A CROSS-CULTURAL INVESTIGATION OF THE INTERPERSONAL RELATIONS AND SOCIAL MILIEU OF INDIAN AND WHITE GIFTED CHILDREN.

A PILOT STUDY

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"There is no universal consensus as to what constitutes 'giftedness', 'talent' or 'genius'. In different cultural areas very different meanings are attached to such expressions as : 'a very able person', 'most promising', 'very gifted', very 'intelligent' ... Of course, intelligence, beauty, gracefulness, strength, courage and so on, are admired everywhere, but very unequally rewarded. The order of priorities too, varies from place to place..." (Bereday; Louwery 1961, p.1).

The increasing amount of research into giftedness concurs with the growing concern, in all countries in the world, developed or less developed, for identifying and nurturing the gifted and talented. However, there remains a paucity of literature concerning cross-cultural research into giftedness. A multicultural society, such as South Africa, provides a good launching pad into such research. The present study pioneers cross-cultural research into giftedness in South Africa and hopes to trigger further investigations into this area.

1.1 <u>AIM</u>

The primary aim of this research is to investigate the interpersonal relations and social milieu of gifted children from differing cultural origins. Specifically, Indian and English-speaking White South African gifted children are investigated. This research moves away from the traditionally cast view of giftedness in terms of exceptional linguistic or mathematical talents. It attempts to broaden the perspective of giftedness and, at the same time, to investigate this broadened perspective in cross-cultural terms. The research aims only at introducing crosscultural investigation into giftedness in South Africa. It is a pilot study upon which further research might be based.

1.2 RATIONALE

This research is motivated by the positive stance of taking advantage of human potential and thereby enriching human society. Given the growing concern in tapping the potential of the gifted and talented, investigating this potential in differing cultural groups could be advantageous to all.

The nature of gifted education fluctuates widely in response to shifting political, social and economic conditions. There is a need to assess the influence of these conditions and where possible to adapt and combine resources in the provision for the gifted. The present study is motivated by the belief that cross-cultural research may have important implications for the future education and needs of gifted from all cultural groups. Before a pooling of knowledge can occur, it is necessary to establish the similarities and/or differences between gifted children from differing cultural origins.

Cross-cultural research implies the research of people from differing cultural origins. Given this implication, the HYPOTHESIS underlying this research is that there will be differences in the interpersonal relations and social milieu of Indian and White gifted children, as measured by the PHSF Relations Questionnaire, and the biographical questionnaire.

The choice of interpersonal relations and social milieu as the focus of this investigation was based on an appraisal of the current literature (refer to chapter two) which highlights these areas as crucial elements in the study of giftedness. The term 'interpersonal relations', in this study, refers to both the interactional relations that exist between the individual and the environment, as well as within the individual.

The Personal, Home, Social and Formal Relations Questionnaire was used as the primary measuring instrument of interpersonal relations in this research. The reason for using the PHSF Relations Questionnaire is that it is one of the few objective measuring tools that has been standardized across both the Indian and White population groups. A detailed account of the PHSF is given in chapter four. The biographical questionnaire (see appendix A) served the dual purpose of both providing information on the social milieu (socio-economic status, number of siblings in the family, birth order and mothers' occupation) and providing additional information on the interpersonal relations of the gifted sample. The combination of the abovementioned measuring instruments enabled the researcher to obtain information from both the gifted child him/herself (through answering the PHSF Relations Questionnaire) and from the gifted child's parents/guardians (through answering the biographical questionnaire).

1.3 OUTLINE OF THE INVESTIGATION

Having introduced this study, the following chapter (Chapter two) provides a review of the literature, it will attempt to provide an overview of the gifted. Specifically, chapter two deals with definition and identification of the gifted, problems associated with giftedness, social and family relations, self concept and temperament, education of the gifted and test limitations. Chapter three will place the two cultural groups pertinent

to this study, the Indian and White South Africans, in their respective contextual frameworks. The research design will be explained in chapter four. Here details will be given concerning the sample and criteria for selecting subjects. In addition an account will be given on the instruments used and procedure followed in this research. Chapter five deals with the results of the study and is divided into data obtained from the PHSF Relations Questionnaire and data obtained from the Biographical Questionnaire. A discussion of the results is dealt with in chapter six. This discussion is linked back to chapters two and three, in an attempt to explain some of the current findings. Finally, chapter seven concludes this research, with limitations of the study, concluding comments and suggestions for further research.

CHAPTER 2 : A REVIEW OF THE LITERATURE

2.1 DEFINITION AND IDENTIFICATION OF THE GIFTED

The definition adopted by the Gifted and Talented Children's Act (1978 USA) states: "The term 'Gifted and Talented' means ... children and whenever applicable, youths who are identified at the preschool elementary or secondary level as possessing demonstrated or potential abilities that give evidence of high performance ability in these six areas: General intellectual ability; specific academic ability; creative or productive thinking; leadership ability; visual and performing art and psychomotor ability" (Intellectually Talented Youth Bulletin, 1978, John Hopkins University, Baltimore, USA).

Wallace and Adams (1984) highlight the problems in definition and use of the term 'gifted'. They note that able and talented pupils are viewed as those capable of high performance and demonstrate achievement and/or potential ability in one or more of the six above-mentioned areas.

The definition adopted by the Gifted and Talented Children's Act (1978) is a broad all-encompassing description of the able and talented pupils. It is evident, from such a description, that the exceptionally able cannot be perceived as a homogenous group. However, Wallace and Adams (1984) have identified three broad groups of able and talented pupils. The first group constitute "The general high achievers who display their abilities in several fields and progress much faster and reach deeper insights than most of their peers ... The second group are high achievers in one or two special fields who may be either highly talented in those areas of who potentially may be general high achievers but who are under-performing in fields that do not currently interest them ... The third group are the under-achievers who may be shy, lazy, victims of

peer group pressure to conform to the norm, may lack parental support, or may never have been sufficiently motivated and challenged by their teachers. Some of these pupils may display more or less severe behaviour problems" (Wallace, Adams , 1984 p.13).

In attempting to describe gifted children one must constantly be aware that gifted children show wide variability with respect to most traits measured. Terman and Oden (1947) note that the gifted children in their sample did not fall into a single or easily described pattern and have therefore stressed the wide variety of personality characteristics among gifted children. Ogilvie (1973) concluded from a study of gifted children in primary schools that 'any list of traits can only be misleading'.

Gallagher (1975) notes that with any group of gifted children, there may be profound individual differences in personal and social characteristics. In contrast Omond (1980) proposes a profile of the characteristics of giftedness. He emphasises that they are "not better but they are different". Omond notes that approximately "60% of gifted children are good all-rounders, good at academic work, at sport, at arts and crafts, are good leaders in the social sphere, often are heavier, healthier, better balanced personalities and often better looking than the average child ... Gifted children often need much less sleep than the average: they may teach themselves to read before attending school: they are often very energetic, inquisitive and very logical with a keen sense of humour: they are good problem solvers but may be poor risk takers; and are often very sensitive ... Questions are anticipated, with often unexpected answers ... as a rule they are quick learners with excellent memories". (Omond, 1980, p.7).

Hildreth (1966) notes that there is no such thing as a 'typical gifted child'. There is a great differentiation among the traits and

characteristics of different gifted children. Each gifted child's profile of abilities is unique and should be considered as such. In assessing the gifted child Hildreth (1966) proposes that intelligence tests predict school performance more successfully than development in personal traits and other growth characteristics. High IQ alone does not guarantee success. Ambition, motivation, determination, personality and family background are all important criteria to be considered when assessing the gifted child.

Research highlights three parameters that have been employed in the identification of the gifted: (i) general intelligence, (ii) special abilities and (iii) creativity. However, there remains considerable disagreement concerning the definition and relative independence of these criteria. Performance on test of general intelligence remains the most widely used criterion of giftedness.

In recent years there has been an escalation in criticisms and dissatisfaction with the criteria of ability implicit in the standard intelligence test. Attempts have been made to identify creativity as a factor which is relatively independent of intelligence. (Getzel and Jackson 1962).

In addition to creativity, De Haan and Havighurst (1961) have proposed a far broader criteria of giftedness. They distinguish between (i) high level scholastic or academic aptitude, (ii) scientific aptitude, (iii) superior talent in arts (iv) social leadership and mechanical ingenuity. However a relatively high level of measured intelligence remains the basic criteria for identifying giftedness. Given a high level of measured intelligence other special abilities are then investigated. Personality, motivation and extra-curricular accomplishments are viewed as key factors involved in identifying and educating the gifted child. However, at present, assessment techniques of these factors are underdeveloped and unsatisfactory.

Nel, in his report on the World Conference on Gifted Education - Manila 1983, emphasises the diversity in definition and identification of the gifted. He notes that in most countries intellectual giftedness still dominates concepts of giftedness. As noted by Passow (1983), the basic identification procedures of giftedness around the world involves some assessment of intellectual or academic aptitude. Identification procedures and techniques depend largely on the prevailing concept of giftedness. In some countries informal approaches of indentification of giftedness are used in conjunction with tests.

The number of gifted school pupils who remain unrecognised is unknown. It is however hypothesized that there are a considerable number of such children, particularly in the lower socio-economic bracket. In addition, the increasing number of large, less personal schools, inhibits recognition of gifted pupils. The definition and identification of the gifted child remains a contentious issue and requires further analysis and clarification.

2.2 PROBLEMS ASSOCIATED WITH GIFTEDNESS

Hollingworth (1936) notes some of the social and educational problems faced by children of exceptional intelligence. She emphasises that the children in the upper percent of intellectual ability are not all alike. This is partially explainable by the wide range of intellectual variation found in those children termed 'highly intelligent'. Intellectual variation among this group ranges from an IQ of 130 to the topmost limit defined as approximately 200 IQ. Research indicates that children with an IQ above 170 face the most difficult problems of adjustment to life. Hollingworth (1936) emphasises that "children of very superior intelligence are not, as a group, socially annoying. The problems of personality adjustment are those of the child, not those of the society." (Hollingworth, 1936, p.254).

Research shows that children of superior intelligence are typically superior in other qualities as well. These qualities include emotional stability and physical development (Burt 1924; Terman 1925; Hartshorne 1927). However special perplexities in the life of a gifted child need to be examined.

The highly gifted child (IQ above 180) faces numerous problems in the school situation. If he/she remains in his/her chronological age school grade, he/she may become increasingly bored, receiving little intellectual stimulation and is therefore likely to develop a strong dislike for school. On the other hand if the child is accelerated in grade status, and is therefore able to function intellectually with real interest and stimulation, he/she may be out of depth socially and physically with his/ her older classmates. Problems facing many gifted children derive from their mixing with older children. Although they are intellectually on a par with these older children, they are at a disadvantage in physical maturity. This leads to physical competitiveness which in turn may impair self-confidence. Physical maturity is also important in social recognition. The child, if placed too far out of his/her age group, may therefore encounter social and interpersonal difficulties. These difficulties come into focus particularly during adolescence with the introduction of associations with the opposite sex.

Certain disciplinary problems arise with 'highly intelligent children'. At school the gifted child's quest for knowledge may cause him/her to be outspoken and precocious. At home, the gifted child might use his/her intelligence as a manipulative tool. This problem is compounded if the parents are at a lower intellectual level than the child. Both at school and home the gifted child is more likely to question and argue 'authority's' instructions. However,gradually, as these children mature, they usually learn self government and discipline and authority is more easily handled.

Another problem facing the gifted child is caused by his/her desire for knowledge on issues that he/she is emotionally too immature to deal with. Examples include children aged six or seven asking questions on the origins of birth and death and the problems of evil. These questions seem to arise earlier than they do with the average child. The gifted child intellectually seeks an explanation but has not reached the emotional maturity to deal with this explanation.

Solomon (1975) notes that intelligent children may be maladjusted for as many reasons as other children. However, it is worth considering the possibility that some problems may be associated with high intelligence. These include the discrepancy between the intelligence level of the gifted child and his/her peers. Specifically, a higher degree of verbalisation and imagination in play activities and the gifted child's inclination to dominate games played with his/her peers. As a result, the intelligent child's outstanding abilities may jeopardize his/her social relationships. If nct given the opportunity to mix with children at comparable levels of ability, the gifted child's social development may be impaired. In addition it is important that the intelligent child learns to live with those less so.

Schauer (1975) notes that although the majority of gifted children are able to lead well adjusted, happy lives, one cannot deny the possibility that some gifted children may also be emotionally disturbed. Gowan (1972) identifies the most highly gifted child as being most susceptible to emotional disturbance. According to Gowan (1972), a possible explanation for emotional instability in the highly gifted child is that such children form a minority group and are subsequently socially aliented.

An additional problem facing the gifted child is that of specialisation. The gifted child usually has a great versatility in ability and interest. The problem arises when the gifted children spread their available time and energy over such a wide array of projects that nothing can be completed or done perfectly. The choice of an area of specialisation is a dilemma most people face, however the choice problem is greater for the gifted child because of his/her wide range of ability and interest.

Research indicated that a primary cause of underachievement is emotional conflict (Freehill 1961; Bricklins 1967). The term underachievement is defined here as meaning a child's performance is below the level which would correspond with his/her tested level of intelligence. Research indicates that the percentage of underachievers varies from 30 - 50% (Hovighurst 1963; Wimberger 1966). When examining the causes of underachievement, one needs to consider the child, the home, the teaching, the examiner or assessor and the examination or method of assessment. (Illingworth 1975). Numerous factors prevail within each of the abovementioned causes. These factors may include the child's personality, feelings of insecurity, unhappiness at home, domestic friction and the child's relationship with teachers, peers, parents and siblings. Under-

achievement may be due to dislike of school, boredom and lack of interest in the work or a general lack of motivation.

A multiplicity of factors seems to influence emotional disturbance in the gifted child. Pringle (1970) emphasises the uniqueness of each child's circumstances and stresses the importance of assessing each child individually, taking into account the child's health, appearance, intelligence and personality and considering the economic, social, cultural standing of the parents.

2.3 SOCIAL RELATIONS

There is considerable inconsistency in the research into the social relationships of gifted children. Complicating the issue is how giftedness is defined. The most common definition being according to academic ranking. This section reviews current research on the social relations among the gifted.

Roedell (1978) in her study on the social relations of gifted preschoolers hypothesises that intellectually advanced preschoolers, when grouped together, may create a unique, mutually stimulating atmosphere that facilitates and reinforces social behaviour. To clarify Roedell's hypothesis, further research with gifted preschoolers among average ability peers needs to be conducted.

Research indicates no clear picture as to the exact relations among the measures of social cognition, social behaviour and intelligence in the gifted child. Postulations as to the reasons for this obsucrity include the variety of measures used for social cognition and social behaviours and the absence of comparison groups of average ability children.

Research (Miller 1956; Callagher and Crowder 1957; Grace and Booth 1958, and Painter 1976) indicates a general gifted popularity in middle childhood. However, in considering the sociometric data it is uncertain whether the gifted were chosen for specific friendship traits or because they represented dominant academic values. Poterfield and Schlichting (1961) attempted to unravel the problems of academic values, peer values and social preference. These researchers found that there does seem to be a positive relationship between achievement and peer status, whether it be in terms of friendship or academic relationships.

In contrast to the above findings, Bonney (1943) hypothesized that in some situations intellectual abilities and social acceptance seem to be unrelated or even negatively related. From this study Bonney (1943) concluded that highly intelligent children are not necessarily socially superior. Freeman (1979) in her descriptive research on gifted children (aged 5-16), found the higher the IQ scores the fewer the number of friends. In addition the gifted children at the highest intellectual level were found to have more personal and environmental problems and were less well adjusted. Earlier studies conducted by Terman (1925) and Hollingworth (1942) support the findings that academic proficiency may be adversely related to social popularity.

In general, the relationship of degree of giftedness and degree of popularity does not seem to be linear. However, based on the reviewed research it could be postulated that those children with average intelligence up to IQ's of 150, fall into a popular category with their peers, and that those highly gifted children (above 150 IQ) fall into less popular categories with their peers.

Studies conducted by Terman (1925) and more contempoary researchers (Freeman 1979 and Painter 1976) indicate that gifted children tend to select playmates who are older than themselves. Although there may be numerous factors influencing this age differential, such as the gifted generally having older classmates, it is however more likely that the age differential is voluntarily determined by the gifted child him/herself. In general studies indicate that gifted children in middle childhood tend to enjoy a fairly high social status within the peer group, although the peer group may not consist of may chronological age peers.

Differences in the relationship between popularity and academic achievement as a function of ones sex has become an area of research. Keistar (1955) found that high ability girls were seen as significantly less popular with boys. Coleman (1961) supports Keistar's findings. Coleman found that peer values in his sample prescribed that girl's who dated should avoid displaying their intellectual abilities. These findings are explainable in terms of the societal stereotyping of sex roles.

Future consideration into peer relationships of the gifted include an examination of social popularity in settings other than the academic setting such as home or church. This research would reduce the confounding factor of the values of the school system in determining social acceptance of the gifted. The social and emotional development of gifted children has become a crucial area in need of investigation. It has, however, proved difficult to make reliable or valid assessments of the social and emotional adjustments of young children. In assessing the research one should bear in mind the limitations in definition and measurement of social and emotional development.

2.4 SELF CONCEPT AND TEMPERAMENT

Self-concept has been recognised as an important variable in an individual's development (Baily 1971; Yauman 1980; Sourenman and Michael 1980). Research investigations on self concept among gifted children show mixed results. Although there is some agreement that gifted children score higher on measures of self concept than do average or handicapped children (O'Such, Iwyle and Havertape 1979), high self concept and high IQ are not always found together. A lower self concept seems to be evident in the underachieveing gifted child (Whitmore 1980).

Peer relations have been indentified as an important variable in the development of self concept. Whitmore (1981) notes that the child's self concept is a composite of numerous self images. One such self image is the social self which is closely related to peer relations.

A study concluded by Maddux, Schieber and Bass (1982) is concerned with how various educational programs affect gifted children. This study examines self concept and social distance in gifted children who receive their schooling in (i) a totally segregated program, (ii) a partially segregated program and (iii) the regular school program. The results of this study (Maddux, Schieber and Bass 1982) show that there is no significant difference in the self concept scores of gifted children who have been placed in a gifted program and those who have not been identified and placed. Similarly, there were no significant differences found in the social distance scores among segregated, integrated or non identified gifted children.

Individual differences in temperament have been identified as an important variable influencing the ways in which gifted children adjust to their

environment. Thomas and Chess (1977) describe temperament as "The how of behaviour. It differs from ability ... and from motivation ... and concerns the way in which an individual behaves" (p.9). Thomas and Chess (1963;1977) found no relationship in their longitudinal sample between children's IQ and their temperament characteristics.

In examining the implications of individual differences among gifted children in personality and temperament, it is important to note that the temperament characteristics of gifted children may play a vital role in determining their successful adjustment to different environments. Children may have equal competencies in performing academic tasks but may differ radically from one another in their stylistic approach. Advanced intellectual skills are not always accompanied by positive temperament styles.

2.5 FAMILY RELATIONS

An interesting and important consideration in the study of gifted children is their family constellation and influence. Studies (Rae 1952; Terman 1954; McCurdy 1956; and Albert 1978) show that families of gifted children differ significantly from average families. Albert (1978) found that these families are highly stimulating for the child, value oriented, with a continuous sense of post social emphases and practices. Research indicates that the development of outstanding skills among young gifted children is related to parental involvement with their children. Parents who spend time with their children, facilitate their interest, answer questions and provide a warm supportive base for intellectual exploration, are likely to foster the development of their children's abilities regardless of the family socioeconomic status. In examining the family background of gifted children, there is evidence to suggest that gifted children can be identified in all cultural and economic groups. Several studies in the United States found that many children with high IQ scores came from upper and middle socio-economic backgrounds and have well educated parents (Cattell 1915; Hollingworth 1942; Terman and Oden 1947; Barbe 1956 and Hitchfield 1973). Contrary to these studies are studies indicating that lower income and minority group populations may also yield a large number of children in all areas of ability (Jenkins 1943; Chen and Gaan 1976).

Birth order has been pointed to as an influential determinant upon a child's development. It is seen to be influenced by the family's culture and history. Research has indicated birth order as an important structural and processional variable. In terms of structure, birth order is organisational, giving order and focus to crucial family relationships. In terms of process, birth order involves quality and tone of essential developmental functions, determining to some extent which family dynamics, interests and values will be directed towards the child, for how long and at what levels of intensity.

Albert (1980) proposes five specific assumptions regarding the gifted child's family.

- "(i) The family is intergenerational, i.e. interactions go on between persons of two or more generations.
 - (ii) The family is transactional, i.e. information is exchanged between family members.
 - (iii) The family is a cultural, psychological and historical unit. The family members have a keen sense of their linkage to past members and early key family experiences.

- (iv) The family views socialisation and identification processes as inter-dependent.
- (v) The family's historical orientation and ongoing socialisation are uniquely focussed upon its children according to the child's family position and capacities.

... a family operates as a selective experience - producing experience - selecting agent motivated towards achieving specific developmental outcomes for its members". (Albert 1980, p.88).

Albert (1980) notes that birth order appears to be a term too vague to use without specific qualifications. An alternative suggested by Albert is 'special family position'. This term carries the connotation that the high achiever was perceived and treated as 'special' in the family, early in his/her development. In addition to the 'special family position' a 'facilitating environment' is required (Winnicott 1957). The environment is seen as 'facilitating' when it identifies and capitalises on the particular talents of the child relatively early in his/her life. Finally Albert (1980) proposes "that in order to understand what occurs in the early development of any child, gifted or not, we need to look closely and continually at what occurs within families" (Albert 1980, p.94).

2.6 EDUCATION

Education for the gifted varies according to the ideological and structural characteristics of different societies. Differential groupings occur according to class, school or extra-mural activity. In the United States there are a few special schools for the gifted, however differentiation according to school is relatively rare. An alternative form of grouping for the gifted child is the special class within a regular school. In

addition there are a number of techniques in use in the States which provide for the gifted child in the regular classroom. These include individualisation of assignments, materials and activities. The most widely operated facilities for the gifted child are those techniques supplementary to school teaching. These include extra curricular activities through school clubs and university programmes.

Knollys (1975), in her personal view on the education for the gifted child, suggests that the play group pre-school education for gifted children is insufficient and that a nursery school offering both mental stimulation and play time is more advisable. Studies have shown that in the play situation gifted children know more games of intellectual skills (e.g. bridge and chess) than the average child and that these gifted children are less interested in play which involves predominantly simple sensori-motor activity. In general, complicated, highly competitive games and outdoor sports are favoured among the gifted child.

The gifted child often has difficulty in finding playmates who are congenial both in size and mental interests. As a result many such children work out forms of solitary intellectual play. Often 'imaginary land' and 'imaginary playmates' are central in the gifted child's play. At present there is no conclusive research indicating the effects of this play of the imagination in gifted children. Knollys (1975) notes that home education should be conducted with caution. The danger arises when parents pressure their gifted child to the extent that he/she misses out on childhood altogether.

Watts (1975) proposes that exceptional children all need exceptional handling (practical and emotional help of a special kind). Exceptional

children are seen as those children at either extremity of the norm range i.e. both subnormal and gifted children. In general, children at the bottom end of the scale have received more attention than those at the top end of the scale. The gifted child is seen as being more able to adjust downwards to meet his/her classmates whereas it is more difficult for those children at the bottom end of the scale to adjust upwards. However, this is an insufficient explanation for not providing for the special needs of the gifted.

Wallace (1984) highlights numerous special considerations related to the education of exceptionally able children. The gifted child is a member of a minority group. By nourishing his/her exceptional abilities, educators widen the gap between the gifted child and the majority of his/her peers, thereby increasing social isolation. Wallace (1984) suggests that a crucial component in the education of the gifted is to provide the gifted child with emotional security and hence courage to accept his/her differences and to stand alone. In addition it is necessary to help the gifted child to develop an understanding and tolerance of others who are less able. Special characteristics of gifted children appropos their education include (i) the high level of creative thinking, requiring the gifted child to step out of the conventional thinking of the group, (ii) the discrepancy between emotional maturity and intellectual understanding, (iii) an advanced fluency and mastering of language may widen the gap in communication levels between the gifted child and his/her peers, and (iv) the gifted child's rapid absorption and retention of ideas and knowledge may lead to him/her quickly exhausting the available curriculum material (Wallace 1984).

As noted by Nel in his report on the World Conference on Gifted Education in Manila, 1983, controversy still exists as to whether to provide special classes or to provide for enrichment in regular classes in catering for

the gifted. Although controversy exists as to the form of provision, most countries agree that differentiated educational provision must be made for the gifted.

An additional controversy concerning the education of the gifted, is the issue of acceleration versus enrichment. "Acceleration involves making educational experiences available in less time or at an earlier age than is normal. Enrichment involves studying in great depth or breadth or at a conceptually advanced level rather than a basic level" (Nel, 1984, p.6). As noted by Nel (1984) most programmes provide for both acceleration and enrichment. The curricular and instructional differentiation appropos special programmes for the gifted, may be in terms of breadth and/or depth of study; tempo or pace; nature or kind. However, organisational or administrative arrangements often hamper the development of a differentiated curriculum.

Nel (1984) explains the purpose of enrichment programmes as, "to assist pupils in accumulating valuable, useful and interesting knowledge which will enrich their lives and will actively promote a creative atmosphere to develop their creative processes ... successful programmes ensure that an atmosphere is created in which the pupil is motivated by challenge, ambition is roused and the acquisition of knowledge is accelerated (Nel 1984, p.7).

'Recognize and educate your gifted and talented children now, or lose them forever' is the 'challenge to Africa' presented by Omond (1980) in his paper, The Education of The Gifted and Talented. Omond (1980) endorses the concept of giftedness and talent as embracing all kinds of ability; from the academic intellectual pupil who is usually a convergent, conventional thinker; to the divergent, unconventional thinker, "who may sometimes appear slow, even stupid" (Omond 1980, p.2). The frustrated underachievers and 'arrogant loners', Omond (1980) argues, are often the products of the gifted and talented who are deprived of challenging, learning situations, in and out of school. Omond (1980) highlights the consequences of NOT developing the potential of the gifted; the financial costs of developing special programmes versus the costs of the possible medical discovery never made or political compromise never reached (Gallagher 1980). The danger of creating an elite is viewed as less dangerous than is the danger of wasting existing human resources.

2.7 TEST LIMITATIONS

Sternberg (1982) notes that standardised tests play a major part in screening programs for identifying the gifted. He acknowledges the 'better' intelligence test's usefulness for screening purposes, when these tests are used in conjunction with other criteria. However, Sternberg argues that tests only work for 'some people some of the time - not all people all of the time'. He further argues that because tests are only correct for a segment of the tested population, we fail to identify many gifted individuals for whom tests are an inadequate measure of their ability. The result is an under-identification of the gifted.

Sternberg (1982) identifies four 'dubious assumptions' that underlie the use of standardised tests. The first assumption is: 'To be smart is to be fast'. Society in general associates speed with intellect. This assumption underlies the majority of tests used in identification of the gifted. Sternberg argues against this assumption proposing that it is both unjustified and wrong. Studies to support Sternberg's (1982) argument include; Baron (1981) who notes that in general a reflective rather than

an impulsive style in problem solving tends to be associated with more intelligent problem solving performance. Timed tests often require the examinee to solve problems impulsively. Sternberg (1981) in a study on planning behaviour, notes that the importance in planning is not the total time spent, but rather the distribution of this time across the various kinds of planning one can do (e.g. problems specific versus global - high order planning).

Studies of reasoning behaviour in children and adults shows that the more intellgent individuals tend to spend relatively more time encoding the terms of a problem in order to facilitate subsequent operations on these encodings, (Sternberg and Rifkin 1979; Mulholland Pellegrino Glaser 1980). Sternberg (1982) stresses that 'sometimes speed is desirable, sometimes not'. The desirability of speed depends upon the task and the particular component of information processing.

The second 'dubious assumption' noted by Sternberg is that 'Intelligence is last year's achievement'. Sternberg notes that the majority of tests used for the assessment of intelligence place heavy achievement demands on the students tested. Given adequate educational opportunities in a suitable social and emotional environment, the achievement-testing orientation is both acceptable and appropriate. However, the achievement testing orientation may lead to invalid test results if the child's environment is characterized by deprivation. This problem is confounded when such deprived children will have to function in the 'normal' sociocultural milieu. Sternberg (1982) proposes a possible alternative to overcome the above problem. He suggests identifying which abilities one wants to measure by achievement-saturated tests and then to attempt to measure these abilities more directly in ways that reduce the achievement load. Sternberg examplifies this through the use of items that tap the skills rather than their by-products.

The third 'dubious assumption' highlighted by Sternberg (1982) is, 'Testing needs to be conducted in a stressful, anxiety provoking situation'. Most examinees realise the crucial influence their test results will have on their future. A substantial proportion of examinees are test anxious and often this anxiety will cripple their test performance. These examinees are at a disadvantage when compared with some examinees for whom little anxiety is generated by the testing situation or possibly a beneficial effect is derived from such situations. Sternberg (1982) examines alternative measures of ability which do not impose a differential penalty on individuals with different levels of test anxiety. Alternative measures include Feuerstein's (1979) Learning Potential Assessment Device (LPAD) and behavioural checklists (Sternberg et al 1981). Sternberg proposes these alternatives as supplements to standard intelligence tests as they are much less stress provoking. Individuals with a discrepancy in scores between these tests and standard intelligence tests would then merit further follow up.

Sternberg's final 'dubious assumption' is that 'Precision is tantamount to validity'. Studies that confirm that people tend to weigh accuratesounding information highly, include Nisbett and Ross (1980). The appearance of precision (stating an exact IQ) does not necessarily say anything about the validity of that score. Sternberg (1982) highlights applicants that have shown excellent competence at the criterion tasks and yet are rejected on the basis of test scores. This illustrates the role of tests becoming more important than the performance it is supposed to predict. In conclusion Sternberg notes "Tests work for some of the people some of the time ... applied conservatively and with full respect to all of the available information ... they can be of some use. Misapplied or overused, they become yet another of the lies we live by". (Sternberg 1982, p.13).

CHAPTER 3: THE INDIAN AND WHITE SOUTH AFRICANS

The population of the Republic of South Africa is both racially and ethnically diverse. It is therefore appropriate to place the two racial groups focussed on in this study in their contextual framework.

3.1 INDIAN SOUTH AFRICANS

Meer (1969) notes that distinctions drawn between different members of a society are a social invention and are drawn for the purpose of social evaluation. Government legislation in South Africa divides the people into four categories: White; Coloured; Asiatic and African. "The social positions of these four 'race' groups is arranged along a vertical power structure, in which the greatest disparity exists between the status of Whites and non-Whites" (Meer 1969, p.60).

Whites and non-Whites are segregated through Government legislation and rigid social barriers. Although the non-Whites are not as rigidly divided from each other as they are from Whites, there is very little contact between them. This 'informal segregation' has been explained as being due to historical tradition of social segregation and legislation that seperates the non-White groups socially and economically.

The South African Indian immigrants consisted initially of an indentured community with a small portion of independent traders. They found themselves in an increasingly White-dominated, race stratified society which resulted in a unique socio-economic political response. Moodley (1975) emphasises the importance of analysing the political behaviour of Indians in interaction with other racial groups rather than considering the Indian community in isolation from the total South African structure. Moodley's (1975) study investigates the extent to which class differences have replaced ethnic identity or coincide with it.

Moodley (1975) considers the socio-political group characteristics of Indian South Africans and notes that the Indians in South Africa can be analogized with the Coloureds in that they constitute an intermediate caste in the socio-political sense. They both have neither the numerical power of the African population, nor the political power of the White minority. In addition the Indian and Coloured castes share economically and legally approximately the same level of discrimination by the Whites and relative privilege vis-á-vis the Africans. However, several important differences between the Indian and Coloured groups do exist. One of the most important differences (as cited by Moodley 1975) is the socio-cultural cohesiveness of the Indians as compared with the virtual anomie of the Coloureds. This has resulted in differences in the social integration of the two groups.

The distinct cultural traditions and relative cohesiveness of the Indian community is of particular interest when considering that in religious and linguistic terms, the Indians constitute a highly diversified group. The Indians in South Africa comprise of Hindus, Moslems, Christians, Zoroastrions and Agnostics with varying languages, Tamil, Telegu, Hindi, Gujerati and Urdu; however the majority of Indians do speak English to varying degrees.

Meer (1969) argues that although Indians are composed of sub-groups and sub-cultures, "South African Indians do constitute a single community in which members occupy the numerous positions in the occupational and social hierarchy, regardless of such differences" (Meer 1969, p.63). In addition public associations such as economics, politics, civic amenities, education

social welfare and recreation have drawn the diverse Indian group together.

It is important to consider the historical background of the Indian South Africans: 1860 denotes the beginning of the Indian presence in South Africa. At this time "The colonial government of India, at the invitation of its Natal counterpart which claimed that indigenous labour was 'unreliable', sent out labourers to work on the sugar plantations. The Indian labourers were contracted to serve a five-year period of indenture, after which they could reindenture themselves or take up any other type of employment. After ten years they were to be given the option either of returning to India, passage paid, or of becoming permanent settlers in Natal with a grant of crown land of equal value. Most Indians who came to South Africa under these conditions opted to settle. The early settlers engaged mostly in agricultural activity and were soon supplying Durban's fruit and vegetable requirements. Other former indentured workers moved into the coal mines, railways and general services" (Moodley 1975, p.252).

Subsequent immigrants were 'free' or 'passenger' Indians who were able to engage in trade. As a result the image of the Indian began to change from dependent labourer to potential competitor. A series of discriminatory measures began with the arise of antagonism between the White settlers and the Indians. In 1893 the parliamentary franchise was officially withdrawn. In 1913 the Indian Immigration Act prohibited the entry of new immigrants, apart from the wives or children of established settlers. In 1923 the insertion of anti-Asiatic clauses in title deeds was legalized and in 1924 the municipal franchise was withdrawn in Durban. This discriminatory legislation led to considerable tension between the politically dominant Whites and the Indians.

By 1961 a new approach in the form of a policy of seperate development was adopted. Indians were to be accepted as the country's 'permanent responsibility' and the Government established the Department of Indian Affairs. In accordance with the policy of seperate development, Indians are residentially restricted under the Group Areas Act and are subject to segregated facilities.

Moodley (1975) notes the social changes within the Indian community. The family business, extended family and communal life have been the fundamental building blocks upon which Indians were able to accumulate initial capital. However, the Indian community reflects the development of a society in transition, moving from traditional means of production to industrialization. The current trend is towards the nuclear family, a stronger emphasis on individualism and women's emancipation. Economically there is an increasing concentration of Indians in manufacturing, commerce and services. Despite these socio-economic changes, the Indians in South Africa have N. A. maintained their cultural identity. As a group the Indians show evidence of exclusivism, illustrated by distinctive clothing, limited social mixing with other groups and few inter-marriages. Meer (1969) notes that although Durban Indians are integrated into the highly cosmopolitan, urban economy, many of their attitudes and patterns of social life continue to be traditionally oriented. Moodley (1975) postulates that as a means of surviving in a hostile environment, South African Indians have held onto traditional cultural tenets and found solace in their history and philosophy.

The Indian community in South Africa have formed welfare, cultural and religious organisations and financed their own schools. A strong emphasis is placed on any possible educational opportunity. Parents exploit all their financial resources in order to send their children for professional education which they view as the only security for the future. Increased educational experiences have served as fuel for an overall 'politicization' of the younger middle-class generation. In addition the impact of education has increased Indian identity and social awareness leading to a more nationalistic orientation. However inequality and differing interests within the Indian community are evident, particularly between the new leadership, comprising young Indian professionals and the intelligencia, and the more compromising older commercial elite.

In considering the impact of Nationalist legislation in South Africa, Moodley (1975) notes that the Group Areas Act of 1950 was the most severe piece of legislation to effect Indians, who had substantial property holdings at the time. This act had significant consequences within the politico-social environment. Considerable financial loss was incurred by Indian property owners. There was a shortage of accomodation in the newly declared Indian areas and dispossessed home-owners had to pay inflated prices for accommodation. The social consequences of The Group Areas Act led to increased community dispersion, eroding the traditional South African Indian way of life. Extended families had to split and resettle according to individual financial means and communal facilities were uprooted. The consequences were large-scale social disorganization within the Indian community.

The establishment of the Department of Indian Affairs had a significant effect on Indian education. The school administration, previously under the Natal Provincial Administration, was taken over by the Department of Indian Affairs. Although provision of better physical facilities and increased salaries were planned, teachers complain about the over-emphasis of bureaucratic requirements, enforced by frequent 'inspections' at the
expense of innovative teaching. The result has been a decline in the number of Indians entering the teaching profession and an increase in the number of qualified teachers leaving the profession. In addition Moodley (1975) notes a general 'politicization' of the teaching profession under the Department of Indian Affairs that has become evident. The invitation of guest speakers to address a school; surveys and research projects are subject to obtaining permission from the Department of Indian Affairs. This inhibits the teacher's ability to operate freely and creatively within the profession. A similar 'politicization' process is evident in the government-run University of Durban-Westville.

In considering the cultural variations, the Van Zijl, Fouche (1980) study produced some interesting results. The responses of Indian, English and Afrikaans speaking White first-year university students were examined. The findings indicate that the Indian subjects show an unwillingness to consult their parents on intimate matters. In contrast, the English and Afrikaans groups view their parents as a prime source of support during periods of inner distress. Communication with Indian psychologists offers an explanation for the above-mentioned finding; "The parental figures in the traditional Indian family set-up is a patriachal one with the father often mainly concerned with providing of primary material needs (ie. housing, finance) and with the mother actively involved with the secondary needs (eg. housekeeping, cooking)..." (Van Zijl, Fouche 1984, p.128). It is further noted that a primary problem facing the Indian student in the Western academic environment is the backwards and forwards transition from one cultural milieu to another.

3.2 WHITE SOUTH AFRICANS

The Whites in South Africa, a minority of the total population, constitute the ruling group and hold both economic and political power. White South Africans are ethnically divided into two groups; the English and Afrikaans speakers and the vast majority of both groups are urban. Although South Africa is a plural society, until the establishment of the Tricameral Government (1984), South Africa's effective governmental structures were unitary with the effective power held by the White minority.

Van der Merwe et al (1974) notes that traditionally White South Africans have resisted trends towards the merging with Black and Coloured groups. Initially segregation was endorsed by the development of racial and ethnic attitudes which prevented meaningful social contact across colour and culture lines. Since the coming to power of the National Party (1948), segregation has been formalized into an ideology which constitutes a rationalization for seperation which is endorsed through legislation.

The division within the White South African population has been English versus Afrikaans-speaking, this division is viewed as secondary to the colour divisions evident in South Africa. However in discussing White South Africans, one cannot ignore the English/Afrikaans dichotomy and the resultant differences in socialization. Historically the distribution of the White population was such that the urban areas were predominantly English and the rural predominantly Afrikaans. More recently, Afrikaans urbanization has altered this English/Afrikaans population distribution. Traditionally Afrikaner socializing influences provide a unity of theme which is not evident to the same extent amongst English-speakers. The present study concentrates on English-speaking South Africans and it is therefore that this group is the focus of this resumé. An analysis of English-speaking White South African socialization is complicated by the heterogeneous socialization patterns evident in this group. The major English-speaking countries, viz. the United Kingdom, the United States of America, Canada, Australia and New Zealand have had a significant influence in the socialization process of White English-speakers in South Africa.

Van der Merwe et al (1974) notes that in accordance with broad patterns of socialization, English-speakers tend to hold more flexible and liberal attitudes than Afrikaaners. The elite English-speakers values, traditionally approximating those of the Western academic world, have set them at variance with White South African political ideas. This could be ascribed to the fact that English-language educational institutions have tended to be influenced by their counterpart overseas institutions.

Van der Merwe et al (1974) in their study: White South African Elites, concludes: "The English-speaking elites...had ethnically diverse origins, a wide spread of religious allegiance and have grown up mainly from an urban base. Historically English-speakers have held the economic power because of the skills which they command and the ability to contribute capital. Their education was seperate from that of the Afrikaaners and, whilst not infused with any particular nationalist ethos, it did set them apart form their White fellow countrymen. But English-speakers show little group cohesion and have not produced a coherent ideology" (Van der Merwe 1974, p.170).

It is important to note that the Van der Merwe et al (1974) study concentrates on White South African Elites. The elite group differ in many respects to the White population as a whole. Owing to the paucity

of White culture research in South Africa, there is little comparable material which enables one to assess adequately the relationship of the elites to the general White population, with regard to attitudes and socialization. However, although White English-speaking elites might constitute a sub-group, on a broader perspective both English and Afrikaans White South Africans remain the political elite group in South Africa.

In examining the political history of liberal and radical alternatives in South Africa, the political success of antiliberal nationalistic forces becomes evident. The White, liberal stance in South Africa, which purports legal and political equality with a promise of equality of opportunities has, to date, proved unfruitful in South Africa. Many former White liberals have jettisoned earlier idealistic principles in favour of political survival (Adam, Giliomee 1979). This change is particularly evident in the White English-speaking universities where, in general, the students have tended towards an apolitical, individual career orientation. The once outspoken liberal consensus of faculty and administration at the English campuses has faded into few and isolated incidents of political protest.

Adam and Giliomee (1979) explore the failure of White South African liberalism; they note that the liberal belief rests on the idealistic assumption that people will abandon their particularistic group interest in favour of a universal truth, morality or humanity. However group membership which guarantees material benefits of power and privilege leave little hope for the success of individualistic appeal. A shortcoming of the White liberals, is that they have not transcended the abstract realm of humanity and individual charity to a concrete articulation of economic and political alternatives that would attempt to reconcile the divergent Black and White interests in a specific blueprint with broad appeal.

CHAPTER 4: RESEARCH DESIGN

4.1 PRELIMINARY PROCEDURE

The research depended on the co-operation of : The Natal and Indian Education Departments; the school principals and school counsellors; the parents/guardians of the sample and finally the sample themselves. Permission from the above-mentioned two education departments, to conduct research, was obtained. The school counsellors and principals were contacted and, with their approval, sent selection criteria forms (see appendix B). The parents of the selected sample were then sent letters of request with permission forms and the biographical questionnaire (see appendices C and A respectively). Finally the PHSF Relations Questionnaire was administered to the selected sample, out of school hours.

4.2 THE SAMPLE

The total sample of sixty, consisted of : Thirty Indian and thirty White gifted (IQ 130+) male and female children with an average age of 15.0 years for the Indian sample and 15.2 years for the White sample. The Indian sample represents seven schools in the Chatsworth area and the White sample represents six, English-media schools in the greater Durban area. Subjects came from residential areas and schools that represent a wide range of socio-economic groups. The socio-economic status level was based upon father's occupation, following Hurbans (1980) who noted that occupational status has long been regarded as the best single measure of socio-economic status. Schlemmer L and Stopforth P (1979): A Guide to the Coding of Occupations in South Africa, was used to categorize the socio-economic groups.

4.3 CRITERIA FOR SELECTING SUBJECTS

The subjects were selected and matched on the following criteria:

- 4.3.1 <u>IQ</u> : An IQ of 130 and above was decided upon as the cut-off point for selection. The NSAIS and GTISA was used for the White and Indian samples respectively. The difficulties in definition and identification of the gifted is discussed in chapter two. IQ as a measure of intellectual giftedness still dominates as an objective selection criteria (Nel; Passow 1983). This research questions the use of IQ in the study of giftedness and uses it only as an initial objective selection criteria.
- 4.3.2 <u>ACE</u> : All subjects were matched on age, determined by their birth date. The average age for the total sample was 15 years 1 month. Average age for the Indian sample was 15.0 years and 15.2 years for the White sample. The PHSF Relations Questionnaire requires that the testee be in the age group of 14 to 19 years.
- 4.3.3 <u>SEX</u>: It was attempted to match the subjects on the exact sex ratio (15 Indian and 15 White females and males respectively). This precise aim was not achieved resulting in: 13 female Indians; 20 female Whites; 17 male Indians and 10 male Whites.
- 4.3.4 <u>RACE</u> : As previously stated, 30 Indian and 30 White subjects were selected. The Indian subjects came from the Chatsworth area, while the White subjects came from the greater Durban area.

4.4 INSTRUMENTS USED

The following instruments were used in this research:

 Selection Criteria Report : completed by the School Counsellor.
Biographical Questionnaire : completed by the parents/guardians.
Personal, Home, Social and : administered to the sixty subjects. Formal Relations Questionnaire (PHSF)

A discussion on each of the measuring instruments follows:

4.4.1 SELECTION CRITERIA REPORT (See appendix B)

Selection criteria reports were given to all the school counsellors involved in this research. The school counsellors were requested to complete one report per subject. The selection criteria report required the following details about each subject:

- . Biographical information
- . The subject's school standard
- . The subjects IQ score or indication that the IQ score was above 130
- . An indication that the subject was not an underachiever. Copies of school reports were requested.

The selection criteria report facilitated the school counsellors in conducting the intital screening of subjects and served as the school counsellor's report on each subject.

4.4.2 BIOGRAPHICAL QUESTIONNAIRE (See appendix A)

The biographical questionnaire was adapted from Watkinson (1980). It included biographical details about both the subject and his/her family and social background; information such as : age, sex, number of children in the family, birth order, and parents occupation. In addition questions on the interpersonal functioning of the subjects were included. The aim of these questions was two-fold; firstly to examine the parents' assessment of the subject and secondly to provide additional information to compliment the PHSF Relations Questionnaire. These questions examined the communication ability of the subject in the home, peer group and formal settings. In order to provide a wholistic view of the subject, questions concerning the subjects interests, hobbies and other extra curricular activities were included. These questions were used to provide additional qualitative information about the subject.

4.4.3 THE PERSONAL, HOME, SOCIAL AND FORMAL RELATIONS QUESTIONNAIRE (PHSF RELATIONS QUESTIONNAIRE)

(A) INTRODUCTION

The Personal, Home, Social and Formal Relations Questionnaire (PHSF) is a revision of the Adjustment Questionnaire of the National Bureau of Educational and Social Research (1951). The final form of the PHSF was completed in 1969. "The purpose of the PHSF Relations Questionnaire is to measure, by means of eleven components, the personal, home, social and formal relations of high school pupils, students and adults in order to determine the level of adjustment" (PHSF Manual 1971, p.5). Adjustment has been defined as: "the dynamic process by which a person strives to satisfy his/her inner needs through mature, efficient and healthy responses and at the same time strives to cope successfully with the demands of the environment in order to attain a harmonious relationship between the self and the environment" (PHSF Manual 1971, p.5).

It is assumed from the above definition that interactional relations exist between the individual and the environment as well as within the individual. Good adjustment is viewed as the development of healthy relations within the self and between the self and the environment. When these relations are inefficient, immature and unsuccessful they are termed as maladjustment. The underlying rationale of the PHSF is concerned with the expression and dynamics of personality traits in the person's striving for harmony within the self and between the self and the environment.

(B) DESCRIPTION OF THE PHSF COMPONENTS

The PHSF is divided into four main adjustment areas: Personal, Home, Social, Formal and measures eleven components of adjustment within these four areas. In addition, a Desirability Scale, indicating the honesty with which the person answered the questions, is included in the PHSF relations questionnaire. The following is a detailed description of the four adjustment areas and eleven components:

PERSONAL RELATIONS (P)

Personal relations refer to the intra-personal relations of the individual. Five components of personal relations are measured in the PHSF relations questionnaire.

" (a) Self-confidence (Variable 1)

The degree of self-confidence displayed by a person can be determined by his own assurance that, when undertaking a test, he will be able to execute it successfully and be satisfied with the results.

(b) <u>Self-Esteem</u> (Variable 2)

The degree of a person's self-esteem is revealed by

- (i) the degree of self-acceptance (a feeling of satisfaction with himself);
- (ii) the degree to which personal standards are reached and the extent to which he feels accepted by others;
- (iii) congruency between that which a person thinks he is and what he ought to be (the ability to evaluate, accept and develop his personality characteristics);
- (iv) the degree to which he feels that he compares well with others of his group.
- (c) Self-control (Variable 3)

The degree of a person's self-control is determined by his ability to control or canalise his emotions and impulses in socially acceptable ways.

(d) Nervousness (Variable 4)

The degree of tension as revealed by anxious, aimless behaviour (compulsiveness) and obsessional thoughts, gives an indication of the person's nervousness. The assumption is that absence of such symptoms indicates the absence of nervousness.

(e) Health (Variable 5)

The degree to which his body functions effectively, as experienced by the person, and the disclosing of a healthy attitude towards his body, can be determined by the absence of preoccupation with his physical condition. "

(PHSF Manual 1978, pp.2,3).

HOME RELATIONS (H)

Home relations refers to the relations experienced by the person within the family, as a member of that family. Two components are included in the measurement of home relations.

" (a) Family Influences (Variable 6)

The degree to which the person experiences satisfaction in his relationships with his parents, his position in the family, and the socio-economic circumstances of his family, can serve as an indication of positive family relationships which act upon him.

(b) Personal Freedom (Variable 7)

The degree of personal freedom enjoyed by a person is determined by opportunities offered to him by meaningful persons in his life, to express his own initiative and to realise his own unique potentialities."

(PHSF Manual 1978, p.3).

SOCIAL RELATIONS (S)

Social relations refers to the person's interactions within the social environment. Specifically it deals with the manner in which a person engages in harmonious and informal relations within the social environment. Three components are included in social relations:

" (a) <u>Sociability - G</u> (Variable 8)

This refers to the general social adjustment and is characterized by the degree to which a person spontaneously partakes in social activities and is revealed by his ability to -

- (i) create ties of friendship;
- (ii) be interested in the activities of his group;
- (iii) sympathise with others;
- (iv) conform with the norms of the group.

(b) <u>Sociability - S</u> (Variable 9)

The degree to which a person is capable of forming friendly relations with a specific person of the opposite sex and to accept the advances of the latter, is an indication of his ability to form social relationships with the opposite sex without being self-conscious.

(c) Moral Sense (Variable 10)

The degree of a person's moral sense is revealed by -

- (i) the degree of certainty he experiences when he acts according to accepted norms;
- (ii) his endeavour to avoid conflict with society;
- (iii) the feelings of guilt he displays when he disregards the accepted norms."

(PHSF Manual 1978, p.4).

FORMAL RELATIONS (F)

Formal relations refers to those relations occuring in formal situations, such as; school, college, university or in an occupation. There is only one component in formal relations:

" Formal Relations (Variable 11)

The degree of success with which a person can uphold formal relations, is revealed by -

- the ability to enter into effective and healthy relations with superiors and figures of authority;
- (ii) the joy he experiences as a result of his relations with superiors or figures of authority;

(iii) the confidence placed in him by meaningful persons in his life" (PHSF Manual 1978, pp. 4,5).

The method of answering the PHSF relations questionnaire is through the use of a four-point scale. The person indicates HOW OFTEN he/she experiences certain relations or situations by marking one of the following symbols on the answer sheet:

- A = Almost always/Always
- D = Often
- S = Sometimes
- N = Rarely/Never

(C) STANDARDIZATION

(i) WHITE SAMPLE

Item selection and factor analysis preceded the final standardised form of the PHSF Relations Questionnaire. The final form of the PHSF, consisting of 180 items, was compiled and applied during Talent Survey (1969) to 1788 standard ten pupils at high schools in the Cape, Orange Free State, Natal and South West Africa, for the calculation of norms. In addition the PHSF was applied to a representative sample of standard eight (N = 1279) and standard nine (N = 1382) pupils in the four provinces of the Republic of South Africa (1971). The schools were selected in such a way that urban, rural and industrial areas, as well as provincial, agricultural and commercial schools were represented. There was an approximately equal distribution of the samples according to school standard, language and sex. Norms (stanines) were calculated seperately for males and females.

(ii) INDIAN SAMPLE

An item analysis was conducted in order to determine the suitability of the items in the PHSF questionnaire for Indian pupils. The PHSF was applied to a representative sample of 2583 Indian pupils during April/May 1976. Based on the item analysis, a decision to retain all the items of the PHSF in unchanged form was made. The discriminant and difficulty indices compared favourably with those obtained for Whites. There were no indications of differences which would result from differences in culture. Seperate norms were established for males and females, as well as for age groups 14 years, 15 years and 16 - 19 years. Ferguson's adaptation of the Kuder-Richardson formula 20 was used to calculate the reliability of the PHSF. Reliability demonstrates the degree of accuracy and the consistency with which a test measures. The reliability coefficients of the PHSF range between 0.5 and 0.8 (with the exception of two) and show a tendency to increase with the age of the testees. The reliability of a test is related to the error of measurement of the test. The greater the reliability, the less the error of measurement.

(E) STANDARD ERROR OF MEASUREMENT

The standard error of measurement indicates the random fluctuation of test scores. The error of measurement indices are given in terms of stanines. An example of PHSF error of measurement is 0.6. This means that the obtained score (stanine) may vary randomly between 0.6 less than and 0.6 more than the actual score in approximately two-thirds of the cases - (ie: stanine = 5, may vary between 4.4 and 5.6 in two-thirds of the cases).

(F) FACTOR ANALYSIS

A factor analysis of the eleven components of the PHSF questionnaire was conducted. The Principal Factor Analysis method was used and the axes were rotated according to the Varimax criterion. It was established that for a 99 per cent level of confidence, a loading of 0.21 in the case of males and 0.27 in the case of females can be regarded as significant. In the identified adjustment areas of the PHSF, only one factor loading falls below the cut-off point, namely 0.29 for self-confidence, in the case of females. The maximum number of factors interpreted was determined according to Cattell's (1966) scree test. Research done with the preliminary form of the PHSF showed that the PHSF possesses a fairly high degree of construct validity. In addition, the PHSF was found to have a fairly high degree of concept validity as demonstrated from a provisional factor analysis on the PHSF and the Adjustment Questionnaire (NBAQ). The components of the PHSF show a more clearly differentiated factor composition than the fields of the NBAQ.

The PHSF has been applied to pupils in two schools for behavioural deviates, and were then compared with the standard ten norm group. The results of this comparison demonstrates that the PHSF discriminates relatively consistently between the norm group and the group of deviate males and females. However, further validity studies of the PHSF are needed.

(H) APPLICATION AND SCORING

In accordance with test regulations (HSRC) the PHSF Relations Questionnaire should be applied by guidance counsellors or psychologists only. The questionnaire should be applied in a room which is relatively free of disturbances and each testee should be provided with a questionnaire, an answer sheet, a pencil and an eraser. There is no time limit imposed, but testees are asked to work as quickly as possible; it is advised that testees mark their initial reaction. In instructing the testees, the tester should emphasise that the words 'How often...' should be read before each question and that no questions should be skipped.

Emphasis is placed on accuracy when scoring the PHSF and it is advised that the scores are checked by a second person or counted twice. The PHSF provides two standardized scoring keys. Scoring key number one is used for components 1, 2, 7, 8, 10 and 11, while scoring key number two is used for components 3, 4, 5, 6, 9 and 12. There are 15 items per component. A four point scale is used and weights are assigned to each division of the scale. The positive questions have weights 3, 2, 1 and 0 whereas the negative questions have weights 0, 1, 2 and 3 according to the four answer positions on the answer sheets. A score of 1 point is allocated in cases where items are not marked or where two or more answer positions are marked. The raw scores are then converted into norms (stanines) for each component. The stanine scale (nine-point standard scale) is a normalised scale. It provides standard scores of 1 to 9 with an average of 5 and a standard deviation of 1 - 96. Each stanine represents a certain theoretical percentile range (see appendix D: Interpretation of stanines).

(I) INTERPRETATION OF SCORES

When interpretations are made from the PHSF results, a single score should not be regarded as an absolute measurement. Ideally these scores should be related to other information about the individual (eg. biographical information and other test data). It is essential to take the standard errors of measurement into account when interpretating the results. This provides an indication of the random fluctuation of the scores.

In the interpretation, cognisance should be taken of variation between the four main adjustment areas as well as possible relationships that may exist between certain components, especially components within the same main adjustment area. A HIGH score indicates a GOOD adjustment while a LOW score indicates possible maladjustment. A positive connotation is applied to scores higher than a stanine of 5, whereas a negative connotation is ascribed to the components when the score is below a stanine of 5. In addition the desirability scale should be taken into account in the

interpretation as this provides an indication of the honesty with which the testee answered the questionnaire. In general, honesty in answering is indicated by a HIGH score, while a LOW score indicates the possibility that the testee wanted to present him/herself in a 'favourable light'.

4.5 PROCEDURE

Using the selection criteria report and biographical questionnaire as a guideline, and having obtained parental consent, 60 subjects who met the criteria for selection formed the sample. The two groups, thirty Indians and thirty Whites, were tested on two seperate days, one week apart. Both groups were tested out of school hours, on Saturday mornings. The PHSF Relations Questionnaire was administered to both groups with the same set of administration instructions, preceding the test. (See appendix E for administration instructions). Test administration was conducted by the researcher and her supervisor.

The first group to be tested was the Indian group. The test was conducted in a school hall in the Chatsworth area. The White group was tested the following week in a lecture room at the University of Natal, Durban. On completion of the PHSF Relations Questionnaire the testees were provided with refreshments and given the opportunity for informal discussion.

The responses were scored by the researcher using the two standardized scoring keys and were checked by a second independent person. The responses were then statistically analysed using the Kruskal-Wallis one-way analysis of variance by ranks.

4.6 RATIONALE FOR THE KRUSKAL-WALLIS ONE-WAY ANALYSIS OF VARIANCE BY RANKS

The Kruskal-Wallis one-way analysis of variance is a non-parametric test appropriate for a number of independent random samples and an ordinal scale of measurement. The test involves a comparison of the sum of the rankings for each of the categories of the nominal-scale variables. The Kruskal-Wallis technique tests the null hypothesis that the K samples come from the same populations or from identical populations with respect to averages, assuming that the variable under study has an underlying continuous distribution. A statistic H is computed in order to measure the degree to which the various sums of ranks differ from what would be expected under the null hypothesis. If the probability associated with the observed value of H is equal to or less than the previously set level of significance, in this study :0.05, then H_0 is rejected in favour of H_1 .

Deatils of the results and analysis are presented in the following chapter.

CHAPTER 5: RESULTS OF THE STUDY

The data used in the analyses was based on the response of thirty Indian and thirty White gifted children of both sexes, to the PHSF Relations Questionnaire. A detailed appraisal of the PHSF is provided in chapter four. A biographical questionnaire was used to provide additional information for analysis purposes (see appendix A).

The responses of each individual subject were scored using the standard PHSF scoring keys. The raw score obtained for each P.H.S.F. variable was converted into a stanine score. Separate standardized norm tables were used for Indian and White, male and female subjects. The Indian male and female norm tables are determined according to age while the White male and female norm tables are determined by school standard. Both samples were matched on age so as to equate the age versus school standard norm tables.

The obtained scores were analysed to determine the similarities and/or differences between the interpersonal relations of Indian and White gifted children. To investigate the differences, if any, between the Indian and White sample, the PHSF relations scores were subjected to the Kruskal-Wallis one-way analysis of variance by ranks. A detailed rationale for using the Kruskal-Wallis technique is provided in chapter four.

The following tables represent the results of the analysis:

5.1 DATA FROM THE PHSF RELATIONS QUESTIONNAIRE

TABLE 5.1.1: KRUSKAL-WALLIS ONE-WAY ANALYSIS OF VARIANCE

| PHSF | ME | ANS | Н | |
|------------------|--------|-------|--------|---|
| VARIABLES | INDIAN | WHITE | (df=1) | |
| Self Confidence | 6.50 | 4.90 | 6.68 | + |
| Self Esteem | 5.07 | 5.30 | 0.14 | |
| Self Control | 4.20 | 4.23 | 0.004 | |
| Nervousness | 4.80 | 5.40 | 1.28 | |
| Health | 5.77 | 5.77 | 0.03 | |
| Family Influence | 4.50 | 4.30 | 0.22 | |
| Personal Freedom | 5.63 | 5.43 | 0.07 | |
| Sociability (G) | 4.75 | 4.95 | 0.31 | |
| Sociability (S) | 5.27 | 4.77 | 1.74 | |
| Moral Sense | 4.60 | 4.87 | 0.26 | |
| Formal Relations | 5.80 | 4.77 | 4.28 | - |
| Desirability | 6.43 | 6.97 | 0.84 | |
| | | | | |
| | N=30 | N=30 | | |
| | | | | |

(INDIAN AND WHITE, MALE AND FEMALE COMBINED)

+ = Significant, P ≤ 0.05

Table 5.1.1 shows that in this study, there is a significant difference between Indian and White gifted children on the variables: self-confidence and formal relations. The means indicate that for both self-confidence and formal relations, Indians have a significantly higher level of adjustment within the standardized Indian population as compared to the White sample within the standardized White population. No significant differences were found between Indian and White gifted children on the remaining ten PHSF variables. On all variables, the means show that both the Indians and Whites score within the average range of adjustment (54%) on a 1 - 9 stanine scale (see appendix D: Interpretation of stanines). The graphical representation (fugure I, page 52) illustrates (visually) the proximity of the Indian and White sample's mean scores.

| SELF CONFIDENCE | BELOW AVERAGE | AVERAGE | ABOVE AVERAGE |
|-----------------|---------------|---------------|---------------|
| | STANINE 1 - 3 | STANINE 4 - 6 | STANINE 7 - 9 |
| INDIAN | 13.3% | 36.7% | 50% |
| WHITE | 30% | 43.3% | 26.7% |
| N=60 | | | |

TABLE 5.1.2: SCORE DISTRIBUTION: SELF CONFIDENCE

Table 5.1.2 illustrates that on the PHSF variable, self confidence, 50% of Indians and 26,7% of Whites scored within the above average/high stanine range. Whereas 13.3% of Indians and 30% of Whites scored within the below average/low stanine range. (Stanines 1 - 3 are defined as below average/low, while stanines 7 - 9 are defined as above average/high).

TABLE 5.1.3: SCORE DISTRIBUTION: FORMAL RELATIONS

| FORMAL RELATIONS | BELOW AVERAGE | average | ABOVE AVERAGE |
|------------------|---------------|---------------|---------------|
| | STANINE 1 - 3 | stanine 4 – 6 | STANINE 7 - 9 |
| INDIAN | 13.3% | 43.3% | 43.3% |
| WHITE | 26.7% | 53.3% | 20% |
| N=60 | | | |



PHSF VARIABLES

_____. INDIAN SAMPLE

----- WHITE SAMPLE

+ : SIGNIFICANT, P≰0.05

FIGURE I : GRAPHICAL REPRESENTATION OF THE PHSF DATA:

KRUSKAL-WALLIS ONE-WAY ANALYSIS OF VARIANCE,

(INDIAN AND WHITE; MALE AND FEMALE COMBINED)

Table 5.1.3 illustrates that on the PHSF variable formal relations, 43.3% of Indians and 20% of Whites scored within the above average/high stanine range. While 13.3% of Indians and 26.7% of Whites scored within the below average/low stanine range.

| | 5 1 | 4. | KRUSKAL-WALLTS | ONE-WAY | ANALYSIS | OF | VARIANCE |
|--|-----|----|----------------|---------|----------|----|----------|
|--|-----|----|----------------|---------|----------|----|----------|

| PHSF | ME | ANS | Н |
|------------------|--------|-------|--------|
| VARIABLES | INDIAN | WHITE | (df=1) |
| Self Confidence | 6.46 | 5.00 | 2.87 |
| Self Esteem | 5.54 | 5.40 | 0.07 |
| Self Control | 3.85 | 4.35 | 0.68 |
| Nervousness | 5.00 | 5.65 | 0.27 |
| Health | 5.39 | 6.60 | 1.73 |
| Family Influence | 4.62 | 4.65 | 0.01 |
| Personal Freedom | 5.85 | 5.50 | 0.14 |
| Sociability (G) | 4.69 | 4.90 | 0.25 |
| Sociability (S) | 4.85 | 5.10 | 0.04 |
| Moral Sense | 4.69 | 5.05 | 0.22 |
| Formal Relations | 5.39 | 4.80 | 0.91 |
| Desirability | 6.69 | 7.05 | 0.65 |
| | N=13 | N=20 | N=33 |

(INDIAN AND WHITE FEMALES)

Table 5.1.4 shows that there is no significant difference between Female Indian and White gifted children on any of the measured PHSF variables. The means show that both Indian and White females, in this study, score within the average range of adjustment (54%) on a 1 - 9 stanine scale, with the exception of the Indian females' self control score which is slightly below average - (see appendix D: Interpretation of stanines).

| PHSF | ME | ANS | Н | |
|------------------|--------|-------|--------|---|
| VARIABLES | INDIAN | WHITE | (df=1) | |
| Self Confidence | 6.53 | 4.70 | 3.84 | + |
| Self Esteem | 4.71 | 5.10 | 0.17 | |
| Self Control | 4.47 | 4.00 | 0.62 | |
| Nervousness | 4.65 | 4.90 | 0.11 | |
| Health | 6.06 | 4.10 | 5.93 | + |
| Family Influence | 4.41 | 3,60 | 1.39 | |
| Personal Freedom | 5.47 | 5.30 | ` 0.01 | |
| Sociability (G) | 4.77 - | 5.00 | 0.05 | |
| Sociability (S) | 5.59 | 4.10 | 3.44 | |
| Moral Sense | 4.53 | 4.50 | 0.00 | |
| Formal Relations | 6.12 | 4.70 | 2.63 | |
| Desirability | 6.24 | 6.80 | 0.26 | |
| | N=17 | N=10 | N=27 | |

TABLE 5.1.5: KRUSKAL-WALLIS ONE-WAY ANALYSIS OF VARIANCE

(INDIAN AND WHITE MALES)

+ Significant, $P \leq 0.005$

Table 5.1.5 shows that, in this study, there is a significant difference between Indian and White MALE gifted children on the PHSF variables: self confidence and health. The means indicate that for both self confidence and health, the Indian sample has a significantly higher level of adjustment within the standardized Indian population as compared to the level of adjustment of the White sample within the standardized White population. No significant differences were found between Indian and White male gifted children on the remaining ten PHSF variables. The means on all variables except family influence (White) show that both Indian and White gifted males score within the average range of adjustment (54%) on a 1 - 9 stanine scale (see appendix D). On the variable family influence, the White males score slightly below the standardized average of the White male population.

5.2 DATA FROM THE BIOGRAPHICAL QUESTIONNAIRE

| | COMMUNICAT AT HOME | 'ES FREELY | COMMUNICATES FREELY WITH ADULT OUTSIDERS | | COMMUNICATION WITH PEERS | |
|--------|-----------------------|------------|--|-------|-----------------------------|------|
| | Yes | . 80% | Yes | 46.7% | Own Age | 90% |
| INDIAN | No | 10% | No | 50% | Older | 6.78 |
| | Sometimes | 10% | Sometimes | 3.3% | Younger | 3.3% |
| | | | | | | |
| | Yes | 90% | Yes | 70% | Own Age | 80% |
| WHITE | No | 3.3% | No | 20% | Older | 20% |
| | Sometimes | 6.7% | Sometimes | 10% | Younger | _ |
| | | | | | | |

TABLE 5.2.1: INTERPERSONAL INTERACTIONS

Table 5.2.1 illustrates a comparative analysis of the interpersonal interactions of the gifted sample. The data was obtained from the biographical questionnaire (see appendix A). The results show that the majority of both the Indian and White sample communicate freely at home (Indian sample : 80%, White sample : 90%). The results indicate that the Indian and White sample seem to differ in their communication with adult outsiders. 46.7% of the Indian sample and 70% of the White sample communicate freely with adult outsiders, whereas 50% of the Indian sample and 20% of the White sample do not communicate freely with adult outsiders. In addition the results show that the majority of both Indian and White sample communicate with peers of their own age. In summary, the above results reveal minimal differences between the Indian and White sample's interpersonal interactions.

| | NUMBER OF HOURS READING N PER WEEK | | NUMBER OF HOURS WATCHING TELEVISION PER WEEK | |
|--------|---------------------------------------|-----------------|---|-------|
| | 0 - 5 hrs | 23.3% | 0 - 5 hrs | 13.3% |
| INDIAN | 6 - 10 hrs | 56.7% | 6 - 10 hrs | 36.7% |
| | ll plus | 20% | 11 plus | 50% |
| | | | | |
| | 0 - 5 hrs | ·23 . 3% | 0 - 5 hrs | 23.3% |
| WHITE | 6 - 10 hrs | 43.3% | 6 - 10 hrs | 36.7% |
| | ll plus | 33.3% | ll plus | 40% |
| | | | | |

| | TABLE | 5.2.2: | TTME | SPENT | READING | AND | WATCHING | TELEVISI | ON |
|--|-------|--------|------|-------|---------|-----|----------|----------|----|
|--|-------|--------|------|-------|---------|-----|----------|----------|----|

The results in table 5.2.2 again illustrate minimal differences between the Indian and White gifted sample. The number of hours the Indian and White sample spend reading and watching television was assessed through the biographical questionnaire. The results show that exactly the same percentage (23.3%) of the Indian and White sample spend 0 - 5 hours reading per week. The largest proportion of both the Indian and White sample spend 6 - 10 hours reading per week and a slightly less proportion of the Indian sample (20%) spend more than 11 hours reading per week. In addition, the above results show that exactly the same percentage (36.7%) of the Indian and White sample spend 6 - 10 hours watching television per week. The greatest proportion of both the Indian (50%) and White (40%) sample spend more than 11 hours per week watching television. Slightly more of the White sample spend 0 - 5 hours watching television per week and slightly more of the Indian sample spend over 11 hours watching television per week. However, it should be noted that these differences are minimal.

TABLE 5.2.3: ANALYSIS OF SOCIO-ECONOMIC STATUS, NUMBER OF SIBLINGS AND

| | SOCIO-ECONOMIC STATUS $(\bar{\mathbf{x}})$ | NUMBER OF SIBLINGS $(\bar{\mathbf{x}})$ | BIRTH ORDER $(\overline{\mathbf{x}})$ |
|--------|---|---|---------------------------------------|
| INDIAN | 2.0 | 3.17 | 2.13 |
| WHITE | 1.5 | 2.70 | 1.73 |
| | N=60 | N=60 | N=60 |

BIRTH ORDER

Table 5.2.3 illustrates the Indian and White sample's mean scores on : Socio-economic status, Number of siblings and Birth order. By inspection, the means for socio-economic status (assessed by father's occupation) show that for both Indian and Whites, in this sample, the predominant occupational categories seem to be Professional and managerial (1) and Middle White-collar (2) (Schlemmer L, Stopforth P : A Guide to Coding Occupations, 1979; see appendix F for a breakdown of socio-economic status into occupational categories). The number of siblings means show that for both Indians and Whites, in this sample, the average family size is two to three siblings. As shown by the means for birth order, the predominant birth order for both the Indian and White sample is first or second born.

| | WORKING MOTHERS | HOUSEWIVES | N |
|--------|-----------------|------------|----|
| INDIAN | 27.6% | 72.4% | 29 |
| WHITE | 60% | 40% | 30 |

TABLE 5.2.4: MOTHER'S OCCUPATION : WORKING MOTHERS VERSUS HOUSEWIVES

Table 5.2.4 illustrates a comparative analysis, examining the proportion of working mothers of gifted children versus those mothers who worked at home and classified themselves as 'housewives'. Of interest is that the majority of White mothers (60%) have out of home occupations, whereas the majority of Indian mothers (72.4%) are classified as 'housewives'.

These results will be discussed in more detail in the following chapter (chapter six).

CHAPTER 6 : DISCUSSION OF THE RESULTS

6.1 OUTLINE OF THE DISCUSSION

The structure of this discussion is as follows:

6.2 Discussion on data obtained from the PHSF Relations Questionnaire; Research findings; male and female combined;

- (i) Significant differences between Indian and Whites on self confidence
- (ii) Significant differences between Indian and Whites on formal relations
- (iii) No significant differences between Indian and Whites on the remaining variables.
- (iv) Mean scores on all variables
- (v) Desirability scale.

Research findings; male and female seperated;

- No significant differences found between Indian and White females on any of the PHSF variables
- (ii) Significant differences between Indian and White males on self confidence

(iii) Significant differences between Indian and White males on health.

6.3 Discussion on data obtained from the biographical questionnaire; Interpersonal Interactions;

- (i) Communication at home
- (ii) Communication with adult outsiders
- (iii) Communication with peers.

Activities, time allocation;

- (i) Number of hours spent reading per week
- (ii) Number of hours spent watching television per week.

Societal/Family milieu;

- (i) Socio-economic status
- (ii) Number of siblings in the family

(iii) Birth-order of the sample sibling

(iv) Mother's occupation.

The discussion follows in the above specified order.

6.2 DISCUSSION ON DATA OBTAINED FROM THE PHSF RELATIONS QUESTIONNAIRE

The results in table 5.1.1 (page 50) illustrate that a significant difference between Indian and White (male and female combined) gifted pupils was found on the self confidence variable. Self confidence is defined as" "The degree of self-confidence displayed by a person can be determined by his own assurance that, when undertaking a task, he will be able to execute it successfully and be satisfied with the results" (PHSF Manual 1978, p.2).

In this study the Indian sample was found to have a significantly higher self-confidence adjustment than the White sample, i.e. the Indian sample have a higher self-confidence than the Whites, in accordance with their respective standardized norm groups. The magnitude of the Indian/White self confidence difference is highlighted by score distribution on the self confidence variable (see table 5.1.2, page 51). 50% of the Indian sample and 26.7% of the White sample scored within the above average/high stanine range on self confidence; thereby showing the higher proportion of Indian gifted children who score in the above average range on self confidence.

A possible explanation for this finding is that amongst the Indian South Africans a strong emphasis is placed on education and intelligence as a means of ensuring future security and success (Moodley 1975). Although the english-speaking White group share a high regard for education, such prime importance, to the exclusion of other measures of success, is not placed on education. This proposition can be exemplified by the importance White South Africans place on sport achievement. In the light of this explanation, it does not seem surprising that the intellectually able child in an Indian population is going to receive higher acclaim than is the same pupil in a White population. Higher acclaim would then possibly lead to a higher level of self confidence, thereby explaining the present finding.

The second significant difference found between Indian and White (male and female combined) gifted children is on the formal relations variable (see table 5.1.1 page 50). Formal relations is defined: "The degree of success with which a person can uphold formal relations is revealed by; (i) the ability to enter into effective and healthy relations with superiors and figures of authority; (ii) the joy he experiences as a result of his relations with superiors or figures of authority; and (iii) the confidence placed on him by meaningful persons in his life" (PHSF Manual 1978, p.4,5).

In this study, the Indian sample were found to have a higher level of adjustment to formal relations than the White sample, in accordance with their respective standardized norm groups. The formal relations score distribution (see table 5.1.3 page 51) exemplifies the Indian/White disparity in formal relations. 43% of the Indian sample and only 20% of the White sample scored within the above average/high staning range on formal relations.

As discussed in chapter three, the Indian population show evidence of strong formal relations within the patriarchal family structure (Van Zijl, Fouche 1984), although the authoritarian family structure is diminishing as westernization increases (Pillay 1972). Evidence of increasing westernization in the South African Indian community cannot completely negate the existence of the traditional socio-cultural structure that has

existed in the older generations of Indians. Comparatively, the Indian community in South Africa shows a great tendency towards group cohesion and a strong socio-ideological value system than do the White englishspeaking South Africans (Van der Merwe et al 1974). This phenomenon could possibly explain the higher degree of adjustment to formal relations found amongst the Indian sample in this study.

No significant differences between Indian and White (male and female combined) gifted children were found on the remaining nine PHSF variables, namely: self esteem; self control; nervousness; health; family influence; personal freedom; sociability (G); sociability (S) and moral sense. The hypothesis, stated in chapter one: "There will be differences in the interpersonal relations and social milieu of Indian and White gifted children as measured by the PHSF Relations Questionnaire and the biographical questionnaire" was rejected for the above-mentioned nine variables.

This finding has important implications for the future consideration of Indian and White gifted children. It suggests that on the majority (nine out of eleven) variables measured by the PHSF Relations Questionnaire, no significant differences between the Indian and White sample are evident. It is, however, suggested that further research is needed before the implications of this finding can be made explicit.

Of additional interest are the mean scores of the eleven PHSF variables (see table 5.1.1 page 50). On all variables, the mean scores show that both the Indian and White sample score within the average range of adjustment (54%) on the 1 - 9 stanine scale. This suggests that the Indian and White gifted children, in this sample, do not have more exceptional interpersonal levels of adjustment than do their respective standardized norm groups.

Research indicates no clear picture as to the exact nature of interpersonal relations amongst gifted children. There is evidence to support both above and below average adjustment in interpersonal relations (see literature review, chapter two). This research endorses the 'middle of the road' approach appropos the interpersonal relations of gifted children. Research into giftedness should take cognisance of the wide variability evident amongst the gifted. Interpersonal relations are only one of many groups of characteristics that needs to be considered in the study of the gifted.

The Desirability Scale (variable 12) is defined as "a validity scale indicating the honesty with which the person answered the questionnaire. The questions are of such a nature that only exceptional people can justly give favourable answers" (PHSF Manual 1971, p.9). No significant difference was found in the Indian and White sample's score on the desirability scale. The mean scores indicate that both groups scored within the average, bordering on the above average range. This finding endorses the validity of all the PHSF findings examined in this study.

A further analysis of the PHSF variables was done using sex as an additional distinguishing (independent) variable. As discussed in chapter four, an attempt was made to match the subjects on an exact sex ratio. However this precision was not achieved resulting in a sex ratio of, 13 female Indians; 20 female Whites and 17 male Indians; 10 male Whites.

It is of interest to note that no significant differences between female Indian and White gifted children were found on any of the PHSF variables. (see table 5.1.4, page 53). A possible hypothesis is that Indian and White gifted females occupy a similar position within the context of the broader standardized norm group, i.e. : this result indicates that the female socio-cultural position and interpersonal relations is similar across the two cultural groups.

It is of further interest to note that significant differences were found between Indian and White male gifted children. Specifically, the two variables that show a significant difference are : self confidence and health (see table 5.1.5, page 54).

In the combined sample (male and female) Indians and Whites show a significant difference in their adjustment to self confidence. The sex analysis shows that the self confidence significant finding predominates in the male group (no significant difference was found in the female groups on self confidence). The male findings indicate that the Indian males have a significantly higher level of adjustment to self confidence than the White males, in accordance with their respective standardized norm groups.

The proposed explanation for the higher self confidence in the Indian combined sample can be applied here. The hypothesis that the Indian group place a strong emphasis on education and intelligence as measures of success while the White group include other measures of success (for example sport achievement) is endorsed by the present male finding. The current societal value system (in both groups) emphasizes male success, power and achievement. It is not surprising therefore, that greater importance is placed on male interpersonal relations, specifically self confidence.

The second significant difference found between Indian and White males is on the health variable (see table 5.1.5, page 54). Health is defined as: "The degree to which his body functions effectively, as experienced by the person, and the disclosing of a healthy attitude towards his body, can be determined by the absence of preoccupation with his physical condition" (PHSF Manual 1979, p.3). In this study, Indian males were found to have a higher level of adjustment to health than the White males, in accordance with their respective standardized norm groups. On the basis of this finding, one can only assume that the Indian male sample perceives themselves as being healthier than their White counterparts. However, there is no known research to substantiate this finding.

6.3 DISCUSSION ON DATA OBTAINED FROM THE BIOGRAPHICAL QUESTIONNAIRE

The PHSF Relations Questionnaire, in this study, measures the personal, home, social and formal relations of the gifted child. In addition to the PHSF measure, a second, more qualitative assessment, was conducted. Specifically, the interpersonal interactions and social milieu of the Indian and White gifted children were additionally assessed through the biographical questionnaire. The responses were those of the gifted child's parents/guardians, thus yielding responses from both the gifted pupil (PHSF questionnaire) and his/her parents (biographical responses). The latter responses were used to provide additional qualitative information and are therefore more subjective in nature.

Table 5.2.1 (page 55) illustrates the findings appropos the Indian and White gifted child's communication at home, with adult outsiders and with peers. Specifically, the questions asked in the biographical questionnaire were as follows:

(i) Does your child speak often at home, expressing ideas freely or is he/she rather quiet?

(ii) Does your child speak freely and openly to other adults not well known?

The responses to the above two questions were categorized into "yes", "no" and "sometimes".

(iii) Does your child play and communicate freely with children of his/her own age or are older or younger children preferred?The responses to this question were categorized into "own age", "older" and "younger". (Source of questions: see biographical questionnaire appendix A).

The results reveal that the majority of both the Indian and White sample communicate freely at home. Albert (1978) notes that a stimulating home/ family setting which facilitates the child's interests, answers questions and provides a warm supportive base for intellectual exploration, are important elements contributing to the child reaching his/her full potential.

Of importance to this research, is the similarity between the Indian and White gifted child's communication at home. This finding is endorsed by the PHSF home relations, specifically, family influence (variable 6) and personal freedom (variable 7). No significant difference between the Indian and White samples was found on these two variables. "Home relations refer to the relationships within the family which are experienced by the person as a member of the family" (PHSF Manual 1978, p.3). Both the Indian and White samples scored within the average stanine range on home relations. From the above finding it would seem that although the Indian and White sample represent two different cultural groups, this does not seem to have an effect on how the gifted child experiences his/her home setting.
The results on communication with adult outsiders (see table 5.2.1, page 55) indicate a slight difference between the Indian and White sample. The majority of Whites (70%) responded "yes" when asked "Does your child speak freely and openly to other adults not well known?", whereas fewer Indians (46.7%) answered "yes" to this question.

There is a disparity in findings when an attempt is made to relate the above mentioned finding to the PHSF Relations Questionnaire, specifically, formal relations. The Indian sample were found to have a significantly higher level of adjustment on the formal relations variable than the Whites, and yet a larger proportion of the Whites seem to communicate freely with adults not well known to them. A possibility is that formal relations cannot be analyised with ability to communicate freely with adult outsiders. In addition formal relations were measured by the gifted child's responses whereas it was the parents who responded to their child's ability to communicate with adult outsiders. This could be an additional confounding variable.

An analysis of peer relationships was conducted, examining the preferred interactional group. The question posed was: "Does your child play and communicate freely with children his/her own age or are older or younger children preferred?"

The social development of the gifted is a crucial area in need of investigation. Research conflicts as to the exact nature of social relations amongst gifted children. Poterfield and Schlichting (1961) found a positive relationship between achievement and peer status. In contrast Freeman (1979) found academic proficiency to be adversely related to social popularity. Painter (1976) and Freeman (1979) indicate that gifted children tend to select an older peer group than themselves.

The findings in this research do not support Painter (1976) and Freeman's (1979) findings. The majority of both Indians (90%) and Whites (80%) in the present study, communicate freely with children of their own age. This finding, again, signifies a similarity between the Indian and White sample.

The PHSF social relations variable endorses the similarity found between the Indian and White gifted sample. No significant differences were found between the Indian and White sample on the two sociability variables (sociability in the group setting and sociability with a specific person of the opposite sex). Both groups scored within the average stanine range.

Appropos peer relationships with same age, older or younger, further research is needed before any conclusions are reached. However, of importance to this research, is the similarity found between the two cultural groups in the choice of social agents.

An additional analysis of the number of hours per week the Indian and White gifted sample spend reading and watching television was conducted (see table 5.2.2, page 50). Although this analysis is not directly related to interpersonal interactions, it does provide some indication of other activities in which the gifted child is involved. This information should only be viewed as of secondary importance to the present study. The questions posed were:

- (i) Approximately how many hours per week does your child spend reading of his/her own accord?
- (ii) How many hours per week does your child spend watching television/ videos?

The responses were categorized into 0 - 5 hours; 6 - 10 hours and 11 or more hours. (Source of questions: see biographical questionnaire, appendix A).

The results indicate some clear similarities between the Indian and White gifted sample. Exactly the same percentage (23.3%) of the Indian and White sample spend 0 - 5 hours reading per week. A second exact percentage (36.7%) was found in the 6 - 10 hour range of time spent watching television per week. The largest proportion of both samples spend 6 - 10 hours reading per week and 11 or more hours watching television. Slight differences between the Indian and White sample were; a slightly larger percentage of Whites spend 11 or more hours reading per week and a slightly larger proportion of the Indian sample spend 11 or more hours watching television per week. These findings have significance in that they further endorse the similarities found between the Indian and White gifted sample.

An analysis of Indian and White socio-economic status, number of siblings in the family and birth order of the sample sibling was conducted. This information was obtained from the biographical questionnaire and used to provide additional qualitative information about the subject and his/her social milieu.

Research highlights the importance of considering family constellation and influence in the study of gifted children. There is evidence to suggest that gifted children can be identified in all social and economic groups. Barbe (1956) and Hitchfield (1973) found that many children with high IQ scores come from upper and middle socio-economic backgrounds. In contrast Chen and Gaon (1976) found evidence to suggest that lower income and minority groups may also yield a large number of high ability children. In addition the family size and birth order are viewed as influential determinants upon the child's development. Research highlights birth order as an important structural and processional variable, giving order and focus to crucial family relationships and determines, to some extent, the family dynamics and how they will be directed towards the child.

In this study, an inspection of the socio-economic status, number of siblings and birth order means reveal similar trends across the Indian and White sample (see table 5.2.3, page 57). Specifically, the socio-economic status for both Indians and Whites, in this sample, show that the predominant occupational categories (appendix F) seem to be (i)professional and managerial and (ii) middle white-collar, (socio-economic status is assessed by father's occupation). For both Indians and Whites, in this sample, the average family size is two to three siblings and the predominant birth order of the subject is first or second born.

The lack of significant differences between Indians and Whites in the above mentioned areas is endorsed by the findings of Van Zijl and Fouche (1984). Their study on multi-cultural counselling found no significant differences between Indian and english-speaking White university students responses to a biographical questionnaire on the following aspects: financial situation, accord with wishes of parents and numbers of siblings.

Traditionally, emphasis in the Indian cultural group has been on community cohesiveness and the extended family. Evidence of increasing Indian westernization is illustrated by Moodley (1975) who notes that the Indian family is undergoing remarkable change, highlighted by the movement away from the traditional joint and extended systems to the nuclear pattern. This transition is endorsed by Chetty (1979) who notes that there is a definite tendency for the family to become a smaller unit, with fewer children.

The biographical questionnaire sought information on both parents occupations. The father's occupation was used to assess socio-economic status; based on Hurbans (1980) proposition that fathers occupation seems to be regarded as a reliable measure of socio- economic status. A comparative analysis of mothers occupation was conducted (see table 5.2.4, page 58) and revealed an interesting finding. The majority of White mothers (60%) have out of home occupations. In contrast, the majority of Indian mothers (72.4%) worked in the home, classifying themselves as "housewives".

This finding seems to suggest that the english-speaking White women, in this sample, are further emancipated than the Indian women. Although Moodley (1975) cites evidence of increasing woman's emancipation and individualism amongst Indian women, earlier Meer (1969) noted that many attitudes and patterns in Indian socio-cultural life continue to be traditionally oriented. Meer's (1969) suggestion could possibly explain why more Indian women tend to stay at home.

The above finding, when considered in the light of the overall results of this study which indicate, that in the majority of areas examined, there are few significant differences between Indian and White gifted children, suggests that mothers occupation, whether they are working mothers or housewives, has minimal effect on their gifted child.

Having proposed certain explanations and hypotheses, in this discussion on the research findings, it is important to reiterate that this research represents a pilot study. This discussion should therefore be viewed as providing tentative proposals upon which further research might be based.

Having examined the interpersonal relations and social milieu of Indian and White gifted children, using the PHSF Relations Questionnaire and biographical questionnaire, the overriding factor that emerges is the similarity between Indian and White gifted children on interpersonal relations and social milieu. On nine, out of the eleven variables measured by the PHSF Relations Questionnaire, no significant differences between the Indian and White sample were found. The female sample showed no significant differences between the Indians and Whites on any of the PHSF variables. In the male sample, again nine out of the eleven PHSF variables showed no significant differences between the Indians and Whites.

The data on interpersonal interactions and social milieu, obtained from the biographical questionnaire, illustrates the similarity found between Indian and White gifted children's communication at home and with peers. Similarities between the Indian and White sample were also found when examining number of hours spent reading and watching television per week. In addition similarities were found between the Indian and White sample on socio-economic status, number of siblings in the family and birth order of the sample sibling.

On all the above-mentioned similarities found, both through the PHSF and biographical questionnaires, the hypothesis stated in chapter one; "There will be differences in the interpersonal relations and social milieu of Indian and White gifted children, as measured by the PHSF Relations Questionnaire and the biographical questionnaire", was rejected. The above hypothesis was accepted for only two of the eleven PHSF variables, namely, self confidence and formal relations, where the Indian sample, in both cases, was found to have a significantly higher level of adjustment than the White sample. In the male sample, the hypothesis was accepted again for only two out of the eleven PHSF variables. Here the Indian male sample was found to have significantly higher level of adjustment on self confidence and health than the White male sample.

The overall findings indicate that the interpersonal relations and social milieu similarities far outweigh the differences found between Indian and White gifted children, in this sample.

CHAPTER 7: LIMITATIONS, CONCLUDING COMMENTS AND SUGGESTIONS FOR FURTHER RESEARCH.

7.1 LIMITATIONS OF THIS STUDY.

In order to assess the validity and relevance of this research, it is important to consider its limitations:

- (a) The instruments used for data collection were not flawless. Although the PHSF is a questionnaire and not a test of ability, it does not escape the negative connotations of test anxiety as highlighted by Sternberg (1982). It was difficult for the sample, coming from a school 'test of ability' environment not to associate the PHSF as a measure of their ability. In addition the PHSF is measuring personal, home, social and formal relations out of their context (in a 'testing' environment). The biographical questionnaire can be criticised for not meeting the criteria of a standardized test. The interpersonal relations questions posed in the biographical questionnaire were not selected and weighted by criterion keying. The use of both subjective and objective measuring instruments remains a contentious issue.
- (b) The sample size of sixty (thirty Indian and thirty White subjects) was relatively small. Being a pilot study this sample size was acceptable. However a larger sample is needed before any conclusive generalizations can be made.
- (c) As a cross-cultural study, this research is limited in that it only examines the Indian and english-speaking White populations. Investigation into other cultural groups is a necessity in the furtherance of cross cultural research of the gifted.

(d) The theoretical section (literature review) of this study is limited. No cross-cultural research of the gifted in South Africa to either endorse or discredit this study, is cited. This is as a result of the paucity of research in this area. Little has been written on the South African english-speaking White cultural group and as a result the theoretical section on White South Africans is sparse.

7.2 CONCLUDING COMMENTS AND SUGGESTIONS FOR FURTHER RESEARCH.

Throughout the preceding chapters the need for cross-cultural research of the gifted has been implied. The aim of this research was to investigate the interpersonal relations and social milieu of Indian and english-speaking White gifted children in South Africa. The findings of the present study have demonstrated that in the area of interpersonal relations and social milieu, there are more similarities than differences between Indian and White gifted children. As previously mentioned, the present research is a pilot study and therefore no conclusive generalizations can be made. Rather it is hoped that this research will generate further cross-cultural research in the area of giftedness. In the light of the above, some suggestions for further research will now be offered:

- (a) Further research, using alternative measuring devices of interpersonal relations with larger sample sizes is required.
- (b) Cross-cultural research into other areas of giftedness is needed. Possibilities include cross-cultural research into the definition, identification and education of the gifted.
- (c) Research using control groups of the norm population could be conducted across differing cultural groups.

- (d) Age and sex, as factors associated with giftedness need to be further researched among the different cultural groups.
- (e) Cross-cultural research of the gifted, in many more cultural groups is needed.

Finally, the above represents only a few of the many possibilities for further cross-cultural research of the gifted. The implications of such research could be considered with much enthusiasm. .

| Adam, H. | Ethnic Power Mobilized: Can South Africa | | |
|-----------------------|---|--|--|
| Gilomee, H. | Change? London: Yale University Press, 1979. | | |
| Albert, R.S. | Family Positions and the Attainment of | | |
| | Eminence: A study of Special Family Positions | | |
| | and Special Family Experience. Gifted Child | | |
| | Quarterly, 1980, 24 (2), 87 – 95. | | |
| | Deer Deletionshing of the Academically | | |
| Austin, A. B. and | Peer Relationships of the Academically | | |
| Draper, D. C. | Gifted: A Review Gifted Child Quarterly, | | |
| | 1981, 25 (3), 129 - 134. | | |
| Baron, J. | Reflective Thinking as a Goal of Education. | | |
| | Intelligence, 1981, 5, 291 – 309 | | |
| Bereday, F. | Concepts of excellence in Education | | |
| Louwerys, J. A. (Eds) | Yearbook of Education, 1961. | | |
| Chetty, R. | The Changing Family. Unpublished article, | | |
| | University of Durban/Westville, 1979. | | |
| Freeman, J. | Gifted Children: Their Identification and | | |
| | Development in a Social Context. Lancaster: | | |
| | M I P Press, 1979. | | |
| | | | |

`

| Gallagher,J.J. | Teaching the Gifted Child. Boston: Allyn and Bacon, 1975. | |
|----------------------------|---|--|
| Gallagher,J.J. | Reaching their Potential. Israel: Kolleck and Son, 1979. | |
| Hildreth,G.H. | Introduction to the Gifted. New York: McGraw - Hill, 1966. | |
| Hitchfield,E.M. | In Search of Promise. Iondon: Longman, 1973. | |
| Hollingworth, L.S. | The Child of Very Superior Intelligence as a Special Problem in Social Adjustment. <i>Mental</i> <i>Hygiene</i> ,1931, XI (1) 3 - 16. | |
| Hollingworth, L.S. | Children above 180 IQ. New York: World Book Co., 1942. | |
| Hoyle, E. and Wilks, J. | Gifted Children and their Education. Education Today: Department of Education and Science, New York, London, 1979. | |
| Hurbans, N. M. | A Study of the Attitudes of Indian Children and Adolescents Towards In-Groups and Out- Groups. Unpublished Masters Dissertation, University of Durban/Westville, 1980. | |

•

| Maddux,L.D., | Self Concept and Social Distance in Gifted | | |
|------------------|--|--|--|
| Scheiber,L.M.and | Children. Gifted Child Quarterly, 1982, | | |
| Bass,J.E. | 26, (2). | | |
| Meer,F. | Portrait of Indian South Africans, Durban: Premier Press, 1969. | | |
| Moodley,K.A. | South African Indians: The Wavering Minority, in Thompson L and Butler J (Eds). Change in Contemporary South Africa. Los Angeles: University of California Press, 1975. | | |
| Nel,J.F. | Report on the World Conference on Gifted Education, Manila, 1983. 1984, School Media Centre, 16 (1), 6 - 7. | | |
| Ogilvie,E. | Gifted Children in Primary Schools. Schools Council, Macmillan Education, 1973. | | |
| Omond, J.L. | The Education of the Gifted and Talented: A Challenge to Africa. Ciskeian Conference on Education, East London, 1980. | | |
| Painter, E. | Comparison of Achievement and Ability in Children of High Intellectual Potential. Unpublished Master's thesis, London University 1976. | | |

| Pillay, U. | A Comparative Study of the Values, Attitudes |
|-------------------|---|
| | and Folklore across Three Generations of |
| | Hindu Tamil-speaking Females in Durban. |
| | Unpublished Masters Dissertation, University |
| | of Durban/Westville, 1972. |
| | |
| Pringle,M.L.K. | Able Misfits: A study of Educational and |
| | Behaviour Dífficulties of 103 Very Intelligent |
| | Children. London: Longman/National Bureau |
| | for Co-operation in Child Care, 1970. |
| | |
| Roedell,W.C. | Social Development in Intellectually |
| | Advanced Children. In Robinson H B (Chair), |
| | Intellectually Advanced Children: Preliminary |
| | Findings of a Longitudinal Study. Symposium |
| | presented at the Annual Convention of the |
| | American Psychological Association, Toronto: |
| | 1978. |
| Schauer C H | Emotional Disturbances and Ciftodnoss |
| bendder y B.m. | Gilted Child Quantarly 1976 pr (A) |
| | Ochred Chica Quartery, 1970, XX (4). |
| Schlemmer, L. and | A Guide to the Coding of Occupations in |
| Stopforth, P. | South Africa Durban: Centre for Applied Social |
| | Sciences, University of Natal, 1979. |
| | |
| Slegel, S. | Nonparametric Statistics for the Behavioural |
| | Sciences. New York: McGraw-Hill Book Co., 1956. |

Sternberg, R.J.

Lies We Live By: Misapplication of Tests in Identifying the Gifted. London: Yale University, 1982.

Terman,L.M.et al Genetic Studies of Genius. Stanford California : Stanford University Press. (Vol I 1925; Vol II 1926; Vol III 1930; Vol IV 1947; Vol V 1959.).

Van der Merwe,H.W.White South African Elites: A Study ofAshley,M.J.Incumbents of Top Positions in the RepublicCharton,N.C.J.andof South Africa. Cape Town: Juta and Co Ltd.,Huber,B.J.1974.

Van Zijl,J.C.andMulti-cultural Counselling : Some ConvergentFouche,G.and Divergent Factors. South African Journalof Education. 1984, 4 (3), 126 - 132.

Wallace,B. An examination of the Development of the Adams,H.B. Concept of Gifted Education in the United Kingdom. An Analysis of the Current Position with Suggestions for a Positive Way Forward. Unpublished, Essex University, 1984.

Wallace,B. Educating the Gifted. Unpublished, Essex University, 1984.

Whitmore, J.R.

Giftedness, Conflict and Under-Achievement. Boston: Allyn and Bacon, 1980

APPENDIX A : THE BIOGRAPHICAL QUESTIONNAIRE

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QUESTIONNAIRE

| NAME OF CHILD: |
|---|
| SURNAME: |
| DATE OF BIRTH: |
| COUNTRY OF BIRTH: |
| NUMBER OF CHILDREN IN FAMILY: |
| STATE IF FIRST BORN, SECOND ETC: |
| OCCUPATION OF FATHER: |
| OCCUPATION OF MOTHER: |
| HOME ADDRESS: |
| ••••••••••••••••••••••••••••••••••••••• |
| · · · · · · · · · · · · · · · · · · · |
| TELEPHONE NUMBER:(H)(W) |
| • |

INTERPERSONAL FUNCTIONING

Does your child speak often at home, expressing ideas freely or is he/she rather quiet?

What are his/her favourite topics of conversation?

Does your child speak freely and openly to other adults not well known?

Would you say your child has a good sense of humour? (Please give example if possible).

Does your child play and communicate freely with children of his/her own age or are older or younger children preferred?

83

2/....

How does your family spend their holidays?

Please list how your child has spent his/her 3 most recent holidays.

What are your child's favourite extra-mural and/or extra-curricular activities?

What are his/her favourite school subjects?

Approximately how many hours per week does your child spend reading of his/her own accord?

My child's reading tastes include the following: (Please tick appropriate squares);

| Magazines |] |
|--------------------------------|---|
| Comics | |
| Non-fiction | |
| Fiction | |
| Newspapers | |
| Science-Fiction | |
| Encyclopaedias | |
| Bible or other religious texts | |
| Other (please specify) | |

How many hours per week does your child spend watching television/videos?

3/....

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What are his/her favourite programmes?

Please supply any other information about your child's development, personality and interpersonal relations that you think may be of interest or importance.

APPENDIX B : SELECTION CRITERIA FORM

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CONFIDENTIAL REPORT:

UNIVERSITY OF NATAL/DURBAN

| Referred by: |
|---|
| Counsellors Name: |
| School Address: |
| |
| |
| Telephone: |
| Name of Pupil: MALE FEMALE X |
| Name of Parent/Guardian: |
| Home Address: |
| ••••••••••••••••••••••••••••••••••••••• |
| · · · · · · · · · · · · · · · · · · · |
| Telephone: |
| Pupil's Date of Birth: |
| Pupil's Present School Standard: |
| Is the pupil's IQ Score above 130? YES/NO |
| According to: NSAIS/GTISA (Delete whichever does not apply) |
| Please provide some indication that the above pupil is not an underachiever, (e.g. copy of last school report). |
| Additional Comments: |
| |
| I hereby confirm the above information to be correct. |
| |
| (School Counsellor) Signature (School Principal)Signature |
| Thank you for your co-operation. |
| |
| Chamlene Deineut |

Charlene Beinart (Intern Psychologist)

APPENDIX C : LETTER OF REQUEST AND PERMISSION FORM

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LETTER OF REQUEST AND PERMISSION FORM

Dear

I am currently doing research as part of the requirements for a Masters degree in Counselling Psychology. I am interested in investigating the interpersonal relations of children who are achieving well scholastically. As your child falls into the academically able category, I hereby request your permission for him/her to participate in my research project.

All that will be required of your child is that he/she answers a questionnaire. This questionnaire is recognised by the HSRC and its use in my investigation has been approved by the Department of Education. Participants will not be identified by name and confidentiality will be strictly adhered to. In order to avoid disruption of your child's school day, it is planned that the children concerned will meet as a group at out of school hours. The questionnaire will take approximately one hour to complete. Refreshments will be provided.

It would be appreciated if you would sign the attached request form and indicate whether your child will be able to attend. In addition it would be of help to me if you would fill in the enclosed questionnaire and return it together with the request form in the envelope provided.

Your co-operation will be greatly appreciated.

Yours sincerely

Charlene Beinart Intern Psychologist

REQUEST FOR PERMISSION TO PARTICIPATE IN RESEARCH PROJECT

I,.... the parent/guardian (Full Name) hereby give/do not give my permission for to participate in the research project conducted by Ms C Beinart.

Signed Date

My child will/will not be able to attend.

VENUE: Chatsworth Teacher's Centre

DATE: Saturday 4 May 1985: from 9.00 a m - 10.00 a m .

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APPENDIX D : INTERPRETATION OF STANINES

INTERPRETATION OF STANINES

| Stanine Level | Percentage of cases (approximate) | Interpretation |
|---------------|-----------------------------------|----------------|
| 1 | 4 | Low (4%) |
| 2 | 7 | Below |
| 3 | 12 | Average (19%) |
| 4 | 17 | |
| 5 | 20 | Average (54%) |
| 6 | 17 | |
| 7 | 12 | Above |
| 8 | 7 | Average (19%) |
| 9 | 4 | High (4%) |

The stanine scale consists of 9 scale intervals and is based on a distribution with a mean of 5 and a standard deviation of 1.96. Excepted for the extreme ends (1 and 9), the scale intervals are all of the same size in terms of standard deviation units. Each stanine represents a certain portion of the norm group, as shown in the above table. A descriptive five-point scale is used for interpretation. (Taken from: PHSF Manual 1978, p.13).

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APPENDIX E : ADMINISTRATION INSTRUCTIONS

ADMINISTRATION INSTRUCTIONS

INTRODUCTION

- 1. Thank you all for coming today introduce self and supervisor.
- We are interested in finding out the way in which you experience everyday life. We hope that you will be able to give us some indication of this by answering the questionnaire we will be giving you.
- 3. Before starting this questionnaire, I would like you to please write your name, age, school and standard at school on the answer sheet.
- 4. At the same time there is a register going around. Please tick your name off on the register and make a note of the NUMBER next to your name. Please write your number on your answer sheet.
- Each person has been given a pencil. There are erasers available and if you need one please raise your hand.
- We will now hand out the questionnaire. I will read through the instructions. Please follow my reading from the front page of your questionnaire.

PHSF RELATIONS QUESTIONNAIRE: INSTRUCTIONS

This is a questionnaire and not a test. There are thus no correct or incorrect answers. All the questions are about things which everyone experiences. Some may feel that they <u>always</u> experience certain of these things while others may feel that they have <u>never</u> experienced them. It is therefore necessary that you answer each question honestly according to your <u>own</u> feelings.

Example:

How often.....

- (i) Do you use the telephone in your spare time?
 - A = Almost always/Always D = Often S = Sometimes

N = Rarely/Never

Decide, using your own judgement, how often you do this, and mark either A or D or S or N on your answer sheet. If, for instance, you <u>always</u> or <u>almost always</u> use the telephone in your spare time, mark A by colouring in with your pencil the space between the two dotted lines, across the A:

Note :

- 1. Give only one answer to each question.
- 2. Answer all the questions. Ensure that you answer each question next to the right number on the answer sheet.
- 3. Questions referring to your parents imply "parents or guardians".
- 4. In some questions the words "teacher/lecturer/superior" are used. "<u>Teacher</u>" will be applicable to pupils, "<u>lecturer</u>" to students and "superior" to adults.
- 5. Erase neatly should you wish to alter an answer.
- 6. There is no time limit but work as quickly as possible since your initial reaction to each question is usually the most reliable.
- 7. Do not write in the test booklet.
- 8. Remember that you have to read the phrase "How often" before <u>each</u> question although it only appears once at the top of each page.

Are there any questions?

Please begin.

APPENDIX F : OCCUPATIONAL CATEGORIES

OCCUPATIONAL CATEGORIES

Rank order of broad CASS Occupational Categories:

Criterion for code index among 5 categories of occupational status.

(Code 1 - 5 in descending order of prestige).

| Rank and Coding Order | CASS Occupational Category | Ranks of Occupation Groups | Grade Intervals of Prestige Scale |
|-----------------------------|---|----------------------------------|--|
| 1 | Professional and Managerial | 1 - 5 | 82 - 73 |
| 2 | Middle White-collar | 6 - 12 | 72 - 64 |
| 3 | Manual Foreman, Skilled Artisans, Farmers + and Status Equivalent | 13 - 16 | 58 - 52 |
| 4++ | Routine Non-Manual and Semi-Skilled Manual | 17 - 18 | 52 - 48 |
| 5 | Unskilled Manual and Menial | 19 - 20 | 26 - 20 |
| | | | |

- + White farmers in South Africa enjoy a higher social and occupational status than is prevalent in most modern countries. It is therefore possible if the case warrants it, to code them as a seperate category between Ranks 2 and 3 above. They are included under Rank 3 above as their socio-economic index is equivalent to the Group (14) "Manual Foreman and Highcraft" - see table 2.
- ++ This categorisation reflects the general trend for lower non-manual occupations to sink below the traditional manual level in industrialised society.

(Taken from: Schlemmer and Stopforth 1979, p.9).

The occupational coding system proposed by Schlemmer and Stopforth (1979) aims at encouraging standardisation in the coding of occupations in survey research in South Africa. The Schlemmer, Stopforth (1979) study provides a 'core model' in the form of prestige ratings validated against income and education for a representative cross-section of 97 occupational titles. The above occupational coding system does not differentiate between Whites, Coloured and Indians. The classification of occupational status is intended as a way of differentiating systematically between occupations which represent 'levels of achievement in work-status'. Further, occupational status is viewed as an index of 'social achievement'. Occupational status is noted as only one of numerous measures of social standing. Occupational status is not completely synonymous with social status, other achievements (e.g.: noteworthy sporting achievements) can influence the effect of occupation.

The Schlemmer, Stopforth (1979) study offers the following occupational categorizations:

(i) Occupational Categories: broad distinctions in socio-economic level.

(ii) Occupational Groups: finer distinctions in socio-economic level.

(iii) A scale of Individual Prestige Scores for discreet occupational titles.

(iv) A tentative arrangement of Occupational Groups applicable to Africans. The present study uses the first Schlemmer and Stopforth (1979) coding system; namely: Occupational Categories: broad distinctions in socioeconomic level.