA):
   - i) Total Bang. and total indig. children.
   - ii) Bang. boys and indig. boys.
   - iii) Bang. girls and indig. girls.
   - iv) Bang. (>2) children and total indig. children.

2. Within the total Bangladeshi sample (3-way ANOVA): with respect to the factors of length of schooling, sex and age:
   - i) Length of schooling, i.e Bang. children with more than two years of English schooling {Bang.(>2)} and Bang. with between 1 and 2 years of English schooling {Bang.(<2)}.
   - ii) Sex, i.e. Bang. boys and Bang. girls.
   - iii) Age - There are five different age groups. Attempts to regress the performance on age will not be made. Only interest in age is to see if it affects the score significantly.

3. Within the total indigenous sample - (one-way ANOVA) with respect to the factor of sex, i.e. indig. boys and indig. girls.

(Details of ANOVA results and findings for all tests and all findings tested are to be found in Appendix VII)

TABLE 16

TEST: TOTAL ADJUSTMENT

	Level of Significance	Details
Between Group Comparison (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	0.002	Bang. < indig.
Bang. boys Indig. boys	NS	Bang. < indig.
Bang. girls Indig. girls	<0.001	Bang. < indig.
Bang.(>2) Indig.	NS	
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	<0.001	Bang.(>2) > Bang.(<2)
Sex	<0.001	Bang.boy > Bang.girl
Age	<0.001	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	NS	

TOTAL ADJUSTMENT

Comparisons between the total Bang. and the total indig. sample of children shows the total Bang. sample to be significantly less adjusted overall than the total indig. sample. The Bang. girls are less adjusted than the indig. girls. However, there was no significant difference between the Bang. boys and the indig. boys, nor between the Bang.(>2) and the indig. children. Comparisons within the Bang. group show the positive effects of length of schooling on Total Adjustment to be significant, and there is similarly a significant difference between the Bang. girls and Bang. boys, the boys being the more adjusted. However, within the total indig. group, i.e. indig. boys and girls there is no significant difference. Total adjustment is seen to increase significantly with increasing age. It is of interest that

there is a significant difference between the Bang. (>2) and Bang.(<2), the Bang. (>2) being more adjusted, but not between the Bang. (>2) and the indigenous children.

TABLE 17

TEST: SOCIAL ADJUSTMENT

	Level of Significance	Details
Between Group Comparison (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	NS	
Bang. boys Indig. boys	NS	
Bang. girls Indig. girls	NS	
Bang.(>2) Indig.	NS	
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	<0.001	Bang.(>2) > Bang.(<2)
Sex	<0.001	Bang.boy > Bang.girl
Age	<0.001	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	NS	

SOCIAL ADJUSTMENT (a subtest of Total Adjustment)

There are no significant differences between the Bang. and indig. sample groups, but within the Bang. group there are, again, significant differences with respect to the positive effect of length of schooling and significant sex differences. So the Bang. children with more than 2 years schooling show greater social adjustment, and the Bang. boys are socially significantly more adjusted than the Bang. girls. Within the indig. Bang. group there is no significant difference. The lack of significant difference between the indig. and the Bang. groups on the total Social Adjustment scores may be accounted for by the Bang. children scoring unexpectedly highly on 3 out of the 6 subtests within the total Social Adjustment test. The subtests are discussed on pages 199-204.

TABLE 18

TEST: PERSONAL ADJUSTMENT

	Level of Significance	Details
Between Group Comparison (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	<0.001	Bang. < indig.
Bang. boys Indig. boys	0.002	Bang.boy < indig. boy
Bang. girls Indig. girls	<0.001	Bang.girl < indig.girl
Bang.(>2) Indig.	<0.001	Bang.(>2) < indig.
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	<0.001	Bang.(>2) > Bang.(<2)
Sex	<0.001	Bang.boy > Bang.girl
Age	<0.001	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	NS	

PERSONAL ADJUSTMENT (a subtest of the Total Adjustment test)

Between group comparisons indicate that there is a significant difference between the indig. and Bang. children in all four groups, including the Bang.(>2) when compared with the indig. children. This finding would seem to indicate that even though length of schooling makes a significant difference to the Bang. child as far as personal adjustment is concerned, this adjustment is still not similar to that of the indig. child. It is of interest that for all three major Adjustment scores - Total Adjustment, Social Adjustment and Personal Adjustment - there are no significant differences between the indig. boys and the indig. girls but significant difference between the Bang. boys and Bang. girls. Increasing age is significantly associated with increasing scores on Personal Adjustment.

TABLE 19

TEST: SOCIAL STANDARD

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	<0.001	Bang. < indig.
Bang. boys Indig. boys	<0.001	Bang.boy < indig.girl
Bang. girls Indig. girls	0.001	Bang.girl < indig.girl
Bang.(>2) Indig.	<0.001	Bang.(>2) < indig.
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	<0.001	Bang.(>2) > Bang.(<2)
Sex	<0.001	Bang.boy > Bang. girl
Age	<0.001	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	NS	

SOCIAL STANDARD (a subtest of Social Adjustment)

(For commentary see page 200)

TABLE 20

TEST: SOCIAL SKILLS

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	0.001	Bang. < indig.
Bang. boys Indig. boys	NS	
Bang. girls Indig. girls	0.001	Bang.girl < indig.girl
Bang. (>2) Indig.	NS	
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	<0.001	Bang.(>2) > Bang.(<2)
Sex	<0.001	Bang.boy > Bang.girl
Age	<0.001	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	NS	

SOCIAL STANDARD (a subtest of Social Adjustment)

SOCIAL SKILLS (" " " " ")

The differences in the scores of the four between group comparisons which were made for these two tests were similar with two exceptions: the indig. children show a significantly higher degree of social skill and evince a higher social standard than the Bang. children, with the exception of the Bang. boys, and the Bang.(>2) when compared with the indig. boys and the indig. children respectively, where no significant difference was found in relation to social skills (only). Comparisons within the Bang. group shows the positive effect of length of schooling on both social standards and social skills, with an apparently greater influence on the development of social skills, as for this subtest the Bang.(>2) children's score was not significantly different from that of the indig. sample. However, this finding may be an artifact of the particular test used, and in view of the other findings in this area, not too much reliance should be placed

upon it. The Bangladeshi boys scored significantly higher than Bang. girls in both Social Standard and Social Skills tests but the test shows no significant sex difference within the group. Increasing age is significantly related to increasing scores on both tests.

TABLE 21

TEST: ANTISOCIAL TENDENCIES

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	<0.001	Bang. > indig.
Bang. boys Indig. boys	<0.001	Bang.boy > indig.boy
Bang. girls Indig. girls	<0.001	Bang.girl > indig.girl
Bang. (>2) Indig.	<0.001	Bang.(>2) > indig.
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	NS	
Sex	0.049	Bang.boy < Bang.girl
Age	<0.001	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	0.018	Indig.boy < indig.girl

ANTISOCIAL TENDENCIES (a subtest of Social Adjustment)

(For commentary see page 200)

TABLE 22

TEST: FAMILY RELATIONS

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	<0.001	Bang. > indig.
Bang. boys Indig. boys	<0.001	Bang. boy > indig.boy
Bang. girls Indig. girls	<0.001	Bang.girl > indig.girl
Bang. (>2) Indig.	<0.001	Bang.(>2) > indig.
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	NS	
Sex	<0.001	Bang.boy < Bang.girl
Age	<0.001	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	NS	

ANTISOCIAL TENDENCIES (a subtest of Social Adjustment)
FAMILY RELATIONS (" " " " ")

The differences in the scores of the four between group comparisons which were made for these two tests were similar: the Bang. children show a lower degree of antisocial tendencies and a stronger sense of family relationships, both in relation to the test applied to the total sample as well as when comparing the Bang. boys and girls with the indig. boys and girls; and the Bang.(>2) children also had lower anti-social tendency scores and higher family relationship scores than the indig. children. The within-sample comparisons show that length of schooling seems to have no significant effect on either measure, but sexual differences are significant on both measures, with the Bang.girls having fewer antisocial tendencies and stronger family relationships scores than the Bang. boys. Within the indig. group again girls show signficantly fewer antisocial tendencies than boys

but there is no significant difference in the family relationship scores. Age is again a significant factor in relation to both tests but higher scores are not necessarily associated with increased age.

TABLE 23

TEST: SCHOOL RELATIONS

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	<0.001	Bang. > indig.
Bang. boys Indig. boys	<0.001	Bang.boy > indig.boy
Bang. girls Indig. girls	NS	
Bang. (>2) Indig.	<0.001	Bang.(>2) > indig.
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	<0.001	Bang.(>2) > Bang.(<2)
Sex	<0.001	Bang.boy > Bang.girl
Age	<0.001	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	0.001	Indig.boy < indig.girl

SCHOOL RELATIONS (a subtest of Social Adjustment)

Both the total sample of Bang. children and the Bang. boys scored significantly higher on this test than the total sample of indig. children and the indig. boys, respectively, there being no sifnificant difference, however, between the Bang. girls and the indig.girls on this test; but the Bang. (>2) scored significantly higher than the indig. children. The within group comparisons show a significant difference between the Bang. boys and the Bang.girls, the boys obtaining the better scores, and it is of interest that a comparison

of the indigenous boys and girls with one another, however, shows the indigenous girls scoring significantly higher than the boys. Increasing age is significantly associated with increasing scores on the School Relations test.

TABLE 24

TEST: COMMUNITY RELATIONS

	Level of Significance	Details
Between Groups Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	<0.001	Bang. < indig.
Bang. boys Indig. boys	<0.001	Bang.boy < indig.boy
Bang. girls Indig. girls	<0.001	Bang.girl < indig.girl
Bang. (>2) Indig.	<0.001	Bang.(>2) < indig.
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	<0.001	Bang.(>2) > Bang.(<2)
Sex	<0.001	Bang.boy > Bang.girl
Age	<0.001	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	NS	

COMMUNITY RELATIONS (a subtest of Social Adjustment)

The four between group comparisons indicate that in all four the Bang. children scored significantly lower than the indig. children. The within group comparisons show the positively significant difference in respect of increased length of schooling and increasing age; and whereas there was no significant difference between the indig.girls and indig. boys, there was a significant difference between the Bang. boys and Bang. girls, the boys appearing to have a higher sense of community belonging.

TABLE 25

TEST: SELF-RELIANCE

	Level of Significance	Details
Between Group Comparison (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	<0.001	Bang.< indig.
Bang. boys Indig. boys	0.022	Bang.boy < indig.boy
Bang. girls Indig. girls	<0.001	Bang.girl < indig.girl
Bang.(>2) Indig.	0.001	Bang.(>2) < indig.
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	<0.001	Bang.(>2) > Bang.(<2)
Sex	<0.001	Bang.boy > Bang.girl
Age	<0.001	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	NS	

SELF-RELIANCE (a subtest of Personal Adjustment)

(for commentary see page 211)

TABLE 26

TEST: SENSE OF PERSONAL WORTH

	Level of Significance	Details
Between Group Comparison: (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	<0.001	Bang. < indig.
Bang. boys Indig. boys	<0.001	Bang.boy < indig. boy
Bang. girls Indig. girls	<0.001	Bang.girl < indig. girl
Bang.(>2) Indig.	<0.001	Bang.(>2) < indig.
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	<0.001	Bang.(>2) > Bang.(<2)
Sex	<0.001	Bang. boy > Bang.girl
Age	<0.001	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	NS	

SENSE OF PERSONAL WORTH (a subtest of Personal Adjustment)

(For commentary see page 211)

TABLE 27

TEST: SENSE OF PERSONAL FREEDOM

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	<0.001	Bang. < indig.
Bang. boys Indig. boys	<0.001	Bang.boy < indig.boy
Bang. girls Indig. girls	<0.001	Bang.girl < indig.girl
Bang.(>2) Indig.	<0.001	Bang.(>2)< indig.
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	<0.001	Bang.(>2) > Bang.(<2)
Sex	<0.001	Bang.boy > Bang.girl
Age	<0.001	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	0.048	Indig.boy > indig.girl

SENSE OF PERSONAL FREEDOM (a subtest of Personal Adjustment)

(For commentary see page 211)

TABLE 28

TEST: FEELING OF BELONGING

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	<0.001	Bang. < indig.
Bang. boys Indig. boys	NS	
Bang. girls Indig. girls	<0.001	Bang.girl < indig.girl
Bang. (>2) Indig.	<0.001	Bang.(>2) < indig.
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	<0.001	Bang.(>2) > Bang.(<2)
Sex	<0.001	Bang.boy > Bang.girl
Age	<0.001	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	NS	

FEELING OF BELONGING (a subtest of Personal Adjustment)

(For commentary see page 211)

TABLE 29

TEST: FREEDOM FROM WITHDRAWAL TENDENCY

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	0.013	Bang. < indig.
Bang. boys Indig. boys	NS	
Bang. girls Indig. girls	<0.001	Bang. < indig.
Bang. (>2) Indig.	NS	
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	<0.001	Bang.(>2) > Bang.(<2)
Sex	<0.001	Bang.boy > Bang.girl
Age	<0.001	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	NS	

FREEDOM FROM WITHDRAWAL TENDENCY (a subject of Personal Adjustment)

(For commentary see page 211)

TABLE 30

TEST: FREEDOM FROM NERVOUS SYMPTOMS

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	<0.001	Bang. < indig.
Bang. boys Indig. boys	<0.001	Bang.boy < indig.boy
Bang. girls Indig. girls	<0.001	Bang.girl < indig.girl
Bang. (>2) Indig.	<0.001	Bang.(>2) < indig.
Within Group (Bang) Comparisons (3-way ANOVA)		
Length of schooling	<0.001	Bang.(>2) > Bang.(<2)
Sex	<0.001	Bang.boy > Bang.girl
Age	<0.001	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	NS	

FREEDOM FROM NERVOUS SYMPTOMS (a subject of Personal Adjustment)

(For commentary see page 211)

SELF RELIANCE	(Subtest of	Personal Adjustment	)
SENSE OF PERSONAL WORTH	(	"	)
SENSE OF PERSONAL FREEDOM	(	"	)
FEELING OF BELONGING	(	"	)
FREEDOM FROM WITHDRAWAL TENDENCY	(	"	)
FREEDOM FROM NERVOUS SYMPTOMS	(	"	)

When the results of the comparisons between and within the two groups are considered for the six personal adjustment subtests, it is clear that with three exceptions the following picture emerges: there are significant differences in scoring between the four groups when the indig. and Bang. children are compared with one another. In all tests increasing age is a signifiacnt factor. Within group comparisons show that in all cases length of schooling is positively associated with scores on all the subtests indicating better adjustment, and in all instances the Bang. boy appears to be significantly better adjusted than the Bang. girl, whereas in all instances except one ('Sense of Personal Freedom') there is no significant difference between the scores of the indig. boys and the indig. girls. The test for 'Sense of Personal Freedom' showed a significant difference in favour of indig. children.

The three exceptions to the between-group comparisons are that there is no significant difference between the Bang. boys and the indig. boys in respect of 'Feeling of Belonging' and ' Withdrawl Tendencies', and also no significant difference on the later subtest between the Bang. (>2) and the indig. children.

TABLE 31

TEST: NON-VERBAL INTELLIGENCE

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	<0.001	Bang. < indig.
Bang. boys Indig. boys	<0.001	Bang.boy < indig.boy
Bang. girls Indig. girls	<0.001	Bang.girl < indig.girl
Bang. (>2) Indig.	<0.001	Bang.(>2) < indig.
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	<0.001	Bang.(>2) > Bang.(<2)
Sex	<0.001	Bang.boy > Bang.girl
Age	<0.001	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	NS	

NON-VERBAL INTELLIGENCE

Comparison of the scores of total Bang. and total Indig. children of all 4 groups on this test shows significantly lower scores for the Bang. children. The within group comparison of the Bang. sample again shows a significant positive effect of increased length of schooling on intelligence and a significantly higher intelligence score for the Bang. boys when compared with the girls. But the within group comparison of the indig. sample shows no signficant sexual differences. Increasing age is significantly associated with rising scores on the non-verbal intelligence tests.

TABLE 32

TEST: VOCABULARY

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	<0.001	Bang. < indig.
Bang. boys Indig. boys	<0.001	Bang.boy < indig.boy
Bang. girls Indig. girls	<0.001	Bang.girl < indig.girl
Bang. (>2) Indig.	<0.001	Bang.(>2) < indig.
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	<0.001	Bang.(>2) > Bang.(<2)
Sex	NS	
Age	<0.001	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	NS	

VOCABULARY

(For commentary see page 212)

TABLE 33

TEST: PROFICIENCY IN SPOKEN ENGLISH

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	<0.001	Bang. < indig.
Bang. boys Indig. boys	<0.001	Bang.boy < indig. boys
Bang. girls Indig. girls	<0.001	Bang.girl < indig.girl
Bang. (>2) Indig.	0.001	Bang.(>2) < indig.
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	<0.001	Bang.(>2) > Bang.(<2)
Sex	NS	
Age	NS	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	NS	

PROFICIENCY IN SPOKEN ENGLISH

(For commentary see page 215)

The results for both these tests are identical for all the groups tested, except in relation to the age factor, that is, the between group comparisons of all four groups show that 1) the total Bang. sample when compared with the indig. sample, 2) the Bang.(>2) when compared with the indig. sample, 3) the Bang. boys when compared with the indig. boys and 4) the Bang. girls when compared with the indig. girls all showed significantly lower vocabulary and spoken English scores. The within group comparisons show a significant positive effect of increased length of schooling on vocabulary and spoken English but no significant difference between Bang. boys and girls, nor is there such a difference between the boys and girls of the indig. sample.

Increasing age is significantly related to increasing vocabulary whereas there is no significant relationship between increasing age and increasing proficiency in spoken English.

TABLE 34

TEST: EXTROVERSION

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	<0.001	Bang. < indig.
Bang. boys Indig. boys	<0.001	Bang.boy < indig.boy
Bang. girls Indig. girls	<0.001	Bang.girl < indig.girl
Bang.(>2) Indig.	<0.001	Bang.(>2) < indig.
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	<0.001	Bang.(>2) > Bang.(<2)
Sex	<0.001	Bang.boy > Bang.girl
Age	<0.001	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	0.002	Indig.boy > indig.girl

EXTROVERSION

The four between group comparisons show that the Bang. children are significantly less extroverted than the indig. children and the within group comparison for the Bangladeshi sample shows that the Bang.(>2) are significantly more extroverted than the Bang.(<2) children and the Bang. boys are significantly more extroverted that the Bangladeshi girls. Similarly the indig. boys are significantly more extroverted than indig. girls. Increasing age is significantly related to increasing extroversion.

TABLE 35

TEST: NEUROTICISM

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	<0.001	Bang. > indig.
Bang. boys Indig. boys	<0.001	Bang.boy > indig. boy
Bang. girls Indig. girls	<0.001	Bang.girl > indig.girl
Bang. (>2) Indig.	0.001	Bang. (>2)> indig.
Within Group (Bang.) Comparisons		
Length of schooling	<0.001	Bang.(>2) < Bang.(<2)
Sex	NS	
Age	0.001	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	NS	

NEUROTICISM

Comparisons between the four between groups show that the Bang. samples have higher neuroticism scores than the indig. samples. Within the Bang. groups comparisons show that the Bang. (>2) have lower neuroticism scores than the Bang.(<2), but there is no significant difference between boys and girls in either the Bang. or indig. samples. Increasing age is significantly related to neuroticism but not linearly.

Table 36

TEST ATTITUDE TO SCHOOL

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	<0.001	Bang. > indig.
Bang. boys Indig. boys	<0.001	Bang.boy > indig.
Bang. girls Indig. girls	NS	
Bang.(>2) Indig.	<0.001	Bang.(>2) > indig.
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	0.029	Bang.(>2) > Bang.(<2)
Sex	<0.001	Bang.boy > Bang.girl
Age		
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	0.011	Indig.boy< indig.girl

ATTITUDE TO SCHOOL

The results of the comparison between the total Bang. and total indig. children and between the Bang. boys and the indig. boys show that the Bang. children have a significantly more positive attitude to school than the indig. children. But between Bang. girls and indig. girls there is no such significant difference. Between the Bang. (>2) and indig. children again Bang.(>2) children show a significantly more positive attitude. The within group comparisons of the Bang. sample indicate a significantly higher score for the Bang.(>2) children when compared with Bang.(<2) and the boys have a significantly more favourable attitude than the girls. However the indigenous girls have a significantly more

favourable attitude when compared with the indigenous boys. There seems to be an increase in favourable attitudes towards school with increase in age but not linearly.

TABLE 37

TEST: INTEREST IN SCHOOLWORK

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	NS	
Bang. boys Indig. boys	0.031	Bang.boy > indig.boy
Bang. girls Indig. girls	0.035	Bang.girl < indig. girl
Bang.(>2) Indig.	0.035	Bang.(>2) > indig.
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	<0.001	Bang.(>2) > Bang.(<2)
Sex	0.001	Bang.boy > Bang.girl
Age	0.023	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	NS	

INTEREST IN SCHOOLWORK

(For commentary see page 221)

TABLE 38

TEST: IMPORTANCE OF DOING WELL

	Level of Significance	Details
Between Group Comparisons (Bang. and indig. (one-way ANOVA)		
Total Bang. sample Total indig. sample	NS	
Bang. boys Indig. boys	<0.001	Bang.boy > indig.boy
Bang. girls Indig. girls	0.049	Bang.girl < indig.girl
Bang.(>2) Indig.	0.009	Bang.(>2) > indig.
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	0.003	Bang.(>2) > Bang.(<2)
Sex	<0.001	Bang.boy > Bang.girl
Age	<0.001	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	<0.023	Indig.boy < indig.girl

IMPORTANCE OF DOING WELL

(For commentary see page 221)

INTEREST IN SCHOOLWORK AND IMPORTANCE OF DOING WELL

In these two attitude tests the score of all the groups except one (indig.boys and girls) are similar. However, there are no significant differences between the total Bangladeshi group and the total indig. group on either interest in schoolwork or the importance of doing well. But Bang. boys show significantly higher scores on both the 'interest in schoolwork' and 'importance of doing well' tests than indig. boys. Bang. girls also show significantly lower scores on these tests than indig. girls. Again Bang.(>2) children indicated significantly higher scores in both these attitude tests when compared with the indig. children. Comparisons within the Bang. group show the significantly positive effect of length of schooling on both tests. The Bang. boys have significantly higher scores on both the tests than the Bang. girls. Within the indig. group there is no significant difference in interest in schoolwork but indig. girls showed a significantly more positive attitude regarding the importance of doing well than the indig. boys. With both attitude tests increasing age has a significant effect but possibly there is no direct linear relationship between increasing age and more positive attitudes in these two tests.

TABLE 39

TEST: ATTITUDE TO CLASS

	Level of Significance	Details
Between Group Comparison (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	NS	
Bang. boys Indig. boys	NS	
Bang. girls Indig. girls	NS	
Bang.(>2) Indig.	NS	
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	NS	
Sex	NS	
Age	<0.001	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	NS	

ATTITUDE TO CLASS

There are no significant differences between and within any of the groups. Increasing age is significantly associated with favourable attitude to school but not linearly.

TABLE 40

TEST: RELATIONSHIP WITH TEACHERS

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	<0.001	Bang. > indig.
Bang. boys Indig. boys	<0.001	Bang.boy > indig.boy
Bang. girls Indig. girls	<0.039	Bang.girl > indig.girl
Bang.(>2) Indig.	<0.001	Bang.(>2) > indig.
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	0.044	Bang.(>2) > Bang.(<2)
Sex	0.038	Bang.boy < Bang.girl
Age	0.001	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	0.002	Indig.boy < indig.girl

RELATIONSHIP WITH TEACHER

On the four between group comparisons the Bangladeshi children show a significantly more positive attitude with respect to their relationship with their class teacher. Within the Bang. group increased length of schooling appears to be related to a better relationship with the teacher so that the Bang.(>2) have a significantly more positive attitude towards their relationship with teachers than the Bang.(<2) children. There are significant sex differences with the Bang. girls having a higher score on this test than the Bang. boys, and similarly, the indigenous girls score higher than the boys. Age also has a significant effect, possibly not linearly.

TABLE 41

TEST: ANXIETY IN CLASS

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample / Total indig. sample	<0.001	Bang. < indig.
Bang. boys / Indig. boys	<0.001	Bang.boy < indig.boy
Bang. girls / Indig. girls	<0.001	Bang.girl < indig.girl
Bang.(>2) / Indig.	<0.001	Bang.(>2) < indig.
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	<0.001	Bang.(>2) > Bang.(<2)
Sex	<0.001	Bang.boy < Bang.girl
Age	NS	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys / Indig. girls	NS	

ANXIETY IN CLASS

The between group comparisons indicate that in all four groups Bang. children show significantly greater anxiety in class than indig. children. Within group comparisons indicate length of schooling affects anxiety in class, with the Bang.(>2) children showing less anxiety in class than the Bang.(<2) children. There are significant sex differences within the Bangladeshi group, with the girls showing less anxiety than the boys, but no significant differences between indig. boys and girls. The effect of age does not appear to be significant in this test.

TABLE 42

TEST: SOCIAL ADJUSTMENT

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	0.023	Bang. < indig.
Bang. boys Indig. boys	NS	
Bang. girls Indig. girls	NS	
Bang. (>2) Indig.	NS	
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	0.002	Bang.(>2) > Bang.(<2)
Sex	NS	
Age	0.011	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	0.038	Indig.boy < indig.girl

SOCIAL ADJUSTMENT

The between group comparisons show a significant difference between the total Bang. group and the total indig. group with the Bang. children scoring significantly lower in social adjustment. Although comparisons of the Bang. boys and indig. boys shows no significant difference, the comparison of Bang. girls and indig. girls also shows the Bang. girls to have lower scores on social adjustment. Within group comparisons for the Bang. children show increased length of schooling to be positively related to social adjustment with the Bang.(>2) children scoring higher than the Bang.(<2) children, but sexual differences are not significant. Within the indig. group, indig. girls score significantly higher in social adjustment than indig. boys. Age appears to affect social adjustment significantly but not through a linear relationship.

TABLE 43

TEST: ACADEMIC SELF-IMAGE

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	NS	
Bang. boys Indig. boys	NS	
Bang. girls Indig. girls	NS	
Bang. (>2) Indig.	0.001	Bang.(>2) > indig.
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	<0.001	Bang.(>2) > Bang.(<2)
Sex	NS	
Age	0.010	
Within Group (indig.) Comparison (one-way ANOVA)		
Indig. boys Indig. girls	NS	

ACADEMIC SELF-IMAGE

The results of 3 of the between group comparisons (total Bang. and total indig. sample, Bang. boys and indig. boys and Bang. girls and indig. girls) show no significant difference between these groups, but the comparison between Bang.(>2) children and indig. children indicate that the Bang. (>2) children have scored higher on academic self-image than the indig. children. Comparisons within the Bang. group show increased length of schooling, positively to affect academic self-image with Bang. (>2) children scoring higher than Bang.(<2) children. There are no significant sex differences within either the Bang. or the indig. groups. The age difference affects Academic Self Image significantly but the relationship is possibly not linear.

V. INTEREST

TABLE: 44

TEST: TOTAL INTERESTS

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	<0.001	Bang. < indig.
Bang. boys Indig. boys	0.005	Bang.boy < indig.boy
Bang. girls Indig. girls	0.004	Bang.girl < indig.girl
Bang. (>2) Indig.	NS	
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	<0.001	Bang.(>2) > Bang.(<2)
Sex	NS	
Age	NS	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	NS	

TOTAL INTERESTS

(This includes the total scores of all six interest tests.)

The between group comparisons of three of the four groups show the Bang. children to have significantly lower interest scores than the indig. children. A comparison of Bang.(>2) and indig. children, however, shows no significant difference in total interest scores. Comparisons within the Bang. groups show increased length of schooling positively to affect total interest scores, with Bang.(<2) children scoring significantly higher than Bang.(2) children. There are no significant sex differences within either the Bang. or indig. groups. Age does not appear significantly to affect total interest scores.

TABLE 45

TEST: INTEREST IN SCHOOL SUBJECT

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	<0.001	Bang. < indig.
Bang. boys Indig. boys	0.012	Bang.boy < indig.boy
Bang. girls Indig. girls	0.005	Bang.girl < indig.girl
Bang. (>2) Indig.	NS	
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	<0.001	Bang.(>2) > Bang.(<2)
Sex	NS	
Age	NS	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	NS	

INTEREST IN SCHOOL SUBJECTS

Between group comparisons for the first three groups show the Bang. children to have scored significantly lower on interest in school subjects than indig. children. Comparison of Bang. (>2) groups and the indig. group shows no significant difference in interest in school subjects, however. Comparisons within the Bang. group again indicate increased length of schooling to have a significantly positive effect on interest in school subjects. There are no significant sex differences within either the Bang. or the indig. groups. Age is not a significant factor in relation to interest in school subjects.

TABLE 46

TEST: INTEREST IN PAINTING, DRAWING ETC.

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	NS	
Bang. boys Indig. boys	NS	
Bang. girls Indig. girls	NS	
Bang. (>2) Indig.	NS	
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	0.015	Bang.(>2) > Bang. (<2)
Sex	NS	
Age	NS	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	NS	

INTEREST IN PAINTING, DRAWING ETC. (DESCRIPTIVE)

Between group comparisons of all 4 groups show no significant differences between the Bang. and indig. groups. Within the Bang. group increased length of schooling has a significant positive effect on interest in painting and drawing. Again, there are no significant sex differences within either the Bang. or indigenous groups and age does not appear to have a significant effect on interest in painting and drawing.

TABLE 47

TEST: INTEREST IN MODELLING, BUILDING, CRAFTWORK ETC.

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	0.008	Bang. < indig.
Bang. boys Indig. boys	0.006	Bang.boy < indig. boy
Bang. girls Indig. girls	NS	
Bang. (>2) Indig.	NS	
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	0.037	Bang.(>2) > Bang.(<2)
Sex	NS	
Age	NS	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	0.019	Indig.boy > indig. girl

INTEREST IN MODELLING, BUILDING, CRAFTWORK ETC. (CONSTRUCTIVE)

Between group comparisons of the total Bang. and total indig. groups and between the Bang. boys and indig. boys show significant differences, with the indig. groups scoring higher. But comparisons between Bang. girls and indig. girls and between Bang.(>2) and indig. children show no significant differences. Within the Bang.group length of schooling is found to have a significantly positive effect. There is no significant sex difference within the Bang. group, but there is a significant difference within the indig.group, with boys scoring better than girls. Age does not appear to be a significant factor in interest in modelling, building and craftwork.

TABLE 48

TEST: INTEREST IN DANCE, MUSIC, DRAMA ETC.

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	NS	
Bang. boys Indig. boys	NS	
Bang. girls Indig. girls	0.010	Bang.girl < indig.girl
Bang. (>2) Indig.	NS	
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	0.009	Bang.(>2) > Bang.(<2)
Sex	NS	
Age	NS	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	<0.001	Indig.boy < indig.girl

INTEREST IN DANCE, MUSIC, DRAMA ETC. (PARTICIPATORY)

The between group comparisons show no significant differences in the scores between the total Bang. and total indig. groups, nor between the Bang. boys and indig. boys or the Bang.(>2) and indig. groups. But there is a significant difference between Bang. girls and indig. girls with the indig. girls scoring higher than the Bang. girls.

Within the Bang. group, the Bang.(>2) children scored significantly higher than the Bang.(<2) children (showing the positive effect of increased length of schooling). There is no significant sex differences within this group, but within the indig. group, girls scored significantly higher than boys. Age does not appear to be a significant factor.

TABLE 49

TEST: INTEREST IN BODY SKILLS - SPORTS, GYMNASTICS ETC.

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	<0.001	Bang. < indig.
Bang. boys Indig. boys	0.007	Bang.boy < indig.boy
Bang. girls Indig. girls	<0.001	Bang.girl < indig. girl
Bang.(>2) Indig.	<0.001	Bang.(>2) < indig.
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	NS	
Sex	0.016	Bang.boy > Bang.girl
Age	0.010	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	NS	

INTEREST IN BODY SKILLS - SPORTS, GYMNASTICS ETC. (PHYSICAL SKILLS)

All four between group comparisons show Bang. children scoring lower than indig. children in body skills. Within the Bang. group there is no significant difference between Bang.(>2) and (<2) indicating that with increasing length of schooling these children's body skills do not improve, but there is a significant sex difference, with the girls scoring lower in interest in body skills than the boys. There is no such difference within the indig. group. Age appears to affect scores on the body skills test but possibly not through a linear relationship.

TABLE 50

TEST: INTEREST IN HAND SKILLS: TOOLS: INSTRUMENTS, SCISSORS,PEN, ETC. ETC.

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	0.008	Bang. < indig.
Bang. boys Indig. boys	NS	
Bang. girls Indig. girls	NS	
Bang.(>2) Indig.	NS	
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	NS	
Sex	NS	
Age	0.015	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	NS	

INTEREST IN HAND SKILLS: TOOLS: INSTRUMENTS, SCISSORS, PEN, ETC. (PHYSICAL SKILLS)

Between group comparisons of total Bang. and total indig. groups and of the Bang. boys and indig. boys show the Bang. groups scoring significantly lower in their interest in hand skills. But there is no significant difference between Bang. and indig. girls nor between Bang.(>2) and indig. children. Within the Bang. group there is no significant difference in the scores of Bang.(<2) and (>2) children indicating length of schooling is not an important factor in developing increasing interest in hand skills. There are no significant sex differences in either the Bangladeshi or the indig. group. Age appears to affect significantly the interest in hand skills but possibly there is no linear relationship.

TABLE 51

TEST: ACADEMIC PERFORMANCE

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	<0.001	Bang. < indig.
Bang. boys Indig. boys	<0.001	Bang.boy < indig.boy
Bang. girls Indig. girls	<0.001	Bang.girl < indig.girl
Bang.(>2) Indig.	<0.013	Bang.(>2) < indig.
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	<0.001	Bang.(>2) > Bang.(<2)
Sex	NS	
Age	NS	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	NS	

ACADEMIC PERFORMANCE

(The academic performance scores were made up from the total scores on the proficiency in English language and mathematics tests).

In all four between group comparisons the Bang. children scored significantly lower on academic performance than indig. children. Within the Bang. group, the Bang.(>2) children scored significantly higher than the Bang.(<2) children showing increased length of schooling has a positive effect on academic performance. There are no significant sexual differences within either the Bang. or the indig. group. Age is not a significant factor in academic performance.

TABLE 52

TEST: ATTAINMENT IN ENGLISH LANGUAGE

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total Indig. sample	<0.001	Bang. < indig.
Bang. boys Indig. boys	<0.001	Bang.boy < indig.boy
Bang. girls Indig. girls	<0.001	Bang.girl < indig.girl
Bang. (>2) Indig.	0.001	Bang.(>2) < indig.
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	<0.001	Bang.(>2)> Bang. (<2)
Sex	NS	
Age	NS	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	NS	

ATTAINMENT IN ENGLISH LANGUAGE

(For commentary see page 237)

TABLE 53

TEST: MATHEMATICS

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	NS	
Bang. boys Indig. boys	NS	
Bang. girls Indig. girls	NS	
Bang. (>2) Indig.	NS	
Within Group (Bang.) Camparisons (3-WAY ANOVA)		
Length of schooling	0.003	Bang.(>2) > Bang.(<2)
Sex	0.006	Bang.boy > Bang. girl
Age	NS	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	NS	

MATHEMATICS

(For commentary see page 237)

All four between group comparisons including that between Bang.(>2) and indig. children, show Bang. children scoring significantly lower on English language proficiency than indig. children. However, there are no significant differences in mathematical ability for all four between group comparisons.

Within the Bang. group, Bang.(>2) children did better on both tests than Bang.(<2) children (indicating the positive effect of increased length of schooling). There are no significant sex differences for proficiency in English scores within the Bang. group, but in the mathematical test the Bang. boys scored significiantly higher than the girls. Within the indig. group, there are no significant sex differences on either test. Age is not a significant factor for either test.

TABLE 54

TEST: NON-ACADEMIC PERFORMANCE

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample / Total indig. sample	0.006	Bang. < indig.
Bang. boys / Indig. boys	NS	
Bang. girls / Indig. girls	0.024	Bang.girl < indig.girl
Bang. (>2) / Indig.	NS	
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	0.002	Bang.(>2) > Bang.(<2)
Sex	NS	
Age	NS	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig.boys / Indig.girls	NS	

NON-ACADEMIC PERFORMANCE

Between group comparisons of the total Bang. and total indig. groups and of Bang. girls and indig. girls show the Bang. children scoring significantly lower on non-academic performance than the indig. children. However, comparisons between Bang. boys and indig. boys and between Bang.(>2) children and indig. children show no significant differences. Within the Bang. group, increased length of schooling again appears significantly to affect the scores. There are no significant sex differences within either the Bang. or the indig. groups. Age does not appear to be a significant factor in non-academic performance.

TABLE 55

TEST: TOTAL BEHAVIOURAL SCALE

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	NS	
Bang. boys Indig. boys	NS	
Bang. girls Indig. girls	NS	
Bang.(>2) Indig.	NS	
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	NS	
Sex	NS	
Age	NS	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	NS	

TOTAL BEHAVIOURAL SCALE

(For commentary see page 241)

TABLE 56

TEST: NEUROTIC BEHAVIOUR

	Level of Significance	Details
Between Group Comparisons (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	NS	
Bang. boys Indig. boys	NS	
Bang. girls Indig. girls	NS	
Bang. (>2) Indig.	NS	
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	NS	
Sex	NS	
Age	NS	
Within Group (indig.) Comparisons (one-way ANOVA)		
Indig. boys Indig. girls	NS	

NEUROTIC BEHAVIOUR

(For commentary see page 241)

TABLE 57

TEST: ANTISOCIAL BEHAVIOUR

	Level of Significance	Details
Between Group Comparison (Bang. and indig.) (one-way ANOVA)		
Total Bang. sample Total indig. sample	NS	
Bang. boys Indig. boys	NS	
Bang. girls Indig. girls	NS	
Bang.(>2) Indig.	NS	
Within Group (Bang.) Comparisons (3-way ANOVA)		
Length of schooling	NS	
Sex	0.036	Bang.boy > Bang.girl
Age	NS	
Within Group (indig.) Comparisons (One-way ANOVA)		
Indig. boys Indig. girls	NS	

TOTAL BEHAVIOURAL PROBLEMS, NEUROTIC AND ANTISOCIAL BEHAVIOUR

All four between group comparisons which were made for these three tests show no significant difference in scores. No significant differences appeared in the within group comparisons, apart from the comparisons within the scores of Bang. boys and girls where boys scored significantly higher on Antisocial behaviour, albeit at 0.036 level. Age does not appear to be a significant factor.

PART - V

CHAPTER 8

FINDINGS

Discussion of the unexpected findings

The major interests of this investigation are:

I. The difference in performance on a number of social personal and scholastic variables, but particularly on aspects of adjustment between the Bang. children tested and an indig. group of children living in the same geographical area.

II. The effects of length of schooling in Great Britain on the primary school Bang. children using the same variables .

III. Sex differences between the Bang. boy and girl in relation to the above variables.

As can be seen from Tables 58, 59 and 60 in a number of tests the null hypothesis was confirmed. The results of these tests fall into three groups:

A) where a significant difference was expected but none found,

B) where no significant difference was expected but a significant difference found,

C) where a significant difference was expected in one direction but a significant difference was found in the opposite direction.

A. WHERE A SIGNIFICANT DIFFERENCE WAS EXPECTED BUT NONE FOUND

I. Total indigenous and total Bangladeshi children:

1. Total Social Adjustment (sub-section of Adjustment)

Hypothesis: that indig. children would show a significantly greater degree of social adjustment than Bang. children.

The fact that this hypothesis was not confirmed may indicate a lack of social adjustment in the indig. children rather than a high level of adjustment in the Bang. children. Three of the component subtests were in favour of Bang. children and three in favour of indig.

Attitude Scale Tests:

2. Interest in schoolwork
3. Importance of doing well
4. Academic self-image

Hypothesis: that there would be a significant difference in favour of indig. children on the following tests:

In Interest in Schoolwork: It had been anticipated that indig. children would have significantly greater interest in schoolwork than Bang. children because of the latter's lack of familiarity with the substance of English schoolwork. It is possible that as school activities in the U.K. are so much more varied and stimulating than in Bangladesh and teaching staff frequently make special efforts to interest Bang. children, this activates the children's interest.

Importance of Doing Well: Although there is considerable respect for teaching in Bangladeshi families it is in most cases not associated with the later economic advancement of their children, as the majority of boys enter the same field of employment as their fathers. However, as there was no significant difference between the two groups this may indicate the somewhat neutral effect of the Bangladeshi community

Table 58. A. The table below gives the results of tests where the hypothesis predicted significant results, but the actual results were statistically non-significant.

NAME OF MAIN TESTS	I BANGLADESHI AND INDIGENOUS	II BANG.(<2) AND BANG.(>2)	III BANG. BOYS AND BANG. GIRLS
Adjustment	• Total Social Adjustment (ind.)*		
Non-verbal, Vocabulary and Proficiency in Spoken English			• Vocabulary (Bang.boy) • Proficiency in Spoken English (Bang.boy) Attainment in English language (sub test in Academic performance (Bang. boy)
Personality			• Neuroticism (Bang.boy)
Attitudes Scale	•Interest in Schoolwork (ind.) •Importance of doing well (ind.) •Academic self-image (ind.)		• Academic self-image (Bang.boy)
Interests			• Interest in School Subjects (Bang.boy)
Academic Performance	•Mathematrics (Bang.)		• Academic performance (Bang.boy)
Behavioural Scale (Rutter)	•Neurotic behaviour (ind.) •Antisocial behaviour (Bang.)	•Neurotic behaviour (Bang. >2)	•Neurotic behaviour (Bang. boy)

* Prediction in favour of the group is shown in brackets

towards schooling : the importance of teaching and learning is offset by no very clear conception of how this learning could be used later in life.

Academic Self-Image: The fact that the 'Academic Self Image' of the Bang. child was found to be stronger than had been anticipated may possibly also be accounted for by the support and encouragement given by the teachers.

5. Mathematics

Hypothesis: that Bang. children would have significantly better results in this test than indig. children.

Asian children are generally found to be better at Mathematics than indig. children but the lack of significant difference for the primary school child may be attributed to language problems and possibly also to differences in teaching methods. These children's rural background may have a greater effect than anticipated.

6. Neurotic behaviour
7. Antisocial behaviour
(Rutter's Behavioural Scale)

Neurotic Behaviour:

Hypothesis: that Bang. children would score significantly higher on the neuroticism scale than indig. children.

In fact, the result showed that there was no significant difference between the level of neuroticism in Bang. children and in indig. children: neither group of children was found to have neurotic behaviour.

This test was completed by the teachers who may have underestimated the degree of neurotic behaviour in Bang. children. It has been noted in other studies that teachers are obviously affected by aggressive or disruptive behaviour, and so some of the less obvious problems from which Bang. children suffer may well have been overlooked. The desire of Bang. children to please their teachers may enhance this tendency.

In the Eysenck personality questionnaire which contains very detailed questions and which was completed by the writer in a personal interview with each child, the Bang. children were found to have a significantly higher neuroticism score than the indig. children.

Antisocial Behaviour:

Hypothesis: that there would be a significantly greater degree of Antisocial Behaviour in indig. children.

When the test for 'Antisocial Tendencies' (a subtest of the Social Adjustment Test) was administered by the writer in individual contact with each child it was found that Bang. children had significantly fewer antisocial tendencies than the indig. children. The difference in outcome between the Rutter Antisocial Behaviour Test and the 'Antisocial Tendencies'Test can possibly be accounted for by the teachers' more subjective assessment of the children.

II. Within total Bang. sample in respect to length of schooling, i.e. Bang.(>2) compared with Bang.(<2).

1. Neurotic Behaviour (Rutter's Behavioural Scale)

Hypothesis: that the Bang.(<2) children will score significantly higher on the neurotic behaviour scale than the Bang.(>2) children.

The explanation for these findings has already been discussed in AI6 (p.245).

III. Within total Bang. sample in respect to Sex, i.e., Bang. boy compared to Bang. girl.

1. Vocabulary
2. Proficiency in spoken English
3. Attainment in English language (as a subtest in Academic Performance)

Hypothesis: that Bang. boys would perform significantly better on all three tests than Bang. girls.

The possible reasons for these results could be that there are no positive parental restrictions actually preventing the girls from learning English. It is also of interest to speculate whether the greater verbal facility in girls, which has been observed by other researchers studying indig. children, operates among Bang. girls at this age even when learning a second language informally.

4. Neuroticism (as a subtest of Personality dimension)

Hypothesis: that Bang. boys will score significantly lower on the neuroticism scale than the Bang. girls. It is possible that boys also suffer from neuroticism for some time after their arrival in this country. Although their basic personalities seem not to be altered by the total change of environment they may still react to such a stressful event in their lives by temporarily exhibiting more neurotic habits. In addition, girls appear to be less competitive and also show less anxiety in class (p.260). They also showed a better relationship with the teacher (p257 which perhaps helps them to score lower in this dimension.

5. Academic Self Image (subtest of the school questionnaire in relation to attitude to school)

Hypothesis: that there would be a significantly better Academic self image in Bang. boys in comparison with Bang. girls.

Bang. girls generally appreciate the opportunities that exist for them in the school environment since much of their time at home may be spent doing repetitive household jobs and this satisfaction may be translated into a strengthened academic self image. The girls may gain a positive pleasure from conforming to the teacher's expectations.

6. Interest in school subjects (subtest of Interests)

Hypothesis: that there would be a significantly greater interest in school subjects in Bang. boys in comparison with Bang. girls.

The positive way in which the Bang. girls view their school subjects may be the result of the girls' proficiency in English language.

7. Academic performance

Hypothesis: that Bang. girls would have a significantly lower academic performance than Bang. boys.

The girls' natural facility in language appears to make up for their lower score in mathematics, and this brought their overall score up to the same level as the boys because there were 3 elements in the test besides mathematics, i.e. oral and written English and reading.

8. Neurotic behaviour (Rutter's Behavioural Scale)

Hypothesis: that Bang. girls would score significantly higher on this neuroticism scale than Bang. boys.

The possible drawbacks of this test have already been discussed in AI 6 (p 245).

B. WHERE A NON-SIGNIFICANT RESULT WAS EXPECTED BUT A SIGNIFICANT DIFFERENCE WAS FOUND

I. Total indigenous and total Bangladeshi children:

1. Family relations
2. School relations
3. Community relations
(subtests of Social Adjustment)

Hypothesis: that there would be no significant difference between indig. and Bang. children in the above tests.

Family Relations Test: This result in favour of Bang. children appears to illustrate the consistent strength and warmth of Bangladeshi family life and the attachment of the children to their own culture.

School Relations Test: Similarly the Bang. children scored more highly on this test than expected. This may be a reflection of the esteem in which education is held by their parents and which exists in the Bangladeshi culture. The large number of Bang. children in these schools enables them to have a wide choice of friends and gives them some confidence which they would lack if there were only one or two in each class.

Community Relations Test: In the Community Relations test there was found to be a significant difference in favour of indig. children. This is perhaps because indig. children have a greater freedom of movement in the area in which they live since they belong to the dominant culture. Fear of attack keeps Bang. children close to home and hence restricts their opportunities to learn about the host community.

4. Non-Verbal Intelligence

Hypothesis: that there would be no significant difference in tests of Non-Verbal Intelligence between indig. and Bang. since this test does not require any proficiency in the English language.

Table 59. B. The table below gives the results of tests where the hypothesis predicted non-significant results, but the actual results were statistically significant.

NAME OF MAIN TESTS	I BANGLADESHI AND INDIGENOUS	II BANG.(>2) AND BANG.(<2)	III BANG. BOYS AND BANG. GIRLS
Adjustment	• Family Relations (Bang.)* • School Relations (Bang.). • Community Relations (ind.)	•School Relations (Bang.>2) •Community Relations (Bang.>2)	•Antisocial tendencies (girls) •Family Relations (girls) •School Relations (boy) •Community Relations (boy)
Non-verbal Intelligence	•Non-verbal Intelligence (ind.)	•Non-verbal Intelligence (Bang.>2)	•Non-verbal Intelligence (boy)
Attitudes Scale	•Attitude to School (Bang.) •Relationship with teacher (Bang.) •Social adjustment (ind.)	•Attitude to School (Bang.>2) •Relationship with teacher (Bang.>2) •Social Adjustment (Bang.>2)	•Attitude to School (boy) •Relationship with teacher (girl)
Interests	•Total interests (ind.) •Interest in Modelling, building, craftwork (ind.) •Interest in Body skills, sports, gym etc. (ind.) •Interest in Handskills, tools instruments, scissors etc. (ind.)	•Total interests (Bang.>2) •Interest in painting, drawing, etc. (Bang.>2) •Interest in Modelling, building, craftwork (Bang.>2) •Interest in Dance, music, drama (Bang.>2)	
Academic and non-academic performance	•Non-academic performance (ind.)	•Mathematics (Bang.>2) •Non-academic performance (Bang.>2)	
Behavioural Scale (Rutter)			Antisocial behaviour (girl)

* Result in favour of the group is shown in brackets.

It may be that this test is not as suitable for Bang. children as it is for other immigrant groups and that unfamiliarity with the tasks of the test prevented Bang. children from performing as well as indig. children. Their background does not give them many opportunities to learn these skills, as puzzles, games with shapes and blocks are not common toys in Bangladeshi villages and parents, although they are very much in favour of education, do not always realise the connection between play and learning.

5. Attitude to school
6. Relationship with teacher
7. Social adjustment

(tests of School Questionnaire regarding attitudes to school)

Hypothesis: that there would be no significant difference between Bang. and indig. children.

The scores of the '<u>Attitude to school</u>' test and the test measuring the children's quality of relationship to their teacher both indicate that there was a significant difference in favour of Bangladeshi children. Their favourable attitude may most likely be attributed to the approval shown by their parents towards school, but also may be accounted for by the school life in London being different from their experiences of school at home in the village. Once they have settled down they find school so much more varied and interesting, and the teachers try to help the children and give them individual attention whenever possible and necessary.

<u>Relationship with teacher</u>: Teachers in the U.K. make considerable efforts to approach the children in a friendly way rather than the authoritarian way to which they were accustomed in Bangladesh.

<u>Social adjustment</u>: This subtest of the Attitude Scale is largely concerned with the child's ability to get on with others in the class. This finding may indicate the effects of racial tension between the indig. and Bang. children and

the difficulties which these children have in settling down in a new country and in a new school. Despite the fact that the Bang. child is not in a minority in most of the schools from which this sample of children was drawn, their social adjustment, as measured by this test, was significantly less than that of the indig. children.

8. Total interests
9. Interest in modelling, building, craftwork etc.
10. Interest in body skills - sports, gymnasium etc.
11. Interest in hand skills - tools: instruments, scissors etc.

(Tests of Interest)

Hypothesis: that there would be no significant difference between Bang. and indig. children.

Total interests: The possible reasons for this significant result are given below in the discussion of the three subtests. It had been expected that since none of the interests measured by the 3 subtests are dependent on language ability, there would be no significant difference between the two groups, but in fact significant differences were found in favour of indig. children.

Interest in modelling, building, craftwork etc. and hand skills - tools: instruments, scissors etc: Again unfamiliarity with modelling materials and lack of understanding of their possibilities may limit interest and achievement in both hand skills and modelling skills. Very few of the Bangladeshi families own cars and thus the children do not see adults working with tools in the way that is common in English families where car ownership is much more usual.

Interest in body skills - sports, gymnasium etc: Body skills are less developed in Bangladeshi children who are much less sturdy than indig. children of the same age. They are not always well nourished or suitably dressed for playing outside in the English climate. They have colds and are ill more frequently than English children. Although Bang. children

can run, they are not very successful in team games or other organised sport. Because they are so shy and bashful, the girls especially find it very difficult to participate in those activities.

12. Non-academic performance

Hypothesis: that there would be no significant difference in non-academic performance between indig. and Bang. children since this test does not need any proficiency in English language. Non-academic performance includes most of the items covered in the tests of interest except interest in school subjects.

In fact there was a significant difference in favour of indig. children. This may be accounted for by the cultural differences between the indig. and the Bang. children, particularly those relating to body skills and handskills. Parents usually do not associate these non-academic activities with education and consequently children are not encouraged to do them.

II. <u>The effect of length of schooling within total Bang. sample, i.e. Bang.(>2) compared with Bang.(<2)</u>

1. School relations (subtest of Social Adjustment)
2. Community relations (" " " ")
3. Non-verbal intelligence
4. Attitude to school (School Questionnaire related to attitude towards school)
5. Relationship with teacher (")
6. Social adjustment (")
7. Total interests test (Subtest of Interests)
8. Interest in painting, drawing etc. (subtest of Interests)
9. Interest in modelling, building, craftwork etc. (subtest of Interests)
10. Interest in dance, music, drama etc. (subtest of Interests)
11. Mathematics (subtest of Academic performance)
12. Non-academic performance

Hypothesis for all tests discussed in this Section: that there would be no significant difference between Bang.(>2) and Bang.(<2) children. In all instances there was a significant difference between the two groups in favour of the Bang.(>2).

1. School Relation: : There was found to be a significant difference in favour of Bang.(>2) children who, with this level of experience of English schooling have been able to adjust to school life to a greater extent than those children with (<2) years.

This can be accounted for by the length of time that Bang. children need to get over the initial cultural problems as well as the different style of schooling when they first arrive in this country.

2. Community Relation: The Bang.(>2) children showed a greater degree of adjustment to their physical and social environment than Bang.(<2). However this result must be evaluated in the light of the comparison of indig. and total Bang. scores which showed a significant difference in favour of indig. children. Bang. children resident here for more than two years do show signs of tolerance which are hardly present in Bang.(<2) but even so do not approach the level of indig. children.

3. Non-Verbal Intelligence: The reason for this discrepancy is likely to be the positive effect of several years in a stimulating environment in school which obviously benefits the child's intelligence. It was noticed that schools in Bangladesh paid very little attention to the development of non-verbal skills and that the children were unable to perform well in non-verbal intelligence tests.

4. Attitude to School: Although most Bang. children have a favourable attitude to school the additional difficulties faced by Bang.(<2) children in language and culture apparently significantly prevent the development of a favourable attitude to school.

It had not been anticipated that this variable would be affected by length of schooling as usually Bang. children have a very good attitude to school.

5. Relationship with Teachers: The difference between the two scores was again significant at the 4.4% level. As generally all Bang. children appear to have a positive relationship with their teachers it is of interest to note that this relationship can be further enhanced with additional years of schooling.

6. Social Adjustment Test: This social adjustment test is mainly concerned with how children get on with their classmates. The large number of Bang. children in their schools enables even new arrivals to form friendships quickly. However, they do experience difficulties when settling into a new culture and a new school and so do improve as their length of English schooling increases.

7. Total Interest Test: Increased length of schooling was found to have an unexpectedly beneficial effect on the 'Total Interests' Tests' scores.

8. Interest in painting, drawing etc:

9. Interest in modelling, building, craftwork etc:
The difference between the two groups can be accounted for by the unfamiliarity of Bang.(<2) children with the materials for these crafts and lack of practice in using them.

10. Interest in dance, music, drama etc: The fact that Bang.(>2) had more interest at 0.9% level in dancing, music, drama etc. may reflect the time needed to adjust to and develop interests in the physical movements of dancing as it

is taught in English schools which is alien to Bang. children, particularly to the girls.

11. Mathematics: Increased length of schooling seems to aid the Bang. child in becoming acquainted with British methods and also improvement in language skills is likely to foster a greater understanding of what is required of them.

12. Non-academic performance: The significant difference here may reflect the length of time needed to adjust to alien activities and to become familiar enough with, and to feel secure enough in, school to be able to shine in non-academic activities.

III. Effect of sex differences within Bangladeshi sample, i.e. Bang.boy and girls .

1. Antisocial tendencies (subtest of Social Adjustment)
2. Family relations (" " " ")
3. Relationship with teacher (a test of Attitude towards School)
4. Antisocial behaviour (Rutter Behavioural Scale)
5. School relations (subtest of Social Adjustment)
6. Community relations (" " " ")
7. Non-verbal intelligence test
8. Attitude to school (a test of Attitude towards School)

Hypothesis: that there would be no significant difference between Bang. boys and girls.

In four of these tests - 'Antisocial tendencies', 'Family relations', 'Relationship with teacher' and 'Antisocial behaviour' (Rutter), there were significant differences in favour of the girls, and in four tests - 'School relations', 'Community relations', 'Non-verbal Intelligence' and 'Attitude to school', the difference was in favour of the boys. The four tests in favour of the girls will be considered first.

1. Antisocial tendencies: The fact that the boys score less favourably on this test than the Bang. girls (albeit at a 0.049 level), may possibly be attributed to the fact that the Bang. boys have more freedom in their personal relationships than Bang. girls and do sometimes have quarrels with each other but on the whole they cannot be said to be antisocial.

2. Family relations: The difference between the boys and girls on this test may be accounted for by the greater degree of contact between Bang. girls and their parents because girls stay at home close to their mothers while the boys play more freely with their own friends.

3. Relationship with teacher: It is possible that the Bang. girls' close relationships with the adults in their own families especially the women, when they try to help with homework has a positive effect on their relationships with the, mostly female, teachers they meet at school. Also the teachers are aware of the special disadvantages suffered by the Bang.girls and so usually try to form a good relationship with them.

4. Antisocial behaviour: The explanation for this finding has already been discussed above in Antisocial tendencies

As mentioned earlier, the School relations test as well as Community relations test, Non-verbal intelligence test and Attitude to school test showed a significant difference in favour of the Bang. boys.

5. School relations: The result is not so surprising in view of the greater confidence shown by the boys in dealing with outsiders and the encouragement they receive from home in their school activities, but the form of the questions asked may also have affected the response, as some of them are cast in such a way as to demand considerable self-confidence to give positive answers, and this may have affected the girls' scores as, for cultural reasons variously described the Bang. girl seems to have less self-confidence than the boy.

6. Community relations: The Bang. boy is given more opportunity than the girl to mix with the Bangladeshi community outside the home and so he is more able to explore his social and physical environment than the girl Boys are sometimes sent out to fetch shopping from the local shops but girls are not given a chance to leave the home at all except when escorted by elders.

7. Non-verbal intelligence: Mental stimulation and encouragement can have an effect on intellectual development (see p.) and even the boys' limited experience of the outside world gives them some advantage here over the girls. Bangladeshi culture values the education of its sons far more highly than that of its daughters. Children recognise this differential attitude from an early age and it may adversely affect the girls in their intellectual development.

8. Attitude to school: It is possible that the boys have a greater ability to deal with social situations outside the home. It is reasonable that the scores for the 'School Relations' test and those for the 'Attitude to School' should be similar. These two factors are undoubtedly related, though it is difficult to say which, if either, is influential upon the other.

C. WHERE A SIGNIFICANT DIFFERENCE WAS EXPECTED IN ONE DIRECTION AND A SIGNIFICANT DIFFERENCE WAS FOUND IN THE OPPOSITE DIRECTION:

III. Effect of sex difference within Bang. sample:

1. Anxiety in class

Hypothesis: that Bang. girls would be likely to show a significantly greater degree of anxiety than boys.

The reverse was found to be the case, Bang. boys showing a significantly greater degree of anxiety. This is possibly due to the fact that Bang. girls have a better relationship with their teachers and hence show less anxiety and are also less competitive. This lack of anxiety in girls may be indicative of lack of motivation which may ultimately lead to low achievement in spite of ability (Table 60C, p. 260).

In the preceding pages individual test results have been compared with the original hypotheses and possible reasons for the divergence in findings put forward. The pattern of the unexpected results is itself significant and throws light on the likely effects of length of schooling and sex on the children's various abilities, attitudes, interest and social adjustment.

Overall, there was a large number of test results (12) which indicated significant differences between Bang. and indig. children where none had been expected (Table 59B). Although in 8 tests (out of 12) Bang. children were not as able as had been anticipated, the remaining four tests were in favour of Bang. children. However, in 7 (Table 58A) other tests they were found to be more proficient than had been expected so in effect the pattern of their strengths and weaknesses has been shown to be other than had been anticipated.

There was a large number of differences between Bang. (>2) and (<2) which were found to be unexpectedly significant. This shows that the beneficial effects of length

of schooling are greater than had been thought. In many of the same tests, e.g., vocabulary, proficiency in spoken language, intelligence etc. a significant difference was found between Bang. and indig. children showing that although length of schooling had beneficial effects these were not great enough to raise the Bang.(>2) children to a similar standard as indig. children. As can be seen from Table 32, 33 and 52 although the Bang.(>2) children clearly benefit from having had a longer education in British schools, their proficiency in English as a language does not approach that of the indig. child and the Bang.(<2) is even more disadvantaged in this respect.

The number of tests in which unexpectedly significant results were found in favour of the Bang.boys (when compared with) Bang. girls) was not great, i.e. in four tests, mainly in areas which can be attributed to their greater enjoyment of freedom. However, in four tests - 'Relationship with teacher', 'Family relations', 'Anti-social tendencies' and 'Anti-social behaviour' (Rutter) - girls were found to have scores significantly better than the boys, but in eight tests where a significantly higher result in favour of the boys had been expected, no such differences were found. Thus, overall, it was found that fewer differences between boys and girls existed than had been anticipated.

Table 60 C. The table below gives the results of tests where the hypotheses predicted significant results, but the actual results were also statistically significant but in opposite direction.

	I	II	III
TESTS	BANG. AND IND.	BANG.(>2) AND BANG.(<2)	BANG.BOYS AND BANG. GIRLS
Attitudes Scale			Anxiety in Class (girls)*

* Result in favour of the group is shown in brackets.

DISCUSSION OF FINDINGS ON THE EFFECTS OF LENGTH OF SCHOOLING AND SEX DIFFERENCES

One of the most distinctive features of this study has been the size and homogeneity of the immigrant group which enables conclusions regarding the educational effects of the Bangladeshi culture on the Bangladeshi children being educated in London to be validly drawn. One of the aims of this project was to find out whether home or school was dominant on the children in respect of the influence of each variable. The size of the population and concentration of a Bangladeshi community in this small area of Tower Hamlets does in some way reduce the problems of the children in adjusting, but these must eventually be confronted if the child is to spend the rest of his life in this country. Adjustment to the host society is less necessary where there is a large and homogeneous community, and the omnipresent fear and racial tension in the area reduces even further the incentive to change habits and ideas. The Sylheti culture remains vigorous and strong and commands the loyalty of the members of the community. However, from the present study it appears that the rich and stimulating English school environment has a marked positive affect on Bang. children, even on the Bang. girls.

The Effects of Length of Schooling

The effect of length of schooling is of great importance in this study since it gives a measure of both the effectiveness of schooling and the strength of Bangladeshi home culture. When Bang.(>2) and Bang.(<2) were compared with respect to all the test variables, it was found that out of 42 test results there were significant differences in 34 test results in favour of Bang. children who had more than two years of English schooling, though in the original hypotheses it had been predicted that in 23 test results there would be significant differences in favour of Bang.(>2) children. But the present findings revealed more differences between

Table 61 .Effects of length of schooling in relation to various tests.

TESTS	INDIG. AND BANG.(>2) : NOT SIG. BANG.(>2) AND BANG.(<2): SIG.	INDIG. AND BANG.(>2) : SIG. BANG.(>2) AND BANG.(<2): SIG.	INDIG. AND BANG.(>2) : SIG. BANG.(>2) AND BANG.(<2): NOT SIG.
Adjustment	Total Adjustment Total Social Adjustment Freedom from withdrawal tendencies Social skills	Total personal adjustment Self-reliance Sense of personal worth Sense of personal freedom Feeling of belonging Freedom from nervous symptoms Social standard School relations Community relations	 Antisocial tendencies Family relations
Non-verbal, Vocabulary and Proficiency in Spoken English		Non-verbal intelligence Vocabulary Proficiency in spoken English	
Personality		Extroversion Neuroticism	
Attitudes Scale	 Social Adjustment	Attitude to school Interest in schoolwork Importance of doing well Relationship with teacher Anxiety in class Academic self-image	
Interests	Total Interests Interest in school subjects Interest in painting, drawing Interest in modelling, building, craftwork Interest in dance, music, drama		 Interest in body skills, sports, gym
Academic and non-Academic Performance	Mathematics Non-academic performance	Academic performance English	

these two Bangladeshi groups than had been expected. Therefore one could conclude at this stage that length of English schooling has a very positively significant effect on Bangladeshi children, especially as measured by the Adjustment tests. It was found that out of 15 tests of adjustment (tests and subtests) only in two subtests of social adjustment i.e. in Antisocial Tendencies and in Family Relations the results were statistically insignificant. But in the remaining 13 tests significant differences were found in favour of Bangladeshi (>2) children.
The results of Bang.(>2) children strongly suggest that children with more than 2 years English schooling have definitely been beneficially influenced by the English school environment. As the children have settled down they have been able to perceive that there is some satisfaction to be gained from participating fully in the stimulating and varied school life both because of the enjoyment which the activities themselves bring and for the sake of the social acceptance that comes from taking part. Bangladeshi children, like the Indian and West Indian children studied by St. Romain (1973) know that they cannot exist apart from the host culture in the school and still be accepted and valued by their peer group and the teacher. The pressure exerted by other children helps these pupils to conform, albeit in a limited way, to the expected social standards, and indirectly helps them to adjust at least in the social situations where these constraints operate. Outside school Bangladeshi children behave in the way that their parents and members of their own community expect them to do.

In this connection it will be worthwhile to discuss the importance of achievement in the English language. Why are Bangladeshi children with more than two years of English schooling better adjusted than Bangladeshi children with less than two years of schooling? One of the most important reasons must be that they have fewer linguistic difficulties than Bang.(<2) children. In vocabulary, spoken English and English as a school subject there is a highly significant difference between these two groups, and the mean scores of Bang.(>2) years of English schooling are much better than those

of Bang. (<2). By the time two years or more have passed the linguistic capabilities of those children who have had their education in England improved considerably. St. Romain (1973) also emphasized this point: 'Analysis of the evidence suggests that, in this city (Newcastle-upon-Tyne) as elsewhere, by overcoming their linguistic difficulties and communication problems the immigrant children's (not Bangladeshis in this case) socialization and adjustment problems are significantly minimized.' (p 128).

Again, when these two groups are compared in the various tests of attitude and interests, personality chareceristics and vocabulary and non-verbal intelligence, as well as on academic and non-academic performances, there were significant differences in favour of Bang. (>2) children when compared with the Bang. (<2) children. This emphasizes additionally the benefit of a longer period of schooling in the U.K.

Exceptions to this general rule are found when the result of the neurotic and antisocial behaviour (Rutter), attitude to class and interests in hand and body skills are considered. These results show that although schooling does have a beneficial effect on the child's abilities, where the socializing influence of the Bangladeshi family is highly influential, and where the children are affected by their continuing shyness and even a (comparatively) physical weakness, the interest in hand and in practice of various hand and body skills do not seem of importance to the children.

If the Bang. (>2) group is then compared with an indig. control group (see Table 61) the extent of their improvement can be measured. In 22 tests there was both a significant difference between, on the one hand Bang. (>2) and Bang. (<2), and on the other hand between Bang. (>2) and indig. These included such important test variables as non-verbal and vocubulary and spoken English, English and Academic performance, all of which show that Bang. children still had some way to go to catch up with the indig. children.

There are correspondingly fewer test scores (12) in which Bang.(>2) had reached substantially the same level as indig. children. They were able to achieve the same level of interests in School subjects, modelling, painting, dance and music and in Non-academic performance. Their proficiency in mathematics reached the same level as indigenous children although it had been expected to surpass them and in Social skills and Adjustment the two groups obtained similar scores. The Bang. children's apparent success in Total Adjustment and Social Adjustment must be qualified by the fact that indig. children from 'twilight' areas such as Spitalfields are known to have many problems so that the overall level of both groups (Bang.(>2) and indig.) may not be high.

In three tests there were significant differences between indig. and Bang.(>2) but not between Bang.(<2) and Bang.(>2). These were in Antisocial tendencies, Family Relations and Body skills. These indicate that the strength of Bang. socialization is such that no significant difference arises even after two years schooling.(Table 61).

To conclude, from the evidence of this study it can be said that although length of schooling does have a significant effect on many of the variables measured, in most cases the Bang. children found great difficulty in catching up with the indig. children. However, these results do show that the education that the children are receiving is greatly beneficial to them.

The Effects of Sex Differences

When results of the comparison between the Bang. boys and the Bang. girls are considered, it was found that there are differences between these two groups but that these are not as great as had been expected. Out of a total of 42 tests and subtests it was found that there were significant differences in 20 tests in favour of Bangladeshi boys, 5 tests in favour of Bangladeshi girls and no significant differences in 17 test variables, whereas in the original hypotheses it had been assumed that there would be

Table 62. Effects of sex peculiar to Bangladeshi sample in relation to various tests

TESTS	INDIG.BOYS AND GIRLS: NOT SIG. BANG.BOYS AND GIRLS : SIG.	INDIG.BOYS AND GIRLS: SIG BANG.BOYS AND GIRLS : SIG.	INDIG.BOYS AND GIRLS: SIG. BANG.BOYS AND GIRLS : NOT SIG.
Adjustment	Total Adjustment Total Social Adjustment Total Personal Adjustment Social standard Social skills Family relations Community relations Self-reliance Sense of personal worth Sense of personal freedom Feeling of belonging Freedom from withdrawal tendencies Freedom from nervous symptoms	Antisocial tendencies School relations	
Non-verbal, Vocabulary and Proficiency in Spoken English	Intelligence		
Personality		Extroversion	
Attitudes Scale	Interest in schoolwork Anxiety in class	Attitude to school Importance of doing well Relationship with teacher	Social Adjustment
Interests	Interest in body skills		Interest in modelling, building, craftwork etc. Interest in Dance, music, drama etc.
Academic Performance	Mathematics		
Behavioural Scale	Antisocial behaviour		

significant differences in 25 test results in favour of the Bang. boys. In the remaining 17 tests it was expected that there would not be any significant difference. But, as already mentioned, the results show that in 20 tests the results were significantly different in favour of the Bang. boys. Though in 12 out of 15 adjustment test and subtest variables it was hypothesised that there would be significant differences in favour of Bang. boys and in the remaining three tests, i.e. Family Relations, School Relations and Community Relations there were not likely to be any significant differences. But results showed out of these 15 tests of Adjustment there were significant differences in 13 test results and all in favour of Bang. boys.

The number of tests in which unexpectedly significant results were found in favour of Bang. boys were not great, i.e. in four tests, mainly in areas which are attributable to their greater freedom. However, in two tests - relationship with teacher and family relations - girls were found to score significantly higher. On the other hand, in eight tests in which it had been expected that the test scores would show significant difference in favour of the boys, there were no significant differences. These were in the following tests: Vocabulary, Proficiency in spoken English, Neuroticism and Academic self-image (Attitude), Interest in school subjects (Interests), Academic performance, and Attainment in English and Neurotic behaviour. Thus, overall, it was found that fewer differences between boys and girls existed than had been anticipated. Table 62 shows a comparison between the results of indig. boys and girls and Bang. boys and girls which indicates whether the differences between Bang. boys and girls were the result of sex differences as such or whether they were peculiar to the Bang. sample.

Differences Between the Two Ethnic Groups

When the two total groups of indig. and Bang. children are compared there are significant differences in favour of indig. children on a great many tests. Notable exceptions to this are in the attitude scale tests (in favour of Bang. children) and also in tests which seek to identify behavioural problems, neurotic and anti-social behaviour in which as a whole no difference was found between

the indig. and Bang. children. If the total groups are then divided into boys and girls and the Bang. boys compared with the indig. boys and likewise for girls, a more detailed breakdown of the significant results can be obtained.

Overall, there are more significant differences between indig. girls and Bang. girls than there are between the two male groups. This is especially evident in relation to total adjustment, where in the total groups there were significant differences but there were no such differences between the indig. and Bang. boys. The low score for total adjustment for the Bang. girls has perhaps reduced the total Bang. score and this accounts for the significant difference between indig. and Bang. when both sexes are combined together. A similar effect is found in the test of non-academic performance.

However, in the most crucial tests, i.e. Proficiency in English and also tests of Vocabulary and Non-Verbal Intelligenc there were no differences between Bang. boys and Bang. girls. performances but when each sex was directly compared with the indigenous boys and the indigenous girls respectively there were significant differences.

In about 45% of the tests, including all tests of Adjustment, Intelligence, Neuroticism, Interests and Mathematical skills, there were significant differences between Bang. boys and Bang. girls, but not between indig. boys and indig. girls. Thus sex has a considerable influence on the performance of Bang. children but between indig. boys and girls the difference is slight. When these results are compared with the expected results it can be seen that in some respects the difference between Bang. boys and girls was not as great as had been anticipated. Significant differences between both indig. boys and girls and Bang. boys and girls were not found to exist in tests of English, Attitude to class, Interests and Performance and Neuroticism. In six tests there are significant differences between both Bang. boys and Bang. girls and indig. boys and girls, (see Table 62).

In five tests there were greater differences between the Bang. boys and girls than between indig. boys and girls. These included tests of antisocial behaviour (Rutter's) and the total Behavioural Scale and tests of Social Adjustment, in which Bang. boys and girls both did equally well or equally badly. In tests of interest in dancing, drama etc. and modelling, building etc. there was a significant difference between indig. boys and indig. girls. In these areas of interests there is traditionally a differentiation between the sexes.

Table 62 shows that in six tests there were significant sex differences in both indig. and Bang. groups. School relations, Extroversion, Attitude to School, and Importance of doing well were in favour of Bang. boys and Antisocial tendencies and Relationship with teacher in favour of Bang. girls. Antisocial tendencies, Attitude to school, Importance of doing well and Relationship with teacher were in favour of indig. girls and School relation and Extroversion in favour of indig. boys. Two tests, i.e. Antisocial tendencies and Relationship with teacher were both (indig. and Bang.) in favour of girls and two, i.e. School relation and Extroversion in favour of boys (indig. and Bang.), showing that for the majority there were some cultural similarities in the learning of sex roles common both to the Bangladeshi and host communities. Even where the tests were in favour of Bang. boys and indig. girls these two groups were the least unlike, i.e. Bang. girls and indig. boys are much too different to show comparable scores.

Altogether, the analysis of the results with respect to sex has shown that although there are many tests in which there were differences in the performance between Bang. boys and the Bang. girls but none in the indig. group it is interesting to note that social and cultural similarities exist which influence the differentiation of the behaviour of both indig. boys and indig. girls on the one hand and Bang. boys and Bang. girls on the other.

It is appropriate (and interesting) to discuss here the test results of vocabulary, spoken English and attainment in English (as a school subject). It had been predicted that there would be significant differences between Bangladeshi boys and girls in these test variables, but the results deviated strongly from this expectation, i.e. on these tests the results were statistically insignificant. This seems to suggest that both sexes are able to benefit equally from formal and informal English language teaching at school because the teachers' expectations of verbal ability from girl pupils are not significantly lower than their expectations from the boys. Restrictive parental attitudes towards the girls seem not to extend to their proficiency in English, as it tends to be outside the parents' own range of experience and is culturally neutral. As mentioned earlier, Bang. girls are in general quite docile and it may be that they find that school offers them interests and opportunities which they may not have at home because of the demands of household work, and therefore they make effective use of their hours in school and strive to please their teachers.

It was noticed that between Bang. and indig. children the amount of social contact was minimal. The Bang. children thus miss one of the most powerful forces in promoting adjustment and English children do so also. It has been shown by other researchers that immigrant children with friends from among the host community have significantly higher adjustment scores. The lack of contact between the two groups of children is undoubtedly due to differences of race, colour, culture and language. St. Romain,(1973) in relation to other immigrant pupils in Newcastle-upon-Tyne commented that: '...observation strongly suggests that social relations involving coloured immigrant children in this city's schools are influenced by the race, colour and cultural background of the pupils concerned,(p.74). In Tower Hamlets racial tension, in addition would seem to have considerable adverse effect on Bangladeshi children's social relation and adjustment in the host environment.

CHAPTER 9

DISCUSSION

DISCUSSION OF THE OVERALL RESULTS

The prime purpose of the research has been to examine the social, personal and scholastic dimensions of the adjustment problems faced by Bangladeshi children in Tower Hamlets. The cultural shock experienced by the children on moving from a very simple rural community to a complex western urban environment can only be assessed fully by the testing of a large range of variables, so that a fairly detailed picture can be constructed. Cultural shock is a term which implies the breakdown of certainty in area of life which to the unaffected require as little conscious thought as breathing, but which for sufferers can provoke extreme anxiety. Adjustment in these circumstances means the gradual process of acquiring new experiences and learning new responses which can be accommodated to existing patterns.

It must be said that, arising from the present results on social, personal and scholastic variables, but particularly on aspects of adjustment in Bangladeshi junior children, the overall standard was found to be poor in comparison with indigenous children, for which environmental factors, such as poor health, inadequate and overcrowded housing, the cold weather and racial tension in the area can at least to some extent be said to have some responsibility. The majority of Bangladeshi parents feel that any adjustment and achievement which may occur must be within the context of their cultural and regional norms. It is marginally relevant here to comment on Taylor's findings (1976) in relation to the cultural assimilation of three Punjabi religious groups living in Britain, that is, Hindu, Sikh and Muslim. Taylor found that the Muslim group had made the least cultural transition of the three groups (the Bangladeshi community

in Tower Hamlets is Muslim).

Although Bangladeshi children are greatly affected by the Bangladeshi cultural and religious values and norms, the present study very clearly indicates that there is an increasing and not inconsiderable improvement in the performance of Bangladeshi children on a large number of variables tested with increasing length of English schooling. It is also evident that not only the Bangladeshi boys but also the girls are making progress since, in more than fifty per cent of the variables tested, similar results were obtained for the girls as for the boys.

The nature of the changes in the Bangladeshi children on test scores when compared with the indigenous children and in relation to length of English schooling and sex are discussed in the following pages.

I. ADJUSTMENT

A. Bangladeshi children compared with indigenous children

An important finding of the present study, in relation to Bangladeshi and indigenous children was in respect of adjustment. Adjustment (consisting of both personal and social adjustment), the major variable under consideration, was found to be generally poor for the Bangladeshi group (Table 63).

The overall score for Social Adjustment was clearly affected by the Bangladeshi children's scores for the three subtests, i.e. Family relations, School relations, and Anti-social tendencies, but in the other three subtests, i.e. Social standard, Social skill and Community relations, the Bangladeshi children's scores were significantly lower than the indigenous children's scores. Thus, although it is not possible on the statistical evidence to state that the Bangladeshi children were significantly less well adjusted

Table 63. Comparative distribution of test scores of total Bangladeshi and total indigenous sample on 'Adjustment' test.

ADJUSTMENT	LEVEL OF SIGNIFICANCE	DETAILS
Total adjustment	0.002	Bang. < indig.
I. Social adjustment		
II. Personal adjustment	< 0.001	Bang. < indig.
IA. Social standard	< 0.001	Bang. < indig.
IB. Social skills	< 0.001	Bang. < indig.
IC. Antisocial tendencies	< 0.001	Bang. > indig.
ID. Family relations	< 0.001	Bang. > indig.
IE. School relations	< 0.001	Bang. > indig.
IF. Community relations	< 0.001	Bang. < indig.
IIA. Self-reliance	< 0.001	Bang. < indig.
IIB. Sense of personal worth	< 0.001	Bang. < indig.
IIC. Sense of personal freedom	< 0.001	Bang. < indig.
IID. Feeling of belonging	< 0.001	Bang. < indig.
IIE. Freedom from withdrawal tendency	0.013	Bang. < indig.
IIF. Freedom from nervous symptoms	< 0.001	Bang. < indig.

socially than the indigenous children, nevertheless, on three crucial subtests there is evidence for this. Their apparently favourable Social Adjustment can be seen partly as the result of belonging to a large, homogeneous minority group which reduces the need for contact with the host community and enables them to be socially well adjusted within their own community in spite of their inability to deal effectively with English people.

An examination of the results of the various adjustment subtests shows that overall there is a significant difference between the two ethnic groups.

The social relations that the Bangladeshi children form are within their own linguistic-regional group. Skin colour is also greatly influential in the selection of friends; their physical distinctiveness and their inability to communicate lead them to have social relations within their own group. Even when occasionally Bangladeshi children with more than two years of schooling in Britain do have some social relationships with indigenous children their lifestyle remains entirely as it is within their own Bangladeshi group. This strong

attachment to their own culture by an immigrant group has also been encountered by other researchers including Ashby (1968) in children from India and Pakistan. Ashby's results indicated that the sociometric analysis of classroom structure gave most cause for concern with respect to the integration of immigrant children. Rex and Moore(1967), reporting from Sparkbrook found from observations and children's essays that in virtually every case the Indian and Pakistani children kept themselves almost completely separate outside school. Saint (1963) in Smethwick, found that socially there was a distinct cleavage between the English and Punjabi sub-groups in the classes that were given a sociometric test. The results of Ashby, Rex and Moore and Saint support the findings of the present study that a feeling of strong cultural belonging is the possible cause of lack of social relations. Furthermore, this feeling is even more rigid and strict with Bangladeshi children than with children from other Asian groups, and thus the main reason for their poor adjustment may be due to their parents tenaciously upholding their culture, religion and language, so that these affiliations are not weakened in the children; they are sent to classes outside school hours to learn both the religion and the language of their homeland. The vicious circle which is thus set up can be seen to operate as follows: the strong attachment felt to their own cultural group does not help the Bangladeshi children to communicate well in English with indigenous groups; and, as the CRC Report on Urban Deprivation (1977) points out, the disadvantages they thus suffer are minimised by their continuing to remain within their close-knit and ethnic community.

In Tower Hamlets Bangladeshi children constitute the largest immigrant group in the schools; oral evidence from the teachers and social workers shows that in schools where there are many immigrant children from the same ethnic group motivation for adjustment and integration is low. One of the problems of belonging to a homogeneous group is that sometimes children also are not sufficiently motivated to make an effort to develop satisfactory social and personal relations with the indigenous children, since they can so readily play with

children from their own ethnic group. The ever present racial tension in Tower Hamlets also makes it difficult for the Bangladeshi children to make close friendships with indigenous children.

When personal adjustment is considered it can be seen that Bangladeshi children were found to be much poorer in personal adjustment than in social adjustment in comparison with indigenous children. This lack of personal adjustment is generally not apparent to their teachers who, when asked to say what the specific problems are which immigrant children experience, refer particularly to their lack of ability in speaking the English language and the cultural shock they experience on immigrating. It is true to say that many of the most severe types of maladjustment are not expressed as behavioural problems and so are unlikely to attract a teacher's attention (Kallarachal et al. 1976).

To grow up in an alien and hostile environment is to stretch to the limit a child's strength of character and self-confidence. In these circumstances greater than average ability is required if a child is to have faith in future success and to know that he is well regarded by others. For most of these children, language difficulties, cultural shock and bewilderment, plus the lack of positive attitudes towards the outside world which they perceive in their parents effectively prevent good personal adjustment.

While it is true that these factors all conspire to lower the personal adjustment which they exhibit in this country, in the villages of Bangladesh such qualities as self-reliance, personal freedom and sense of personal worth are not encouraged in children, and the questions included in the various tests used to test these qualities would be quite inappropriate to use to test children in Sylhet. Individualism is not valued in Sylhet to anything like the same extent as in Western Europe and America.

Nevertheless, even bearing this in mind it would seem that Bangladeshi children, particularly those newly arrived,

suffer more severely than indigenous children from nervous symptoms, lack of self-confidence and a feeling of powerlessness, all of which negatively affect personal adjustment, (see Table 63).

B. Bang. (>2)* children compared with Bang. (<2)* children

It is clear from the present study that length of schooling has a significant positive effect on the Bangladeshi child's adjustment, both social and personal, since the results of almost all the subtests of Adjustment were in favour of Bang. (>2) children (Table 64). In spite of strong parental dislike

Table 64. Comparative distribution of test scores of Bang. (>2) and Bang. (<2) children on 'Adjustment' test.

ADJUSTMENT	LEVEL OF SIGNIFICANCE	DETAILS
Total adjustment	<0.001	Bang.(>2) > Bang.(<2)
I. Social adjustment	<0.001	Bang.(>2) > Bang.(<2)
II. Personal adjustment	<0.001	Bang.(>2) > Bang.(<2)
IA. Social standard	<0.001	Bang.(>2) > Bang.(<2)
IB. Social skills	<0.001	Bang.(>2) > Bang.(<2)
IC. Anti-social tendencies	NS	
ID. Family relations	NS	
IE. School relations	<0.001	Bang.(>2) > Bang.(<2)
IF. Community relations	<0.001	Bang.(>2) > Bang.(<2)
IIA. Self-reliance	<0.001	Bang.(>2) > Bang.(<2)
IIB. Sense of personal worth	<0.001	Bang.(>2) > Bang.(<2)
IIC. Sense of personal freedom	<0.001	Bang.(>2) > Bang.(<2)
IID. Feeling of belonging	<0.001	Bang.(>2) > Bang.(<2)
IIE. Freedom from withdrawal tendency	<0.001	Bang.(>2) > Bang.(<2)
IIF. Freedom from nervous symptoms	<0.001	Bang.(>2) > Bang.(<2)

of adjustment to the indigenous environment and culture, Bang. (>2) children did show some improvement when compared with recent arrivals (Bang. <2). The positive change and achievement which has occurred is very likely due to the stimulating effects of English schooling, since the only contact Bangladeshi children have with the host culture is at school.

*Bang. (>2) means Bangladeshi children with more than two years schooling in Britain.
Bang. (<2) means Bangladeshi children with between one to two years of schooling in Britain.

It was found, for example, that English schooling of between 2-4 years improves personal adjustment significantly and this must be attributed entirely to the effects of the school environment. In particular, the children with more English schooling suffered much less from withdrawal tendencies and nervous symptoms as they have become more acclimatized to English ways. In British schools children are usually expected to act independently and this encourages the growth of self-confidence, and also a willingness to trust their own judgement. However, a lack of personal adjustment lingers on and even the Bangladeshi (>2) children do not seem able to shed all their disadvantages. Only in 'the Freedom from Withdrawal Tendencies' test do they reach the same score as indigenous children (see Table 29 page 209).

So it could be concluded, as other researchers have found in relation to other Asian children, that Bangladeshi children, in spite of their parents' rigid ideas, cultural and religious biases, benefit from increased length of English schooling. Ghuman's view of the positive function of school in relation to immigrant children is worth mentioning here. He emphasised that, ' ... it is the sole agency for socialising the children into the host culture: and ... schools are indeed changing young people's attitudes and fostering a positive attitude to English culture', (Ghuman, 1975, p.113). In support of length of schooling he also added, 'Our study of the British Punjabi boys convinced us about the important value of the educational experiences provides by the English school', (p.116). It is of particular interest that this study of primary school children from a particularly rigid and deprived rural area of the Indian sub-Continent has shown the same results after the children have experienced only limited years of schooling.

C. Bangladeshi boys compared with Bangladeshi girls

When the boys and girls are compared with one another it was found that the Bangladeshi girls were more poorly adjusted than the boys (Table 65).

Table 65. Difference in the distribution of Bangladeshi boy and girl's scores on 'Adjustment' test.

ADJUSTMENT	LEVEL OF SIGNIFICANCE	DETAILS
Total Adjustment	<0.001	Bang.boy > Bang.girl
I. Social adjustment	<0.001	Bang.boy > Bang.girl
II. Personal adjustment	<0.001	Bang.boy > Bang.girl
IA. Social standard	<0.001	Bang.boy > Bang.girl
IB. Social skills	<0.001	Bang.boy > Bang.girl
IC. Antisocial tendencies	<0.049	Bang.boy < Bang.girl
ID. Family relations	<0.001	Bang.boy < Bang.girl
IE. School relations	<0.001	Bang.boy > Bang.girl
IF. Community relations	<0.001	Bang.boy > Bang.girl
IIA. Self-reliance	<0.001	Bang.boy > Bang.girl
IIB. Sense of personal worth	<0.001	Bang.boy > Bang.girl
IIC. Sense of personal freedom	<0.001	Bang.boy > Bang.girl
IID. Feeling of belonging	<0.001	Bang.boy > Bang.girl
IIE. Freedom from withdrawal tendency	<0.001	Bang.boy > Bang.girl
IIF. Freedom from nervous symptoms	<0.001	Bang.boy > Bang.girl

The Bangladeshi girls unexpectedly achieved almost similar results to the boys in many tests of attainments, attitudes and interests, as will be discussed later on, however, in adjustment tests they did not achieve similar results to the boys. As mentioned earlier, Bangladeshi parents have more restrictive ideas about their daughters' education. Since the girls are obliged to go to school the parents have to accept that the girls will learn what is appropriate for life in a western community, but, as far as the parents are concerned, such learning must not transgress the boundaries set by their own culture and religion. In relation to adjustment to the indigenous society, parental attitude is very negative because it is believed that girls do not gain anything of lasting value in relation to their own culture and also contact with the host society is likely to corrupt their lives. Ballard(1979) has commented on the strict surveillance which Asian parents exercise over their daughters. Bangladeshi parents actively do not encourage their boys to adjust, and with girls the parental negative attitude is even stronger. So Bangladeshi girls are at an even greater disadvantage than Bangladeshi boys as far as adjustment to the host community is concerned. Parental attitudes, therefore, would appear to mitigate against the adjustment of their

daughters to the host culture despite the influence of British schooling.

II. NON-VERBAL INTELLIGENCE, VOCABULARY AND PROFICIENCY IN SPOKEN ENGLISH TESTS

As discussed on pages 140 - 41 and 171 - 72, the use of tests standardised on a Western population is not entirely satisfactory when used to test a sample of newly arrived or first generation Asian children in this country. However, (i) the children tested here all had at last one year's schooling in this country, (ii) the children have to learn to live in a culture in which the abilities tested are valued, and (iii) all researchers working with immigrant children have had to use non-verbal tests standardised on Western samples.

A. Bangladeshi children compared with indigenous children

NON-VERBAL INTELLIGENCE

In the non-verbal intelligence test Bangladeshi children showed poorer performances than the indigenous children (Table 66) and this was so even for the Bang. (>2) children when

Table 66. Comparative distribution of scores of total Bangladeshi and total indigenous children on Non-Verbal Intelligence, Vocabulary and Proficiency in spoken English test.

NON-VERBAL INTELLIGENCE, VOCABULARY AND PROFICIENCY IN SPOKEN ENGLISH	LEVEL OF SIGNIFICANCE	DETAILS
I. Non-verbal intelligence	<0.001	Bang. < indig.
II. Vocabulary	<0.001	Bang. < indig.
III. Proficiency in spoken English	<0.001	Bang. < indig.

compared with indigenous children. There could be several reasons for this relatively poor performance. (1) For the children who have experienced schooling in Bangladesh the effects of such schooling may have already been influential. Sharma (1971), in relation to Indian education, has described

how such schooling concentrates heavily on verbal learning by rote, and the ability to memorize material learned this way is highly valued. The understanding of relationships between ideas and the use of symbols does receive some attention, but other skills, such as spatial or perceptual abilities, tend to be neglected. This lack of balance in the children's education may obstruct their intellectual growth, and this is not corrected by their home environment. It is even possible that the effects of a Bangladeshi education may extend to children who have not experienced any education although their parents' experience of a Bangladeshi education may still be influential. (2) There is always the possibility that there may be a group difference in innate intelligence between this group and the indigenous children tested. Such group differences are discussed by Vernon (1979) and others. However, the Bangladeshi childred tested are so disadvantaged in a variety of ways that it is premature to conclude that there is an innate difference in intellectual ability between them and the indigenous children tested. Also, as discussed on page 282 , the difference in test scores between the Bang. (>2) and Bang. (<2) is highly significant (see Table 67), thus indicating the effects of increased British schooling in non-verbal intelligence scores. (3) The children do not appear to receive the encouragement from their parents which is necessary for intellectual development. Ghuman (1975) stated that Punjabi boys do not get sufficient stimulation, encouragement and support from their parents, all of which have been shown to be conducive to intellectual development (Vernon, 1969). Extensive observation of Bangladeshi children at home in Tower Hamlets and in Bangladesh substantiate the above statement. For example, Bangladeshi children have few if any educational toys or children's books; at the most they might have a ball or doll or a small car as toys, and there was no evidence that they were encouraged to look at books of any kind. Ashby (1968) found a generally lower intelligence in the immigrant children (Pakistani and Indian) he tested, and he has suggested that this may in part be due to their coming from an area poor both socially and economically. As stated earlier, the Bangladeshi families are severely disadvantaged both socially and

economically, possibly more so than Ashby's sample, which might be a contributory factor to the poor performance on non-verbal intelligence and vocabulary tests. (4) Non-verbal tests are, by definition, constructed without using language as part of the test material. The test material of the Junior Ravens Progressive Matrices is, as is known, made up of shapes of various kinds which have to be related to one another. Ghuman (1975) when discussing Punjabi children, refers to the fact that such children have particular difficulty in using this type of material which is of a perceptual kind. It is possible that they could not separate the perceived whole into its parts, nor consequently see a relationship between that which is given and that which is required. As far as Bangladeshi children are concerned, their home environment does not provide them with the opportunity to play with pictures, building bricks and jigsaw puzzles, and this may be one reason why they are unable to do such tests adequately. There is a high degree of association between this test and cultural factors, meaning that the ability to perform well on it is probably related to both the home and the school environment.

VOCABULARY AND PROFICIENCY IN SPOKEN ENGLISH TESTS

One of the most important findings of this study with regard to vocabulary and proficiency in spoken English is that the Bangladeshi children gave a poorer performance when compared to the indigenous children (Table 66) which, although to be expected from children whose mother tongue is not English, is most discouraging as far as the Bang. (>2) is concerned, as even these children did not obtain scores comparable to those of the indigenous children (see Table 32 & 33, pages 213-14). It was noticed that immigrant children were lacking in all aspects of verbal skills. On the Mill Hill Vocabulary Scale, as used by Bhatnagar (1970) in his study of West Indian, Cypriot and English, the English group scored significantly higher than the immigrant group. Owing to the difficulty of communicating in English, Bangladeshi children probably do not feel sufficiently confident to mix with English children and consequently inter-

relate with their own ethnic group only, further increasing their language difficulties. A possible further reason for the children's lack of language ability in English is given by Bullock (1975), who writes that British teachers often have a low expectation of the children's language ability, which in turn is reflected in part at least in their performance. Saint (1963) emphasised this in relation to Punjabi children, where it is plain that lack of fluency in English was a major factor in their general isolation and poor performance. If this difficulty could be overcome then it is likely that educational and social adjustment might be more readily achieved. The inclination of immigrant children to play with children from their own ethnic group is not helpful for their total adjustment to the indigenous school environment.

B. Bang. (>2) children compared with Bang. (<2) children

NON-VERBAL INTELLIGENCE

Although, when considering the test scores of all the Bangladeshi children when compared with indigenous children it is clear that the Bangladeshi children performed less well than the indigenous children on the Ravens Progressive Matrices, the present study also indicates that there is a great improvement in the performance of children who have been here for more than two years (Table 67). Even though the tests were unfamiliar

Table 67. Differences in distribution of Bang. (>2) and Bang. (<2) children on Intelligence, Vocabulary and Proficiency in spoken English.

NON-VERBAL INTELLIGENCE, VOCABULARY AND PROFICIENCY IN SPOKEN ENGLISH	LEVEL OF SIGNIFICANCE	DETAILS
I. Non-verbal intelligence	<0.001	Bang.(>2) > Bang.(<2)
II. Vocabulary	<0.001	Bang.(>2) > Bang.(<2)
III. Proficiency in spoken English	<0.001	Bang.(>2) > Bang.(<2)

to the Bangladeshi children their experience of English schooling most likely enabled them to acquaint themselves with similar tasks and so give a better performance when compared

with the more recent arrivals who have had only one-to-two years schooling (see Table 67). Verma and Mallick (1981) refer to a study by Little et al. which also found that " ... length of education in England is more important in determining primary school achievement than either length of residence in Britain or being born in Britain", (p. 57). Saint (1963) working with Punjabi children using Progressive Matrices found that as mentioned above cultural factors are important determinants of performance in this test and this is indicated by the moderately positive correlation between I.Q. and length of residence and schooling in a Western environment. Saint also found that the new environment at school and outside with the host community helps to improve performance on I.Q. tests. He indicated that the finding of increased I.Q. in those children who have been here longer is in line with the results obtained by Klineberg (1944) and Lee (1951) in their studies of the children of migrant blacks in the United States. Other studies such as Sharma (1971), Ghuman (1975), etc. also found that there is a significant rise in the intelligence scores of the migrating group as they move from the traditional environment into one relatively richer and more stimulating.

Ashby (1968) compared the intellectual ability of Indian and Pakistani with Scottish children using, amongst other tests, Raven Progress Matrices, and found that the mean scores of the immigrant children showed a positive relationship with length of stay. There was no significant difference between the mean scores of the long stay immigrants and the Scots. The medium stay group's mean scores were significantly lower than the Scottish children's scores on the Glasgow verbal reasoning and the Ravens Matrices tests. The short stay group had signifcantly lower scores in all tests when compared with both Scottish and long stay groups. Also Ghuman (1975) and Sharma (1971) testing Indian children in comparison with English children using Raven's Progressive Matrices Test found no significant differences between the immigrant and native children when the immigrant children had experienced the full length of English schooling. Although Bangladeshi are more disadvantaged in every respect than most other immigrant groups

studied, it could be concluded that, whatever the background, length of schooling always seems to be a very significant factor in improving a child's level of intelligence.

VOCABULARY AND PROFICIENCY IN SPOKEN ENGLISH TESTS

The present study has also found the favourable effect which English schooling has on Bangladeshi children in relation to vocabulary and spoken English, since those Bangladeshi children who have been here for more than two years gave a better performance than recent arrivals (between 1-2 years). Bangladeshi children, in addition to their lack of contact with indigenous children, tend not to get any encouragement from their parents or their ethnic group generally to improve their command of English. If there is therefore to be any improvement in the Bangladeshi children's use of English it will mainly be due to exposure to the English culture and language at school. This study has shown that though the Bang. (>2) children have a somewhat better command of English than the Bang. (<2) children (see Table 67), nevertheless, unless the children are encouraged to interact more with the indigenous children, possibly through pre-school nursery school attendance, to learn to speak English well before they go to school, their relative inefficiency in the spoken and later written language is not likely to improve very much.

It has been observed that the lack of proper communication may be a vital factor in various immigrant problems, such as culture shock, tendency to withdraw from unpleasant situations and low self-confidence (D.E.S. Educational Survey 13, 1971). The writer has noticed that those Bangladeshi children who have been in Britain for some time and can speak English fairly fluently, even though they do not have much social contact with indigenous children, can at least talk to indigenous children about TV programmes, school games, outings etc. Once they overcome their language problem, social relationships between indigenous and Bangladeshi children do develop. Analysis of the evidence of other researchers in this field also suggests that by being helped to overcome their linguistic difficulties

and communication problems, the immigrant children's socialisation and adjustment problems can be significantly reduced. Ashby (1968) pointed out, 'our comparison of immigrant length-of-stay groups on four tests of ability substantiates the findings of Edson and Pickup, Saint and the ILEA report that with increasing experience of British schooling there is an improvement in performance not only on scores on verbal tests in the English language as might be expected but also in the so-called "culture-free tests"',(p. 86).

In conclusion, it can be said that even a limited increase in length of schooling of Bangladeshi primary school children improves the children's vocabulary and general proficiency in spoken English; but it is clear that the provision of schooling and the social relationships of children of the host and immigrant communities are two interdependent factors with regard to the latter's improvement in gaining command of English.

C. Bangladeshi boys compared with Bangladeshi girls

NON-VERBAL INTELLIGENCE

When the Bangladeshi boy is compared with the Bangladeshi girl, as hypothesised, the present study has shown that Bangladeshi girls perform less well on the Raven Progressive Matrices Tests than Bangladeshi boys (Table 68). Ashby (1968)

Table 68. Differences in the distribution of scores of Bangladeshi boys and Bangladeshi girls on Intelligence, Vocabulary and Proficiency in spoken English.

NON-VERBAL INTELLIGENCE, VOCABULARY AND PROFICIENCY IN SPOKEN ENGLISH	LEVEL OF SIGNIFICANCE	DETAILS
I. Non-verbal intelligence	< 0.001	Bang.boy > Bang.girl
II. Vocabulary	NS	
III. Proficiency in spoken English	NS	

also noticed the difference in the mean score between immigrant boys' and girls' intelligence tests, favouring the boys, but

not to a significant extent.

VOCABULARY AND PROFICIENCY IN SPOKEN ENGLISH TESTS

The most interesting and encouraging result is that Bangladeshi girls, who usually face many more difficulties than boys and get much less encouragement and fewer opportunities from their parents and families to enrich and improve their abilities and achievements, nevertheless obtained results similar to those of the Bangladeshi boys (see Table 68), in relation to vocabulary and spoken English. The findings of Ashby (1968) in relation to sex differences are worth noting here since he indicated 'that although not statistically significant there is a tendency for immigrant girls to score less than immigrant boys on both tests of verbal reasoning and on Progressive Matrices', (p. 92).

The fact that the Bangladeshi girls' scores were better than expected must be attributed to the effect of their schooling since they receive little or no encouragement from home.

III. PERSONALITY

A. Bangladeshi children compared with indigenous children

Bangladeshi children were found to be less extrovert and more neurotic than indigenous children (Table 69). The findings

Table 69. Comparative distribution of scores of total Bangladeshi and indigenous sample on Personality dimensions.

PERSONALITY	LEVEL OF SIGNIFICANCE	DETAILS
I. Extrovert	<0.001	Bang. < indig.
II. Neuroticism	<0.001	Bang. < indig.

of Spiers' (1976) research with Indian and Pakistani samples in

part coincide with the results of the present study, but in relation to extroversion only. He found that extroversion was rather lower in Indian than in English children of the same age (average 13½ years), but he found the neuroticism score to be about the same for both groups. The Bangladeshi children would, according to the findings of the present study, tend to be somewhat quiet and unaggressive, anxious and depressed. These characteristics might develop as a reaction to the problems which arise from the inability of an individual to control unpleasant features of his environment and his reaction to this powerlessness.

B. Bang. (>2) children compared with Bang. (<2) children

It would appear that with increased length of schooling in Britain neurotic characteristics, possibly originating from the stresses of immigration, are somewhat reduced and the extroversion score is increased (Table 70). Bari (1973)

Table 70. Comparative distribution of scores of Bang. (>2) and Bang (<2) children on Personality dimensions.

PERSONALITY	LEVEL OF SIGNIFICANCE	DETAILS
I. Extroversion	<0.001	Bang.(>2) > Bang.(<2)
II. Neuroticism	<0.001	Bang.(>2) < Bang.(<2)

using the New Junior Maudsley Inventory, the forerunner of the Junior Eysenck Personality Questionnaire, and comparing Bangladeshi children of Secondary school age in Bangladesh with Bangladeshi children in Britain found that half the immigrant Bangladeshi children when compared to the Bangladeshi children in Bangladesh were "neurotic" according to the norms established by Eysenck. The present study found that the Bangladeshi children's degree of neuroticism decreased with length of schooling in Britain.

Although it is Eysenck's contention that extroversion and neuroticism are to a degree genetically determined, the present

study found that environmental factors can affect personality because Bangladeshi children who have been here more than two years had higher scores for extroversion and lower ones for neuroticism than the more recent arrivals. (See Table 70). However, even after two years of schooling Bangladeshi children do not produce Extroversion and Neuroticism scores which are similar to those of the indigenous children with whom they were compared, but whether this is due to residual difficulties of being immigrant or to cultural or to genetic factors cannot be ascertained from this data. The EPQ (Junior) was used for reasons mentioned in Chapter 6 in spite of the fact that the children's personalities could not be assessed prior to their leaving Bangladesh so that the degree of neuroticism and extroversion on their entry to the U.K. and after two or more years cannot be compared with any previous score.

C. Bangladeshi boys compared with Bangladeshi girls

With respect to sex difference (Table 71), although

Table 71. Differences in the distribution of Bangladeshi boy and girl scores on Personality dimensions.

PERSONALITY	LEVEL OF SIGNIFICANCE	DETAILS
I. Extrovert	< 0.001	Bang.boys > Bang.girls
II. Neuroticism	NS	

Bangladeshi boys were more extrovert than Bangladeshi girls, this difference cannot be considered as peculiar to the Bangladeshi sample only, since with indigenous boys and girls similar results were found (see p. 216). Leedham's (1969) work is worth mentioning in this connection. It was found that with the Derby study of 4th year Junior school children, the results showed that boys were more extroverted than girls. This agrees with the general statement in the Junior EPI manual (1973): 'It appears, therefore, the boys are more extroverted than girls, a finding not unexpected in view of the previous observation with adult samples that men are more extroverted than women', (p. 6).

With regard to the relationship between sex and neuroticism, the results of the Bangladeshi girls were remarkably similar to the boys; in fact, the same lack of distinction was found between the test results of the indigenous boys and girls (see p. 35). This relates to Spiers' (1976) findings in relation to adolescent immigrants from India and Pakistan among whom neuroticism was found to be similar for both sexes.

These findings do not agree with the findings of both Eysenck (1973) and Leedham (1969) that girls usually have a higher neuroticism score than boys. It is of interest that both this study and the work of Spiers indicate that this sex difference is not found in samples of Asian children.

To summarise, it can be said that Bangladeshi children have a lower extroversion score and a higher neuroticism score than the indigenous children. It was also found that Bang. (>2) have a higher extroversion and a lower neuroticism score when compared to Bang. (<2) children. The sex differences found in the Bangladeshi children with regard to neuroticism are the same as those found in the sample of indigenous children.

IV. SCHOOL QUESTIONNAIRE FOR CHILDREN'S ATTITUDE SCALE

The results of the attitude scale test towards school can broadly be divided into two sections, i.e. six tests out of eight (Attitude to school, Attitude to class, Relationship with teacher, Interest in schoolwork, Importance of doing well, and Academic self-image) are concerned with attitudes towards aspects of school (including relations with the teacher) and schoolwork, and two tests (Social relations and Anxiety in class) are concerned with social relations and the personality of the child.

A. Bangladeshi children compared with indigenous children

The present study gives indications that Bangladeshi children have better attitudes towards school, class, schoolwork and relationships with teachers than indigenous children (Table 72) since in relation to the first section, i.e.

Table 72. Comparative distribution of scores of total Bangladeshi and total indigenous sample on School Questionnaire for Children's Attitude Scale.

ATTITUDE	LEVEL OF SIGNIFICANCE	DETAILS
I. Attitude to school	<0.001	Bang. > Indig.
II. Interest in schoolwork	NS	
III. Importance of doing well	NS	
IV. Attitude to class	NS	
V. Relationship with teacher	<0.001	Bang. > Indig.
VI. Anxiety in class	<0.001	Bang. > Indig.
VII. Social adjustment	0.023	Bang. < Indig.
VIII. Academic self-image	NS	

attitude towards aspects of school and schoolwork, Bangladeshi children had either attitudes similar to or more favourable than indigenous children. In relation to social relations and personality of the child Bangladeshi children showed less favourable attitudes than indigenous children.

It is possible that their favourable attitudes towards aspects of school and schoolwork mentioned earlier are the reflection of parental positive attitudes towards school. Bangladeshi parents have a very high regard for school and teachers. The fact is that in spite of all the problems which have come about since their migration Bangladeshi children are able to benefit from their school life. Saint (1963) also found this encouraging factor in his study of Punjabi boys. He found that in spite of the educational backwardness and in some cases inability to take part in the classwork, the Punjabi boys in the secondary schools were emotionally well disposed towards the new school situation, as their responses on an attitude-to-school scale were most

favourable. Again, in relation to attitudes towards teachers, Dosanjh (1967) found that Punjabi immigrant children liked their teachers because they were kind and helpful. In this connection he drew attention to a statement by Cheema (no date) which he felt exaggerated the idea that here (in England) kind, white teachers appeared to them (Indian immigrant children) 'like angels'. Children from a disadvantaged area were found to have a more favourable attitude to school, perhaps because it was such a favourable contrast to home (Hewison, 1973). Haynes (1971), who used the same questionnaire as used in the present study with Indian children, found that the Indian children had a significantly more favourable attitude towards school and their class teachers than the indigenous children, but were significantly less well adjusted socially (as measured by Attitude Scale used in the present study) than English children. Similar effects have been noted by other researchers in relation to children from disadvantaged areas. It is interesting that all the above studies substantiate in general the present findings of the positive attitude of Asian children to their schools and teachers.

There is no doubt that the Bangladeshi children have very little social relationships with indigenous children, the main reason, as mentioned earlier, being unfavourable parental attitudes towards social relations with indigenous children. Bangladeshi children's difficulty in communicating their quiet, submissive nature, and their membership of a sizeable minority which can satisfy their need for playmates without involving outsiders, all restrict their desire to form close friendships with indigenous children.

In relation to 'Anxiety in Class', (one of the Attitude Scales) Bangladeshi children showed considerably more anxiety than indigenous children, which is not unexpected in immigrant children. Bangladeshi children live two kinds of lives, one

springing from the Bangladeshi culture at home, and one affected by Western culture at school. As discussed in relation to the neuroticism score, attempting to effect an adjustment between these may well be the reason for the anxiety scores the children obtain.

B. Bang. (>2) children compared with Bang. (<2) children

The present results of scores obtained on the various Attitude Scales emphasise the positive effects of increased length of schooling since Bangladeshi children who have been here more than two years scored significantly higher in 7 out of 8 tests of attitudes when compared to Bang. (<2) children; in the remaining test (Attitude to Class) both groups scored equally (Table 73). Although Bangladeshi children in general

Table 73. Comparative distribution of scores of Bang. (>2) and Bang. (<2) children on Children's Attitude Scale.

ATTITUDE	LEVEL OF SIGNIFICANCE	DETAILS
I. Attitude to school	0.029	Bang.(>2) > Bang.(<2)
II. Interest in schoolwork	<0.001	Bang.(>2) > Bang.(<2)
III. Importance of doing well	0.003	Bang.(>2) > Bang.(<2)
IV. Attitude to class	NS	
V. Relationship with teacher	0.044	Bang.(>2) > Bang.(<2)
VI. Anxiety in class	<0.001	Bang.(>2) > Bang.(<2)
VII. Social adjustment	0.002	Bang.(>2) > Bang.(<2)
VIII. Academic self-image	<0.001	Bang.(>2) > Bang.(<2)

showed a better attitude towards school than the indigenous children, the earlier arrivals showed even better attitudes. Their attitudes towards school and schoolwork were even better than indigenous children. They even showed a similar degree of social adjustment to indigenous children. Ghuman's (1975) study of Punjabi children differs somewhat from the present work in that in attitude to school the Punjabis were not rated more highly than indigenous children. The test he used was assessed by the teachers, whereas Haynes (1971) and the present writer used a school questionnaire developed by Lunn (1970) which was administered by the researchers. When Ghuman (1975)

asked the teachers for their comments they did not rate the two groups differently in school activities, such as trips, but in the tests administered by researchers in studying the Bangladeshi children and the Punjabis investigated by Haynes (1970), the immigrant children were found to have better attitudes towards school than the indigenous children.

C. Bangladeshi boys compared with Bangladeshi girls

With regard to sex differences, both boys and girls in the present study scored similarly (Table 74). The Bangladeshi

Table 74. Comparative distribution of scores of Bangladeshi boys and Bangladeshi girls on Children's Attitude Scale.

ATTITUDE	LEVEL OF SIGNIFICANCE	DETAILS
I. Attitude to school	<0.001	Bang.boys > Bang.girls
II. Interest in schoolwork	<0.001	Bang.boys > Bang.girls
III. Importance of doing well	<0.001	Bang.boys > Bang.girls
IV. Attitude to class	NS	
V. Relationship with teacher	0.038	Bang.boys < Bang.girls
VI. Anxiety in class	<0.001	Bang.boys < Bang.girls
VII. Social adjustment	NS	
VIII. Academic self-image	NS	

boys showed a better attitude towards school and schoolwork when compared to the girls, whereas the girls showed a better attitude towards relationship with the teacher and scored less on anxiety in class than boys.

Usually Bangladeshi girls are not very good at scholastic work, since they are not encouraged at home to improve their schoolwork and their interest in school activities as much as the boys; one could suppose that this might result in their having less motivation and less ambition to compete with other children. The Bangladeshi girls also showed a better attitude with respect to their relationship with their teacher than the indigenous girls. English primary schools are staffed mainly by women teachers, whereas in Bangladeshi villages teachers are usually male, and the writer, who has experienced schooling as

a teacher in both countries, knows that the Bangladeshi teacher is more strict than the English female teacher. From observation the Bangladeshi girls appear to be shy and somewhat frightened in school in Bangladesh, whereas in England the more informal atmosphere enables them to form a cordial relationship with their female teacher. The girls are not very competitive nor very ambitious, and this may help to reduce their anxiety level. In this connection it is worth mentioning that indigenous girls in general also showed a much better attitude to school than indigenous boys.

Thus, in summary, it can be said that the explanation for these positive attitudes is not only that parents have a favourable attitude towards the school and the teacher, but also that the effects which the teachers make to provide a stimulating and varied classroom environment bear fruit, and after more than 2 years schooling Bangladeshi children are able to benefit greatly from British schooling as far as their attitude to school is concerned. Though girls are in a more disadvantaged position in their own community because of parental attitudes to schooling, they were still able to score almost equally well as the boys on the attitude scale tests.

V. INTEREST

As mentioned earlier, the six tests of interest were broadly divided into three sections - interest in school subjects (consisting of two tests), interest in creative activities (consisting of three tests) and interest in physical skills (consisting of two tests).

A. Bangladeshi children compared with indigenous children

It is not surprising that Bangladeshi children show a low interest in school subjects, but their lack of interest in non-verbal activities like modelling, building, craftwork (a test

of creative activities) and both body and hand skills (two tests of physical skills) is also not very great (Table 75).

Table 75. Comparative distribution of scores of total Bangladeshi and total indigenous sample on Interests.

INTERESTS	LEVEL OF SIGNIFICANCE	DETAILS
Total interests	<0.001	Bang. < indig.
Interest in school subjects	<0.001	Bang. < indig.
" " painting, drawing etc.	NS	
" " modelling, building, craftwork etc.	0.008	Bang. < indig.
" " dance, music, drama etc.	NS	
" " body skills:- sports, gymnastics etc. (physical skills)	<0.001	Bang. < indig.
" " hand skills:- tools, scissors, instruments etc. (physical skills)	<0.008	Bang. < indig.

In other words, their lack of ability and interest in constructive activities and lack of physical skills leads one to conclude that it is probably not their verbal inefficiency which has affected their interests, but rather the social and cultural aspects of their past experiences, which is why even with activities where no verbal expertise is required they could not show much interest. Their interests seem mainly to be related to those activities familiar to them from their own culture, and the children's lack of interest in modelling, building, craftwork and hand skills may be due to their unfamiliarity with these crafts, and their lack of understanding of what these interests could enable them to achieve may limit their interest and achievement in these crafts. Their lack of interest in body skills is mainly because their physique and co-ordination are less developed and because they are much less sturdy than indigenous children of the same age. They are not always prepared for playing outside in the English climate, their clothing is not usually suitable and they are not as well nourished as they should be. Although Bangladeshi children can run well, they are not very successful in team games or other organised sport.

There are often other reasons,too,why the Bangladeshi children lack interest in the non-formal subjects taught in British schools: in Bangladeshi primary schools the curriculum is not very detailed and subjects like arts and crafts, hand skills and a wide range of physical education are little taught. Bangladeshi schools do not emphasise extra-curricular or creative activities as such, since their main aim is to teach formally the most fundamental school subjects. Lack of opportunity to explore, and lack of encouragement to construct things on their own initiative, greatly hampers the development of imagination and creative abilities. This lack of creative experience, which might hinder intellectual development, may well also have a negative effect on their performance in non-verbal intelligence tests (see Table 66).

Although Bangladeshi children did not score well in the interest tests, there were two tests in which their scores were similar to those of the indigenous children, i.e. in the visual and musical arts. However, generally speaking, their lack of familiarity with activities outside the narrow range of their own culture and society would seem to restrict the expression of their abilities.

B. Bang. (>2) children compared with Bang. (<2) children

The present findings greatly emphasise the effectiveness of English schooling in increasing Bangladeshi children's interests in school subjects and creative activities, since Bangladeshi children who have been here for more than two years were found to have more interests than those who have been here only between 1-2 years.

However, the most notable findings of the present study in relation to length of schooling is that Bang. (>2) and (<2) showed a similar lack of interest in both body and hand skills (Table 76). Since even Bang. (>2) scored poorly in relation to "body skills" it is suggested that the relatively poor physical development of the Bangladeshi children may be responsible for this.

Table 76. Differences in the distributions of the scores of the Bang. (>2) and Bang. (<2) children on Interests.

INTEREST	LEVEL OF SIGNIFICANCE	DETAILS
Total Interests	<0.001	Bang.(>2) > Bang.(<2)
Interest in school subjects	<0.001	Bang.(>2) > Bang.(<2)
" " painting, drawing etc.	0.015	Bang.(>2) > Bang.(<2)
" " modelling, building, craftwork etc.	0.037	Bang.(>2) > Bang.(<2)
" " dance, music, drama etc.	0.009	Bang.(>2) > Bang.(<2)
" " body skills: sports, gymnastics etc. (physical skills)	NS	
" " hand skills: tools, scissors, instruments etc. (physical skills)	NS	

Although Bangladeshi families can afford to eat a nutritious and balanced diet cultural and social factors prevent them from doing so. They maintain the same habits of buying, cooking and eating food as they had in their home villages. They eat little fresh fruit and raw salad vegetables, preferring rice at every meal eaten with overcooked vegetables and a little meat or fish with much spicy gravy. Even those children who have been here for the longest period are less sturdy than indigenous children. The Bangladeshi children are physically slight and at times appear weak, and this may affect their interest at least in body skill activities.

C. Bangladeshi boys compared with Bangladeshi girls

It is of interest to note that the Bangladeshi girls scored very similarly when compared to the Bangladeshi boys in all tests of creative activities and physical skills, with the exception of one physical skill, i.e. "body skills" (Table 77).

It is surprising to find that the girls are able to develop their interests in spite of the lack of encouragement they receive when compared with the encouragement the boys receive. There is a belief in Bangladeshi society that girls are not as good at these activities as the boys, except for

Table 77. Comparative distribution of scores of Bangladeshi boys and Bangladeshi girls on Interests.

INTEREST	LEVEL OF SIGNIFICANCE	DETAILS
Total Interests	NS	
Interest in schoolwork	NS	
" " painting, drawing etc.	NS	
" " modelling, building, craftwork etc.	NS	
" " dance, music, drama etc.	NS	
" " body skills: sports, gymnastics, etc. (physical skills)	0.016	Bang.boy > Bang.girl
" " .hand skills: tools, scissors, instruments etc. (physical skills)	NS	

dance and music, but the present study shows that this belief is unfounded, and that, given the right encouragement, the girls can show the same interest in these activities as the boys.

Their home environment gives them little opportunity for play, and as they are expected to help their mothers they are scarcely able to leave the house. This enhances the attraction of school, where they have a good relationship with their teachers who encourage them to try all sorts of new activities. It must be said that they do require some time to recognise the potential benefits of the alien school environment. Bangladeshi girls did not show any interest in body skills, i.e. sports, gymnasium, etc., mainly due to obvious cultural and religious factors as well as personality factors, such as shyness. In Bangladeshi culture girls are not allowed to play outside even when they are young anywhere except in school. In addition to this they are, as mentioned above, very shy and bashful, and find it very difficult to participate properly in the physical activities in school. The Bangladeshi girls are also even less sturdy than the Bangladeshi boys, nor are their clothes suitable for play out-of-doors. Dosanjh (1967) found that Punjabi girls were also hampered in their participation in

games, physical education, swimming and dancing because of the traditional prohibition on removing their loose trousers (salwars).

In summary, it can be said that Bangladeshi children generally were found not to have much interest in creative, physical and school subjects, particularly in developing creative and physical skills. Although with the increased length of English schooling most of the deficiency in interests in creative activities is reduced, yet their physical abilities in respect of body skills remain underdeveloped even with increased length of schooling. With regard to sex differences, it was found that Bangladeshi girls showed similar interests to boys, a finding which contradicts the received wisdom of the Bangladeshi community. However, like the Bangladeshi boys, the girls have a low interest in body skills. In conclusion, it can be said that their improvement after two years of schooling is very likely due to the quality of English schooling, and its powerful effect, particularly on the Bangladeshi girls, is noteworthy.

VI. ACADEMIC AND NON-ACADEMIC PERFORMANCE

ACADEMIC PERFORMANCE

A. Bangladeshi children compared with indigenous children

Bangladeshi children were found to be poor in their academic performance when compared with the indigenous children (Table 78). This was also fairly predictable since, as mentioned earlier, the Academic Performance Test consisted largely of a test of proficiency in the English language, i.e. oral, written and reading, as well as attainment in mathematics. There is much other evidence to show that immigrant children perform less well in school for whatever reasons, than indigenous

Table 78. Comparative distribution of scores of total Bangladeshi and total indigenous children on Academic and non-Academic performance.

ACADEMIC AND NON-ACADEMIC PERFORMANCE	LEVEL OF SIGNIFICANCE	DETAILS
Academic performance	<0.001	Bang. < indig.
English	<0.001	Bang. < indig.
Mathematics	NS	
Non-academic performance	0.006	Bang. < indig.

children. For example, Ellis (1977) found that the indigenous children had greater scholastic aptitude than the immigrant children he tested.

The ILEA report 959 (1967) also emphasised that the important factor in determining the level of a pupil's performance is his knowledge of English. However, it is not just that many immigrant children are poor in English, but they also lack confidence, so that even if they know a little English they are not confident enough to express themselves; they are so conscious of their possible mistakes. This factor was commented on several times by the class teachers in the course of carrying out the present research. It seems from observation that shyness also hinders the children's development of spoken English, so that they feel unable to speak unless compelled to, and so their proficiency in English develops very slowly; in the present study even Bangladeshi children with more than two years of schooling were found to be inferior in relation to indigenous children in their command of English, probably(see Table 32,33 & 52) because their parents do not allow them to practise speaking English outside school. The ILEA report 959 also stated that 'clear, consistent and significant differences were found between the performance of immigrants taken as a whole and all Authority pupils'.

However, it must not be overlooked that as Pidgeon (1970) and Vernon (1979) have commented, teachers' self-fulfilling

prophecies may well affect the degree of achievement which immigrant children are able to attain; and such expectations appear to affect younger children more than older children (Rosenthal and Jacobsōn, 1968). In relation to the difficulties they experience in attaining a good standard of English, most researchers have commented that lack of English knowledge is one of the most significant factors contributing to the immigrant children's problems in school, and to their satisfactory attainment in schoolwork. This problem has also been observed in West Indian and Cypriot secondary school children. Bhatnagar's (1970) findings substantiate this further, since he found that attainment in written English, fluency of spoken English and vocabulary were all poor in immigrant (West Indian and Cypriot) children when compared with English children. Ghuman's (1975) study also confirmed this further, since he found that English boys were rated significantly higher than the Punjabi boys on their spoken English and comprehension when class teachers were asked to rank the abilities of the British Punjabi and the English boys on spoken English, understanding of English, written English and arithmetic.* Regarding their abilities in written English and arithmetic, the English and the British Punjabi boys got approximately similar ratings on these two abilities. The findings of the present study contradict Ghuman's findings as far as the results of the written English test are concerned; however, if, as will be discussed below, the standard of living of an immigrant child's family appears to be related to the degree of achievement the child can attain then, as the Bangladeshi community seems to be considerably more disadvantaged than any other immigrant group. This may account for the children's poor performance in written English.

Part of the disadvantage from which the immigrant group suffers in general is that their living conditions are poor and congested. Bangladeshis prefer to live in their own community and they have many children and relatives living in the same

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* He studied only boys.

household, so insufficient space and much noise restrict the children's opportunity to read for pleasure at home. It is well known that large family size is associated with poor reading ability in children, and large family size may have other deliterious educational effects, too (Rutter et al.,1974). Burt (1958) found that povety was associated with reading retardation in more than 50% of his cases. Poverty, together with bad housing, overcrowding and malnourishment, lack of cultural variety, lack of parental interest and, for many children, (personal observation) lack of sleep, would all seem to contribute to the children's low mean attainments in the use of English.

The Bangladeshi children's low level of proficiency in the English language reduces their average attainment below that of indigenous children with similar mathematical ability. As far as their performance in mathematics is concerned, the view expressed by Burgin and Edson (1966) derived from work carried out on the achievement of children at the Huddersfield Spring Grove School is possibly relevant here: this was that with regard to mathematical ability and attainment Indian and Pakistani children usually find the mechanical side of arithmetic quite easy to do, but their lack of proficiency in English holds them back when it comes to solving mathematical problems. A comment found in 'A Report of the Central Advisory Council for Education' (HMSO, 1967) is worth repeating here: ' ... children with high mathematical or technical ability are at a disadvantage because of their poor command of written English', (p.70). Bari (1973) working with Bangladeshi children of secondary school age in Bangladesh and in Britain found that the Bangladeshi homeland children performed better in mathematics than the Bangladeshi children in Britain and he assumed that this was so because the Bangladeshi homeland children were taught mathematics in their mother tongue. These children are bilingual and Darcy (1953) has commented that in most of the literature describing the effects of bilingualism it has been noted that bilingual children are handicapped in verbal intelligence.

However, Little (1975) noted in his report on the performance of children from Ethnic Minority Backgrounds in Primary School that on the whole the attainment of South Asian children in English and Maths was better than that of other immigrants, such as West Indian and Turkish Cypriots. A further comparative study of immigrants of many different origins by Essen and Ghodsian (1979) pointed to first generation Asian immigrants being better at mathematics than reading because of their difficulties with the English language.

The relatively poor performance of the Bangladeshi children on the mathematic ability test may be in part accounted for also by the fact that Bangladeshi parents in most cases lack knowledge of the new techniques and methods of doing mathematics, so that they are not able to give their children any help at home. The writer has also noticed that in Bangladesh the traditional ways of doing mathematics still exist, whereas English schools use modern methods and techniques for solving arithmetical problems.

It has been noted (Ashby, 1968, Hero, 1967, and Morrison, 1958) that Punjabi, Indian and Pakistani children, though they speak their mother tongue, do not usually learn to read or write it. Bangladeshi parents, however, make great efforts to teach their children the written language and, as referred to earlier, do not encourage the children to speak English at home as they fear the loss of their own identity. Thus the boundaries of the bilingualism coincide strictly with the home and school respectively, and consequently their attainment in English is more adversely affected than those of other Asian immigrant children. Verma and Mallick (1981) comment on the fact that children from Asian communities who speak some English at home are advantaged when going to school when compared with children who speak no English at home; but it is also clear that learning their mother tongue, while helping children to develop a self identity, need not hinder the learning of English at home. Indeed, Derrick (1977) refers to the positive advantages which learning the vernacular can bring the child from an ethnic minority. However, Taylor (1974) refers to a

study of immigrant children in infant schools by Stoker(1970) who discounts the common notion that children who only learn their mother tongue before going to school will "pick-up" English automatically at school without special teaching.

The present study and others (such as McEwan, Gipps and Sumner, 1975) referred to in this thesis, highlight the fact that whereas it is important for a child from an immigrant community to learn his mother tongue, it is equally important for him to learn English before going to school.

B. Bang. (>2) children compared with Bang. (< 2) children

It can be seen from Table 79 that once again the effects

Table 79. Differences in the distribution of Bang. (>2) and Bang. (<2) children's score on Academic and Non-Academic performance.

ACADEMIC AND NON-ACADEMIC PERFORMANCE	LEVEL OF SIGNIFICANCE	DETAILS
Academic performance	<0.001	Bang.(>2) > Bang.(<2)
English	<0.001	Bang.(>2) > Bang.(<2)
Mathematics	0.003	Bang.(>2) > Bang.(<2)
Non-academic performance	0.002	Bang.(>2) > Bang.(<2)

of increased length of schooling at the primary stage has a significant effect on children's academic performance. This would seem to indicate that their improved attainment is due to the schooling they receive. Ghuman (1975) mentioned from the comment of head teachers that immigrant boys entering the infant school speak almost no English, so that their proficiency in the English language after some years of schooling is entirely the result of the experience and training received at school. So the longer their education in the English school the better their performance in English is likely to be, but it is also likely that, as referred to on chapter 10 if these children could be assisted to learn English before starting school this would be an undoubted help to them at school.

The ILEA report (1967), 'The Education of Immigrant Pupils in Primary Schools' assessed the ability and attainment of such children, and also found that length of English education was positively correlated with performance. It was found that where immigrants have had a substantially complete primary education in this country the level of their performance at 11 years of age may be quite close to that of the general level of London children (including immigrants), and likewise that the performance of these more fortunate immigrant children may be similar to that of the non-immigrant children attending the same schools. It is encouraging to find that immigrant children can overcome a language handicap and its consequences for communication and learning. To emphasise the positive effect of length of schooling, Ashby (1970) also carried out a comparison between Indian and Pakistani and Scottish children in attainment in school subjects, in oral English, reading, written English and formal and problem arithmetic. He used teachers' ratings obtained from the school progress record, and a positive relationship was found between length of stay and achievement. If anything, the longer-stay immigrants were superior to the Scottish children on mean ratings of oral English, English reading, written English, and were significantly higher than the Scots on mean rating by teachers for formal and problem arithmetic . In medium-stay children there was no significant difference between their own level of attainment and that of their Scottish peers. The Scots were superior to the short-stay immigrants. In further support of improvement which follows from longer English education on various tests of abilities of 11 year old immigrant children in London, Little et al.(1968) indicated* that in tests of arithmetic and verbal reasoning there were no significant differences between those immigrant children with full English primary schooling and indigenous children, but in the English test there was a significant difference. In all the tests children without a full English primary education performed significantly less well than indigenous children.

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* On the basis of the survey of ILEA report 959 (1967).

In summary, the Bangladeshi children's overall improvement in academic performance with increased length of schooling is encouraging.

C. Bangladeshi boys compared with Bangladeshi girls

With respect to sex differences, the Bangladeshi girls were found to have a similar level of attainment to that of the Bangladeshi boys. Although Bangladeshi boys were found to be better at mathematics, the Bangladeshi girls' performance was similar to that of the Bangladeshi boys in English, i.e. in speaking, writing and reading English (Table 80).

Table 80 . Differences in the distribution of Bangladeshi boys' and Bangladeshi girls' scores on Academic and Non-Academic performance.

ACADEMIC AND NON-ACADEMIC PERFORMANCE	LEVEL OF SIGNIFICANCE	DETAILS
Academic performance	NS	
English	NS	
Mathematics	0.006	Bang.boys > Bang.girls
Non-academic performance	NS	

The girls' achievements must be attributed to the beneficial effects of English schooling, which was able to be effective despite the parents' restricted outlook in relation to their daughters' education. Ashby (1968) found, when comparing immigrant boys and girls on school attainment, that the boys were significantly better than the girls, especially in arithmetic. In this context, the present result differs from Ashby's as far as the girls' use of English is concerned.

As quoted by Ashby, Vernon (1960) found that in general boys are better than girls in tests of inductive reasoning and arithmetical ability; nevertheless, the discrepancy between Asian immigrant boys and girls is even greater than that between indigenous boys and girls. An Asian research worker, Syed (no date), studied Pakistani children in Glasgow and is quoted by Ashby (1968) as attributing the poor level

of attainment in arithmetic in Pakistani girls to their lack of experience in handling money and shopping. This is also true for Bangladeshi girls and women, who rarely go shopping or handle money. All such transactions are carried out by Bangladeshi men and boys, so that women are not exposed to the gaze of male shop assistants. In Pakistan, India and Bangladesh, shopping involves haggling which is considered an unsuitable occupation for women, since shopping in the market is a male activity; these attitudes and cultural traditions are carried over to this country even where prices are fixed and shop assistants are mostly female.

Summarising the results relating to academic achievement, the overall academic performance of the Bangladeshi children as assessed by the present study was poor, and the children's deficiency in English, the basic tool for learning in this country, would seem to be the major contributory factor. Although increased length of schooling was found to have favourable effects for a number of reasons, Bangladeshi children's progress is nevertheless slow. McEwan, Gipps and Sumner (1975) also refer in their study to the performance of the ethnic minority junior children born abroad who improved significantly over time in Britain, though they still performed at a standard lower than English children up to the end of the junior school period.

With respect to sex differences, the findings of this study were interesting and encouraging, since Bangladeshi girls showed similar ability to Bangladeshi boys in academic performance. For both variables, i.e. length of schooling and sex, the favourable results are mainly due to exposure to the English school environment.

NON-ACADEMIC PERFORMANCE

A. Bangladeshi children compared with indigenous children

As well as scoring lower than the indigenous children on the total set of interest scores, Bangladeshi children showed less ability in non-academic interests as well. The main

reasons are explained in the 'Interest' section (p.294 - 296). It can be assumed that parental attitudes have a significant effect on children's ability in non-academic performance, as Bangladeshi parents associate education only with academic achievement, and non-academic activities tend to be regarded as somewhat of a waste of time. They think of school as a place for education and not for non-academic activities, and even outside school there is little opportunity for the children to explore these activities. Racial tension limits their physical movement outside the home, and overcrowding and congestion have similar effects inside their homes. Thus, the children's only skills are those which can be acquired and practised at school.

B. Bang. (>2) children compared with Bang. (<2) children

In respect to non-academic performance, it is encouraging to note that test scores improve to the same level as indigenous children with increased length of schooling (see Table 79) and there are differences between the score of Bang. (>2) children when compared with Bang. (<2) children, indicating the beneficial effect of increased English schooling.

C. Bangladeshi boys compared with Bangladeshi girls

An aspect of special interest is the achievement of Bangladeshi girls, since in both academic and non-academic performance they showed similar ability to boys in spite of being more disadvantaged at home.

In conclusion, Bangladeshi children were found to score marginally lower not only in academic but also in non-academic subjects. Length of schooling, however, has a considerable influence on these immigrant children, particularly on their non-academic performance, even though their progress is still very slow, especially in respect to academic performance, despite increased length of schooling when compared with indigenous children.

VII. CHILDREN'S BEHAVIOURAL QUESTIONNAIRE (RUTTER)

As mentioned previously, the criterion for a child's Behavioural Questionnaire score, completed by the teachers, is such that children with a total score of nine or more show some disorder at school.

A. Bangladeshi children compared with indigenous children

The interesting finding from the results of this questionnaire is that there is no signifcant difference between Bangladeshi and indigenous children in the total behavioural problem scale, although 26% of indigenous children and 19.5% of Bangladeshi children were designated as having some disorders. It is worthwhile to make comparisons with studies which used Rutter's Behavioural Scale. A comparison of four different studies using the Rutter Scale (completed by teachers) is described below:

Table 81. Rating of maladjustment* by teachers, using Rutter Scales.

DIFFERENT STUDIES	%
Present study	
Bangladeshi group	19.5
Indigenous group	26
Leicester study	
Indian group	10.0
Contrast English group	26.5
Isle of Wight study	7.1
London study	
West Indians	28.2
Non-immigrants	27.6

Source: Except for 'Present Study'. Kallarackal and Herbert, 'The Happiness of Indian Immigrant Children', New Society, 26 Feb., 1976, Vol. 35.

* The present study used the same test as Kallarackal et al. In the latter study children scoring 9 points and above were labelled 'maladjusted'. In the present study they are labelled as having "behavioural problems".

In Kallarackal et al. the findings were that the difference in the amount of maladjustment between the Indian and English children is statistically significant, and the authors are reasonably confident in concluding that the rates of maladjustment among the first generation of fairly typical Indian immigrant children, i.e. the second generation immigrants, are lower than those in a comparable population or urban native non-immigrant children. From the present study it appears that teachers either do not see any difference between children in the two ethnic groups as far as maladjustment is concerned, or do not wish to describe the Bangladeshi and indigenous children as different from one another (Table 82).

Table 82. Comparative distribution of scores of total Bangladeshi and total indigenous sample on Children's Behavioural Scale (Rutter).

BEHAVIOURAL PROBLEM SCALES	LEVEL OF SIGNIFICANCE	DETAILS
Total Behavioural Problem	NS	
Neurotic behaviour	NS	
Antisocial	NS	

However, as far as the neurotic and antisocial scales are concerned (two sub-scales of total behavioural scale), the similar results for both the groups are unexpected, since it was expected, as explained in the hypothesis, that the Bangladeshi children would be more neurotic and less antisocial than indigenous children. Perhaps teachers are not sensitive to the less obvious differences between these groups. Although there are some mean differences in the test results these are not statistically significant. Teachers seem to be unaware of problems among the majority of Bangladeshi and indigenous children or they may prefer not to commit themselves. It is also possible that there is some subjective bias in their response.

There are other possible reasons for their similar attitudes towards both groups, as in other studies (Wickman, 1928, Kallarackal et al. 1976), it was found that the children

who showed undesirable traits, but ones which did not cause active annoyance to the teachers, were mentioned only in passing in the teachers' reports. Aggressive or difficult and disruptive behaviour tends to be seen as problem behaviour, as such behaviour challenges authority and makes keeping order and discipline difficult. Withdrawal from social relations, inhibition and introversion tend to be regarded sometimes as temporary difficulties associated with immigration.

Although a non-significant result was indicated in relation to antisocial behaviour, the writer noticed that Bangladeshi children are less antisocial in their behaviour than indigenous children, a fact attributed by their teachers to their strong, stable family life. The Bangladeshi children are usually very docile, compliant and polite and seem to be frightened of the consequences of antisocial behaviour. Kallarackal et al.(1976) also reported the same quality in Indian family life. It is generally thought that English children are less strictly disciplined than Bangladeshi children, and the writer found this to be so also. Indigenous children have less supervision and have much more freedom and independence so tend to be more unruly. Their greater physical strength also allows them to be more aggressive. This was borne out by the results of the test of antisocial tendencies (subtest of Social Adjustment) in which indigenous children were found to show more antisocial tendencies than Bangladeshi children. (This latter test was administered by the author, not by the teachers.)

In relation to neurotic behaviour, although the difference between the indigenous and Bangladeshi children were not statistically significant, Bangladeshi children have more immigrant-related problems. It is quite possible that a child will be withdrawn, worried and fearful of new situations. The child may try to escape from this alien situation by truancy or bed wetting, and frequent tears. The "neurotic" dimension of the Eysenck Personality Test (the J.E.P.Q.) emphasises this, since in that test Bangladeshi children scored

significantly higher on the neuroticism scale than the indigenous children. The writer would like, tentatively, to suggest that the fact that the difference in the neuroticism scores between the indigenous and the Bangladeshi children on the Rutter Scale does not provide a reliable measure because of possible teacher bias, as already referred to. The desire of Bangladeshi children to please their teachers, as well as their obedient and submissive behaviour, may also enhance the development of a 'halo effect', which means that teachers may fail to notice some undesirable habits and characteristics to which Bangladeshi children are prone.

B. Bang. (>2) children compared with Bang. (<2) children

In respect of length of schooling neither Bang. (>2) children nor Bang. (<2) children, in the teachers' opinion, exhibited any neurotic behaviour (Table 83), which finding is difficult to explain other than by the teachers' subjective bias and the operation of the 'halo effect', since the scores on the Personality Tests, which were carried out by the writer in a more objective manner, showed that Bang. (<2) children score more highly on the J.E.P.Q. on the "N" Scale than the Bang. (>2) children. This finding is less unexpected than the results of the teachers' assessments, as neurotic tendencies might well be the result of various immigrant-related problems.

Table 83. Differences in the distribution of Bang. (>2) and Bang. (<2) children's scores on Children's Behavioural Scale (Rutter).

BEHAVIOURAL SCALES	LEVEL OF SIGNIFICANCE	DETAILS
Total Behavioural Problems	NS	
Neurotic behaviour	NS	
Antisocial behaviour	NS.	

With respect to antisocial behaviour it was expected that length of schooling would not affect Bangladeshi children negatively. Bangladeshi children's basically quiet nature is

associated with strict parental supervision, which leads them to resist the development of any kind of antisocial behaviour.

If there is any behavioural problem in Bangladeshi children it is manifested in neurotic behaviour rather than antisocial behaviour. The children are more docile, and inward-looking, and even those children born here do not seem to have the desire to take part in any kind of antisocial activities. This statement is emphasised by the result obtained when Bang. (>2) and (<2) children were compared in respect to 'antisocial tendencies', which is a subtest of 'social adjustment'. There was no significant difference between the two groups. With increased length of schooling their adjustment to the whole school environment may improve, but this is not associated with the development of antisocial behaviour, at least as far as primary school children are concerned. They belong to such a homogeneous group that adjustment to the school environment is slowed down, and possibly the likelihood of maladjustment associated with integration is reduced.

C. Bangladeshi boys compared with Bangladeshi girls

With regard to sex differences in the teachers' opinion there was a significant difference, albeit at 0.036 level, between the Bangladeshi boys and the Bangladeshi girls (Table 84).

Table 84. Comparative distribution of scores of Bangladeshi boys and Bangladeshi girls on Children's Behavioural Scale (Rutter).

BEHAVIOURAL SCALE	LEVEL OF SIGNIFICANCE	DETAILS
Total Behavioural Problem	NS	
Neurotic behaviour	NS	
Antisocial behaviour	0.036	Bang.boy > Bang.girl

The Bangladeshi girls have a better relationship with their teachers than the boys, which the attitude tests made clear, and it appears from the test of 'Anxiety in class', (another attitude test) that their anxiety in class also decreased with the development of this relationship.

With regard to "antisocial behaviour" the present results show the boys to be more antisocial in behaviour than the girls. The "antisocial tendency" scores in the 'Adjustment Test' (subtest of Social Adjustment) also showed a difference in favour of Bangladeshi girls: the possible reasons given for accounting for this result, referred to on p. 257 is applicable to the present findings also, i.e. Bangladeshi boys have more freedom in their personal relationships than Bangladeshi girls, and although do sometimes quarrel with one another they cannot be said to be antisocial.

Profile of the Bangladeshi children with more than two years of English schooling and Bangladeshi girls in Tower Hamlets

The main aims of this study were to examine length of schooling and sex as factors affecting the general adjustment, education and behaviour of Bangladeshi children. The findings of the researcher should enable her to draw a profile of the Bangladeshi junior child living in Tower Hamlets.

Many other researchers (p.2) have remarked on the beneficial effect of full English primary schooling in bringing immigrant children to substantially the same level as indigenous children in their test scores; however, in this study, it was found that even with a longer stay (all statements are comparative to the sample of indigenous children), Bangladeshi junior children who have had more than 2 years schooling have still not adjusted well to school life in the U.K. Their non-verbal intelligence is poor, and their vocabulary and spoken English are also inadequate. Their attitude to school generally, however, is good. The children's lack of interest in physical and hand skills is notable. Academic performance is poor probably because of the language deficiency and non-academic performance is also poor, again most likely on account of their lack of interest in body skills. In Rutter's Behavioural Scale the children were found to have neither high neurotic behaviour nor anti-social scores.

When Bangladeshi girls are considered, it can be seen that both their social and personal adjustment is poorer than that of the Bangladeshi boys. Their performance in the non-verbal intelligence test was also poorer, but their vocabulary and spoken English test scores were comparable to those of the boys. They also had a lower extroversion score than the boys, and had approximately the same neuroticism score. Although their attitude towards school was generally good, the girls did not show as much interest in schoolwork

nor place as much importance on doing well in school as the boys did. The girls showed interest in creative activities, including painting, modelling and dancing, but interest in body skills was lacking. Their academic performance appeared to be comparable with that of the boys because of their proficiency in language but they were weaker in mathematics than the boys. Their non-academic performance was similar to that of the boys.

PART - VI

CHAPTER 10

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSION

Bangladeshi children face even more difficulties in their lives than the local indigenous children; they must learn to live in a world which is completely different in very many ways outside their home life than within. In their school life especially they enter a world which their parents can scarcely understand. The relative informality of English schooling is quite alien to their parents who, although having a high regard for education, have only their own experience in Bangladesh to use as a standard.

Although Bangladeshi parents do expect their children to achieve highly at school, their lack of understanding of modern educational practice and their suspicion of European culture imposes additional stresses on their children. The children must satisfy both parents and teachers, and are torn between the demands of both. However, the fact that the Bangladeshi community in Tower Hamlets is so closely knit is in some ways a source of strength to the child, who probably, therefore, feels less anxiety than the child who has fewer compatriots in his school and so feels himself to be isolated from other children and from the outside community. At the same time, the mere fact that the Bangladeshi child in Tower Hamlets has this support from his home community discourages him from mixing with indigenous children and makes adjustment and language learning more difficult. Nevertheless, it is unlikely that adjustment would be more fully achieved if the Bangladeshi community were smaller because of the strong racial tensions in the area.

However, in relation to length of schooling, this study appears to have shown that even with these difficulties and disadvantages Bang. (>2) primary school children do benefit considerably from their schooling experience, both as far as

social and personal adjustment, their command of English and other factors are concerned.

Social and personal adjustment in Bangladeshi children improves considerably with more than two years English schooling, there was no significant difference in "social adjustment" between Bang. (>2) and indigenous children. This was also true for 'Freedom from withdrawal tendencies', 'Social skills', 'Social adjustment' (attitude test), 'Total interest' including 'Interest in school subjects' and 'Painting, craftwork and music', 'Mathematics and Non-academic performance'. In all these tests not only were Bang. (>2) significantly better than Bang. (<2) but there was also no significant difference between the scores obtained by the Bang. (>2) children and the scores of indigenous children. However, some reservations must be expressed here as to the exact nature of the social adjustment which has been measured, as much of it relates to social adjustment within the Bangladeshi community only. In most of the other subtests of adjustment, although two years or more English schooling benefited Bangladeshi children, they still did not reach the same level of adjustment as indigenous children. The two exceptions to this were 'Freedom from withdrawal tendencies' and 'Social skills', where there were no differences between Bang. (>2) and indigenous children. The improvement in Social skills, although again relating mainly to their dealings with other Bangladeshi children, was especially encouraging. The answers given to certain questions asked showed that Bang. (>2) children were considerate of the feelings of other children and tried to help them, such as 'Do you help new pupils to talk to other children?' or 'Is it hard for you to talk to people as soon as you meet them?'.

In tests of intelligence it can be seen that Bangladeshi children improved with increased length of schooling in the U.K.; however, the length of time needed to reach the same level as indigenous children is quite considerable, since even Bang. (>2) children did not reach the same level as indigenous

children. To some extent the same is true for tests of personality, such as extroversion and neuroticism, where Bang (>2) were found to be less extroverted and more neurotic than indigenous.

In the vast majority of items of the School attitude questionnaire test the scores achieved showed that increased length of schooling had an extremely powerful influence. Bangladeshi children with more than two years of schooling not only showed the same favourable attitudes to school as indigenous children, but surpassed them and were able to show more favourable attitudes in all except 'Attitude to Class', which relates mainly to schoolfriends, and 'Social adjustment', where there was no difference between the results they had achieved and that of indigenous children.

Increased length of schooling also positively affected Bangladeshi children's interests in many practical skills and activities. Previously most of them had had no experience of these, but with more than two years schooling in all except body skills, indigenous and Bangladeshi children showed similar aptitude. The question of body skills relates more closely to outward differences than any other of the categories of interests, girls being physically very shy and boys also lacking in confidence in these activities.

There is also a definite improvement in academic performance and in English as their length of schooling increases. However, because of language difficulties considerable extra help will be needed if Bangladeshi children are to reach a comparable standard to indigenous children.

Although Bangladeshi children can improve considerably, their improvement must always be seen within the context of their own culture, as they do not usually step outside the limits imposed by parents and elders. In this respect they are unlike other Asian groups whose children become much more like the indigenous children once they have settled in Great Britain.

When sex differences are examined, Bangladeshi girls are subjected to even stricter supervision than boys, and in view of this, and in view also of the rigid and inflexible parental attitudes towards their education, their test scores in various scholastic attainments, attitudes and interests are quite remarkable. The fact that these are relatively close to those of the boys is very encouraging, because the disadvantages under which they suffer are so much greater.

Nevertheless, the level of adjustment in Bangladeshi girls was found to be low and this is mainly due to the extra-ordinary narrowness of their lives. The structure of culture and religion are such that at the first signs of physical development parents would much prefer to keep their daughters at home where they can teach them Bengali and give them religious instruction. However, although parents are forced to send the girls to school their unwillingness makes it really difficult for girls to adjust or learn the required skills. Ballard's (1979) description of the position of South Asian girls (Indian, Pakistani, Bangladeshi and East African Asian) in the family is worth noting here, 'Girls are under stricter surveillance than boys, for it is felt that too much freedom might spoil a girl's reputation and thus damage her changes of making a good marriage. In addition, the status and prestige of the family as a whole depends upon keeping its reputation, much of which rests with the chaste behaviour of its women, irreproachable' (p. 117). Furthermore, she pointed out, (although this has to be qualified for Bangladeshi girls) that many girls complain about the dual standard of morality which allows their brothers a good deal more freedom than they have themselves. This was illustrated by a girl typist who stated that in Asian society the woman is a white piece of cloth and a man a black piece. The black piece will not show the dirt but on the white piece the slightest spot will show.

However, Bangladeshi girls in most cases do not complain. They know from their early childhood how they will be treated once they reach secondary school age. The community expect and, indeed, prefers, that girls work inside the home and boys

outside and, in fact, they are more concerned to retain the institution of purdah than are the men, who are unaffected by it. Coming out of 'purdah' is an 'Islamic' offence, although there are signs that the Indian and Pakistani girls, as opposed to the Bangladeshi girls, are dropping the traditional restrictions. These days Indian or Pakistani girls do work in factories under a supervisor known to them or under the supervision of women from their own community, but Bangladeshi girls are not allowed to work outside the home. Unlike other Indian women, a Bangladeshi mother would never contemplate working. Bangladeshi girls may be considered more disadvantaged in many respects than Pakistani and Indian girls.

So in these highly restricted circumstances, their achievement is unexpected. In this context, Ashby's (1968) comments about Indian and Pakistani girls partially supports the findings of the present study; Ashby found that Asian women keep very much to themselves and the respectful attitudes of daughters leads them to abide by their mother's wishes. Thus their exposure to English culture is restricted to whatever their parents will permit and to what they learn at school. Bangladeshi girls suffer from even greater cultural rigidity than other Asian girls, a matter which could usefully form the basis of a future study. 'It could be argued that the longer resident here have been exposed to facets of our culture outside the home over a longer period and that the home no longer exercises the same potency in this respect'(Ashby,ibid,p.99). It was found that within the medium* stay group the willingness of parents to accept features of English life within their own homes was positively correlated with the abilities of the girls to do well in English subjects. The Bangladeshi girls' adjustment as found in the present study is comparatively low, it must be assumed, largely because of their parents' rejection of the host community, but where there is no direct conflict with traditional values, or where natural capacity is concerned,

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* Ashby (1968) divided immigrant children into three groups according to length of stay, i.e. born in Britain of immigrant parents, later and recent arrivals.

e.g. attainment in English language and academic achievement generally, then this study has shown that good results can be achieved. It could be hypothesised that their improvement does result in part at least from wishing to please their teachers.

It is worth noting that although Bangladeshi girls are much more disadvantaged than boys and have more difficulty in adjusting, nevertheless the girls did not show any neurotic symptoms. Even with more barriers to overcome than the boys, they have a comparatively favourable attitude towards class, teachers and academic work and have a similar interest score to the boys. This finding of the present study is encouraging and important.

The writer is both impressed and concerned with the total evidence of the uncultivated potential of the Bangladeshi girls which is contrary to the belief frequently expressed within their own community, that is that Bangladeshi girls have nothing to offer intellectually. As mentioned earlier, the main concern of this study was to ascertain the effect of length of schooling and sex on the range of variables considered, and the findings show that increased length of schooling had a positive influence on attainment in the vast majority of tests. When the effect of length of schooling on Bangladeshi boys and girls was considered separately rather than together, it was found that increased length of schooling had a greater effect on the girls than on the boys in about half the tests. The girls' achievement was unexpectedly high, emphasising the positive benefit obtained from exposure to the school environment.

The children of both sexes are very loyal to their families and in no way wish to challenge the norms and values of their society. In their restricted contacts with the host community, their school is the only agency in a position to help them adjust even within the narrow limits possible for them because of their cultural background. The role of the school is thus crucial if Bangladeshi children are to be

enabled to make full use of their talents in this society and to be able to face the future here with confidence. It is important, however, that the training of teachers, as discussed on page 138 should equip them to teach in multi-cultural schools. Without such training it will be difficult for teachers in this country to give immigrant children the precise help they need.

In this respect the encouragement of their parents is vital. Parents are understandably suspicious of the white community and wish to strengthen the children's ties to their own culture in the face of rival attractions. In addition, however, Asian parents, as described by Khan (1977) and others, have different expectations about schooling, basing their knowledge on their own childhood experiences in the homeland, from the conditions actually existing in English schools. It is difficult, therefore, for them to give their children the kind of help at home which is of most benefit to the children when at school. Unless their parents are able to offer them more encouragement to participate fully in school activities, as in fact some other Asian parents are more able to do, they will not be able to take full advantage of such opportunities as exist for them. This conclusion implies that it would seem advisable to try to influence Bangladeshi parents; and some of the ways in which this might be done are discussed in the following chapter.

However, one has also to remember that Bangladeshi children in Spitalfields suffer from the environmental deficiencies of the area which must affect their ability to learn. Their housing standards are poor and the children consequently often live in overcrowded conditions, have little space for play and may not get enough sleep because families eat late at night and may spend long hours chatting together with friends and relatives, often in the same room where the children should be sleeping. Their poor performance and lack of interest in body skills may relate to the often unhealthy conditions in which they are forced to live. There is a further point which may well have an effect on their potential achievement, and that is that white teachers, as discussed

on page 137-8 tend to have low expectations of their coloured pupils' scholastic abilities.

However, there are many encouraging signs that Bangladeshi children may be able to improve their scholastic attainment as their own attitude to school is very favourable and the attitudes of their parents are also favourable within the limits of their own culture; but the results of this study do show that at present Bangladeshi children do not appear to be achieving their full potential, and the greatest problem is to match the parents' hopes and aspirations with the requirements of modern education, so that their children can achieve their full potential without abandoning their own culture and religion. This thesis has been concerned with the allround development of the Bangladeshi primary school child; it has been seen that such children can perform much better at school when they have had more than two years education in an English school than children with less than two years education, but that they do not even then perform as well as indigenous children from the same low socio-economic background. Donaldson (1978) and others have shown that the ability to read early in life is of immense advantage to a child, and this ability can, indeed, make all the difference to his later scholastic development and so to his future in life. Early reading ability, though largely dependent on what the child has learnt about the use of language, especially the written word, at home before coming to school, can be taught in the first year or two at school. Nevertheless this will only be done if teachers-in-training are themselves taught the importance of giving special attention to those children, from whatever ethnic background, who come to school with little or no knowledge of the written word. It is by no means clear that the importance of this fact is stressed in all teacher training establishments. For the Bangladeshi child living in this country what happens in school during his first few years there would seem to be of great importance to his future development.

IMPLICATIONS AND SUGGESTIONS

One of the major findings of this study in relation to one group of Asian children has been to confirm previous research which has emphasized the connection between adjustment, abilities, academic achievement and general development, and the length of schooling that the children have received in the U.K. The school is for many children their only opportunity to learn about the host community in an atmosphere of trust and friendliness, unlike the pervasive fear and distrust which exist away from the schools in the Spitalfields neighbourhood. In school the children are exposed to a wide range of influences: social, intellectual and cultural, presented in circumstances in which they are often expected to respond or participate in some way. The strongly positive effect of schooling in improving adjustment can be seen from the comparison of Bangladeshi children with more than two years of English schooling and those with between 1-2 years.

The family life of Sylheti immigrants conforms very closely to the traditional patterns found in Bangladesh and thus the child's home environment does not prepare him for the demands which school will make. The importance of length of schooling rather than length of residence has been noted by other researchers such as Ashby (1968) and Ghuman (1975). In Sharma 's (1971) study it was found that length of stay in the U.K. had less effect on measured intelligence in immigrant children than did the period of time spent in English schooling, and his results emphasize the fact that the intelligence scores of those who have been in this country longer are very close to those of the English children. This again supports the earlier findings regarding the importance of the English school in shaping the intellectual abilities of immigrant children. The ILEA Report No. 959 (1967) reported similar findings.

Since Bengali is used exclusively in the home, the child receives very little exposure to the English language

prior to starting school, and hence, at the time that the English child begins to explore the possibilities of reading, starts to express himself and develop new intellectual skills through writing, the Bangladeshi child must master a new language before this process can even commence.

In other studies it was found that ability in English was closely related to adjustment, since children with some ability to express themselves feel less lost and bewildered by their strange surroundings. However, the findings of this research indicate that for Bangladeshi children their cultural norms and values have a greater relationship to adjustment than their knowledge of the English language.

The two major problems which the Bangladeshi child suffersfrom, culture shock and language difficulty, can be overcome by the provision of Bangladeshi teaching staff trained to understand their problems, and by the promotion of understanding among parents of the extreme pressures which affect their children. It must be recognized in the Bangladeshi community that the acquisition of the English language is of prime importance for their children's education and future wellbeing, and that the children need constant encouragement to do well at school. This first encounter with the host community can be made considerably easier for the child if the parents understand this.

The teaching of English is of prime importance to Bangladeshi children as not only in the short term must their inability to communicate in a basic fashion be conquered, but in the long term, unless Bangladeshi children are taught to express themselves fluently and clearly in spoken and written English, then the doors of further education will remain closed to them. It was found that in most schools Bangladeshi children were taught English in special classes in the same schools. It was observed that the teaching aimed to give a basic command of English and once this level was reached there was little further

remedial work done. There also appeared to be few attempts made to find in an objective way the most effective means of teaching these children.

The question of the development of language skills leads to a consideration of the fundamental importance of the child's home in helping their development. Most Bangladeshi families, although much in favour of education, tend to equate this with 'going to school' and fail to realise that there are many things which the child can learn before he goes to school which will help him enormously. This is reflected in their attitude towards toys, of which the children have few, especially those which encourage constructional, spatial or creative learning. This was strongly reflected in the low level of interest shown in the tests in these types of activity. This is difficult to promote as the need for additional mental stimulation of small children through conversation and creative activities in the context of the traditional Bengali family is poorly understood by the family. As is the case with the Punjabi families described by Ghuman (1975), the strong belief in the authority of elders, society and religion encourages a collective attitude towards life which has nurtured and protected the community and enabled it to reach its present strength in Tower Hamlets. However, the prevalent view which adults have of the child in the Sylheti culture is to regard the child as a passive recipient of knowledge rather than an active participant in a process of learning. Thus any attempt to broaden the pre-school child's range of experience may be seen as either totally unnecessary, incomprehensible or alternatively as a threat to traditional patterns of authority and child rearing. This gulf between school and home is often shown in the complete lack of common understanding between parents and teachers of the aims and processes of education. This gap can only be bridged by constant patient efforts to involve parents more in the activities of the school. The appointment of educational social workers, especially Bangladeshis would surely help. There are many issues waiting to be tackled, from the fuller education of girls.

the provision of careers and further education, to the education of the parents themselves through the Adult Education Institute. It may well be beneficial to arrange for talks for both parents and children from other adult Bangladeshis from various walks of life, outside the range of the experience of the Sylhetis, to open their eyes to the opportunities which exist. Such education might help them to understand that it is possible to take advantage of a western education without losing their own culture and religion. A broader base of skills within the community would not only be an investment for the future of the Sylheti community in the U.K., but ultimately may bring benefits to their homeland. The extra income from gaining wage-earners will have to be at least partly foregone so that some investment for the future can be made. At least the brightest children in a family should receive some further training, and information about grants should be made readily available to parents. At present the second and third generation of Sylhetis are growing up in Spitalfields, and as yet only a handful have made any use of the educational opportunities available beyond school leaving age. It is surely time that the community took advantage of opportunities, not only to improve their own position, but also to acquire skills that will be of use in Bangladesh.

The benefits which the children could gain from some pre-school exposure to both English and other forms of activity may well be considerable, especially for the girls, and the possibility of starting playgroups closely allied with existing acceptable institutions should be examined. In this respect an intermediate stage between the Bangladeshi home and English school is likely to be beneficial. At present, it is unrealistic to expect that mixed indigenous and Bangladeshi classes would be attended, as indeed existing nurseries are generally not much used by Bangladeshis; and any benefit which might have arisen from early integration must be foregone.

The importance of good physical health in childhood is already recognized, and clinics are well attended. Thus it may be possible for Bangladeshi mothers to meet in these surroundings with their children without attracting disapproval or causing anxiety. It is very easy for such activities to be perceived as a threat to traditional values. However, in addition to helping to educate parents by allaying their fears about possible loss of their cultural values and teaching them how English schools work, it could be of great value if playschools could be organized where indigenous staff and Bangladeshi staff speak English only to both mothers and children. Such 'schools' could be attached to the baby clinics.

Although it has been pointed out in this study that the Bangladeshi girls' scores on various tests are unexpectedly good, the fact still remains that there was a significant difference between the boys' and girls' scores in favour of the boys in many tests - all Adjustment subtests except Family Relations and Antisocial Tendencies, Non-verbal Intelligence, Extroversion, Attitude to school (one test of attitude), Interest in schoolwork, and Importance of doing well, and Body skills.

Special efforts should be made to supplement the education which the girls receive at school in order to make up for their lack of experience and to help the development of skills. When the time is right they should then be able to take advantage of the educational opportunities in this country alongside their brothers. If the girls were given more encouragement at home it is likely that they may achieve standards equal to those of the indigenous girls.

However, the main aim of this study was to examine the adjustment of Bangladeshi children, a factor which cannot be readily separated from the many cultural influences operating in this situation. The tendency for learning to be regarded as essentially a passive activity is also related to the Bangladeshi view that children should

take what is offered to them at school in the way of explicit instruction in reading, writing etc. but should reject all other aspects of the host society. Much of the modern educational practice is incompatible with this view: thus not only is adjustment discouraged, but so is, therefore, to a large extent also learning. These problems can be at least partially overcome by sensitivity in the educational provision for Bangladeshi children. As has already been suggested, one of the most pressing needs is for the employment of more qualified Bangladeshi teachers, especially women. It may be necessary to provide additional English language classes for qualified Bangladeshi teachers so that they are not disadvantaged in applying for teaching posts in this country. Bangladeshi children may benefit from different types of schooling depending on the stage in their school careers when they enter the country. A period of intensive language teaching separated from the mainstream of their schooling has been found to be best for those arriving at a later stage. Employment of Bangladeshi teachers together with methods of teaching appropriate to the age at which the children arrive will really promote a more useful and effective teaching and healthier connection between school and home, and can enable the Bangladeshi child to communicate more readily and learn more easily in the early stages, thereby ensuring a more gradual and less traumatic transition from home to school and also perhaps gaining the confidence of parents.

It is likely that the size of the Bangladeshi population in the Spitalfields area and in the schools of Tower Hamlets has certain beneficial effects on the adjustment process in these children, though the disadvantages are also obvious and have been discussed. It has been noted in other studies, especially that of Dosanjh (1967), that immigrant children gain strength from the number of other children of the same ethnic background and culture. The Bangladeshi children adjust to being part of a larger group of Bangladeshi children in an English environment rather than as Bangladeshi individuals bobbing alone in a

sea of English children. Their adjustment, therefore, has a different quality as they are partially protected.

The importance of acquiring a good command of both written and spoken English in the Bangladeshi child's development cannot be stressed too highly; however, the value of mother tongue teaching must be recognized also. The extension of this will enable Bangladeshi children to develop their existing latent ability, previously unrecognized at school, and may have a carryover effect into their English learning abilities. The employment of more Bangladeshi teachers in the schools would also enable this to be carried out more easily.

Both Bangladeshi and indigenous children would benefit from the development of special teaching materials: the Bangladeshi children from Bengali language aids and those designed to help overcome cultural disadvantages, and the older primary school indigenous children from materials designed to broaden their horizons and their understanding of Bangladeshi history, religion and culture. The overall aim of such materials must be to promote equal opportunities and a better understanding of one another's culture.

Although it must be recognized that at present there is little desire in the Sylheti community to look outwards, as time passes and the new generations grow up in a world in which automation is increasing and where lack of new technical skills may prove a considerable handicap, the demand for traditional Bangladeshi skills will undoubtedly fall and it is important, therefore, to consider the future. The later generations of Bangladeshis may find they have no wish to return to live in Bangladesh if they have lived all their lives in the U.K., and thus the foundations of a good social and technical education must be laid now if the community is to broaden its economic and social base and achieve its full potential.

At present, children slip through the education system as quietly as they can, since conformity shelters them from the prejudices of the English without arousing fear and suspicion in their parents. The lack of social interaction with English children outside school can perhaps be compensated for by after school activities such as clubs, outings and film shows organized by teachers. Racial animosity is so high in the district that a disproportionate responsibility falls on the teaching staff to understand Bangladeshi culture, to be sympathetic towards individual children and to be aware of their own negative stereotypes.

There are a number of reasons why the Bangladeshis of Tower Hamlets could be in a strong position to improve their situation: firstly, they are a homogeneous group and derive much strength and stability from this; secondly, the parents have a very high regard for education and, lastly, as the results of this study have shown, much progress can be made provided that the children receive a reasonable number of years of English schooling especially in the early years, and that Bangladeshi girls are enabled to overcome many of their handicaps in making academic and other progress. The unfortunate fact remains, however, that unless the racialism at present so strong in the area can be overcome it is unlikely that this potential will ever be realised and all the strengths which the Bangladeshi child has will be expended in purely defensive ways, and a great opportunity will be lost for the present and future generations.

Young Bangladeshis are learning to take the initiative. They are showing that while they are here they intend to make their mark on society and they are not prepared to be the victims of racialism. However, a true position of strength can only come from full participation in educational activities rather than from the withdrawal and passive characteristics exhibited in the past.

As Fishman (1979) has written, 'The reactions of the Bengali Community, particularly its youth, to these verbal attacks and to the vicious physical assaults which have accompanied them, and the consequent developments within the community, indicate that the Bengali East End will eventually claim as important a place in British history as the Jewish East End has claimed, and that history will leave its detractors as foolish as do those of the Jews.' (p.95).

Suggestions for further research

Suggestions for further research fall into two types: firstly, research into the educational and social means of making the education of Bangladeshi children more immediately useful and helpful for them; and secondly, research addressed to more general academic questions.

There are several issues arising directly out of this study which require further research. The most important is the necessity to develop a test of intelligence and ability which, if not entirely culture-free, is at least suited to the experience and background of immigrant children. There is also a deficiency in currently available tests of adjustment and one suitable for use in this country is urgently needed.

A question directly related to the problem of the lack of an adequate test of intelligence measured by the non-verbal test is whether mathematical ability and general intelligence are correlated in Bangladeshi children as is usually thought to be the case for other Asian children. Bangladeshi children's relatively poor performance in mathematics may be related to environmental factors affecting rural and working class Bangladeshi children more strongly than middle class Bangladeshi children.

A question of even greater importance is the pattern of schooling which Bangladeshi girls follow. There is some evidence that school attendance in Bangladeshi girls diminishes after puberty and some are indeed sent back to Bangladesh. A study of a cohort of Bangladeshi girls through their primary and secondary schooling and perhaps beyond with respect to their abilities, interests and attainments would be most useful. At present there is no definite information on their lives as females within the community.

It would also be worthwhile to conduct a study in which Bangladeshi girls could be compared with other Asian girls since their achievements were unexpectedly good in spite of the additional disadvantages which they suffer.

A study of middle class Bangladeshi children in the U.K. in comparison with Sylheti children would give some indication of the extent to which social class, rural background and poverty affect Bangladeshi children.

The writer's early intention had been to carry out a comparative study of Sylheti children at home in Bangladesh and also in Tower Hamlets; however, during the pilot study in Bangladesh, it was found that no suitable tests were available there because of the disruption of the Bangladesh Institute of Education during the war of independence from Pakistan. The development of tests applicable to Bangladeshi children would be of great value to educational research. A comparative study of children in the two different contexts could then be carried out.

Although the problems of immigrants vary from place to place and from time to time, the dissemination of information about the immigrant child in a host community allows future researchers to evaluate these findings and extract material which they judge to be of value to them.

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APPENDICES

APPENDIX I

West Indian, Indian and Pakistani (including Bengladesh) Immigrants in the U.K., and the total forecast population, 1965-2015.

End of Year.	Total Population of the U.K.	Population of West Indian, Indian and Pakistani origin.	As a percent of total.
	('000)	('000)	(%)
1965	54,820	759	1.4
1970	56,951	1,098	1.9
1975	58,904	1,473	2.5
1980	60,879	1,886	3.1
1985	63,017	2,309	3.7
1990	65,468	2,746	4.2
1995	68,363	3,216	4.7
2000	71,325	3,722	5.2
2005	74,442	4,267	5.7
2010	77,483	4,851	6.3
2015	80,523	5,484	6.8

Source. Economist Intelligence Unit Report Commonwealth Immigrants and the Future of the U.K. May 1965 p.2. (Martell, 1976).

APPENDIX II

Estimated Future Populations, Five Major Immigrant Groups. 1971-86.

Year.	Country of Origin. India.	Pakistan (and Bengladesh)	Jamaica, Rest of Caribbean and West Africa.
1966	223,600	119,700	504,800
1971(1)	377,000	211,000	640,000
1976(1)	510,000	290,000	722,000
1981(1)	579,000	306,000	784,000
1986(1)	768,000	408,000	898,000
1986(2)	890,000	485,000	1,008,000

Totals;		
	1966 - 848,100	1981(1) - 1,669,000
	1971(1) - 1,228,000	1986(1) - 2,074,000
	1976(1) - 1,522,000	1986(2) - 2,373,000

(1) Low fertility projection.

(2) High fertility projection.

Source: 1966 Census and projections. Quoted E.J.B. Rose (1969) p. 633. op.cit. Adapted.
(Martell, 1976)

APPENDIX III

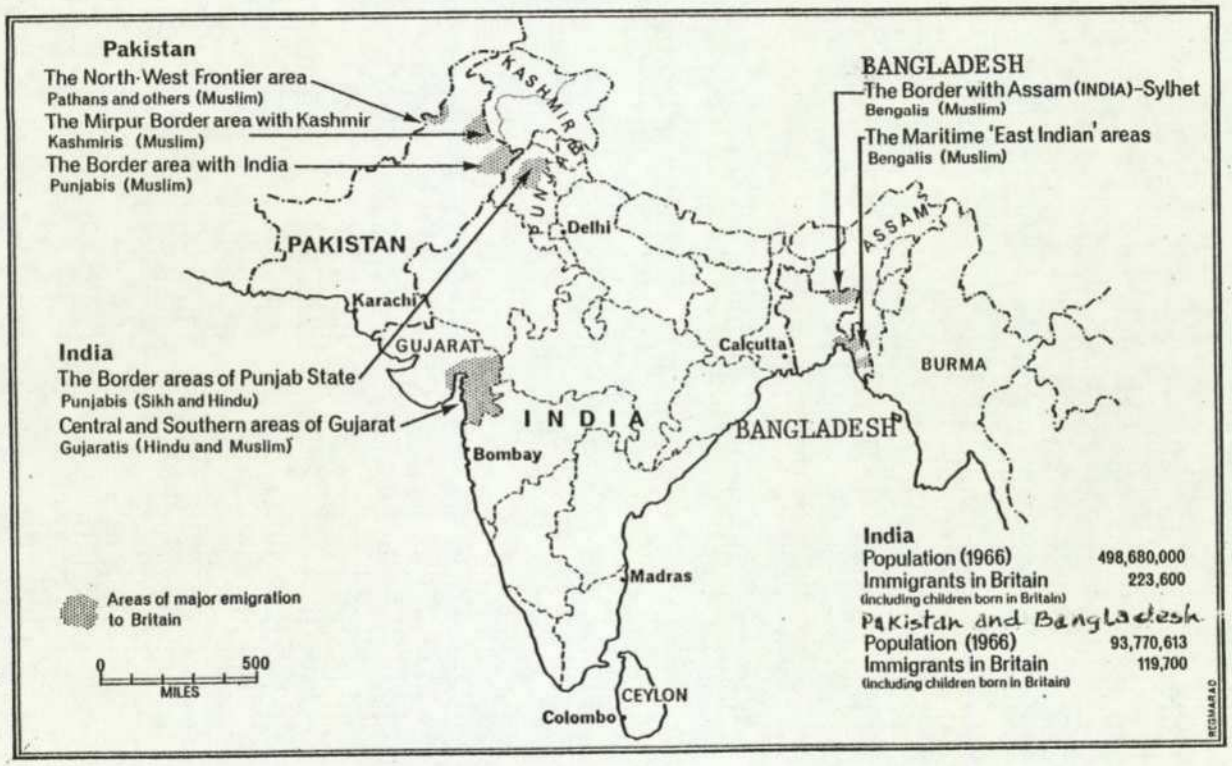
Acceptances for settlement, Indian Sub- Continent 1973-76.

	INDIA			PAKISTAN			BANGLADESH			
Year	(a) Acceptance on arrival	(b) On removal of time limit	(c) TOTAL	(d) Acceptance on arrival	(e) On removal of time limit	(f) TOTAL	(g) Acceptance on arrival	(h) On removal of time limit	(i) TOTAL	TOTAL FROM INDIAN SUB-CONTINENT
1973	5,056	1,184	6,240	3,386	252	3,638	1,689	64	1,753	11,631
1974	4,176	2,478	6,654	3,561	840	4,401	763	259	1,022	12,077
1975	6,537	3,658	10,195	6,183	1,541	7,724	2,978	298	3,276	21,195
1976	6,582	4,439	11,021	9,503	2,196	11,699	3,680	295	3,975	26,695

Source: Home Office Control of Immigration Statistics, 1973–76.

APPENDIX IV

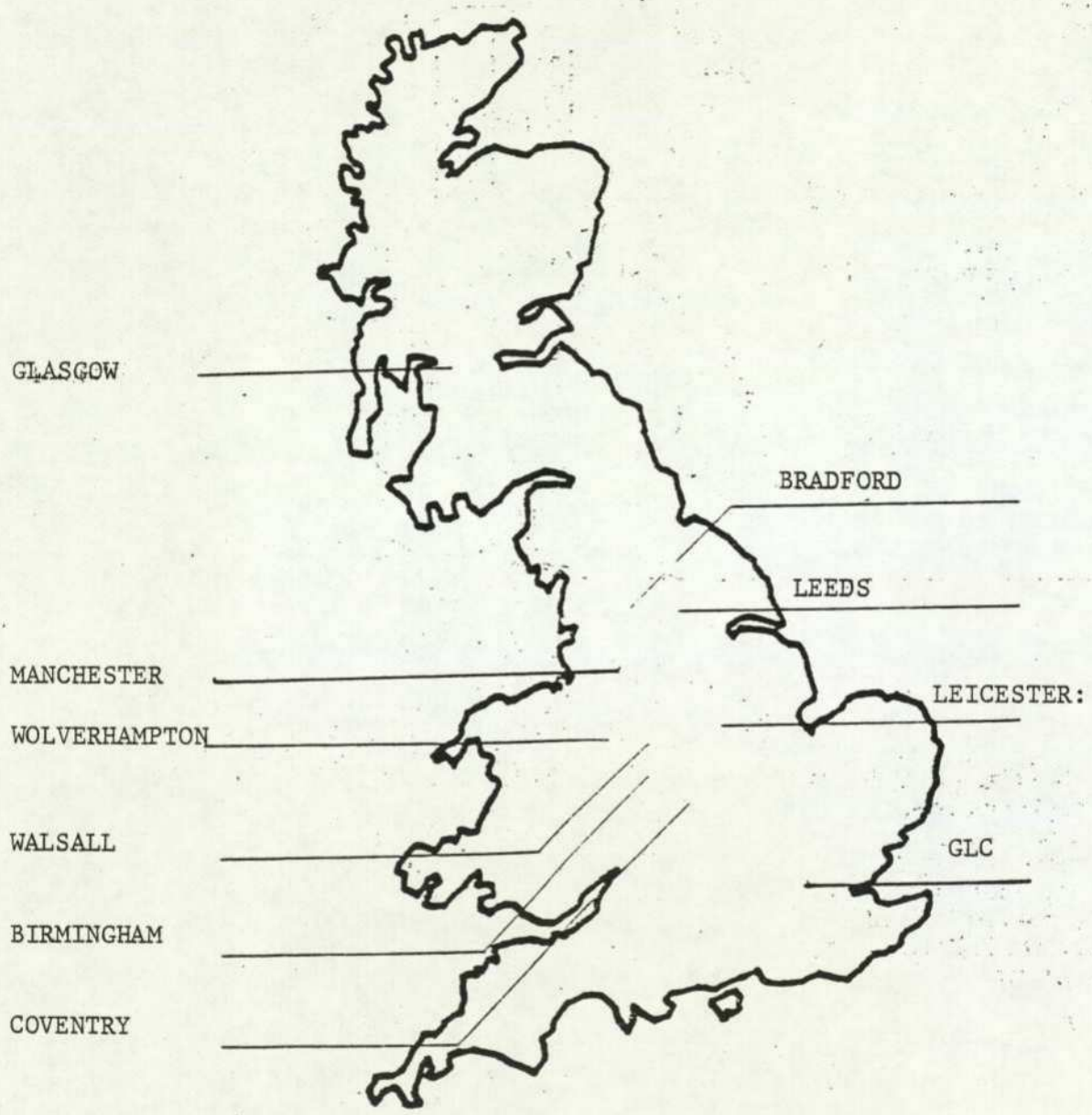
India, Pakistan and Bangladesh: showing the areas from which Indians, Pakistanis and Bangladeshis have emigrated to the United Kingdom.



Source: Rose, E.J.B. et al,(1969) 'Colour and Citizenship', London: Institute of Race Relations, Oxford University Press.

APPENDIX V

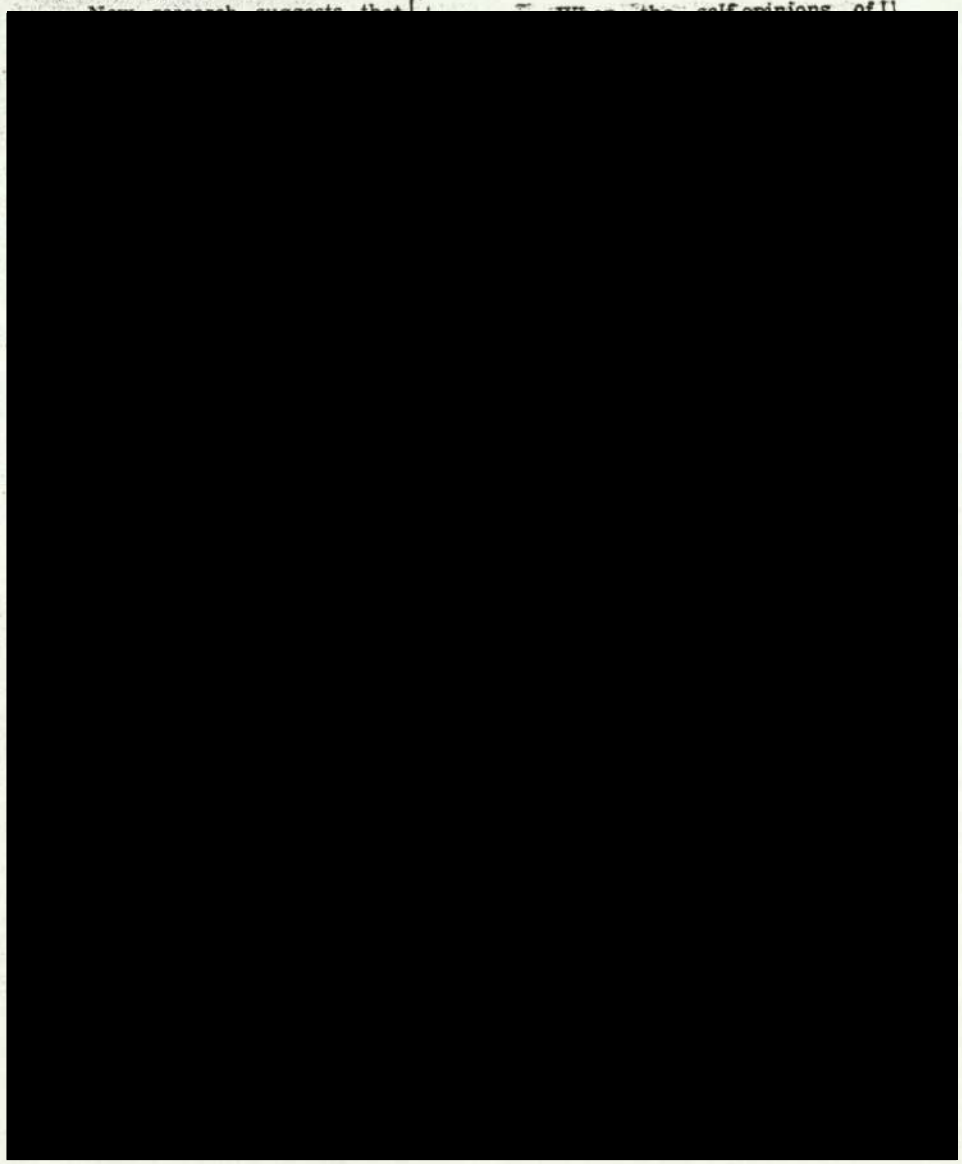
Locations of Indian, Pakistani and Bangladeshi settled in the U.K.



APPENDIX VI

Research highlights black pupils' problems

By Wendy Berliner



Source: Guardian, Monday, June 29, 1981

APPENDIX VII

RESULTS AND FINDINGS

The approach to the analyses of the observations is to be made on the basis of parametric models. Through the use of parametric models, predictions can be made about the performance of the children outside this study. Furthermore, standard computing packages are available for dealing with such models SPSS was chosen.

Analysis of variance (ANOVA) provides a method for testing the parametric assumptions.

For example, when dealing with the Total Adjustments of the children the model fitted is:

$$y_{ij} = \mu + \beta_i + \epsilon_{ij}$$

where y_{ij} is the Total Adjustment for j-th child in the i-th group and ϵ_{ij} 's are uncorrelated errors with $N(0,\sigma^2)$ distribution; group 1 English children, group 2 ≡ Bengali children.

The null hypothesis is $\beta_1 = \beta_2$ and this hypothesis is tested through the Analysis of Variance.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS LENGTH OF SCHOOLING					
EXPLAINED					
RESIDUAL					
TOTAL					

Similarly, parametric models are assumed and tested in all the following tables.

The primary interest of this study is the main effects although inference about the 2-way and higher-order interactions could also be made from the tables.

As stated previously (p.185), it will be the convention that a test will be held to be significant if the significance level $p<5\%$ and not significant if $p \geq 5\%$. If the significance level is zero up to 3 decimal places the test will be said to be significant at 0% level.

The total sample was divided into indigenous and Bangladeshi groups and the Bangladeshi group further subdivided according to length of schooling: therefore length of schooling as a differentiating factor is not applicable to indigenous children.

INDEX

I. ADJUSTMENT 336

II. NON-VERBAL VOCABULARY AND PROFICIENCY IN SPOKEN ENGLISH 441

III. PERSONALITY 462

IV. SCHOOL QUESTIONNAIRE FOR CHILDRE'S ATTITUDES SCALE 476

V. INTEREST 532

VI. ACADEMIC AND NON-ACADEMIC PERFORMANCE 581

VII. TOTAL BEHAVIOURAL SCALE (RUTTER) 609

I. ADJUSTMENT

1. TOTAL ADJUSTMENT

Between Group Comparison:

1A. Total indigenous and total Bangladeshi children:

TABLE 1A1

One-way analysis of variance for the factor length of schooling on total adjustment.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	2877.660	1	2877.660	10.130	0.002
LENGTH OF SCHOOLING	2877.660	1	2877.660	10.130	0.002
EXPLAINED	2877.660	1	2877.660	10.130	0.002
RESIDUAL	84652.510	298	284.069		
TOTAL	87530.170	299	292.743		

H_0 - Length of schooling does not affect total adjustment for all subjects.

H_A - Length of schooling affects total adjustment for all subjects.

Significance level P is 0.2%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 1A2

Multiple Classification Analysis

Grand mean = 84.19.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
TOTAL INDIGENOUS	100	4.38
TOTAL BANGLADESHI	200	-2.19

Between Group Comparison:

1B Indigenous boys and Bangladeshi boys:

TABLE 1B1

One-way analysis of variance for the factor length of schooling on total adjustment.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	334.469	1	334.469	1.182	0.278
LENGTH OF SCHOOLING	334.469	1	334.469	1.182	0.278
EXPLAINED	334.469	1	334.469	1.182	0.278
RESIDUAL	50371.175	178	282.984		
TOTAL	50705.644	179	283.272		

H_0 - Length of schooling does not affect total adjustment for all subjects.

H_A - Length of schooling affects total adjustment for all subjects.

Significance level P is 27.8%.

The null hypothesis thus cannot be rejected.

TABLE 1B2

Multiple Classification Analysis

Grand mean = 86.16.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
TOTAL INDIGENOUS	60	1.93
TOTAL BANGLADESHI	120	-0.96

Between Group Comparison:

1C. Indigenous girls and Bangladeshi girls:

TABLE 1C1

One-way analysis of variance for the factor length of schooling on total adjustment.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	3896.204	1	3896.204	14.740	0.000
LENGTH OF SCHOOLING	3896.204	1	3896.204	14.740	0.000
EXPLAINED	3896.204	1	3896.204	14.740	0.000
RESIDUAL	31189.788	118	264.320		
TOTAL	35085.992	119	294.840		

H_0 - Length of schooling does not affect total adjustment for all subjects.

H_A - Length of schooling affects total adjustment for all subjects.

Significance level P is 0.0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 1C2

Multiple Classification Analysis

Grand mean = 81.24.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	8.06
BANGLADESHI GIRLS	80	-4.03

Between Group Comparison:

1D. Total indigenous and Bangladeshi children (>2):

TABLE 1D1

One-way analysis of variance for the factor length of school on total adjustment.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	584.868	1	584.868	2.004	0.154
LENGTH OF SCHOOLING	584.868	1	584.868	2.004	0.154
EXPLAINED	584.868	1	584.868	2.004	0.154
RESIDUAL	57214.678	200	286.073		
TOTAL	57799.546	201	287.560		

H_0 - Length of schooling does not affect total adjustment for all subjects.

H_A - Length of schooling affects total adjustment for all subjects.

Significance level P is 15.4%.

The null hypothesis thus cannot be rejected.

TABLE 1D2

Multiple Classification Analysis

Grand mean = 86.85.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	1.72
BANGLADESHI CHILDREN	102	-1.68

1E. Within total Bangladeshi sample:

TABLE 1E1

3-way ANOVA with factor, length of schooling, sex and age on total adjustment.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	51240.695	6	8540.116	229.526	0.
VAR - AGE	45970.337	4	11492.584	308.877	0.
VAR - LENGTH OF SCHOOLING	2829.065	1	2829.065	76.035	-0.000
VAR - SEX	3805.925	1	3805.925	102.289	-0.000
2-WAY INTERACTIONS	475.418	9	52.824	1.420	0.182
AGE x LENGTH OF SCHOOLING	164.318	4	41.080	1.104	0.356
AGE x SEX	153.068	4	38.267	1.028	0.394
LENGTH OF SCHOOLING x SEX	135.721	1	135.721	3.648	0.058
3-WAY INTERACTIONS	6.520	4	1.630	0.044	0.996
AGE x LENGTH OF SCHOOLING x SEX	6.520	4	1.630	0.044	0.996
EXPLAINED	51722.634	19	2722.244	73.164	0.
RESIDUAL	6697.367	180	37.208		
TOTAL	58420.001	199	293.568		

Length of schooling:

H_0 - Length of schooling does not affect total adjustment for total Bangladeshi subjects.

H_A - Length of schooling affects total adjustment for total Bangladeshi subjects.

Significance level P is 0.0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect total adjustment for the total Bangladeshi subjects.

H_A - Sex affects total adjustment for the total Bangladeshi subjects.

Significance level P is 0.0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Age:

H_0 - Age does not affect total adjustment for total Bangladeshi subjects.

H_A - Age affects total adjustment for total Bangladeshi subjects.

Significance level P is 0.0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

1. All the main effects are significant.
2. None of the 2-way interaction is significant.
3. The effect of the 3-way interaction between age, length of schooling and sex on total adjustment for total Bangladeshi subjects is not statistically significant.

TABLE 1E2

Multiple classification analysis

Grand mean = 82.00.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	3.17
BANGLADESHI (<2)	98	-3.30
SEX		
MALE	120	3.19
FEMALE	80	-4.79
AGE		
7 YEARS OLD	25	-20.52
8 YEARS OLD	56	-15.48
9 YEARS OLD	50	4.20
10 YEARS OLD	52	16.23
11 YEARS OLD	17	19.18

Within Indigenous Group Comparison:

1F. Indigenous boys and indigenous girls:

TABLE 1F1

One-way analysis of variance for the factor sex on total adjustment.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	35.527	1	35.527	0.133	0.716
SEX	35.527	1	35.527	0.133	0.716
EXPLAINED	35.527	1	35.527	0.133	0.716
RESIDUAL	26196.984	98	267.316		
TOTAL	26232.510	99	264.975		

H_0 - Sex does not affect total adjustment for all subjects.

H_A - Sex affects total adjustment for all subjects.

Significance level P is 71.6%.

The null hypothesis thus cannot be rejected.

TABLE 1F2

Multiple Classification Analysis

Grand mean = 88.57.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	-0.49
INDIGENOUS GIRLS	40	0.73

2. TOTAL SOCIAL ADJUSTMENT

Between Group Comparison:

2A. Total indigenous and total Bangladeshi children:

TABLE 2A1

One-way analysis of variance for the factor length of schooling on total social adjustment.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.107	1	0.107	0.001	0.970
LENGTH OF SCHOOLING	0.107	1	0.107	0.001	0.970
EXPLAINED	0.107	1	0.107	0.001	0.970
RESIDUAL	21758.490	298	73.015		
TOTAL	21758.596	299	72.771		

H_0 - Length of schooling does not affect total social adjustment for all subjects.

H_A - Length of schooling affects total social adjustment for all subjects.

Significance level P is 97%.

The null hypothesis thus cannot be rejected.

TABLE 2A2

Multiple Classification Analysis

Grand mean = 45.30.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	-0.03
BANGLADESHI CHILDREN	200	0.01

Between Group Comparison:

2B. Indigenous boys and Bangladeshi boys:

TABLE 2B1

One-way analysis of variance for the factor length of schooling on total social adjustment.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	83.136	1	83.136	1.157	0.283
LENGTH OF SCHOOLING	83.136	1	83.136	1.157	0.283
EXPLAINED	83.136	1	83.136	1.157	0.283
RESIDUAL	12787.725	178	71.841		
TOTAL	12870.861	179	71.904		

H_0 - Length of schooling does not affect total social adjustment for all subjects.

H_A - Length of schooling affects total social adjustment for all subjects.

Significance level P is 28.3%.

The null hypothesis thus cannot be rejected.

TABLE 2B2

Multiple Classification Analysis

Grand mean = 45.53.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	-0.96
BANGLADESHI BOYS	120	0.48

Between Group Comparison:

2C. Indigenous girls and Bangladeshi girls:

TABLE 2C1

One-way analysis of variance for the factor length of schooling on total social adjustment.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	113.438	1	113.438	1.530	0.219
LENGTH OF SCHOOLING	113.438	1	113.438	1.530	0.219
EXPLAINED	113.438	1	113.438	1.530	0.219
RESIDUAL	8750.262	118	74.155		
TOTAL	8863.700	119	74.485		

H_0 - Length of schooling does not affect total social adjustment for all subjects.

H_A - Length of schooling affects total social adjustment for all subjects.

Significance level P is 21.9%.

The null hypothesis thus cannot be rejected.

TABLE 2C2

Multiple Classification Analysis

Grand mean = 44.95.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	1.38
BANGLADESHI GIRLS	80	-0.69

Between Group Comparison:

2D. Total indigenous and Bangladeshi children (>2):

TABLE 2D1

One-way analysis of variance for the factor length of schooling on total social adjustment.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	77.617	1	77.617	1.085	0.299
LENGTH OF SCHOOLING	77.617	1	77.617	1.085	0.299
EXPLAINED	77.617	1	77.617	1.085	0.299
RESIDUAL	14303.200	200	71.516		
TOTAL	14380.817	201	71.546		

H_0 - Length of schooling does not affect total social adjustment for all subjects.

H_A - Length of schooling affects total social adjustment for all subjects.

Significance level P is 29.9%.

The null hypothesis thus cannot be rejected.

TABLE 2D2

Multiple Classification Analysis

Grand mean = 45.90.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	-0.63
BANGLADESHI CHILDREN	102	0.61

2E. Within total Bangladeshi samples:

TABLE 2E1

3-way ANOVA with factor, length of schooling, sex and age on total social adjustment.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	13776.833	6	2296.139	258.966	0.
VAR - AGE	13320.341	4	3330.085	375.578	0.
VAR - LENGTH OF SCHOOLING	450.767	1	450.767	50.839	-0.000
VAR - SEX	266.741	1	266.741	30.084	0.000
2-WAY INTERACTIONS	157.974	9	17.553	1.980	0.044
AGE x LENGTH OF SCHOOLING	54.440	4	13.610	1.535	0.194
AGE x SEX	39.455	4	9.864	1.112	0.352
LENGTH OF SCHOOLING x SEX	66.890	1	66.890	7.544	0.007
3-WAY INTERACTIONS	9.994	4	2.498	0.282	0.890
AGE x LENGTH OF SCHOOLING x SEX	9.994	4	2.498	0.282	0.890
EXPLAINED	13944.801	19	733.937	82.776	0.
RESIDUAL	1595.979	180	8.867		
TOTAL	15540.780	199	78.094		

Length of schooling:

H_0 - Length of schooling does not affect total social adjustment for total Bangladeshi subjects.

H_A - Length of schooling affects total social adjustment for total Bangladeshi subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect total social adjustment for the total Bangladeshi subjects.

H_A - Sex affects total social adjustment for the total Bangladeshi subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Age:

H_0 - Age does not affect total social adjustment for the total Bangladeshi subjects.

H_A - Age affects total social adjustment for the total Bangladeshi subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

1. All the main effects are significant.
2. Among the two-way interaction only Length of Schooling and Sex is significant at 0.7% level.
3. The effect of 3-way interaction between Age, Length of Schooling and Sex on Social Adjustment for total Bangladeshi subjects is not statistically significant.

TABLE 2E2

Multiple Classification Analysis

Grand mean = 45.31.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	1.20
BANGLADESHI (<2)	98	-1.25
SEX		
MALE	120	0.70
FEMALE	80	-1.05
AGE		
7 YEARS OLD	25	-10.79
8 YEARS OLD	56	- 8.99
9 YEARS OLD	50	3.83
10 YEARS OLD	52	8.25
11 YEARS OLD	17	8.98

Within Indigenous Group Comparison:

2F. Indigenous boys and indigenous girls:

TABLE 2F1

One-way analysis of variance for the factor sex on total social adjustment.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	74.202	1	74.202	1.184	0.279
SEX	74.202	1	74.202	1.184	0.279
EXPLAINED	74.202	1	74.202	1.184	0.279
RESIDUAL	6143.508	98	62.689		
TOTAL	6217.710	99	62.805		

H_0 - Sex does not affect total social adjustment for all subjects.

H_A - Sex affects total social adjustment for all subjects.

Significance level P is 27.9%.

The null hypothesis thus cannot be rejected.

TABLE 2F2

Multiple Classification Analysis

Grand mean = 45.27.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	-0.70
INDIGENOUS GIRLS	40	1.05

3. TOTAL PERSONAL ADJUSTMENT

Between Group Comparison:

3A. Total indigenous and total Bangladeshi children:

TABLE 3A1

One-way analysis of variance for the factor length of schooling on total personal adjustment.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	2912.807	1	2912.807	38.751	0.
LENGTH OF SCHOOLING	2912.807	1	2912.807	38.751	0.
EXPLAINED	2912.807	1	2912.807	38.751	0.
RESIDUAL	22399.782	298	75.167		
TOTAL	25312.588	299	84.657		

H_0 - Length of schooling does not affect total personal adjustment for all subjects.

H_A - Length of schooling affects total personal adjustment for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 3A2

Multiple Classification Analysis

Grand mean = 38.89.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	4.41
BANGLADESHI CHILDREN	200	-2.20

Between Group Comparison:

3B. Indigenous boys and Bangladeshi boys:

TABLE 3B1

One-way analysis of variance for the factor length of schooling on total personal adjustment.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	751.111	1	751.111	10.293	0.002
LENGTH OF SCHOOLING	751.111	1	751.111	10.293	0.002
EXPLAINED	751.111	1	751.111	10.293	0.002
RESIDUAL	12988.950	178	72.972		
TOTAL	13740.061	179	76.760		

H_0 - Length of schooling does not affect total personal adjustment for all subjects.

H_A - Length of schooling affects total personal adjustment for all subjects.

Significance level P is 0.2%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 3B2

Multiple Classification Analysis

Grand mean = 40.63.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	2.89
BANGLADESHI GIRLS	120	-1.44

Between Group Comparison:

3C. Indigenous girls and Bangladeshi girls:

TABLE 3C1

One-way analysis of variance for the factor length of schooling on total personal adjustment.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	2680.017	1	2680.017	41.949	0.
LENGTH OF SCHOOLING	2680.017	1	2680.017	41.949	0.
EXPLAINED	2680.017	1	2680.017	41.949	0.
RESIDUAL	7538.775	118	63.888		
TOTAL	10218.792	119	85.872		

H_0 - Length of schooling does not affect total personal adjustment for all subjects.

H_A - Length of schooling affects total personal adjustment for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 3C2

Multiple Classification Analysis

Grand mean = 36.29.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	6.68
BANGLADESHI GIRLS	80	-3.34

Between Group Comparison:

3D. Total indigenous and Bangladeshi children (>2):

TABLE 3D1

One-way analysis of variance for the factor length of schooling on total personal adjustment.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	1088.609	1	1088.609	14.121	0.000
LENGTH OF SCHOOLING	1088.609	1	1088.609	14.121	0.000
EXPLAINED	1088.609	1	1088.609	14.121	0.000
RESIDUAL	15417.990	200	77.090		
TOTAL	16506.599	201	82.122		

H_0 - Length of schooling does not affect total personal adjustment for all subjects.

H_A - Length of schooling affects total personal adjustment for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 3D2

Multiple Classification Analysis

Grand mean = 40.96.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	2.34
BANGLADESHI CHILDREN	102	-2.30

3E. Within total Bangladeshi samples:

TABLE 3E1

3-way ANOVA with factor, length of schooling, sex and age on total personal adjustment.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	12815.970	6	2135.995	184.650	0.
VAR - AGE	10083.977	4	2520.994	217.932	0.
VAR - LENGTH OF SCHOOLING	1021.293	1	1021.293	88.288	-0.000
VAR - SEX	2057.526	1	2057.526	177.867	-0.000
2-WAY INTERACTIONS	185.051	9	20.561	1.777	0.075
AGE - LENGTH OF SCHOOLING	48.340	4	12.085	1.045	0.386
AGE x SEX	124.374	4	31.093	2.688	0.033
LENGTH OF SCHOOLING x SEX	12.050	1	12.050	1.042	0.309
3-WAY INTERACTIONS	3.558	4	0.889	0.077	0.989
AGE x LENGTH OF SCHOOLING x SEX	3.558	4	0.889	0.077	0.989
EXPLAINED	13004.579	19	684.452	59.169	0.
RESIDUAL	2082.201	180	11.568		
TOTAL	15086.780	199	75.813		

Length of schooling:

H_0 - Length of schooling does not affect total personal adjustment for all subjects.

H_A - Length of schooling affects total personal adjustment for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect total personal adjustment for total Bangladeshi subjects.

H_A - Sex affects total total personal adjustment for total Bangladeshi subjects. Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Age:

H_0 - Age does not affect total adjustment for the total Bangladeshi subjects.

H_A - Age affects total adjustment for the total Bangladeshi subjects. Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

1. All the main effects are significant.
2. Among the two-way interaction only age and sex is significant at 3.3% level.
3. The effect of 3-way interaction between age, length of schooling and sex on personal adjustment for total Bangladeshi subjects is not statistically significant.

TABLE 3E2

Multiple Classification Analysis

Grand mean = 36.69.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	1.97
BANGLADESHI (<2)	98	-2.05
SEX		
MALE	120	2.49
FEMALE	80	-3.74
AGE		
7 YEARS OLD	25	-9.73
8 YEARS OLD	56	-6.49
9 YEARS OLD	50	0.37
10 YEARS OLD	52	7.98
11 YEARS OLD	17	10.19

Within Indigenous Group Comparison:

3F. Indigenous boys and indigenous girls:

TABLE 3F1

One-way analysis of variance for the factor sex on total personal adjustment.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	7.042	1	7.042	0.094	0.759
SEX	7.042	1	7.042	0.094	0.759
EXPLAINED	7.042	1	7.042	0.094	0.759
RESIDUAL	7305.958	98	74.551		
TOTAL	7313.000	99	73.869		

H_0 - Sex does not affect total personal adjustment for all subjects.

H_A - Sex affects total personal adjustment for all subjects.

Significance level P is 75.9%.

The null hypothesis thus cannot be rejected.

TABLE 3F2

Multiple Classification Analysis

Grand mean = 43.30.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	0.22
INDIGENOUS GIRLS	40	-0.33

4. SELF-RELIANCE

Between Group Comparison:

4A. Total indigenous and total Bangladeshi children:

TABLE 4A1

One-way analysis of variance for the factor length of schooling on self-reliance.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	58.907	1	58.907	58.429	0.
LENGTH OF SCHOOLING	58.907	1	58.907	58.429	0.
EXPLAINED	58.907	1	58.907	58.429	0.
RESIDUAL	481.880	298	1.617		
TOTAL	540.787	299	1.809		

H_0 - Length of schooling does not affect self-reliance for all subjects.

H_A - Length of schooling affects self-reliance for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 4A2

Multiple Classification Analysis

Grand mean = 5.47.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.63
BANGLADESHI CHILDREN	200	-0.31

Between Group Comparison:

4B. Indigenous boys and Bangladeshi boys:

TABLE 4B1

One-way analysis of variance for the factor length of schooling on self-reliance.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	7.803	1	7.803	5.331	0.022
	7.803	1	7.803	5.331	0.022
EXPLAINED	7.803	1	7.803	5.331	0.022
RESIDUAL	260.508	178	1.464		
TOTAL	268.311	179	1.499		

H_0 - Length of schooling does not affect self-reliance for all subjects.

H_A - Length of schooling affects self-reliance for all subjects.

Significance level P is 2.2 %.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 4B2

Multiple Classification Analysis

Grand mean = 5.62.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	0.29
BANGLADESHI BOYS	120	-0.15

Between Group Comparison:

4C. Indigenous girls and Bangladeshi girls:

TABLE 4C1

One-way analysis of variance for the factor length of schooling on self-reliance.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	75.938	1	75.938	48.030	-0.000
LENGTH OF SCHOOLING	75.938	1	75.938	48.030	-0.000
EXPLAINED	75.938	1	75.938	48.030	-0.000
RESIDUAL	186.562	118	1.581		
TOTAL	262.500	119	2.206		

H_0 - Length of schooling does not affect self-reliance for all subjects.

H_A - Length of schooling affects self-reliance for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 4C2

Multiple Classification Analysis

Grand mean = 5.25.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	1.13
BANGLADESHI GIRLS	80	-0.56

Between Group Comparison:

4D. Total indigenous and Bangladeshi children (>2):

TABLE 4D1

One-way analysis of variance for the factor length of schooling on self-reliance.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	17.589	1	17.589	10.580	0.001
LENGTH OF SCHOOLING	17.589	1	17.589	10.580	0.001
EXPLAINED	17.589	1	17.589	10.580	0.001
RESIDUAL	332.490	200	1.662		
TOTAL	350.079	201	1.742		

H_O - Length of schooling does not affect self-reliance for all subjects.

H_A - Length of schooling affects self-reliance for all subjects.

Significance level P is 0.1%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 4D2

Multiple Classification Analysis

Grand mean = 5.80.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.30
BANGLADESHI CHILDREN	102	-0.29

4E. Within total Bangladeshi samples:

TABLE 4E1

3-way ANOVA with factor, length of schooling, sex and age on self-reliance.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	140.139	6	23.356	29.433	0.
VAR - AGE	83.516	4	20.879	26.311	0.
VAR - LENGTH OF SCHOOLING	29.991	1	29.991	37.793	0.
VAR - SEX	31.368	1	31.368	39.528	0.
2-WAY INTERACTIONS	9.106	9	1.012	1.275	0.253
AGE x LENGTH OF SCHOOLING	4.661	4	1.165	1.469	0.214
AGE x SEX	3.066	4	0.766	0.966	0.428
LENGTH OF SCHOOLING x SEX	1.023	1	1.023	1.289	0.258
3-WAY INTERACTIONS	2.795	4	0.699	0.880	0.477
AGE x LENGTH OF SCHOOLING x SEX	2.795	4	0.699	0.880	0.477
EXPLAINED	152.040	19	8.002	10.084	0.000
RESIDUAL	142.840	180	0.794		
TOTAL	294.880	199	1.482		

Length of schooling:

H_0 - Length of schooling does not affect self-reliance for total Bangladeshi subjects.

H_A - Length of schooling affects self-reliance for total Bangladeshi subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect self-reliance for the total Bangladeshi subjects.

H_A - Sex affects self-reliance for the total Bangladeshi subjects. Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Age:

H_0 - Age does not affect self-reliance for the total Bangladeshi subjects.

H_A - Age affects self-reliance for the total Bangladeshi subjects. Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

1. All the main effects are significant.
2. None of the 2-way interaction is significant.
3. The effect of 3-way interaction between age, length of schooling and sex on self-reliance for total Bangladeshi sub jects is not statistically significant.

TABLE 4E2

Multiple Classification Analysis

Grand mean = 5.16.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	0.35
BANGLADESHI (<2)	98	-0.36
SEX		
MALE	120	0.31
FEMALE	80	-0.47
AGE		
7 YEARS OLD	25	-1.04
8 YEARS OLD	56	-0.36
9 YEARS OLD	50	-0.16
10 YEARS OLD	52	0.67
11 YEARS OLD	17	1.13

Within Indigenous Group Comparison:

4F. Indigenous boys and indigenous girls:

TABLE 4F1

One-way analysis of variance for the factor sex on self-reliance.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	5.042	1	5.042	2.715	0.103
SEX	5.042	1	5.042	2.715	0.103
EXPLAINED	5.042	1	5.042	2.715	0.103
RESIDUAL	181.958	98	1.857		
TOTAL	187.000	99	1.889		

H_0 - Sex does not affect self-reliance for all subjects.

H_A - Sex affects self-reliance for all subjects.

Significance level P is 10.3%.

The null hypothesis thus cannot be rejected.

TABLE 4F2

Multiple Classification Analysis

Grand mean = 6.10.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	-0.18
INDIGENOUS GIRLS	40	0.27

5. SENSE OF PERSONAL WORTH

Between Group Comparison:

5A. Total indigenous and total Bangladeshi children:

TABLE 5A1

One-way analysis of variance for the factor length of schooling on sense of personal worth.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	106.682	1	106.682	51.663	0.
LENGTH OF SCHOOLING	106.682	1	106.682	51.663	0.
EXPLAINED	106.682	1	106.682	51.663	0.
RESIDUAL	615.355	298	2.065		
TOTAL	722.037	299	2.415		

H_0 - Length of schooling does not affect total sense of personal worth for all subjects.

H_A - Length of schooling affects sense of personal worth for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 5A1

Multiple Classification Analysis

Grand mean = 6.28.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.84
BANGLADESHI CHILDREN	200	-0.42

Between Group Comparison:

5B. Indigenous boys and Bangladeshi boys:

TABLE 5B1

One-way analysis of variance for the factor length of schooling on sense of personal worth.

SOURCE OF VARIANCE	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	24.544	1	24.544	13.480	0.000
LENGTH OF SCHOOLING	24.544	1	24.544	13.480	0.000
EXPLAINED	24.544	1	24.544	13.480	0.000
RESIDUAL	324.100	178	1.821		
TOTAL	348.644	179	1.948		

H_0 - Length of schooling does not affect sense of personal worth for all subjects.

H_A - Length of schooling affects sense of personal worth for all subjects.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 5B2

Multiple Classification Analysis

Grand mean = 6.54.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	0.52
BANGLADESHI BOYS	120	-0.26

Between Group Comparison:

5C. Indigenous girls and Bangladeshi girls:

TABLE 5C1

One-way analysis of variance for the factor length of schooling on sense of personal worth.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	105.337	1	105.337	52.716	-0.000
LENGTH OF SCHOOLING	105.337	1	105.337	52.716	-0.000
EXPLAINED	105.337	1	105.337	52.716	-0.000
RESIDUAL	235.788	118	1.998		
TOTAL	341.125	119	2.867		

H_0 - Length of schooling does not affect sense of personal worth for all subjects.

H_A - Length of schooling affects sense of personal worth for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 5C2

Multiple Classification Analysis

Grand mean = 5.88.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	1.32
BANGLADESHI GIRLS	80	-0.66

Between Group Comparison:

5D. Indigenous and Bangladeshi children (>2):

TABLE 5D1

One-way analysis of variance for the factor length of schooling on sense of personal worth.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	34.442	1	34.442	15.454	0.000
LENGTH OF SCHOOLING	34.442	1	34.442	15.454	0.000
EXPLAINED	34.442	1	34.442	15.454	0.000
RESIDUAL	445.736	200	2.229		
TOTAL	480.178	201	2.389		

H_0 - Length of schooling does not affect sense of personal worth for all subjects.

H_A - Length of schooling affects sense of personal worth for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 5D2

Multiple Classification Analysis

Grand mean = 6.70

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.42
BANGLADESHI CHILDREN	102	-0.41

5E. Within total Bangladeshi samples:

TABLE 5E1

3-way ANOVA with factor, length of schooling, sex and age on sense of personal worth.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	251.625	6	41.938	53.460	0.000
VAR - AGE	154.084	4	38.521	49.104	0.000
VAR - LENGTH OF SCHOOLING	46.468	1	46.468	59.235	-0.000
VAR - SEX	59.084	1	59.084	75.317	-0.000
2-WAY INTERACTIONS	11.810	9	1.312	1.673	0.098
AGE x LENGTH OF SCHOOLING	7.754	4	1.938	2.471	0.046
AGE x SEX	3.854	4	0.964	1.228	0.300
LENGTH OF SCHOOLING x SEX	0.741	1	0.741	0.945	0.332
3-WAY INTERACTIONS	2.155	4	0.539	0.687	0.602
AGE x LENGTH OF SCHOOLING x SEX	2.155	4	0.539	0.687	0.602
EXPLAINED	265.590	19	13.978	17.819	0.000
RESIDUAL	141.205	180	0.784		
TOTAL	406.795	199	2.044		

Length of schooling:

H_0 - Length of schooling does not affect sense of personal worth for total Brngladeshi subjects.

H_A - Length of schooling affects sense of personal worth for total Bangladeshi subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect sense of personal worth for the total Bangladeshi subjects.

H_A - Sex affects sense of personal worth for the total Bangladeshi subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Age:

H_0 - Age does not affect sense of personal worth for the total Bangladeshi subjects.

H_A - Age affects sense of personal worth for the total Bangladeshi subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

1. All the main effects are significant.
2. Among the two-way interaction only age and length of schooling is significant at 4.6% level.
3. The effect of 3-way interaction between age, length of schooling and sex on personal worth for total Bangladeshi subjects is not statistically significant.

TABLE 5E2

Multiple Classification Analysis

Grand mean = 5.86.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	0.44
BANGLADESHI (<2)	98	-0.46
SEX		
MALE	120	0.43
FEMALE	80	-0.64
AGE		
7 YEARS OLD	25	-1.22
8 YEARS OLD	56	-0.69
9 YEARS OLD	50	-0.12
10 YEARS OLD	52	0.97
11 YEARS OLD	17	1.44

Within Indigenous Group Comparison:

5F. Indigenous boys and indigenous girls:

TABLE 5F1

One-way analysis of variance for the factor sex on sense of personal worth.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.427	1	0.427	0.201	0.655
SEX	0.427	1	0.427	0.201	0.655
EXPLAINED	0.427	1	0.427	0.201	0.655
RESIDUAL	208.133	98	2.124		
TOTAL	208.560	99	2.107		

H_0 - Sex does not affect sense of personal worth for all subjects.

H_A - Sex affects sense of personal worth for all subjects.

Significance level P is 65.6%.

The null hypothesis thus cannot be rejected.

TABLE 5F2

Multiple Classification Analysis

Grand mean = 7.12.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	-0.05
INDIGENOUS GIRLS	40	0.08

6. SENSE OF PERSONAL FREEDOM

Between Group Comparison:

6A. Total indigenous and total Bangladeshi children:

TABLE 6A1

One-way analysis of variance for the factor length of schooling on sense of personal freedom.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	212.415	1	212.415	69.668	0.
LENGTH OF SCHOOLING	212.415	1	212.415	69.668	0.
EXPLAINED	212.415	1	212.415	69.668	0.
RESIDUAL	908.585	298	3.049		
TOTAL	1121.000	299	3.749		

H_0 - Length of schooling does not affect sense of personal freedom for all subjects.

H_A - Length of schooling affects sense of personal freedom for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 6A2

Multiple Classification Analysis

Grand mean = 7.10.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	1.19
BANGLADESHI CHILDREN	200	-0.60

Between Group Comparison:

6B. Indigenous boys and Bangladeshi boys:

TABLE 6B1

One-way analysis of variance for the factor length of schooling on sense of personal freedom.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	93.025	1	93.025	31.374	0.000
LENGTH OF SCHOOLING	93.025	1	93 025	31.374	0.000
EXPLAINED	93.025	1	93.025	31.374	0.000
RESIDUAL	527.775	178	2.965		
TOTAL	620.800	179	3.468		

H_0 - Length of schooling does not affect sense of personal freedom for all subjects.

H_A - Length of schooling affects sense of personal freedom for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 6B2

Multiple Classification Analysis

Grand mean = 7.53.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	1.02
BANGLADESHI BOYS	120	-0.51

Between Group Comparison:

6C. Indigenous boys and Bangladeshi boys:

TABLE 6C1

One-way analysis of variance for the factor length of schooling on sense of personal freedom.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	126.150	1	126.150	51.410	-0.000
LENGTH OF SCHOOLING	126.150	1	126.150	51.410	-0.000
EXPLAINED	126.150	1	126.150	51.410	-0.000
RESIDUAL	289.550	118	2.454		
TOTAL	415.700	119	3.493		

H_0 - Length of schooling does not affect sense of personal freedom for all subjects.

H_A - Length of schooling affects sense of personal freedom for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 6C2

Multiple Classification Analysis

Grand mean = 7.53.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	40	1.45
BANGLADESHI BOYS	80	-0.72

Between Group Comparison:

6D. Total indigenous and Bangladeshi children (>2):

TABLE 6D1

One-way analysis of variance for the factor length of schooling on sense of personal freedom.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	118.993	1	118.993	39.568	0.
LENGTH OF SCHOOLING	118.993	1	118.993	39.568	0.
EXPLAINED	118.993	1	118.993	39.568	0.
RESIDUAL	601.463	200	3.007		
TOTAL	720.455	201	3.584		

H_0 - Length of schooling does not affect sense of personal freedom for all subjects.

H_A - Length of schooling affects sense of personal freedom for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 6D2

Multiple Classification Analysis

Grand mean = 7.51.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.78
BANGLADESHI CHILDREN	102	-0.76

6E. Within total Bangladeshi samples:

TABLE 6E1

3-way ANOVA with factor, length of schooling, sex and age on sense of personal freedom.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	462.275	6	77.046	83.023	0.
VAR - AGE	366.507	4	91.627	98.735	0.
VAR - LENGTH OF SCHOOLING	19.122	1	19.122	20.605	0.000
VAR - SEX	89.606	1	89.606	96.558	-0.000
2-WAY INTERACTIONS	11.997	9	1.333	1.436	0.175
AGE x LENGTH OF SCHOOLING	0.440	4	0.110	0.119	0.976
AGE x SEX	7.903	4	1.976	2.129	0.079
LENGTH OF SCHOOLING x SEX	3.446	1	3.466	3.735	0.055
3-WAY INTERACTIONS	8.682	4	2.171	2.339	0.057
AGE x LENGTH OF SCHOOLING x SEX	8.682	4	2.171	2.339	0.057
EXPLAINED	482.955	19	25.419	27.391	0.
RESIDUAL	167.040	180	0.928		
TOTAL	649.995	199	3.266		

Length of schooling:

H_0 - Length of schooling does not affect sense of personal freedom for all Bangladeshi subjects.

H_A - Length of schooling affects sense of personal freedom for all Bangladeshi subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect sense of personal freedom for the total Bangladeshi subjects.

H_A - Sex affects sense of personal freedom for the total Bangladeshi subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Age:

H_0 - Age does not affect sense of personal freedom for the total Bangladeshi subjects.

H_A - Age affects sense of personal freedom for the total Bangladeshi subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

1. All the main effects are significant.
2. None of the 2-way interaction is significant.
3. The effect of 3-way interaction between age, length of schooling and sex on sense of personal freedom for total Bangladeshi subjects is not statistically significant.

TABLE 6E2

Multiple Classification Analysis

Grand mean = 6.50.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	0.25
BANGLADESHI (<2)	98	-0.26
SEX		
MALE	120	0.52
FEMALE	80	-0.78
AGE		
7 YEARS OLD	25	-1.87
8 YEARS OLD	56	-1.33
9 YEARS OLD	50	0.27
10 YEARS OLD	52	1.53
11 YEARS OLD	17	1.61

Within Indigenous Group Comparison:

6F. Indigenous boys and indigenous girls:

TABLE 6F1

One-way analysis of variance for the factor sex on sense of personal freedom.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	10.140	1	10.140	4.000	0.048
SEX	10.140	1	10.140	4.000	0.048
EXPLAINED	10.140	1	10.140	4.000	0.048
RESIDUAL	248.450	98	2.535		
TOTAL	258.590	99	2.612		

H_0 - Sex does not affect sense of personal freedom for all subjects.

H_A - Sex affects sense of personal freedom for all subjects.

Significance level P is 4.8%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 6F2

Multiple Classification Analysis

Grand mean = 8.29.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	0.26
INDIGENOUS GIRLS	40	-0.39

7. FEELING OF BELONGING

Between Group Comparison:

7A. Total indigenous and total Bangladeshi children:

TABLE 7A1

One-way analysis of variance for the factor length of schooling on feeling of belonging.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	44.282	1	44.282	12.406	0.000
LENGTH OF SCHOOLING	44.282	1	44.282	12.406	0.000
EXPLAINED	44.282	1	44.282	12.406	0.000
RESIDUAL	1063.705	298	3.569		
TOTAL	1107.987	299	3.706		

H_0 - Length of schooling does not affect feeling of belonging for all subjects.

H_A - Length of schooling affects feeling of belonging for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 7A2

Multiple Classification Analysis

Grand mean = 7.33.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.54
BANGLADESHI CHILDREN	200	-0.27

Between Group Comparison:

7B. Indigenous boys and Bangladeshi boys:

TABLE 7B1

One-way analysis of variance for the factor length of schooling on feeling of belonging.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	12.469	1	12.469	3.543	0.061
LENGTH OF SCHOOLING	12.469	1	12.469	3.543	0.061
EXPLAINED	12.469	1	12.469	3.543	0.061
RESIDUAL	626.525	178	3.520		
TOTAL	638.994	179	3.570		

H_0 - Length of schooling does not affect feeling of belonging for all subjects.

H_A - Length of schooling affects feeling of belonging for all subjects.

Significance level P is 6.1%.

The null hypothesis thus cannot be rejected.

TABLE 7B2

Multiple Classification Analysis

Grand mean = 7.49.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	0.37
BANGLADESHI BOYS	120	-0.19

Between Group Comparison:

7C. Indigenous girls and Bangladeshi girls:

TABLE 7C1

One-way analysis of variance for the factor length of schooling on feeling of belonging.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	38.400	1	38.400	10.842	0.001
LENGTH OF SCHOOLING	38.400	1	38.400	10.842	0.001
EXPLAINED	38.400	1	38.400	10.842	0.001
RESIDUAL	417.925	118	3.542		
TOTAL	456.325	119	3.835		

H_0 - Length of schooling does not affect feeling of belonging for all subjects.

H_A - Length of schooling affects feeling of belonging for all subjects.

Significance level P is 0.1%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 7C2

Multiple Classification Analysis

Grand mean = 7.07.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	0.80
BANGLADESHI GIRLS	80	-0.40

Between Group Comparison:

7D. Total indigenous and Bangladeshi children (>2):

TABLE 7D1

One-way analysis of variance for the factor length of schooling on feeling of belonging.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	15.079	1	15.079	4.056	0.045
LENGTH OF SCHOOLING	15.079	1	15.079	4.056	0.045
EXPLAINED	15.079	1	15.079	4.056	0.045
RESIDUAL	743.634	200	3.718		
TOTAL	758.713	201	3.775		

H_0 - Length of schooling does not affect feeling of belonging for all subjects.

H_A - Length of schooling affects feeling of belonging for all subjects.

Significance level P is 4.5%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 7D2

Multiple Classification Analysis

Grand mean = 7.59.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.28
BANGLADESHI CHILDREN	102	-0.27

7E. Within total Bangladeshi samples:

TABLE 7E1

3-way ANOVA with factor, length of schooling, sex and age on feeling of belonging.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	555.519	6	92.587	125.007	0.
VAR - AGE	520.402	4	130.100	175.657	0.
VAR - LENGTH OF SCHOOLING	21.448	1	21.448	28.958	0.000
VAR - SEX	26.112	1	26.112	35.255	0.000
2-WAY INTERACTIONS	8.422	9	0.936	1.263	0.260
AGE x LENGTH OF SCHOOLING	3.453	4	0.863	1.165	0.328
AGE x SEX	5.268	4	1.317	1.778	0.135
LENGTH OF SCHOOLING x SEX	0.000	1	0.000	0.000	0.994
3-WAY INTERACTIONS	7.137	4	1.784	2.409	0.051
AGE x LENGTH OF SCHOOLING x SEX	7.137	4	1.784	2.409	0.051
EXPLAINED	571.078	19	30.057	40.582	0.
RESIDUAL	133.317	180	0.741		
TOTAL	704.395	199	3.540		

Length of schooling:

H_0 - Length of schooling does not affect feeling of belonging for all subjects.

H_A - Length of schooling affects feeling of belonging for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect feeling of belonging for all subjects.

H_A - Sex affects feeling of belonging for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Age:

H_0 - Age does not affect feeling of belonging for all subjects.

H_A - Age affects feeling of belonging for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

1. All the main effects are significant.
2. None of the 2-way interaction is significant.
3. The effect of 3-way interaction between age, length of schooling and sex on feeling of belonging for total Bangladeshi subjects is not statistically significant.

TABLE 7E2

Multiple Classification Analysis

Grand mean = 7.06.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	0.27
BANGLADESHI (<2)	98	-0.28
SEX		
MALE	120	0.25
FEMALE	80	-0.38
AGE		
7 YEARS OLD	25	-2.10
8 YEARS OLD	56	-1.75
9 YEARS OLD	50	0.65
10 YEARS OLD	52	1.73
11 YEARS OLD	17	1.77

Within Indigenous Group Comparison:

7F. Indigenous boys and Indigenous girls:

TABLE 7F1

One-way analysis of variance for the factor sex on feeling of belonging.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.002	1	0.002	0.000	0.983
SEX	0.002	1	0.002	0.000	0.983
EXPLAINED	0.002	1	0.002	0.000	0.983
RESIDUAL	359.308	98	3.666		
TOTAL	359.310	99	3.629		

H_0 - Sex does not affect feeling of belonging for all subjects.

H_A - Sex affects feeling of belonging for all subjects.

Significance level P is 98.3%.

The null hypothesis thus cannot be rejected.

TABLE 7F2

Multiple Classification Analysis

Grand mean = 7.87.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	-0.00
INDIGENOUS GIRLS	40	0.00

8. FREEDOM FROM WITHDRAWAL TENDENCIES

Between Group Comparison:

8A. Total indigenous and total Bangladeshi children:

TABLE 8A1

One-way analysis of variance for the factor length of schooling on freedom from withdrawal tendencies.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	18.727	1	18.727	6.314	0.013
LENGTH OF SCHOOLING	18.727	1	18.727	6.314	0.013
EXPLAINED	18.727	1	18.727	6.314	0.013
RESIDUAL	883.870	298	2.966		
TOTAL	902.597	299	3.019		

H_0 - Length of schooling does not affect freedom from withdrawal tendencies for all subjects.

H_A - Length of schooling affects freedom from withdrawal tendencies for all subjects.

Significance level P is 1.3%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 8A2

Multiple Classification Analysis

Grand mean = 6.04.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.35
BANGLADESHI CHILDREN	200	-0.18

Between Group Comparison:

8B. Indigenous boys and Bangladeshi boys:

TABLE 8B1

One-way analysis of variance for the factor length of schooling on freedom from withdrawal tendencies.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.025	1	0.025	0.008	0.928
LENGTH OF SCHOOLING	0.025	1	0.025	0.008	0.928
EXPLAINED	0.025	1	0.025	0.008	0.928
RESIDUAL	544.525	178	3.059		
TOTAL	544.550	179	3.042		

H_0 - Length of schooling does not affect freedom from withdrawal tendencies for all subjects.

H_A - Length of schooling affects freedom from withdrawal tendencies for all subjects.

Significance level P is 92.8%.

The null hypothesis thus cannot be rejected.

TABLE 8B2

Multiple Classification Analysis

Grand mean = 6.45.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	-0.02
INDIGENOUS GIRLS	120	0.01

Between Group Comparison:

8C. Indigenous girls and Bangladeshi girls:

TABLE 8C1

One-way analysis of variance for the factor length of schooling on freedom from withdrawal tendencies.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	49.504	1	49.504	25.216	0.000
LENGTH OF SCHOOLING	49.504	1	49.504	25.216	0.000
EXPLAINED	49.504	1	49.504	25.216	0.000
RESIDUAL	231.662	118	1.963		
TOTAL	281.167	119	2.363		

H_0 - Length of schooling does not affect freedom from withdrawal tendencies for all subjects.

H_A - Length of schooling affects freedom from withdrawal tendencies for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 8C2

Multiple Classification Analysis

Grand mean = 5.42.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	0.91
BANGLADESHI GIRLS	80	-0.45

Between Group Comparison:

8D. Total indigenous and Bangladeshi children (>2):

TABLE 8D1

One-way analysis of variance for the factor length of schooling on freedom from withdrawal tendencies.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	1.060	1	1.060	0.386	0.535
LENGTH OF SCHOOLING	1.060	1	1.060	0.386	0.535
EXPLAINED	1.060	1	1.060	0.386	0.535
RESIDUAL	548.663	200	2.743		
TOTAL	549.723	201	2.735		

H_0 - Length of schooling does not affect freedom from withdrawal tendencies for all subjects.

H_A - Length of schooling affects freedom from withdrawal tendencies for all subjects.

Significance level P is 53.5%.

The null hypothesis thus cannot be rejected.

TABLE 8D2

Multiple Classification Analysis

Grand mean = 6.32.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
1NDIGENOUS CHILDREN	100	0.07
BANGLADESHI CHILDREN	102	-0.07

8E. Within total Bangladeshi samples:

TABLE 8E1

3-way ANOVA with factor, length of schooling, sex and age on freedom from withdrawal tendencies.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	474.915	6	79.152	89.891	0.
VAR - AGE	333.737	4	83.434	94.753	0.
VAR - LENGTH OF SCHOOLING	36.929	1	36.929	41.939	0.
VAR - SEX	113.067	1	113.067	128.407	-0.000
2-WAY INTERACTIONS	11.343	9	1.260	1.431	0.178
AGE x LENGTH OF SCHOOLING	3.212	4	0.803	0.912	0.458
AGE x SEX	7.289	4	1.822	2.069	0.087
LENGTH OF SCHOOLING x SEX	0.160	1	0.160	0.182	0.670
3-WAY INTERACTIONS	5.325	4	1.331	1.512	0.201
AGE x LENGTH OF SCHOOLING x SEX	5.325	4	1.331	1.512	0.201
EXPLAINED	491.583	19	25.873	29.383	0.
RESIDUAL	158.497	180	0.881		
TOTAL	650.080	199	3.267		

Length of schooling:

H_0 - Length of schooling does not affect freedom from withdrawal tendencies for total Bangladeshi subjects.

H_A - Length of schooling affects freedom from withdrawal tendencies for total Bangladeshi subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect freedom from withdrawal tendencies for the total Bangladeshi subjects.

H_A - Sex affects freedom from withdrawal tendencies for the total Bangladeshi subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Age:

H_0 - Age does not affect freedom from withdrawal tendencies for the total Bangladeshi subjects.

H_A - Age affects freedom from withdrawal tendencies for the total Bangladeshi subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

1. All the main effects are significant.
2. None of the 2-way interaction is significant.
3. The effect of 3-way interaction between age, length of schooling and sex on freedom from withdrawal tendencies for total Bangladeshi subjects is not statistically significant.

TABLE 8E2

Multiple Classification Analysis

Grand mean = 5.86.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	0.39
BANGLADESHI (<2)	98	-0.40
SEX		
MALE	120	0.60
FEMALE	80	-0.90
AGE		
7 YEARS OLD	25	-1.58
8 YEARS OLD	56	-1.11
9 YEARS OLD	50	-0.24
10 YEARS OLD	52	1.47
11 YEARS OLD	17	2.20

Within Indigenous Group Comparison:

8F. Indigenous boys and indigenous girls:

TABLE 8F1

One-way analysis of variance for the factor sex on freedom from withdrawal tendencies.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.282	1	0.282	0.118	0.732
SEX	0.282	1	0.282	0.118	0.732
EXPLAINED	0.282	1	0.282	0.118	0.732
RESIDUAL	233.508	98	2.383		
TOTAL	233.790	99	2.362		

H_0 - Sex does not affect freedom from withdrawal tendencies for all subjects.

H_A - Sex affects freedom from withdrawal tendencies for all subjects.

Significance level P is 73.2%.

The null hypothesis thus cannot be rejected.

TABLE 8F2

Multiple Classification Analysis

Grand mean = 6.39.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	0.04
INDIGENOUS GIRLS	40	-0.06

9. FREEDOM FROM NERVOUS SYMPTOMS

Between Group Comparison:

9A. Total indigenous and total Bangladeshi children:

TABLE 9A1

One-way analysis of variance for the factor length of schooling on freedom from nervous symptoms.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	108.375	1	108.375	32.658	0.000
LENGTH OF SCHOOLING	108.375	1	108.375	32.658	0.000
EXPLAINED	108.375	1	108.375	32.658	0.000
RESIDUAL	988.905	298	3.318		
TOTAL	1097.280	299	3.670		

H_0 - Length of schooling does not affect freedom from nervous symptoms for all subjects.

H_A - Length of schooling affects freedom from nervous symptoms for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 9A2

Multiple Classification Analysis

Grand mean = 6.68.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.85
BANGLADESHI CHILDREN	200	-0.43

Between Group Comparison:

9B. Indigenous boys and Bangladeshi boys:

TABLE 9B1

One-way analysis of variance for the factor length of schooling on freedom from nervous symptoms.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	44.100	1	44.100	13.241	0.000
LENGTH OF SCHOOLING	44.100	1	44.100	13.241	0.000
EXPLAINED	44.100	1	44.100	13.241	0.000
RESIDUAL	592.850	178	3.331		
TOTAL	636.950	179	3.558		

H_0 - Length of schooling does not affect freedom from nervous symptoms for all subjects.

H_A - Length of schooling affects freedom from nervous symptoms for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 9B2

Multiple Classification Analysis

Grand mean = 6.98.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	0.70
BANGLADESHI BOYS	120	-0.35

Between Group Comparison:

9C. Indigenous girls and Bangladeshi girls:

TABLE 9C1

One-way analysis of variance for the factor length of schooling on freedom from nervous symptoms.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	69.337	1	69.337	23.404	0.000
LENGTH OF SCHOOLING	69.337	1	69.337	23.404	0.000
EXPLAINED	69.337	1	69.337	23.404	0.000
RESIDUAL	349.588	118	2.963		
TOTAL	418.925	119	3.520		

H_0 - Length of schooling does not affect freedom from nervous symptoms for all subjects.

H_A - Length of schooling affects freedom from nervous symptoms for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 9C2

Multiple Classification Analysis

Grand mean = 6.23

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	1.07
BANGLADESHI GIRLS	80	-0.54

Between Group Comparison:

9D. Total indigenous and Bangladeshi children (>2):

TABLE 9D1

One-way analysis of variance for the factor length of schooling on freedom from nervous symptoms.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	50.554	1	50.554	15.084	0.000
LENGTH OF SCHOOLING	50.554	1	50.554	15.084	0.000
EXPLAINED	50.554	1	50.554	15.084	0.000
RESIDUAL	670.322	200	3.352		
TOTAL	720.876	201	3.586		

H_0 - Length of schooling does not affect freedom from nervous symptoms for all subjects.

H_A - Length of schooling affects freedom from nervous symptoms for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 9D2

Multiple Classification Analysis

Grand mean = 7.02.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.51
BANGLADESHI CHILDREN	102	-0.50

9E. Within total Bangladeshi samples:

TABLE 9E1

3-way ANOVA with factor, length of schooling, sex and age on freedom from nervous symptoms.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	453.774	6	75.629	73.404	0.
VAR - AGE	393.851	4	98.463	95.566	0.
VAR - LENGTH OF SCHOOLING	21.009	1	21.009	20.390	0.000
VAR - SEX	47.105	1	47.105	45.719	0.
2-WAY INTERACTIONS	12.320	9	1.369	1.329	0.225
AGE x LENGTH OF SCHOOLING	1.208	4	0.302	0.293	0.882
AGE x SEX	7.145	4	1.786	1.734	0.144
LENGTH OF SCHOOLING x SEX	3.481	1	3.481	3.379	0.068
3-WAY INTERACTIONS	4.444	4	1.111	1.078	0.369
AGE x LENGTH OF SCHOOLING x SEX	4.444	4	1.111	1.078	0.369
EXPLAINED	470.538	19	24.765	24.036	0.
RESIDUAL	185.457	180	1.030		
TOTAL	655.995	199	3.296		

Length of schooling:

H_O - Length of schooling does not affect freedom from nervous symptoms for all Bangladeshi subjects.

H_A - Length of schooling affects freedom from nervous symptoms for all Bangladeshi subjects.

Significance level P is 0%

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect freedom from nervous symptoms for the total Bangladeshi subjects.

H_A - Sex affects freedom from nervous symptoms for the total Bangladeshi subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Age:

H_0 - Age does not affect freedom from nervous symptoms for the total Bangladeshi subjects.

H_A - Age affects freedom from nervous symptoms for the total Bangladeshi subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

1. All the main effects are significant.
2. None of the 2-way interaction is significant.
3. The effect of 3-way interaction between age, length of schooling and sex on freedom from nervous symptoms for total Bangladeshi subjects is not statistically significant.

TABLE 9E2

Multiple Classification Analysis

Grand mean = 6.25.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	0.27
BANGLADESHI (<2)	98	-0.29
SEX		
MALE	120	0.38
FEMALE	80	-0.57
AGE		
7 YEARS OLD	25	-1.94
8 YEARS OLD	56	-1.25
9 YEARS OLD	50	0.00
10 YEARS OLD	52	1.61
11 YEARS OLD	17	2.04

Within Indigenous Group Comparison:

9F. Indigenous boys and indigenous girls:

TABLE 9F1

One-way analysis of variance for the factor sex on freedom from nervous symptoms.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	3.527	1	3.527	1.049	0.308
SEX	3.527	1	3.527	1.049	0.308
EXPLAINED	3.527	1	3.527	1.049	0.308
RESIDUAL	329.383	98	3.361		
TOTAL	332.910	99	3.363		

H_0 - Sex does not affect freedom from nervous symptoms for all subjects.

H_A - Sex affects freedom from nervous symptoms for all subjects.

Significance level P is 30.8%.

The null hypothesis thus cannot be rejected.

TABLE 9F2

Multiple Classification Analysis

Grand mean = 7.53.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	0.15
BANGLADESHI BOYS	40	-0.23

10. SOCIAL STANDARD

Between Group Comparison:

10A. Total indigenous and total Bangladeshi children:

TABLE 10A1

One-way analysis of variance for the factor length of schooling on social standard.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	110.082	1	110.082	41.986	0.
LENGTH OF SCHOOLING	110.082	1	110.082	41.986	0.
EXPLAINED	110.082	1	110.082	41.986	0.
RESIDUAL	781.315	298	2.622		
TOTAL	891.397	299	2.981		

H_0 - Length of schooling does not affect social standard for all subjects.

H_A - Length of schooling affects social standard for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 10A2

Multiple Classification Analysis

Grand mean = 6.80.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.86
BANGLADESHI CHILDREN	200	-0.43

Between Group Comparison:

10B. Indigenous boys and Bangladeshi boys:

TABLE 10B1

One-way analysis of variance for the factor length of schooling on social standard.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	43.403	1	43.403	16.737	0.000
LENGTH OF SCHOOLING	43.403	1	43.403	16.737	0.000
EXPLAINED	43.403	1	43.403	16.737	0.000
RESIDUAL	461.592	178	2.593		
TOTAL	504.994	179	2.821		

H_0 - Length of schooling does not affect social standard for all subjects.

H_A - Length of schooling affects social standard for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 10B2

Multiple Classification Analysis

Grand mean = 7.01

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	0.69
BANGLADESHI BOYS	120	-0.35

Between Group Comparison:

10C. Indigenous girls and Bangladeshi girls:

TABLE 10C1

One-way analysis of variance for the factor length of schooling on social standard.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	72.600	1	72.600	29.001	0.001
LENGTH OF SCHOOLING	72.600	1	72.600	29.001	0.001
EXPLAINED	72.600	1	72.600	29.001	0.001
RESIDUAL	295.400	118	2.503		
TOTAL	368.000	119	3.092		

H_0 - Length of schooling does not affect social standard for all subjects.

H_A - Length of schooling affects social standard for all subjects.

Significance level P is 0.1%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 10C2

Multiple Classification Analysis

Grand mean = 6.50.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	1.10
BANGLADESHI GIRLS	80	-0.55

Between Group Comparison:

10D. Total indigenous and Bangladeshi children (>2):

TABLE 10D1

One-way analysis of variance for the factor length of schooling on social standard.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	40.474	1	40.474	15.973	0.000
LENGTH OF SCHOOLING	40.474	1	40.474	15.973	0.000
EXPLAINED	40.474	1	40.474	15.973	0.000
RESIDUAL	506.793	200	2.534		
TOTAL	547.267	201	2.723		

H_0 - Length of schooling does not affect social standard for all subjects.

H_A - Length of schooling affects social standard for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 10D2

Multiple classification Analysis

Grand mean = 7.21.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.45
BANGLADESHI CHILDREN	102	-0.44

10E. Within total Bangladeshi samples:

TABLE 10E1

3-way ANOVA with factor, length of schooling, sex and age on social standard.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	361.045	6	60.174	58.421	0.
VAR - AGE	303.961	4	75.990	73.777	0.000
VAR - LENGTH OF SCHOOLING	36.652	1	36.652	35.584	0.000
VAR - SEX	27.149	1	27.149	26.353	0.000
2-WAY INTERACTIONS	9.787	9	1.087	1.056	0.398
AGE x LENGTH OF SCHOOLING	4.168	4	1.042	1.012	0.403
AGE x SEX	2.752	4	0.688	0.668	0.615
LENGTH OF SCHOOLING x SEX	2.641	1	2.641	2.564	0.111
3-WAY INTERACTIONS	0.643	4	0.161	0.156	0.960
AGE x LENGTH OF SCHOOLING x SEX	0.643	4	0.161	0.156	0.960
EXPLAINED	371.474	19	19.551	18.982	0.000
RESIDUAL	185.401	180	1.030		
TOTAL	556.875	199	2.798		

Length of schooling:

H_0 - Length of schooling does not affect social standard for total Bangladeshi subjects.

H_A - Length of schooling affects social standard for total Bangladeshi subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect social standard for the total Bangladeshi subjects.

H_A - Sex affects social standard for the total Bangladeshi subjects. Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Age:

H_0 - Age does not affect social standard for the total Bangladeshi subjects.

H_A - Age affects social standard for the total Bangladeshi subjects. Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

1. All the main effects are significant.
2. None of the 2-way interaction is significant.
3. The effect of 3-way interaction between age, length of schooling and sex on social standard for total Bangladeshi subjects is not statistically significant.

TABLE 10E2

Multiple Classification Analysis

Grand mean = 6.38.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	0.39
BANGLADESHI (<2)	98	-0.41
SEX		
MALE	120	0.28
FEMALE	80	-0.43
AGE		
7 YEARS OLD	25	-1.62
8 YEARS OLD	56	-0.98
9 YEARS OLD	50	-0.21
10 YEARS OLD	52	1.28
11 YEARS OLD	17	2.33

Within Indigenous Group Comparison:

10F. Indigenous boys and indigenous girls:

TABLE 10F1

One-way analysis of variance for the factor sex on social standard.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.240	1	0.240	0.105	0.747
SEX	0.240	1	0.240	0.105	0.747
EXPLAINED	0.240	1	0.240	0.105	0.747
RESIDUAL	224.200	98	2.288		
TOTAL	224.440	99	2.267		

H_0 - Sex does not affect social standard for all subjects.

H_A - Sex affects social standard for all subjects.

Significance level P is 74.7%.

The null hypothesis cannot thus be rejected.

TABLE 10F2

Multiple Classification Analysis

Grand mean = 7.66.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	0.04
INDIGENOUS GIRLS	40	-0.06

11. SOCIAL SKILLS

Between Group Comparison:

11A. Total indigenous and total Bangladeshi children:

TABLE 11A1

One-way analysis of variance for the factor length of schooling on social skills.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	34.082	1	34.082	10.645	0.001
LENGTH OF SCHOOLING	34.082	1	34.082	10.645	0.001
EXPLAINED	34.082	1	34.082	10.645	0.001
RESIDUAL	954.115	298	3.202		
TOTAL	988.197	299	3.305		

H_0 - Length of schooling does not affect social skills for all subjects.

H_A - Length of schooling affects social skills for all subjects.

Significance level P is 0.1%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 11A2

Multiple Classification Analysis

Grand mean = 0.1%.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.48
BANGLADESHI CHILDREN	200	-0.24

Between Group Comparison:

11B. Indigenous boys and Bangladeshi boys:

TABLE 11B1

One-way analysis of variance for the factor length of schooling on social skills.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	7.511	1	7.511	2.303	0.131
LENGTH OF SCHOOLING	7.511	1	7.511	2.303	0.131
EXPLAINED	7.511	1	7.511	2.303	0.131
RESIDUAL	580.550	178	3.262		
TOTAL	588.061	179	3.285		

H_0 - Length of schooling does not affect social skills for all subjects.

H_A - Length of schooling affects social skills for all subjects.

Significance level P is 13.1%.

The null hypothesis thus cannot be rejected.

TABLE 11B2

Multiple Classification Analysis

Grand mean = 7.63.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	0.29
BANGLADESHI BOYS	120	-0.14

Between Group Comparison:

11C. Indigenous girls and Bangladeshi girls:

TABLE 11C1

One-way analysis of variance for the factor length of schooling on social skills.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	34.504	1	34.504	11.872	0.001
LENGTH OF SCHOOLING	34.504	1	34.504	11.872	0.001
EXPLAINED	34.504	1	34.504	11.872	0.001
RESIDUAL	342.962	118	2.906		
TOTAL	377.467	119	3.172		

H_0 - Length of schooling does not affect social skills for all subjects.

H_A - Length of schooling affects social skills for all subjects.

Significance level P is 0.1%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 11C2

Multiple Classification Analysis

Grand mean = 7.07.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	0.76
BANGLADESHI GIRLS	80	0.38

Between Group Comparison:

11D. Total indigenous and Bangladeshi children (>2):

TABLE 11D1

One-way analysis of variance for the factor length of schooling on social skills.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	8.464	1	8.464	2.696	0.102
LENGTH OF SCHOOLING	8.464	1	8.464	2.696	0.102
EXPLAINED	8.464	1	8.464	2.696	0.102
RESIDUAL	627.972	200	3.140		
TOTAL	636.436	201	3.166		

H_0 - Length of schooling does not affect social skills for all subjects.

H_A - Length of schooling affects social skills for all subjects.

Significance level P is 10.2%.

The null hypothesis thus cannot be rejected.

TABLE 11D2

Multiple Classification Analysis

Grand mean = 7.67.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.21
BANGLADESHI CHILDREN	102	-0.20

11E. Within total Bangladeshi samples:

TABLE 11E1

3-way ANOVA with factor, length of schooling, sex and age on social skills.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	506.054	6	84.342	116.566	0.
VAR - AGE	454.992	4	113.748	157.207	0.
VAR - LENGTH OF SCHOOLING	27.377	1	27.377	37.837	0.
VAR - SEX	38.066	1	38.066	52.610	-0.000
2-WAY INTERACTIONS	9.216	9	1.024	1.415	0.184
AGE x LENGTH OF SCHOOLING	4.146	4	1.037	1.433	0.225
AGE x SEX	2.532	4	0.633	0.875	0.480
LENGTH OF SCHOOLING x SEX	1.340	1	1.340	1.852	0.175
3-WAY INTERACTIONS	4.045	4	1.011	1.398	0.237
AGE x LENGTH OF SCHOOLING x SEX	4.045	4	1.011	1.398	0.237
EXPLAINED	519.315	19	27.332	37.775	0.
RESIDUAL	130.240	180	0.724		
TOTAL	649.555	199	3.264		

Length of schooling:

H_0 - Length of schooling does not affect social skills for total Bangladeshi subjects.

H_A - Length of schooling affects social skills for total Bangladeshi subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect social skills for the total Bangladeshi subjects.

H_A - Sex affects social skills for the total Bangladeshi subjects. Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Age:

H_0 - Age does not affect social skills for the total Bangladeshi subjects.

H_A - Age affects social skills for the total Bangladeshi subjects. Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

1. All the main effects are significant.
2. None of the 2-way interaction is significant.
3. The effect of 3-way interaction between age, length of schooling and sex on social skills for total Bangladeshi subjects is not statistically significant.

TABLE 11E2

Multiple Classification Analysis

Grand mean = 7.17.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	0.31
BANGLADESHI (<2)	98	-0.32
SEX		
MALE	120	0.32
FEMALE	80	-0.48
AGE		
7 YEARS OLD	25	-2.13
8 YEARS OLD	56	-1.52
9 YEARS OLD	50	0.50
10 YEARS OLD	52	1.60
11 YEARS OLD	17	1.78

Within Indigenous Group Comparison:

11F. Indigenous boys and indigenous girls:

TABLE 11F1

One-way analysis of variance for the factor sex on social skills.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.202	1	0.202	0.065	0.799
SEX	0.202	1	0.202	0.065	0.799
EXPLAINED	0.202	1	0.202	0.065	0.799
RESIDUAL	304.358	98	3.106		
TOTAL	304.560	99	3.076		

H_0 - Sex does not affect social skills for all subjects.

H_A - Sex affects social skills for all subjects.

Significance level P is 79.9%.

The null hypothesis thus cannot be rejected.

TABLE 11F2

Multiple Classification Analysis

Grand mean = 7.88.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	0.04
INDIGENOUS GIRLS	40	-0.06

12. ANTISOCIAL TENDENCIES

Between Group Comparison:

12A. Total indigenous and total Bangladeshi children:

TABLE 12A1

One-way analysis of variance for the factor length of schooling on antisocial tendencies.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	210.042	1	210.042	67.613	0.
LENGTH OF SCHOOLING	210.042	1	210.042	67.613	0.
EXPLAINED	210.042	1	210.042	67.613	0.
RESIDUAL	925.745	298	3.107		
TOTAL	1135.787	299	3.799		

H_0 - Length of schooling does not affect antisocial tendencies for all subjects.

H_A - Length of schooling affects antisocial tendencies for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 12A2

Multiple Classification Analysis

Grand mean = 7.69.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	-1.18
BANGLADESHI CHILDREN	200	0.59

Between Group Comparison:

12B. Indigenous boys and Bangladeshi boys:

TABLE 12B1

One-way analysis of variance for the factor length of schooling on antisocial tendencies.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	143.136	1	143.136	52.884	-0.000
LENGTH OF SCHOOLING	143.136	1	143.136	52.884	-0.000
EXPLAINED	143.136	1	143.136	52.884	-0.000
RESIDUAL	481.775	178	2.707		
TOTAL	624.911	179	3.491		

H_0 - Length of schooling does not affect antisocial tendencies for all subjects.

H_A - Length of schooling affects antisocial tendencies for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 12B2

Multiple Classification Analysis

Grand mean = 7.48.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	-1.26
BANGLADESHI BOYS	120	0.63

Bntween Group Comparison:

12C. Indigenous girls and Bangladeshi girls:

TABLE 12C1

One-way analysis of variance for the factor length of schooling on antisocial tendencies.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	68.267	1	68.267	19.102	0.000
LENGTH OF SCHOOLING	68.267	1	68.267	19.102	0.000
EXPLAINED	68.267	1	68.267	19.102	0.000
RESIDUAL	421.700	118	3.574		
TOTAL	489.967	119	4.117		

H_0 - Length of schooling does not affect antisocial tendencies for all subjects.

H_A - Length of schooling affects antisocial tendencies for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 12C2

Multiple Classification Analysis

Grand mean = 8.02.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	-1.07
BANGLADESHI GIRLS	80	0.53

Between Group Comparison:

12D. Total indigenous and Bangladeshi children (>2):

TABLE 12D1

One-way analysis of variance for the factor length of schooling on antisocial tendencies.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	136.950	1	136.950	48.695	0.
LENGTH OF SCHOOLING	136.950	1	136.950	48.695	0.
EXPLAINED	136.950	1	136.950	48.695	0.
RESIDUAL	562.480	200	2.812		
TOTAL	699.431	201	3.480		

H_0 - Length of schooling does not affect antisocial tendencies for all subjects.

HA - Length of schooling affects antisocial tendencies for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 12D2

Multiple Classification Analysis

Grand mean = 7.34.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	-0.83
BANGLADESHI CHILDREN	102	0.82

12E. Within total Bangladeshi sample:

TABLE 12E1

3-way ANOVA with factor, length of schooling, sex and age on antisocial tendencies.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	530.817	6	88.470	123.210	0.
VAR - AGE	517.751	4	129.438	180.265	0.
VAR - LENGTH OF SCHOOLING	1.062	1	1.062	1.479	0.225
VAR - SEX	2.825	1	2.825	3.934	0.049
2-WAY INTERACTIONS	24.078	9	2.675	3.726	0.000
AGE x LENGTH OF SCHOOLING	4.619	4	1.155	1.608	0.174
AGE x SEX	13.798	4	3.449	4.804	0.001
LENGTH OF SCHOOLING x SEX	7.325	1	7.325	10.202	0.002
3-WAY INTERACTIONS	8.612	4	2.153	2.999	0.020
AGE x LENGTH OF SCHOOLING x SEX	8.612	4	2.153	2.999	0.020
EXPLAINED	563.508	19	29.658	41.305	0.
RESIDUAL	129.247	180	0.718		
TOTAL	692.755	199	3.481		

Length of schooling:

H_0 - Length of schooling does not affect antisocial tendencies for total Bangladeshi sample.

H_A - Length of schooling affects antisocial tendencies for total Bangladeshi sample.

Significance level P is 22.5%.

The null hypothesis thus cannot be rejected.

Sex:

H_0 - Sex does not affect antisocial tendencies for total Bangladeshi sample.

H_A - Sex affects antisocial tendencies for total Bangladeshi sample.

Significance level P is 4.9%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Age:

H_0 - Age does not affect antisocial tendencies for total Bangladeshi sample.

H_A - Age affects antisocial tendencies for total Bangladeshi sample.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

1. Among the main effects only length of schooling is not significant.
2. Among the two-way interaction only age and length of schooling is not significant.
3. The effect of 3-way interaction between age, length of schooling and sex on antisocial tendencies for total Bangladeshi subjects is statistically significant at 2.0%.

TABLE 12E2

Multiple Classification Analysis

Grand mean = 8.28.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	-0.13
BANGLADESHI (<2)	98	0.13
SEX		
MALE	120	-0.18
FEMALE	80	0.26
AGE		
7 YEARS OLD	25	-1.72
8 YEARS OLD	56	-2.02
9 YEARS OLD	50	1.77
10 YEARS OLD	52	1.06
11 YEARS OLD	17	0.72

Within Indigenous Group Comparison:

12F. Indigenous boys and indigenous girls:

TABLE 12F1

One-way analysis of variance for the factor sex on antisocial tendencies.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	12.907	1	12.907	5.747	0.018
SEX	12.907	1	12.907	5.747	0.018
EXPLAINED	12.907	1	12.907	5.747	0.018
RESIDUAL	220.083	98	2.246		
TOTAL	232.990	99	2.353		

H_0 - Sex does not affect antisocial tendencies for all subjects.

H_A - Sex affects antisocial tendencies for all subjects.

Significance level P is 1.8%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 12F2

Multiple Classification Analysis

Grand mean = 6.51.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	-0.29
INDIGENOUS GIRLS	40	0.44

13. FAMILY RELATIONS

Between Group Comparison:

13A. Total indigenous and Bangladeshi children:

TABLE 13A1

One-way analysis of variance for the factor length of schooling on family relations.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	79.207	1	79.207	30.432	0.000
LENGTH OF SCHOOLING	79.207	1	79.207	30.432	0.000
EXPLAINED	79.207	1	79.207	30.432	0.000
RESIDUAL	775.630	298	2.603		
TOTAL	854.837	299	2.859		

H_0 - Length of schooling does not affect family relations for all subjects.

H_A - Length of schooling affects family relations for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 13A2

Multiple Classification Analysis

Grand mean = 8.86.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	-0.73
BANGLADESHI CHILDREN	200	0.36

Between Group Comparison:

13B. Indigenous boys and Bangladeshi boys:

TABLE 13B1

One-way length analysis of variance for the factor length of schooling on family relations.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	39.336	1	39.336	17.393	0.000
LENGTH OF SCHOOLING	39.336	1	39.336	17.393	0.000
EXPLAINED	39.336	1	39.336	17.393	0.000
RESIDUAL	402.575	178	2.262		
TOTAL	441.911	179	2.469		

H_0 - Length of schooling does not affect family relations for all subjects.

H_A - Length of schooling affects family relations for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 13B2

Multiple Classification Analysis

Grand mean = 8.58.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	-0.66
BANGLADESHI BOYS	120	0.33

Between Group Comparison:

13C. Indigenous girls and Bangladeshi girls:

TABLE 13C1

One-way analysis of variation for the factor length of schooling on family relations.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	40.838	1	40.838	14.295	0.000
LENGTH OF SCHOOLING	40.838	1	40.838	14.295	0.000
EXPLAINED	40.838	1	40.838	14.295	0.000
RESIDUAL	337.087	118	2.857		
TOTAL	377.925	119	3.176		

H_0 - Length of schooling does not affect family relations for all subjects.

H_A - Length of schooling affects family relations for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 13C2

Multiple Classification Analysis

Grand mean = 9.27.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	-0.82
BANGLADESHI GIRLS	80	0.41

Between Group Comparison:

13D. Total indigenous and Bangladeshi children (>2):

TABLE 13D1

One-way analysis of variation for the factor length of schooling on family relations.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	52.233	1	52.233	21.579	0.000
LENGTH OF SCHOOLING	52.233	1	52.233	21.579	0.000
EXPLAINED	52.233	1	52.233	21.579	0.000
RESIDUAL	484.104	200	2.421		
TOTAL	536.337	201	2.668		

H_0 - Length of schooling does not affect family relations for all subjects.

H_A - Length of schooling affects family relations for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 13D2

Multiple Classification Analysis

Grand mean = 8.64.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	-0.51
BANGLADESHI CHILDREN	102	0.50

13E. Within total Bangladeshi samples:

TABLE 13E1

3-way ANOVA with factor, length of schooling, sex and age on family relations.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	482.091	6	80.349	152.104	0.
VAR - AGE	451.546	4	112.887	213.700	0.
VAR - LENGTH OF SCHOOLING	0.066	1	0.066	0.125	0.724
VAR - SEX	16.786	1	16.786	31.777	0.000
2-WAY INTERACTIONS	8.747	9	0.972	1.840	0.064
AGE x LENGTH OF SCHOOLING	1.173	4	0.293	0.555	0.696
AGE x SEX	7.115	4	1.779	3.367	0.011
LENGTH OF SCHOOLING x SEX	0.000	1	0.000	0.001	0.980
3-WAY INERACTIONS	2.397	4	0.599	1.134	0.342
AGE x LENGTH OF SCHOOLING x SEX	2.397	4	0.599	1.134	0.342
EXPLAINED	493.235	19	25.960	49.143	0.
RESIDUAL	95.085	180	0.528		
TOTAL	588.320	199	2.956		

Length of schooling:

H_0 - Length of schooling does not affect family relations for the total Bangladeshi subjects.

H_A - Length of schooling affects family relations for the total Bangladeshi subjects.

Significance level P is 72.4%.

The null hypothesis thus cannot be rejected.

Sex:

H_0 - Sex does not affect family relations for the total Bangladeshi subjects.

H_A - Sex affects family relations for the total Bangladeshi subjects.

Significance level P is

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Age:

H_0 - Age does not affect family relations for the total Bangladeshi subjects.

H_A - Age affects family relations for the total Bangladeshi subjects.

Significance level P is

The null hypothesis is thus rejected and the alternative hypothesis accepted.

1. Among the main effects only length of schooling is not significant.
2. Among the two-way interaction only age and sex is significant at 1.1% level.
3. The effect of 3-way interaction between age, length of schooling and sex on family relations for total Bangladeshi subjects is not statistically significant.

TABLE 13E2

Multiple Classification Analysis

Grand mean = 9.22.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	-0.07
BANGLADESHI (<2)	98	0.08
SEX		
MALE	120	-0.31
FEMALE	80	0.47
AGE		
7 YEARS OLD	25	-1.78
8 YEARS OLD	56	-1.83
9 YEARS OLD	50	1.68
10 YEARS OLD	52	0.97
11 YEARS OLD	17	0.72

Within Indigenous Group Comparison:

13F. Indigenous boys and indigenous girls:

TABLE 13F1

One-way analysis of variance for the factor sex on family relations.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	6.827	1	6.827	3.707	0.057
SEX	6.827	1	6.827	3.707	0.057
EXPLAINED	6.827	1	6.827	3.707	0.057
RESIDUAL	180.483	98	1.842		
TOTAL	187.310	99	1.892		

H_0 - Sex does not affect family relations for all subjects.

H_A - Sex affects family relations for all subjects.

Significance level P is 5.7%.

The null hypothesis thus cannot be rejected.

TABLE 13F2

Multiple Classification Analysis

Grand mean = 8.13.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	-0.21
INDIGENOUS GIRLS	40	0.32

14. SCHOOL RELATIONS

Between Group Comparison:

14A. Total indigenous and total Bangladeshi children:

TABLE 14A1

One-way analysis of variance for the factor length of schooling on school relations.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	29.040	1	29.040	13.000	0.000
LENGTH OF SCHOOLING	29.040	1	29.040	13.000	0.000
EXPLAINED	29.040	1	29.040	13.000	0.000
RESIDUAL	665.690	298	2.234		
TOTAL	694.730	299	2.324		

H_0 - Length of schooling does not affect school relations for all subjects.

H_A - Length of schooling affects school relations for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 14A2

Multiple Classification Analysis

Grand mean = 8.03.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	-0.44
BANGLADESHI CHILDREN	200	0.22

Between Group Comparison:

14B. Indigenous boys and Bangladeshi boys:

TABLE 14B1

One-way analysis of variance for the factor length of schooling on school relations.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	60.025	1	60.025	27.786	0.000
LENGTH OF SCHOOLING	60.025	1	60.025	27.786	0.000
EXPLAINED	60.025	1	60.025	27.786	0.000
RESIDUAL	384.525	178	2.160		
TOTAL	444.550	179	2.484		

H_0 - Length of schooling does not affect school relations for all subjects.

H_A - Length of schooling affects school relations for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 14B2

Multiple Classification Analysis

Grand mean = 8.12.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	-0.82
BANGLADESHI BOYS	120	0.41

Between Group Comparison:

14C. Indigenous girls and Bangladeshi girls:

TABLE 14C1

One-way analysis of variance for the factor length of schooling on school relations.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.938	1	0.938	0.450	0.504
LENGTH OF SCHOOLING	0.938	1	0.938	0.450	0.504
EXPLAINED	0.938	1	0.938	0.450	0.504
RESIDUAL	245.862	118	2.084		
TOTAL	246.800	119	2.074		

H_0 - Length of schooling does not affect school relations for all subjects.

H_A - Length of schooling affects school relations for all subjects.

Significance level P is 50.4%.

The null hypothesis thus cannot be rejected.

TABLE 14C2

Multiple Classification Analysis

Grand mean = 7.90.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	0.13
BANGLADESHI GIRLS	80	-0.06

Between Group Comparison:

14D. Total indigenous and Bangladeshi children (>2):

TABLE 14D1

One-way analysis of variance for the factor length of schooling on school relations.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	50.317	1	50.317	23.034	0.000
LENGTH OF SCHOOLING	50.317	1	50.317	23.034	0.000
EXPLAINED	50.317	1	50.317	23.034	0.000
RESIDUAL	436.896	200	2.184		
TOTAL	487.213	201	2.424		

H_0 - Length of schooling does not affect school relations for all subjects.

H_A - Length of schooling affects school relations for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 14D2

Multiple Classification Analysis

Grand mean = 8.09.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	-0.50
BANGLADESHI CHILDREN	102	0.49

14E. Within total Bangladeshi samples:

TABLE 14E1

3-way ANOVA with factor, length of schooling, sex and age on school relations.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	343.924	6	57.321	81.174	0.
VAR - AGE	296.254	4	74.063	104.884	0.
VAR - LENGTH OF SCHOOLING	29.392	1	29.392	41.623	0.
VAR - SEX	26.718	1	26.718	37.836	0.
2-WAY INTERACTIONS	16.281	9	1.809	2.562	0.009
AGE x LENGTH OF SCHOOLING	2.352	4	0.588	0.833	0.506
AGE x SEX	8.764	4	2.191	3.103	0.017
LENGTH OF SCHOOLING x SEX	4.389	1	4.389	6.216	0.014
3-WAY INTERACTIONS	2.189	4	0.547	0.775	0.543
AGE x LENGTH OF SCHOOLING x SEX	2.189	4	0.547	0.775	0.543
EXPLAINED	362.394	19	19.073	27.011	0.
RESIDUAL	127.106	180	0.706		
TOTAL	489.500	199	2.460		

Length of schooling:

H_0 - Length of schooling does not affect school relations for total Bangladeshi subjects.

H_A - Length of schooling affects school relations for total Bangladeshi subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect school relations for the total Bangladeshi subjects.

H_A - Sex affects school relations for the total Bangladeshi subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Age:

H_0 - Age does not affect school relations for the total Bangladeshi subjects.

H_A - Age affects school relations for the total Bangladeshi subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

1. All main effects are significant.
2. Among the two-way interaction only age and length of schooling is not significant.
3. The effect of 3-way interaction between age, length of schooling and sex on school relations for total Bangladeshi subjects is not statistically significant.

TABLE 14E2

Multiple Classification Analysis

Grand mean = 8.25.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	0.34
BANGLADESHI (<2)	98	-0.35
SEX		
MALE	120	0.27
FEMALE	80	-0.41
AGE		
7 YEARS OLD	25	-1.53
8 YEARS OLD	56	-1.29
9 YEARS OLD	50	0.29
10 YEARS OLD	52	1.46
11 YEARS OLD	17	1.16

Within Indigenous Group Comparison:

14F. Indigenous boys and indigenous girls:

TABLE 14F1

One-way analysis of variance for the factor sex on school relations.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	12.615	1	12.615	7.558	0.007
SEX	12.615	1	12.615	7.558	0.007
EXPLAINED	12.615	1	12.615	7.558	0.007
RESIDUAL	163.575	98	1.669		
TOTAL	176.190	99	1.780		

H_0 - Sex does not affect school relations for all subjects.

H_A - Sex affects school relations for all subjects.

Significance level P is 0.7%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 14F2

Multiple Classification Analysis

Grand mean = 7.59.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	-0.29
INDIGENOUS GIRLS	40	0.44

15. COMMUNITY RELATIONS

Between Group Comparison:

15A. Total indigenous and total Bangladeshi children:

TABLE 15A1

One-way schooling of variance for the factor length of schooling on community relations.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	147.015	1	147.015	46.808	0.
LENGTH OF SCHOOLING	147.015	1	147.015	46.808	0.
EXPLAINED	147.015	1	147.015	46.808	0.
RESIDUAL	935.955	298	3.141		
TOTAL	1082.970	299	3.622		

H_0 - Length of schooling does not affect community relations for all subjects.

H_A - Length of schooling affects community relations for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 15A2

Multiple Classification Analysis

Grand mean = 6.51.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.99
BANGLADESHI CHILDREN	200	-0.50

Between Group Comparison:

15B. Indigenous boys and Bangladeshi boys:

TABLE 15B1

One-way analysis of variance for the factor length of schooling on community relations.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	56.803	1	56.803	16.759	0.000
LENGTH OF SCHOOLING	56.803	1	56.803	16.759	0.000
EXPLAINED	56.803	1	56.803	16.759	0.000
RESIDUAL	603.308	178	3.389		
TOTAL	660.111	179	3.688		

H_0 - Length of schooling does not affect community relations for all subjects.

H_A - Length of schooling affects community relations for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 15B2

Multiple Classification Analysis

Grand mean = 6.72.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	0.79
BANGLADESHI BOYS	120	-0.40

Between Group Comparison:

15C. Indigenous girls and Bangladeshi girls:

TABLE 15C1

One-way analysis of variance for the factor length of schooling on community relations.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	98.817	1	98.817	38.385	0.
LENGTH OF SCHOOLING	98.817	1	98.817	38.385	0.
EXPLAINED	98.817	1	98.817	38.385	0.
RESIDUAL	303.775	118	2.574		
TOTAL	402.592	119	3.383		

H_0 - Length of schooling does not affect community relations for all subjects.

H_A - Length of schooling affects community relations for all subjects.

Significance level P is 0%.

- The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 15C2

Multiple Classification Analysis

Grand mean = 6.19.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	1.28
BANGLADESHI GIRLS	80	-0.64

Between Group Comparison:

15D. Total indigenous and Bangladeshi children (>2):

TABLE 15D1

One-way analysis of variance for the factor length of schooling on community relations.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	63.075	1	63.075	21.561	0.000
LENGTH OF SCHOOLING	63.075	1	63.075	21 561	0.000
EXPLAINED	63.075	1	63.075	21.561	0.000
RESIDUAL	585.088	200	2.925		
TOTAL	648.163	201	3.225		

H_0 - Length of schooling does not affect community relations for all subjects.

H_A - Length of schooling affects community relations for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 15D2

Multiple Classification Analysis

Grand mean = 6.94.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.56
BANGLADESHI CHILDREN	102	-0.55

15E. Within total Bangladeshi samples:

TABLE 15E1

3-way ANOVA with factor, length of schooling, sex and age on community relations.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	539.136	6	89.856	105.869	0.
VAR - AGE	480.785	4	120.196	141.616	0.
VAR - LENGTH OF SCHOOLING	33.767	1	33.767	39.785	0.
VAR - SEX	30.922	1	30.922	36.432	0.
2-WAY INTERACTIONS	9.655	9	1.073	1.264	0.259
AGE x LENGTH OF SCHOOLING	5.651	4	1.413	1.664	0.160
AGE x SEX	3.327	4	0.832	0.980	0.420
LENGTH OF SCHOOLING x SEX	0.376	1	0.376	0.443	0.507
3-WAY INTERACTIONS	1.390	4	0.348	0.410	0.802
AGE x LENGTH OF SCHOOLING x SEX	1.390	4	0.348	0.410	0.802
EXPLAINED	550.181	19	28.957	34.117	0.
RESIDUAL	152.774	180	0.849		
TOTAL	702.955	199	3.532		

Length of schooling:

H_0 - Length of schooling does not affect community relations for total Bangladeshi subjects.

H_A - Length of schooling affects community relations for total Bangladeshi subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect community relations for the total Bangladeshi subjects.

H_A - Sex affects community relations for the total Bangladeshi subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Age:

H_0 - Age does not affect community relations for the total Bangladeshi subjects.

H_A - Age affects community relations for the total Bangladeshi subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

1. All the main effects are significant.
2. None of the 2-way interaction is s.gnificant.
3. The effect of 3-way interaction between age, length of schooling and sex on community relations for total Bangladeshi subjects is not statistically significant.

TABLE 15E2

Multiple Classification Analaysis

Grand mean = 6.01.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	0.37
BANGLADESHI (<2)	98	-0.38
SEX		
MALE	120	0.31
FEMALE	80	-0.46
AGE		
7 YEARS OLD	25	-2.01
8 YEARS OLD	56	-1.35
9 YEARS OLD	50	-0.19
10 YEARS OLD	52	1.87
11 YEARS OLD	17	2.28

Within Indigenous Group Comparison:

15F. Indigenous boys and indigenous girls:

TABLE 15F1

One-way analysis of variance for the factor sex on community relations.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.042	1	0.042	0.018	0.895
SEX	0.042	1	0.042	0.018	0.895
EXPLAINED	0.042	1	0.042	0.018	0.895
RESIDUAL	232.958	98	2.377		
TOTAL	233.000	99	2.354		

H_0 - Sex does not affect community relations for all subjects.

H_A - Sex affects community relations for all subjects.

Significance level P is 89.5%.

The null hypothesis thus cannot be rejected.

TABLE 15F2

Multiple Classification Analysis

Grand mean = 7.50.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	0.02
INDIGENOUS GIRLS	40	-0.02

16. INTELIGENCE

Between Group Comparison:

16A. Total indigenous and Bangladeshi children:

TOTAL 16A1

One-way analysis of variance for the factor length of schooling on intelligence.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	1510.507	1	1510.507	59.280	0.
LENGTH OF SCHOOLING	1510.507	1	1510.507	59.280	0.
EXPLAINED	1510.507	1	1510.507	59.280	0.
RESIDUAL	7593.240	298	25.481		
TOTAL	9103.746	299	30.447		

H_0 - Length of schooling does not affect intelligence for all subjects.

H_A - Length of schooling affects intelligence for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 16A2

Multiple Classification Analysis

Grand mean = 23.09.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	3.17
BANGLADESHI CHILDREN	200	-1.59

Between Group Comparison:

16B. Indigenous boys and Bangladeshi boys:

TABLE 16B1

One-way analysis of variance for the factor length of schooling on intelligence.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	688.900	1	688.900	27.604	0.000
LENGTH OF SCHOOLING	688.900	1	688.900	27.604	0.000
EXPLAINED	688.900	1	688.900	27.604	0.000
RESIDUAL	4442.300	178	24.957		
TOTAL	5131.200	179	28.666		

H_0 - Length of schooling does not affect intelligence for all subjects.

H_A - Length of schooling affects intelligence for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 16B2

Multiple Classification Analysis

Grand mean = 23.93.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	2.77
BANGLADESHI BOYS	120	-1.38

Between Group Comparison:

16C. Indigenous girls and Bangladeshi girls:

TABLE 16C1

One-way analysis of variance for the factor length of schooling on intelligence.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	858.817	1	858.817	36.308	0.000
LENGTH OF SCHOOLING	858.817	1	858.817	36.308	0.000
EXPLAINED	858.817	1	858.817	36.308	0.000
RESIDUAL	2791.150	118	23.654		
TOTAL	3649.967	119	30.672		

H_0 - Length of schooling does not affect intelligence for all subjects.

H_A - Length of schooling affects intelligence for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 16C2

Multiple Classification Analysis

Grand mean = 21.83.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	3.78
BANGLADESHI GIRLS	80	-1.89

Between Group Comparison:

16D. Total indigenous and Bangladeshi children (>2):

TABLE 16D1

One-way analysis of variance for the factor length of schooling on intelligence.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	420.996	1	420.996	18.221	0.000
LENGTH OF SCHOOLING	420.996	1	420.996	18.221	0.000
EXPLAINED	420.996	1	420.996	18.221	0.000
RESIDUAL	4621.083	200	23.105		
TOTAL	5042.079	201	25.085		

H_0 - Length of schooling does not affect intelligence for all subjects.

H_A - Length of schooling affects intelligence for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 16D2

Multiple Classification Analysis

Grand mean = 24.80.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	1.46
BANGLADESHI CHILDREN	102	-1.43

16E. Within total Bangladeshi sample:

TABLE 16E1

3-way ANOVA with factor, length of schooling, sex and age on intelligence.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	3733.161	6	622.194	57.319	0.000
VAR - AGE	2647.772	4	661.943	60.981	0.000
VAR - LENGTH OF SCHOOLING	812.060	1	812.060	74.810	-0.000
VAR - SEX	367.465	1	367.465	33.852	0.000
2-WAY INTERACTIONS	159.439	9	17.715	1.632	0.109
AGE x LENGTH OF SCHOOLING	45.077	4	11.269	1.038	0.389
AGE x SEX	93.197	4	23.299	2.146	0.077
LENGTH OF SCHOOLING x SEX	13.805	1	13.805	1.272	0.261
3-WAY INTERACTIONS	47.515	4	11.879	1.094	0.361
AGE x LENGTH OF SCHOOLING x SEX	47.515	4	11.879	1.094	0.361
EXPLAINED	3940.116	19	207.375	19.104	0.000
RESIDUAL	1953.884	180	10.855		
TOTAL	5894.000	199	29.618		

Length of schooling:

H_0 - Length of schooling does not affect intelligence for total Bangladeshi subjects.

H_A - Length of schooling affects intelligence for total Bangladeshi subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect intelligence for total Bangladeshi sample.

H_A - Sex affects intelligence for total Bangladeshi sample.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Age:

H_0 - Age does not affect intelligence for total Bangladeshi sample.

H_A - Age affects hypothesis for total Bangladeshi sample.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

1. All the main effects are significant.
2. None of the 2-way interaction is significant.
3. The effect of 3-way interaction between age, length of schooling and sex on intelligence for total Bangladeshi subjects is not statistically significant.

TABLE 16E2

Multiple Classification Analysis

Grand mean = 21.50.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	1.87
BANGLADESBI (<2)	98	-1.95
SEX		
MALE	120	1.05
FEMALE	80	-1.58
AGE		
7 YEARS OLD	25	-4.86
8 YEARS OLD	56	-2.84
9 YEARS OLD	50	-0.70
10 YEARS OLD	52	3.98
11 YEARS OLD	17	6.38

Within Indigenous Group Comparison:

16F. Indigenous boys and indigenous girls:

TABLE 16F1

One-way analysis of variance for the factor sex on intelligence.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	29.040	1	29.040	1.704	0.195
SEX	29.040	1	29.040	1.704	0.195
EXPLAINED	29.040	1	29.040	1.704	0.195
RESIDUAL	1670.200	98	17.043		
TOTAL	1699.240	99	17.164		

H_0 - Sex does not affect intelligence for all subjects.

H_A - Sex affects intelligence for all subjects.

Significance level P is 19.5%.

The null hypothesis thus cannot be rejected.

TABLE 16F2

Multiple Classification Analysis

Grand mean = 26.26.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	0.44
INDIGENOUS GIRLS	40	-0.66

17. VOCABULARY

Between Group Comparison:

17A. Total indigenous and Bangladeshi children:

TABLE 17A1

One-way analysis of variance for the factor length of schooling on vocabulary.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	17485.202	1	17485.202	227.527	-0.000
LENGTH OF SCHOOLING	17485.202	1	17485.202	227.527	-0.000
EXPLAINED	17485.202	1	17485.202	227.527	-0.000
RESIDUAL	22900.994	298	76.849		
TOTAL	40386.196	299	135.071		

H_0 - Length of schooling does not affect vocabulary for all subjects.

H_A - Length of schooling affects vocabulary for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 17A2

Multiple Classification Analysis

Grand mean = 29.76.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	10.80
BANGLADESHI CHILDREN	200	- 5.40

Between Group Comparison:

17B. Indigenous boys and Bangladeshi boys:

TABLE 17B1

One-way analysis of variance for the factor length of schooling on vocabulary.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	9476.136	1	9476.136	116.801	-0.000
LENGTH OF SCHOOLING	9476.136	1	9476.136	116.801	-0.000
EXPLAINED	9476.136	1	9476.136	116.801	-0.000
RESIDUAL	14441.258	178	81.131		
TOTAL	23917.394	179	133.617		

H_0 - Length of schooling does not affect vocabulary for all subjects.

H_A - Length of schooling affects vocabulary for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 17B2

Multiple Classification Analysis

Grand mean = 29.1.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	10.26
BANGLADESHI BOYS	120	- 5.13

Between Group Comparison:

17C. Indigenous girls and Bangladeshi girls:

TABLE 17C1

One-way analysis of variance for the factor length of schooling on vocabulary.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	8073.600	1	8073.600	113.603	-0.000
LENGTH OF SCHOOLING	8073.600	1	8073.600	113.603	-0.000
EXPLAINED	8073.600	1	8073.600	113.603	-0.000
RESIDUAL	8386.100	118	71.069		
TOTAL	16459.700	119	138.317		

H_0 - Length of schooling does not affect vocabulary for all subjects.

H_A - Length of schooling affects vocabulary for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 17C2

Multiple Classification Analysis

Grand mean = 29.55.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	11.60
BANGLADESHI GIRLS	80	- 5.80

Between Group Comparison:

17D. Total indigenous and Bangladeshi children (>2):

TABLE 17D1

One-way analysis of variance for the factor length of schooling on vocabulary.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	8015.596	1	8015.596	90.651	-0.000
LENGTH OF SCHOOLING	8015.596	1	8015.596	90.651	-0.000
EXPLAINED	8015.596	1	8015.596	90.651	-0.000
RESIDUAL	17684.483	200	88.422		
TOTAL	25700.079	201	127.861		

H_0 - Length of schooling does not affect vocabulary for all subjects.

H_A - Length of schooling affects vocabulary for all subjects.

Significance level P is 0%.

The null hypothesis is rejected and the alternative hypothesis accepted.

TABLE 17D2

Multiple Classification Analysis

Grand mean = 34.20.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	6.36
BANGLADESHI CHILDREN	102	-6.24

17 E. Within total Bangladeshi sample:

TABLE 17E1

3-way ANOVA with factor, length of schooling, sex and age on vocabulary.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	5625.265	6	937.544	25.829	0.
VAR - AGE	2863.644	4	715.911	19.723	0.
VAR - LENGTH OF SCHOOLING	2754.604	1	2754.604	75.887	-0.000
VAR - SEX	62.741	1	62.741	1.728	0.190
2-WAY INTERACTIONS	1349.804	9	149.978	4.132	0.000
AGE x LENGTH OF SCHOOLING	596.836	4	149.209	4.111	0.003
AGE x SEX	508.942	4	127.236	3.505	0.009
LENGTH OF SCHOOLING x SEX	189.738	1	189.738	5.227	0.023
3-WAY INTERACTIONS	255.553	4	63.888	1.760	0.139
AGE x LENGTH OF SCHOOLING x SEX	255.553	4	63.888	1.760	0.139
EXPLAINED	7230.622	19	380.559	10.484	0.000
RESIDUAL	6533.733	180	36.299		
TOTAL	13764.355	199	69.168		

Length of schooling:

H_0 - Length of schooling does not affect vocabulary for total Bangladeshi sample.

H_A - Length of schooling affects vocabulary for total Bangladeshi sample.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect vocabulary for total Bangladeshi sample.

H_A - Sex affects vocabulary for total Bangladeshi sample.

Significance level P is 19.0%.

The null hypothesis thus cannot be rejected.

Age:

H_0 - Age does not affect vocabulary for total Bangladeshi sample.

H_A - Age affects vocabulary for total Bangladeshi sample.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

1. Among the main effects only sex is not significant.
2. All 2-way intereactions are significant.
3. The effect of 3-way interactions between age, length of schooling, and sex on vocabulary for total Bangladeshi subjects is not statistically significant.

TABLE 17E2

Multiple Classification Analysis

Grand mean = 24.37.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	3.60
BANGLADESHI (<2)	98	-3.74
SEX		
MALE	120	0.41
FEMALE	80	-0.62
AGE		
7 YEARS OLD	25	-4.09
8 YEARS OLD	56	-3.12
9 YEARS OLD	50	-1.42
10 YEARS OLD	52	4.79
11 YEARS OLD	17	5.81

Within Indigenous Group Comparison:

17F. Indigenous boys and indigenous girls:

TABLE 17F1

One-way analysis of variance for the factor sex on vocabulary.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	23.207	1	23.207	0.250	0.619
SEX	23.207	1	23.207	0.250	0.619
EXPLAINED	23.207	1	23.207	0.250	0.619
RESIDUAL	9113.433	98	92.994		
TOTAL	9136.640	99	92.289		

H_0 - Sex does not affect vocabulary for all subjects.

H_A - Sex affects vocabulary for all subjects.

Significance level P is 61.9%.

The null hypothesis thus cannot be rejected.

TABLE 17F2

Multiple Classification Analysis

Grand mean = 40.56.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	-0.39
INDIGENOUS GIRLS	40	0.59

18. PROFICIENCY IN SPOKEN ENGLISH

Between Group Comparison:

18A. Total indigenous and total Bangladeshi children:

TABLE 18A1

One-way analysis of variance for the factor length of schooling on proficiency in spoken English.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	138.240	1	138.240	44.243	0.
LENGTH OF SCHOOLING	138.240	1	138.240	44.243	0.
EXPLAINED	138.240	1	138.240	44.243	0.
RESIDUAL	931.130	298	3.125		
TOTAL	1069.370	299	3.576		

H_0 - Length of schooling does not affect proficiency in spoken English for all subjects.

H_A - Length of schooling affects proficiency in spoken English for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 18A2

Multiple Classification Analysis

Grand mean = 5.89.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.96
BANGLADESHI CHILDREN	200	-0.48

Between Group Comparison:

18B. Indigenous boys and Bangladeshi boys:

TABLE 18B1

One-way analysis of variance for the factor length of schooling on proficiency in spoken English.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	71.111	1	71.111	22.044	0.000
LENGTH OF SCHOOLING	71.111	1	71.111	22.044	0.000
EXPLAINED	71.111	1	71.111	22.044	0.000
RESIDUAL	574.200	178	3.226		
TOTAL	645.311	179	3.605		

H_0 - Length of schooling does not affect proficiency in spoken English for all subjects.

H_A - Length of schooling affects proficiency in spoken English for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 18B2

Multiple Classification Analysis

Grand mean = 5.88.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	0.89
BANGLADESHI BOYS	120	-0.44

Between Group Comparison:

18C. Indigenous girls and Bangladeshi girls:

TABLE 18C1

One-way analysis of variance for the factor length of schooling on proficiency in spoken English.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	68.267	1	68.267	22.645	0.000
LENGTH OF SCHOOLING	68.267	1	68.267	22.645	0.000
EXPLAINED	68.267	1	68.267	22.645	0.000
RESIDUAL	355.725	118	3.015		
TOTAL	423.992	119	3.563		

H_0 - Length of schooling does not affect proficiency in spoken English for all subjects.

H_A - Length of schooling affects proficiency in spoken English for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 18C2

Multiple Classification Analysis

Grand mean = 5.91.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	1.07
BANGLADESHI GIRLS	80	-0.53

Between Group Comparison:

18D. Total indigenous and Bangladeshi children (>2):

TABLE 18D1

One-way analysis of variance for the factor length of schooling on proficiency in spoken English.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	37.329	1	37.329	12.244	0.001
LENGTH OF SCHOOLING	37.329	1	37.329	12.244	0.001
EXPLAINED	37.329	1	37.329	12.244	0.001
RESIDUAL	609.740	200	3.049		
TOTAL	647.069	201	3.219		

H_0 - Length of schooling does not affect proficiency in spoken English for all subjects.

H_A - Length of schooling affects proficiency in spoken English for all subjects.

Significance level P is 0.1%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 18D2

Multiple Classification Analysis

Grand mean = 6.42.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.42
BANGLADESHI CHILDREN	102	-0.43

18E. Within total Bangladeshi sample:

TABLE 18E1

3-way ANOVA with factor, length of schooling, sex and age on proficiency in spoken English.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	78.389	6	13.065	4.588	0.000
VAR - AGE	7.945	4	1.986	0.697	0.595
VAR - LENGTH OF SCHOOLING	70.953	1	70.953	24.917	0.000
VAR - SEX	0.141	1	0.141	0.049	0.824
2-WAY INTERACTIONS	30.242	9	3.360	1.180	0.310
AGE x LENGTH OF SCHOOLING	25.908	4	6.477	2.275	0.063
AGE x SEX	5.664	4	1.416	0.497	0.738
LENGTH OF SCHOOLING x SEX	0.135	1	0.135	0.048	0.828
3-WAY INTERACTIONS	5.190	4	1.297	0.456	0.768
AGE x LENGTH OF SCHOOLING x SEX	5.190	4	1.297	0.456	0.768
EXPLAINED	113.821	19	5.991	2.104	0.006
RESIDUAL	512.559	180	2.848		
TOTAL	626.380	199	3.148		

Length of schooling:

H_0 - Length of schooling does not affect proficiency in spoken English for total Bangladeshi subjects.

H_A - Length of schooling affects proficiency in spoken English for total Bangladeshi subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect proficiency in spoken English for total Bangladeshi subjects.

H_A - Sex affects proficiency in spoken English for total Bangladeshi subjects.

Significance level P is 82.4%.

The null hypothesis thus cannot be rejected.

Age:

H_0 - Age does not affect proficiency in spoken English for total Bangladeshi subjects.

H_A - Age affects proficiency in spoken English for total Bangladeshi subjects.

Significance level P is 59.5%.

The null hypothesis thus cannot be rejected.

1. Among main effects only length of schooling is significant.
2. None of the 2-way interaction is significant.
3. The effect of 3-way interaction between age, length of schooling and sex on proficiency in spoken English for total Bangladeshi subjects is not statistically significant.

TABLE 18E2

Multiple classification Analysis

Grand mean = 5.41

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	0.58
BANGLADESHI (<2)	98	-0.60
SEX		
MALE	120	0.02
FEMALE	80	-0.04
AGE		
7 YEARS OLD	25	0.03
8 YEARS OLD	56	0.23
9 YEARS OLD	50	-0.17
10 YEARS OLD	52	0.03
11 YEARS OLD	17	-0.41

Within Indigenous Group Comparis.n:

18F. Indigenous boys and indigenous girls:

TABLE 18F1

One-way analysis of variance for the factor sex on proficiency in spoken English.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	1.042	1	1.042	0.336	0.563
SEX	1.042	1	1.042	0.336	0.563
EXPLAINED	1.042	1	1.042	0.336	0.463
RESIDUAL	303.708	98	3.099		
TOTAL	304.750	99	3.078		

H_0 - Sex does not affect proficiency in spoken English for all subjects.

H_A - Sex affects proficiency in spoken English for all subjects.

Significance level P is 56.3%.

The null hypothesis thus cannot be rejected.

TABLE 18F2

Multiple Classification Analysis

Grand mean = 6.85.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	-0.08
INDIGENOUS GIRLS	40	0.13

II. PERSONALITY

19. EXTROVERSION

Between Group Comparison:

19A. Total indigenous and total Bangladeshi children:

TABLE 19A1

One-way analysis of variance for the factor length of schooling on extroversion.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	1270.215	1	1270.215	216.543	-0.000
LENGTH OF SCHOOLING	1270.215	1	1270.215	216.543	-0.000
EXPLAINED	1270.215	1	1270.215	216.543	-0.000
RESIDUAL	1748.035	298	5.866		
TOTAL	3018.250	299	10.094		

H_0 - Length of schooling does not affect extroversion for all subjects.

H_A - Length of schooling affects extroversion for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 19A2

Multiple Classification Analysis

Grand mean = 15.05.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
TOTAL INDIGENOUS	100	2.91
TOTAL BANGLADESHI	200	-1.45

Between Group Comparison:

19B. Indigenous boys and Bangladeshi boys:

TABLE 19B1

One-way analysis of variance for the factor length of schooling on extroversion.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	722.500	1	722.500	147.095	-0.000
LENGTH OF SCHOOLING	722.500	1	722.500	147.095	-0.000
EXPLAINED	722.500	1	722.500	147.095	-0.000
RESIDUAL	874.300	178	4.912		
TOTAL	1596.800	179	8.921		

H_0 - Length of schooling does not affect extroversion for all subjects.

H_A - Length of schooling affects extroversion for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 19B2

Multiple Classification Analysis

Grand mean = 15.80.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
TOTAL INDIGENOUS	60	2.83
TOTAL BANGLADESHI	120	-1.42

Between Group Comparison:

19C. Indigenous girls and Bangladeshi girls:

TABLE 19C1

One-way analysis of variance for the factor length of schooling on extroversion.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	549.037	1	549.037	104.614	-0.000
LENGTH OF SCHOOLING	549.037	1	549.037	104.614	-0.000
EXPLAINED	549.037	1	549.037	104.614	-0.000
RESIDUAL	619.288	118	5.248		
TOTAL	1168.325	119	9.818		

H_O - Length of schooling does not affect extroversion for all subjects.

H_A - Length of schooling affects extroversion for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 19C2

Multiple Classification Analysis

Grand mean = 13.92.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	3.03
BANGLADESHI GIRLS	80	-1.51

Between Group Comparison:

19D. Total indigenous and Bangladeshi children (>2):

TABLE 19D1

One-way analysis of variance for the factor length of schooling on extroversion.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	499.853	1	499.853	81.990	-0.000
LENGTH OF SCHOOLING	499.853	1	499.853	81.990	-0.000
EXPLAINED	499.853	1	499.853	81.990	-0.000
RESIDUAL	1219.301	200	6.097		
TOTAL	1719.153	201	8.553		

H_0 - Length of schooling does not affect extroversion for all subjects.

H_A - Length of schooling affects extroversion for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 19D2

Multiple Classification Analysis

Grand mean = 16.37.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	1.59
BANGLADESHI CHILDREN	102	-1.56

19E. Within total Bangladeshi samples:

TABLE 19E1

3-way ANOVA with factor, length of schooling, sex and age on extroversion.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	614.301	6	102.383	45.162	0.000
VAR - AGE	106.607	4	26.652	11.756	0.000
VAR - LENGTH OF SCHOOLING	343.879	1	343.879	151.686	-0.000
VAR - SEX	201.328	1	201.328	88.806	-0.000
2-WAY INTERACTIONS	24.304	9	2.700	1.191	0.303
AGE x LENGTH OF SCHOOLING	12.584	4	3.146	1.388	0.240
AGE x SEX	15.004	4	3.751	1.655	0.163
LENGTH OF SCHOOLING x SEX	0.097	1	0.097	0.043	0.837
3-WAY INTERACTIONS	1.523	4	0.381	0.168	0.954
AGE x LENGTH OF SCHOOLING x SEX	1.523	4	0.381	0.168	0.954
EXPLAINED	640.128	19	33.691	14.861	0.000
RESIDUAL	408.068	180	2.267		
TOTAL	1048.195	199	5.267		

Length of schooling:

H_0 - Length of schooling does not affect extroversion for total Bangladeshi sample.

H_A - Length of schooling affects extroversion for total Bangladeshi sample.
Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect extroversion for total Bangladeshi sample.

H_A - Sex affects extroversion for total Bangladeshi sample.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Age:

H_0 - Age does not affect extroversion for total Bangladeshi sample.

H_A - Age affects extroversion for total Bangladeshi sample.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

1. All the main effects are significant.
2. None of the 2-way interaction is significant.
3. The effect of the 3-way interaction between age, length of schooling and sex on Extroversion for total Bangladeshi subjects is not statistically significant.

TABLE 19E2

Multiple Classification Analysis

Grand mean = 13.6.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	1.22
BANGLADESHI (<2)	98	-1.27
SEX		
MALE	120	0.79
FEMALE	80	-1.18
AGE		
7 YEARS OLD	25	-1.36
8 YEARS OLD	56	-0.17
9 YEARS OLD	50	-0.10
10 YEARS OLD	52	0.60
11 YEARS OLD	17	0.99

Within Indigenous Group Comparison:

19F. Indigenous boys and indigenous girls:

TABLE 19F1

One-way analysis of variance for the factor sex on extroversion.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	68.007	1	68.007	10.548	0.002
SEX	68.007	1	68.007	10.548	0.002
EXPLAINED	68.007	1	68.007	10.548	0.002
RESIDUAL	631.833	98	6.447		
TOTAL	699.840	99	7.069		

H_0 - Sex does not affect extroversion for all subjects.

H_A - Sex affects extroversion for all subjects.

Significance level P is 0.2%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 19F2

Multiple Classification Analysis

Grand mean = 17.96.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	0.67
INDIGENOUS GIRLS	40	-1.01

20. NEUROTICISM

Between Group Comparison:

20A. Total indigenous and total Bangladeshi children:

TABLE 20A1

One-way analysis of variance for the factor length of schooling on neuroticism.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	457.627	1	457.627	59.247	0.
LENGTH OF SCHOOLING	457.627	1	457.627	59.247	0.
EXPLAINED	457.627	1	457.627	59.247	0.
RESIDUAL	2301.770	298	7.724		
TOTAL	2759.397	299	9.229		

H_0 - Length of schooling does not affect neuroticism for all subjects.

H_A - Length of schooling affects neuroticism for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis rejected.

TABLE 20A2

Multiple Classification Analysis

Grand mean = 13.2.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
TOTAL INDIGENOUS	100	-1.75
TOTAL BANGLADESHI	200	0.87

Between Group Comparison:

20B. Indigenous boys and Bangladeshi boys:

TABLE 20B1

One-way analysis of variance for the factor length of schooling on neuroticism.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	300.669	1	300.669	31.165	0.000
LENGTH OF SCHOOLING	300.669	1	300.669	31.165	0.000
EXPLAINED	300.669	1	300.669	31.165	0.000
RESIDUAL	1717.308	178	9.648		
TOTAL	2017.978	179	11.274		

H_0 - Length of schooling does not affect neuroticism for all subjects.

H_A - Length of schooling affects neuroticism for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 20B2

Multiple Classification Analysis

Grand mean = 13.01.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	-1.83
BANGLADESHI BOYS	120	0.91

Between Group Comparison:

20C. Indigenous girls and Bangladeshi girls:

TABLE 20C1

One-way analysis of variance for the factor length of schooling on neuroticism.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	158.438	1	158.438	32.945	0.000
LENGTH OF SCHOOLING	158.438	1	158.438	32.943	0.000
EXPLAINED	158.438	1	158.438	32.943	0.000
RESIDUAL	567.488	118	4.809		
TOTAL	725.925	119	6.100		

H_0 - Length of schooling does not affect neuroticism for all subjects.

H_A - Length of schooling affects neuroticism for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 20C2

Multiple Classification Analysis

Grand mean = 13.48.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	-1.63
BANGLADESHI GIRLS	80	0.81

Between Group Comparison:

20D. Total indigenous and Bangladeshi children (>2):

TABLE 20D1

One-way analysis of variance for the factor length of schooling on neuroticism.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	110.810	1	110.810	11.805	0.001
LENGTH OF SCHOOLING	110.810	1	110.810	11.805	0.001
EXPLAINED	110.810	1	110.810	11.805	0.001
RESIDUAL	1877.270	200	9.386		
TOTAL	1988.079	201	9.891		

H_0 - Length of schooling does not affect neuroticism for all subjects.

H_A - Length of schooling affects neuroticism for all subjects.

Significance level P is 0.1%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 20D2

Multiple Classification Analysis

Grand mean = 12.2.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	-0.75
BANGLADESHI CHILDREN	102	0.73

20E. Within total Bangladeshi samples:

TABLE 20E1

3-way ANOVA with factor, length of schooling, sex and age on neuroticism.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQAURE	F	SIGNIF OF F
MAIN EFFECTS	376.162	6	62.694	13.012	0.
VAR - AGE	97.788	4	24.447	5.074	0.001
VAR - LENGTH OF SCHOOLING	265.081	1	265.081	55.018	-0.000
VAR - SEX	6.831	1	6.831	1.418	0.235
2-WAY INTERACTIONS	41.690	9	4.632	0.961	0.474
AGE x LENGTH OF SCHOOLING	17.048	4	4.262	0.885	0.474
AGE x SEX	18.625	4	4.656	0.966	0.427
LENGTH OF SCHOOLING x SEX	3.871	1	3.871	0.803	0.371
3-WAY INTERACTIONS	11.914	4	2.978	0.618	0.650
AGE x LENGTH OF SCHOOLING x SEX	11.914	4	2.978	0.618	0.650
EXPLAINED	429.766	19	22.619	4.695	0.000
RESIDUAL	867.254	180	4.818		
TOTAL	1297.020	199	6.518		

Length of schooling:

H_0 - Length of schooling does not affect neuroticism for total Bangladeshi subjects.

H_A - Length of schooling affects neuroticism for total Bangladeshi subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect neuroticism for total Bangladeshi subjects.

H_A - Sex affects neuroticism for total Bangladeshi subjects.

Significance level P is 23.5%.

The null hypothesis thus cannot be rejected.

Age:

H_0 - Age does not affect neuroticism for total Bangladeshi subjects.

H_A - Age affects neuroticism for total Bangladeshi subjects.

Significance level P is 0.1%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

1. Among main effects only sex is not significant.
2. None of the 2-way interaction is significant.
3. The effect of the 3-way interaction between age, length of schooling and sex on Neuroticism for total Bangladeshi subjects is not statistically significant.

TABLE 20E2

Multiple Classification Analysis

Grand mean = 14.07.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	-1.14
BANGLADESHI (<2)	98	1.19
SEX		
MALE	120	-0.15
FEMALE	80	0.22
AGE		
7 YEARS OLD	25	0.25
8 YEARS OLD	56	0.66
9 YEARS OLD	50	0.49
10 YEARS OLD	52	-1.07
11 YEARS OLD	17	-0.72

Within Indigenous Group Comparison:

20F. Indigenous boys and indigenous girls:

TABLE 20F1

One-way analysis of variance for the factor sex on neuroticism.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	10.667	1	10.667	1.052	0.308
SEX	10.667	1	10.667	1.052	0.308
EXPLAINED	10.667	1	10.667	1.052	0.308
RESIDUAL	994.083	98	10.144		
TOTAL	1004.750	99	10.149		

H_0 - Sex does not affect neuroticism for all subjects.

H_A - Sex affects neuroticism for all subjects.

Significance level P is 30.8%.

The null hypothesis thus cannot be rejected.

TABLE 20F2

Multiple Classification Analysis

Grand mean = 11.45.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	-0.27
INDIGENOUS GIRLS	40	0.40

21. ATTITUDE TO SCHOOL

Between Group Comparison:

21A. Total indigenous and total Bangladeshi children:

TABLE 21A1

One-way analysis of variation for the factor length of schooling on attitude to school.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	148.007	1	148.007	56.930	0.
LENGTH OF SCHOOLING	148.007	1	148.007	56.930	0.
EXPLAINED	148.007	1	148.007	56.930	0.
RESIDUAL	774.740	298	2.600		
TOTAL	922.747	299	3.086		

H_0 - Length of schooling does not affect attitude to school for all subjects.

H_A - Length of schooling affects attitude to school for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 21A2

Multiple Classification Analysis

Grand mean = 4.25.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	-0.99
BANGLADESHI CHILDREN	200	0.50

Between Group Comparison:

21B. Indigenous boys and Bangladeshi boys:

TABLE 21B1

One-way analysis of variance for the factor length of schooling on attitude to school.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	222.469	1	222.469	118.381	-0.000
LENGTH OF SCHOOLING	222.469	1	222.469	118.381	-0.000
EXPLAINED	222.469	1	222.469	118.381	-0.000
RESIDUAL	334.508	178	1.879		
TOTAL	556.978	179	3.112		

H_0 - Length of schooling does not affect attitude to school for all subjects.

H_A - Length of schooling affects attitude to school for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 21B2

Multiple Classification Analysis

Grand mean = 4.49.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	-1.57
BANGLADESHI BOYS	120	0.79

Between Group Comparison:

21C. Indigenous girls and Bangladeshi girls:

TABLE 21C1

One-way analysis of variance for the factor length of schooling on attitude to school.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.938	1	0.938	0.325	0.569
LENGTH OF SCHOOLING	0.938	1	0.938	0.325	0.569
EXPLAINED	0.938	1	0.938	0.325	0.569
RESIDUAL	339.863	118	2.880		
TOTAL	340.800	119	2.864		

H_0 - Length of schooling does not affect attitude to school for all subjects.

H_A - Length of schooling affects attitude to school for all subjects.

Signficance level P is 56.9%.

The null hypothesis thus cannot be rejected.

TABLE 21C2

Multiple Classification Analysis

Grand mean = 3.9.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	-0.13
BANGLADESHI GIRLS	80	0.06

Between Group Comparison:

21D. Total indigenous and and Bangladeshi children (>2):

TABLE 21D1

One-way analysis of variance for the factor length of schooling on attitude to school.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	137.767	1	137.767	53.249	-0.000
LENGTH OF SCHOOLING	137.767	1	137.767	53.249	-0.000
EXPLAINED	137.767	1	137.767	53.249	-0.000
RESIDUAL	517.446	200	2.587		
TOTAL	655.213	201	3.260		

H_O - Length of schooling does not affect attitude to school for all subjects.

H_A - Length of schooling affects attitude to school for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 21D2

Multiple Classification Analysis

Grand mean = 4.09.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	-0.83
BANGLADESHI CHILDREN	102	0.82

21E. Within total Bangladeshi samples:

TABLE 21E1

3-way ANOVA with factor, length of schooling, sex and age on attitude to school.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	121.512	6	20.252	10.421	0.
VAR - AGE	32.284	4	8.071	4.153	0.003
VAR - LENGTH OF SCHOOLING	9.420	1	9.420	4.847	0.029
VAR - SEX	89.755	1	89.755	46.185	0.
2-WAY INTERACTIONS	24.477	9	2.720	1.399	0.191
AGK x LENGTH OF SCHOOLING	4.279	4	1.070	0.550	0.699
AGE x SEX	18.112	4	4.528	2.330	0.058
LENGTH OF SCHOOLING x SEX	5.414	1	5.414	2.786	0.097
3-WAY INTERACTIONS	1.706	4	0.427	0.220	0.927
AGE x LENGTH OF SCHOOLING x SEX	1.706	4	0.427	0.220	0.927
EXPLAINED	147.695	19	7.773	4.000	0.000
RESIDUAL	349.805	180	1.943		
TOTAL	497.500	199	2.500		

Length of schooling:

H_0 - Length of schooling does not affect attitude to school for total Bangladeshi subjects.

H_A - Length of schooling affects attitude to school for total Bangladeshi subjects.

Significance level P is 2.9%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect attitude to school for total Bangladeshi sample.

H_A - Sex affects attitude to school for total Bangladeshi sample. Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Age:

H_0 - Age does not affect attitude to school for total Bangladeshi sample.

H_A - Age affects attitude to school for total Bangladeshi sample. Significance level P is 0.3%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

1. All the main effects are significant.
2. None of the 2-way interaction is significant.
3. The effect of the 3-way interaction between age, length of schooling and sex on Attitude to school for total Bangladeshi subjects is not statistically significant.

TABLE 21E2

Multiple Classification Analysis

Grand mean = 4.75.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	0.16
BANGLADESHI (<2)	98	-0.17
SEX		
MALE	120	0.52
FEMALE	80	-0.79
AGE		
7 YEARS OLD	25	-0.79
8 YEARS OLD	56	-0.11
9 YEARS OLD	50	0.37
10 YEARS OLD	52	0.10
11 YEARS OLD	17	0.13

Within Indigenous Group Comparison:

21F. Indigenous boys and indigenous girls:

TABLE 21F1

One-way analysis of variance for the factor sex on attitude to school.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	17.682	1	17.682	6.676	0.011
SEX	17.682	1	17.682	6.676	0.011
EXPLAINED	17.682	1	17.682	6.676	0.011
RESIDUAL	259.558	98	2.649		
TOTAL	277.240	99	2.800		

H_0 - Sex does not affect attitude to school for all subjects.

H_A - Sex affects attitude to school for all subjects.

Significance level P is 1.1%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 21F2

Multiple Classification Analysis

Grand mean = 3.26

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	-0.34
INDIGENOUS GIRLS	40	0.52

22. INTEREST IN SCHOOLWORK

Between Group Comparison:

22A. Total indigenous and total Bangladeshi children:

TABLE 22A1

One-way analysis of variance for the factor length of schooling on interest in schoolwork.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.202	1	0.202	0.081	0.776
LENGTH OF SCHOOLING	0.202	1	0.202	0.081	0.776
EXPLAINED	0.202	1	0.202	0.081	0.776
RESIDUAL	738.145	298	2.477		
TOTAL	738.347	299	2.469		

H_0 - Length of schooling does not affect interest in schoolwork for all subjects.

H_A - Length of schooling affects interest in schoolwork for all subjects.

Significance level P is 77.6%.

The null hypothesis thus cannot be rejected.

TABLE 22A2

Multiple Classification Analysis

Grand mean = 2.55

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	-0.04
BANGLADESHI CHILDREN	200	0.02

Between Group Comparison:

22B. Indigenous boys and Bangladeshi boys:

TABLE 22B1

One-way analysis of variance for the factor length of schooling on interest in schoolwork.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	11.025	1	11.025	4.741	0.031
LENGTH OF SCHOOLING	11.025	1	11.025	4.741	0.031
EXPLAINED	11.025	1	11.025	4.741	0.031
RESIDUAL	413.925	178	2.325		
TOTAL	424.950	179	2.374		

H_0 - Length of schooling does not affect interest in schoolwork for all subjects.

H_A - Length of schooling affects interest in schoolwork for all subjects.

Significance level P is 3.1%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 22B2

Multiple Classification Analysis

Grand mean = 3.1%.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	-0.35
BANGLADESHI BOYS	120	0.17

Between Group Comparison:

22C. Indigenous girls and Bangladeshi girls:

TABLE 22C1

One-way analysis of variance for the factor length of schooling on interest in schoolwork.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	11.267	1	11.267	4.526	0.035
LENGTH OF SCHOOLING	11.267	1	11.267	4.526	0.035
EXPLAINED	11.267	1	11.267	4.526	0.035
RESIDUAL	293.725	118	2.489		
TOTAL	304.992	119	2.563		

H_0 - Length of schooling does not affect interest in schoolwork for all subjects.

H_A - Length of schooling affects interest in schoolwork for all subjects.

Significance level P is 3.5%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 22C2

Multiple Classification Analysis

Grand mean = 2.34.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	0.43
BANGLADESHI GIRLS	80	-0.22

Between Group Comparison:

22D. Total indigenous and Bangladeshi children (>2):

TABLE 22D1

One-way analysis of variance for the factor length of schooling on interest in schoolwork.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	11.644	1	11.644	4.513	0.035
LENGTH OF SCHOOLING	11.644	1	11.644	4.513	0.035
EXPLAINED	11.644	1	11.644	4.513	0.035
RESIDUAL	515.980	200	2.580		
TOTAL	527.624	201	2.625		

H_0 - Length of schooling does not affect interest in schoolwork for all subjects.

H_A - Length of schooling affects interest in schoolwork for all subjects.

Significance level P is 3.5%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 22D2

Multiple Classification Analysis

Grand mean = 2.75.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	-0.24
BANGLADESHI CHILDREN	102	0.24

22E. Within total Bangladeshi sample:

TABLE 22E1

3-way ANOVA with factor, length of schooling, sex and age on interest in schoolwork.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	91.133	6	15.189	6.753	0.000
VAR - AGE	26.119	4	6.530	2.903	0.023
VAR - LENGTH OF SCHOOLING	45.956	1	45.956	20.431	0.000
VAR - SEX	27.635	1	27.635	12.286	0.001
2-WAY INTERACTIONS	17.045	9	1.894	0.842	0.578
AGE x LENGTH OF SCHOOLING	3.874	4	0.968	0.431	0.786
AGE x SEX	12.313	4	3.078	1.369	0.247
LENGTH OF SCHOOLING x SEX	1.031	1	1.031	0.458	0.499
3-WAY INTERACTIONS	6.101	4	1.525	0.678	0.608
AGE x LENGTH OF SCHOOLING x SEX	6.101	4	1.525	0.678	0.608
EXPLAINED	114.279	19	6.015	2.674	0.000
RESIDUAL	404.876	180	2.249		
TOTAL	519.155	199	2.609		

Length of schooling:

H_0 - Length of schooling does not affect interest in schoolwork for total Bangladeshi sample.

H_A - Length of schoolwork affects interest in schoolwork for total Bangladeshi sample.

Significance level P is 0%.

The null hypothesis is thus rejec ted and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect interest in schoolwork for total Bangladeshi sample.

HA - Sex affects interest in schoolwork for total Bangladeshi sample.

Significance level P is 0.1%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Age:

H_0 - Age does not affect interest in schoolwork for total Bangladeshi sample.

H_A - Age affects interest in schoolwork for total Bangladeshi sample.

Significance level P is 2.3%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

1. All the main effects are significant.
2. None of the 2-way interaction is significant.
3. The effect of the 2-way interaction between age, length of schooling and sex on Interest in schoolwork for total Bangladeshi subjects is not statistically significant.

TABLE 22E1

Multiple Classification Analysis

Grand mean = 2.56.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	0.43
BANGLADESHI (<2)	98	-0.44
SEX		
MALE	120	0.29
FEMALE	80	-0.44
AGE		
7 YEARS OLD	25	-0.77
8 YEARS OLD	56	0.22
9 YEARS OLD	50	0.16
10 YEARS OLD	52	0.05
11 YEARS OLD	17	-0.21

Within Indigenous Group Comparison:

22F. Indigenous boys and indigenous girls:

TABLE 22F1

One-way analysis of variance for the factor sex on interest in schoolwork.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	4.682	1	4.682	2.141	0.147
SEX	4.682	1	4.682	2.141	0.147
EXPLAINED	4.682	1	4.682	2.141	0.147
RESIDUAL	214.308	98	2.187		
TOTAL	218.990	99	2.212		

H_0 - Sex does not affect interest in schoolwork for all subjects.

H_A - Sex affects interest in schoolwork for all subjects.

Significance level P is 14.7%.

The null hypothesis thus cannot be rejected.

TABLE 22F2

Multiple Classification Analysis

Grand mean = 2.51.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	-0.18
INDIGENOUS GIRLS	40	0.27

23. IMPORTANCE OF DOING WELL

Between Group Comparison:

23A. Total indigenous and total Bangladeshi children:

TABLE 23A1

One-way analysis of variance for the factor length of schooling on importance of doing well.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	16.007	1	16.007	3.054	0.082
LENGTH OF SCHOOLING	16.007	1	16.007	3.054	0.082
EXPLAINED	16.007	1	16.007	3.054	0.082
RESIDUAL	1561.740	298	5.241		
TOTAL	1577.747	299	5.277		

H_0 - Length of schooling does not affect importance of doing well

H_A - Length of schooling affects importance of doing well.

Significance level P is 8.2%.

The null hypothesis thus cannot be rejected.

TABLE 23A2

Multiple Classification Analysis

Grand mean = 7.25.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	-0.33
BANGLADESHI CHILDREN	200	0.16

Between Group Comparison:

23B. Indigenous boys and Bangladeshi boys:

TABLE 23B1

One-way analysis of variance for the factor length of schooling on importance of doing well.

SOURCE OF VARIATION	SUM OF SQUARES'	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	80.278	1	80.278	17.675	0.000
LENGTH OF SCHOOLING	80.278	1	80.278	17.675	0.000
EXPLAINED	80.278	1	80.278	17.675	0.000
RESIDUAL	808.450	178	4.542		
TOTAL	888.728	179	4.965		

H_0 - Length of schooling does not affect importance of doing well for all subjects.

H_A - Length of schooling affects importance of doing well for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 23B2

Multiple Classification Analysis

Grand mean = 7.46.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	-0.94
BANGLADESHI BOYS	120	0.47

Between Group Comparison:

23C. Indigenous girls and Bangladeshi girls:

TABLE 23C1

One-way analysis of variance for the factor length of schooling on importance of doing well.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	21.600	1	21.600	3.941	0.049
LENGTH OF SCHOOLING	21.600	1	21.600	3.941	0.049
EXPLAINED	21.600	1	21.600	3.941	0.049
RESIDUAL	646.725	118	5.481		
TOTAL	668.325	119	5.616		

H_0 - Length of schooling does not affect importance of doing well for all subjects.

H_A - Length of schooling affects importance of doing well for all subjects.

Significance level P is 4.9%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 23C2

Multiple Classification Analysis

Grand mean = 6.93.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	0.60
BANGLADESHI GIRLS	80	-0.30

Between Group Comparison:

23D. Total indigenous and Bangladeshi children (>2):

TOTAL 23D1

One-way analysis of variance for the factor length of schooling on importance of doing well.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	36.871	1	36.871	7.015	0.009
LENGTH OF SCHOOLING	36.871	1	36.871	7.015	0.009
EXPLAINED	36.871	1	36.871	7.015	0.009
RESIDUAL	1051.174	200	5.256		
TOTAL	1088.045	201	5.413		

H_0 - Length of schooling does not affect importance of doing well for all subjects.

H_A - Length of schooling affects importance of doing well for all subjects.

Significance level P is 0.9%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 23D2

Multiple Classification Analysis

Grand mean = 7.35.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	-0.43
BANGLADESHI CHILDREN	102	0.42

23E. Within total Bangladeshi sample:

TABLE 23E1

3-way ANOVA with factor, length of schooling, sex and age on importance of doing well.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	221.957	6	36.993	8.103	0.000
VAR - AGE	109.732	4	27.433	6.009	0.000
VAR - LENGTH OF SCHOOLING	41.187	1	41.187	9.022	0.003
VAR - SEX	91.700	1	91.700	20.086	0.000
2-WAY INTERACTIONS	42.881	9	4.765	1.044	0.407
AGE x LENGTH OF SCHOOLING	20.634	4	5.158	1.130	0.344
AGE x SEX	22.941	4	5.735	1.256	0.289
LENGTH OF SCHOOLING x SEX	2.974	1	2.974	0.652	0.421
3-WAY INTERACTIONS	1.785	4	0.446	0.098	0.983
AGE x LENGTH OF SCHOOLING x SEX	1.785	4	0.466	0.098	0.983
EXPLAINED	266.622	19	14.033	3.074	0.000
RESIDUAL	821.758	180	4.565		
TOTAL	1088.380	199	5.469		

Length of schooling:

H_0 - Length of schooling does not affect importance of doing well for total Bangladeshi sample.

H_A - Length of schooling affects importance of doing well for total Bangladeshi sample.

Significance level P is 0.3%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect importance of doing well for total Bangladeshi sample.

H_A - Sex affects importance of doing well for total Bangladeshi sample.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Age:

H_0 - Age does not affect importance of doing well for total Bangladeshi sample.

H_A - Age affects importance of doing well for total Bangladeshi sample.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

1. All the main effects are significant.
2. None of the 2-way interaction is significant.
3. The effect of the 3-way intereaction between age, length of schooling and sex on Importance of doing well for total Bangladeshi subjects is not statistically significant.

TABLE 23E2

Multiple Classification Analysis

Grand mean = 7.41.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	0.36
BANGLADESHI (<2)	98	-0.38
SEX		
MALE	120	0.52
FEMALE	80	-0.79
AGE		
7 YEARS OLD	25	-1.61
8 YEARS OLD	56	-0.21
9 YEARS OLD	50	0.57
10 YEARS OLD	52	0.40
11 YEARS OLD	17	0.18

Within Indigenous Group Comparison:

23F. Indigenous boys and indigenous girls:

TABLE 23F1

One-way analysis of variance for the factor sex on importance of doing well.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	24.402	1	24.402	5.326	0.023
SEX	24.402	1	24.402	5.326	0.023
EXPLAINED	24.402	1	24.402	5.326	0.023
RESIDUAL	448.958	98	4.581		
TOTAL	473.360	99	4.781		

H_0 - Sex does not affect importance of doing well for all subjects.

H_A - Sex affects importance of doing well for all subjects.

Significance level P is 2.3%.

The null hypothesis is thus rejected and the alternative hypothesis is accepted.

TABLE 23F2

Multiple Classification Analysis

Grand mean = 6.92.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	-0.40
INDIGENOUS GIRLS	40	0.60

24. ATTITUDE TO CLASS

Between Group Comparison:

24A. Total indigenous and total Bangladeshi children:

TABLE 24A1

One-way analysis of variance for the factor length of schooling on attitude to class.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	54.000	1	54.000	2.824	0.094
LENGTH OF SCHOOLING	54.000	1	54.000	2.824	0.094
EXPLAINED	54.000	1	54.000	2.824	0.094
RESIDUAL	5699.000	298	19.124		
TOTAL	5753.000	299	19.241		

H_0 - Length of schooling does not affect attitude to class for all subjects.

H_A - Length of schooling affects attitude to class for all subjects.

Significance level P is 9.4%.

The null hypothesis thus cannot be rejected.

TABLE 24A2

Main Classification Analysis

Grand mean = 11.90.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	-0.60
BANGLADESHI CHILDREN	200	0.30

Between Group Comparison:

24B. Indigenous boys and Bangladeshi boys:

TABLE 24B1

One-way analysis of variance for the factor length of schooling on attitude to class.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	29.469	1	29.469	1.445	0.231
LENGTH OF SCHOOLING	29.469	1	29.469	1.445	0.231
EXPLAINED	29.469	1	29.469	1.445	0.231
RESIDUAL	3628.975	178	20.387		
TOTAL	3658.444	179	20.438		

H_0 - Length of schooling does not affect attitude to class for all subjects.

H_A - Length of schooling affects attitude to class for all subjects.

Significance level P is 23.1%.

The null hypothesis thus cannot be rejected.

TABLE 24B2

Multiple Classification Analysis

Grand mean = 11.56.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	-0.57
BANGLADESHI BOYS	120	0.29

Between Group Comparison:

24C. Indigenous girls and Bangladeshi girls:

TABLE 24C1

One-way analysis of variance for the factor length of schooling on attitude to class.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	24.704	1	24.704	1.446	0.232
LENGTH OF SCHOOLING	24.704	1	24.704	1.446	0.232
EXPLAINED	24.704	1	24.704	1.446	0.232
RESIDUAL	2016.462	118	17.089		
TOTAL	2041.167	119	17.153		

H_0 - Length of schooling does not affect attitude to class for all subjects.

H_A - Length of schooling affects attitude to class for all subjects.

Significance level P is 23.2%.

The null hypothesis thus cannot be rejected.

TABLE 24C2

Multiple Classification Analysis

Grand mean = 12.42.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	-0.64
BANGLADESHI GIRLS	80	0.32

Between Group Comparison:

24D. Total indigenous and total Bangladeshi children (>2):

TABLE 24D1

One-way analysis of variance for the factor length of schooling on attitude to class.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	38.790	1	38.790	2.048	0.154
LENGTH OF SCHOOLING	38.790	1	38.790	2.048	0.154
EXPLAINED	38.790	1	38.790	2.048	0.154
RESIDUAL	3787.823	200	18.939		
TOTAL	3826.614	201	19.038		

H_0 - Length of schooling does not affect attitude to class for all subjects.

H_A - Length of schooling affects attitude to class for all subjects.

Significance level P is 15.4%.

The null hypothesis thus cannot be rejected.

TABLE 24D2

Multiple Classification Analysis

Grand mean = 11.74.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	-0.44
BANGLADESHI CHILDREN	102	0.43

24E. Within total Bangladeshi sample:

TABLE 24E1

3-way ANOVA with factor, length of schooling, sex and age on attitude to class.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	935.135	6	155.856	10.066	0.
VAR - AGE	896.373	4	224.093	14.473	0.
VAR - LENGTH OF SCHOOLING	0.427	1	0.427	0.028	0.868
VAR - SEX	35.911	1	35.911	2.319	0.130
2-WAY INTERACTIONS	80.842	9	8.982	0.580	0.812
AGE x LENGTH OF SCHOOLING	25.426	4	6.357	0.411	0.801
AGE x SEX	58.513	4	14.628	0.945	0.439
LENGTH OF SCHOOLING x SEX	0.053	1	0.053	0.003	0.954
3-WAY INTERACTIONS	17.004	4	4.251	0.275	0.894
AGE x LENGTH OF SCHOOLING x SEX	17.004	4	4.251	0.275	0.894
EXPLAINED	1032.981	19	54.367	3.511	0.000
RESIDUAL	2787.018	180	15.483		
TOTAL	3820.000	199	19.196		

Length of schooling:

H_0 - Length of schooling does not affect attitude to class for total Bangladeshi subjects.

H_A - Length of schooling affects attitude to class for total Bangladeshi subjects.

Significance level P is 86.8%.

The null hypothesis thus cannot be rejected.

Sex:

H_0 - Sex does not affect attitude to class for total Bangladeshi subjects.

H_A - Sex affects attitude to class for total Bangladeshi subjects. Significance level P is 13%.

The null hypothesis thus cannot be rejected.

Age:

H_0 - Age does not affect attitude to class for total Bangladeshi subjects.

H_A - Age affects attitude to class for total Bangladeshi subjects. Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

1. Among main effects only length of schooling is significant.
2. None of the 2-way interaction is significant.
3. The effect of 3-way interaction between age, length of schooling and sex on Attitude to class for total Bangladeshi subjects is not statistically significant.

TABLE 24 E2

Multiple Classification Analysis

Grand mean = 12.20.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	-0.02
BANGLADESHI (<2)	98	0.02
SEX		
MALE	120	-0.36
FEMALE	80	0.54
AGE		
7 YEARS OLD	25	2.04
8 YEARS OLD	56	2.25
9 YEARS OLD	50	0.08
10 YEARS OLD	52	-3.05
11 YEARS OLD	17	-1.32

Within Indigenous Group Comparison:

24 F. Indigenous boys and indigenous girls:

TABLE 24F1

One-way analysis of variance for the factor sex on attitude to class.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	15.042	1	15.042	0.791	0.376
SEX	15.042	1	15.042	0.791	0.376
EXPLAINED	15.042	1	15.042	0.791	0.376
RESIDUAL	1863.958	98	19.020		
TOTAL	1879.000	99	18.980		

H_0 - Sex does not affect attitude to class for all subjects.

H_A - Sex affects attitude to class for all subjects.

Significance level P is 37.6%.

The null hypothesis thus cannot be rejected.

TABLE F2

Multiple Classification Analysis

Grand mean = 11.30.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	-0.32
INDIGENOUS GIRLS	40	0.48

25. RELATIONSHIP WITH TEACHERS

Between Group Comparison:

25A. Total indigenous and total Bangladeshi children:

TABLE 25A1

One-way analysis of variance for the factor length of schooling on relationship with teachers.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	68.007	1	68.007	20.871	0.000
LENGTH OF SCHOOLING	68.007	1	68.007	20.871	0.000
EXPLAINED	68.007	1	68.007	20.871	0.000
RESIDUAL	970.990	298	3.258		
TOTAL	1038.997	299	3.475		

H_0 - Length of schooling does not affect relationship with teachers for all subjects.

H_A - Length of schooling affects relationship with teachers for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 25B2

Multiple Classification Analysis

Grand mean = 3.16.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	-0.67
BANGLADESHI CHILDREN	200	0.34

Between Group Comparison:

25B. Indigenous boys and Bangladeshi boys:

TABLE 25B1

One-way analysis of variance for the factor length of schooling on relationship with teachers.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	58.403	1	58.403	18.443	0.000
LENGTH OF SCHOOLING	58.403	1	58.403	18.443	0.000
EXPLAINED	58.403	1	58.403	18.443	0.000
RESIDUAL	563.658	178	3.167		
TOTAL	622.061	299	3.475		

H_0 - Length of schooling does not affect relationship with teachers for all subjects.

H_A - Length of schooling affects relationship with teachers for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 25B2

Multiple Classification Analysis

Grand mean = 2.87.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	-0.81
BANGLADESHI BOYS	120	0.40

Between Group Comparison:

25C. Indigenous girls and Bangladeshi girls:

TABLE 25C1

One-way analysis of variance for the factor length of schooling on relationship with teachers.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	13.537	1	13.537	4.373	0.039
LENGTH OF SCHOOLING	13.537	1	13.537	4.373	0.039
EXPLAINED	13.537	1	13.537	4.373	0.039
RESIDUAL	365.263	118	3.095		
TOTAL	378.800	119	3.183		

H_0 - Length of schooling does not affect relationship with teachers for all subjects.

H_A - Length of schooling affects relationship with teachers for all subjects.

Significance level P is 3.9%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 25C2

Multiple Classification Analysis

Grand mean = 3.60.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	-0.47
BANGLADESHI GIRLS	80	0.24

Between Group Comparison:

25D. Total indigenous and Bangladeshi children (>2):

TOTAL 25D1

One-way analysis of variance for the factor length of schooling on relationship with teachers.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	77.077	1	77.077	23.815	0.000
LENGTH OF SCHOOLING	77.077	1	77.077	23.815	0.000
EXPLAINED	77.077	1	77.077	23.815	0.000
RESIDUAL	647.304	200	3.237		
TOTAL	724.381	201	3.604		

H_0 - Length of schooling does not affect relationship with teachers for all subjects.

H_A - Length of schooling affects relationships with teachers for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 25D2

Multiple Classification Analysis

Grand mean = 3.11.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	-0.62
BANGLADESHI CHILDREN	102	0.61

25E. Within total Bangladeshi sample:

TABLE 25E1

3-way ANOVA with factor, length of schooling, sex and age on relationship with teachers.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	89.890	6	14.982	4.761	0.000
VAR - AGE	64.725	4	16.181	5.142	0.001
VAR - LENGTH OF SCHOOLING	12.894	1	12.894	4.097	0.044
VAR - SEX	13.757	1	13.757	4.372	0.038
2-WAY INTERACTIONS	25.798	9	2.866	0.911	0.517
AGE x LENGTH OF SCHOOLING	15.916	4	3.979	1.264	0.286
AGE x SEX	11.316	4	2.829	0.899	0.466
LENGTH OF SCHOOLING x SEX	0.027	1	0.027	0.009	0.927
3-WAY INTERACTIONS	9.882	4	2.471	0.785	0.536
AGE x LENGTH OF SCHOOLING x SEX	9.882	4	2.471	0.785	0.536
EXPLAINED	125.571	19	6.609	2.100	0.006
RESIDUAL	566.429	180	3.147		
TOTAL	692.000	199	3.477		

Length of schooling:

H_0 - Length of schooling does not affect relationship with teachers for total Bangladeshi sample.

H_A - Length of schooling affects relationship with teachers for total Bangladeshi sample.

Significance level P is 4.4%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect relationship with teachers for total Bangladeshi sample.

H_A - Sex affects relationship with teachers for total Bangladeshi sample.

Significance level P is 3.8%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Age:

H_0 - Age does not affect relationship with teachers for total Bangladeshi sample.

H_A - Age affects relationship with teachers for total Bangladeshi sample.

Significance level P is 0.1%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

1. All the main effects are significant.
2. None of the 2-way interaction is significant.
3. The effect of the 3-way interaction on age, length of schooling and sex on Relationship with teachers for total Bangladeshi subjects is not statistically significant.

TABLE 25E2

Multiple Classification Analysis

Grand mean = 3.50.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	0.23
BANGLADESHI (<2)	98	-0.23
SEX		
MALE	120	-0.22
FEMALE	80	0.34
AGE		
7 YEARS OLD	25	-0.14
8 YEARS OLD	56	0.57
9 YEARS OLD	50	0.40
10 YEARS OLD	52	-0.62
11 YEARS OLD	17	-0.97

Within Indigenous Group Comparison:

25 F. Indigenous boys and indigenous girls:

TABLE 25F1

One-way analysis of variance for the factor sex on relationship with teachers.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	26.882	1	26.882	10.449	0.002
SEX	26.882	1	26.882	10.449	0.002
EXPLAINED	26.882	1	26.882	10.449	0.002
RESIDUAL	252.108	98	2.573		
TOTAL	278.990	99	2.818		

H_0 - Sex does not affect relationship with teachers for all subjects.

H_A - Sex affects relationship with teachers for all subjects.

Significance level P is 0.2%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 25F2

Multiple Classification Analysis

Grand mean = 2.49.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	-0.42
INDIGENOUS GIRLS	40	0.63

26. ANXIETY IN CLASS

Between Group Comparison:

26A. Total indigenous and total Bangladeshi children:

TABLE 26A1

One-way analysis of variance for the factor length of schooling on anxiety in class.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	632.427	1	632.427	371.451	0.
LENGTH OF SCHOOLING	632.427	1	632.427	371.451	0.
EXPLAINED	632.427	1	632.427	371.451	0.
RESIDUAL	507.370	298	1.703		
TOTAL	1139.797	299	3.812		

H_0 - Length of schooling does not affect anxiety in class for all subjects.

H_A - Length of schooling affects anxiety in class for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 26A2

Multiple Classification Analysis

Grand mean = 1.90.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	2.05
BANGLADESHI CHILDREN	200	-1.03

Between Group Comparison:

26B. Indigenous boys and Bangladeshi boys:

TABLE 26B1

One-way analysis of variance for the factor length of schooling on anxiety in class.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	537.778	1	537.778	467.405	0.
LENGTH OF SCHOOLING	537.778	1	537.778	467.405	0.
EXPLAINED	537.778	1	537.778	467.405	0.
RESIDUAL	204.800	178	1.151		
TOTAL	742.578	179	4.148		

H_0 - Length of schooling does not affect anxiety in class for all subjects.

H_A - Length of schooling affects anxiety in class for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 26B2

Multiple Classification Analysis

Grand mean = 1.69.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	2.44
BANGLADESHI BOYS	120	-1.22

Between Group Comparison:

26C. Indigenous girls and Bangladeshi girls:

TABLE 26C1

One-way analysis of variance for the factor length of schooling on anxiety in class.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	129.067	1	129.067	61.232	-0.000
LENGTH OF SCHOOLING	129.067	1	129.067	61.232	-0.000
EXPLAINED	129.067	1	129.067	61.232	-0.000
RESIDUAL	248.725	118	2.108		
TOTAL	377.792	119	3.175		

H_0 - Length of schooling does not affect anxiety in class for all subjects

H_A - Length of schooling affects anxiety in class for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 26C2

Multiple Classification Analysis

Grand mean = 2.21.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	1.47
BANGLADESHI GIRLS	80	-0.73

Between Group Comparison:

26D. Total indigenous and Bangladeshi children (>2):

TABLE 26D1

One-way analysis of variance for the factor length of schooling on anxiety in class.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	382.959	1	382.959	191.084	-0.000
LENGTH OF SCHOOLING	382.959	1	382.959	191.084	-0.000
EXPLAINED	382.959	1	382.959	191.084	-0.000
RESIDUAL	400.828	200	2.004		
TOTAL	783.787	201	3.899		

H_0 - Length of schooling does not affect anxiety in class for all subjects.

H_A - Length of schooling affects anxiety in class for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 26D2

Multiple Classification Analysis

Grand mean = 2.56.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	1.39
BANGLADESHI CHILDREN	102	-1.36

26 E. Within total Bangladeshi sample:

TABLE 26E1

3-way ANOVA with factor, length of schooling, sex and age on anxiety in class.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	71.722	6	11.954	9.555	0.
VAR - AGE	2.354	4	0.588	0.470	0.757
VAR - LENGTH OF SCHOOLING	21.497	1	21.497	17.184	0.000
VAR - SEX	45.526	1	45.526	36.390	0.
2-WAY INTERACTIONS	9.238	9	1.026	0.821	0.598
AGE x LENGTH OF SCHOOLING	0.686	4	0.171	0.137	0.968
AGE x SEX	8.181	4	2.045	1.635	0.167
LENGTH OF SCHOOLING x SEX	0.885	1	0.885	0.707	0.402
3-WAY INTERACTIONS	6.472	4	1.618	1.293	0.274
AGE x LENGTH OF SCHOOLING x SEX	6.472	4	1.618	1.293	0.274
EXPLAINED	87.432	19	4.602	3.678	0.000
RESIDUAL	225.188	180	1.251		
TOTAL	312.620	199	1.571		

Length of schooling:

H_0 - Length of schooling does not affect anxiety in class for total Bangladeshi sample.

H_A - Length of schooling affects anxiety in class for total Bangladeshi sample.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect anxiety in class for total Bangladeshi sample.

H_A - Sex affects anxiety in class for total Bangladeshi sample.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Age:

H_0 - Age does not affect anxiety in class for total Bangladeshi sample.

H_A - Age affects anxiety in class for total Bangladeshi sample.

Significance level P is 75.7%.

The null hypothesis thus cannot be rejected.

1. Among main effects only age is not significant.
2. None of the 2-way intereaction is significant.
3. The effect of 3-way interaction between age, length of schooling and sex on Anxiety in class for total Bangladeshi subjects is not statistically significant.

TABLE 26E2

Multiple Classification Analysis

Grand mean = 0.87.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	0.33
BANGLADESHI (<2)	98	-0.34
SEX		
MALE	120	-0.40
FEMALE	80	0.60
AGE		
7 YEARS OLD	25	-0.11
8 YEARS OLD	56	-0.12
9 YEARS OLD	50	0.19
10 YEARS OLD	52	-0.00
11 YEARS OLD	17	0.01

Within Indigenous Group Comparison:

26 F. Indigenous boys and indigenous girls:

TABLE 26F1

One-way analysis of variance for the factor sex on anxiety in class.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	5.042	1	5.042	2.604	0.110
SEX	5.042	1	5.042	2.604	0.110
EXPLAINED	5.042	1	5.042	2.604	0.110
RESIDUAL	189.708	98	1.936		
TOTAL	194.750	99	1.967		

H_0 - Sex does not affect anxiety in class for all subjects.

H_A - Sex affects anxiety in class for all subjects.

Significance level P is 11.0%.

The null hypothesis thus cannot be rejected.

TABLE 26 F2

Multiple Classification Analysis

Grand mean = 3.95.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	0.18
INDIGENOUS GIRLS	40	-0.27

27. SOCIAL ADJUSTMENT

Between Group Comparison:

27A. Total indigenous and total Bangladeshi children:

TABLE 27A1

One-way analysis of variance for the factor length of schooling on social adjustment.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	3.527	1	3.527	5.225	0.023
LENGTH OF SCHOOLING	3.527	1	3.527	5.225	0.023
EXPLAINED	3.527	1	3.527	5.225	0.023
RESIDUAL	201.140	298	0.675		
TOTAL	204.667	299	0.685		

H_0 - Length of schooling does not affect social adjustment for all subjects.

H_A - Length of schooling affects social adjustment for all subjects.

Significance level P is 2.3%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 27A2

Multiple Classification Analysis

Grand mean = 3.07.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.15
BANGLADESHI CHILDREN	200	-0.08

Between Group Comparison:

27B. Indigenous boys and Bangladeshi boys:

TABLE 27B1

One-way analysis of variance for the factor length of schooling on social adjustment.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.278	1	0.278	0.410	0.523
LENGTH OF SCHOOLING	0.278	1	0.278	0.410	0.523
EXPLAINED	0.278	1	0.278	0.410	0.523
RESIDUAL	120.583	178	0.677		
TOTAL	120.861	179	0.675		

H_0 - Length of schooling does not affect social adjustment for all subjects.

H_A - Length of schooling affects social adjustment for all subjects.

Significance level P is 52.3%.

The null hypothesis thus cannot be rejected.

TABLE 27B2

Multiple Classification Analysis

Grand mean = 3.03.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	0.06
BANGLADESHI BOYS	120	-0.03

Between Group Comparison:

27C. Indigenous girls and Bangladeshi girls:

TABLE 27C1

One-way analysis of variance for the factor length of schooling on social adjustment.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	5.400	1	5.400	8.198	0.005
LENGTH OF SCHOOLING	5.400	1	5.400	8.198	0.005
EXPLAINED	5.400	1	5.400	8.198	0.005
RESIDUAL	77.725	118	0.659		
TOTAL	83.125	119	0.699		

H_0 - Length of schooling does not affect social adjustment for all subjects.

H_A - Length of schooling affects social adjustment for all subjects.

Significance level P is 0.5%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 27C2

Multiple Classification Analysis

Grand mean = 3.13.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	0.30
BANGLADESHI GIRLS	80	-0.15

Between Group Comparison:

27D. Total indigenous and Bangladeshi children (>2):

TABLE 27D1

One-way analysis of variance for the factor length of schooling on social adjustment.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.269	1	0.269	0.401	0.527
LENGTH OF SCHOOLING	0.269	1	0.269	0.401	0.527
EXPLAINED	0.269	1	0.269	0.401	0.527
RESIDUAL	133.954	200	0.670		
TOTAL	134.223	201	0.668		

H_0 - Length of schooling does not affect social adjustment for all subjects.

H_A - Length of schooling affects social adjustment for all subjects.

Significance level P is 52.7%.

The null hypothesis thus cannot be rejected.

TABLE 27D2

Multiple Classification Analysis

Grand mean = 3.18.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.04
BANGLADESHI CHILDREN	102	-0.04

27E. Within total Bangladeshi sample:

TABLE 27E1

3-way ANOVA with factor, length of schooling, sex and age on social adjustment.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	13.835	6	2.306	3.605	0.002
VAR - AGE	8.648	4	2.162	3.380	0.011
VAR - LENGTH OF SCHOOLING	6.461	1	6.461	10.101	0.002
VAR - SEX	0.095	1	0.095	0.149	0.700
2-WAY INTERACTIONS	3.016	9	0.335	0.524	0.856
AGE x LENGTH OF SCHOOLING	1.865	4	0.466	0.729	0.573
AGE x SEX	0.636	4	0.159	0.248	0.910
LENGTH OF SCHOOLING x SEX	0.472	1	0.472	0.738	0.391
3-WAY INTERACTIONS	3.986	4	0.996	1.558	0.188
AGE x LENGTH OF SCHOOLING x SEX	3.986	4	0.996	1.558	0.188
EXPLAINED	20.837	19	1.097	1.714	0.037
RESIDUAL	115.143	180	0.640		
TOTAL	135.980	199	0.683		

Length of schooling:

H_0 - Length of schooling does not affect social adjustment for total Bangladeshi sample.

H_A - Length of schooling affects social adjustment for total Bangladeshi sample.

Significance level P is 0.2%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect social adjustment for total Bangladeshi sample.

H_A - Sex affects social adjustment for total Bangladeshi sample.

Significance level P is 70.0%.

The null hypothesis thus cannot be rejected.

Age:

H_0 - Age does not affect social adjustment for total Bangladeshi sample.

H_A - Age affects social adjustment for total Bangladeshi sample.

Significance level P is 1.1%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

1. Among main effects only sex is not significant.
2. None of the 2-way intereaction is significant.
3. The effect of 3-way interaction between age, length of schooling and sex on Social adjustment for total Bangladeshi subjects is not statistically significant.

TABLE 27E2

Multiple Classification Analysis

Grand mean = 2.99.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	0.16
BANGLADESHI (<2)	98	-0.16
SEX		
MALE	120	0.01
FEMALE	80	-0.02
AGE		
7 YEARS OLD	25	-0.42
8 YEARS OLD	56	-0.04
9 YEARS OLD	50	0.19
10 YEARS OLD	52	0.11
11 YEARS OLD	17	-0.11

Within Indigenous Group Comparison:

27 F. Indigenous boys and indigenous girls:

TABLE 27F1

One-way analysis of variance for the factor sex on social adjustment.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	2.802	1	2.802	4.403	0.038
SEX	2.802	1	2.802	4.403	0.038
EXPLAINED	2.802	1	2.802	4.403	0.038
RESIDUAL	62.358	98	0.636		
TOTAL	65.160	99	0.658		

H_0 - Sex does not affect social adjustment for all subjects.

H_A - Sex affects social adjustment for all subject s.

Significance level P is 3.8%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 27F2

Multiple Classification Analysis

Grand mean = 3.22.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	-0.14
INDIGENOUS GIRLS	40	0.21

28. ACADEMIC SELF-IMAGE

Between Group Comparison:

28A. Total indigenous and total Bangladeshi children:

TABLE 28A1

One-way analysis of variance for the factor length of schooling on academic self-image.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.027	1	0.027	0.001	0.976
LENGTH OF SCHOOLING	0.027	1	0.027	0.001	0.976
EXPLAINED	0.027	1	0.027	0.001	0.976
RESIDUAL	8642.410	298	29.001		
TOTAL	8642.437	299	28.904		

H_0 - Length of schooling does not affect academic self-image for all subjects.

H_A - Length of schooling affects academic self-image for all subjects.

Significance level P is 97.6%.

The null hypothesis thus cannot be rejected.

TABLE 28A2

Multiple Classification Analysis

Grand mean = 10.46.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.01
BANGLADESHI CHILDREN	200	-0.01

Between Group Comparison:

28B. Indigenous boys and Bangladeshi boys:

TABLE 28B1

One-way analysis of variance for the factor length of schooling on academic self-image.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	10.678	1	10.678	0.361	0.549
LENGTH OF SCHOOLING	10.678	1	10.678	0.361	0.549
EXPLAINED	10.678	1	10.678	0.361	0.549
RESIDUAL	5269.650	178	29.605		
TOTAL	5280.328	179	29.499		

H_0 - Length of schooling does not affect academic self-image for all subjects.

H_A - Length of schooling affects academic self-image for all subjects.

Significance level P is 54.9%.

The null hypothesis thus cannot be rejected.

TABLE 28B2

Multiple Classification Analysis

Grand mean = 10.66.

VARIABLE + CATEGOEY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	-0.34
BANGLADESHI BOYS	120	0.17

Between Group Comparison:

28C. Indigenous girls and Bangladeshi girls:

TABLE 28C1

One-way analysis of variance for the factor length of schooling on academic self-image.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	18.150	1	18.150	0.644	0.424
LENGTH OF SCHOOLING	18.150	1	18.150	0.644	0.424
EXPLAINED	18.150	1	18.150	0.644	0.424
RESIDUAL	3325.150	118	28.179		
TOTAL	3343.300	119	28.095		

H_0 - Length of schooling does not affect academic self-image for all subjects.

H_A - Length of schooling affects academic self-image for all subjects.

Significance level P is 42.4%.

The null hypothesis thus cannot be rejected.

TABLE 28C2

Multiple Classification Analysis

Grand mean = 10.15.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	0.55
BANGLADESHI GIRLS	80	-0.27

Between Group Comparison:

28D. Total indigenous and Bangladeshi children (>2):

TABLE 28D1

One-way analysis of variance for the factor length of schooling on academic self-image.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	169.828	1	169.828	7.332	0.007
LENGTH OF SCHOOLING	169.828	1	169.828	7.332	0.007
EXPLAINED	169.828	1	169.828	7.332	0.007
RESIDUAL	4632.488	200	23.162		
TOTAL	4802.317	201	23.892		

H_0 - Length of schooling does not affect academic self-image for all subjects.

H_A - Length of schooling affects academic self-image for all subjects.

Significance level P is 0.7%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 28D2

Multiple Classification Analysis

Grand mean = 11.40.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	-0.93
BANGLADESHI CHILDREN	102	0.91

28 E. Within total Bangladeshi sample:

TABLE 28E1

3-way ANOVA with factor, length of schooling, sex and age on academic self-image.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	1178.438	6	196.406	6.538	0.000
VAR - AGE	409.728	4	102.432	3.410	0.010
VAR - LENGTH OF SCHOOLING	833.585	1	833.585	27.750	0.000
VAR - SEX	61.628	1	61.628	2.052	0.154
2-WAY INTERACTIONS	277.703	9	25.300	0.842	0.578
AGE x LENGTH OF SCHOOLING	133.454	4	33.363	1.111	0.353
AGE x SEX	60.893	4	15.223	0.507	0.731
LENGTH OF SCHOOLING x SEX	23.711	1	23.711	0.789	0.375
3-WAY INTERACTIONS	36.401	4	9.100	0.303	0.876
AGE x LENGTH OF SCHOOLING x SEX	36.401	4	9.100	0.303	0.876
EXPLAINED	1442.541	180	75.923	2.528	0.001
RESIDUAL	5406.959	180	30.039		
TOTAL	6849.500	199	34.420		

Length of schooling:

H_0 - Length of schooling does not affect academic self-image for total Bangladeshi sample.

H_A - Length of schooling affects acadenic self-image for total Bangladeshi sample.

Significance level P is 0.0%.

The null hypothesis thus is rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect academic self-image for total Bangladeshi sample.

H_A - Sex affects academic self-image for total Bangladeshi sample. Significance level P is 15.4%.

The null hypothesis thus cannot be rejected.

Age:

H_0 - Age does not affect academic self-image for total Bangladeshi sample.

H_A - Age affects academic self-image for total Bangladeshi sample. Significance level P is 1%.

The null hypothesis is rejected and the alternative hypothesis accepted.

1. Among main effects only sex is not significant.
2. None of the 2-way intereaction is significant.
3. The effect of 3-way interaction between age, length of schooling and sex on Academic self-image for total Bangladeshi subjects is not statistically significant.

TABLE 28E2

Multiple Classification Analysis

Grand mean = 10.45.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	1.85
BANGLADESHI (<2)	98	-1.93
SEX		
MALE	120	0.38
FEMALE	80	-0.58
AGE		
7 YEARS OLD	25	-2.73
8 YEARS OLD	56	0.07
9 YEARS OLD	50	1.27
10 YEARS OLD	52	0.38
11 YEARS OLD	17	-1.10

Within Indigenous Group Comparison:

28F. Indigenous boys and indigenous girls:

TABLE 28F1

One-way analysis of variance for the factor sex on academic self-image.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	3.527	1	3.527	0.193	0.661
SEX	3.527	1	3.527	0.193	0.661
EXPLAINED	3.527	1	3.527	0.193	0.661
RESIDUAL	1789.383	98	18.259		
TOTAL	1792.910	99	18.110		

H_0 - Sex does not affect academic self-image for all subjects.

H_A - Sex affects academic self-image for all subjects.

Significance level P is 66.1%.

The null hypothesis thus cannot be rejected.

TABLE 28F2

Multiple Classification Analysis

Grand mean = 10.47.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	-0.15
INDIGENOUS GIRLS	40	0.23

V. INTEREST

29. TOTAL INTEREST

Between Group Comparison:

29A. Total indigenous and total Bangladeshi children:

TABLE 29A1

One-way analysis of variance for the factor length of schooling on total interests.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	552.667	1	522.667	16.475	0.000
LENGTH OF SCHOOLING	552.667	1	522.667	16.475	0.000
EXPLAINED	552.667	1	522.667	16.475	0.000
RESIDUAL	9454.120	298	31.725		
TOTAL	9976.786	299	33.367		

H_0 - Length of schooling does not affect total interests for all subjects.

H_A - Length of schooling affects total interests for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 29A2

Multiple Classification Analysis

Grand mean = 28.19.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	1.87
BANGLADESHI CHILDREN	200	-0.93

Between Group Comparison:

29B. Indigenous boys and Bangladeshi boys:

TABLE 29B1

One-way analysis of variance for the factor length of schooling on total interests.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	245.025	1	245.025	7.916	0.005
LENGTH OF SCHOOLING	245.025	1	245.025	7.916	0.005
EXPLAINED	245.025	1	245.025	7.916	0.005
RESIDUAL	5509.525	178	30.952		
TOTAL	5754.550	179	32.148		

H_0 - Length of schooling does not affect total interests for all subjects.

H_A - Length of schooling affects total interests for all subjects.

Significance level P is 0.5%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 29B2

Multiple Classification Analysis

Grand mean = 28.22.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	1.65
BANGLADESHI BOYS	12	-0.83

Between Group Comparison:

29C. Indigenous girls and Bangladeshi girls:

TABLE 29C1

One-way analysis of variance for the factor length of schooling on total interests.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	288.204	1	288.204	8.645	0.004
LENGTH OF SCHOOLING	288.204	1	288.204	8.645	0.004
EXPLAINED	288.204	1	288.204	8.645	0.004
RESIDUAL	3933.787	118	33.337		
TOTAL	4221.992	119	35.479		

H_0 - Length of schooling does not affect total interests for all subjects.

H_A - Length of schooling affects total interests for all subjects.

Significance level P is 0.4%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 29C2

Multiple Classification Analysis

Grand mean = 28.16.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	2.19
BANGLADESHI GIRLS	80	-1.10

Between Group Comparison:

29D. Total indigenous and Bangladeshi children (>2):

TABLE 29D1

One-way analysis of variance for the factor length of schooling on total interests.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	100.808	1	100.808	3.572	0.060
LENGTH OF SCHOOLING	100.808	1	100.808	3.572	0.060
EXPLAINED	100.808	1	100.808	3.572	0.060
RESIDUAL	5644.934	200	28.225		
TOTAL	5745.743	201	28.586		

H_0 - Length of schooling does not affect total interests for all subjects.

H_A - Length of schooling affects total interests for all subjects.

Significance level P is 6.0%.

The null hypothesis thus cannot be rejected.

TABLE 29 D2

Multiple Classification Analysis

Grand mean = 29.35.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.71
BANGLADESHI CHILDREN	102	-0.70

29E. Within total Bangladeshi sample:

TABLE 29E1

3-way ANOVA with factor, length of schooling, sex and age on total interests.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	644.215	6	107.369	3.548	0.002
VAR - AGE	236.041	4	59.010	1.950	0.104
VAR - LENGTH OF SCHOOLING	433.410	1	433.410	14.324	0.000
VAR - SEX	4.948	1	4.948	0.164	0.686
2-WAY INTERACTIONS	332.159	9	36.907	1.220	0.285
AGE x LENGTH OF SCHOOLING	293.856	4	73.464	2.428	0.050
AGE x SEX	48.364	4	12.091	0.400	0.809
LENGTH OF SCHOOLING x SEX	0.615	1	0.615	0.020	0.887
3-WAY INTERACTIONS	11.658	4	2.914	0.096	0.984
AGE x LENGTH OF SCHOOLING x SEX	11.658	4	2.914	0.096	0.984
EXPLAINED	988.032	19	52.002	1.719	0.037
RESIDUAL	5446.449	180	30.258		
TOTAL	6434.480	199	32.334		

Length of schooling:

H_0 - Length of schooling does not affect total interests for total Bangladeshi sample.

H_A - Length of schooling affects total interests for total Bangladeshi sample.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect total interests for total Bangladeshi sample.

H_A - Sex affects total interests for total Bangladeshi sample.

Significance level P is 68.6%.

The null hypothesis thus cannot be rejected.

Age:

H_0 - Age does not affect total interests for total Bangladeshi sample.

H_A - Age affects total interests for total Bangladeshi sample.

Significance level P is 10.4%.

The null hypothesis thus cannot be rejected.

1. Among the main effects only length of schooling is significant.
2. None of the 2-way interaction is significant.
3. The effect of the 3-way interaction between age, length of schooling and sex on total interests for total Bangladeshi subjects is not statistically significant.

TABLE 29E2

Multiple Classification Analysis

Grand mean = 27.26.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	1.39
BANGLADESHI (<2)	98	-1.44
SEX		
MALE	120	0.13
FEMALE	80	-0.20
AGE		
7 YEARS OLD	25	-0.40
8 YEARS OLD	56	0.81
9 YEARS OLD	50	0.32
10 YEARS OLD	52	0.03
11 YEARS OLD	17	-3.08

Within Indigenous Group Comparison:

29 F. Indigenous boys and indigenous girls:

TABLE 29F1

One-way analysis of variance for the factor sex on total interests.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	5.607	1	5.607	0.182	0.670
SEX	5.607	1	5.607	0.182	0.670
EXPLAINED	5.607	1	5.607	0.182	0.670
RESIDUAL	3014.033	98	30.755		
TOTAL	3019.640	99	30.501		

H_0 - Sex does not affect total interests for all subjects.

H_A - Sex affects total interests for all subjects.

Significance level P is 67%.

The null hypothesis thus cannot be rejected.

TABLE 29F2

Multiple Classification Analysis

Grand mean = 30.06.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	-0.19
INDIGENOUS GIRLS	40	0.29

30. INTEREST IN SCHOOL SUBJECTS

Between Group Comparison:

30A. Total indigenous and total Bangladeshi children:

TABLE 31A1

One-way analysis of variance for the factor length of schooling on interest in school subjects.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	140.167	1	140.167	14.246	0.000
LENGTH OF SCHOOLING	140.167	1	140.167	14.246	0.000
EXPLAINED	140.167	1	140.167	14.246	0.000
RESIDUAL	2931.980	298	9.839		
TOTAL	3072.147	299	10.275		

H_0 - Length of schooling does not affect interest in school subjects for all subjects.

H_A - Length of schooling affects interest in school subjects for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 31 A2

Multiple Classification Analysis

Grand mean = 12.11.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.97
BANGLADESHI CHILDREN	200	-0.48

Between Group Comparison:

30B. Indigenous boys and Bangladeshi boys:

TABLE 30B1

One-way analysis of variance for the factor length of schooling on interest in school subjects.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	63.336	1	63.336	6.451	0.012
LENGTH OF SCHOOLING	63.336	1	63.336	6.451	0.012
EXPLAINED	63.336	1	63.336	6.451	0.012
RESIDUAL	1747.525	178	9.818		
TOTAL	1810.861	179	10.117		

H_0 - Length of schooling does not affect interest in school subjects for all subjects.

H_A - Length of schooling affects interest in school subjects for all subjects.

Significance level P is 1.2%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 30B2

Multiple Classification Analysis

Grand mean = 12.03.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	60	0.84
BANGLADESHI CHILDREN	120	-0.42

Between Group Comparison:

30C. Indigenous girls and Bangladeshi girls:

TABLE 30C1

One-way analysis of variance for the factor length of schooling on interest in school subjects.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	80.504	1	80.504	8.068	0.005
LENGTH OF SCHOOLING	80.504	1	80.504	8.068	0.005
EXPLAINED	80.504	1	80.504	8.068	0.005
RESIDUAL	1177.488	118	9.979		
TOTAL	1257.992	119	10.571		

H_0 - Length of schooling does not affect interest in school subjects for all subjects.

H_A - Length of schooling affects interest in school subjects for all subjects.

Significance level P is 0.5%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 30C2

Multiple Classification Analysis

Grand mean = 12.24.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	1.16
BANGLADESHI GIRLS	80	-0.58

Between Group Comparison:

30D. Total indigenous and Bangladeshi children (>2):

TABLE 30D1

One-way analysis of variance for the factor length of schooling on interest in school subjects.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	17.566	1	17.566	1.854	0.175
LENGTH OF SCHOOLING	17.566	1	17.566	1.854	0.175
EXPLAINED	17.566	1	17.566	1.854	0.175
RESIDUAL	1894.850	200	9.474		
TOTAL	1912.416	201	9.515		

H_0 - Length of schooling does not affect interest in school subjects for all subjects.

H_A - Length of schooling affects interest in school subjects for all subjects.

Significance level P is 17.5%.

The null hypothesis thus cannot be rejected.

TABLE 30D2

Multiple Classification Analysis

Grand mean = 12.78.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.30
BANGLADESHI CHILDREN	102	-0.29

30E. Within total Bangladeshi sample:

TABLE 30E1

3-way ANOVA with factor, length of schooling, sex and age on interest in school subjects.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	197.645	6	32.941	3.649	0.002
VAR - AGE	43.612	4	10.903	1.208	0.309
VAR - LENGTH OF SCHOOLING	161.648	1	161.648	17.907	0.000
VAR - SEX	0.000	1	0.000	0.000	0.998
2-WAY INTERACTIONS	83.884	9	9.320	1.032	0.416
AGE x LENGTH OF SCHOOLING	62.395	4	15.599	1.728	0.146
AGE x SEX	22.496	4	5.624	0.623	0.647
LENGTH OF SCHOOLING x SEX	1.881	1	1.881	0.208	0.649
3-WAY INTERACTIONS	4.182	4	1.046	0.116	0.977
AGE x LENGTH OF SCHOOLING x SEX	4.182	4	1.046	0.116	0.977
EXPLAINED	285.711	19	15.037	1.666	0.046
RESIDUAL	1624.909	180	9.027		
TOTAL	1910.620	199	9.601		

Length of schooling:

H_0 - Length of schooling does not affect interest in school subjects for total Bangladeshi subjects.

H_A - Length of schooling affects interest in school subjects for total Bangladeshi subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect interest in school subjects for total Bangladeshi subjects.

H_A - Sex affects interest in school subjects for total Bangladeshi subjects.

Significance level P is 99.8%.

The null hypothesis thus cannot be rejected.

Age:

H_0 - Age does not affect interest in school subjects for total Bangladeshi subjects.

H_A - Age affects interest in school subjects for total Bangladeshi subjects.

Significance level P is 30.9%.

The null hypothesis thus cannot be rejected.

1. Among main effects only length of schooling is significant.
2. None of the 2-way interaction is significant.
3. The effect of the 3-way interaction between age, length of schooling and sex on interest in school subjects for total Bangladeshi subjects is not statistically significant.

TABLE 30E2

Multiple Classification Analysis

Grand mean = 11.63.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	0.86
BANGLADESHI (<2)	98	-0.90
SEX		
MALE	120	-0.02
FEMALE	80	-0.03
AGE		
7 YEARS OLD	25	0.05
8 YEARS OLD	56	0.30
9 YEARS OLD	50	0.33
10 YEARS OLD	52	-0.30
11 YEARS OLD	17	-1.10

Within Indigenous Group Comparison:

30F. Indigenous boys and indigenous girls:

TABLE 30F1

One-way analysis of variance for the factor sex on interest in school subjects.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	6.827	1	6.827	0.659	0.419
SEX	6.827	1	6.827	0.659	0.419
EXPLAINED	6.827	1	6.827	0.659	0.419
RESIDUAL	1014.533	98	10.352		
TOTAL	1021.360	99	10.317		

H_0 - Sex does not affect interest in school subjects for all subjects.

H_A - Sex affects interest in school subjects for all subjects.

Significance level P is 41.9%.

The null hypothesis thus cannot be rejected.

TABLE 30F2

Multiple Classification Analysis

Grand mean = 13.08.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	-0.21
INDIGENOUS GIRLS	40	-0.32

31. INTEREST IN PAINTING, DRAWING, ETC.

Between Group Comparison:

31A. Total indigenous and total Bangladeshi children:

TABLE 31A1

One-way analysis of variance for the factor length of schooling on interest in painting, drawing, etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	1.927	1	1.927	2.802	0.095
LENGTH OF SCHOOLING	1.927	1	1.927	2.802	0.095
EXPLAINED	1.927	1	1.927	2.802	0.095
RESIDUAL	204.910	298	0.688		
TOTAL	206.837	299	0.692		

H_0 - Length of schooling does not affect interest in painting, drawing, etc. for all subjects.

H_A - Length of schooling affects interest in painting, drawing, etc. for all subjects.

Significance level P is 9.5.

The null hypothesis thus cannot be rejected.

TABLE 31A2

Multiple Classification Analysis

Grand mean = 3.36.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.11
BANGLADESHI CHILDREN	200	-0.06

Between Group Comparison:

31B. Indigenous boys and Bangladeshi boys:

TABLE 31 B1

One-way analysis of variance for the factor length of schooling on interest in painting, drawing etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	2.500	1	2.500	3.730	0.055
LENGTH OF SCHOOLING	2.500	1	2.500	3.730	0.055
EXPLAINED	2.500	1	2.500	3.730	0.005
RESIDUAL	119.300	178	0.670		
TOTAL	121.800	179	0.680		

H_0 - Length of schooling does not affect interest in painting, drawing, etc. for all subjects.

H_A - Length of schooling affects interest in painting, drawing, etc. for all subjects.

Significance level P is 5.5%.

The null hypothesis thus cannot be rejected.

TABLE 31B2

Multiple Classification Analysis

Grand mean = 3.37.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	0.17
BANGLADESHI BOYS	120	-0.08

Between Group Comparison:

31C. Indigenous girls and Bangladeshi girls:

TABLE 31C1

One-way analysis of variance for the factor length of schooling on interest in painting, drawing, etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.067	1	0.067	0.093	0.761
LENGTH OF SCHOOLING	0.067	1	0.067	0.093	0.761
EXPLAINED	0.067	1	0.067	0.093	0.761
RESIDUAL	84.925	118	0.720		
TOTAL	84.992	119	0.714		

H_0 - Length of schooling does not affect interest in painting, drawing, etc. for all subjects.

H_A - Length of schooling affects interest in painting, drawing, etc. for all subjects.

Significance level P is 76.1%.

The null hypothesis thus cannot be rejected.

TABLE 31C2

Multiple Classification Analysis

Grand mean = 3.34.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	0.03
BANGLADESHI GIRLS	80	-0.02

Between Group Comparison:

31D. Total indigenous and Bangladeshi children (>2):

TABLE 31D1

One-way analysis of variance for the factor length of schooling on interest in painting, drawing, etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.075	1	0.075	0.135	0.714
LENGTH OF SCHOOLING	0.075	1	0.075	0.135	0.714
EXPLAINED	0.075	1	0.075	0.135	0.714
RESIDUAL	111.930	200	0.560		
TOTAL	112.005	201	0.557		

H_0 - Length of schooling does not affect interest in painting, drawing, etc. for all subjects.

H_A - Length of schooling affects interest in painting, drawing, etc. for all subjects.

Significance level P is 71.4%.

The null hypothesis thus cannot be rejected.

TABLE 31D2

Multiple Classification Analysis

Grand mean = 3.45.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.02
BANGLADESHI CHILDREN	102	-0.02

31E. Within total Bangladeshi sample:

TABLE 31E1

3-way ANOVA with factor, length of schooling, sex and age on interest in painting, drawing, etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	7.889	6	1.315	1.884	0.086
VAR - AGE	4.237	4	1.059	1.518	0.199
VAR - LENGTH OF SCHOOLING	4.214	1	4.214	6.038	0.015
VAR - SEX	0.037	1	0.037	0.053	0.818
2-WAY INTERACTIONS	8.347	9	0.927	1.329	0.225
AGE x LENGTH OF SCHOOLING	7.482	4	1.871	2.680	0.033
AGE x SEX	1.071	4	0.268	0.384	0.820
LENGTH OF SCHOOLING x SEX	0.021	1	0.021	0.030	0.863
3- WAY INTERACTIONS	0.148	4	0.037	0.053	0.995
AGE x LENGTH OF SCHOOLING x SEX	0.148	4	0.037	0.053	0.995
EXPLAINED	16.384	19	0.862	1.236	0.233
RESIDUAL	125.616	180	0.698		
TOTAL	142.00	199	0.714		

Length of schooling:

H_0 - Length of schooling does not affect interest in painting, drawing, etc. for total Bangladeshi subjects.

H_A - Length of schooling affects interest in painting, drawing etc. for total Bangladeshi subjects.

Significance level P is 1.5%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect interest in painting, drawing, etc. for total Bangladeshi subjects.

H_A - Sex affects interest in painting, drawing, etc. for total Bangladeshi subjects.

Significance level P is 81.8%.

The null hypothesis thus cannot be rejected.

Age:

H_0 - Age does not affect interest in painting, drawing, etc. for total Bangladeshi subjects.

H_A - Age affects interest in painting, drawing, etc. for total Bangladeshi subjects.

Significance level P is 19.9%.

The null hypothesis thus cannot be rejected.

1. Among main effects only length of schooling is significant.
2. The two-way intereaction between age and length of schooling is significant at 3.3% level.
3. The effect of the 3-way interaction between age, length of schooling and sex on interest in painting, drawing etc. for total Bangladeshi subjects is not statistically significant.

TABLE 31E2

Multiple Classification Analysis

Grand mean = 3.30.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	0.13
BANGLADESHI (<2)	98	-0.14
SEX		
MALE	120	-0.02
FEMALE	80	0.02
AGE		
7 YEARS OLD	25	-0.14
8 YEARS OLD	56	0.06
9 YEARS OLD	50	0.16
10 YEARS OLD	52	-0.05
11 YEARS OLD	17	-0.30

Within Indigenous Group Comparison:

31 F. Indigenous boys and indigenous girls:

TABLE 31F1

One-way analysis of variance for the factor sex on interest in painting, drawing, etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.602	1	0.602	0.946	0.333
SEX	0.602	1	0.602	0.946	0.333
EXPLAINED	0.602	1	0.602	0.946	0.333
RESIDUAL	62.308	98	0.636		
TOTAL	62.910	99	0.635		

H_0 - Sex does not affect interest in painting, drawing etc. for all subjects.

H_A - Sex affects interest in painting, drawing etc. for all subjects.

Significance level P is 33.3%.

The null hypothesis thus cannot be rejected.

TABLE F2

Multiple Classification Analysis

Grand mean = 3.47.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	0.06
INDIGENOUS GIRLS	40	-0.09

32. INTEREST IN MODELLING, BUILDING, CRAFTWORK ETC.

Between Group Comparison:

32A. Total indigenous and Bangladeshi children:

TABLE 32A1

One-way analysis of variance for the factor length of schooling on interest in modelling, building, craftwork etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	4.507	1	4.507	7.041	0.008
LENGTH OF SCHOOLING	4.507	1	4.507	7.041	0.008
EXPLAINED	4.507	1	4.507	7.041	0.008
RESIDUAL	190.730	298	0.640		
TOTAL	195.237	299	0.653		

H_0 - Length of schooling does not affect interest in modelling, building, craftwork etc.

H_A - Length of schooling affects interest in modelling, building, craftwork etc.

Significance level P is 0.8%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 32A2

Multiple Classification Analysis

Grand mean = 3.26.

VARIABLE + CATEGORY	N	DEVIANION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.17
BANGLADESHI CHILDREN	200	-0.09

Between Group Comparison:

32B. Indigenous boys and Bangladeshi boys:

TABLE 32B1

One-way analysis of variance for the factor length of schooling on interest in modelling, building, craftwork etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	4.900	1	4.900	7.784	0.006
LENGTH OF SCHOOLING	4.900	1	4.900	7.784	0.006
EXPLAINED	4.900	1	4.900	7.784	0.006
RESIDUAL	112.050	178	0.629		
TOTAL	116.950	179	0.653		

H_0 - Length of schooling does not affect interest in modelling, building, craftwork etc. for all subjects.

H_A - Length of schooling affects interest in modelling, building, craftwork etc. for all subjects.

Significance level P is 0.6%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 32B2

Multiple Classification Analysis

Grand mean = 3.35.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	0.23
BANGLADESHI BOYS	120	-0.12

Between Group Comparison;

32C. Indigenous girls and Bangladeshi girls:

TABLE 32C1

One-way analysis of variance for the factor length of schooling on interest in modelling, building, craftwork etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.417	1	0.417	0.665	0.416
LENGTH OF SCHOOLING	0.417	1	0.417	0.665	0.416
EXPLAINED	0.417	1	0.417	0.665	0.416
RESIDUAL	73.950	118	0.627		
TOTAL	74.367	119	0.625		

H_0 - Length of schooling does not affect interest in modelling, building, craftwork etc. for all subjects.

H_A - Length of schooling affects interest in modelling, building, craftwork etc. for all subjects.

Significance level P is 41.6%.

The null hypothesis thus cannot be rejected.

TABLE 32C2

Multiple Classification Analysis

Grand mean = 3.12.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	0.08
BANGLADESHI GIRLS	80	-0.04

Between Group Comparison:

32D. Total indigenous and Bangladeshi children (>2):

TABLE 32D1

One-way analysis of variance for the factor length of schooling on interest in modelling, building, craftwork etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	1.221	1	1.221	2.164	0.143
LENGTH OF SCHOOLING	1.221	1	1.221	2.164	0.143
EXPLAINED	1.221	1	1.221	2.164	0.143
RESIDUAL	112.824	200	0.564		
TOTAL	114.045	201	0.567		

H_0 - Length of schooling does not affect interest in modelling, building, craftwork etc.

H_A - Length of schooling affects interest in modelling, building, craftwork etc.

Significance level P is 14.3%.

The null hypothesis thus cannot be rejected.

TABLE 32D2

Multiple Classification Analysis

Grand mean = 3.35.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.08
BANGLADESHI CHILDREN	102	-0.08

32E. Within total Bangladeshi sample:

TABLE 32E1

3-way ANOVA with factor, length of schooling, sex and age on interest in modelling, building, craftwork etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	7.276	6	1.213	1.923	0.079
VAR - AGE	3.716	4	0.929	1.473	0.212
VAR - LENGTH OF SCHOOLING	2.796	1	2.796	4.434	0.037
VAR - SEX	1.137	1	1.137	1.803	0.181
2-WAY INTERACTIONS	4.759	9	0.529	0.838	0.582
AGE x LENGTH OF SCHOOLING	4.187	4	1.047	1.660	0.161
AGE x SEX	0.344	4	0.086	0.136	0.969
LENGTH OF SCHOOLING x SEX	0.513	1	0.513	0.813	0.368
3-WAY INTERACTIONS	0.667	4	0.167	0.265	0.900
AGE x LENGTH OF SCHOOLING x SEX	0.667	4	0.167	0.265	0.900
EXPLAINED	12.702	19	0.669	1.060	0.396
RESIDUAL	113.518	180	0.631		
TOTAL	126.220	199	0.634		

Length of schooling:

H_0 - Length of schooling does not affect interest in modelling, building, craftwork etc. for total Bangladeshi sample.

H_A - Length of schooling affects interest in modelling, building, craftwork etc. for total Bangladeshi sample.

Significance level P is 3.7%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect interest in modelling, building, craftwork etc. for total Bangladeshi sample.

H_A - Sex affects interest in modelling, building, craftwork etc. for total Bangladeshi sample.

Significance level P is 18.1%.

The null hypothesis thus cannot be rejected.

Age:

H_0 - Age does not affect interest in modelling, building, craftwork etc. for total Bangladeshi sample.

H_A - Age affects interest in modelling, building, craftwork etc. for total Bangladeshi sample.

Significance level P is 21.2%.

The null hypothesis thus cannot b e rejected.

1. Among main effects only length of schooling is significant.
2. None of the 2-way interaction is significant.
3. The effect of the 3-way interaction between age, length of schooling and sex on total adjustment for total Bangladeshi subjects is not statistically significant.

TABLE 32E2

Multiple Classification Analysis

Grand mean = 3.17.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	0.10
BANGLADESHI (<2)	98	-0.11
SEX		
MALE	120	0.06
FEMALE	80	-0.09
AGE		
7 YEARS OLD	25	-0.17
8 YEARS OLD	56	0.08
9 YEARS OLD	50	0.05
10 YEARS OLD	52	0.06
11 YEARS OLD	17	-0.35

Within Indigenous Group Comparison:

32F. Indigenous boys and indigenous girls:

TABLE 32F1

One-way analysis of variance for the factor sex on interest in modelling, building, craftwork etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	3.527	1	3.527	5.667	0.019
SEX	3.527	1	3.527	5.667	0.019
EXPLAINED	3.527	1	3.527	5.667	0.019
RESIDUAL	60.983	98	0.622		
TOTAL	64.510	99	0.652		

H_0 - Sex does not affect interest in modelling, building, craftwork etc. for all subjects.

H_A - Sex affects interest in modelling, building, craftwork etc. for all subjects.

Significance level P is 1.9%.

The null hypothesis thus cannot be rejected and the alternative hypothesis accepted.

TABLE 32F2

Multiple Classification Analysis

Grand mean = 3.43.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	0.15
INDIGENOUS GIRLS	40	-0.23

33. INTEREST IN DANCE, MUSIC, DRAMA, ETC.

Between Group Comparison:

33A. Total indigenous and Bangladeshi children:

TABLE 33A1

One-way analysis of variance for the factor length of schooling on interest in dance, music, drama etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	2.535	1	2.535	3.580	0.059
LENGTH OF SCHOOLING	2.535	1	2.535	3.580	0.059
EXPLAINED	2.535	1	2.535	3.580	0.059
RESIDUAL	210.985	298	0.708		
TOTAL	213.520	299	0.714		

H_0 - Length of schooling does not affect interest in dance, music, drama, etc. for all subjects.

H_A - Length of schooling affects interest in dance, music, drama, etc. for all children.

Significance level P is 5.9%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE A2

Multiple Classification Analysis

Grand mean = 3.04.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.13
BANGLADESHI CHILDREN	200	-0.06

Between Group Comparison:

33B. Indigenous boys and Bangladeshi boys:

TABLE 33B1

One-way analysis of variance for the factor length of schooling on interest in dance, music, drama, etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.025	1	0.025	0.041	0.839
LENGTH OF SCHOOLING	0.025	1	0.025	0.041	0.839
EXPLAINED	0.025	1	0.025	0.041	0.839
RESIDUAL	107.725	178	0.605		
TOTAL	107.750	179	0.602		

H_0 - Length of schooling does not affect interest in dance, music, drama, etc. for all subjects.

H_A - Length of schooling affects interest in dance, music, drama, etc. for all subjects.

Significance level P is 83.0%.

The null hypothesis thus cannot be rejected.

TABLE 33B2

Multiple Classification Analysis

Grand mean = 2.92.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	0.02
BANGLADESHI BOYS	120	-0.01

Between Group Comparison:

33C. Indigenous girls and Bangladeshi girls:

TABLE 33C1

One-way analysis of variance for the factor length of schooling on interest in dance, music, drama, etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	5.400	1	5.400	6.813	0.010
LENGTH OF SCHOOLING	5.400	1	5.400	6.813	0.010
EXPLAINED	5.400	1	5.400	6.813	0.010
RESIDUAL	93.525	118	0.793		
TOTAL	98.925	119	0.831		

H_0 - Length of schooling does not affect interest in dance, music, drama, etc. for all subjects.

H_A - Length of schooling affects interest in dance, music, drama, etc. for all subjects.

Significance level P is 1.0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 33C2

Multiple Classification Analysis

Grand mean = 3.22.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	0.30
BANGLADESHI GIRLS	80	-0.15

Between Group Comparison:

33D. Total indigenous and Bangladeshi children (>2):

TABLE 33D1

One-way analysis of variance for the factor length of schooling on interest in dance, music, drama, etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.054	1	0.054	0.087	0.768
LENGTH OF SCHOOLING	0.054	1	0.054	0.087	0.768
EXPLAINED	0.054	1	0.054	0.087	0.768
RESIDUAL	124.188	200	0.621		
TOTAL	124.243	201	0.618		

H_0 - Length of schooling does not affect interest in dance, music, drama, etc. for all subjects.

H_A - Length of schooling affects interest in dance, music, drama, etc. for all subjects.

Significance level P is 76.8%.

The null hypothesis thus cannot be rejected.

TABLE 33D2

Multiple Classification Analysis

Grand mean = 3.15.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.02
BANGLADESHI CHILDREN	102	-0.02

33E. Within total Bangladeshi sample:

TABLE 33E1

3-way ANOVA with factor, length of schooling, sex and age on interest in dance, music, drama, etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	9.002	6	1.500	2.039	0.063
VAR - AGE	2.316	4	0.579	0.787	0.535
VAR - LENGTH OF SCHOOLING	5.169	1	5.169	7.026	0.009
VAR - SEX	1.507	1	1.507	2.048	0.154
2-WAY INTERACTIONS	10.561	9	1.173	1.595	0.120
AGE x LENGTH OF SCHOOLING	7.134	4	1.784	2.424	0.050
AGE x SEX	3.254	4	0.814	1.106	0.355
LENGTH OF SCHOOLING x SEX	0.268	1	0.268	0.364	0.547
3-WAY INTERACTIONS	0.882	4	0.221	0.300	0.878
AGE x LENGTH OF SCHOOLING x SEX	0.882	4	0.221	0.300	0.878
EXPLAINED	20.444	19	1.076	1.463	0.104
RESIDUAL	132.431	180	0.736		
TOTAL	152.875	199	0.768		

Length of schooling:

H_0 - Length of schooling does not affect interest in dance, music, drama, etc. for all subjects.

H_A - Length of schooling affects interest in dance, music, drama, etc. for all subjects.

Significance level P is 0.9%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect interest in dance, music, drama, etc. for total Bangladeshi sample.

H_A - Sex affects interest in dance, music, drama, etc. for total Bangladeshi sample.

Significance level P is 15.4%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Age:

H_0 - Age does not affect interest in dance, music, drama, etc. for total Bangladeshi sample.

H_A - Age affects interest in dance, music, drama, etc. for toral Bangladeshi sample.

Significance level P is 53.5%.

The null hypothesis thus cannot be rejected.

1. Among main effects on length of schooling is significant.
2. None of the 2-way interaction is significant.
3. The effect of the 3-way interaction between age, length of schooling and sex on total adjustment for total Bangladeshi subjects is not statistically significant.

TABLE 33E2

Multiple Classification Analysis

Grand mean = 2.97.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	0.16
BANGLADESHI (<2)	98	-0.17
SEX		
MALE	120	-0.07
FEMALE	80	0.10
AGE		
7 YEARS OLD	25	0.11
8 YEARS OLD	56	0.08
9 YEARS OLD	50	-0.07
10 YEARS OLD	52	0.03
11 YEARS OLD	17	0.27

Within Indigenous Group Comparison:

33F. Indigenous boys and indigenous girls:

TABLE 33F1

One-way analysis of variance for the factor sex on interest in dance, music, drama, etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	8.402	1	8.402	16.564	0.000
SEX	8.402	1	8.402	16.564	0.000
EXPLAINED	8.402	1	8.402	16.564	0.000
RESIDUAL	49.708	98	0.507		
TOTAL	58.110	99	0.587		

H_0 - Sex does not affect interest in dance, music, drama, etc. for all subjects.

H_A - Sex affects interest in dance, music, drama, etc. for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 33F2

Multiple Classification Analysis

Grand mean = 3.17.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	-0.24
INDIGENOUS GIRLS	40	0.36

34. INTEREST IN BODY SKILLS - SPORTS, GYMNASTICS ETC.

Between Group Comparison:

34A. Total indigenous and total Bangladeshi children:

TABLE 34A1

One-way analysis of variance for the factor length of schooling on interest in body skills - sports, gymnastics etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	14.727	1	14.727	22.019	0.000
LENGTH OF SCHOOLING	14.727	1	14.727	22.019	0.000
EXPLAINED	14.727	1	14.727	22.019	0.000
RESIDUAL	199.310	298	0.669		
TOTAL	214.037	299	0.716		

H_0 - Length of schooling does not affect interest in body skills - sports, gymnastics etc. for all subjects.

H_A - Length of schooling affects interest in body skills - sports, gymnastics etc. for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 34A2

Multiple Classification Analysis

Grand mean = 3.28.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.31
BANGLADESHI CHILDREN	20	-0.16

Between Group Comparison:

34B. Indigenous boys and Bangladeshi boys:

TABLE 34B1

One-way analysis of variance for the factor length of schooling on interest in body skills - sports, gymnastics etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	4.669	1	4.669	7.517	0.007
LENGTH OF SCHOOLING	4.669	1	4.669	7.517	0.007
EXPLAINED	4.669	1	4.669	7.517	0.007
RESIDUAL	110.575	178	0.621		
TOTAL	115.244	179	0.644		

H_O - Length of schooling does not affect interest in body skills - sports, gymnastics etc.

H_A - Length of schooling affects interest in body skills - sports, gymnastics, etc.

Significance level P is 0.7%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 34B2

Multiple Classification Analysis

Grand mean = 3.36.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	0.23
BANGLADESHI BOYS	120	-0.11

Between Group Comparison:

34C. Indigenous girls and Bangladeshi girls:

TABLE 34 C1

One-way analysis of variance for the factor length of schooling on interest in body skills - sports, gymnastics etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	11.704	1	11.704	16.385	0.000
LENGTH OF SCHOOLING	11.704	1	11.704	16.385	0.000
EXPLAINED	11.704	1	11.704	16.385	0.000
RESIDUAL	84.287	118	0.714		
TOTAL	95.992	119	0.807		

H_0 - Length of schooling does not affect interest in body skills - sports, gymnastics etc.

H_A - Length of schooling affects interest in body skills - sports, gymnastics etc.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 34C2

Multiple Classification Analysis

Grand mean = 3.16.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	0.44
BANGLADESHI GIRLS	80	-0.22

Between Group Comparison:

34D. Total indigenous and Bangladeshi children (>2):

TABLE 34D1

One-way analysis of variance for the factor length of schooling on interest in body skills - sports, gymnastics etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECT	8.635	1	8.635	13.386	0.000
LENGTH OF SCHOOLING	8.635	1	8.635	13.386	0.000
EXPLAINED	8.635	1	8.635	13.386	0.000
RESIDUAL	129.014	200	0.645		
TOTAL	137.649	201	0.685		

H_0 - Length of schooling does not affect interest in body skills - sports, gymnastics etc.

H_A - Length of schooling affects interest in body skills - sports, gymnastics etc.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 34D2

Multiple Classification Analysis

Grand mean = 3.38.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.21
BANGLADESHI CHILDREN	102	-0.20

34E. Within total Bangladeshi sample:

TABLE 34 E1

3-way ANOVA with factor, length of schooling, sex and age on interest in body skills - sports, gymnastics etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	13.160	6	2.193	3.793	0.001
VAR - AGE	7.968	4	1.992	3.445	0.010
VAR - LENGTH OF SCHOOLING	0.862	1	0.862	1.491	0.224
VAR - SEX	3.446	1	3.446	5.960	0.016
2-WAY INTERACTIONS	8.128	9	0.903	1.562	0.130
AGE x LENGTH OF SCHOOLING	5.252	4	1.313	2.271	0.063
AGE x SEX	1.516	4	0.379	0.655	0.624
LENGTH OF SCHOOLING x SEX	0.644	1	0.644	1.113	0.293
3-WAY INTERACTIONS	1.756	4	0.439	0.759	0.553
AGE x LENGTH OF SCHOOLING x SEX	1.756	4	0.439	0.759	0.553
EXPLAINED	23.044	19	1.213	2.098	0.007
RESIDUAL	104.076	180	0.578		
TOTAL	127.120	199	0.639		

Length of schooling:

H_0 - Length of schooling does not affect interest in body skills - sports, gymnastics etc.

H_A - Length of schooling affects interest in body skills - sports, gymnastics etc.

Significance level P is 22.4.

The null hypothesis thus cannot be rejected.

Sex:

H_0 - Sex does not affect interest in body skills - sports, gymnastics etc. for total Bangladeshi sample.

H_A - Sex affects interest in body skills - sports, gymnastics etc. for total Bangladeshi sample.

Significance level P is 1.6%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Age:

H_0 - Age does not affect interest in body skills - sports, gymastics etc. for total Bangladeshi sample.

H_A - Age affects interest in body skills - sports, gymnastics etc. for total Bangladeshi sample.

Significance level P is 1.0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

1. Among main effects only length of schooling is not significant.
2. None of the 2-way interaction is significant.
3. The effect of the 3-way interaction between age, length of schooling and sex on total adjustment for total Bangladeshi subjects is not statistically significant.

TABLE 34E2

Multiple Classification Analysis

Grand mean = 3.12.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	0.06
BANGLADESHI (<2)	98	-0.06
SEX		
MALE	120	0.12
FEMALE	80	-0.18
AGE		
7 YEARS OLD	25	-0.12
8 YEARS OLD	56	0.15
9 YEARS OLD	50	-0.12
10 YEARS OLD	52	0.19
11 YEARS OLD	17	-0.53

Within Indigenous Group Comparison:

34 F. Indigenous boys and indigenous girls:

TABLE 34 F1

One-way analysis of variance for the factor sex on interest in body skills - sports, gymnastics etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.007	1	0.007	0.009	0.924
SEX	0.007	1	0.007	0.009	0.924
EXPLAINED	0.007	1	0.007	0.009	0.924
RESIDUAL	72.183	98	0.737		
TOTAL	72.190	99	0.729		

H_0 - Sex does not affect interest in body skills - sports, gymnastics etc. for all subjects.

H_A - Sex affects interest in body skills - sports, gymnastics etc. for all subjects.

Significance level P is 92.4%.

The null hypothesis thus cannot be rejected.

TABLE 34 F2

Multiple Classification Analysis

Grand mean = 3.59.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	-0.01
INDIGENOUS GIRLS	40	0.01

35. INTEREST IN HAND SKILLS - TOOLS: INSTRUMENTS, SCISSORS, PENS ETC.

Between Group Comparison:

35A. Total indigenous and Bangladeshi children:

TABLE 35A1

One-way analysis of variance for the factor length of schooling on interest in hand skills - tools: instruments, scissors, pens etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	4.335	1	4.335	7.101	0.008
LENGTH OF SCHOOLING	4.335	1	4.335	7.101	0.008
EXPLAINED	4.335	1	4.335	7.101	0.008
RESIDUAL	181.915	298	0.610		
TOTAL	186.250	299	0.623		

H_0 - Length of schooling does not affect interest in hand skills - tools: instruments, scissors, pens etc.

H_A - Length of schooling affects interest in hand skills - tools: instruments, scissors, pens etc.

Significance level P is 0.8%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 35A1

Multiple Classification Analysis

Grand mean = 3.15.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.17
BANGLADESHI CHILDREN	200	-0.09

Between Group Comparison:

35B. Indigenous boys and Bangladeshi boys:

TABLE 35B1

One-way analysis of variance for the factor length of schooling on interest in hand skills - tools: instruments, scissors, pens etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	2.500	1	2.500	3.893	0.050
LENGTH OF SCHOOLING	2.500	1	2.500	3.893	0.050
EXPLAINED	2.500	1	2.500	3.893	0.050
RESIDUAL	114.300	178	0.642		
TOTAL	116.800	179	0.653		

H_0 - Length of schooling does not affect interest in hand skills - tools: instruments, scissors, pens etc.

H_A - Length of schooling affects interest in hand skills - tools: instruments, scissors, pens etc.

Significance level P is 5%.

The null hypothesis thus cannot be rejected.

TABLE 35B2

Multiple Classification Analysis

Grand mean = 3.20.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	0.17
BANGLADESHI BOYS	120	-0.08

Between Group Comparison:

35C. Indigenous girls and Bangladeshi girls:

TABLE 35C1

One-way analysis of variance for the factor length of schooling on interest in hand skills - tools: instruments, scissors, pens etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	1.837	1	1.837	3.261	0.073
LENGTH OF SCHOOLING	1.837	1	1.837	3.261	0.073
EXPLAINED	1.837	1	1.837	3.261	0.073
RESIDUAL	66.488	118	0.563		
TOTAL	68.325	119	0.574		

H_O - Length of schooling does not affect interest in hand skills - tools: instruments, scissors, pens etc. for all subjects.

H_A - Length of schooling affects interest in hand skills - tools: instruments, scissors, pens etc. for all subjects.

Significance level P is 7.3%.

The null hypothesis thus cannot be rejected.

TABLE 35C2

Multiple Classification Analysis

Grand mean = 3.07.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	0.18
BANGLADESHI GIRLS	80	-0.09

Between Group Comparison:

35D. Total indigenous and Bangladeshi children (>2):

TABLE 35D1

One-way analysis of variance for the factor length of schooling on interest in hand skills - tools: instruments, scissors, pens etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	1.686	1	1.686	2.814	0.095
LENGTH OF SCHOOLING	1.686	1	1.686	2.814	0.095
EXPLAINED	1.686	1	1.686	2.814	0.095
RESIDUAL	119.838	200	0.599		
TOTAL	121.525	201	0.605		

H_0 - Length of schooling does not affect interest in hand skills - tools: instruments, scissors, pens etc. for all subjects.

H_A - Length of schooling affects interest in hand skills - tools: instruments, scissors, pens etc. for all subjects.

Significance level P is 9.5%.

The null hypothesis thus cannot be rejected.

TABLE 35D2

Multiple Classification Analysis

Grand mean = 3.23.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.09
BANGLADESHI CHILDREN	102	-0.09

35E. Within total Bangladeshi sample:

TABLE 35E1

3-way ANOVA with factor, length of schooling, sex and age on interest in hand skills - tools: instruments, scissors, pens etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	9.162	6	1.527	2.670	0.017
VAR - AGE	7.227	4	1.807	3.159	0.015
VAR - LENGTH OF SCHOOLING	1.387	1	1.387	2.425	0.121
VAR - SEX	0.532	1	0.532	0.930	0.336
2-WAY INTERACTIONS	1.741	9	0.193	0.338	0.961
AGE x LENGTH OF SCHOOLING	1.618	4	0.404	0.707	0.588
AGE x SEX	0.145	4	0.036	0.063	0.993
LENGTH OF SCHOOLING X SEX	0.016	1	0.016	0.028	0.866
3-WAY INTERACTIONS	0.299	4	0.075	0.131	0.971
AGE x LENGTH OF SCHOOLING x SEX	0.299	4	0.075	0.131	0.971
EXPLAINED	11.201	19	0.590	1.031	0.428
RESIDUAL	102.954	180	0.572		
TOTAL	114.155	199	0.574		

Length of schooling:

H_0 - Length of schooling does not affect interest in hand skills - tools: instruments, scissors, pens etc. for total Bangladeshi sample.

H_A - Length of schooling affects interest in hand skills - tools: instruments, scissors, pens etc. for total Bangladeshi sample.

Significance level P is 12.1%.

The null hypothesis thus cannot be rejected.

Sex:

H_0 - Sex does not affect interest in hand skills - tools: instruments, scissors, pens etc. for total Bangladeshi sample.

H_A - Sex affects interest in hand skills - tools: instruments, scissors, pens etc. for total Bangladeshi sample.

Significance level P is 33.6%.

The null hypothesis thus cannot be rejected.

Age:

H_0 - Age does not affect interest in hand skills - tools: instruments, scissors, pens etc. for total Bangladeshi sample.

H_A - Age affects interest in hand skills - tools: instruments, scissors, pens etc. for total Bangladesbi sample.

Significance level P is 1.5%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

1. Among main effects only age is significant.
2. None of the 2-way interaction is significant.
3. The effect of the 3-way interaction between age, length of schooling and sex on total adjustment for total Bangladeshi subjects is not statistically significant.

TABLE 35E2

Multiple Classification Analysis

Grand mean = 3.06

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	0.07
BANGLADESHI (<2)	98	-0.08
SEX		
MALE	120	0.05
FEMALE	80	-0.08
AGE		
7 YEARS OLD	25	-0.15
8 YEARS OLD	56	0.15
9 YEARS OLD	50	-0.03
10 YEARS OLD	52	0.11
11 YEARS OLD	17	-0.54

Within Indigenous Group Comparison:

35F. Indigenous boys and indigenous girls:

TABLE 35F1

One-way analysis of variance for the factor sex on interest in hand skills - tools: instruments, scissors, pens etc.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.327	1	0.327	0.475	0.492
SEX	0.327	1	0.327	0.475	0.492
EXPLAINED	0.327	1	0.327	0.475	0.492
RESIDUAL	67.433	98	0.688		
TOTAL	67.760	99	0.684		

H_0 - Sex does not affect interest in hand skills - tools: instruments, scissors, pens etc. for all subjects.

H_A - Sex affects interest in hand skills - tools, instruments, scissors, pens etc. for all subjects.

Significance level P is 49.2%.

The null hypothesis thus cannot be rejected.

TABLE 35F2

Multiple Classification Analysis

Grand mean = 3.32.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	0.05
INDIGENOUS GIRLS	40	-0.07

VI. ACADEMIC AND NON-ACADEMIC PERFORMANCE

36. ACADEMIC PERFORMANCE

Between Group Comparison:

36A. Total indigenous and total Bangladeshi children:

TABLE 36A1

One-way analysis of variance for the factor length of schooling on academic performance.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	524.535	1	524.535	30.873	0.000
LENGTH OF SCHOOLING	524.535	1	524.535	30.873	0.000
EXPLAINED	524.535	1	524.535	30.873	0.000
RESIDUAL	5062.995	298	16.990		
TOTAL	5587.530	299	18.687		

H_0 - Length of schooling does not affect academic performance for all subjects.

H_A - Length of schooling affects academic performance for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 36A2

Multiple Classification Analysis

Grand mean = 14.43.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	1.87
BANGLADESHI CHILDREN	200	-0.93

Between Group Comparison:

36B. Indigenous boys and Bangladeshi boys:

TABLE 36B1

One-way analysis of variance for the factor length of schooling on academic performance.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	255.025	1	255.025	14.703	0.000
LENGTH OF SCHOOLING	255.025	1	255.025	14.703	0.000
EXPLAINED	255.025	1	255.025	14.703	0.000
RESIDUAL	3087.525	178	17.346		
TOTAL	3342.550	179	18.673		

H_0 - Length of schooling does not affect academic performance for all subjects.

H_A - Length of schooling affects academic performance for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 36B2

Multiple Classification Analysis

Grand mean = 14.45.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	1.68
BANGLADESHI BOYS	120	-0.84

Between Group Comparison:

36C. Indigenous girls and Bangladeshi girls:

TABLE 36C1

One-way analysis of variance for the factor length of schooling on academic performance.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	277.350	1	277.350	16.634	0.000
LENGTH OF SCHOOLING	277.350	1	277.350	16.634	0.000
EXPLAINED	277.350	1	277.350	16.634	0.000
RESIDUAL	1967.450	118	16.673		
TOTAL	2244.800	119	18.864		

H_0 - Length of schooling does not affect academic performance for all subjects.

H_A - Length of schooling affects academic performance for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 36C2

Multiple Classification Analysis

Grand mean = 14.40.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	2.15
BANGLADESHI GIRLS	80	-1.07

Between Group Comparison:

36D. Total indigenous and Bangladeshi children (>2):

TABLE 36D1

One-way analysis of variance for the factor length of schooling on academic performance.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	105.736	1	105.736	6.336	0.013
LENGTH OF SCHOOLING	105.736	1	105.736	6.336	0.013
EXPLAINED	105.736	1	105.736	6.336	0.013
RESIDUAL	3337.794	200	16.689		
TOTAL	3443.530	201	17.132		

H_0 - Length of schooling does not affect acadenic performance for all subjects.

H_A - Length of schooling affects academic performance for all subjects.

Significance level P is 1.3%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 36D2

Multiple Classification Analysis

Grand mean = 15.57.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.73
BANGLADESHI CHILDREN	102	-0.72

36E. Within total Bangladeshi sample:

TABLE 36E1

3-way ANOVA with factor, length of schooling, sex and age on academic performance.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	429.041	6	71.507	5.003	0.000
VAR - AGE	39.215	4	9.804	0.686	0.603
VAR - LENGTH OF SCHOOLING	380.704	1	380.704	26.634	0.000
VAR - SEX	4.583	1	4.583	0.321	0.572
2-WAY INTERACTIONS	124.715	9	13.857	0.969	0.467
AGE x LENGTH OF SCHOOLING	83.434	4	20.858	1.459	0.217
AGE x SEX	46.262	4	11.566	0.809	0.521
LENGTH OF SCHOOLING x SEX	6.757	1	6.757	0.473	0.493
3-WAY INTERACTIONS	19.295	4	4.824	0.337	0.852
AGE x LENGTH OF SCHOOLING x SEX	19.295	4	4.824	0.337	0.852
EXPLAINED	573.050	19	30.161	2.110	0.006
RESIDUAL	2572.945	180	14.294		
TOTAL	3145.995	199	15.809		

Length of schooling:

H_0 - Length of schooling does not affect academic performance for total Bangladeshi sample.

H_A - Length of schooling affects academic performance for total Bangladeshi sample.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect academic performance for total Bangladeshi sample.

H_A - Sex affects academic performance for total Bangladeshi sample.

Significance level P is 57.2%.

The null hypothesis thus cannot be rejected.

Age:

H_0 - Age does not affect academic performance for total Bangladeshi sample.

H_A - Age affects academic performance for total Bangladeshi sample.

Significance level P is 60%.

The null hypothesis thus cannot be rejected.

1. Among main effects only length of schooling is significant.
2. None of the 2-way interaction is significant.
3. The effect of the 3-way interaction between age, length of schooling and sex on academic performance for total Bangladeshi subjects is not statistically significant.

TABLE 36E2

Multiple Classification Analysis

Grand mean = 13.50.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	1.36
BANGLADESHI (<2)	98	-1.41
SEX		
MALE	120	0.11
FEMALE	80	-0.17
AGE		
7 YEARS OLD	25	0.71
8 YEARS OLD	56	0.29
9 YEARS OLD	50	-0.15
10 YEARS OLD	52	-0.09
11 YEARS OLD	17	-1.26

Within Indigenous Group Comparison:

36 F. Indigenous boys and indigenous girls:

TABLE 36F1

One-way analysis of variance for the factor sex on academic performance.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	4.167	1	4.167	0.213	0.645
SEX	4.167	1	4.167	0.213	0.645
EXPLAINED	4.167	1	4.167	0.213	0.645
RESIDUAL	1912.833	98	19.519		
TOTAL	1917.000	99	19.364		

H_0 - Sex does not affect academic performance for all subjects.

H_A - Sex affects academic performance for all subjects.

Significance level P is 64.5%.

The null hypothesis thus cannot be rejected.

TABLE 36 F2

Multiple Classification Analysis

Grand mean = 16.30.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	-0.17
INDIGENOUS GIRLS	40	0.25

37. ATTAINMENT IN ENGLISH LANGUAGE

Between Group Comparison:

37A. Total indigenous and total Bangladeshi children:

TABLE 37A1

One-way analysis of variance for the factor length of schooling on attainment in English language.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	528.282	1	528.282	44.067	0.
LENGTH OF SCHOOLING	528.282	1	528.282	44.067	0.
EXPLAINED	528.282	1	528.282	44.067	0.
RESIDUAL	3572.465	298	11.988		
TOTAL	4100.747	299	13.715		

H_0 - Length of schooling does not affect attainment in English language for all subjects.

H_A - Length of schooling affects attainment in English language for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 37A2

Multiple Classification Analysis

Grand mean = 11.41.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	1.88
BANGLADESHI CHILDREN	200	-0.94

Between Group Comparison:

37B. Indigenous boys and Bangladeshi boys:

TABLE 37B1

One-way analysis of variance for the factor length of schooling on attainment in English language.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	268.669	1	268.669	21.931	0.000
LENGTH OF SCHOOLING	268.669	1	268.669	21.931	0.000
EXPLAINED	268.669	1	268.669	21.931	0.000
RESIDUAL	2180.642	178	12.251		
TOTAL	2449.311	179	13.683		

H_0 - Length of schooling does not affect attainment in English language for all subjects.

H_A - Length of schooling affects attainment in English language for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 37B2

Multiple Classification Analysis

Grand mean = 11.32.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	1.73
BANGLADESHI BOYS	120	-0.86

Between Group Comparison:

37C. Indigenous girls and Bangladeshi girls:

TABLE 37C1

One-way analysis of variance for the factor length of schooling on attainment in English language.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	264.600	1	264.600	22.575	0.000
LENGTH OF SCHOOLING	264.600	1	264.600	22.575	0.000
EXPLAINED	264.600	1	264.600	22.575	0.000
RESIDUAL	1383.100	118	11.721		
TOTAL	1647.700	119	13.846		

H_0 - Length of schooling does not affect attainment in English language for all subjects.

H_A - Length of schooling affects attainment in English language for all subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 37C2

Multiple Classification Analysis

Grand mean = 11.55.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	2.10
BANGLADESHI GIRLS	80	-1.05

Between Group Comparison:

37D. Total indigenous and Bangladeshi children (>2):

TABLE 37D1

One-way analysis of variance for the factor length of schooling on attainment in English language.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	134.677	1	134.677	11.474	0.001
LENGTH OF SCHOOLING	134.677	1	134.677	11.474	0.001
EXPLAINED	134.677	1	134.677	11.474	0.001
RESIDUAL	2347.580	200	11.738		
TOTAL	2482.258	201	12.350		

H_0 - Length of schooling does not affect attainment in English language for all subjects.

H_A - Length of schooling affects attainment in English language for all subjects.

Significance level P is 0.1%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 37D2

Multiple Classification Analysis

Grand mean = 12.47.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.82
BANGLADESHI CHILDREN	102	-0.81

37E. Within total Bangladeshi sample:

TABLE 37E1

3-way ANOVA with factor, length of schooling, sex and age on attainment in English language.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	312.885	6	52.147	5.165	0.000
VAR - AGE	22.105	4	5.526	0.547	0.701
VAR - LENGTH OF SCHOOLING	287.018	1	287.018	28.430	0.000
VAR - SEX	0.054	1	0.054	0.005	0.942
2-WAY INTERACTIONS	111.115	9	12.346	1.223	0.283
AGE x LENGTH OF SCHOOLING	84.697	4	21.174	2.097	0.083
AGE x SEX	30.890	4	7.723	0.765	0.549
LENGNH OF SCHOOLING x SEX	3.299	1	3.299	0.327	0.568
3-WAY INTERACTIONS	16.657	4	4.164	0.412	0.800
AGE x LENGTH OF SCHOOLING x SEX	16.657	4	4.164	0.412	0.800
EXPLAINED	440.657	19	23.192	2.297	0.003
RESIDUAL	1817.218	180	10.096		
TOTAL	2257.875	199	11.346		

Length of schooling:

H_0 - Length of schooling does not affect attainment in English language for total Bangladeshi subjects.

H_A - Length of schooling affects attainment in English language for total Bangladeshi subjects.

Significance level P is 0%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect attainment in English language for total Bangladeshi sample.

H_A - Sex affects attainment in English language for total Bangladeshi sample.

Significance level P is 94.2%.

The null hypothesis thus cannot be rejected.

Age:

H_0 - Age does not affect attainment in English language for total Bangladeshi sample.

H_A - Age affects attainment in English language for total Bangladeshi sample.

Significance level P is 70.1%.

The null hypothesis thus cannot be rejected.

1. Among the main effects only length of schooling is significant.
2. None of the 2-way interaction is significant.
3. The effect of the 3-way interaction between age, length of schooling and sex on total adjustment for total Bangladeshi subjects is not statistically significant.

TABLE 37E2

Multiple Classification Analysis

Grand mean = 10.48.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	1.18
BANGLADESHI (<2)	98	-1.23
SEX		
MALE	120	-0.02
FEMALE	80	0.02
AGE		
7 YEARS OLD	25	0.44
8 YEARS OLD	56	0.26
9 YEARS OLD	50	-0.25
10 YEARS OLD	52	0.04
11 YEARS OLD	17	-0.89

Within Indigenous Group Comparison:

37 F. Indigenous boys and indigenous girls:

TABLE 37F1

One-way analysis of variance for the factor sex on attainment in English language.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	8.640	1	8.640	0.648	0.423
SEX	8.640	1	8.640	0.648	0.423
EXPLAINED	8.640	1	8.640	0.648	0.423
RESIDUAL	1305.950	98	13.326		
TOTAL	1314.590	99	13.279		

H_0 - Sex does not affect attainment in English language for all subjects.

H_A - Sex affects attainment in English language for all subjects.

Significance level P is 42.3%.

The null hypothesis thus cannot be rejected.

TABLE 37 F2

Multiple Classification Analysis

Grand mean = 13.29.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	-0.24
INDIGENOUS GIRLS	40	0.36

38. MATHEMATICS

Between Group Comparison:

38A. Total indigenous and total Bangladeshi children:

TABLE 38A1

One-way analysis of variance for the factor length of schooling on mathematics.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.027	1	0.027	0.034	0.855
LENGTH OF SCHOOLING	0.027	1	0.027	0.034	0.855
EXPLAINED	0.027	1	0.027	0.034	0.855
RESIDUAL	235.920	298	0.792		
TOTAL	235.947	299	0.789		

H_0 - Length of schooling does not affect mathematics for all subjects.

H_A - Length of schooling affects mathematics for all subjects.

Significance level P is 85.5%.

The null hypothesis thus cannot be rejected.

TABLE 38A2

Multiple Classification Analysis

Grand mean = 3.01.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	-0.01
BANGLADESHI CHILDREN	200	0.01

Between Group Comparison:

38B. Indigenous boys and Bangladeshi boys:

TABLE 38B1

One-way analysis of variance for the factor length of schooling on mathematics.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.178	1	0.178	0.230	0.632
LENGTH OF SCHOOLING	0.178	1	0.178	0.230	0.632
EXPLAINED	0.178	1	0.178	0.230	0.632
RESIDUAL	137.883	178	0.775		
TOTAL	138.061	179	0.771		

H_O - Length of schooling does not affect mathematics for all subjects.

H_A - Length of schooling affects mathematics for all subjects.

Significance level P is 63.2%.

The null hypothesis thus cannot be rejected.

TABLE 38B2

Multiple Classification Analysis

Grand mean = 3.13.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	-0.04
BANGLADESHI BOYS	120	0.02

Between Group Comparison:

38C. Indigenous girls and Bangladeshi girls:

TABLE 38C1

One-way analysis of variance for the factor length of schooling on mathematics.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.067	1	0.067	0.086	0.770
LENGTH OF SCHOOLING	0.067	1	0.067	0.086	0.770
EXPLAINED	0.067	1	0.067	0.086	0.770
RESIDUAL	91.925	118	0.779		
TOTAL	91.992	119	0.773		

H_0 - Length of schooling does not affect mathematics for all subjects.

H_A - Length of schooling affects mathematics for all subjects.

Significance level P is 77.0%.

The null hypothesis thus cannot be rejected.

TABLE 38C2

Multiple Classification Analysis

Grand mean = 2.84.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	0	40
BANGLADESHI GIRLS	2	80

Between Group Comparison:

38D. Total indigenous and Bangladeshi children (>2):

TABLE 38D1

One-way analysis of variance for the factor length of schooling on mathematics.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	1.941	1	1.941	2.488	0.116
LENGTH OF SCHOOLING	1.941	1	1.941	2.488	0.116
EXPLAINED	1.941	1	1.941	2.488	0.116
RESIDUAL	156.078	200	0.780		
TOTAL	158.020	201	0.786		

H_0 - Length of schooling does not affect mathematics for all subjects.

H_A - Length of schooling affects mathematics for all subjects.

Significance level P is 11.6%.

The null hypothesis thus cannot be rejected.

TABLE 38D2

Multiple Classification Analysis

Grand mean = 3.10.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	-0.10
BANGLADESHI CHILDREN	102	0.10

38E. Within total Bangladeshi sample:

TABLE 38E1

3-way ANOVA with factor, length of schooling, sex and age on mathematics.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	17.483	6	2.914	3.952	0.001
VAR - AGE	5.672	4	1.418	1.923	0.108
VAR - LENGTH OF SCHOOLING	6.605	1	6.605	8.958	0.003
VAR - SEX	5.635	1	5.635	7.643	0.006
2-WAY INTERACTIONS	4.005	9	0.445	0.603	0.793
AGE x LENGTH OF SCHOOLING	1.138	4	0.284	0.386	0.819
AGE x SEX	2.759	4	0.690	0.935	0.445
LENGTH OF SCHOOLING x SEX	0.613	1	0.613	0.832	0.363
3-WAY INTERACTIONS	1.709	4	0.427	0.579	0.678
AGE x LENGTH OF SCHOOLING x SEX	1.709	4	0.427	0.579	0.678
EXPLAINED	23.196	19	1.221	1.656	0.048
RESIDUAL	132.724	180	0.737		
TOTAL	155.920	199	0.784		

Length of schooling:

H_0 - Length of schooling does not affect mathematics for all subjects.

H_A - Length of schooling affects mathematics for all subjects.

Significance level P is 0.3%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect mathematics for total Bangladeshi sample.

H_A - Sex affects mathematics for total Bangladeshi sample.

Significance level P is 0.6%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Age:

H_0 - Age does not affect mathematics for total Bangladeshi sample.

H_A - Age affects mathematics for total Bangladeshi sample.

Significance level P is 10.8%.

The null hypothesis thus cannot be rejected.

1. Among the main effects only age is not significant.
2. None of the 2-way interaction is significant.
3. The effect of the 3-way interaction between age, length of schooling and sex on total adjustment for total Bangladeshi subjects is not statistically significant.

TABLE 38E2

Multiple Classification Analysis

Grand mean = 3.02.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	0.18
BANGLADESHI (<2)	98	-0.18
SEX		
MALE	120	0.13
FEMALE	80	-0.20
AGE		
7 YEARS OLD	25	0.26
8 YEARS OLD	56	0.03
9 YEARS OLD	50	0.10
10 YEARS OLD	52	-0.14
11 YEARS OLD	17	-0.37

Within Indigenous Group Comparison:

38 F. Indigenous boys and indigenous girls:

TABLE 38F1

One-way analysis of variance for the factor sex on mathematics.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	1.042	1	1.042	1.293	0.258
SEX	1.042	1	1.042	1.293	0.258
EXPLAINED	1.042	1	1.042	1.293	0.258
RESIDUAL	78.958	98	0.806		
TOTAL	80.000	99	0.808		

H_0 - Sex does not affect mathematics for all subjects.

H_A - Sex affects mathematics for all subjects.

Significance level P is 25.8%.

The null hypothesis thus cannot be rejected.

TABLE 38F2

Multiple Classification Analysis

Grand mean = 3.00.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	0.08
INDIGENOUS GIRLS	40	-0.13

39. NON-ACADEMIC PERFORMANCE

Between Group Comparison:

39A. Total indigenous and total Bangladeshi children:

TABLE 39A1

One-way analysis of variance for the factor length of schooling on non-academic performance.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	91.260	1	91.260	7.818	0.006
LENGTH OF SCHOOLING	91.260	1	91.260	7.818	0.006
EXPLAINED	91.260	1	91.260	7.818	0.006
RESIDUAL	3478.670	298	11.673		
TOTAL	3569.930	299	11.940		

H_0 - Length of schooling does not affect non-academic performance for all subjects.

H_A - Length of schooling affects non-academic performance for all subjects.

Significance level P is 0.6%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 39A2

Multiple Classification Analysis

Grand mean = 15.63.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.78
BANGLADESHI CHILDREN	200	-0.39

Between Group Comparison:

39B. Indigenous boys and Bangladeshi boys:

TABLE 39B1

One-way analysis of variance for the factor length of schooling on non-academic performance.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	34.225	1	34.225	3.000	0.085
LENGTH OF SCHOOLING	34.225	1	34.225	3.000	0.085
EXPLAINED	34.225	1	34.225	3.000	0.085
RESIDUAL	2030.575	178	11.408		
TOTAL	2064.800	179	11.535		

H_0 - Length of schooling does not affect non-academic performance for all subjects.

H_A - Length of schooling affects non-academic performance for all subjects.

Significance level P is 8.5%.

The null hypothesis thus cannot be rejected.

TABLE 39B2

Multiple Classification Analysis

Grand mean = 15.80.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	60	
BANGLADESHI BOYS	120	

Between Group Comparison:

39C. Indigenous girls and Bangladeshi girls:

TABLE 39C1

One-way analysis of variance for the factor length of schooling on non-academic performance.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	63.037	1	63.037	5.205	0.024
LENGTH OF SCHOOLING	63.037	1	63.037	5.205	0.024
EXPLAINED	63.038	1	63.038	5.205	0.024
RESIDUAL	1429.088	118	12.111		
TOTAL	1492.125	119	12.539		

H_0 - Length of schooling does not affect non-academic performance for all subjects.

H_A - Length of schooling affects non-academic performance for all subjects.

Significance level P is 2.4%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

TABLE 39C2

Multiple Classification Analysis

Grand mean = 15.38.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	40	1.03
BANGLADESHI GIRLS	80	-0.51

Between Group Comparison:

39D. Total indigenous and Bangladeshi children (>2):

TABLE 39D1

One-way analysis of variance for the factor length of schooling on non-academic performance.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	10.639	1	10.639	1.003	0.318
LENGTH OF SCHOOLING	10.639	1	10.639	1.003	0.318
EXPLAINED	10.639	1	10.639	1.003	0.318
RESIDUAL	2120.945	200	10.605		
TOTAL	2131.584	201	10.605		

H_0 - Length of schooling does not affect non-academic performance for all subjects.

H_A - Length of schooling affects non-academic performance for all subjects.

Significance level P is 31.8%.

The null hypothesis thus cannot be rejected.

TABLE 39D2

Multiple Classification Analysis

Grand mean = 16.18.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	100	0.23
BANGLADESHI CHILDREN	102	-0.23

39E. Within total Bangladeshi sample:

TABLE 39E1

3-way ANOVA with factor, length of schooling, sex and age on non-academic performance.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	200.964	6	33.494	2.970	0.009
VAR - AGE	74.471	4	18.618	1.651	0.163
VAR - LENGTH OF SCHOOLING	114.069	1	114.069	10.116	0.002
VAR - SEX	16.881	1	16.881	1.497	0.223
2-WAY INTERACTIONS	156.788	9	17.421	1.545	0.135
AGE x LENGTH OF SCHOOLING	117.116	4	29.279	2.596	0.038
AGE x SEX	48.375	4	12.094	1.072	0.372
LENGTH OF SCHOOLING x SEX	0.122	1	0.122	0.011	0.917
3-WAY INTERACTIONS	4.947	4	1.237	0.110	0.979
AGE x LENGTH OF SCHOOLING x SEX	4.947	4	1.237	0.110	0.979
EXPLAINED	362.698	19	19.089	1.693	0.041
RESIDUAL	2029.782	180	11.277		
TOTAL	2392.480	199	12.023		

Length of schooling:

H_0 - Length of schooling does not affect non-academic performance for total Bangladeshi sample.

H_A - Length of schooling affects non-academic performance for total Bangladeshi sample.

Significance level P is 0.2%.

The null hypothesis is thus rejected and the alternative hypothesis accepted.

Sex:

H_0 - Sex does not affect non-academic performance for total Bangladeshi sample.

H_A - Sex affects non-academic performance for total Bangladeshi sample.

Significance level P is 22.3%.

The null hypothesis thus cannot be rejected.

Age:

H_0 - Age does not affect non-academic performance for total Bangladeshi sample.

H_A - Age affects non-academic performance for total Bangladeshi sample.

Significance level P is 16.03%.

The null hypothesis thus cannot be rejected.

1. Among the main effects only length of schooling is significant.
2. The two-way intereaction between age and length of schooling is significant at the 3.8% level.
3. The effect of the 3-way interaction between age, length of schooling and sex on non-academic performance for total Bangladeshi subjects is not statistically significant.

TABLE 39E2

Multiple Classification Analysis

Grand mean = 15.24.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	102	0.71
BANGLADESHI (<2)	98	-0.74
SEX		
MALE	120	0.25
FEMALE	80	-0.38
AGE		
7 YEARS OLD	25	-0.28
8 YEARS OLD	56	0.26
9 YEARS OLD	50	0.02
10 YEARS OLD	52	0.43
11 YEARS OLD	17	-1.83

Within Indigenous Group Comparison:

39F. Indigenous boys and indigenous girls:

TABLE 39F1

One-way analysis of variance for the factor sex on non-academic performance.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.007	1	0.007	0.001	0.980
SEX	0.007	1	0.007	0.001	0.980
EXPLAINED	0.007	1	0.007	0.001	0.980
RESIDUAL	1086.183	98	11.084		
TOTAL	1086.190	99	10.972		

H_0 - Sex does not affect non-academic performance for all subjects.

H_A - Sex affects non-academic performance for all subjects.

Significance level P is 98.0%.

The null hypothesis thus cannot be rejected.

TABLE 39F2

Multiple Classification Analysis

Grand mean = 16.41.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	60	0.01
INDIGENOUS GIRLS	40	-0.01

VII. TOTAL BEHAVIOURAL SCALE (RUTTER)

40. TOTAL BEHAVIOURAL SCALE

Between Group Comparison:

40A. Total indigenous and total Bangladeshi children:

TABLE 40A1

One-way analysis of variance for the factor length of schooling on total behavioural scale (Rutter).

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	80.787	1	80.787	1.633	0.207
LENGTH OF SCHOOLING	80.787	1	80.787	1.633	0.207
EXPLAINED	80.787	1	80.787	1.633	0.207
RESIDUAL	2671.052	54	49.464		
TOTAL	2751.839	55	50.033		

H_O - Length of schooling does not affect total behavioural scale for all subjects.

H_A - Length of schooling affects total behavioural scale for all subjects.

Significance level P is 20.7%.

The null hypothesis thus cannot be rejected.

TABLE 40A2

Multiple Classification Analysis

Grand mean = 17.30.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
TOTAL INDIGENOUS	24	-1.39
TOTAL BANGLADESHI	32	1.04

Between Group Comparison:

40B. Indigenous boys and Bangladeshi boys:

TABLE 40B1

One-way analysis of variance for the factor length of schooling on total behavioural scale.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	51.364	1	51.364	0.922	0.343
LENGTH OF SCHOOLING	51.364	1	51.364	0.922	0.343
EXPLAINED	51.364	1	51.364	0.922	0.343
RESIDUAL	2117.611	38	55.727		
TOTAL	2168.975	39	55.615		

H_0 - Length of schooling does not affect total behavioural scale for all subjects.

H_A - Length of schooling affects total behavioural scale for all subjects.

Significance level P is 34.3%.

The null hypothesis thus cannot be rejected.

TABLE 40B2

Multiple Classification Analysis

Grand mean = 17.97%.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
TOTAL INDIGENOUS	18	-1.25
TOTAL BANGLADESHI	22	1.03

Between Group Comparison:

40C. Indigenous girls and Bangladeshi girls:

TABLE 40C1

One-way analysis of variance for the factor length of schooling on total behavioural scale.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	43.350	1	43.350	1.274	0.278
LENGTH OF SCHOOLING	43.350	1	43.350	1.274	0.278
EXPLAINED	43.350	1	43.350	1.274	0.278
RESIDUAL	476.400	14	34.029		
TOTAL	519.750	15	34.650		

H_0 - Length of schooling does not affect total behavioural scale for all subjects.

H_A - Length of schooling affects total behavioural scale for all subjects.

Significance level P is 27.8%.

The null hypothesis thus cannot be rejected.

TABLE 40C2

Multiple Classification Analysis

Grand mean = 15.63.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	6	-2.13
BANGLADESHI GIRLS	10	1.28

Between Group Comparison:

40D. Total indigenous and Bangladeshi children (>2):

TABLE 40D1

One-way analysis of variance for the factor length of schooling on total behavioural scale.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	108.643	1	108.643	2.387	0.130
LENGTH OF SCHOOLING	108.643	1	108.643	2.387	0.130
EXPLAINED	108.643	1	108.643	2.387	0.130
RESIDUAL	1820.333	40	45.508		
TOTAL	1928.976	41	47.048		

H_0 - Length of schooling does not affect total behavioural scale for all subjects.

H_A - Length of schooling affects total behavioural scale for all subjects.

Significance level P is 13%.

The null hypothesis thus cannot be rejected.

TABLE 40D2

Multiple Classification Analysis

Grand mean = 17.31.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	28	-1.39
BANGLADESHI CHILDREN	18	1.86

40E. Within total Bangladeshi sample:

Table 40E1

1-way ANOVA with factor length of schooling, sex and age on total behavioural scale.*

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	513.481	6	85.580	1.468	0.230
VAR - AGE	441.940	4	110.485	1.895	0.143
VAR - LENGTH OF SCHOOLING	24.845	1	24.845	0.426	0.520
VAR - SEX	17.290	1	17.290	0.297	0.591
EXPLAINED	513.481	6	85.580	1.468	0.230
RESIDUAL	1457.737	25	58.309		
TOTAL	1971.219	31	63.588		

Length of schooling:

H_0 - Length of schooling does not affect total behavioural scale for total Bangladeshi sample.

H_A - Length of schooling affects total behavioural scale for total Bangladeshi sample.

Significance level P is 52%

The null hypothesis thus cannot be rejected.

* Due to empty cells or a singular matrix, higher order interactions have been suppressed.

Sex:

H_0 - Sex does not affect total behavioural scale for the total Bangladeshi sample.

H_A - Sex affects total behavioural scale for the total Bangladeshi sample.

Significance level P is 59%

The null hypothesis thus cannot be rejected.

Age:

H_0 - Age does not affect total behavioural scale for the total Bangladeshi sample.

HA - Age affects total behavioural scale for the total Bangladeshi sample.

Significance level P is 14.3%.

The null hypothesis thus cannot be rejected.

TABLE 40E2

Multiple Classification Analysis

Grand mean = 18.34.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	18	0.82
BANGLADESHI (<2)	14	-1.06
SEX		
MALE	22	0.66
FEMALE	10	-1.44
AGE		
7 YEARS OLD	8	3.41
8 YEARS OLD	10	2.16
9 YEARS OLD	5	-6.94
10 YEARS OLD	6	0.49
11 YEARS OLD	3	-5.68

Within Indigenous Group Comparison:

40F. Indigenous boys and indigenous girls:

TABLE 40F1

One-way analysis of variance for the factor sex on total behavioural scale.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	46.722	1	46.722	1.574	0.223
SEX	46.722	1	46.722	1.574	0.223
EXPLAINED	46.722	1	46.722	1.574	0.233
RESIDUAL	653.111	22	29.687		
TOTAL	699.833	23	30.428		

H_0 - Sex does not affect total behavioural scale for all subjects.

H_A - Sex affects behavioural scale for all subjects.

Significance level P is 22.3%.

The null hypothesis thus cannot be rejected.

TABLE 40F2

Multiple Classification Analysis

Grand mean = 15.92.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	18	0.81
INDIGENOUS GIRLS	6	-2.42

41. NEUROTIC BEHAVIOUR (RUTTER)

Between Group Comparison:

41A. Total indigenous and total Bangladeshi children:

TABLE 41A1

One-way analysis of variance for the factor length of schooling on neurotic behaviour.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.430	1	0.430	0.167	0.684
LENGTH OF SCHOOLING	0.430	1	0.430	0.167	0.684
EXPLAINED	0.430	1	0.430	0.167	0.684
RESIDUAL	138.927	54	2.573		
TOTAL	139.357	55	2.534		

H_0 - Length of schooling does not affect neurotic behaviour for all subjects.

H_A - Length of schooling affects neurotic behaviour for all subjects.

Significance level P is 68.4%.

The null hypothesis thus cannot be rejected.

TABLE 41A2

Multiple Classification Analysis

Grand mean = 1.89.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
TOTAL INDIGENOUS	29	-0.10
TOTAL BANGLADESHI	32	0.08

Between Group Comparison:

41B. Indigenous boys and Bangladeshi boys:

TABLE 41B1

One-way analysis of variance for the factor length of schooling on neurotic behaviour.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.073	1	0.073	0.026	0.872
LENGTH OF SCHOOLING	0.073	1	0.073	0.026	0.872
EXPLAINED	0.073	1	0.073	0.026	0.872
RESIDUAL	104.702	38	2.755		
TOTAL	104.775	39	2.687		

H_0 - Length of schooling does not affect neurotic behaviour for all subjects.

H_A - Length of schooling affects neurotic behaviour for all subjects.

Significance level P is 87.2%.

The null hypothesis thus cannot be rejected.

TABLE 41B2

Multiple Classification Analysis

Grand mean = 1.67.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
TOTAL INDIGENOUS	18	0.05
TOTAL BANGLADESHI	22	-0.04

Between Group Comparison:

41C. Indigenous girls and Bangladeshi girls:

TABLE 41C1

One-way analysis of variance for the factor length of schooling on neurotic behaviour.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	1.838	1	1.838	0.986	0.338
LENGTH OF SCHOOLING	1.838	1	1.838	0.986	0.338
EXPLAINED	1.838	1	1.838	0.986	0.338
RESIDUAL	26.100	14	1.864		
TOTAL	27.938	15	1.862		

H_0 - Length of schooling does not affect neurotic behaviour for all subjects.

H_A - Length of schooling affects neurotic behaviour for all subjects.

Significance level P is 33.8.

The null hypothesis thus cannot be rejected.

TABLE 41C2

Multiple Classification Analysis

Grand mean = 2.44

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	6	-0.44
BANGLADESHI GIRLS	10	0.26

Between Group Comparison:

41D. Total indigenous and Bangladeshi children (>2):

TABLE 41D1

One-way analysis of variance for the factor length of schooling on neurotic behaviour.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.018	1	0.018	0.007	0.934
LENGTH OF SCHOOLING	0.018	1	0.018	0.007	0.934
EXPLAINED	0.018	1	0.018	0.007	0.934
RESIDUAL	102.458	40	2.561		
TOTAL	102.476	41	2.499		

H_0 - Length of schooling does not affect neurotic behaviour for all subjects.

H_A - Length of schooling affects neurotic behaviour for all subjects.

Significance level P is 93.4%.

The null hypothesis thus cannot be rejected.

TABLE 41D2

Multiple Classification Analysis

Grand mean = 1.81.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	24	-0.02
BANGLADESHI CHILDREN	18	0.02

41E. Within total Bangladeshi sample:

TABLE 41E1

1-way ANOVA with factor, length of schooling, sex and age on neurotic behaviour.*

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	16.455	6	2.742	0.972	0.464
VAR - AGE	6.676	4	1.669	0.592	0.672
VAR - LENGTH OF SCHOOLING	7.196	1	7.196	2.551	0.123
VAR - SEX	2.362	1	2.362	0.837	0.369
EXPLAINED	16.455	6	2.742	0.972	0.464
RESIDUAL	70.514	25	2.821		
TOTAL	86.969	31	2.805		

Length of schooling:

H_0 - Length of schooling does not affect neurotic behaviour for total Bangladeshi sample.

H_A - Length of schooling affects neurotic behaviour for total Bangladeshi sample.

Significance level P is 12.3%

The null hypothesis thus cannot be rejected.

* Due to empty cells or a singular matrix, higher order interactions have been suppressed.

Sex:

H_0 - Sex does not affect neurotic behaviour for total Bangladeshi sample.

H_A - Sex affects neurotic behaviour for total Bangladeshi sample.

Significance level P is 36.9%

The null hypothesis thus cannot be rejected.

Age:

H_0 - Age does not affect neurotic behaviour for total Bangladeshi sample.

H_A - Age affects neurotic behaviour for total Bangladeshi sample.

Significance level P is 67.2%.

The null hypothesis thus cannot be rejected.

TABLE 41E2

Multiple Classification Analysis

Grand mean = 1.97.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	18	-0.14
BANGLADESHI (<2)	14	0.17
SEX		
MALE	22	-0.33
FEMALE	10	0.73
AGE		
7 YEARS OLD	8	-0.22
8 YEARS OLD	10	0.53
9 YEARS OLD	5	0.43
10 YEARS OLD	6	-0.47
11 YEARS OLD	3	-0.97

Within Indigenous Group Comparison:

41F. Indigenous boys and indigenous girls:

TABLE 41F1

One-way analysis of variance for the factor sex on neurotic behaviour.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.347	1	0.347	0.148	0.704
SEX	0.347	1	0.347	0.148	0.704
EXPLAINED	0.347	1	0.347	0.148	0.704
RESIDUAL	51.611	22	2.346		
TOTAL	51.958	23	2.259		

H_0 - Sex does not affect neurotic behaviour for all subjects.

H_A - Sex affects neurotic behaviour for all subjects.

Significance level P is 70.4%.

The null hypothesis thus cannot be rejected.

TABLE 41F2

Multiple Classification Analysis

Grand mean = 1.81.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	18	-0.07
INDIGENOUS GIRLS	6	0.21

42. ANTISOCIAL BEHAVIOUR (RUTTER)

Between Group Comparison:

42A. Total indigenous and Bangladeshi children:

TABLE 42A1

One-way analysis of variance for the factor length of schooling on antisocial behaviour (Rutter).

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	5.720	1	5.720	0.647	0.425
LENGTH OF SCHOOLING	5.720	1	5.720	0.647	0.425
EXPLAINED	5.720	1	5.720	0.647	0.425
RESIDUAL	477.708	54	8.846		
TOTAL	483.429	55	8.790		

H_0 - Length of schooling does not affect antisocial behaviour for all subjects.

H_A - Length of schooling affects antisocial behaviour for all subjects.

Significance level P is 42.5%.

The null hypothesis thus cannot be rejected.

TABLE 42A2

Multiple Classification Analysis

Grand mean = 79.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	24	-0.37
BANGLADESHI CHILDREN	32	0.28

Between Group Comparison:

42B. Indigenous boys and Bangladeshi boys:

TABLE 42B1

One-way analysis of variance for the factor length of schooling on antisocial behaviour.

:

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	7.911	1	7.911	0.973	0.330
LENGTH OF SCHOOLING	7.911	1	7.911	0.973	0.330
EXPLAINED	7.911	1	7.911	0.973	0.330
RESIDUAL	308.864	38	8.128		
TOTAL	316.775	39	8.122		

H_0 - Length of schooling does not affect antisocial behaviour for all subjects.

H_A - Length of schooling affects antisocial behaviour for all subjects.

Significance level P is 33%.

The null hypothesis thus cannot be rejected.

TABLE 42B2

Multiple Classification Analysis

Grand mean = 5.60.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS BOYS	18	-0.49
BANGLADESHI BOYS	22	0.40

Between Group Comparison:

42C. Indigenous girls and Bangladeshi girls:

TABLE 42C1

One-way analysis of variance for the factor length of schooling on antisocial behaviour.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	0.704	1	0.704	0.079	0.783
LENGTH OF SCHOOLING	0.704	1	0.704	0.079	0.783
EXPLAINED	0.704	1	0.704	0.079	0.783
RESIDUAL	125.233	14	8.945		
TOTAL	125.938	15	8.396		

H_0 - Length of schooling does not affect antisocial behaviour for all subjects.

H_A - Length of schooling affects antisocial behaviour for all subjects.

Significance level P is 78.3.

The null hypothesis thus cannot be rejected.

TABLE 42C2

Multiple Classification Analysis

Grand mean = 3.44.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS GIRLS	6	-0.27
BANGLADESHI GIRLS	10	0.16

Between Group Comparison:

42D. Total indigenous and Bangladeshi children (>2):

TABLE 42D1

One-way analysis of variance for the factor length of schooling on antisocial behaviour.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	14.675	1	14.675	1.869	0.179
LENGTH OF SCHOOLING	14.675	1	14.675	1.869	0.179
EXPLAINED	14.675	1	14.675	1.869	0.179
RESIDUAL	314.111	40	7.853		
TOTAL	328.786	41	8.019		

H_0 - Length of schooling does not affect antisocial behaviour for all subjects.

H_A - Length of schooling affects antisocial behaviour for all subjects.

Significance level P is 17.9%.

The null hypothesis thus cannot be rejected.

TABLE 42D2

Multiple Classification Analysis

Grand mean = 4.93.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
INDIGENOUS CHILDREN	24	-0.51
BANGLADESHI CHILDREN	18	0.68

42E .Within total Bangladeshi sample:

TABLE 42E1

1 -way ANOVA with factor length of schooling, sex and age on antisocial behaviour.*

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	116.478	6	19.413	2.899	0.028
VAR - AGE	63.809	4	15.952	2.382	0.079
VAR - LENGTH OF SCHOOLING	32.903	1	32.903	4.914	0.036
VAR - SEX	14.992	1	14.992	2.239	0.147
EXPLAINED	116.478	6	19.413	2.899	0.028
RESIDUAL	167.397	25	6.696		
TOTAL	283.875	31	9.157		

Length of schooling:

H_0 - Length of schooling does not affect antisocial behaviour for total Bangladeshi sample.

H_A - Length of schooling affects antisocial behaviour for total Bangladeshi sample.

Significance level P is 3.6%

The null hypothesis is rejected and the alternative hypothesis accepted.

* Due to empty cells or a singular matrix, higher order interactions have been suppressed.

Sex:

H_0 - Sex does not affect antisocial behaviour for total Bangladeshi sample.

H_A - Sex affects antisocial behaviour for total Bangladeshi sample.

Significance level P is

The null hypothesis thus can not be rejected.

Age:

H_0 - Age does not affect antisocial behaviour for total Bangladeshi sample.

H_A - Age affects antisocial behaviour for total Bangladeshi sample.

Significance level P is 7.9%.

The null hypothesis thus cannot be rejected.

TABLE 42E2

Multiple Classification Analysis

Grand mean = 5.53.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
LENGTH OF SCHOOLING		
BANGLADESHI (>2)	18	0.91
BANGLADESHI (<2)	14	-1.17
SEX		
MALE	22	0.70
FEMALE	10	-1.53
AGE		
7 YEARS OLD	8	1.44
8 YEARS OLD	10	0.74
9 YEARS OLD	5	-2.86
10 YEARS OLD	6	0.27
11 YEARS OLD	3	-2.06

Within Indigenous Group Comparison:

42F. Indigenous boys and indigenous girls:

TABLE 42F1

One-way analysis of variance for the factor sex on antisocial behaviour.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	12.500	1	12.500	1.517	0.231
SEX	12.500	1	12.500	1.517	0.231
EXPLAINED	12.500	1	12.500	1.517	0.231
RESIDUAL	181.333	22	8.242		
TOTAL	193.833	23	8.428		

H_0 - Sex does not affect antisocial behaviour for all subjects.

H_A - Sex affects antisocial behaviour for all subjects.

Significance level P is 23.1%

The null hypothesis thus cannot be rejected.

TABLE 42F2

Multiple Classification Analysis

Grand mean = 4.42.

VARIABLE + CATEGORY	N	DEVIATION FROM GRAND MEAN
SEX		
INDIGENOUS BOYS	18	0.42
INDIGENOUS GIRLS	6	-1.25

END