

**THE PSYCHOLOGICAL  
ASSESSMENT OF CHILDREN'S  
LEARNING AND BEHAVIOURAL  
PROBLEMS AS MANIFESTED IN  
KWAZULU PRIMARY SCHOOLS**

*by*

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DECLARATION

I, the undersigned, hereby declare that this dissertation is my own original work and that it has never been presented in part or in its entirety at this or any other university in order to obtain a degree.

P.T. SIBAYA

## OPSOMMING

Hierdie studie het die omvang en aard van die leer- en gedragsproblematiek, soos gemanifesteer in die primêre skole in KwaZulu ondersoek. Die eerste doelstelling van die studie was om insig te verkry in die onderwysers se beskouinge aangaande die leer- en gedragsprobleme van kinders in die primêre skole in KwaZulu. Die tweede doel was om te bepaal of die onderwysers se beskouinge deur enige spesifieke persoonlike karakteristieke beïnvloed word. Die derde doel was om te bepaal welke sieninge die onderwysers huldig aangaande die modus operandi vir diagnose, behandeling en hantering van leer- en gedragsprobleme. Daar is ook kennis geneem van onderwysers se aanbevelings met betrekking tot moontlike ingrypingstrategie by die hantering van leer- en gedragsprobleme. Ten einde die eerste en tweede doelstellings te verwesenlik is daar van 'n gestandaardiseerde skaal (DESB) gebruik gemaak. Om die derde en vierde doelwitte te realiseer is 'n nuwe skaal ontwerp en gestandaardiseer. Ten einde 'n geldigheidsindeks te verkry is daar van faktoranalise gebruik gemaak.

Die metingsinstrument is toegepas op 'n verteenwoordigende steekproef van onderwysers in KwaZulu primêre skole. 'n Ontleding van driehonderd en tagtig korrek voltooide vraelyste is uitgevoer. Elk van die elf faktore gemeet deur die DESB kon gereduseer word tot twee of drie meer algemene

kategorieë. In die eerste kategorie was die response van diegene wat die faktore as heeltemal afwesig in die klaskamer ervaar het. Kategorie twee, was die onderwysers wat die omvang van die probleme beskou het as binne die normale grense. Kategorie drie was die response van onderwysers wat die faktore in die klaskamer as 'oorweldigend' beskryf het. 'n Dieper ontleding van die frekwensieverspreiding van die response het aanleiding gegee tot die identifikasie van twee groeperinge. Die eerste groepering het verband gehou met faktore wat as problematies beskou word in die klaskamersituasie. Hierdie groepering het faktore ingesluit soos ongeduldigheid, wanbegrip, onoplettendheid, teruggetrokkenheid en gebrek aan inisiatief en oorspronklikheid. Hierdie groepering het verband gehou met leerprobleme. Die tweede groepering daarenteen het betrekking gehad op gedragsprobleme. Die groepering het faktore ingesluit soos wangedrag in die klaskamer, minagting (disrespect-defiance), verwyte en beskuldigings, angs om te presteer, oorafhanklikheid van andere, ontoepaslike reaksies en 'n behoefte om toenadering by die onderwyser te soek.

Analises van variansie is uitgevoer ten einde vas te stel of daar beduidende verskille tussen gemiddeldes bestaan. By sewe van die veertien faktore was daar geen betekenisvolle verskille tussen die geslagte, die verskillende grade van ondervinding en kontak met sielkundiges van die onderwysers in hulle waarneming oor die omvang van leer- en gedrags-



probleme nie. In slegs enkele gevalle het die onderwysers se geslag, ondervinding, en kontak 'n beduidende invloed op hul waarnemings gehad.

Kanoniese korrelasie is aangewend om die verband tussen onderwysers se besonderhede en elf DESB faktore te ondersoek. Sekere verband is bevestig tussen die genoemde besonderhede van die onderwysers en die elf DESB faktore. Die Anova tegniek is ook gebruik, ten einde die betekenis van die verskille in die rekenkundige gemiddeldes tussen diagnose, behandeling en bestuur, te toets. Ten opsigte van hul waarnemings, met betrekking tot die wyse van hantering van leer- en gedragsprobleme, verskil onderwysers nie van mekaar nie. Daar is egter betekenisvolle verskille in die onderwysers se waarnemings, wat betref die wyses van diagnose en behandeling van leer- en gedragsprobleme. Verder kon die onderwysers se aanbevelings aangaande die hantering van leer- en gedragsprobleme in 'n eenvoudige rangordeformaat uitgebeeld word.

Die bevindings van hierdie studie is in verband gebring met inligting soos uit die literatuuroorsig verkry en hierdie inligting is voorts geïnterpreteer teen die agtergrond van die aard van die sielkundige dienste binne Swart skole in Suid-Afrika. Aanbevelings is gemaak vir die implementering van alternatiewe, met koste effektiewe en doeltreffende sielkundige dienste.

## SUMMARY

This study examined the nature of learning and behavioural problems as manifested in KwaZulu primary schools. The first aim was to investigate teachers' perceptions of the nature of learning and behaviour problems as manifested by children in KwaZulu primary schools. The second aim was to find out whether these perceptions are influenced by any particular respondent characteristics. The third aim examined teachers' views of the modus operandi for diagnosis, treatment, and management of these learning and behavioural problems. Finally, teachers' recommendations for intervention strategies with regard to learning and behaviour problems, were investigated. To this end, a standardized scale (DESB) was used to achieve the goals of the first and second aim. The researcher constructed and validated his own scale to meet the objectives of the third and fourth aim. The method of factor analysis was used during validation.

The measuring instrument was administered to a representative sample of teachers. Three hundred and eighty correctly completed questionnaires were analyzed. Each of the eleven factors measured by the DESB could be classified into two or three categories. In the first category, group one, teachers perceived factors as extremely deficient in the classroom, category group two consisted of teachers

perceiving factors as occurring within normal range in the classroom, and category group three included teachers perceiving factors as occurring in excess in the classroom. An examination of the frequency distribution revealed that there were two clusters of problems. The first cluster consisted of conditions designated as troublesome in the classroom. These were impatience, comprehension, inattentive-withdrawn and creative initiative. This cluster constituted learning problems or difficulties. The second cluster embraced behaviour problems. These were classroom disturbance, disrespect-defiance, external blame, achievement anxiety, external reliance, irrelevant-responsiveness and need for closeness to the teacher.

The Anova technique was used to test for the significance of differences among means. In seven out of fourteen instances, there were no significant differences between sex, experience, contact and teachers' perceptions of the nature of learning and behaviour problems. In very few instances, teachers' particulars like sex, contact and experience, yielded statistically significant results.

The canonical correlation R statistic was used to test for the relationship between five teachers' particulars and eleven factors. The first and the second canonical correlation coefficients accounted for a significant linkage between the two sets of canonical variables namely eleven

DESB factors and teachers' particulars.

The Anova technique was also used to test for the significance of differences among means for diagnosis, treatment and management. Teachers do not differ in their perceptions of the mode of management of learning and behaviour problems. There are however, significant differences in the teachers' perceptions of the modes of diagnosis and treatment of learning and behaviour problems.

Specific recommendations by teachers on the treatment of learning and behaviour problems, were able to be presented in simple ranked format.

These findings were discussed in relation to the literature reviewed, and interpreted within the framework of psychological services delivery in African schools. Suggestions with regard to an alternative, speculative, cost-effective and efficient model for the delivery of psychological services, were made.

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P.T.S.

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KWADLANGEZWA

TABLE OF CONTENTS

	PAGE
DECLARATION .....	i
OPSOMMING .....	ii
SUMMARY .....	v
ACKNOWLEDGEMENTS .....	viii
CONTENTS .....	xi
 CHAPTER ONE :	
1.0 INTRODUCTION .....	1
1.1 MOTIVATION FOR THE STUDY .....	1
1.2 STATEMENT OF THE PROBLEM .....	9
1.3 AIMS OF STUDY .....	11
1.4 PLAN OF STUDY .....	12
 CHAPTER TWO :	
2.0 A CONSIDERATION OF VARIOUS DEVELOPMENTAL TRENDS OF A BLACK CHILD IN KWAZULU AND EMPIRICAL STUDIES ON PSYCHOLOGICAL ASSESSMENT OF CHILDREN .....	15
2.1 INTRODUCTION .....	15
2.2 A TRADITIONAL PERSPECTIVE .....	16
2.3 A CONTEMPORARY VIEW .....	19
2.4 UNIVERSAL CHARACTERISTIC NEEDS OF CHILDREN .....	23
2.5 A TAXONOMY OF CHILD PSYCHOPATHOLOGY .....	29
2.5.1 DIFFICULTIES IN THE DEFINITION OF TERMS .....	30



2.5.2	CONCEPTUAL MODELS AND THEIR IMPLI- CATIONS FOR PSYCHOLOGICAL ASSESSMENT .....	34
2.5.2.1	PSYCHODYNAMIC MODEL .....	35
2.5.2.2	BEHAVIOURAL MODEL .....	36
2.5.2.3	BIOPHYSICAL MODEL .....	38
2.5.2.4	SOCIOLOGICAL MODEL .....	39
2.5.2.5	ECOLOGICAL MODEL .....	41
2.5.2.6	DEVELOPMENTAL APPROACH .....	43
2.5.2.7	LEARNING DISABILITY MODEL .....	44
2.5.2.8	COUNTER-THEORY MODEL .....	45
2.5.2.9	PSYCHOEDUCATIONAL MODEL .....	47
2.6	EMPIRICAL STUDIES ON PSYCHOLOGICAL ASSESSMENT OF CHILDREN .....	49
2.7	CONCLUSION .....	63

## CHAPTER THREE :

3.0	RESEARCH DESIGN AND METHODOLOGY .....	65
3.1	INTRODUCTION .....	65
3.2	AIMS OF STUDY .....	66
3.3	DEFINITION OF TERMS .....	66
3.3.1	Psychological assessment .....	67
3.3.2	Children .....	67
3.3.3	Behaviour problems .....	67
3.3.4	Learning problems .....	67
3.3.5	KwaZulu schools .....	68
3.4	FORMULATION OF HYPOTHESES .....	68
3.4.1	Hypothesis number one .....	68

3.4.2	Hypothesis number two .....	68
3.4.3	Hypothesis number three .....	69
3.4.4	Hypothesis number four .....	69
3.5	METHODS OF DATA COLLECTION .....	69
3.5.1	THE RESEARCH INSTRUMENT : SECTION I (DESB) .....	72
3.5.1.1	Rationale for the selection of the DESB ....	73
3.5.1.2	Description of the scale .....	74
3.5.1.3	Scoring and interpretation procedure .....	81
3.5.1.4	Normative data for the DESB .....	81
3.5.2	THE RESEARCH INSTRUMENT : SECTION II .....	84
3.5.2.1	Description of section II of the instrument .....	86
3.5.2.2	Factor analysis for item analysis .....	87
3.5.2.3	Scoring and analysis of data .....	88
3.6	SAMPLE DESIGN AND SAMPLING PROCEDURE .....	89
3.6.1	Rationale for sample selection .....	89
3.6.2	Sampling frames .....	91
3.6.3	Multistage area/cluster sampling design ....	92
3.7	PLANNING FOR ADMINISTRATION OF THE RESEARCH INSTRUMENT .....	93

## CHAPTER FOUR :

4.0	EMPIRICAL STUDY .....	96
4.1	INTRODUCTION .....	96
4.2	THE STUDY SAMPLE .....	96
4.3	SELECTION OF SCHOOLS FOR THE PILOT STUDY ...	97
4.4	ADMINISTRATION OF THE RESEARCH INSTRUMENT .....	99
4.5	RESULTS OF THE PILOT STUDY .....	102
4.5.1	FACTOR ANALYSIS FOR 23 ITEMS : 48 THROUGH 70 .....	102
4.5.2	CORRELATION OF ITEM WITH THE CATEGORY .....	107
4.5.3	CANONICAL CORRELATIONS .....	111
4.6	CONCLUSION .....	123

## CHAPTER FIVE :

5.0	PRESENTATION AND ANALYSIS OF DATA .....	125
5.1	INTRODUCTION .....	125
5.2	FINAL STUDY SAMPLE .....	125
5.3	RESULTS .....	126
5.3.1	PRESENTATION OF MEANS AND STANDARD DEVIATIONS FOR THE WHOLE SAMPLE .....	126
5.3.2	REITERATION OF HYPOTHESES .....	130
5.3.3	ANALYSIS OF DATA .....	131
5.3.3.1	TESTING OF HYPOTHESIS NUMBER ONE .....	132
5.3.3.2	A SUMMARY ON THE TESTING OF HYPOTHESIS NUMBER ONE .....	172
5.3.3.3	CANONICAL R AND TESTING OF HYPOTHESIS NUMBER TWO .....	173
5.3.3.4	TESTING OF HYPOTHESIS NUMBER THREE .....	179
5.3.3.5	RANK ORDER AND TESTING OF HYPOTHESIS NUMBER FOUR .....	190
5.4	CONCLUSION .....	199

## CHAPTER SIX :

6.0	RESULTS, FINDINGS AND DISCUSSION .....	201
6.1	INTRODUCTION .....	201
6.1.1	THE NATURE OF LEARNING AND BEHAVIOUR PROBLEMS .....	202
6.1.2	THE RELATIONSHIP BETWEEN PERCEPTION OF LEARNING/BEHAVIOUR PROBLEMS AND RESPONDENTS' DIMENSIONS .....	218
6.1.3	TEACHERS' VIEWS ON DIAGNOSIS, TREATMENT AND MANAGEMENT .....	219
6.1.4	TEACHERS' RECOMMENDATIONS ON INTER- VENTION STRATEGIES .....	220
6.2	PATTERNS OF LEARNING AND BEHAVIOUR PROBLEMS .....	221
6.3	SPECULATIVE INTERVENTION MODEL .....	225
6.3.1	ASSUMPTIONS UNDERLYING THE PROPOSED ALTERNATIVE MODEL IN THE DELIVERY OF PSYCHOLOGICAL SERVICES .....	227
6.3.2	PROPOSED MODEL OF PSYCHOLOGICAL SERVICES DELIVERY IN AFRICAN/BLACK SCHOOLS .....	232
6.3.3	CONSULTATION AND PSYCHOLOGICAL SERVICES DELIVERY IN AFRICAN SCHOOLS .....	236
6.4	CONCLUSION .....	238

## CHAPTER SEVEN :

7.0	SUMMARY, GENERALISATION AND RECOMMENDATION .....	239
7.1	SUMMARY .....	239
7.1.1	THE PROBLEM .....	239
7.1.2	THE AIMS OF THE STUDY .....	239
7.1.3	HYPOTHESES DEVELOPED .....	240
7.1.4	METHODOLOGY .....	241
7.1.5	RESULTS .....	242
7.2	GENERALISATION .....	244
7.3	RECOMMENDATIONS .....	245
	REFERENCES .....	248

## TABLES

Table 4.1	Distribution of schools in the Mehlesizwe Circuit (1989) .....	97
Table 4.2	Schools visited in the Mehlesizwe Circuit .....	98
Table 4.3	Categorization of subjects in the Pilot Study (N=116) .....	99
Table 4.4	Equimax rotated factor matrix .....	103
Table 4.5	Values of $r^2 \times 100$ .....	107
Table 4.6	Correlational analysis : relationship between an item and the category : diagnostic activity (N=116) .....	109
Table 4.7	Correlational analysis : relationship between an item and the category : treatment activity (N=116) .....	110
Table 4.8	Correlational analysis : relationship between an item and the category : management activity (N=116) .....	110
Table 4.9	Diagnosis and treatment : the relative contribution of sets variables to canonical correlation coefficients .....	114
Table 4.10	Diagnosis and management : the relative contribution of sets variables to canonical correlation coefficients .....	118
Table 4.11	Treatment and management : the relative contribution of sets variables to the canonical correlation coefficients .....	121
Table 5.1	Categorization of subjects in the final study sample (N=380) .....	125
Table 5.2	Teachers' responses to eleven factors and three nonfactor items (N=380) .....	127
Table 5.3.1	Teachers' perceptions of sets I, II and III .....	129
Table 5.3.2	Cell-frequencies in a 3-way design .....	133

Table 5.4	ANOVA for factor 1 .....	135
Table 5.5	ANOVA for factor 2 .....	137
Table 5.6	ANOVA for factor 3 .....	139
Table 5.7	ANOVA for factor 4 .....	141
Table 5.8	ANOVA for factor 5 .....	145
Table 5.9	ANOVA for factor 6 .....	147
Table 5.10	ANOVA for factor 7 .....	151
Table 5.11	ANOVA for factor 8 .....	154
Table 5.12	ANOVA for factor 9 .....	157
Table 5.13	ANOVA for factor 10 .....	159
Table 5.14	ANOVA for factor 11 .....	162
Table 5.15	ANOVA for nonfactor item 27 .....	165
Table 5.16	ANOVA for nonfactor item 40 .....	167
Table 5.17	ANOVA for nonfactor item 41 .....	170
Table 5.18	Relationship between respondents' dimensions and eleven factors .....	175
Table 5.19	ANOVA for diagnosis : Set 1 .....	180
Table 5.20	ANOVA for treatment : Set 2 .....	183
Table 5.21	ANOVA for management : Set 3 .....	188
Table 5.22	Teachers' recommendations for helping a child with learning problems (N=380) .....	191
Table 5.23	Teachers' recommendations for helping a child with behaviour problems (N=380) .....	193
Table 6.1	Classification of teachers on the basis of total factor score (N=380) .....	208
Table 6.2	Criteria for dividing a total factor score .....	209
Table 6.3	Results of testing hypothesis number one .....	212
Table 6.4	DESB factor means .....	224

## APPENDICES

APPENDIX A : DEVEREUX ELEMENTARY SCHOOL BEHAVIOUR RATING SCALE (DESB) .....	258
APPENDIX B : DESB : NORMATIVE AND RELIABILITY DATA .....	280
APPENDIX C : DESB : MEANS AND STANDARD DEVIATIONS OF DESB AT EACH GRADE LEVEL .....	281
APPENDIX D : DESB : TEST-RETEST MEANS; CORRELATIONS AND ERRORS OF MEASUREMENT .....	282
APPENDIX E : DESB : RELATIONSHIP BETWEEN FACTOR AND ADDITIONAL ITEM SCORES AND READING AND ARITHMETIC CLASSROOM ACHIEVEMENT GRADES .....	283
APPENDIX F : AMERICAN AND SOUTH AFRICAN GRADE 2 DEVEREUX FACTOR MEANS .....	284
APPENDIX G : THE SCALE USED IN THE FINAL STUDY .....	285



## FIGURES

FIGURE 5.1	SCE Interaction : F4-cell means .....	142
FIGURE 5.2	SCE Interaction : F6-cell means .....	148
FIGURE 5.3	CE Interaction : F7-cell means .....	152
FIGURE 5.4	CE Interaction : F8-cell means .....	155
FIGURE 5.5	SE Interaction : F10-cell means .....	160
FIGURE 5.6	CE Interaction : F11-cell means .....	163
FIGURE 5.7	SE Interaction : Nonfactor item 40 .....	168
FIGURE 5.8	SCE Interaction : Set 1 diagnosis .....	181
FIGURE 5.9	SC Interaction : Set 2 treatment .....	184
FIGURE 5.10	CE Interaction : Set 2 treatment .....	186
FIGURE 6.1	Model A : An alternative model for delivery of psychological services in African schools .....	233
FIGURE 6.2	Model B : Direct/Indirect service delivery model .....	234

## ANNEXURES

ANNEXURE A :	REQUEST FOR PERMISSION TO DO RESEARCH ...	306
ANNEXURE B :	PERMISSION GRANTED TO DO RESEARCH .....	307
ANNEXURE C :	COVERING LETTER TO PRINCIPALS .....	308

## CHAPTER ONE

### 1.0 INTRODUCTION

#### 1.1 MOTIVATION FOR THE STUDY

The crux of classroom practice is the assistance rendered to the child, to enable him to attain eminent academic achievement and to allow his unfolding personality to develop to the fullest extent. The classroom atmosphere must therefore be safe and healthy for pupils to express their needs, or the teachers entrusted with the responsibility of classroom management must create, a warm atmosphere for the satisfaction of pupils' needs.

A review of literature on Pedagogics in South Africa (Duminy, 1973; Behr, 1977; Beard and Morrow, 1981; Engelbrecht and Lubbe, 1982; Landman, Kilian, Swanepoel and Bodenstein, 1982; Duminy and Steyn, 1983; Dreyer and Duminy, 1983) reveals that emphasis is often made on the study of principles of education and on training teachers as classroom specialists in the impartation of knowledge and skills. The topics or areas of main focus are : teaching methods, media efficacy, and the broader educational principles governing classroom practice. In all probabilities, this approach attempts to make teachers experts in the impartation of the subject matter with little if any, sound knowledge about the recipient, namely the educand. This practice has been of great concern until the late 1960's.

There has been a sporadic surge for knowledge about the learner during the early 1970's. Increasingly, the emphasis has shifted from teaching methods to the learner's cognitive abilities and developmental trends. Factual knowledge obtained from the study of the child's cognitive and developmental traits has laid the background for the evolution of teaching methods. The main concern during the early 1970's was the teaching of the average school child.

Individual differences among, and intervention strategies for, African pupils with learning or behavioural problems have been completely neglected, if not ignored. There are no books dealing with the deviant African child or the problem child; learning problems or problem behaviour among African pupils. These problems have now grown out of proportion and they find expression in high failure rates and overt aggressive tendencies (school riots for an example) to which teachers' expertise does not provide an answer.

The phrase "leading of children or children accompaniment" (du Plooy, Griessel and Oberholzer, 1982:3) is a central theme of education and also of various subdisciplines of Pedagogics. It means : giving guidance, direction and providing the safest measures of conveyance from the educand pole to adulthood i.e. educator pole and attainment of maturity in its perfection. The idea of intervention in the course of the development of the "normal" child, presupposes skills in parenting.

Teachers and parents may find it beyond their capabilities to handle a deviant child. This problem becomes more pronounced within the classroom or school situation. Since teachers are expected to lead individuals with learning and behavioural problems, it is imperative to identify these problems and to examine the methods by which the solutions to these problems can be achieved.

The modern theory of education condemns the fragmentation of the human personality. Intellectual development at the expense of character moulding is seen as dangerous, and as a perfection of one side of the coin. It is often said that education is concerned with the development of the whole child (Gunter, 1979). This holistic doctrine is useful but not always practicable. Members of the teaching personnel tend to focus mainly on the academic progress of pupils, thereby deemphasizing the personality aspects of the educand.

In all analyses, schools and other educational institutions have come into existence to manage the intellectual and personality development of the learning child. The intellectual aspect can be viewed as comprising a process of acquiring knowledge and skills necessary for competent execution of activities in daily life. Personality is a rather wide and diffuse concept which also has cultural connotations. Personality refers to the personal traits of

an individual, including some or all of the following aspects : emotional, social, cultural, spiritual, psychological etc. Personality is a pivotal concern of education at school or in the home. While teaching is a limited concept, restricted to a school situation, where specialized training is necessary for the impartation of knowledge and skills, education is a broader concept used to include all attempts at making a developing human being more humane.

The doctrine of human "wholeness or totality" has led to the diversification of Pedagogics into numerous branches of specialization. These areas of specialization are mutually exclusive. The reason for the existence of these areas or subdisciplines of Pedagogics, is to facilitate an indepth study of each area of specialization, so that researchers can pool together their findings in order to create a sound body of knowledge about the phenomena of Pedagogics.

Researchers in these areas have become experts and have made significant contributions in the theory and practice of education.

Every individual is unique, with its own needs, limitations and possibilities. It responds to situations confronting it in a manner that is uniquely its own. This uniqueness becomes more evident in the classroom situation. It indicates a need for a special treatment of the individual

and for psychological intervention in the course of the upbringing or development of the individual learner. To what extent does the school system meet individual needs? This issue remains a question.

The history of psychological services in South Africa reveals that the provision of psychometric data on pupils "in need of placement", has been a predominant aim and function of the psychological services (Africa, 1977; Basson, 1977; Gumede, 1981). The phrase "testing pupils" has been in great vogue in the literature on psychological services. In schools, this approach has led to emphasis being placed on psychometric testing rather than on psychological assessment or intervention (Basson, 1977).

Among Whites in the Republic of South Africa, psychological and pedagogical assistance to schools and clinics was provided from 1925. The Department of Bantu Education established a psychological services section for Blacks in 1960 (Africa, 1977; Basson, 1977; Gumede, 1981).

In psychological services rendered in Black schools, the individual learner, together with his problems and qualities, recedes into the background. Consequently, referral problems are not answered. Instead a process of data collection prevails. As such it is a means towards an end and not an end in itself. This measurement oriented-

approach has prevailed and the question is whether it meets the needs of children within the school setting.

In the vicinity of the University of Zululand, there are many schools. These schools - primary, secondary and high schools - are controlled by the KwaZulu Department of Education and Culture. They have no special facilities for children in need of psychological intervention because there are no psychological clinics. The lack of proper and effective therapeutic facilities for pupils or children in these schools prompted the writer to investigate teachers' perceptions of the need for psychological intervention within the school. Effective therapeutic assistance must be rendered to children in need. There is therefore justification for the present study.

Professor J.B. Schoeman of Medunsa prepared a list of points for discussion by the PASA Committee on Mental Health on the 14th of August 1986. The topic for discussion was :  
Psychological Services in the South African Context. A paper delivered on this topic highlighted the drawbacks in the provision and rendering of psychological services in the Republic of South Africa. The points raised have far reaching implications for the Black community in particular. Below is a summary tabulating some of the major points :

- (a) At the administrative level, the Department of Mental Health Services is too fragmented. These divisions are

- 7 -

serious limitations to the present service delivery system.

- (b) Services like Clinical Psychology are selective in nature i.e. they meet the needs of the affluent sector of our society e.g. those who can afford to consult psychologists in private practice.
- (c) "There are very few psychologists from population groups other than the White community" (Schoeman, 1986:2).
- (d) Closely connected with the above point is the lack of a definition of "psychologist" or his role in the Black community. Traditional faith healers, diviners and similar practitioners are the well known and acceptable means for a mental health service delivery system.
- (e) No modus operandi has ever been set for White psychologists to render psychological assistance in the Black community. It is maintained that there are many cultural barriers against therapeutic services of this nature. Surprisingly, in medical therapy however, White practitioners do not encounter problems with Blacks.
- (f) The absence of Black psychologists has delayed the implementation of an improved and relevant psycho-



logical service delivery system. "It is quite possible that the White planners of psychological services have not as yet given attention to those aspects which are the real priorities in the different population groups" (Schoeman, 1986:2).

- (g) Mental health services are centralised in urban areas. A framework must be developed to co-ordinate psychological services in rural-urban communities.
- (h) Limitations in the proper delivery of psychological services in the Black community are linked with some of the following factors : lack of South African data on effective psychotherapy; lack of community based aftercare facilities; unequal distribution of funds and facilities.
- (i) Psychologists in the Republic of South Africa are currently involved in the re-evaluation of their social responsibility and community involvement. This movement is attributed to the socio-political turmoil prevalent in the Republic of South Africa and the fact that there exists a relationship between mental health and conditions under which people live. In this regard, Schoeman, (1986:7) has this to say : "A core principle of community psychology is not to 'give' additional services and facilities to the community, but to

catalyze and harness the latter's resources. In this effort, members of the community are actively involved in identifying their needs and in establishing services. Such an approach ensures that local requirements, which differ from community to community, are given adequate consideration and consequently that relevant programmes are developed. In contrast, if needs were to be identified and services planned, implemented and controlled from a centralized agency, there is a very real risk that local needs will not be met."

This investigation is an attempt to do what has been outlined in the preceding paragraphs, that is to say, it attempts to identify the needs for psychological intervention, to select priorities and to make recommendations for the implementation of improved psychological intervention within the school.

## 1.2 STATEMENT OF THE PROBLEM

1.2.1 The De Lange Report (1981) made recommendations in connection with guidance services in Black education. These recommendations did not stipulate the modus operandi for the delivery of psychological and guidance services. The framework for the method of procedures to be followed in Black schools must still be developed.

There are many Black pupils who need various types of psychological help but assistance is not forthcoming. A significant contribution would be the drawing of a plan of procedures for rendering psychological help to pupils. This is of utmost importance.

- 1.2.2 There is a growing awareness of a need for a multi-disciplinary approach in the treatment of psychological problems. Such an approach emphasizes working or consulting with other professionals. In KwaZulu schools guidelines which will enable professionals (teachers, social workers, psychologists, medical practitioners, etc.) to operate effectively within the school have to be drawn up. The compartmentalization of knowledge in the field of education has made it impossible for professionals like educational/clinical/counselling psychologists and school counsellors to operate efficiently in KwaZulu schools. An outline of how professionals can operate effectively within a school will have to be formulated/provided.
- 1.2.3 There are specific problems inherent in the history of psychometric testing in Black schools e.g.
- (i) rejection of or disregard for individual differences
  - (ii) the assumption that group testing can be used as a valid and reliable yardstick for assessment, and
  - (iii) the absence of intervention programmes. In the assistance given by psychological services to

pupils in KwaZulu schools profitable use will have to be made of psychometric results. The individuality of the pupil, the shortcomings of group testing, staff training, staff participation, the different professional groups able to render services in KwaZulu schools, as well as the overall structure and process of the service will have to be carefully scrutinized. The outcome could be a service that is workable, controllable, efficient and child-centered.

1.2.4 Researchers in the field of Pedagogics have made significant contributions for improving the quality of teaching and learning. Little if any, has been done on the role of psychology within the school. Information over the broad spectrum of psychological services etc. will provide/furnish the fundamentals for an updated system/approach.

### 1.3 AIMS OF STUDY

A considerable amount of knowledge has been gained through descriptive studies of the work carried out by educational institutions and departments of education in the Republic of South Africa (Ndaba, 1975; Thembela, 1975; Lehobye, 1978; Gilbert, 1982). However, a more evaluative study needs to be undertaken in order :

- 1.3.1 to discover the nature of children's learning and behaviour problems which require psychological intervention in KwaZulu primary schools;
- 1.3.2 to find out whether there is any relationship between perception of learning and behaviour problems and the following teachers' particulars : (a) sex, (b) class, (c) age, (d) experience and (e) frequency of contact;
- 1.3.3 to determine the modus operandi that can be followed to provide for diagnosis, treatment and management of these learning and behaviour problems;
- 1.3.4 to assess teachers' recommendations for intervention strategies with regard to learning and behaviour problems.

#### 1.4 PLAN OF STUDY

This study is organised as follows :

##### 1.4.1 CHAPTER ONE

This chapter consists of : motivation for investigation in this field, statement of the problem, aims of the study and a plan for the organization of the whole scientific report.

#### 1.4.2 CHAPTER TWO

Chapter two provides a theoretical background to the study. This background considers and discusses the factors which influence the developmental trends of Black children in KwaZulu. Factors like the cultural background, children's need structure, basic psychological needs, and socio-economic factors are discussed. The extent of the influence of these factors is also assessed. A synopsis of a review of previous research in this field is also included.

#### 1.4.3 CHAPTER THREE

This chapter details the research design and methodology of the study. The design and method of investigation are discussed in detail. Described in this chapter are among other things, how data is collected, the selection of subjects, a plan for organization and analysis of data.

#### 1.4.4 CHAPTER FOUR

Chapter four concerns itself with the empirical investigation, that is to say, it describes how fieldwork was carried out and the scale administered.

#### 1.4.5 CHAPTER FIVE

This chapter contains the analysis and interpretation of data. The hypotheses formulated/postulated in chapter three are tested in this section.

#### 1.4.6 CHAPTER SIX

Chapter six presents the main findings of this investigation or study on the following : the views held by teachers with regard to the nature of learning and behaviour problems; how these can be managed, as well as teachers' perceptions of an effective psychological services delivery system within the school.

#### 1.4.7 CHAPTER SEVEN

This chapter concludes the research report by making recommendations for an improved psychological services delivery system within the school.

## CHAPTER TWO

### 2.0 A CONSIDERATION OF VARIOUS DEVELOPMENTAL TRENDS OF A BLACK CHILD IN KWAZULU AND EMPIRICAL STUDIES ON PSYCHOLOGICAL ASSESSMENT OF CHILDREN

#### 2.1 INTRODUCTION

Cultural artifacts are subject to change just as life changes. Standards of behaviour, attitudes and society have changed over the past decades. Such changes are not uncommon in societies. These changes affect attitudes of young and old people. Conceptions of deviance in behaviour change over time. What is considered right today may be viewed differently in a century ahead. About fifty years ago it was an acceptable and normal standard of behaviour to punctuate the answer to every question with "Miss" or "Sir". Today many teachers may find this unacceptable and would be irritated by such constant interjection of these titles (Mortimore, Davies, Varlaam, West, Devine and Mazza, 1983).

A school is a miniature community. There are certain rules and regulations governing learning activities and behaviour in the school community. These rules and regulations are also subject to change. Consequently, teachers tend to view learning and behavioural problems differently in different periods. It is on the strength of these changes that a consideration of developmental trends of a Black child in Kwa-Zulu is considered pertinent to the present investigation.



## 2.2 A TRADITIONAL PERSPECTIVE

The understanding of learning and behavioural problems in schools lies with the knowledge of what are acceptable or unacceptable forms of behaviour in a cultural group. In view of the aim of this study, it is imperative to give a brief outline of how children were brought up in a traditional Zulu society and within a family. This will be followed by a discussion of current life styles in the upbringing event.

Accounts of social and family life in traditional Zulu society are well documented in South African literature (Kidd, 1906; Kidd, 1925; Bryant, 1949; Vilakazi, 1962; Krige, 1965; Dreyer, 1980). An outstanding feature of traditional Zulu society was a community-oriented basis of life. Community-interest superceded individualistic values. No wonder the upbringing and socialization of the child was a communal responsibility and not the task of biological parents alone. The role of parenthood was shared with other members of the community. "In Bantu society it is always the group, seldom the individual that is important ..." (Krige, 1965:36).

Since the education of the child was the responsibility of the community there was orderliness in everyday life. Nothing was left to chance or could be discovered through

trial and error methods. Children were born into a culture with ready made solutions to developmental problems.

Individual conformity was not a response to group pressure but a response to cultural prescribed patterns. In this system of education, deviance in learning and behaviour was precluded. The rules and norms of behaviour were made explicit. "If a child misbehaved any adult had the right to reprimand or punish the child" (Dreyer, 1980:16). In this society the child acquired a single set of values because there were ready made framework models of behaviour. The problems of identity crisis, role conflicts and rebellions that we are accustomed to today were non-existent. It is surmised that members of the younger generation acquired their cultural tradition with easiness and great rapidity.

Different methods were used in the upbringing of children. From birth to death an individual passed through a series of culturally prescribed stages. The initiation into subsequent stages of development was preceded by a ceremony which signalled changes in the status of a person (Krige, 1965; Dreyer, 1980). Progression from childhood to adulthood was characterized by age-sets (Krige, 1965). These age-sets corresponded to the stages of development of a child. The roles, rules and codes of behaviour and learning activities of each age-set were culturally prescribed. The rules of behaviour patterns of one age-set towards members of other

age-sets were made known. The parents therefore shared the responsibility of upbringing with members of these age-sets.

The developmental phases of the individual coincided with age-set categories. At any given moment the individual was a member of a group or age-set. Since there were no formal schools, education and socialization were the functions of the age-sets. There were strict disciplinary measures governing learning activities and behaviour patterns of the members of the age-set. It is the writer's contention that authoritarian measures of discipline were partly good for the sole reason of training individuals to be responsible and to respect. These measures were partly bad inasmuch as they degenerated creativity, and mystified exploration and curiosity. A culture with orderliness and a body of divine knowledge does not permit individuals to add or subtract from an existing store of knowledge. "A consequence of ascribed criteria in traditional Zulu society was that the expectations of society for its adolescents were explicit, formal and generally unambiguous" (Dreyer, 1980).

An expression not uncommon with many cultures is that children are seen not heard. This expression has stood the test of time to date among the Zulus. Its implication is recognition of adults as authority figures. It accentuates the social distance between adults and children and is not borne out of an attitude of cold rejection of children.

Since the education of the child was the responsibility of all members of the community, respect for adults and wisdom which comes with age were the watch words.

The idea of social distance was extended to the sexes. Within an age-set the sexes did not mix. The age-sets were developmental phases with sex differentiation. That is to say the age-sets existed in a parallel sex differentiation in all aspects of the developmental phases. Co-education did not characterize age-sets but the sexes were clearly differentiated (Krige, 1965; Dreyer, 1980). From this practice, it is surmised that the problems of premarital intercourse and pregnancies were very rare. The measures of control and discipline were more stringent on girls after puberty.

It is on the basis of this prohibitive nature of the traditional Zulu society that behaviours considered as problems within the community were not widely prevalent. The learning activities of children were modelled by several significant others in the community. The traditional Zulu child acquired the cultural traditions with great rapidity and extreme simplicity.

### 2.3 A CONTEMPORARY VIEW

The contact between the Zulus and the Whites has resulted in

changes in traditions. Such changes are often perceived to be undirectional. The Western modes are taken as modifiers of the traditional Zulu practices. Christianity, industrialization, and formal schooling (Dreyer, 1980) are widely accepted change agents for cultural modifications.

The traditional way of life of the Zulus stressed the principles of conformity and compliance whilst the Western style of life views individualism and personal striving as significant components of child development. As a result many Zulus have learnt to put personal interests before community interests. The role of the father as a figure of authority has been considerably modified. This is a response to the wave of industrialization. A different system of economy has emerged and paved the way for migratory labour. This reduced the authoritative figure of the father and accorded women power and status in the disciplinary measures of children. History reveals that women's authoritative guidance (Dreyer, 1980) has been tested and found wanting to the children's demands. There are no longer members of the age-sets to discipline growing children. "All this caused a marked increase on unruly, even delinquent behaviour in young people" (Dreyer, 1980:23).

Learning and behavioural problems in schools must be viewed in the light of these changes. The adult's role as an educator has been greatly reduced. Children have increased

latitude to take independent decisions and courses of action which cannot meet with adult sanctions. It is obvious that learning and behavioural problems have a psycho-social basis.

These cultural changes have brought about diverse and complex results. The extended families which have played significant roles as "cushions" for separation anxiety have dwindled. There is therefore no longer a communal basis for the solution of individual problems. The individual remains accountable for his existence, and cannot fall back on community members in the face of trouble. The collective view of life has now been replaced by individualistic attitudes towards life. The familiar response to such changes is uncertainty, confusion, despair and identity crisis.

Although schooling became a cultural change agent, the Zulus did not discard all their customs and values. Instead they have learnt to compartmentalize their cultural practices. No matter how subtle these practices are today, they influence the life of both uneducated and educated Blacks. The process of striking a balance between traditional beliefs and Western life or behaviour is evidenced in isolated instances, by wearing skin amulets around the wrist whilst raising arms in supplication to Jesus.

Such cultural changes did not offset children's respect for adults. Just as was the case in traditional settings, parents and adults in general, are generally held in high esteem among the Zulus. Respect for adults is a characteristic shared by other African cultures in Southern Africa and possibly in Africa as a whole. These cultures enforce obedience and unquestionable submission to authority figures in the upbringing of children. There is thus blind obedience to adults which is reflected in the doctrine that "a parent can never be wrong", and even if he or she is wrong, the child is expected to obey (Mwamwenda, 1989 : 307-308). Differences between the Black and White university students in attitudes towards education and values (Danziger, 1957; Mann, 1962) and authoritarianism can be traced to differences in family structure, child-rearing practices, Bantu education and social status of Blacks in the Southern Africa (Nene 1990: 32). This attitude is not restricted to one's biological parents. Adult members of the community are accorded same respect. Any sane adult person regardless of his or her race of origin, is generally accorded the same respect as one's own parents. The Zulus have this distinction. It is considered a disgrace to misbehave towards an adult and children are brought up in this style. The transfer of responsibility of discipline by Zulu parents to teachers (Dreyer, 1980) does not signify admission of failure of parenthood. It may be considered an appreciation of roles of formal schooling in the upbringing of children in as much as schools came to replace non-formal age-sets in the education of children.

Despite the prevailing political turmoil in the Southern African schools for Blacks, students' perceptions of their teachers (Gilbert, 1982) bear testimony to the principle of respect for adults. Gilbert's study (1982) reports that students perceive teachers as having good understanding of their problems and are approachable. Generally speaking, pupils are very positive about their teachers. This finding reveals that the pupils' occasional violent behaviour towards teachers, property and the public at large, is presumably brought about by incidental pressure groups. Such pressure groups emerge as transient disorders.

#### 2.4 UNIVERSAL CHARACTERISTIC NEEDS OF CHILDREN

Children are born and brought up. Different cultures have different lifestyles and childrearing patterns. The personality traits which emerge later on in life are the products of interaction between nature and nurture. It is a truism that children in general - worldwide share certain characteristics and needs. Similarities in children are in preponderance as compared to differences. Our first task is to identify universal characteristic needs of children. These needs together with cultural life experiences dealt with in the previous sections, provide the necessary theoretical background for conceptualization of learning and behavioural problems as manifested by pupils in KwaZulu



schools. This in turn will lead us to a decision level concerning the nature and manner of delivery of therapeutic measures.

Children's physical, social, emotional and intellectual development rests with satisfaction of needs. "The organic potentialities do not develop at all in the absence of environmental influences. This is true of physical potentialities; it is even more true of mental ones. The development of the mental potentialities presents virtually infinite possibilities under the action of varying environments ...." (Montagu cited by Schmidt, 1973:20). Human offspring remain dependent for care and satisfaction of needs for longer periods of time than any other living animal on earth. It is this dependency which prolongs human interaction and makes it a premise for humanization.

Vulnerability or proneness to learning and behavioural problems is a complex process. It cannot be accounted for by an inherited robust nervous system or weak body constitution. These learning and behaviour problems should not be viewed as the property of the child but must be seen as products of interaction between the child and his environment. This implies that an attempt directed at the study of learning and behaviour problems should consider as its premise, patterns of upbringing. The focus on race relations and growth patterns of children (Burman and

Reynolds, 1986) has left potent factors of human experience in the family and community out of the picture.

The child must live fully in the bond of unity with its educators in the pedagogical community. Within this pedagogical community dysfunctional upbringing is inevitable. There will always be a kind of shortcoming or deficiency because no system of upbringing is without faults. In essence, upbringing cannot guarantee an unadulterated success. The correlate of governmental discrimination measures with deficiency in the upbringing is illogical at best, just as it cannot be justified that there is a direct causal relationship between governmental discrimination and excessive copulation of human beings or single parenthood. Such conclusions are often reached through non-experimental research. This mode of reasoning shows weaknesses of non-experimental research which tends to be a descriptive quasi-design thereby blowing inferences disproportionately. This type of research lacks power of randomization and has a high risk of improper interpretation.

An association can be found however, between dysfunctional upbringing and incidence of occurrence of learning and behavioural problems in the community. That is to say, disturbed human relations within a family can be one source of problems in the learning or behaviour of children. "A child who grows up under such circumstances must inevitably

build up disturbed world relationships and thus reveal behaviour and/or learning problems .... One is thus concerned with the psychology of behaviour or learning problems which are the result of a pedagogical situation or a community with pedagogical shortcomings. Although the learning problems reveal themselves for the first time at school, they can be caused long beforehand by serious shortcomings in the pedagogical situation" (Nel, 1974:74).

Whilst the above assertion is acknowledged as true, the present study concerns itself with assessment of learning and behavioural problems as they are manifested in KwaZulu schools. It is true that many of the children's problems manifested at home and in school are normal growth problems which are or can be overcome with age. Difficult in the definition of learning and behavioural problems is a detaining factor. To overcome this obstacle, the definition must relate to a specific situation namely the school. It is in this situation where the study purports to examine teachers' views or perceptions of the nature of learning and behavioural problems. Knowledge of the nature of these problems and how they manifest themselves within the school, will enable us to make decisions regarding an intervention model. This is an affirmative action in the light of prevailing problems in KwaZulu schools.

As it has been said in the preceding paragraphs, youngsters

have many characteristics in common although cultural differences do exist. A developmental approach to the study of man emphasizes similar stages of development. There are certain developmental needs that must be met during the growth process of the individual. There are basic needs that must be satisfied first before higher needs can emerge.

Regardless of cultural differences all children need proper food, clothing, health care services, and all forms of protection to survive. Failure to satisfy these needs leads to outcomes one cannot predict with certainty. Need deprivation can be regarded as a dysfunctional educational situation (Van Niekerk, 1982). The disturbance in the upbringing of the child may have serious repercussions on his/her learning and behaviour.

Children address an appeal for love and warmth from parents and educators. Upbringing is a major task of parenthood and therefore of education. Existence derives meaning from being wanted instead of being tolerated. As the child gets older this need for unconditional love is extended to people other than parents. These people may include peer groups, communities, societies and institutions. The belongingness need is stronger in man because of his gregariousness. It is surmised that the satisfaction of this need leads to the development of a healthy and well-balanced or well adjusted personality. It's deprivation might engender a feeling of

dismay, insecurity and anxiety. Amongst other things, the essential ingredients for a stable personality development therefore are love, acceptance, parental devotion and society's willingness to accept and educate the individual. In the upbringing of children, we seek to discover modes in which children can be loved and accepted instead of being rejected; a method to allay emotional lability in children; and finally a form of upbringing that is halfway between the two extremes of rejection and overprotectiveness. Unfortunately an average cannot be found in these practices because they are qualitative and categorical human variables (Donahue and Nichtern, 1965; Mayer, 1973).

**It is not the aim of this study to trace the development of needs in children. This section aims merely at identifying common human traits in the upbringing of children.** These traits are important in the understanding of learning and behaviour patterns of children. Through interaction with educators, the child observes adults' demonstrating guidance, trust, respect, authority and confidence. The child internalizes these activities. Thus in the proper system of upbringing the child develops feelings for support, security and confidence. It stands to reason that a lack of one or more of these traits in the upbringing is more likely to lead to dysfunctional education. Whenever the relationship between the parent and the child is abounded with mutual love, respect and trust, education flourishes (Gunter, 1974).

Several studies (Vrey, 1984:26) lend support to the pronouncement that dysfunctional parent-child relationship can lead to problem behaviour in children. It is on the basis of these empirical data that Vrey (1984) advocates sound pedagogical relations between the child and parents. If the abovementioned needs are not met and the parent-child-relationship is not pedagogically sound, the probability of occurrence of learning and behavioural problems during one's school life becomes imminent.

The conditions which lead to learning and behavioural problems are varied (Mortimer et al., 1983). The affective education stressed in the above section is just one condition that must be met to obviate learning and behavioural problems. Certain intrinsic conditions exemplified by learning disabilities, sensory handicaps, mental retardation and serious emotional disturbances, to mention but a few, account for learning and behaviour problems. On the other hand, extrinsic or environmental conditions like : the lack of opportunity to learn, cultural disadvantage, economic disadvantage, and inadequate instruction are included among sources of learning and behaviour problems (Kirk and Gallagher, 1986; Herward and Orlansky, 1984).

## 2.5 A TAXONOMY OF CHILD PSYCHOPATHOLOGY

### 2.5.1 DIFFICULTIES IN THE DEFINITION OF TERMS

The system of classification and categorization of childhood psychological disturbances has been a problem since 1952 when the American Psychiatric Association (APA) published its first edition of Diagnostic and Statistical Manual of Mental Disorders (DSMI). The development of the second edition (DSMII) in 1968 was a further attempt of refinement of the system of classification of psychological problems. The DSMIII which is a third edition was completed in 1979. This edition is generally theoretical rather than etiological in approach. This theoretical approach is basically descriptive. The definitions of the disorders consist of the descriptions of clinical features of the psychological problems. It is obvious that the DSMIII version is not final. It is just an attempt at an elaborated system of classification of child psychopathology (APA, 1985).

Cumes (1986) has reviewed several studies on classification of child psychopathology. These studies reveal that researchers use multivariate analyses to classify childhood disorders, or they use teachers' reports or ratings to classify syndromes of behaviour problems. It is clear that no one system of classification has been agreed upon, to categorize childhood disorders.

There is no adequate definition of psychopathological

conditions or problems among children of schoolgoing age. Any measure of emotional problem, deviance, personality or behavioural trait is not precise enough to provide a foundation for comprehensive definition. The problem of definition and classification of learning and behavioural problems is made difficult by the fact that different conceptual models use different constructs in the description of disorders. Furthermore, many childhood disorders are regarded as normal growth problems and usually dwindle as the child grows older.

There is a general confusion and lack of agreement among specialists in the discipline of Special Education about the most fitting terminology for learning and behavioural problems. The definitional deficit of learning and behavioural problems retards development and advancement of theories of assessment and intervention. The literature bears this out (Leach and Raybould, 1977; Swanson and Reinert, 1979; Thompson, 1981; Hallahan and Kauffman, 1982 ; Heward and Orlansky, 1984; Kirk and Gallagher, 1986). Learning and behavioural problems are described by various terms such as behaviour problems, emotional problems, emotionally disturbed children, behaviour-, conduct-, personality-, or neurotic-disorders, special or exceptional children, children in conflict, learning or behaviour or emotional difficulties, or children with learning disabilities.



Behaviour and activities of children, and also those of adults, do not fit nicely into clearly defined categories, for one reason different causes can give rise to the same symptomatology. In addition, different approaches to the study of children's disorders lead to the development of different sets of taxonomy of child psychopathology.

"Because there is no universally accepted definition of problem behaviour, it is not possible to establish the prevalence of such problems in any absolute way. The notion of 'behaviour problem' as used in the literature, varies from study to study and consequently prevalence figures are based on subjective perspective and are influenced by the context in which the judgement is made" (Cumes, 1986:35).

In the present investigation the term "learning and behavioural problem" shall be used as a generic term, to include whatever is problematic in the education of the child as per KwaZulu teachers' perceptions within the school. Leach and Raybould (1977) believe that teachers' perceptions and reactions to problematic occurrences is a first step in the assessment of school problems. They maintain that children's ability to gain competence in the basic school tasks, and their behavioural adjustments within the school vary in accordance with teachers' reactions. Zax, Cowen, Izzo and Trost (1964) hold a similar view. In this regard, Faust (Leach and Raybould, 1977:16) has this to say : "there

are few inherent stable traits of the individual and individual characteristics can change as a function of their interaction with the environment." From this assertion, it can be deduced that teachers are significant determinants of pupils' behaviour. They serve as precipitating or maintaining factors of behavioural symptoms manifested in the school situation. Furthermore, this implies that teachers can handle learning and behavioural problems thereby minimising the probability of occurrence of such behaviours. Inversely, teacher's control of pupils' behaviour will serve to enhance pupils' learning tempo (Leach and Rayboulds, 1977). The question to be posed at this juncture is to what extent are teachers in KwaZulu schools equipped with skills to act as behaviour modifiers? Probably learning and behavioural problems make the job of teaching a tedious and complex task for most teachers. This condition warrants the present investigation.

The above discussion reveals that there are no clearly entrenched categories or catch-all-terms for learning and behavioural problems. Children's learning and behavioural problems are often judged by parents, experts and teachers and therefore "adults' observations typically provide the data base for psychological assessment of children's disorders or learning and behavioural problems" (underlined added) (Achenbach and Edelbrock, 1978:1277). It is in the light of the prevailing evidence and partly because children

or students do not on their own accord report or seek advice from adult professionals, that the present study aims at psychological assessment of pupils' problems from the teachers' point of view. Based on the teachers' perception and with the help of the operational definitions the problems will be sorted out.

Swanson and Reinert (1979) provide a broad conceptual base for learning and behavioural problems. They use the term "children in conflict" which appears to be a generic terminology. It is a useful umbrella term to incorporate divergent views on pathological conditions of children. They maintain that a child in conflict manifests behaviour detrimental to his personal or educational development or could have similar effects on his peers. Nothing detains us from labelling the child, maladjusted, if he or she evinces such symptoms. To this end, Van Niekerk (1982) prefers the phrase : "child in educational distress" and puts emphasis on the role of upbringing and teachers' contribution to dysfunctional education.

#### 2.5.2 CONCEPTUAL MODELS AND THEIR IMPLICATIONS FOR PSYCHOLOGICAL ASSESSMENT

There are several models or approaches in use to understand children's problems. These are useful tools which circumvent the confusion of an endless list of terms, categories and

labels. These models form the basis for better understanding and explanation of pathological conditions among school going populations. The models act as practical guides for the understanding of children's disturbances (Swanson and Reinert, 1979; Apter and Conoley, 1984).

#### 2.5.2.1 PSYCHODYNAMIC MODEL

Sigmund Freud was the originator of a school of thought known as Psychoanalysis from which the psychodynamic model is derived. One basic tenet of this approach is that disturbed behaviour or learning is the product of inner conflict. This model places heavy emphasis on the influence of past experiences on present overt behaviour. It is believed that past experiences which are largely unconscious to the learner, determine present perceptions and behaviour. Apter and Conoley (1984:60) enumerate the following educational implications of this approach :

- "(i) educators must realise that troubled children are frequently not conscious of the rationale or motivation for their inappropriate behaviour ...
  
- (ii) Children do not always premeditate their actions ... and cannot always consciously control their behaviour, and therefore punitive measures must be avoided.

(iii) Hostility directed towards the teacher is an irrational response to inner unconscious conflict.

(iv) Behaviour which is a response to intrapsychic conflict appears to be inconsistent and inappropriate to observers".

It is obvious that this approach is of little value to the teacher, because it is based on hypothetical constructs and operations. The child's observable maladaptive behaviour cannot always be explained in terms of unobservable conflicts. The model overlooks environmental or situational determinants of behaviour. This approach details no account of determinants of appropriate and adaptive behaviour.

#### 2.5.2.2 BEHAVIOURAL MODEL

A school of thought which has made significant impact in the field of educational practice is called Behaviourism. The behavioural principles on learning started in the laboratory and were later applied in the classroom to replace the psychodynamic model during the early 1960's (Apter and Conoley, 1984).

The basic principle behind this school of thought is that both adaptive and maladaptive behaviours are learnt. Life experiences are therefore building blocks of behaviour.

Swanson and Reinert (1979:6) say that "... emotional or behavioural deviance is the definable consequence of either mislearning or restricted learning and that normal, healthy, or desirable behaviours may be acquired to replace or supplement undersirable behaviours by consistently applying established principles of learning".

This approach focuses on observable and overt behavioural dimensions. Learning and behavioural problems are judged against established standards or criteria. The conflict of imaginary Lilliputians in the person's psychological makeup is totally excluded in conceptualization of problem behaviour. The framework provided by this model leaves the teacher with ample latitude to view the child's problem within observable known parameters. It is for this reason that this approach has gained popularity among specialists who work with children and for the fact that literature abounds with techniques or methods for immediate control of classroom dysfunctional behaviours (O'Leary and O'Leary, 1977; Swanson and Reinert, 1979; Herbert, 1981; Apter and Conoley, 1984).

The behavioural perspective stresses the point that learning of appropriate or inappropriate responses takes place within the context of a human environment. This implies that the social environment serves to reinforce acquired behaviour. Hence teachers and parents are significant behaviour

modifiers. "Teachers and parents are the individuals who do in fact provide many of the antecedent and consequent events of the child's behaviour and thus are in the most advantageous position to alter the child's behaviour" (O'Leary and O'Leary, 1977:19). This assertion does not however exonerate psychologists from rendering direct service to the problem child or acting as consultants to parents and teachers.

#### 2.5.2.3 BIOPHYSICAL MODEL

This is a medical model which provides a different perspective of learning and behavioural problems. According to this model problems emerge as outcomes of disturbed balance in the systems within the body. Learning problems, behavioural and emotional disturbances are collectively regarded as a response to a state of biological disequilibrium. These disturbances are pathological products of deficiencies in the person's bodily systems.

This perspective views the child as a computer-like object with three classes of variables namely, the input variables, the throughput (organismic) variables and output variables. The child who successfully integrates these variables is 'normal'. "Central nervous system dysfunction, however, would make it less likely that a youngster could process information effectively, causing him or her to be less

adaptable and consequently more prone to psychological disturbances" (Apter and Conoley, 1984:65). Viewed from this angle, learning and behavioural problems are the external manifestation of internal organic pathology. The sources of the problems might be one or a combination of dysfunctional genes, neuropsychological factors, nutritional disorders, neurological disorders and developmental lags in areas like neurological organization, perceptual-motor learning, sensory integration etc. (Apter and Conoley, 1984). According to this approach, the biological and physical aspects of the child are the sources from which learning and behavioural problems stem. In this regard Swanson and Reinert (1979:95) have this to say : "The medical model provides the practitioner with an approach to behaviour problems that focuses on the child rather than the social milieu. The assumption is made that if the 'problem' can be removed, the child will be immune to the problem, irrespective of the social context in which it might occur".

#### 2.5.2.4 SOCIOLOGICAL MODEL

In sharp contrast with the biophysical model which lays emphasis on internal biological disturbances, the sociological approach views the environment as a determinant of learning and behaviour problems. The child interacts with physical and social environments. The sociological model has attributes in common with behaviourism which views behaviour



as a product of conditioning life experiences or events. By analogy, the agents of socialization are the conditioning factors for this approach. The basic tenet for this approach therefore, is that for a given group of people there exists a system of rules governing activities and behaviour of the members. Learning and behaviour become problematic if marked by deviation from the established sets of norms. Judgement made by the ingroup members in particular, qualifies behaviour as incorrigible, undesirable, destructive and deviant (Frazier, 1976).

Thus the conception of learning and behavioural problems tends to be relative instead of being absolute and universal. The point of departure of the sociological approach is cultural relativity of norms. This is the essence of a deviance perspective in contrast with a disability perspective. The sociological perspective de-emphasizes pathological conditions and emphasizes breaking of the rules which are explicit for ingroup members yet implicit for outgroup members. For example a wide yawning in the presence of others is tolerable in one culture. Members of another culture may raise their eyebrows in response to this kind of behaviour. Within the same culture many forms of behaviour may be unacceptable to the members of the subgroups or across the sexes. Furthermore, acceptability of behaviour is a function of situational context. Shouting at a soccer match raises little concern or reaction but is totally forbidden in the church or classroom situation.

#### 2.5.2.5 ECOLOGICAL MODEL

The ecosystem's standpoint is the ecological environment, that is the notion of the interaction between the child and various aspects of his environment. The human child lives in an open world and is subject to random environmental moulding effects. The whole process of child development takes place within the context of microsystem, mesosystem, exosystem and macrosystem.

This perspective stipulates that emotional, learning and behavioural problems are entities outside the body of the child. Problems of this nature are not the properties of the child but the outcomes of interactions. It is the absence of balance in the ecosystem which accounts for the development of psychological problems. This means it is not the child alone who has a psychological problem, but the source is disturbance in the child's ecological environment. The goal of therapeutic intervention within the school should therefore be the systems rather than the child alone. Intervention programmes should address the systems so that these function properly for the benefit of the child.

The systems can be distinguished as, at the most basic level (Elliott and Witt, 1986; Reynolds and Gutkins, 1982) there is a microsystem which consists largely of the child's immediate activities in relation to the physical contact

within the home, the church, the school and peers. A combination of any two or more microsystems produces the mesosystem. The mesosystem can result from the interaction between the home and the school. The microsystem and the mesosystem are those settings in which the child is directly involved and in turn affect his personality.

On the periphery of the child's world relations there are two systems namely, the macrosystem and the exosystem. The amount of influence exerted by these systems is disproportionate to the degree of involvement of the child with the systems. These two systems ensure uniformity in form and content of the lower-order systems. They dictate to the child the modes of satisfaction of needs of the basic systems, and they exert tremendous influence on the child despite the fact that the latter is not directly involved in them. The parents' work conditions and government policy lie outside the child's direct involvement yet frustrations borne out of these situations are communicated indirectly to the child thereby exerting influence.

Any approach to psychological assessment of children's learning and behavioural problems must explore the ecosystems. It is a dubious proposition that a focus on cognitive aspects of the child to the total preclusion of the ecosystem could be worthy of the name therapy or psychological assessment. A conceptualization of learning

and behavioural problems in terms of disturbance of these systems is more meaningful than a single lens model of psychological assessment.

#### 2.5.2.6 DEVELOPMENTAL APPROACH

This approach sees learning and problem behaviour "not as abnormal but as 'lags' in skills or segmentations of behaviour that prevent the child from manifesting age-appropriate development" (Swanson and Reinert, 1979:7). Children of different developmental stages manifest different characteristics in behaviour and learning. What is a common characteristic pattern for each stage of development is considered normal - and therefore a criterion-reference measurement for assessment. According to this model, children with learning and behavioural problems are those who deviate from an age-appropriate level of adaptation to their educational tasks and in their repertoire of behaviour. Van Niekerk (1982:40) says : "The child who has in some way been impeded or hampered in respect of his adequate progress towards adulthood, finds that his educational situation differs from that of the child who is developing adequately. The scientific investigation (Psychological assessment) is then directed on the one hand at this different situatedness of the child .... and on the other hand at the different nature of the education and tuition" (brackets added).

#### 2.5.2.7 LEARNING DISABILITY MODEL

This approach views the source of the problem as located within the body of the child. The disease within the body creates a deficiency or discrepancy between the potentiality of the child and actual performance. This might lead to engagement in disturbing behaviour. According to this approach, a behavioural problem is symptomatic of the underlying pathology. "The assumption behind the learning disabilities approach as related to the child's behavioural functioning is that remediation of academic and information processing deficits tends to decrease behavioural problems by assisting the child in decreasing the discrepancy between his or her capacity and the learning requirements of the classroom" (Swanson and Reinert, 1979:7). While this conception may be valid it is difficult to state with precision whether learning problem precedes behavioural problem or vice versa. Similarly to the medical model the learning disability approach includes, according to Apter and Conoley (1984:17) the following conceptions :

- "(i) Emotional disturbance is believed to be a disease caused by internal neurological or psychological disorders.
  
- (ii) The disease causes the individual to engage in 'disturbed' behaviours, which in turn may be viewed as symptomatic of the underlying illness.

- (iii) Consequently, it is not overt behaviour that marks an individual as emotionally disturbed, internal forces must be thought to exist.
- (iv) Diagnosis of disturbance must include some attempt to measure internal functioning. The focus must be on etiology : what causes the behaviour.
- (v) Emotionally disturbed states are believed to be fixed conditions; they are not viewed as culturally relative.
- (vi) Treatment must focus on curing the individual's underlying pathology, not simply on removing symptoms".

The above discussion forms the major point of departure for the disability perspective in comparison with the deviance perspective detailed under sociological model. Similar to the medical and psychodynamic models, the learning disability approach views learning and problem behaviours as located within the body of the child. Whilst the medical approach views the source of a problem to be biological or physical, the psychodynamic approach sees the source of the problem as psychogenic. The learning disability approach finally attempts to combine biophysical and psychogenic sources.

#### 2.5.2.8 COUNTER-THEORY MODEL

The counter-theory approach focuses on the uniqueness and freedom of the individual. The study of human behaviour is accepted as necessary to promote or celebrate deviance instead of devising curbs, or remediation or therapy for such behaviour (Apter and Conoley, 1984:70). In terms of this approach abnormality should be allowed to flourish to promote diversity in behaviour and exercise of freedom of choice for each individual. This seems to be an overemphasis and oversimplification of diversity and individual freedom. One can scarcely visualize a world of this nature within the realm of imagination.

The main aim of the proponents of this approach is to bring to an end all forms of institutionalized education because of its dehumanizing effect on children. The latter phrase is used as equivalent of conformity. The followers of this approach advocate free school movement and they view abnormality as normality and an adaptive process of the individual to an abnormal environment. Emotional problems are conceptualized as residing in the environment and not in the child. This idea is not foreign to the ecological model.

The counter-theory approach appears to be radical and of little or no significance to the present study. We are concerned with school problem conceptualization and possible intervention techniques for these problems. The counter theory approach does not entertain the ideas of intervention

techniques or remediation. It advocates changes in the existing systems of education. Our main objective is not to change the systems of education but to provide outlets to problems in the systems. The systems of education have stood the test of times. The developments in therapy, of whatever nature, have not yet and will not reach ultimate perfection. It is for this reason, that there are constant innovations in medicine and psychotherapeutic techniques.

#### 2.5.2.9 PSYCHOEDUCATIONAL MODEL

This approach represents an attempt to combine theories of psychodynamics and education. Despite the name, psycho-educational approach, and the fact that some of its components are derived from psychoanalysis "it is an amalgamation of psychological practices that can be used in conjunction with education" (Swanson and Reinert, 1979:258). This is an eclectic approach which comprises (Swanson and Reinert, 1979:8) the following major assumptions :

- "(i) behaviour has various causes, although the same cause can be expressed in various forms;
- (ii) teacher-pupil interaction is important;
- (iii) all learning must be invested with feelings;
- (iv) inappropriate behaviour can be used to teach new



behaviour through understanding and coping with stress;

(v) focus on instruction is to alleviate the discrepancy between behavioural potential and the child's current functioning; and

(vi) limits imposed on children can be a therapeutic example of caring and protecting children".

This appears to be under all circumstances as, the most flexible approach to the understanding and treatment of school problems. In the first place it answers the question of how inappropriate behaviour occurs. Secondly it emphasizes the aspect of intervention. There seems to be ample latitude for the application of various behavioural modification techniques in the use of this approach. The emphasis is not so much on the source of the problem but on the mode of therapeutic intervention. Many of the intervention skills suggested in this approach can be taught to ordinary classroom teachers. The psychoeducational approach appears to be an extension of teacher training programmes to include school psychology. It equips teachers with the knowledge of psychological skills for dealing with the everyday problems of pupils. There is no use of labels but behaviour manifested by the child is described in terms of how it occurs, frequency of its occurrence, its intensity, number of related

problems manifested, duration of its manifestation, sense or meaning of its display by the child. It is on the basis of this form of assessment that the intervention programme is designed to fit the nature of the presenting problem and uniqueness of the individual child. This is not a rigid theoretical approach of a particular system of therapy derived strictly from a particular school of therapy. It is rather a flexible kind of intervention programme.

## 2.6 EMPIRICAL STUDIES ON PSYCHOLOGICAL ASSESSMENT OF CHILDREN

Very little if any, evidence is available on the prevalence of learning and behavioural problems in children of school going age in the Republic of South Africa. The problem is aggravated by lack of precision with regard to the exact nature of learning and behaviour problems. There is an absolute dearth of scientific literature on psychological assessment of Black children's learning and behavioural problems in this country. A recent study by Cumes (1986) examined English-speaking teachers' perceptions of emotionally disturbed primary school children.

Investigations have been carried out world wide and they are pertinent to our situation in this country. Several studies (Rutter, 1967; Spivack and Swift, 1972; Spivack and Swift, 1973; Cowen, Dorr, Clarfield, Kreling, McWilliams, Pokracki, Pratt, Terrel and Wilson, 1973) have appeared on identification

procedures or diagnostic systems for children with learning and behavioural problems. Attempts have also been made with regard to classification and categorization of childhood behavioural problems (Rutter, 1965; Shepherd, Oppenheim and Mitchell, 1966). There is a growing body of literature (Kaplan and Sprunger, 1967; Kelly, Bullock and Dykes, 1977; Cumes, 1986) on the perceptions of children's behavioural problems and attitudes. The implications of these studies are consequent classroom interactions. The comparison of children's, parents', teachers', and psychologists' perceptions of problem behaviour has attracted several investigations (Beilin, 1959; Ryle, Pond and Hamilton, 1965; Ziv, 1970). Not only perceptions but also managements of dysfunctional behaviours of children have been the point of focus (Gilmore and Chandy, 1973; Thompson, 1981). Williams (1974) has done justice to the review of literature on behaviour problems in the school. His work details the nature of behaviour problems, identification of maladjusted children, its causes and methods of treatment.

The expansion of knowledge on learning and behaviour problems of school-going children is remarkable. It has not however, taken the same pace throughout the world. This is even more particularly so with regard to Blacks in the Republic of South Africa. One is tempted to believe that this situation accounts for incorrigible behaviour of Black students in the country. A situation exists in which

children are indifferent to learning activities but are more inclined to politically activist behaviour in schools (Gilbert, 1982). This situation is dissimilar to other parts of the world or at least the so called first world countries in which mental testing followed by school psychology flooded the educational arena after the first World War.

In clinical practice, and in child guidance centres in particular, several techniques are combined in the process of assessment of the child. This process is usually preceded by a questionnaire for screening purposes. It is on the basis of the findings derived from the initial screening questionnaire that tests are designed for further assessment. School teachers are in a good or central position, than a visiting psychologist, to make observations of pupils' behaviours. It is in this context that questionnaires completed by teachers are considered particularly useful screening devices during intake interviews and for research purposes (Rutter, 1967). It is therefore not surprising to find that many studies reviewed in this section point to the use of questionnaires, rating-scales and checklists in the identification of children with learning and behavioural problems.

The use of questionnaires lead to a descriptive model for explanation of learning and behaviour activities of

children. A heavy reliance on questionnaires may be partly due to the lack of precision in testing or laborious-time consuming individual intelligence testing procedures. This results in a dearth of literature on the relationship between learning problems and I.Q. scores. It is however, generally assumed that problem behaviours interfere with normal school learning. Equally true is the notion that specific learning disabilities may give rise to behavioural problems. Personality traits and overt behaviour characteristics lend themselves to descriptive evaluations more than the less observable characteristics associated with specific learning disabilities.

Wickman (Rutter, 1967) broke the ice in 1928 in the field of assessment of children's behaviour in the classroom. The scale he devised has been adopted and modified for use by many subsequent researchers. Having reported on the merits and demerits of this scale, Rutter (1967:1) has this to say :

"It appeared that there is a need for a reliable and valid short questionnaire suitable for to be used with children in the middle age range, which teachers could complete fairly quickly (so that they might reasonably be expected to fill in the scale for a whole class of children for survey or

other purposes), which concerned behaviour occurring in a school situation, and which could be used to discriminate between different types of behavioural disorder, as well as discriminating between children who show disorder and those who do not".

It was on the basis of these considerations that a new scale was developed. This scale proved to be an efficient screening device in the selection of children with emotional or behavioural problems, which is also a valid discriminator between neurotic and antisocial conditions. Furthermore, Rutter (1967) reports several merits for use of his 26-item scale. The advantages of this scale are amongst others, short administration time, ease of scoring, a useful part of the routine school report, a useful measure of the child's behaviour in the school, a useful measure of the child's behaviour in the school situation and the scale can be used with children in the middle age range i.e. 7-13 year-old children.

This scale appears to be a useful tool for research into learning and behavioural problems of pupils. This expectation is derived from the background knowledge that the scale cannot be used to identify children with monosymptomatic disorders, less common disorders of a circumscribed kind and symptoms only manifest outside the school situation (Rutter, 1967).

Sparks (1952) used a five-point scale to measure teachers' attitudes towards children's behaviour problems. The aim of this study was to assess both teachers' attitudes towards behaviour problems that were seriously detrimental to the child's future adjustment and teachers' attitudes towards those problems, that were troublesome to teachers.

A representative sample of 762 elementary-school teachers was selected. The research instrument consisted of Form I and Form II questionnaires which were given to two groups of teachers in each school. The following variables and their levels were noted with respect to each respondent :

A. Educational level :

- (i) teachers with less than a bachelor's degree
- (ii) teachers with a bachelor's degree or more

B. Years of teaching experience

- (i) teachers with 5-10 years of teaching experience
- (ii) teachers with more than ten years of teaching experience.

A control group of 61 graduate students taking a course in educational psychology at the State University of Iowa was employed in the study. Half of these students received Form I and the other half received Form II of the questionnaire.

The results of this investigation showed that the rank difference correlation between the scales' ratings of teachers who used Form I and those who used Form II was not significant. The significant mean ratings difference between Form I and Form II was an indication that the teachers considered the problems in general to be more serious than troublesome. Furthermore teachers' ratings were not influenced by psychological categories. After all teachers are not mental hygienists. The variable of educational level and years of teaching experience did not make a great deal of difference in the way the problems were rated.

The deduction to be made from the above study is that teachers are more concerned with learning and behavioural problems in relation to their detrimental effects on children than the extent of troublesomeness of these problems to their job of teaching.

Furthermore, Rutter (1967) formulated the following deductions from Wickman's study :



- that teachers rank misbehaviour in the classroom as the most serious problems while mental hygienists rate personality and emotional problems as most severe;
- that teachers concern themselves more with children's developmental and adjustment processes and less with learning and behavioural problems in the classroom.

Although several criticisms were levelled against Wickman's study (1928) subsequent investigations substantiated his findings. Ziv (1970) conducted a study in Israel. The aim was to test views held by teachers, psychologists and children towards children's behaviour problems. The subjects were instructed to rank order a 30-item list of behaviour problems. This was a shortened list of Wickman's 50-items. Ziv (1970) wanted to test the following :

- (i) whether there was any positive correlation between teachers' and psychologists' rankings of behaviour problems of children;
- (ii) whether the correlation coefficient for teachers and children will be higher than that for childrens' and psychologists' rankings;
- (iii) whether the correlation coefficient for teachers' and educational psychologists' rankings will be higher than that for teachers' and clinical psychologists' rankings.

The results of the analysis of data revealed a positive and significant correlation between the teachers' and psychologists' rankings of childrens' behaviour problems. A highly significant correlation was found between the rankings of children and teachers. To the researcher's expectation a nonsignificant correlation was found in the rankings of children and psychologists. No significant differences were found between the correlation of teachers and clinical psychologists or between teachers and educational psychologists.

It is not amazing to discover similarity in the ratings of problem children by teachers and psychologists in Israel. One explanation for this phenomenon (Ziv, 1970) is that there is a close cooperation in Israelite schools between teachers and psychologists. The two professional groups collaborate their efforts in an attempt to understand and solve children's problems. In short, Israelite teachers know how to make referrals and to complete checklists compiled by psychologists. Their active interests in psychology is further evidenced by the preponderance of articles in local professional journals. Teachers in this country do actively participate in many extracurricular psychology and education courses.

**In KwaZulu schools there are no school psychological clinics, no qualified school or educational psychologists,**

no close cooperation in the system of delivery of psychological services between teachers and other professionals, and there are no extracurricular courses in psychology and education beyond those that were prescribed for their professional training. What constitutes learning or behavioural problems within a school is unknown. What teachers' conceptualizations of these problems are not documented. Teachers' modes of handling these problems or what they recommend in this regard deserve attention. The present study is undertaken with these views in mind.

Beilin (1959) has made extensive reappraisal of literature on teachers' and clinicians' attitudes towards behaviour problems of children. Starting with Wickman's study in 1928 through 1959 he attempted to classify these studies.

Beilin's study (1959:13) has made it possible to formulate the following classification :

"A. Studies employing descriptions of problem behaviour;

- (i) Teachers' nomination of children with problems, followed by description and classification of problem behaviours. In addition to all or part of the above, some use is made of a rating scale of problem behaviours.

- (ii) Teacher's description of problem behaviour (with no reference to specific children) from which a rating scale is developed or the descriptions themselves are used.
- (iii) Children identified and described as having problems by a social or therapeutic agency.

B. Studies employing the Wickman's rating scales;

- (i) with Wickman's direction
- (ii) with modification of Wickman's direction".

The above classification is useful. It provides a useful system or framework for underpinning the present study. From the above division of studies, it will be more convenient and suitable to place the present investigation in the A (ii) grouping. It attempts to find teachers' common description of learning and behaviour problems. No specific reference is made to a particular child with specific symptoms. No psychological categories will be used to classify children. It is on the basis of these common descriptions of learning and behavioural problems that the true nature of problematic education within the school will be arrived at.

The studies reviewed show evidence of gradual increases in the degree of correlation between teachers' and psychologists' ratings of children with learning and problem behaviours. This evidence suggests that with the passage of time from 1928 to the late 1950's (Beilin, 1959) there has been a remarkable shift in teachers' perceptions from overt to covert behaviours as symptomatic of the child's adjustment in the classroom. In the past, teachers' perceptions of learning and behavioural problems of students were tied to violation of classroom and work rules. Teachers and clinicians have moved closer in their judgement of learning and behavioural problems.

With regard to the question of teachers' grade level and perceptions of childrens' problems, Beilin (1959) reports that elementary school teachers evince concern for social and interpersonal aspects of adjustment like withdrawal, aggressive and unstable emotions. High school teachers, on the other hand, are more concerned with character traits like reliability and dependability among students.

Another important account of Beilin's study (1959) is sex difference in perception of school problems. Female teachers, he reports, tend to rate problem behaviours as more serious and appearance and destruction of property as less serious than do men. Male teachers, on the other hand, consider sex problems as less serious than do women. These perceptions

might be influenced by cultural expectations of boys' and girls' behaviour. As an additional remark, certain problems among boys and girls tend to increase or decrease with age and school grade levels. Beilin (1959) concludes his study by pointing out that data on the relationship between socioeconomic status and children's problems are scarce. It might be an overambitious attempt to relate these variables particularly among Blacks in South Africa where the lines of demarcation of different socioeconomic status are imaginary phenomena than definitive reality.

The most recent and extensive study on teachers' perceptions of emotionally disturbed children and influence of these perceptions on pupils was conducted in South Africa (Cumes, 1986). The subjects for this investigation were English speaking teachers and grade two pupils. In this study, teachers designated 8,23% of children as emotionally disturbed. The ratio of emotional disturbance between the sexes was 12,61% to 3,91% in favour of boys. Disruption and detachment constituted the main nature of emotional disturbance mentioned by teachers. The characteristic disorder of detachment tends to be common among girls whereas the dominant feature among boys is disruptive behaviour. It was also disclosed that teachers hold negative attitudes towards children labelled emotionally disturbed. These children are perceived as less intelligent and less scholastically successful than "normal" children (Cumes, 1986).

The research evidence also reveals that teachers' preconceptions do influence their manner of classroom interactions. Teachers tend to give these emotionally disturbed children less motivation. They preoccupy themselves with normal children in the classroom. In another recent publication, Cumes (1987:32) has this to say : "... it would seem that conditions prevail in regard to the emotionally disturbed child for the self-fulfilling prophecy to occur. The disturbed child is seen as less intelligent or competent, and is less wanted in the classroom. Although these children are apparently as capable as the rest of the class of answering classroom questions, teachers unknowingly encourage them less than they do other children; so the label of 'emotional disturbance' which these children carry affects the way the teacher sees them and relates to them".

A study by Cumes (1986) relates to the White population, the situation could be more problematic among Blacks. As was indicated earlier on, there are no professionals or psychologists to assist teachers in schools for the Blacks. Learning and behavioural problems not attended to at elementary school level become imminent at high school level. There is abundant research evidence on the attitude of Black pupils towards education and other education related facets (Danziger, 1957; Mann, 1962; Nene, 1969; Tunmer, 1972; Gilbert, 1982). Disruptive behaviour and violence have besetted Black schools for more than a decade

in South Africa. It is therefore imperative for the present writer as a pioneer, to include Black pupils at elementary levels of education in the study of learning and behaviour problems.

## 2.7 CONCLUSION

In the light of the above discussion, learning and behavioural problems exist in any system of education. Although several studies have been reviewed since Wickman's study in 1928, certain questions need solutions. A study of psychological assessment of learning and behavioural problems as manifested in KwaZulu schools is long overdue. The delays in this area could have been caused by the fact there were no qualified professionals. Another problem might be the point that emotional problems or disturbances do not lend themselves to clear categories and the language or mathematical formulae do not set up guidelines on the nature of learning and behavioural problems.

The present investigation concerns learning and behavioural problems that are observable in a school setting and are within the conceptual range of teachers. The questions the study attempts to answer are the following :

- (i) What is the nature of teachers' perceptions of learning and behavioural problems as they are manifested in KwaZulu schools?



- (ii) Are there any variables with respect to teachers as respondents which influence their views on the nature of these problems? It should be explicit that perceptions can also be influenced by teacher-pupil interaction.
- (iii) What mode of psychological services delivery do teachers consider best to tackle these problems?
- (iv) What are the teachers' level of competence in handling these problems?

In conclusion, the writer would like to refer to the following important statement :

"Children spend almost half their working hours in school - an environment representative of work; competitive, and social demands with which they will later have to cope. Teachers, as educators and parent-surrogates, are in a unique position to assess how a child copes with these demands, and to compare his adjustment with that of his classmates. Considerable evidence exists that teachers are able to appraise a child's current adjustment with considerable reliability and validity" (Weintraub, Neale and Liebert, 1975:839).

## CHAPTER THREE

## 3.0 RESEARCH DESIGN AND METHODOLOGY

## 3.1 INTRODUCTION

The problem of learning and behaviour among pupils is sufficiently complex to warrant a carefully planned procedure for its investigation. This complexity arises out of the degree to which a condition is regarded as problematic. In an attempt to overcome this complexity research studies (Ollendick and Hersen, 1984) tend to follow epidemiological or classificatory trends. Other research studies are predominantly idiographic. For the present investigation epidemiology and classification are pivotal. This derives from that there are no standardized narrow-band, high fidelity instruments for the assessment of learning and behaviour problems among Blacks. A broad-band, low fidelity assessment tool appears useful for dealing with a large number of children. This tool covers a wide variety of potential learning and behavioural problems. In the present investigation the emphasis is placed on broad-band syndromes rather than on narrow-band syndromes of children's disorders. "Employing teachers as informants has been less useful in developing the narrow-band syndromes, perhaps, than those completed by other informants and because teachers may have less opportunity to observe certain types of problems" (Ollendick and Hersen, 1984:86).

### 3.2 AIMS OF STUDY

A reiteration of the aims of this investigation indicates directions to be followed. The objectives of this study are :

- 3.2.1 What is the nature of children's learning and behaviour problems which require psychological intervention in KwaZulu primary schools?
- 3.2.2 Are there any characteristics with respect to teachers as respondents which influence their views on the nature of these problems? These characteristics are teacher's experience, contact with inspectors of psychological services and sex.
- 3.2.3 What is the modus operandi that can be followed to provide the means for solving these problems?
- 3.2.4 What do teachers recommend for an improved and efficient psychological services delivery programme?

### 3.3 DEFINITION OF TERMS

The thesis subject is : "The psychological assessment of children's learning and behavioural problems as manifested in KwaZulu schools". The operational definitions of these terms are as follows :

### 3.3.1 Psychological assessment

This term shall be used to mean the use of rating scales for the purpose of discovering clusters of learning and behaviour problems with no specific aim of getting a global clinical picture of a given child.

### 3.3.2 Children

The terms "children" and "pupils" will be used interchangeably to refer to persons attending primary schools in KwaZulu.

### 3.3.3 Behaviour problems

This term shall be used to cover any form of activity manifested by the child within a school. These behaviours may or may not conform to the psychological categories or taxonomy of behaviour disorders, but are representative of behaviours which frustrate the teacher's effort to teach and educate the child, and thereby interfere with the learning activities of the child.

### 3.3.4 Learning problems

This concept shall be used in a generic sense and includes whatever is problematic for the child's acquisition of

knowledge and skills as prescribed by the classroom situation i.e. problems which interfere with the learning activities of the child and therefore hamper the child's adjustment to the learning situation.

### 3.3.5 KwaZulu schools

This term shall be used to refer to formal junior and senior primary schools, all under the jurisdiction of KwaZulu Homeland Government.

## 3.4 FORMULATION OF HYPOTHESES

The following hypotheses are formulated to fulfil the aims of the investigation :

3.4.1 There will be no significant effects (interaction effects between the variables and main effects of the variables) between the sex of teachers, the experience of teachers, the yearly contact with inspectors of psychological services and the perception of the nature of learning and behavioural problems as measured by FACTORS 1 to 11 and NONFACTOR ITEMS : 27, 40 and 41.

3.4.2 No relationship exists between the nature of perception of learning and behavioural problems and the following respondents' dimensions :

- 3.4.2.1 Sex of the teacher
- 3.4.2.2 type of school
- 3.4.2.3 age of the teacher
- 3.4.2.4 teaching experience of the teacher
- 3.4.2.5 frequency of contact of the teacher with  
psychologists

3.4.3 There will be no significant effects (interaction effects between the variables and the main effects of the variables) between the sex of teachers, the experience of teachers, the yearly contact with inspectors of psychological services and perception of the modes of diagnosis, treatment and management of learning and behaviour problems.

3.4.4 The percentage of teachers who endorse specific recommendations conforms to an ordinal scale of measurement.\*

\* This hypothesis is formulated for testing responses to open-ended items and cannot be subjected to statistical treatment or computation. The ordinal scale of measurement, based on the frequency of occurrence of similar recommendations will be established.

### 3.5 METHOD OF DATA COLLECTION

Psychological assessment can be viewed as the systematic use of a variety of special techniques for getting a global clinical picture of a given individual. Assessment procedures include, amongst other things, clinical interviews, self-monitoring scales, behavioural observation, standardized testing, rating forms from significant others and self-report measures. A combination of several assessment techniques appears useful in a clinical setting because it yields the best global picture of the child.

The present investigation purports to study children's learning and behaviour problems manifested in KwaZulu schools. The focus is on teachers' views of these conditions, with no specific reference to individual cases for indepth clinical intervention. School related problems are among the easiest of all psychiatric syndromes to identify because they lend themselves to objective measurements. The idea is even more pronounced if the aim of psychological assessment is merely a description of traits along specified dimensions, rather than an indepth clinical assessment. For this reason behaviour assessment questionnaires, behaviour checklists and behaviour rating scales are useful instruments (Williams, 1974).

A critical review of teacher-administered rating scales reveals an abundance of such instruments in current use (Rutter, 1967; Spivack and Swift, 1967; Spivack and Swift, 1972; Spivack and Swift, 1973; Williams, 1974; Ollendick and

Hersen, 1984). "At a methodological level, it appears that the time has come for standardization of instruments and methods of analysis across studies. It is no longer useful for investigators to devise their own rating instruments, score them for whatever subjects are at hand, and analyze them with whatever programs their computer centers happen to offer. There are several instruments for which a considerable body of data exists on substantial samples ..... If none of these instruments is totally satisfactory, a study's contribution will nevertheless be far greater if it at least includes one of them along with whatever new instrument the investigator is inspired to develop so that the findings can be integrated with previous work in the field" (Achenbach and Edelbrock, 1978:1296). This assertion serves as a guiding star for the researcher.

The present study concerns an assessment of learning and behaviour problems of primary school pupils. It would seem convenient to adopt and modify an existing scale for use in this study. This arrangement does not preclude additional subscale items for tapping aspects of school manifested problems not directly covered in the scale opted for adoption. That the use of rating scales predominates in epidemiological or classification research is supported by literature (Conners, 1969; Spivack and Swift, 1973; Weinrott, 1977; Quay, 1977; Achenbach and Edelbrock, 1978; Eyberg and Ross, 1978; Achenbach, 1979; Robinson, Eyberg and Ross,



1980; Roberts, 1981; Wilson and Prentice-Dunn, 1981; Sandoval, 1981; Ollendick and Hersen, 1984).

The hallmarks of behaviour rating scales are validity and reliability. In addition, these instruments also possess the quality of clinical utility. The selection of rating scales for use in this study is based on the instruments' attributes mentioned above, and partly on the generally held belief that parents and teachers are the best informants in this regard. In this study however, we cannot give equal weight to parents and teachers as informants. The importance of these informants decreases with an increase in the age of the child. This means that the increasing importance of each informant depends on the amount of time spent with the child and on situational variances of a sample of the child's behaviour.

### 3.5.1 THE RESEARCH INSTRUMENT : SECTION I (APPENDIX A)

This study aims at the determination of the nature of teachers' perceptions of learning and behavioural problems. The second goal of the study is to ascertain whether these perceptions are influenced by respondent variables. To this end, The Devereux Elementary School Behaviour Rating Scale (DESB) K-6 grades will be used.

With regard to study aims numbers 3, 4 and 5 the researcher will construct and validate his own rating scale.

### 3.5.1.1 Rationale for the selection of the DESB

The DESB was developed by Spivack and Swift (1967) to measure learning and behaviour difficulties of elementary school pupils. The scale measures a child's entire adaptation to the demands of the classroom situation, and academic performance as well. The DESB manual details the following uses of this instrument (Spivack and Swift, 1967) :

- (a) The scale can be used as a means of identifying and measuring those classroom behaviours that may be interfering with achievement.
- (b) It may be used as one element in a total educational diagnosis of a child with a learning problem.
- (c) It is used as an ongoing school record of classroom behavioural adjustment.
- (d) It is also useful in the measurement of behavioural change through time in response to remedial programmes.
- (e) It is a means of communication of information about the child to other professionals.
- (f) It is useful in the group placement of children in classes.
- (g) Researchers can use this scale because it is a reliable measure of behaviours which appear in a classroom setting and are related to learning.

It is my contention that this scale can be used with a significant measure of confidence. There is abundant

research evidence in support of its utility, validity and reliability (Spivack and Swift, 1966; 1967; 1972; 1973; Swift and Spivack, 1968; Weintraub et al., 1975; Quay, 1977; Cumes, 1986). This instrument does not measure clinical syndromes commonly found among psychiatric units or similar situations. In other words the scale consists of items that are readable, understandable and meaningful to teachers who have no background knowledge of psychological concepts and terminology. Teachers rate overt behaviours of the individual child rather than making inferences about personality traits. This minimizes subjective judgement and increases the instrument's sensitivity.

The item pool was evolved through weekly teacher-researcher meetings which were aimed at the description of overt classroom behaviours. At these meetings teachers were requested to judge behaviours as either abetting or interfering with learning. The items were subjected to factor analysis and eventually organized into classes. The scale thus provides multiple behavioural factors. "The items of the scale are unambiguous and singularly free of culture-bound idiomatic phrases" (Cumes, 1986:76). The items for the final scale were selected on the basis of factor loading, some differential weights, similar patterns of correlation with other variables and significant correlation with academic achievement.

### 3.5.1.2 Description of the scale

The DESB consists of 47 items describing eleven behavioural factors or clusters or broad-band syndromes, plus three additional items related to the learning activities of a child in the classroom. Each factor is measured by three to five items. The items can be regarded as narrow-band syndromes contributing to one factor or broad-band syndrome, i.e., all three to five items in a factor measure "a common dimension of classroom behaviour that is relevant to academic achievement or adjustment" (Spivack and Swift, 1967:8). The DESB manual (Spivack and Swift, 1967) details directions on administration, scoring and interpretation of this scale. A brief description of the factors is presented below :

FACTOR 1 : CLASSROOM DISTURBANCE (ITEMS, 11, 12, 13, 30).

This factor measures active, social but inappropriate, disruptive or obstreperous classroom behaviour. This factor encompasses the extent to which a child teases and torments other pupils in the classroom or interferes with others' work and is quickly drawn into noise making and thus must be reprimanded and controlled by the teacher. The combined item scores must exceed 14 to necessitate a teacher's intervention and control of such behaviours. The middle range of scores is 6-14 and may be regarded as a normal range.

"Youngsters who never manifest such behaviours are often overinhibited or fearful, and thus manifest learning problems for these reasons" (Spivack and Swift, 1967:9).

FACTOR 2 : IMPATIENCE (ITEMS, 1, 36, 44, 47).

The four items comprising this factor measure the extent to which the child is impulsive, quick, sloppy, and hasty in performance or in completing work assigned to him or her. This inappropriate urge or drive is accompanied by disregard for understanding directions, and/or attitudes showing that the child is unconcerned about the quality and neatness of his/her work, and is unwilling to review it once considered by the child to be finished. A score of 15 or more suggests difficulties which interfere with successful learning. The normality range is between the scores of 5 and 14, inclusive. A score below 5 characterizes poorly achieving youngsters. The term normality in this context means normalcy or that which conforms to the standard range.

FACTOR 3 : DISRESPECT - DEFIANCE (ITEMS, 5, 7, 9, 16).

These items tap the child's rejection of the teacher, classroom rules, and the subject matter, that is, the extent to which the child speaks disrespectfully to teachers, resists doing what is asked, belittles the work being done, and breaks classroom rules. "High scores indicate a serious disruption of the relationship between the child and the total academic setting. In these children, scholastic progress cannot be expected" (Cumes, 1986:67). In this factor a high score is 9 or more.

FACTOR 4 : EXTERNAL BLAME (ITEMS, 2, 25, 34, 38).

These items tap the child's tendency to ascribe his or her shortcomings, personality deficiencies or incapacitations to external objects or people. The teacher is therefore made a scapegoat i.e. an external source for the child's frustrations or failures. When things do not go well, the child blames external circumstances. The principal concept is that success or failure is not self-determined. Of the normal public school children studied, 84% obtained scores of less than 11 (Spivack and Swift, 1967).

FACTOR 5 : ACHIEVEMENT ANXIETY (ITEMS, 22, 23, 31, 33).

These items measure the extent to which the child gets upset about test scores, worries about not knowing the right answers, is overly concerned or anxious with meeting achievement demands. This state of mind is accompanied by frustration (upset) over failure to meet these expectations. A cut-off point for a high level of anxiety is a score of 13.

FACTOR 6 : EXTERNAL RELIANCE (ITEMS, 24, 29, 32, 42, 46).

Children who obtain high scores on this factor are unable "to make independent decisions, to have their own opinions, and to do things without the licence and support of others" (Cumes, 1986:68). These children rely on the teacher for

directions. They require precise guidelines. They are characterized by overdependence upon the teacher's instructions. The normal range of scores for this factor is between 8 and 19. A score of 7 and below, coupled with other low factor scores, indicates overinhibition. This is a characteristic of an individual who is detached from others in the classroom, and is too reticent to seek help. This leads to underachievement.

FACTOR 7 : COMPREHENSION (ITEMS, 10, 35, 37).

Contrary to previous factors, a low factor score in this instance is related to poor achievement. This dimension indicates the extent to which the child gets the point of what is going on in a didactic situation. This factor explains the level of understanding and application of material learnt, or learning content in daily classroom activities. "Low scores invariably signal learning difficulties, although these are not necessarily attributable to intellectual deficits alone" (Cumes, 1986:69). A low score here is 9 or below and indicates comprehension problems, and subsequent learning problems, regardless of IQ. The normal range is between 10 and 16.

FACTOR 8 : INATTENTIVE - WITHDRAWN (ITEMS, 18, 20, 28, 43).

These items tap the extent to which a child does not pay

attention, seems to be daydreaming and is completely oblivious of what is happening in a didactic situation. These are children teachers find difficult to reach because they are preoccupied with their own fantasies. This behaviour is incompatible with learning in a didactic situation and as such typifies underachievement. Research evidence (Spivack and Swift, 1967) reveals that 7 out of 10 underachievers score 15 and more in this factor.

FACTOR 9 : IRRELEVANT - RESPONSIVENESS (ITEMS, 14, 15, 17, 26).

These items measure the extent to which a child's verbal responses in the classroom are irrelevant, intrusive, exaggerated and untruthful. In short, reference is made to a child's inappropriate comments which interfere with the teacher's teaching. As such these behaviours are a negative contribution in the classroom. A score of 11 is a cut-off point for abnormality in this behavioural dimension. The score of 10 represents normality.

FACTOR 10 : CREATIVE INITIATIVE (ITEMS, 3, 4, 6, 21).

These items tap self-initiative and positive involvement in classroom activities and discussions. This factor measures the extent to which a child, in an interesting fashion, brings to class, things related to current topics, including



the introduction of personal experiences into class discussion. "High scores here are indicative of a child who becomes constructively engaged and personally involved, and who actively initiates behaviour and ideas which are relevant to classroom work. By contrast, in conjunction with other deviant factor scores, a low score here can suggest the extent to which the child has divorced himself from learning environment" (Cumes, 1986:70). A score of 7 is indicative of a lack of involvement in, and thinking about, didactic activities. Scores in the average range fall between 8 and 14, while a score of 15 or above indicates a high degree of creative initiative and a high achiever, particularly when this factor score is accompanied by a high score for factor seven.

FACTOR 11 : NEED FOR CLOSENESS TO THE TEACHER (ITEMS, 8, 19, 39, 45).

These items measure the desire for closeness to, and friendliness with the teacher. "High scores indicate that the teacher is positively valued as a person" (Cumes, 1986:70). A low score would be suggestive of a child's detachment or withdrawal. "Most public school children obtain scores between 10 and 19 on this factor, scores outside of this range indicate abnormally low or high need for personal closeness with the teacher" (Spivack and Swift, 1967:19).

NON-FACTOR ADDITIONAL ITEMS (ITEMS, 27, 40, 41).

The non-factor additional subscale "defines a pattern of problem behaviour of an underachiever who is unable to learn and attend, but not a management or behaviour problem, nor necessarily a very anxious and a fearful child" (Spivack and Swift, 1967:19). Each of these items correlates negatively with successful achievement. This means that children who obtain high scores in each of these items manifest behaviour detrimental to academic success. There is a positive correlation between these three items and the following factors : impatience, external blame, comprehension, and inattentive withdrawn. "High scores in these items suggest that the child is 'in over his head' in class and is being taught well beyond his instructional level" (Spivack and Swift, 1967:19).

#### 3.5.1.3 Scoring and interpretation procedures

The manual details directions on administration, scoring, and interpretation of the scale.

#### 3.5.1.4 Normative data for the DESB

Thirteen elementary schools were involved in the establishment of the validity and reliability of the DESB. The sample consisted of 32 kindergarten through 6th grade teachers.

These teachers rated behaviours of 809 children. These children came from heterogeneous family backgrounds. Approximately 50% of their parents did not attain education beyond high school and about 16% of their fathers completed college education. There were 721 White and 88 Negro children. Appendix B presents the number of children at each educational level, their average age in months, their mean IQ scores, and corresponding standard deviation units.

Appendix C illustrates the means and standard deviations for each factor, and each of the three additional items across all elementary grades. This table shows that the results are quite similar at different educational levels. There is therefore no need for different norms at each level (Spivack and Swift, 1967; Swift and Spivack, 1968). Furthermore, the authors maintain that this similarity is an indication of a "standard" procedure applied by teachers in the rating of children at a given age.

Appendix D details normative data on the reliability of the scale. The estimate of test-retest reliability over a week interval period, reveals small and negligible changes in the means from the initial testing to the retesting session. Test-retest correlations are however very high. The median coefficient for these correlations is 0.87. The standard error of measurement (SEM) is small. This means that the concomittant variation of test-retest scores is highly

correlated. "The scores obtained on a child at any one point in time are reasonably accurate estimates of the true scores for that child at that particular time" (Swift and Spivack, 1968:142). Another important feature is that all SEM's are just about one half of the standard deviation units for the whole sample i.e. the total normative sample. This finding constitutes an important principle because it makes for an allowance for a rule of thumb when assessing changes in a child's scores from one time to another. "Any change having the magnitude equal to or greater than the normative group standard deviation for that score is significant, or would occur by chance less than 5 times in 100" (Swift and Spivack, 1968:142).

Appendix E indicates that there is a strong relationship between classroom behaviour and academic achievement. It has been demonstrated that certain factors in the DESB correlate with low academic achievement. There are high scores on factors 1,2,3,4,5,6,8,9 and low scores on factors 7 and 10 (Spivack and Swift, 1966; 1967; 1972; 1973; 1977; Swift and Spivack, 1968; 1969; Swift, Spivack, Delisser, Danset, Danset-leger and Winnykamen, 1972).

The abovementioned studies and appendices are evidence of validity and reliability of the scale. The DESB has also been translated into French in an attempt to confirm the existence of behaviour factors and to assess its utility in France and in the United States. The utility of this scale

comprises clinical and research purposes (Swift, Spivack, Delisser, Danset, Danset-leger and Winnykamen, 1972). These researchers found that the DESB behaviour groupings are stable across French and American cultures and had the same meaning for academic achievement. "For all but one factor the correlation with academic success was similar and significant beyond 0.01 level" (Swift et al., 1972:493).

The use of the DESB has been extended to the Republic of South Africa (Cumes, 1986). Appendix F indicates similarities between the means of American children and those of children of South African English-speaking families (Cumes, 1986:72).

With regard to the validity of the scale, Spivack and Swift (1966:76) have this to say: "..... an item was considered for inclusion when its promax loading was 0.30 or better, and when its beta weight indicated that it was making a greater contribution to the factor than to other factors".

### 3.5.2 THE RESEARCH INSTRUMENT : SECTION II

The DESB discussed above covers aims one and two of the present study. With regard to aims three, four and five, the researcher formulated statements based on a framework developed by Gilmore and Chandy (1973). These writers developed a scale for exploring five sets of variables on

teachers' perceptions of the psychologists' role and function. To this end, these writers used closed and open-ended questionnaires. Their scale covers the following broad areas : SET 1 : Type of child learning problems; SET 2 : Diagnostic activities; SET 3 : Types of treatment; SET 4 : Treatment Management; SET 5 : Psychologist-psychometrist skills; SET 6 : Teachers' recommendations based on responses to a single open-ended question.

The present study explores the following dimensions of teachers' perceptions :

- (i) The nature of teachers' perceptions of learning and behavioural problems. Section one of the research instrument is intended to achieve this aim or goal of the study.
- (ii) What variables are likely to influence the nature of teachers' perceptions of learning and behavioural problems? Section one of the instrument attempts to achieve this goal.
- (iii) Which diagnostic activities do teachers consider to be of importance? Items number 48 through 52 of section two of the instrument are intended to measure this aspect.

- (iv) Which treatment procedures do teachers consider to be of importance? Item numbers 53 through 62 are intended to provide answers to this question.
- (v) To what extent can teachers assist in the handling of a child with learning and behavioural problems? Item numbers 63 through 70 are designed to measure this aspect.
- (vi) What would teachers like to recommend for enhancing the level of services delivered or rendered to pupils with learning and behavioural problems? Item numbers 71 and 72 are meant to serve this purpose.

#### 3.5.2.1 Description of section II of the instrument

This is a five-point scale which is in a decreasing order. The respondent is asked to indicate how important it would be for him or her to have the stated services fulfilled in respect of a child who has a learning or behavioural problem. The respondent's response is meant to be a cross  in one of the spaces to indicate his/her position in relation to a single item. Each statement is followed by five spaces or boxes with these gradations : extremely important; very important; important; of little importance; of no importance. The scoring procedure is 5,4,3,2,1 respectively. These figures will be omitted in the questionnaire that will be given to the subjects. There are

two reasons for doing this. First, section two of the instrument is a scale of subjective importance applied to each item. Each respondent supplies his or her own frame of reference. As such, section two of the instrument tells us something about the rater (teacher) rather than the object being rated (the child/pathology/activity). This yields views or perceptions or attitudes of the teachers rather than objective assessments. Secondly, we must attempt to avoid influencing the ideation of the respondent, and also try to counteract response set due to location of high values on one end of the scale. Therefore omission of the figures or values encourages the respondent to place a cross  at any point along the continuum.

#### 3.5.2.2 Factor analysis for item analysis

To determine whether a set of items is homogeneous, factor-analytic methods will be used. This is a necessary step since the items were selected on the basis of face validity and some items may therefore be invalid. By carefully choosing items with particular factor-loading patterns, a sophisticated form of content validity will be established. In addition, this form of analysis will yield the internal consistency of the scale. The scale would then be regarded as a valid and reliable instrument (Oppenheim, 1983; Allen and Yen, 1979).



### 3.5.2.3 Scoring and analysis of data

Scoring and analysis of data were done on a standardized way.

The total score for each set is found. This means summation of individual item total scores comprising a set e.g.

SET I : Items 48 through 52 yield a total score on diagnosis.

SET II : Items 53 through 62 yield a total score on treatment.

SET III : Items 63 through 70 yield a total score on management.

A table will be constructed to illustrate mean scores obtained for the total group (sample) on the individual items in each of the three sets of variables. The higher the mean score, and the smaller the standard deviation, the greater the importance placed on that activity by the respondents.

Comparisons by groups : Another goal of this study is to determine whether teachers, grouped according to certain dimensions or variables (biographical data), hold similar views on the nature of learning and behavioural problems, diagnostic activities, treatment procedures, and management.

The interaction of these variables is also considered.

To solve the above problems the following statistical analysis will be done :

- (a) ANOVA will be used to compare group means. This method will indicate whether the means of groups across a set of items are similar or different and if there is any interaction between the groups. This is one method for determining whether three or more means could be expected by chance alone.
- (b) Canonical correlation R will be used to test for relationship between two sets of data.

### 3.6 SAMPLE DESIGN AND SAMPLING PROCEDURE

#### 3.6.1 Rationale for sample selection

The researcher will confine his fieldwork to junior and senior primary school teachers in KwaZulu. The selection of elementary school teachers is made for the following reasons :

- (i) Dr J.W. Cumes (1986) conducted a study for his doctoral degree through the University of Witwatersrand. The title of this study was : "Teachers' perceptions of the emotionally disturbed child : Interactions in the

classroom". He administered the DESB to a sample of English-speaking grade 2 teachers in the Johannesburg area. These teachers were asked to rate primary school children at the grade 2 level. This study was confined to grade 2 children. It did not cover all the educational levels of elementary school.

- (ii) Cumes' (1986) study included 192 experimental subjects. The mean age of these children was 7 years 8 months. The age range of these children was 7 years 1 month to 8 years 8 months. KwaZulu schools hold different expectations in this regard.
- (iii) Except for the tender age below six years, age is not a controlling factor for admission to school. Since there is no compulsory, school going age, it is not unusual for a child to be admitted when he or she is over age for a grade. At the elementary school level, the age range could be anything from 6 years to 21 years. Children are not forced to leave school when they are over age for a grade. Some are already betrothed whilst doing elementary standards of education.
- (iv) Although the study is confined to elementary standards of education, the researcher would capture a very wide behavioural spectrum among pupils. This will not create problems because the available norms of the DESB are based on educational levels rather than on

the age of subjects. The standardization sample of the DESB consists of K-grade six children.

- (v) Learning and behavioural problems are common at elementary school levels. In the same vein, the idea of remedial education is confined to elementary school levels. One cannot speak of remedial intervention with standard ten pupils.

### 3.6.2 Sampling frames

KwaZulu consists of 25 inspection circuits. An alphabetical list of these is available. These inspection circuits are just like magisterial districts on the map. Within each inspection circuit; there are primary and secondary schools. These schools are manned by both female and male teachers. The number of teachers could vary from one school to another. This depends entirely upon the number of pupils and available classrooms.

A complete list of all teachers in KwaZulu is not readily available. Even if it were available, the schools and teachers are scattered throughout the entire homeland. The nature of elements or units from one inspection circuit to another shows no variation.

The above sampling frames lead to a consideration of a

cluster sampling design. The inspection circuits form clusters and a sample of these clusters could be drawn.

Information can then be obtained from teachers in a cluster and generalizations made to other clusters. Each cluster is heterogeneous because it contains different types of teachers and schools. The clusters (inspection circuits) are however homogeneous because they are similar to each other.

### 3.6.3 Multistage area/cluster sampling design

#### Stage One

Three inspection circuits will be selected. This can be viewed as a primary sampling unit or a cluster. This idea is based on the principle of heterogeneity. Within the inspection circuit, there are schools and teachers varying in sex, age, experience, qualifications and other personal attributes. Each inspection circuit is similar in these respects to other inspection circuits. By choosing one of them the researcher should have randomly captured all the features of KwaZulu schools.

Instead of one, three inspection circuits will be selected. One of the three circuits will be used for a pilot study. Two inspection circuits will be used for the final study.

## Stage Two

For the pilot study five junior and five senior primary schools will be selected. For the final study ten junior and ten senior primary schools will be selected. In other words, the final study will involve 30 schools. On the average, this will yield a sample of about four hundred teachers for the final study sample. Within each inspection circuit, the selection of junior or senior primary schools will be based on the use of a table of random numbers as described in the previous stage of this random selection procedure.

## Stage three

The final stage in this sampling design is the selection of teachers from the schools. This means that from each selected school, all teachers will be subjects for the field experiment.

### 3.7 PLANNING FOR ADMINISTRATION OF THE RESEARCH INSTRUMENT

This section describes the empirical investigation. This study will be conducted in the form of a field experiment. The procedure to be followed is outlined below :

- (a) Following the supervisor's or promoter's comments and approval of the research instrument, the KwaZulu

Government Department of Education and Culture will be approached for permission to do research in their schools.

- (b) It is anticipated that the KwaZulu Government would be keen to examine the research instrument and research proposal. Perhaps it will also request for personal contact with the researcher.
- (c) A covering letter will be prepared in which a brief description of the research will be given to the principals of schools.
- (d) The researcher intends to conduct the administration of the instrument personally for the pilot run. This will help in highlighting problem areas in the research project as a whole. These problems can then be attended to before the final study is carried out. Should the need arise, certain sections of the instruments will be accompanied by Zulu translations.
- (e) The teachers will be requested to fill-in their identifying particulars on the cover page of the questionnaire. No name of the child or the teacher should appear on the questionnaire.
- (f) Each teacher will be requested to identify in his/her classroom a child who has a learning or behaviour

problem. In the appropriate spaces, the teacher will write the following about this child :

- first letter of the child's name(s).
  - first letter of the child's surname.
  - "keeping at the back of your mind, information about this child; write his or her age, sex, and indicate in what standard is this child?"
- (g) The teacher is expected to complete one questionnaire in respect of each child. This is meant for research purposes rather than for clinical intervention. There is absolutely no need for additional completed forms from one teacher.
- (h) Page two of the questionnaire details instructions on how to complete the DESB. Section two of the scale is preceded by further information to the respondents.
- (i) Should problems arise in relation to the understanding of instructions or the questionnaire during the pilot study, corrections and modifications will be effected.
- (j) Perhaps there will be a need for modifying the original DESB scale. Care will be taken to ensure that such modifications do not change the ideas of the scale.



## CHAPTER FOUR

### 4.0 EMPIRICAL STUDY

#### 4.1 INTRODUCTION

Chapter Four details fieldwork procedures for the pilot study and the final study. On both occasions the researcher administered the research instrument personally. The pilot study was conducted to validate items 48 through 70 (see Appendix A).

#### 4.2 THE STUDY SAMPLE

The sampling design was discussed in chapter three. The researcher selected three inspection circuits in accordance with the procedures outlined in the previous chapter. The following inspection circuits were selected : Hlabisa; Mehlesizwe; and Umlazi North. The principle of randomness ruled in the selection of these inspection circuits. It is the writer's contention that these three regions might be taken as entities on an urban-rural dimension. This is a mere speculation based roughly on the distance from the metropolitan area of Durban. Umlazi North is located at about 13km from Durban. Hlabisa is located at about 300km from Durban and Mehlesizwe is situated at a halfway point between the two areas, that is, + 160km from Durban. It was surmised that Mehlesizwe includes both

rural-urban school characteristics, while Hlabisa is predominantly rural. Umlazi North has a preponderance of urban features. On this consideration, the Mehlesizwe inspection circuit was used for the pilot study.

The selection of schools within each chosen circuit followed a random procedure. A table of random digits was used for this purpose.

#### 4.3 SELECTION OF SCHOOLS FOR THE PILOT STUDY

Table 4.1 Distribution of Schools in the Mehlesizwe Circuit (1989).

School Category	Number of the same type	percent relative to total (N=85).
Lower Primary Schools	18	21.18
Combined Primary Schools	38	44.71
Higher Primary Schools	04	4.71
Junior Secondary Schools	09	10.59
Senior Secondary Schools	13	15.29
College of Education	01	1.18
Technical College	01	1.18
Trade School	01	1.18

Table 4.1 illustrates the distribution of schools in this circuit. Schools are divided into various types or

categories. The present study examines learning and behavioural problems of primary school children. Hence the sample consisted of teachers from primary schools.

Table 4.2 Schools visited in the Mehlesizwe Circuit

School Category	Sample	Percent relative to school category
Lower Primary School	2	11.11
Higher Primary School	2	50.00
Combined Primary School	6	15.79

Table 4.2 illustrates schools visited in the Mehlesizwe circuit. A combined primary school, as the name implies, has junior and senior primary classes in one establishment. In other words, this school caters for class A, class B, standards 1, 2, 3, 4 and 5. In rare instances, a standard six class may be found attached to a primary school. The lower (junior) primary school category harbours classes A and B, standards 1 and 2. Schools which offer tuition to standards 3,4 and 5 only are called higher (senior) primary schools. It is however, not unusual to find a standard three class attached to a junior primary school or a standard six class attached to a senior primary school. The reason for this arrangement is not difficult to find. The placement of final class pupils sometimes appears not feasible because of overcrowded classroom conditions in subsequent grades.

## 4.4 ADMINISTRATION OF THE RESEARCH INSTRUMENT

Table 4.3 Categorization of subjects in the Pilot Study (N=116)

Sex	Male 18	Female 98						
Primary School Category	Jnr. 47	Snr. 30	Comb 39					
Yearly Contact	Nil 65	Once 48	Twice 3	Thrice 0	Four+ 0			
Teaching Experience: Years	0-4 31	5-9 30	10-14 21	15-19 9	20-24 14	25+ 11		
Teacher's Age: Years	20-24 13	25-29 22	30-34 25	35-39 18	40-44 17	45-49 7	50-54 12	55+ 2

The target population of this pilot study comprised all teachers in the ten primary schools which were visited by the researcher. There were 116 teachers who completed the questionnaire. The selected schools were sparsely located and it was not possible for the researcher to visit more than one school each day. Upon arrival at each school, the researcher explained the purpose of the investigation. The principal was also given a copy of the letter of approval (for this kind of investigation) written by officials of the KwaZulu Government Department of Education and Culture.

The response from the principals and staff members was overwhelmingly positive. The researcher was able to establish rapport readily with the teachers.

The administration of the scale took place without any disruption of the normal daily school routine. Teachers were seen individually or in groups of two or three individuals. A group-administered questionnaire session would not be feasible without disrupting teaching activity. The procedure used in the administration of the instrument gained full cooperation of the respondents.

The procedure for identifying a child with a learning and/or behaviour problem was described as follows :

- (i) You are requested to think about one child in your class who has a learning and/or behaviour problem. There may be many children with learning and behaviour problems in your class. CHOOSE ONE whom you have been watching over the past few months and whose problems you can best describe.
- (ii) Rate this child in accordance with the accompanying instructions.
- (iii) Your ratings should be based on your own experiences with the child.

- (iv) Consider only your impressions of the child, that is, how the child appears to you. Ignore what others have said about the child.
  
- (v) As much as possible, your ratings must be based on the outward behaviour of the child, that is, what you have actually observed about the child. Do not try to interpret what you think might be going on in the child's mind.

The weight of previous research findings supports the idea that teachers possess good observational skills for identifying the atypical child in the classroom and children with problems in class (Zax et al., 1964; Mitchell and Shepherd, 1966; Spivack and Swift, 1966; Rutter, 1967; Kaplan and Sprunger, 1967; Ziv, 1970; Spivack and Swift, 1973; Weintraub et al., 1975; Meyers, Martin and Hyman, 1977; Weinrott, 1977; Sandoval, 1981; Ollendick and Hersen, 1984). Such researchers have identified the following competencies among teachers : behaviour ratings by teachers parallel those of students' peers; teachers have a wide experience with children in the classroom; the longer they teach, the more perfect their standard of comparison becomes and teachers have the opportunity of observing and comparing large numbers of children. Teachers as professionals are better able than parents and physicians to observe, identify and describe children's reactions to situations requiring : sustained attention, a systematic and deliberate approach to problem

solving, self-control of a physical activity level, educational task adaptation, and social interaction skills. It is obvious that teachers' ratings discriminate among a variety of criterion groups and are not a reflection of bias. A critical review of rating scales administered by teachers has shown that information supplied by teachers may be prognostic of later difficulties.

The studies cited above and the description of the scale in chapter three of this thesis strengthened the researcher's confidence in the idea that teachers possess the skills for observing, identifying and rating children with learning and behavioural problems.

#### 4.5 RESULTS OF THE PILOT STUDY

The scoring of the questionnaire was carried out manually. Inaccurately completed questionnaires were discarded. The remaining 116 accurately filled in questionnaires were used in the analysis of data for the pilot run. The Statgraphics programme was used (STSC, 1987) to analyze the data.

##### 4.5.1 FACTOR ANALYSIS FOR 23 ITEMS : 48 THROUGH 70

A factor analysis was done to identify relevant factors and to label these factors.

TABLE 4.4 EQUIMAX ROTATED FACTOR MATRIX

Factor loadings of the 23 items

ITEM	FACTOR			ESTIMATED COMMUNALITY
	1	2	3	
48	-.01	.25	<b>.47</b>	.28
49	.32	.16	<b>.34</b>	.24
50	-.06	-.07	<b>.25</b>	.07
51	.15	-.01	<b>.59</b>	.37
52	.01	.02	<b>.53</b>	.28
53	.13	<b>.31</b>	.18	.14
54	-.10	<b>.49</b>	-.04	.25
55	.01	<b>.49</b>	.22	.30
56	.15	.21	<b>.23</b>	.12
57	.13	<b>.41</b>	.11	.20
58	.19	<b>.38</b>	.10	.19
59	-.03	.21	<b>.46</b>	.26
60	.08	.05	<b>.61</b>	.38
61	.09	<b>.42</b>	-.32	.29
62	.07	.03	<b>.46</b>	.21
63	.07	<b>.27</b>	-.11	.09
64	<b>.73</b>	.04	-.01	.54
65	<b>.79</b>	-.00	-.11	.64
66	<b>.82</b>	-.01	.12	.68
67	<b>.77</b>	.08	.09	.61
68	<b>.82</b>	.20	.01	.71
69	-.08	<b>.63</b>	.04	.41
70	.02	<b>.68</b>	-.07	.46

BOLD TYPE INDICATES ITEM HIGHEST LOADING ON FACTOR

The above table for factor loadings contains correlation coefficients between factors and items. These coefficients represent factor loadings of the items on the factors, i.e. the degree to which an item is associated with a certain factor. In the table, the first column contains item numbers. The second column contains loadings between factor 1 and each item in turn.



The third column contains loadings between factor 2 and each item in turn. The fourth column contains loadings between factor 3 and each item in turn. Each entry in the last column is an estimated communality of an item. This is the sum of squared loadings with an item across factors. Hence the estimated communality represents the proportion of variance in an item that is predictable from the factors underlying it.

Table 4.4 reveals that items 48, 49, 50, 51, 52, 56, 59, 60 and 62 have relatively the highest loadings on the third factor and relatively lower loadings on the second and first factors. These items are considered homogeneous and the factor 3 which they measure is labelled diagnostic activity. Item numbers 53, 54, 55, 57, 58, 61, 63, 69 and 70 have relatively the highest loadings on the second factor and relatively lower loadings on the first and third factors; therefore the second factor could be labelled a treatment activity factor. Items 64 through 68 all have relatively the highest loadings on the first factor and relatively lower loadings on the second and third factors. The first factor could be labelled a management activity factor.

Through the use of factor analysis, 23 items have grouped themselves into three factors or activities. The method of using factor analysis for item analysis is best described by

Allen and Yen (1979 : 111-113 and 130-133). This was considered most suitable for determining whether a set of items was homogeneous or clustered closely around one factor, i.e. measures one factor or activity (Allen and Yen, 1979).

Having worked out the factor analysis, the next task is to determine the significance of the (loading) correlation coefficient of each item.

Establishing a cut-off point for interpretation of a correlation coefficient is somewhat a matter of taste. If the absolute value for a correlation coefficient is .30 or more it is significant at the conventional levels of significance (Tabachnick and Fidell, 1983 : 148-149; 158-159; 170; Tabachnick and Fidell, 1989 : 74-76; 216-217; 233). "As a rule of thumb, loadings in excess of .30 are eligible for interpretation; whereas lower ones are not, because a factor loading of .30 indicates at least a 9% overlap in variance between the variable and the factor. The greater the overlap between a variable and a factor, the more that variable is a pure measure of the factor" (Tabachnick and Fidell, 1983 : 411; Tabachinck and Fidell, 1989:640). Drawing upon literature, Tabachnick and Fidell (1983:411) suggest the following descriptive model of interpretation :-

- that loadings in excess of .71 (50% variance) are considered excellent.
- that loadings in excess of .63 (40% variance) are considered very good.
- that loadings in excess of .55 (30% variance) are considered good.
- that loadings in excess of .45 (20% variance) are considered fair.
- that loadings in excess of .32 (10% variance) are considered poor.

Using .30 as a cut-off point, item numbers 50, 56 and 63 were discarded. The highest loadings for these items are : .25, .23 and .27 respectively.

In the same vein a cut-off point of .30 has the same meaning for correlation coefficient as it has for factor loading (see table 4.4). A correlation coefficient in this context is a measure of the amount of information we have about Y variable from our information about X variable. It is more meaningful to conceptualize the index of association represented by a correlation coefficient in terms of the square of the correlation coefficient instead of a correlation coefficient itself (Ferguson, 1959:108).

Furthermore, Ferguson (1959:08) lists the following values of  $r^2 \times 100$  for values of  $r$  from .10 to 1.00 (see table 4.5).

TABLE 4.5 VALUES OF  $r^2$  MULTIPLIED BY 100

$r$	$r^2 \times 100$
.10	1
.20	4
.30	9
.40	16
.50	25
.60	36
.70	49
.80	64
.90	81
1.00	100

Table 4.5 illustrates values of  $r^2$  multiplied by 100. Thus a correlation coefficient as high as .30 leads us to state that 9 percent of the variance of the one variable is predictable from the variance of the other. While the factor loading of .30 is taken as a cut-off point indicating a 9% overlap in variance between the variable and the factor, a correlation coefficient of .30 is an index of 9% association between an item and a category. An item must satisfy both of these requirements to be retained in the final scale. An item which has a value less than .30 on either technique or method will be discarded.

#### 4.5.2 CORRELATION OF ITEM WITH THE CATEGORY

As a final step in item selection procedure, each item was correlated with a category to which it belonged. This is known as the internal-consistency method of item analysis

(Oppenheim, 1983). A category total score is obtained by adding scores of items for a given category. It is more meaningful to correlate an item with the category or total scale score than to correlate item with another item in a scale. The internal-consistency method of item analysis is used when no external criterion is available (Oppenheim 1983:138). This method was used in this study in order to decide which are the best statements for inclusion in the final scale/instrument.

The method of factor analysis and the method of internal-consistency both yield indices of homogeneity of items (Allen and Yen, 1979:130; Oppenheim, 1983:138). A cut-off point of .30 will also be applicable in the use of internal-consistency method of item analysis. An item which fails to meet this criterion on either procedure will be discarded.

In the following tables for correlational analysis, items which have correlation coefficients less than .30 are indicated by means of astericks. These are the items which did not survive the process of item analysis and were therefore discarded from the final scale. Similarly those items which have factor loadings less than .30 were discarded from the final scale (see table 4.4).

TABLE 4.6 CORRELATIONAL ANALYSIS : RELATIONSHIP BETWEEN AN  
ITEM AND THE CATEGORY : DIAGNOSTIC ACTIVITY (N=116)

ITEM NUMBER	CORRELATION COEFFICIENT: r	SIGNIFICANCE LEVEL
48	.34	.0002
49	.37	.0000
50	.61	.0000
51	.55	.0000
52	.43	.0000
56	.18 *	.0523
59	.37	.0000
60	.49	.0000
62	.34	.0002

\*  $r < .30$

Table 4.6 reveals that item number 56 has a correlation coefficient of .18. This is below our cut-off point .30. This necessitates deletion of this item from the final scale. Item number 50 though it has a correlation coefficient of .61, its factor loading is .25 (see table 4.4). This item is also deleted from the final scale. There are therefore seven items retained in the final scale. These items form or explore the category of diagnostic activity.

TABLE 4.7 CORRELATIONAL ANALYSIS : RELATIONSHIP BETWEEN AN  
ITEM AND THE CATEGORY : TREATMENT ACTIVITY (N=116)

ITEM NUMBER	CORRELATION COEFFICIENT: r	SIGNIFICANCE LEVEL
53	.21 *	.0224
54	.39	.0000
55	.38	.0000
57	.33	.0003
58	.31	.0009
61	.36	.0001
63	.22 *	.0181
69	.43	.0000
70	.50	.0000

\*  $r < .30$

Item number 63 has a correlation coefficient of .22 and a factor loading of .27. It is discarded from the final scale on the strength of both factor analysis and correlational analysis. Item number 53 is discarded because it has low correlation coefficient with the category. This leaves us with seven items measuring the category of treatment activity.

TABLE 4.8 CORRELATIONAL ANALYSIS : RELATIONSHIP BETWEEN AN  
ITEM AND THE CATEGORY : MANAGEMENT ACTIVITY (N=116)

ITEM NUMBER	CORRELATION COEFFICIENT: r	SIGNIFICANCE LEVEL
64	.70	.0000
65	.72	.0000
66	.76	.0000
67	.72	.0000
68	.77	.0000

It is interesting to note that from the above table 4.8 all items measuring management activity have such high correlation coefficients. In table 4.4 these items have also high factor loadings. These items are retained in the final scale.

#### 4.5.3 CANONICAL CORRELATIONS

To end the process of item analysis the researcher sought to determine whether the three sets of activities i.e. diagnosis, treatment and management were related or not. The determination of a linear relationship is a sequel to item validation through correlational analysis. An association of these separate activities the researcher wished to explore. In the present study items 48 through 70 explored three separate but supposedly related areas namely "diagnostic activity", "treatment activity" and "management activity". Correlation analysis and factor analysis carried out in the previous section, had revealed constellations of items which were powerful in the measurement of these separate activities. On the grounds of these analyses, certain items were discarded because they had insignificant correlation coefficients. Of interest to us now is the determination of how the retained items of one activity e.g. diagnosis, are correlated with the retained items of another activity e.g. treatment. An analysis of this nature will indicate to us whether the three activities the scale attempts to measure are related.



This problem falls within the province of a statistical tool called canonical correlation analysis. This type of correlation "identifies the components of one set of variables that are most highly related (linearly) to the components of the other set of variables" (Tatsuoka, 1971:183). This is a stepwise procedure which permits an examination of the relationship between two sets of variables. The first pair of canonical variates are those with largest correlation between linear combinations of the two sets of variates. The second pair of canonical variates are those with largest correlation between linear combinations of the two sets of variates after the variance due to the first set had been removed. This process continues until either no significant linkages between sets remain, or as many canonical variates have been defined as variables in the smaller set (Tabachnick and Fidell, 1983). If the absolute value of a coefficient for canonical variable is 0.3 or more, it will indicate a significant contribution to the canonical correlation (Tabachnick and Fidell, 1983:170; Tabachnick and Fidell, 1989:233).

It must be noted that a minus sign in these correlation coefficients represents the direction of relationship. Of importance is the size of the correlation coefficient which represents the degree of relationship or an index of association. A negative correlation is just as important as a positive relationship. A correlation coefficient with a

minus sign does not indicate a lack of relationship. It indicates just as strong a relationship as a positive correlation of its size. A minus sign correlation coefficient means that as the independent variable increases in strength the dependent variable decreases concomitantly.

TABLE 4.9 DIAGNOSIS AND TREATMENT : THE RELATIVE CONTRIBUTION OF SETS VARIABLES TO CANONICAL CORRELATION COEFFICIENTS.

## Canonical Correlations

Number	Eigenvalue	Canonical Correlation	Wilks Lambda	Chi-Square	D.F.	Significance Level
1	.3084	.5554	.4030	97.696	49	.0000
2	.1998	.4470	.5827	58.051	36	.0114
3	.1705	.4129	.7283	34.085	25	.1061
4	.0756	.2749	.8780	13.988	16	.5996
5	.0447	.2115	.9498	5.542	9	.7847
6	.0051	.0716	.9942	.624	4	.9603
7	.0007	.0259	.9993	.072	1	.7882

## Coefficients for Canonical Variables of the First Set

Item 48	-0.57407	-0.02399	0.05354	0.15129	0.62001	-0.30869	-0.75533
Item 49	0.07586	-0.17624	-0.20693	0.78759	-0.70905	0.08168	-0.19480
Item 51	-0.42980	-0.50358	-0.64147	-0.64826	0.09900	-0.39941	0.16037
Item 52	0.26001	0.66364	0.18053	-0.47706	-0.71147	-0.29929	-0.03624
Item 59	-0.52765	0.34100	0.25900	0.40408	-0.19990	0.03176	0.77670
Item 60	0.24437	-0.65764	0.90352	0.01584	-0.11159	-0.02403	0.08225
Item 62	-0.29863	0.12483	-0.09225	-0.30716	0.09195	0.91133	-0.53199

## Coefficients for Canonical Variables of the Second Set

Item 54	0.30464	-0.09079	-0.18734	0.81609	-0.09781	-0.20956	0.67788
Item 55	-0.70097	-0.28929	-0.05852	-0.15252	-0.25711	-0.66585	-0.54834
Item 57	0.03370	-0.83426	0.28854	0.09985	-0.36014	0.51457	-0.11574
Item 58	-0.61234	0.38887	-0.43804	-0.18820	-0.37171	0.29014	0.42820
Item 61	0.41511	0.10549	-0.79763	0.16621	-0.07523	-0.06996	-0.61796
Item 69	-0.40863	0.02321	-0.19394	0.32627	1.02806	0.20384	-0.31422
Item 70	0.22840	0.65184	0.92177	0.13294	-0.55278	0.32397	-0.03931

Table 4.9 yields significant results for canonical correlations number 1 and 2. The correlation coefficients for canonical correlation numbers 3, 4, 5, 6 and 7 are not significant.

The first canonical correlation is .56 (31% variance); the second is .45 (20% variance). With all seven canonical correlations included, the chi-square is 97.696 at  $df. = 49$ ,  $p = .0000$  and with the first canonical correlation removed, the chi-square is 58.051 at  $df. = 36$ ,  $p < .0114$ . Subsequent chi-square tests were not statistically significant. The first two canonical correlations therefore account for the significant linkages between the two sets of variables.

This implies that the relationship between diagnosis and treatment is very strong particularly when determined by 7 x 7 or 6 x 6 variables from both sets. A decrease in the number of canonical variables leads to a decrease in size of the coefficient.

The canonical correlation analysis is between the two sets of variables namely :

(item 48, item 49, item 51, item 52, item 59, item 60 and item 62) and

(item 54, item 55, item 57, item 58, item 61, item 69 and item 70).

The first canonical correlation is  $\sqrt{0.308} = 0.55$ .

Looking at the chi-square values and significance levels, we only need to consider the first two pairs of canonical variates.

Analysing the pairs of canonical variates that accompany the first canonical correlation :

<u>Set 1</u>	<u>Coefficient</u>
Item 48	-0.574
Item 49	0.076
Item 51	-0.430
Item 52	0.260
Item 59	-0.528
Item 60	0.244
Item 62	-0.299

<u>Set 2</u>	<u>Coefficient</u>
Item 54	0.305
Item 55	-0.701
Item 57	0.034
Item 58	-0.612
Item 61	0.415
Item 69	-0.409
Item 70	0.228

Applying the cut-off value of 0,3; the items relevant to the first canonical variate from set 1 in order of magnitude are 48, 59, 51 and those in set 2 in order of magnitude are 55, 58, 61, 69, 54.

The first canonical variables indicate that items 48, 59, and 51 of the first set and items 55, 58, 61, 69 and 54 of the second set are responsible for the significant correlation between the first two canonical variables. It is also important to note that the canonical coefficients of items 61 and 54 are opposite of the rest of the chosen items of the second set which indicates an inverse relationship between items 61 and 54 and items 55, 58 and 69.

Analysing the pairs of canonical variates that accompany the second canonical correlation, we find that, items relevant to the second canonical variate, from set 1, in order of magnitude are : item 52, item 60, item 51 and item 59; and those in set 2 are : item 57, item 70 and item 58.

Thus the second canonical variate indicates that item 52, item 60, item 51 and item 59 tend to match with item 57, item 70 and item 58.

Looking at the pairs of canonical variates that accompany the 3rd, 4th, 5th, 6th and 7th canonical correlations, we find

that, there is no pair of canonical variates which can be considered for further analysis. The obtained canonical correlations are not significant.

TABLE 4.10 DIAGNOSIS AND MANAGEMENT : THE RELATIVE CONTRIBUTION OF SETS VARIABLES TO CANONICAL CORRELATION COEFFICIENTS.

Canonical Correlations

Number	Eigenvalue	Canonical Correlation	Wilks Lambda	Chi-Square	D.F.	Sign Level
1	.1951	.4417	.6076	54.061	35	.0208
2	.1441	.3796	.7548	30.516	24	.1682
3	.0810	.2846	.8819	13.638	15	.5532
4	.0321	.1791	.9596	4.476	8	.8118
5	.0086	.0928	.9914	.939	3	.8159

Coefficients for Canonical Variables of the First Set

Item 48	-0.56819	0.66755	0.61825	0.29671	0.27505
Item 49	0.14939	-0.72256	0.63913	0.19589	-0.50322
Item 51	-0.09957	0.04934	0.14262	-0.67393	0.78580
Item 52	0.79415	0.10036	-0.31920	0.51843	-0.02667
Item 59	-0.20779	0.02340	0.01268	-0.21411	-0.50787
Item 60	-0.02599	-0.46533	-0.12116	0.35670	0.51495
Item 62	0.53481	0.60119	0.32826	-0.36625	-0.15637

Coefficients for Canonical Variables of the Second Set

Item 64	-0.00413	0.36755	0.46054	-1.31946	0.10165
Item 65	-0.12016	-1.16572	-0.51713	0.14125	-0.74627
Item 66	1.23203	-0.16725	0.17776	0.32405	0.83002
Item 67	0.33071	0.76940	0.42002	0.25173	-1.30506
Item 68	-1.26109	-0.37700	0.46037	0.49388	0.85380

Looking at the above table 4.10 we observe that the first canonical correlation .44 is significant at the .05 level of significance. The chi-square of 54.061 with 35 degrees of freedom means that the first canonical correlation coefficient is significant at the 2.08% level. The first canonical correlation coefficient accounts for the significant linkage between the two sets of canonical variables namely management and diagnosis.

The first canonical correlation is .44 (20% variance). With all five canonical correlations included, the chi-square is 54.061 at  $df.= 35$ ,  $p < .0208$  and with the first canonical correlation removed, subsequent chi-square tests were not statistically significant. The first canonical correlation therefore accounts for the significant linkage between the two sets of variables.

This implies that the relationship between treatment and management is strong, particularly when determined by 7 x 5 variables from both sets. A decrease in the degrees of freedom is accompanied by a decrease in the size of canonical correlation coefficient.

The canonical correlation analysis is between the two sets of variables namely :

(item 48, item 49, item 51, item 52, item 59, item 60 and item 62) and set 2 consists of (item 64, item 65, item 66, item 67 and item 68).



- 120 -

The first canonical correlation is  $\sqrt{.1951} = 0.44$ .

Looking at the chi-square values, we need to consider the first pair of canonical variates.

Analysing the pairs of canonical variates that accompany the first canonical correlation :

<u>Set 1</u>	<u>Coefficient</u>
item 48	-0.56819
item 49	0.14939
item 51	-0.09957
item 52	0.79415
item 59	-0.20779
item 60	-0.02599
item 62	0.53481

<u>Set 2</u>	<u>Coefficient</u>
item 64	-0.00413
item 65	-0.12016
item 66	1.23203
item 67	0.33071
item 68	-1.26109

Applying the cut-off value of 0,3; the items relevant to the first canonical variate from set 1 in order of magnitude are item 52, item 48 and item 62 and those in set 2 in order of magnitude are item 68, item 66 and item 67.

Thus the first canonical variate indicates that items 52, 48 and 62 tend to match with items 68, 66 and 67.

Looking at the pairs of canonical variates that accompany the 2nd, 3rd, 4th and 5th canonical correlations, we find that there is no pair of canonical variates which can be considered for further analysis. The obtained canonical correlations are not significant.

TABLE 4.11 TREATMENT AND MANAGEMENT : THE RELATIVE CONTRIBUTION OF SETS VARIABLES TO THE CANONICAL CORRELATION COEFFICIENTS.

Canonical Correlations						
Number	Eigenvalue	Canonical Correlation	Wilks Lambda	Chi-Square	D.F.	Sign Level
1	.1644	.4054	.6606	44.985	35	.1202
2	.1268	.3561	.7906	25.500	24	.3790
3	.0592	.2434	.9054	10.788	15	.7675
4	.0340	.1845	.9624	4.164	8	.8420
5	.0037	.0612	.9963	.407	3	.9388

Coefficients for Canonical Variables of the First Set

Item 54	0.13121	-0.50288	0.16862	0.04470	-0.03570
Item 55	0.24920	0.66319	-0.22028	-0.74695	0.48490
Item 57	0.55876	0.52487	0.39324	0.63893	0.07677
Item 58	-0.12894	0.29084	-0.72114	-0.06313	-0.68045
Item 61	-0.27178	-0.29941	-0.54598	0.26969	0.76445
Item 69	0.73309	-0.68570	-0.38302	-0.20099	0.03755
Item 70	-0.42638	0.43805	0.23052	0.38039	-0.12245

Coefficients for Canonical Variables of the Second Set

Item 64	-0.09651	0.35544	-0.12645	-0.72143	1.19432
Item 65	-0.77128	-0.52656	-0.91237	0.56799	-0.43642
Item 66	-0.33135	1.02390	0.84701	0.69772	-0.09491
Item 67	-0.32463	0.13494	-0.05790	-1.32890	-0.86683
Item 68	1.44484	-0.09196	-0.54040	0.71854	0.11384

From the above table 4.11 we deduce that none of the canonical correlations is significant at the .05 level. The first canonical correlation is significant at the 12.02% level. This indicates that items in the two sets do not match with each other but serve as predictor variables for separate and independent activities. Therefore management and treatment activities are not related in this research instrument. The relative contribution of canonical variables to the linear combination between the two sets, is minimal at best.

The canonical correlation analysis is between the two sets of variables namely : (item 54, item 55, item 57, item 58, item 61, item 69 and item 70) and the second set consists of (item 64, item 65, item 66, item 67 and item 68).

The first canonical correlation is  $\sqrt{.1644} = .41$ .

Looking at the pairs of canonical variates that accompany the 1st, 2nd, 3rd, 4th and the 5th canonical correlations, we find that there is no pair of canonical variates which can be considered for further analysis. The obtained canonical correlations are not significant.

#### 4.6 CONCLUSION

Tables 4.4 through 4.11 contain details indicating relationships among sets. This finding is in line with the item validation already done. This implies that the research instrument is internally consistent.

Briefly, tables 4.9; 4.10 and 4.11 indicate association between two sets of variables. Each set consists of a number of items. The items are called canonical variables of the first and canonical variables of the second set. Table 4.9 indicates that there is an association or relationship between diagnosis and treatment ( $r = 0.56$  and  $r = 0.45$ ). Table 4.10 indicates there is a relationship between diagnosis and management. The index of this association is a correlation coefficient of .44. A correlation coefficient of 0.41 (Table 4.11) indicates a weak association between treatment and management.

The aim of this chapter was to validate items 48 through 70 of the scale. The questionnaire can now be considered suitable for use in the final study. The validated scale has fewer items than the original scale (see appendix G).

The final study will make use of this validated scale. The chapter to follow will present field data collected with the use of this standardized scale. Hypotheses testing will be based on the analysis of responses to this standardized scale. The sample for use in the final study will be drawn from Hlabisa and Umlazi North regions of the KwaZulu education inspection circuits.

## CHAPTER FIVE

## 5.0 PRESENTATION AND ANALYSIS OF DATA

## 5.1 INTRODUCTION

This chapter contains the presentation, analysis and interpretation of data. The hypotheses formulated in chapter three are tested in this chapter. The section on discussion of results is reserved for the next chapter.

## 5.2 FINAL STUDY SAMPLE

The subjects for the final study sample were drawn from two inspection circuits namely Hlabisa and Umlazi North.

TABLE 5.1 CATEGORIZATION OF SUBJECTS IN THE FINAL STUDY SAMPLE (N=380)

Sex	Male 80	Female 300						
Primary School Category	Jnr 109	Snr 113	CP 158					
Yearly Contact	Nil 140	Once 212	Twice 19	Thrice 5	4 Times 4			
Teaching Experience: Years	0-4 86	5-9 102	10-14 82	15-19 42	20-24 23	25+ 45		
Teacher's Age: Years	20-24 33	25-29 81	30-34 100	35-39 61	40-44 38	45-49 22	50-54 28	55+ 17

The questionnaire was administered to 380 teachers. The procedures for questionnaire administration and fieldwork were discussed in the previous chapter. The present chapter details the results of the final study.

The scoring procedure conducted for the pilot study was also used in the final study. Inaccurately completed questionnaires were discarded.

### 5.3 RESULTS

#### 5.3.1 PRESENTATION OF MEANS AND STANDARD DEVIATIONS FOR THE WHOLE SAMPLE

TABLE 5.2 TEACHERS' RESPONSES TO ELEVEN FACTORS AND THREE  
NONFACTOR ITEMS (N=380)

Factor	Total Sample Mean	Total Sample Standard Deviation
1	13.086	4.7744
2	14.647	4.4676
3	8.45	3.6331
4	8.6526	4.2969
5	10.707	4.1910
6	19.278	5.3203
7	8.1657	3.1716
8	14.923	4.4905
9	9.7	3.8742
10	8.3894	3.5259
11	10.613	4.1084
Nonfactor Items		
27	3.8842	1.8545
40	3.6763	2.0308
41	4.5736	1.9647

Table 5.2 contains means and standard deviations for the whole sample. Each factor has its own mean score and its corresponding standard deviation. The means and standard deviations were also computed for the nonfactor items.



The statistical analyses were done for the hypotheses number one, two and three. Hypothesis number four was not subjected to statistical analysis. Each respondent had one total score for factor one, another total score for factor two and so on up to factor eleven and including total scores for nonfactor items : 27, 40 and 41.

TABLE 5.3.1 TEACHERS' PERCEPTIONS OF SETS I, II AND III

Means and standard deviations of the total sample (N=380)

Variable	Mean	SD
Set I : Diagnostic Activities		
Item 48	4.10	1.01
Item 49	3.94	1.07
Item 51	4.08	0.83
Item 52	4.43	0.70
Item 59	4.30	0.91
Item 60	3.78	1.05
Item 62	4.04	1.12
Set II : Treatment Activities		
Item 54	2.93	1.34
Item 55	3.03	1.27
Item 57	2.94	1.28
Item 58	3.68	1.26
Item 61	1.91	1.18
Item 69	2.66	1.25
Item 70	2.30	1.19
Set III : Management Activities		
Item 64	3.32	1.18
Item 65	3.51	1.03
Item 66	3.67	1.01
Item 67	3.77	0.95
Item 68	3.58	0.95

Responses to items coded on a 5-point scale :

1 = Low and 5 = High.

The means and standard deviations of the whole study sample are given in table 5.3.1. Sets I, II and III cover section two of the research instrument. It consists of statements on diagnostic, treatment and management activities. These statements were obtained through the use of factor analysis. A large item pool was subjected to factor analysis. As a result of this procedure, items grouped themselves into three categories namely diagnosis, treatment and management. Furthermore each item was correlated with a category to which it belonged. The method of correlational analysis was used in this instance. This was done to select the best items or statements for inclusion in the final scale (see paragraphs 4.5.1 and 4.5.2).

### 5.3.2 REITERATION OF HYPOTHESES

The hypotheses to be tested are listed below.

#### Hypothesis 1 :

There will be no significant effects (interaction effects between the variables and main effects of the variables) between the sex of teachers, the experience of teachers, the yearly contact with inspectors of psychological services and the perception of the nature of learning and behavioural problems as measured by FACTORS 1 to 11 and NONFACTOR ITEMS : 27, 40 and 41.

Hypothesis 2 :

No relationship exists between the nature of perception of learning and behavioural problems and the following respondents' dimensions :

- 2.1 Sex
- 2.2 Type of School
- 2.3 Age
- 2.4 Teaching Experience
- 2.5 Frequency of contact with psychologists

Hypothesis 3 :

There will be no significant effects (interaction effects between the variables and the main effects of the variables) between the sex of teachers, the experience of teachers, the yearly contact with inspectors of psychological services and perception of the modes of diagnosis, treatment and management of learning and behaviour problems.

Hypothesis 4 :

The percentage of teachers who endorse specific recommendations conforms to an ordinal scale of measurement.

5.3.3 ANALYSIS OF DATA

## 5.3.3.1 TESTING OF HYPOTHESIS NUMBER ONE

In order to determine whether any significant effects exist between the various factors (F1 to F11, Non-F 27, 40 and 41) and sex, yearly contact and experience, 3-way analyses of variance (ANOVA) have been done. In identifying significant effects in such analyses of variance, different hypotheses are generated viz. :

- H<sub>01</sub> : The three-factor interaction is significant.
- H<sub>02</sub> : No three-factor interaction but all two-factor interactions and main effects are present.
- H<sub>03</sub> : No three-factor interaction, one of the two-factor interactions is absent and the rest of the effects are present. (3 cases).
- H<sub>04</sub> : No three-factor interaction, two of the two-factor interactions are absent and the rest of the effects are present. (3 cases).
- H<sub>05</sub> : No three- and two-factor interactions are present, all the main effects are present.
- H<sub>06</sub> : No three- and two-factor interactions are present and one main effect is absent and the rest of the effects are present. (3 cases).

$H_{07}$  : No three- and two-factor interactions are present and two main effects are absent, only one main effect is present. (3 cases).

$H_{08}$  : All effects are absent.

Those effects that are found to be significant, thus determine the null hypothesis which is to be accepted.

As a result of the limitations of the data and the complexity of interpreting four and more- effect interactions, only the following 3-way design (with cell-frequencies) is considered in this study.

TABLE 5.3.2 CELL-FREQUENCIES IN THE 3-WAY DESIGN

EXPERIENCE	YEARLY CONTACT	SEX	
		MALE	FEMALE
0 - 4	0	8	24
5 - 14		5	69
15+		5	29
0 - 4	> 0	21	33
5 - 14		21	89
15+		20	55

The frequencies in all the cells are not equal. This is an unbalanced design with all the cells filled. A balanced design would have equal frequencies in all cells.

The unbalanced design can be analyzed through using the theory discussed in chapters 4 and 5 of Searle (1987).

For purposes of testing hypothesis number one, the two variables namely primary school category and teacher's age, are left out. The rationale for omitting these variables is as follows : it is felt that experience, yearly contact and sex, are the three variables which may have the greatest influence on the various factor scores. Furthermore, incorporating these two variables will result in a five-way analysis of variance, which implies analysing an unbalanced design with empty cells, thereby making the analyses even more cumbersome, even impossible. In addition, it is clear that teachers' age and experience are dependent on each other.

In the ANOVA-tables that follow, effects will be tested at the conventional level of significance i.e. 5%. In all tables the F-values that are significant at the 5% level have been starred. Where the two/three -way/factor interaction will be found significant, graphical representation of cell means will be done to depict the trend of interactions.

TABLE 5.4 ANOVA FOR FACTOR 1

## Classroom Disturbance

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	TAIL PROB.
MEAN	29645.29954	1	29645.29954	1286.95	0.0000
SEX(S)	9.73623	1	9.73623	0.42	0.5160
CONTACT(C)	15.50934	1	15.50934	0.67	0.4124
EXPERIENCE(E)	4.23331	2	2.11665	0.09	0.9122
SC	40.01260	1	40.01260	1.74	0.1883
SE	26.68630	2	13.34315	0.58	0.5608
CE	31.75926	2	15.87963	0.69	0.5025
SCE	2.14613	2	1.07307	0.05	0.9545
ERROR	8453.93583	367	23.03525		



Table 5.4 reveals that there are no significant interactions or significant differences among means (main effects) with regard to sex (male, female), yearly contact (0, >0) and experience (0-4, 5-14, 15+). This means that teachers' perceptions of classroom disturbance (F1) are not significantly determined by sex, experience and yearly contact with the inspectors of psychological services. Hypothesis 08 has been confirmed.

TABLE 5.5 ANOVA FOR FACTOR 2

## Impatience

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	TAIL PROB.
MEAN	37079.62291	1	37079.62291	1856.58	0.0000
SEX(S)	3.67425	1	3.67425	0.18	0.6682
CONTACT(C)	6.42002	1	6.42002	0.32	0.5711
EXPERIENCE(E)	0.52908	2	0.26454	0.01	0.9868
SC	61.01868	1	61.01868	3.06	0.0813
SE	23.87269	2	11.93634	0.60	0.5506
CE	44.17845	2	22.08923	1.11	0.3320
SCE	26.16152	2	13.08076	0.65	0.5201
ERROR	7329.72072	367	19.97199		

There are no significant interactions or significant differences among means (main effects) with regard to sex (male, female), yearly contact (0, > 0) and years of teaching experience (0-4, 5-14, 15+). This means that teachers' perceptions of impatience are not significantly determined by sex, experience and yearly contact with inspectors of psychological services. Hypothesis 08 is accepted.

TABLE 5.6 ANOVA FOR FACTOR 3

## Disrespect-Defiance

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	TAIL PROB.
MEAN	13854.26814	1	13854.26814	1052.84	0.0000
SEX(S)	75.48774	1	75.48774	5.74	0.0171*
CONTACT(C)	1.30760	1	1.30760	0.10	0.7528
EXPERIENCE(E)	28.85411	2	14.42705	1.10	0.3352
SC	11.47710	1	11.47710	0.87	0.3510
SE	10.03506	2	5.01753	0.38	0.6832
CE	49.41898	2	24.70949	1.88	0.1544
SCE	36.19142	2	18.09571	1.38	0.2541
ERROR	4829.31777	367	13.15890		

No significant two-or three-factor interactions are found. The main effects regarding yearly contact and experience are also not significant while the main effect regarding sex is found to be significant at a level of significance of 1,71%. Given that the sample means for factor 3 for the two sex-groups are 9.3625 for males and 8.2174 for females, it is concluded that the mean f3-score of males is larger than the mean f3-score of the females. Hence it follows that teachers' perceptions of disrespect-defiance, are not significantly determined by experience and yearly contact with inspectors of psychological services or any interaction between these two variables and sex but is only dependent on their sex.

TABLE 5.7 ANOVA FOR FACTOR 4

## External Blame

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	TAIL PROB.
MEAN	15256.91313	1	15256.91313	862.21	0.0000
SEX(S)	202.36563	1	202.36563	11.44	0.0008*
CONTACT(C)	0.07855	1	0.07855	0.00	0.9469
EXPERIENCE(E)	4.54232	2	2.27116	0.13	0.8796
SC	8.08216	1	8.08216	0.46	0.4996
SE	11.93491	2	5.96745	0.34	0.7140
CE	117.08878	2	58.54439	3.31	0.0377*
SCE	128.08501	2	64.04251	3.62	0.0278*
ERROR	6494.09340	367	17.69508		

The significant three-factor interaction SCE ( $p=0.0278$ ) can be interpreted by considering the following graphical representation of F4-Cell means.

FIGURE 5.1 SCE INTERACTION : F4-CELL MEANS

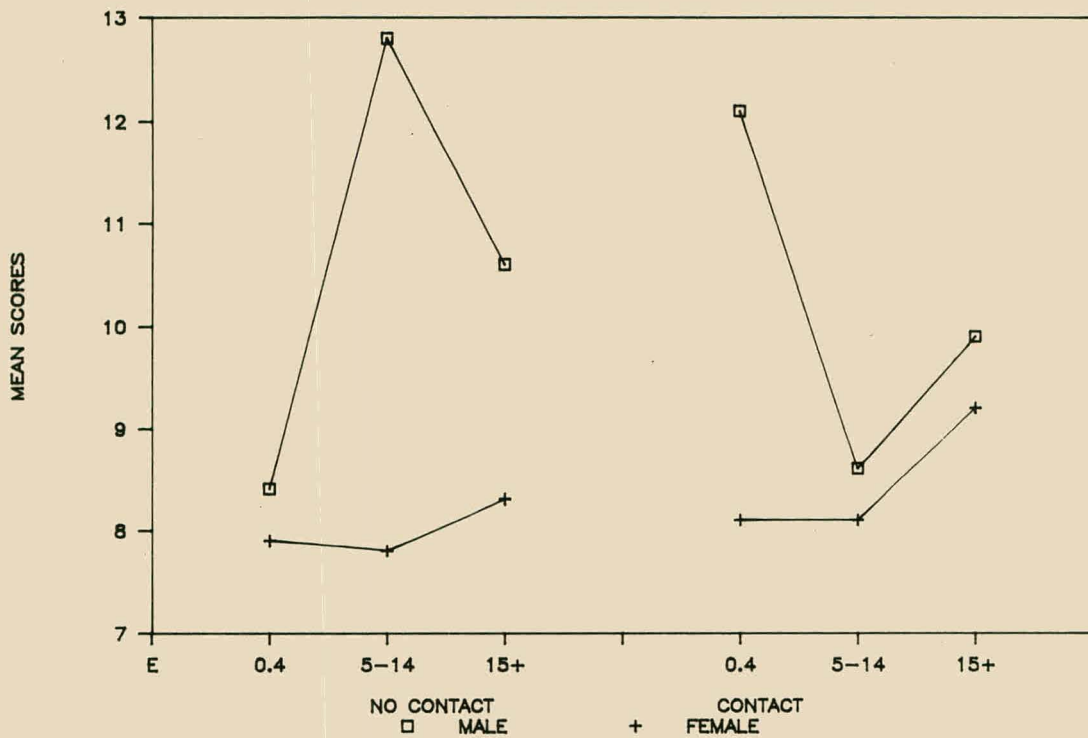


Figure 5.1 reveals the following :

- (i) It is clear that the interaction between sex and experience differs for the different groups of teachers i.e. teachers who have contact with inspectors of psychological services, and those who have no contact.
- (ii) The average F4-response increases more among the most experienced female teachers (15+ years) who had contact with inspectors of psychological services, than among those who had no contact.
- (iii) With years of teaching experience, the average F4-response increases among male teachers who had no contact with inspectors of psychological services. The opposite holds true for those who had contact.
- (iv) The mean F4-score for the male **no contact** group increases and then decreases with an increase in experience while the male **contact** group reacts in an opposite manner i.e. the mean F4-score decreases and then increases with an increase in experience.



- 144 -

We conclude that the SCE interaction has a significant influence on teachers' perceptions of Factor 4. This interaction is significant beyond the 5% level (2.78%).

TABLE 5.8 ANOVA FOR FACTOR 5

## Achievement Anxiety

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	TAIL PROB.
MEAN	21054.22986	1	21054.22986	1184.05	0.0000
SEX(S)	38.77561	1	38.77561	2.18	0.1406
CONTACT(C)	6.98293	1	6.98293	0.39	0.5313
EXPERIENCE(E)	27.31466	2	13.65733	0.77	0.4647
SC	0.73594	1	0.73594	0.04	0.8389
SE	19.06114	2	9.53057	0.54	0.5856
CE	40.94948	2	20.47474	1.15	0.3173
SCE	3.03045	2	1.51522	0.09	0.9183
ERROR	6525.82204	367	17.78153		

As for factors 1 and 2 table 5.8 reveals that there are no significant interactions or differences among means (main effects) with regard to sex (male, female), yearly contact (0, >0) and years of experience (0-4, 5-14, 15+). This means that teachers' perceptions of achievement anxiety are not significantly determined by sex, experience and yearly contact with inspectors of psychological services.

TABLE 5.9 ANOVA FOR FACTOR 6

## External Reliance

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	TAIL PROB.
MEAN	64774.08295	1	64774.08295	2374.27	0.0000
SEX(S)	53.18474	1	53.18474	1.95	0.1635
CONTACT(C)	134.92371	1	134.92371	4.95	0.0268*
EXPERIENCE(E)	40.29172	2	20.14586	0.74	0.4786
SC	67.36163	1	67.36168	2.47	0.1170
SE	97.55775	2	48.77888	1.79	0.1688
CE	267.12024	2	133.56012	4.90	0.0080*
SCE	148.42872	2	74.21436	2.72	0.0672
ERROR	10012.36518	367	27.28165		

Although the three-factor interaction SCE is not significant at the traditional 5% level of significance it is significant at the relative small level of significance of 6.72% and therefore worth considering.

For interpreting this interaction, consideration should be given to graphical representation of the F6-Cell means, as shown in figure 5.2.

FIGURE 5.2 SCE INTERACTION : F6-CELL MEANS

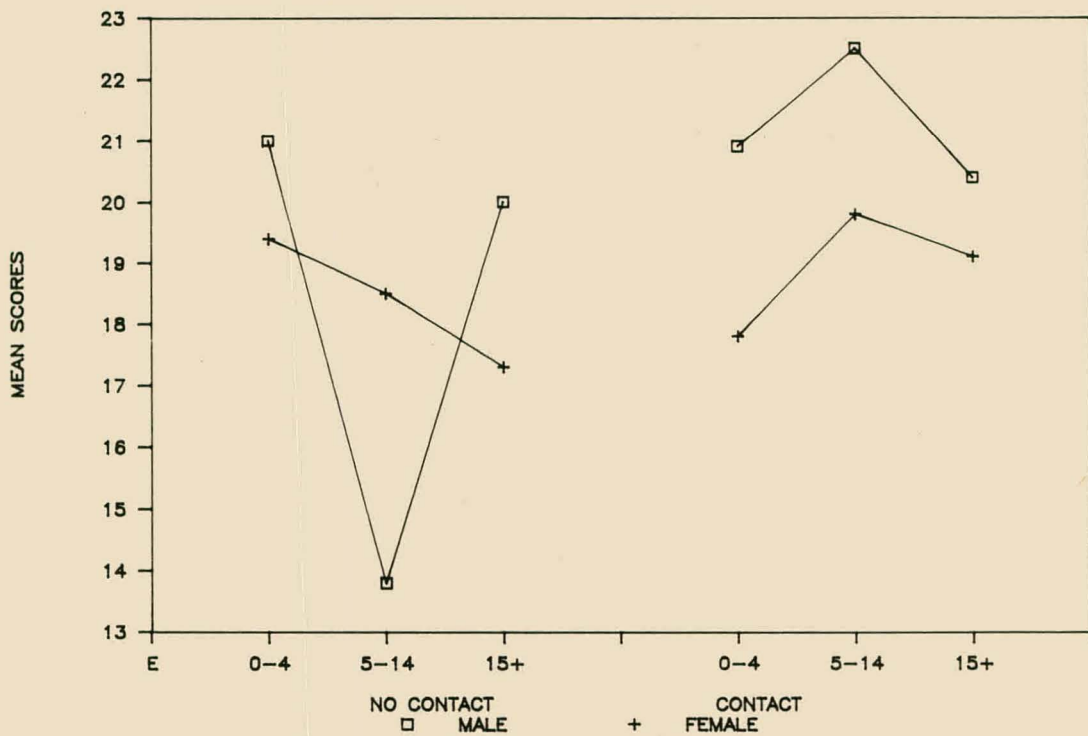


Figure 5.2 reveals the following :

- (i) The interaction between sex and experience differs for the different groups of teachers i.e. teachers who had contact with inspectors of psychological services and those who had no contact.
  
- (ii) For the **no contact** group the mean F6 score decreases sharply and then increases sharply for males with an increase in experience while for the females it decreases steadily. For the **contact** group the mean F6 score for both males and females increases with a relatively small quantity and then decreases with a relative small quantity. The levels of the means of the males are however higher than those of the females.
  
- (iii) The lack of parallel behaviour of curves illustrates the interaction of sex with experience for the zero

- 150 -

category or zero contact group. This is in sharp contrast with the  $>0$  group.

TABLE 5.10 ANOVA FOR FACTOR 7

## Comprehension

SOURCE	SUM OF SQUARES	D. F.	MEAN SQUARE	F	TAIL PROB.
MEAN	12962.22085	1	12962.22085	1306.41	0.0000
SEX(S)	30.21450	1	30.21450	3.05	0.0818
CONTACT(C)	80.90221	1	80.90221	8.15	0.0045*
EXPERIENCE(E)	1.48768	2	0.74384	0.07	0.9278
SC	5.56934	1	5.56934	0.56	0.4542
SE	7.45648	2	3.72824	0.38	0.6870
CE	48.33184	2	24.16592	2.44	0.0890
SCE	15.40705	2	7.70352	0.78	0.4608
ERROR	3641.37981	367	9.92202		



Table 5.10 reveals that the two-factor interaction CE, has a relatively small p value of 0.089 and although it is not significant at 5% level, it is worth considering the graphical display of the Contact-Experience cell means (Figure 5.3).

FIGURE 5.3 CE INTERACTION : F7-CELL MEANS

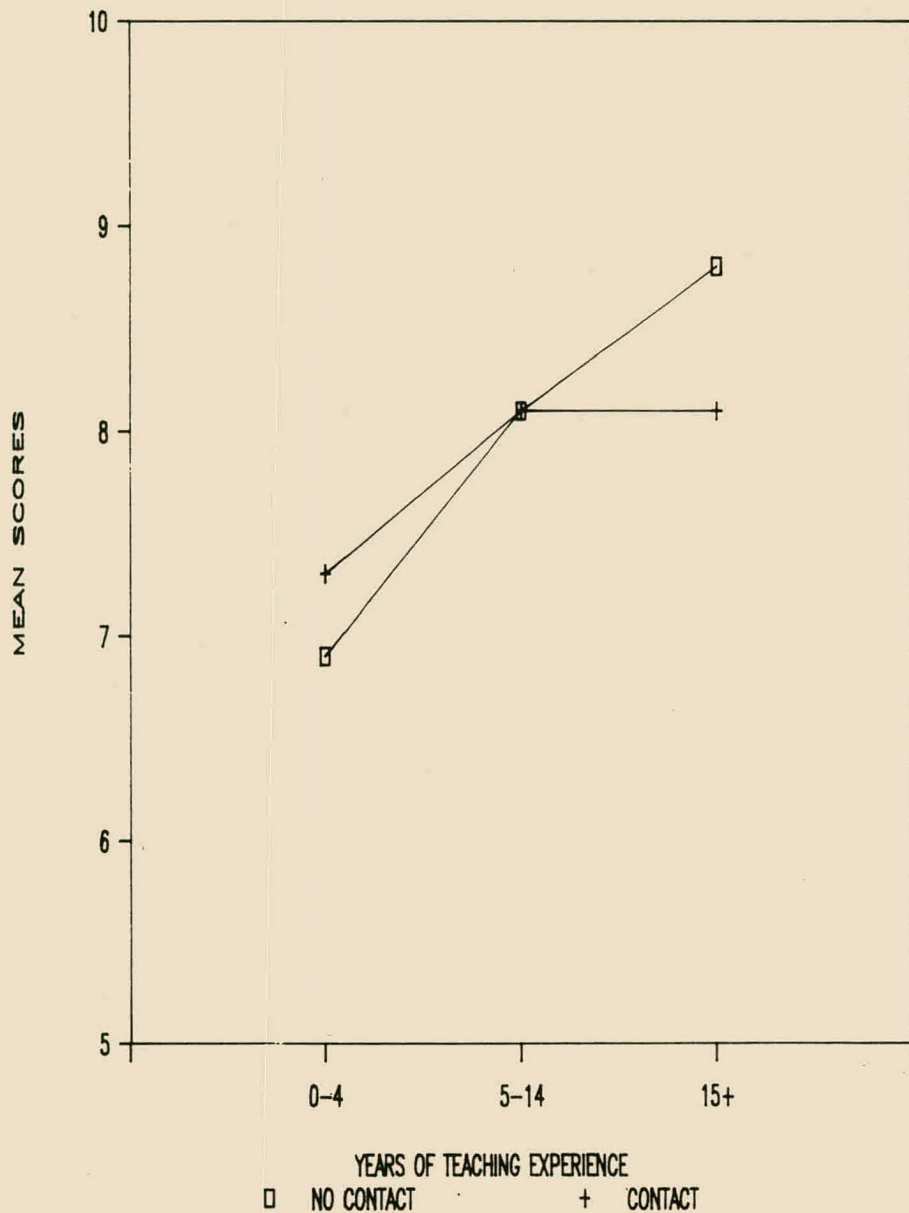


Figure 5.3 reveals that :

- (i) With years of teaching experience, the average F7 response increases steadily for both groups of teachers i.e. those who had contact with inspectors of psychological services and those who had no contact.
- (ii) The CE-interaction is a result of the fact that for 0-4 years experience the "contact group" has a larger mean F7-score than the "zero contact group" while for 15+ years experience the "zero contact group" has a larger mean F7-score than the contact group.
- (iii) The mean scores for inexperienced groups of teachers (0-4 years) are comparatively very low for both categories of contact (0 and >0). The mean scores for the most experienced subjects (15+ years) are relatively high for both categories of contact. The intermediate experience groups (5-14 years) of teachers have mean scores falling between the two extreme scores mentioned above.
- (iv) From studying the graphs the two-factor (CE) interaction ( $p=0.0890$ ) becomes clear.

TABLE 5.11 ANOVA FOR FACTOR 8

## Inattentive-Withdrawn

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	TAIL PROB.
MEAN	38609.25299	1	38609.25299	1910.21	0.0000
SEX(S)	2.62498	1	2.62498	0.13	0.7188
CONTACT(C)	25.98371	1	25.98371	1.29	0.2576
EXPERIENCE(E)	44.60070	2	22.30035	1.10	0.3329
SC	37.49164	1	37.49164	1.85	0.1740
SE	65.40010	2	32.70005	1.62	0.1997
CE	94.41145	2	47.20572	2.34	0.0982
SCE	56.32215	2	28.16108	1.39	0.2496
ERROR	7417.82216	367	20.21205		

Table 5.11 reveals that the two-factor interaction CE, has a relatively small p value of 0.098 and although it is not significant at 5% level, it is worth considering the graphical display of the Contact-Experience cell means (Figure 5.4).

FIGURE 5.4 CE INTERACTION : F8-CELL MEANS

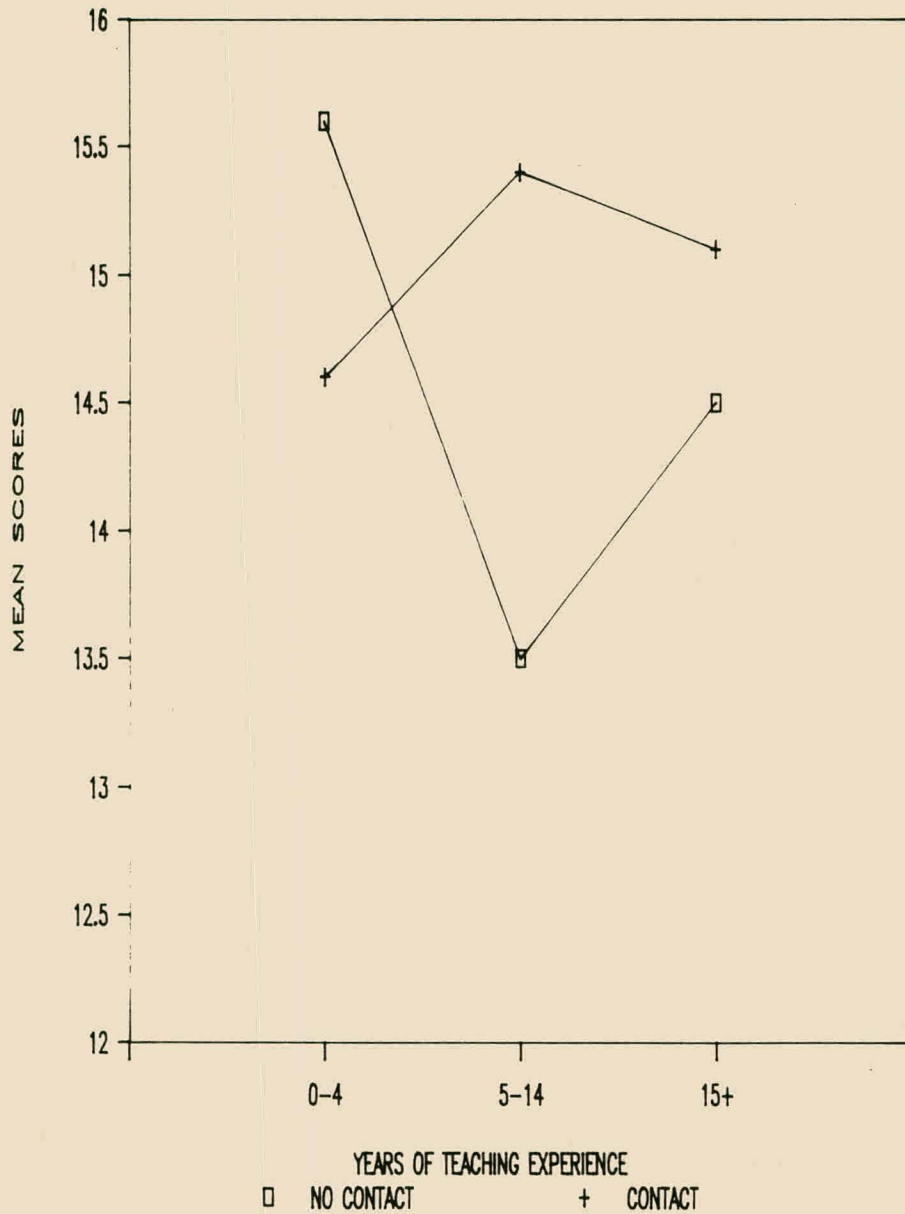


Figure 5.4 reveals that :

- (i) The mean scores for teachers who have no contact with inspectors of psychological services are : 15.6 for the inexperienced group, 13.5 for the intermediate experience group and 14.5 for the most experienced group. Teachers who have contact with inspectors of psychological services record the following means : 14.6; 15.4 and 15.1 for 0-4 years, 5-14 years and 15+ years respectively.
- (ii) The mean score increases steadily, with years of teaching experience for teachers who have contact with inspectors of psychological services. For teachers without contact, the inexperienced group has the highest mean score followed by the most experienced, and finally the mean score for intermediate experienced group.
- (iii) From studying the graphs the two-factor interaction (CE) ( $p=0.098$ ) becomes clear.

TABLE 5.12 ANOVA FOR FACTOR 9

## Irrelevant Responsiveness

SOURCE	SUM OF SQUARES	D. F.	MEAN SQUARE	F	TAIL PROB.
MEAN	16374.72560	1	16374.72560	1089.37	0.0000
SEX(S)	19.54891	1	19.54891	1.30	0.2549
CONTACT(C)	24.00007	1	24.00007	1.60	0.2072
EXPERIENCE(E)	3.90908	2	1.95454	0.13	0.8781
SC	11.60511	1	11.60511	0.77	0.3802
SE	37.46423	2	18.73212	1.25	0.2888
CE	34.11093	2	17.05546	1.13	0.3227
SCE	0.66952	2	0.33476	0.02	0.9780
ERROR	5516.49300	367	15.03132		

The interpretation of table 5.12 is the same as for Factors one and two.

Table 5.12 reveals that there are no significant interactions or significant differences among means (main effects) with regard to sex (male, female), contact (0, >0) and experience (0-4, 5-14, 15+). This means that teachers' perceptions of irrelevant responsiveness (F9) are not significantly determined by sex, experience or contact with inspectors of psychological services or any interaction between the variables.

We conclude that hypothesis number 08 has been confirmed.

TABLE 5.13 ANOVA FOR FACTOR 10

## Creative Initiative

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	TAIL PROB.
MEAN	12238.34382	1	12238.34382	1017.20	0.0000
SEX(S)	12.01473	1	12.01473	1.00	0.3183
CONTACT(C)	14.08749	1	14.08749	1.17	0.2799
EXPERIENCE(E)	10.85733	2	5.42866	0.45	0.6372
SC	3.01849	1	3.01849	0.25	0.6168
SE	121.60787	2	60.80394	5.05	0.0068*
CE	41.20719	2	20.60360	1.71	0.1819
SCE	31.63542	2	15.81771	1.31	0.2698
ERROR	4415.50424	367	12.03135		



In table 5.13 above, the two-way or two-factor SE interaction has a relatively small p value of 0.0068.

For interpreting this interaction, consideration should be given to the graphical representation of the F10 cell means, as shown in figure 5.5.

FIGURE 5.5 SE INTERACTION : F10-CELL MEANS

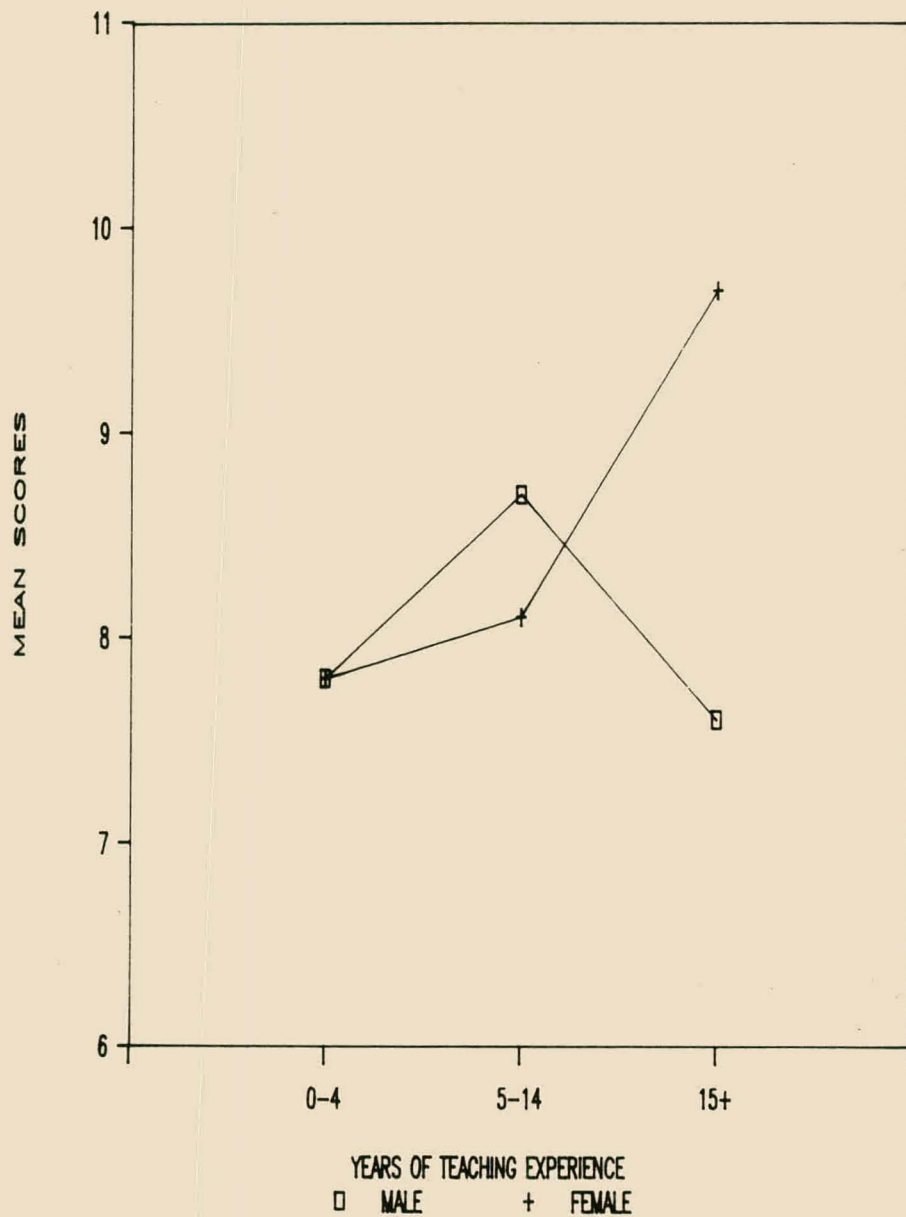


Figure 5.5 reveals that :

- (i) The inexperienced and intermediate experience groups of male and female teachers (0-4 and 5-14 years) do not differ significantly in their perceptions of creative initiative.
- (ii) The experienced groups (15+ years) of male and female teachers differ significantly in their perceptions of creative initiative. The mean score for males decreases while the mean score for females increases.
- (iii) With an increase in the number of years of teaching experience, male and female teachers perceive creative initiative differently.

TABLE 5.14 ANOVA FOR FACTOR 11

## Need for closeness to the teacher

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	TAIL PROB.
MEAN	19826.97264	1	19826.97264	1235.95	0.0000
SEX(S)	11.06703	1	11.06703	0.69	0.4067
CONTACT(C)	56.26946	1	56.26946	3.51	0.0619
EXPERIENCE(E)	13.37900	2	6.68950	0.42	0.6593
SC	23.21140	1	23.21140	1.45	0.2298
SE	70.73289	2	35.36644	2.20	0.1117
CE	176.01365	2	88.00683	5.49	0.0045*
SCE	9.66867	2	4.83434	0.30	0.7400
ERROR	5887.35958	367	16.04185		

Table 5.14 reveals that the two-way or two-factor interaction CE, is significant. This means that the interaction between contact and experience differs significantly for the two categories of contact (0, > 0).

For interpreting these interactions, consideration should be given to the graphical representation of means in the F11-Cell, as shown in figure 5.6.

FIGURE 5.6 CE INTERACTION : F11-CELL MEANS

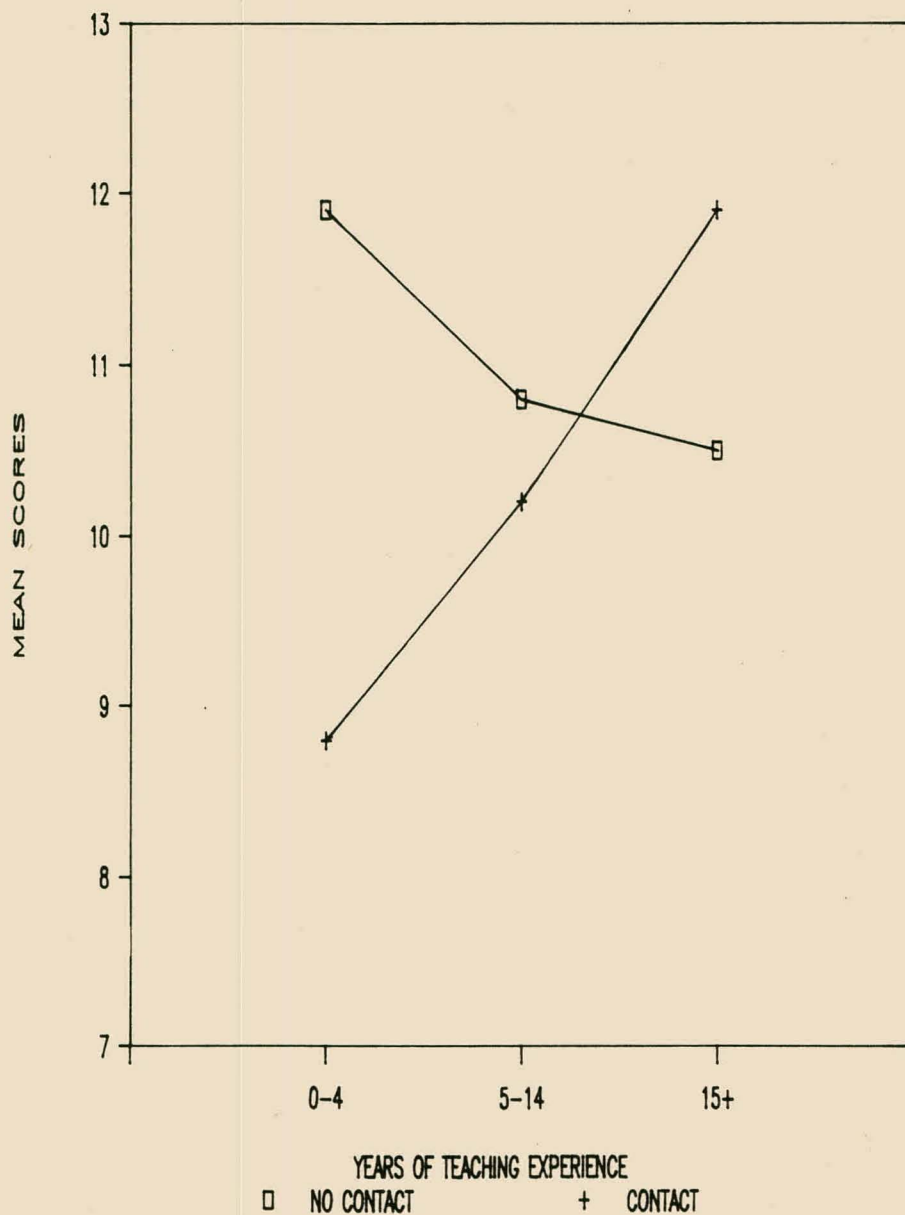


Figure 5.6 reveals the following :

- (i) The interaction between contact and experience (CE) differs for the different groups of teachers i.e. teachers who had contact ( $>0$ ) with inspectors of psychological services, and those who had no contact (0).
  
- (ii) The mean scores of teachers who had contact with inspectors of psychological services, increase with an increase in the number of years of teaching experience while the mean scores of teachers who had no contact with inspectors decrease with years of teaching experience.

TABLE 5.15 ANOVA FOR NONFACTOR ITEM 27

## Inability to change

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	TAIL PROB.
MEAN	2615.06978	1	2615.06978	762.11	0.0000
SEX(S)	5.29939	1	5.29939	1.54	0.2148
CONTACT(C)	9.08737	1	9.08737	2.65	0.1045
EXPERIENCE(E)	0.18504	2	0.09252	0.03	0.9734
SC	0.94103	1	0.94103	0.27	0.6008
SE	9.11768	2	4.55884	1.33	0.2661
CE	4.21783	2	2.10892	0.61	0.5414
SCE	4.40848	2	2.20424	0.64	0.5266
ERROR	1259.31151	367	3.43137		

Table 5.15 reveals that there are no significant interactions or significant differences among means (main effects) with regard to sex (male, female), contact (0, >0) and experience (0-4, 5-14, 15+). This means that teachers' perceptions of pupils' inability to change are not significantly determined by sex, experience or contact with inspectors of psychological services or any interaction of variables.

Hypothesis number 08 has therefore been accepted.

TABLE 5.16 ANOVA FOR NONFACTOR ITEM 40

Desire to quit

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	TAIL PROB.
MEAN	2458.56900	1	2458.56900	599.64	0.0000
SEX(S)	9.15228	1	9.15228	2.23	0.1360
CONTACT(C)	0.27251	1	0.27251	0.07	0.7967
EXPERIENCE(E)	32.70739	2	16.35369	3.99	0.0193*
SC	0.74952	1	0.74952	0.18	0.6692
SE	21.05127	2	10.52563	2.57	0.0781
CE	17.14382	2	8.57191	2.09	0.1251
SCE	10.91090	2	5.45545	1.33	0.2656
ERROR	1504.71683	367	4.10005		



Table 5.16 reveals that the two-factor interaction SE, has a relatively small p value of 0.0781 and although it is not significant at 5% level, it is worth considering the graphical display of the SEX-EXPERIENCE cell means (Figure 5.7).

FIGURE 5.7 SE INTERACTION : NONFACTOR ITEM 40

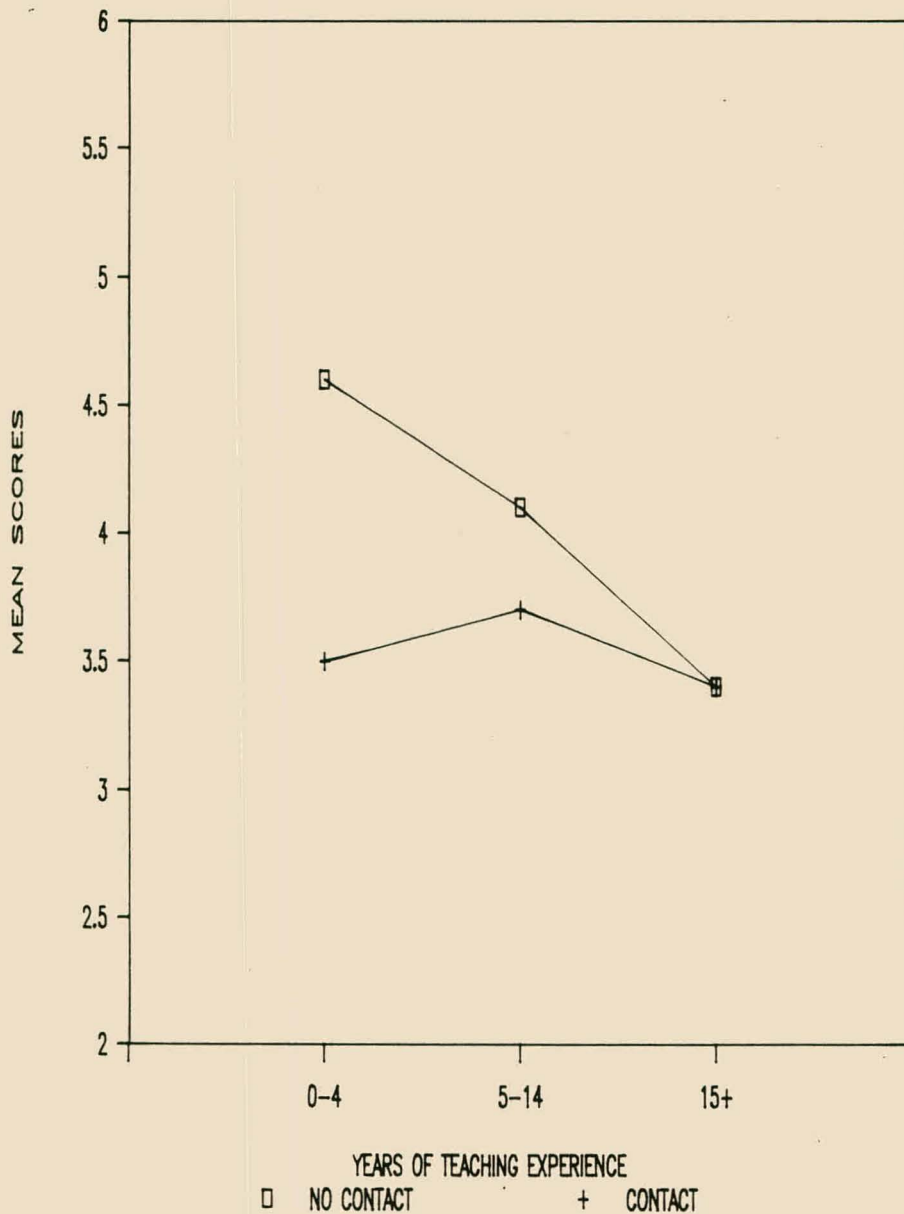


Figure 5.7 reveals that :

- (i) The inexperienced groups (0-4 years) of male and female teachers differ in their perception of nonfactor item number 40 (desire to quit). The perception of the desire to quit is more pronounced among members of the **no contact** inexperienced group than among members of the **contact** inexperienced group.
- (ii) The intermediate experience groups (5-14 years) of male and female teachers evince a slight difference in perception of nonfactor item number 40 (desire to quit).
- (iii) The most experienced male and female teachers (15+ years) do not differ in perception of the nonfactor item number 40. Both groups have a mean score of 3.4.
- (iv) With years of teaching experience, differences diminish in male and female teachers' perceptions of the problem behaviour called "desire to quit".

TABLE 5.17 ANOVA FOR NONFACTOR ITEM 41

## Slowness to accomplish task

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	TAIL PROB.
MEAN	3696.52628	1	3696.52628	949.17	0.0000
SEX(S)	2.18233	1	2.18233	0.56	0.4546
CONTACT(C)	3.90474	1	3.90474	1.00	0.3173
EXPERIENCE(E)	1.05511	2	0.52756	0.14	0.8734
SC	2.47195	1	2.47195	0.63	0.4261
SE	5.42221	2	2.71110	0.70	0.4992
CE	7.22458	2	3.61229	0.93	0.3965
SCE	0.66072	2	0.33036	0.08	0.9187
ERROR	1429.27604	367	3.89449		

Table 5.17 reveals that there are no significant interactions or significant differences among means (main effects) with regard to sex (male, female), contact (0, >0) and experience (0-4, 5-14, 15+). This means that teachers' perceptions of pupils' slowness to accomplish tasks, are not significantly determined by sex, experience or contact with inspectors of psychological services (interactions).

Hypothesis 08 has been confirmed.

## 5.3.3.2 A SUMMARY ON THE TESTING OF HYPOTHESIS NUMBER ONE

Table 5.4 through table 5.17 contain the results of the three-way analyses of variance which were conducted for the unbalanced design in table 5.3.2 (Searle, 1987; Dunn and Clark, 1987). This was done for sex, experience and contact for each of the DESB eleven factors and nonfactor items : 27, 40 and 41. For the statistical analyses, the respondents were grouped according to (i) sex (male, female), (ii) contact (0=no contact, > 0=contact with inspectors of psychological services) and (iii) the number of years of teaching experience (0-4 years i.e. inexperienced, 5-14 years i.e. intermediate experience and 15+ years i.e. the most experienced group of teachers).

The statistical analyses of data for FACTORS 1, 2, 5, 8 and 9 plus NONFACTOR items 27 and 41 reveal that there are no significant interactions or significant differences among means (main effects) with regard to sex (male, female), yearly contact (0, >0) and years of teaching experience (0-4, 5-14, 15+ years). This means that teachers' perceptions of : classroom disturbance (F1), impatience (F2), achievement anxiety (F5), inattentive-withdrawn (F8), irrelevant responsiveness (9), inability to change (item 27) and slowness to accomplish task (item 41) are not significantly determined by experience, sex and yearly contact with the inspectors of psychological services. Hypothesis number 08 is tenable.

The analyses also reveal no significant two-or three-way interaction effects with regard to FACTORS 3, 7 and NONFACTOR item 40. It has been discovered however, that for FACTOR 3 i.e. disrespect-defiance, sex is significant in teachers' perceptions of this condition ( $F=5.74$ ,  $p=.0171$ ). For FACTOR 7, i.e. comprehension, the effect of yearly contact is significant ( $F=8.15$ ,  $p=.0045$ ). For the NONFACTOR item 40 i.e. desire to quit, the effect of experience is significant ( $F=3.99$ ,  $p=.0193$ ).

Significant interaction effects were found for FACTORS 4, 6, 10 and 11.

The present chapter confines itself to analysis of data and its interpretation. The discussion of results is reserved for chapter six.

#### 5.3.3.3 CANONICAL R AND TESTING OF HYPOTHESIS NUMBER TWO

##### REITERATION OF HYPOTHESIS NUMBER TWO

No relationship exists between the nature of perception of learning, and behavioural problems, and the following respondents' dimensions :

- (i) sex
- (ii) type of school (class)
- (iii) age
- (iv) experience
- (v) contact

The research question we attempt to answer here is on the degree of relationship among variables; we have a multiple number of dependent and independent variables; and the goal of the analysis would be to maximally correlate a linear combination of dependent variables with a linear combination of independent variables. The appropriate statistical test selected for this purpose is the canonical R (Tabachnick and Fidell, 1983:63).

TABLE 5.18 RELATIONSHIP BETWEEN RESPONDENTS' DIMENSIONS AND ELEVEN FACTORS.

## Canonical Correlations

Number	Eigenvalue	Canonical Correlation	Wilks Lambda	Chi-Square	D.F.	Sign. Level
1	.1242	.3524	.7408	111.16	55	.0000
2	.0746	.2732	.8458	62.04	40	.0143
3	.0410	.2024	.9140	33.30	27	.1872
4	.0284	.1684	.9531	17.81	16	.3351
5	.0191	.1382	.9809	7.15	7	.4139

## Coefficients for Canonical Variables of the First Set

f 1	Classroom disturbance	0.32301	0.29630	-0.72225	0.46257	0.24471
f 2	Impatience	0.04635	-0.11244	0.22118	-0.21815	-0.20287
f 3	Disrespect-defiance	-0.77554	-0.77823	-0.04903	-0.66266	0.12498
f 4	External blame	-0.33967	0.50199	0.57821	0.55980	0.02347
f 5	Achievement Anxiety	-0.19957	0.10941	-0.11016	-0.35166	-0.43855
f 6	External reliance	-0.52320	-0.11802	-0.32267	0.37463	0.24676
f 7	Comprehension	-0.22108	-0.08391	-0.59283	0.27733	-0.68034
f 8	Inattentive withdrawn	0.27885	-0.16495	0.18036	0.47313	-0.08957
f 9	Irrelevant Responsiveness	0.21702	0.52245	0.43730	-0.16535	-0.43020
f10	Creative initiative	0.14953	-0.91765	0.42749	0.40566	0.13383
f11	Closeness	0.64061	0.23247	0.14063	-0.11766	-0.28544

## Coefficients for Canonical Variables of the Second Set

Sex	0.75236	-0.12914	0.11944	-0.49172	0.42424
Class	-0.22516	-0.96279	-0.12047	0.12802	0.13609
Age	0.63594	0.14614	-1.35875	0.75323	-0.08400
Experience	-0.04944	-0.26865	1.62400	-0.05357	-0.35444
Contact	0.01437	0.31912	0.17835	0.47490	0.82437



The first canonical correlation has 55 degrees of freedom and a chi-square value of 111.16. This is significant at .0000 level of significance. This means that the relationship between variables of the first set and those of the second set (11x5=55 df) is highly significant. The second canonical correlation has a df of 40 and a chi-square of 62.04. This is also significant at .01 level. Canonical correlations number 3, 4, and 5 are not significant.

The first and the second canonical correlation coefficient account for the significant linkage between the two sets of canonical variables namely eleven DESB factors and respondents' dimensions.

The canonical correlation analysis is between the two sets of variables namely : (f1, f2, f3, f4, f5, f6, f7, f8, f9, f10 and f11) and set 2 consists of teachers' characteristics (sex, class, age, experience and contact).

The first canonical correlation is  $\sqrt{.1242} = .35$ .

Looking at the chi-square values and significance levels, we need to consider the first two pairs of canonical variates.

Analysing the pairs of canonical variates that accompany the first canonical correlation :

<u>Set 1</u>	<u>Coefficient</u>
f1	0.32301
f2	0.04635
f3	-0.77554
f4	-0.33967
f5	-0.19957
f6	-0.52320
f7	-0.22108
f8	0.27885
f9	0.21702
f10	0.14953
f11	0.64061

<u>Set 2</u>	<u>Coefficient</u>
Sex	0.75236
Class	-0.22516
Age	0.63594
Experience	-0.04944
Contact	0.01437

Applying the cut-off value of 0.3; the items relevant to the first canonical variate from set 1 in order of magnitude are f3, f11, f6, f4 and f1 and those in set 2 are sex and age.

Thus the first canonical variate indicates that items f3, f11, f6, f4 and f1 tend to match with teachers' characteristics namely, sex and age.

Analysing the pairs of canonical variates that accompany the second canonical correlation, we find that, items relevant to the second canonical variate, from set 1, in order of magnitude are, f10, f3, f9, and f4; and those in set 2 are class and contact.

Thus the second canonical variate indicates that items : f10, f3, f9 and f4 tend to match with teachers' characteristics namely class and contact.

Looking at the pairs of canonical variates that accompany the 3rd, 4th and 5th canonical correlations, we find that there is no pair of canonical variates which can be considered for further analysis. The obtained canonical correlations are not significant.

#### 5.3.3.4 TESTING OF HYPOTHESIS NUMBER THREE

##### REITERATION OF HYPOTHESIS NUMBER THREE

There will be no significant effects (interaction effects between the variables and the main effects of the variables) between the sex of teachers, the experience of teachers, the yearly contact with inspectors of psychological services and perception of the modes of diagnosis, treatment and management of learning and behaviour problems.

In order to test or determine whether any significant effects exist between the various activities namely diagnosis, treatment, management and teachers' characteristics like sex, yearly contact and experience, three-way analyses of variance (ANOVA) have been done.

The reasons for the selection of the above mentioned statistical technique are the same as those advanced for testing hypothesis number one. These reasons appear under paragraph 5.3.3.1.

- 180 -

TABLE 5.19 ANOVA FOR DIAGNOSIS : SET 1

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	TAIL PROB.
MEAN	141361.39100	1	141361.39100	10101.15	0.0000
SEX(S)	16.84762	1	16.84762	1.20	0.2733
CONTACT(C)	29.13914	1	29.13914	2.08	0.1499
EXPERIENCE(E)	30.22979	2	15.11489	1.08	0.3407
SC	9.42800	1	9.42800	0.67	0.4123
SE	30.67027	2	15.33514	1.10	0.3354
CE	33.62526	2	16.81263	1.20	0.3020
SCE	66.89661	2	33.44831	2.39	0.0930*
ERROR	5136.01407	367	13.99459		

The significant three-factor interaction SCE ( $p=0.0930$ ) can be interpreted by considering the following graphical representation of diagnosis or Set 1 cell means.

FIGURE 5.8 SCE INTERACTION : SET 1 DIAGNOSIS

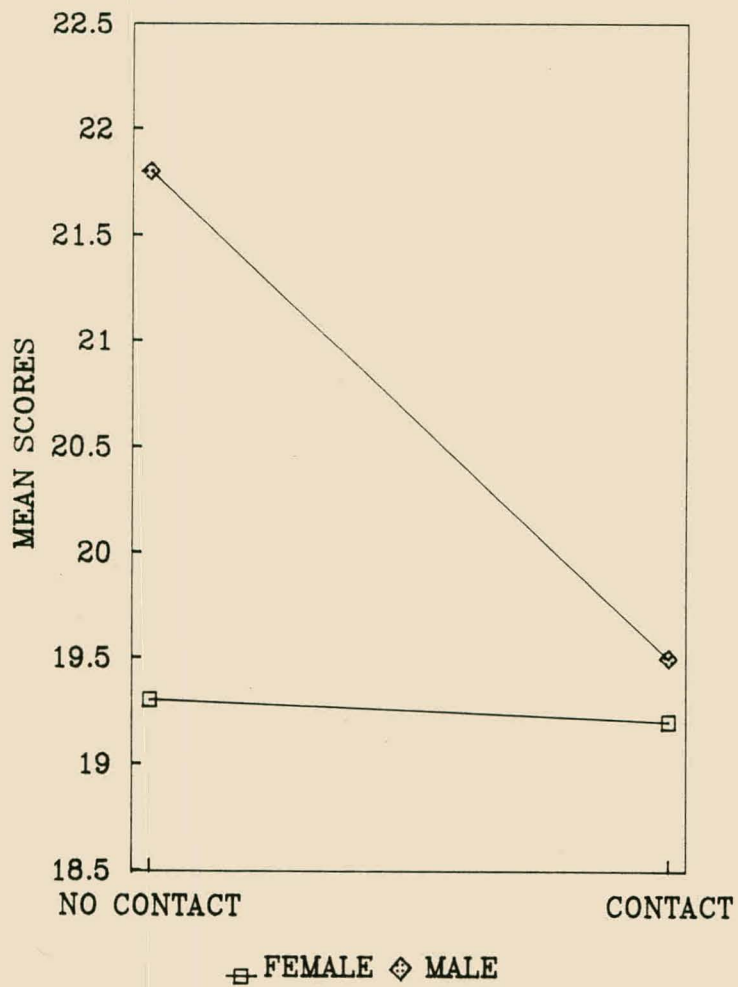


Figure 5.8 reveals the following :

- (i) The interaction between sex and experience differs for the different groups of teachers i.e. teachers who had contact with inspectors of psychological services and those who had no contact.
- (ii) For the no contact group the mean diagnostic score decreases sharply and then increases sharply for males with an increase in experience while for the females it increases steadily.
- (iii) For the contact group the mean diagnostic scores for the inexperienced and the experienced females are greater than those of their male counterparts.
- (iv) The mean diagnostic score for the intermediate experience male group is greater than the mean score for the intermediate female group which has contact with inspectors of psychological services.
- (v) The lack of parallel behaviour of the curves illustrates the interaction of sex with experience for both the zero or no contact group and the contact group.

- 183 -

TABLE 5.20 ANOVA FOR TREATMENT : SET 2

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	TAIL PROB.
MEAN	70611.28415	1	70611.28415	2882.76	0.0000
SEX(S)	91.81939	1	91.81939	3.75	0.0536
CONTACT(C)	49.27010	1	49.27010	2.01	0.1570
EXPERIENCE(E)	27.46351	2	13.73176	0.56	0.5713
SC	108.73860	1	108.73860	4.44	0.0358*
SE	37.47041	2	18.73521	0.76	0.4661
CE	297.44812	2	148.72406	6.07	0.0025*
SCE	39.06649	2	19.53325	0.80	0.4513
ERROR	8989.40609	367	24.49429		



Table 5.20 reveals that there are significant two factor interactions namely SC ( $p=0.0358$ ) and CE ( $p=0.0025$ ). The significant two-factor interaction SC ( $p=0.0358$ ) can be interpreted by considering the following graphical representation of treatment or Set 2 cell means.

FIGURE 5.9 SC INTERACTION : SET 2 TREATMENT

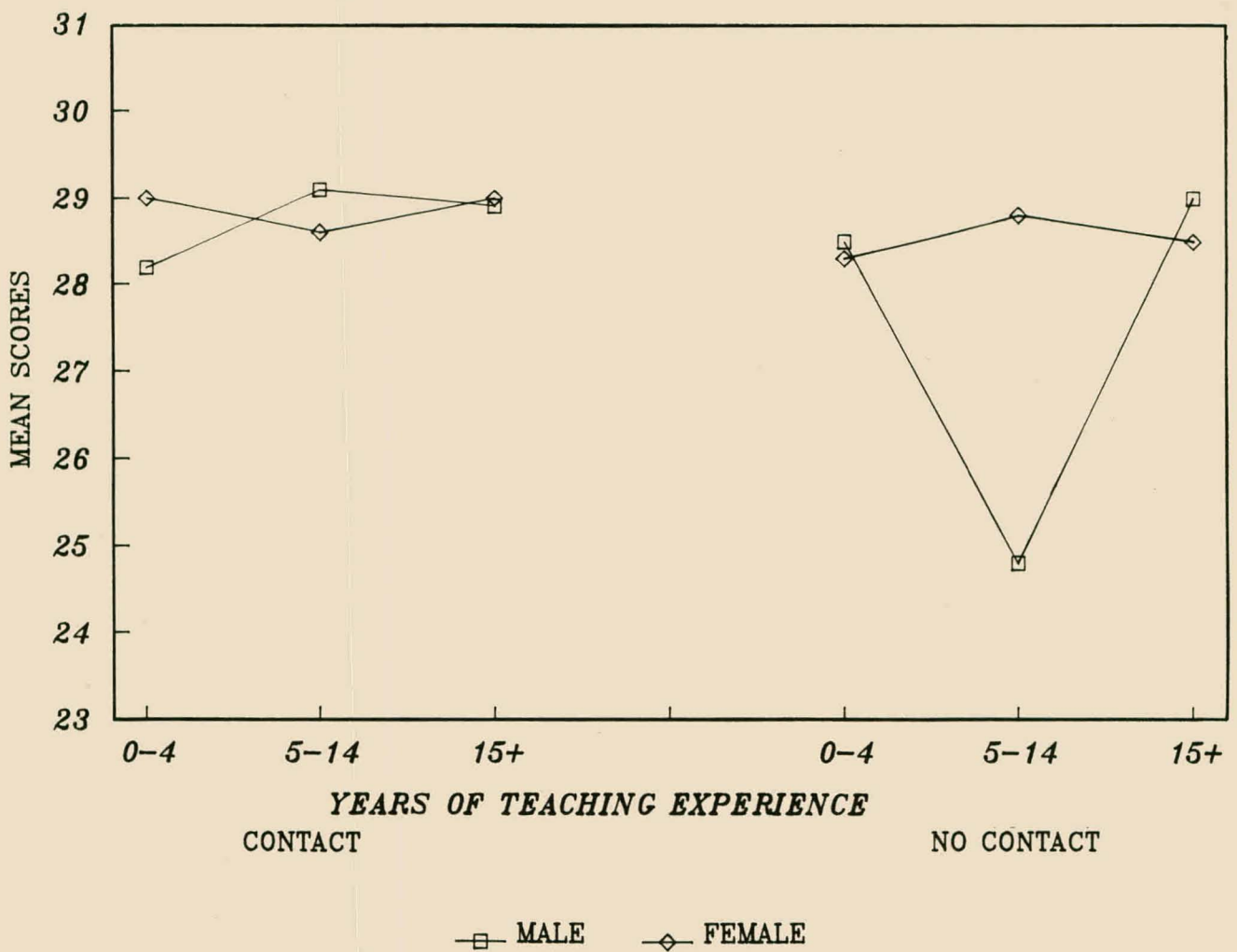


Figure 5.9 reveals the following :

- (i) The means of the females for the zero contact and contact groups are more or less the same (19.3 and 19.2) while the male zero contact group has the highest mean score (21.7) than the male-contact group (19.5) and the two female-groups.
  
- (ii) It can thus be deduced that contact with inspectors of psychological services has a greater influence on the perceptions of the mode of treatment of learning and behavioural problems by male teachers than by female teachers. The means decrease from 21.7 to 19.5 for males while the means remain more or less the same for females (19.3 to 19.2).

FIGURE 5.10 CE INTERACTION : SET 2 TREATMENT

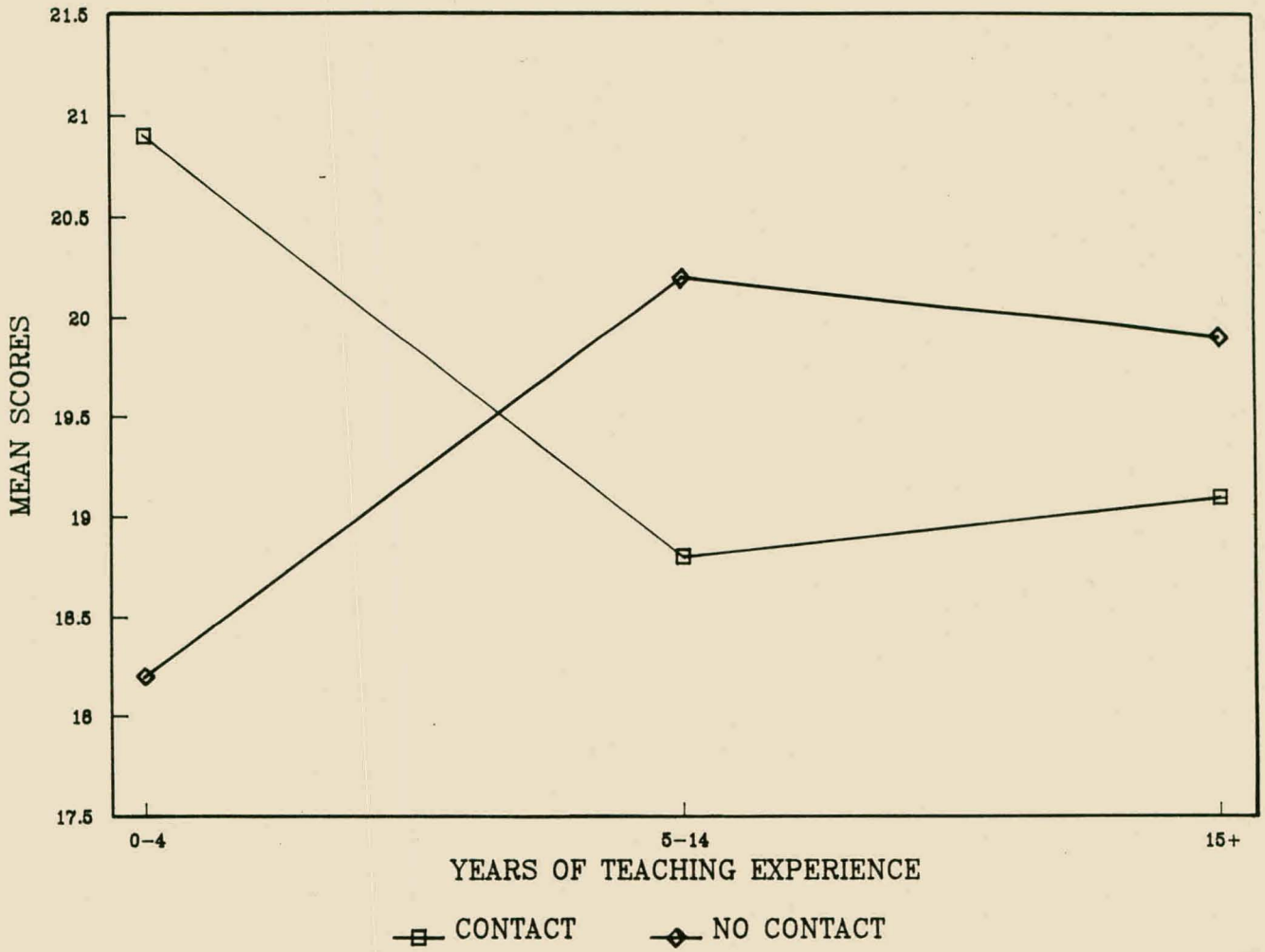


Figure 5.10 reveals the following :

- (i) The mean treatment score for the contact inexperienced group is greater than the mean score for the zero contact group. The intermediate zero contact group has a higher mean score than the contact group. With an increase in years of teaching experience the curves for the two groups remain relatively parallel.
  
- (ii) The mean scores of teachers who had contact with inspectors of psychological services, decrease sharply and then increase steadily with an increase in the number of years of teaching experience while the mean scores of teachers who had no contact with inspectors increase sharply and then decrease steadily with years of teaching experience.

TABLE 5.21 ANOVA FOR MANAGEMENT : SET 3

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	TAIL PROB.
MEAN	55590.11807	1	55590.11807	3408.41	0.0000
SEX(S)	7.59492	1	7.59492	0.47	0.4954
CONTACT(C)	34.24598	1	34.24598	2.10	0.1482
EXPERIENCE(E)	5.12094	2	2.56047	0.16	0.8548
SC	2.65994	1	2.65994	0.16	0.6866
SE	0.53756	2	0.26878	0.02	0.9837
CE	27.11272	2	13.55636	0.83	0.4364
SCE	48.33949	2	24.16974	1.48	0.2286
ERROR	5985.66509	367	16.30971		

Table 5.21 reveals that there are no significant interactions or significant differences among means (main effects) with regard to sex (male, female), yearly contact (contact, no contact) and experience (0-4, 5-14, 15+). This means that teachers' perceptions of management activities are not significantly determined by sex, experience and yearly contact with the inspectors of psychological services.

5.3.3.5 RANK ORDER AND TESTING OF HYPOTHESIS NUMBER FOUR

REITERATION OF HYPOTHESIS NUMBER FOUR

THE PERCENTAGE OF TEACHERS WHO ENDORSE SPECIFIC RECOMMEN-  
DATIONS CONFORMS TO AN ORDINAL SCALE OF MEASUREMENT.

TABLE 5.22 TEACHERS' RECOMMENDATIONS FOR HELPING A CHILD WITH LEARNING PROBLEMS (N=380)\*\*

Recommendations	Frequency*	Percent of Respondents Recommending***	Rank Order
Encourage a child's participation in practical or extracurricular activities :	93	26.3	1
Teacher-parent conferences must be held :	83	23.5	2
Refer the child to or consult with a/an psychologist/inspector of psychological services/guidance teacher/nurse/social worker/specialist :	62	17.5	3
Junior Primary school curricular must be enriched and include among other things the teaching of spelling, dictation, recitation, poems, writing, use different methods of teaching, lesson presentation, excursions and this child must occupy a front seat in class :	57	16.1	4
Organize group discussions, assign special tasks and motivate children to participate :	52	14.7	5
Discuss the learning problem with the child, give more responsibility and homework to this child :	48	13.6	6



TABLE 5.22 CONTINUED

Exercise the principle of individualization and ability (homogeneous) grouping :	43	12.2	7.5
Use learning/teaching aids with these children :	43	12.2	7.5
Apply principles of behaviourism - reinforce appropriate behaviour, ignore/punish inappropriate ones :	32	9.0	9
Bring awareness to the child/show him love, acceptance, willingness and competence to help him overcome his problem :	29	8.2	10
Teacher must compile a case history :	23	6.5	11
Give the child remedial work/assign the child to a special class :	15	4.2	12
Find out whether the child has any sensory defects :	10	2.8	13
Let these children attend special schools with special teachers :	9	2.5	14
Teachers must know how to teach a child with a learning problem :	5	1.4	15

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\* a respondent could make more than one recommendation

\*\* the denominator is N minus no response category i.e. 380-26=354

\*\*\* percentage relative to N=354

TABLE 5.23 TEACHERS' RECOMMENDATIONS FOR HELPING A CHILD WITH BEHAVIOUR PROBLEMS (N=380)\*\*

Recommendations	Frequency*	Percent of Respondents Recommending ***	Rank Order
Give the child work to do alone, or in a group, and encourage the child to take leadership e.g. bellringer :	137	39.1	1
Work hand in hand with parents, keep them informed or organize teacher-parent conferences :	115	32.9	2
Apply principles of behaviourism-reinforce appropriate behaviour, ignore/punish inappropriate ones :	108	30.9	3
Motivate the child to participate fully in extracurricular activities :	102	29.1	4
Give/teach the child moral lessons from the bible; teach him/her to avoid bad company and not to join bad organizations/organize moral lessons on behaviour/teacher should read to pupils biblical stories concerning behaviour :	54	15.4	5
Consult with/refer the child to the school counsellor, psychologist, welfare people :	52	14.9	6

- 194 -

TABLE 5.23 CONTINUED

Teachers must show love, acceptance, empathy, friendly discipline and not harshness, be approachable and allow free discussions with pupils :

Gather a child's case history :

Keep child away from parents; boarding school/special school placement :

Diagnose : try to find out about the nature and cause of a problem :

Request a social worker to help :

Take the child on excursions :

free discussions with pupils :	36	10.3	7
Gather a child's case history :	35	10.0	8
Keep child away from parents; boarding school/special school placement :	11	3.1	9
Diagnose : try to find out about the nature and cause of a problem :	10	2.9	10
Request a social worker to help :	9	2.6	11
Take the child on excursions :	5	1.4	12

\* a respondent could make more than one recommendation

\*\* the denominator is N minus no response category i.e. 380-30=350

\*\*\* percentage relative to N=350.

Tables 5.22 and 5.23 detail teachers' recommendations on activities which could benefit children with learning or behavioural problems. More than 92% of respondents made multiple recommendations on activities directed at helping a child with a learning, and a child with behavioural problems. A bird's eyeview of both tables reveals a general impression of desire for more psychological services and varied procedures for rendering psychological services. Fifteen recommendations were made with regard to learning problems and twelve recommendations were made in connection with behaviour problems.

An examination of tables reveals common themes and slight relationships in the order of recommendations. Important amongst such relationships are recommendations on : participation of pupils in practical, extracurricular activities for purpose of ameliorating learning and behaviour problems (ranked 1 and 4 respectively); parental involvement received rank order number 2 for both activities; referral was assigned ranks 3 and 6, methods of handling or teaching children with learning and behaviour problems were ranked 4 and 5; and application of behavioural techniques to learning and behaviour problems received ranks 9 and 3 respectively.

It is interesting to note that parental involvement was ranked position two for both types of problems. Teachers have

begun to realize that the education of children does not hinge exclusively upon their expertise as professionals. There are problems which defy teachers' professional inclinations. Behaviour modification techniques are more relevant for behaviour rather than for learning problems. This is reflected in the ranks 3 and 9 respectively.

Teachers assigned rank number one to pupils' participation in extracurricular activities and leadership roles. This kind of participation was considered the most desirable for both learning and behavioural problems. It is not very clear why teachers consider extracurricular activities the most important engagement for children with learning problems. It is however generally accepted that teachers should arrange school work and extracurricular activities in such a manner that pupils with behaviour problems which interfere with academic performance, get success in some other fields and thus gain self-confidence. In these activities pupils develop a wide range of interests. Extracurricular activities per se are not remedies for learning problems.

A significant proportion of teachers recommends that children with learning problems be referred to specialists (rank order number 3) and also children with behaviour problems (rank order number 6). Teachers also recommend a systematic variation of teaching methods in the treatment of learning problems (rank order number 4) and of behaviour

problems (rank order number 5). This implies that variation /change in the teachers' mode of lesson presentation will be accompanied by variation or change in the pupils' behaviour.

The themes which were most commonly voiced in connection with learning and behaviour problems were twofold in nature, namely behaviour modification and involvement of pupils and their parents. For both learning and behaviour problems, teachers recommend the following : reinforcement of appropriate acts or behaviour of pupils and punishing or ignoring inappropriate behaviour patterns; showing empathy and love; modelling behaviour through moral lessons, biblical stories and stories depicting people with impeccable characters. This finding indicates that teachers believe that the application of learning principles and techniques to learning and behaviour problems can be effective measures of control.

For both learning (rated 1) and behaviour (rated 4) problems pupils' involvement in extracurricular activities and leadership roles, appears significant. Coupled with parental involvement (rated 2) for both problems, this recommendation indicates that teachers are aware of the roles of students and their parents in the educational arena.

There is evidence to suggest that recommendations made by teachers are a reflection of their knowledge of Educational

Psychology. Aspects which teachers mentioned were amongst others : teaching through modelling, teaching of values and attitudes, individualized educational programmes (IEP) motivation of pupils, homogeneous or heterogeneous grouping of pupils, specific techniques for establishing order discipline and enhancing students' self-control. These aspects received rank orders 1 through 10 for learning problems and 1 through 7 for behaviour problems. This reflects the influence of the subject or course of study on teachers' ideation and decision making. Every teacher training programme covers these aspects or topics.

Lack of knowledge on Special Education became apparently evident. Aspects which are a province of Special Education were ranked the least. These are 11 through 15 for learning problems and 8 through 12 for behaviour problems.

The hypothesis on the ordinal strength of teachers' recommendations is tenable. For both learning and behaviour problems there is a clear ordinal sequence in the teachers' recommendations. There is only one tied score. An increase in the number of ties would lead us to conclude that the data lacks ordinal strength in magnitude.

#### 5.4 CONCLUSION

Chapter five was concerned with the analysis and interpretation of data. The discussion of the results will be done in chapter six.

The results of analysis of data for chapter five have revealed the following : No significant interactions or differences were found among means for factors 1, 2, 5, 8 and 9. No significant two-/three-factor interactions were found for factors 3, 7 and item 40. Significant interaction effects were found for factors 4, 6, 10 and 11.

The relationship between teachers' particulars and perception of learning and behaviour problems was found to be statistically significant in two out of five instances. The main effects of canonical variables of the first set and second set yield significant results ( $df=11 \times s=ss$ ). The subsequent computation ( $df=10 \times 4=40$ ) also yields significant correlation. The results of further computation yield no significant results. In terms of the first two computations hypothesis two is found tenable.

The testing of hypothesis number three has produced statistically no significant results. Teachers grouped according to respondents' dimensions do not perceive diagnosis, treatment, and management modes differently.



Chapter six to follow discusses the results of these analyses. It will also highlight the findings in relation to their implementation.

## CHAPTER SIX

### 6.0 RESULTS, FINDINGS AND DISCUSSION

#### 6.1 INTRODUCTION

An attempt is made to answer the question : has the present study achieved its objectives? This chapter therefore discusses results of the analysis which was done in the previous chapter. The results of statistical analyses are scrutinized for meaning, relation with aims of study and significance of findings. Chapter six therefore examines the aims of the study in relation to hypotheses and findings. This discussion throws light on achievement of the aims of study. It is on the basis of this discussion that speculations are conjured into a model.

This study was intended to find answers to the following questions :

- (i) what is the nature of children's learning and behaviour problems which require psychological intervention in KwaZulu primary schools?
- (ii) Is there a relationship between perception of learning and behaviour problems and the following respondents' dimensions :

- (a) teacher's sex;
  - (b) class taught i.e. junior primary, senior primary and combined school;
  - (c) teacher's age in years;
  - (d) teacher's experience in years;
  - (e) teacher's frequency of contact with inspectors of psychological services.
- (iii) What is the modus operandi that can be followed to provide the means for solving these problems?
- (iv) What is the plan of psychological services delivery that teachers would like to recommend for an improved and efficient programme for psychological intervention within the school?

#### 6.1.1 THE NATURE OF LEARNING AND BEHAVIOUR PROBLEMS

This discussion of findings is based on the results of the ANOVA for FACTORS ONE through ELEVEN plus NONFACTOR ITEMS 27, 40 and 41 (TABLES 4.5 through 5.17).

One important finding of this study is that teachers do not differ in their perceptions of certain behaviour and learning problems. The present results have shown that irrespective of the intervening variables or teachers' characteristics, teachers hold similar perceptions of the

following conditions : classroom disturbance (F1), impatience (F2), achievement anxiety (F5), inattentive-withdrawn (F8), irrelevant-responsiveness (F9), inability to change (item 27) and slowness to accomplish task (item 41). These troublesome conditions are largely in the field of behavioural problems or problems in the personality field. This means that teachers' perceptions show more similarity in behavioural rather than in learning problems. This finding seems to support Borg and Falzon's (1990) contention that teachers show more awareness of problems in the personality field than in other areas of children's endeavours. This finding also lends support to the belief that teachers consider pupils' behaviour troublesome, if it disturbs them in the classroom (Ziv, 1970).

Another important finding of this study concerns teachers characteristics in relation to perception. Sex difference has differential influence on teachers' perceptions of disrespect-defiance (F4). Several factors may explain the differences we find between male and female teachers. One possible explanation is that male and female teachers make different classroom demands on pupils' compliant or conformity behaviour. Furthermore, boys and girls manifest different socially defined behaviours.

It has been observed that teachers who have and those who have no contact with inspectors of psychological services

hold different perceptions of pupils' comprehension level. This may reflect range of pupils' individual differences more than teachers' characteristic perceptions. In any classroom situation pupils differ in their level of understanding of the subject matter. This finding falls in line with the general principle of individual differences in comprehension ability and in pupils' achievement in academic work. The extent to which the child is likely to quit (abandon) or give up when the learning task is difficult or demands more than usual effort typifies learning problems. Teachers grouped in accordance with their years of teaching experience differ significantly in their perceptions of pupils' desire to quit (item 40). More importantly, different perceptions in this regard, suggest that teachers' views of this problem, change as a result of increase in the number of years of teaching experience. To summarize the above discussion, it must be stated that sex seems to influence teachers' perception of disrespect-defiance, while yearly contact influences teachers' perception of comprehension. Experience has a bearing on teachers' perceptions of pupils' desire to quit. This is in keeping with Borg and Falzon's (1990) findings that with an increase in the number of years of teaching experience, teachers become progressively more tolerant of undersirable behaviour of pupils. Comprehension and desire to quit are related to pupils' academic work and therefore constitute learning problems.

In the results, we find four classroom conditions in which the interaction effects were significant. These conditions are external blame (F4) (CE and SCE = sex x contact x experience), external reliance (F6) (CE), creative initiative (F10) (SE) and the need for closeness to the teacher (F11) (CE). Sex and interaction of sex with experience are significant associates of teachers' perceptions of external blame, external reliance, creative initiative and need for closeness with the teacher. The relationship between sex and experience depends on the influence of the third variable i.e. yearly contact. The main feature distinguishing groups is whether they have or have no contact with inspectors of psychological services.

It has been observed (Figure 5.1) that the intermediate experience (5-14 years) groups of teachers who have no contact with inspectors of psychological services account for the significant differences between male and female perceptions of external blame. The inexperienced (0-4 years) groups of teachers who have contact with inspectors of psychological services account for the significant differences between male and female perceptions of external blame.

The interaction of sex and experience in perception of pupils' external reliance is highly significant for teachers who have no contact with inspectors of psychological

services than those who have contact (Figure 5.2).

Regardless of whether they have or have no contact with inspectors of psychological services male and female teachers differ significantly in their perceptions of pupils' creative initiative. Female teachers show an improvement (increase in mean scores) in their perceptions of creative initiative in children. This improvement varies concomitantly with an increase in the number of years of teaching experience. The opposite holds true for male teachers (Figure 5.3).

Both male and female teachers who have contact with inspectors of psychological services perceive pupils' need for closeness to the teacher. An increase in the number of years of teaching experience is accompanied by an increase in the ability to perceive this condition. This applies to teachers who have contact with inspectors of psychological services. Teachers who have no contact with inspectors of psychological services show an inverse relationship between perception of need for closeness and teaching experience (Figure 5.6).

The most important summarizing statement generated by these findings on interaction effects is that teachers' perceptions of learning and behaviour problems as listed in the DESB scale are influenced by interaction of the following teachers' characteristics : sex, experience and

yearly contact with inspectors of psychological services.  
Teachers differ in perceptions of certain learning and  
behaviour problems.



- 208 -

TABLE 6.1 CLASSIFICATION OF TEACHERS ON THE BASIS OF TOTAL  
FACTOR SCORE (N=380)

Factor Number	Nature of Learning and Behaviour Problems	Group 1		Group 2		Group 3	
		N	%	N	%	N	%
1	Classroom disturbance	25	6.6	201	52.9	154	40.5
2	Impatience	2	.5	184	48.4	194	51.1
3	Disrespect-defiance	-	-	221	58.2	159	41.8
4	External blame	-	-	267	70.3	113	29.7
5	Achievement anxiety	-	-	248	65.3	132	34.7
6	External reliance	2	.5	201	52.9	177	46.6
7*	Comprehension	262	69	113	29.7	5	1.3
8	Inattentive-withdrawn	-	-	175	46.1	205	53.9
9	Irrelevant-responsiveness	-	-	241	63.4	139	36.6
10*	Creative initiative	183	48.2	171	45	26	6.8
11	Need for closeness to the teacher	162	42.6	207	54.5	11	2.9

Group 1 = Teachers perceiving a factor as extremely deficient in class : Abnormally low

Group 2 = Teachers perceiving a factor as occurring within normal range in class.

Group 3 = Teachers perceiving a factor as occurring in excess in class : Abnormally High

\* = Factors scored in the opposite direction i.e. a high score indicates normality.

TABLE 6.2 CRITERIA FOR DIVIDING A TOTAL FACTOR SCORE

	Abnormally Low	Average: Normal Range	Abnormally High
Factor 1	5-	6-14	15+
Factor 2	4-	5-14	15+
*Factor 3		8-	9+
*Factor 4		10-	11+
*Factor 5		12-	13+
Factor 6	7-	8-19	20+
Factor 7	9-	10-16	17+
*Factor 8		14-	15+
*Factor 9		10-	11+
Factor 10	7-	8-14	15+
Factor 11	9-	10-19	20+

\* indicates dichotomous criteria for various factors

The above classification is reported in the DESB Manual.

Each factor score can be classified into one of the three or one of the two categories. These categories are : abnormally low total factor score, a total score falling within normal range, and abnormally high total factor score.

There were three hundred and eight subjects or respondents in the final study sample. Each respondent had eleven total factor scores. Each one of these factor scores could be classified as outlined in table 6.2 above and also in table 6.1.

In order to get a clear picture or pattern of learning and behaviour problems, a continuum from abnormally low, through normal range to abnormally high must be dichotomised. This means that for the sake of interpretation, a comparison can be made between an abnormally low category and a normal range. In some instances, a comparison can be made between an abnormally high category and a normal range. Where the two extreme categories (namely extremely deficient behaviour and distinctly excessive behaviour) indicate the same direction of deviancy or disturbance, the two scores can be added and the sum then compared with the normal range. Factors seven and ten are scored in the opposite direction i.e. abnormally low and abnormally high scores for these factors mean diametrically the opposite. Factors like numbers 3; 4; 5; 8 and 9 do not present a problem. They constitute a dichotomous scale. Factors which consist of three divisions are numbers 1; 2; 6; 7; 10 and 11.

On the basis of the above description, two clusters of learning and behaviour problems emerged. The first cluster comprises exclusively of conditions designated as troublesome or problematic in the classroom. These are impatience  $51.1 + .5 = 51.6\%$ ; comprehension  $69 + 1.3 = 70.3\%$ ; inattentive-withdrawn  $53.9\%$ , and creative initiative  $48.2\%$ . The second cluster predominantly embraces abnormal behaviour patterns occurring within normal range in the classroom. These are classroom disturbance  $52.9\%$ ; disrespect-defiance

58.2%; external blame 70.3%; achievement anxiety 65.3%; external reliance 52.9%; irrelevant-responsiveness 63.4%; and need for closeness to the teacher 54.5%.

If the highest percentage falls on group 1 or group 3, the disorder is put in the first cluster, but if it falls on group 2, the disturbance is classified under the second cluster. This is an explanation of how the two clusters were formed. The most important thing is to describe the emerging picture of learning and behaviour problems. It is the theme of this thesis to describe the manifestation of learning and behaviour problems.

Another emerging pattern from this quantification is the ratio of learning to behaviour problems. The ratio we observe is 4:7. Disorders in the first cluster constitute learning difficulties or learning problems. Disturbances in the second cluster constitute behaviour problems. It is a sound scientific conclusion to state that this study reveals learning problems, the most troublesome conditions in primary schools in KwaZulu. Behaviour disorders/problems like disrespect-defiance, external blame, achievement anxiety, external reliance and need for closeness to the teacher, were perceived as occurring within the normal range.

With regard to the intensity or degree of occurrence of each kind of learning or behaviour problem, statistically

-212 -

significant results were obtained for external reliance, comprehension, need for closeness, desire to quit, disrespect-defiance, external blame and creative initiative. No statistically significant results were obtained for conditions like : classroom disturbance, impatience, achievement anxiety, inattentive withdrawn and irrelevant-responsiveness. The table below illustrates instances of acceptance and rejection of hypothesis number 08 on the basis of factor-score data.

TABLE 6.3 RESULTS OF TESTING HYPOTHESIS NUMBER ONE

Factor Number	Sex	A Three-way Analysis of Variance					
		Contact	Experience	SC	SE	CE	SCE
1	NS	NS	NS	NS	NS	NS	NS
2	NS	NS	NS	NS	NS	NS	NS
3	S	NS	NS	NS	NS	NS	NS
4	S	NS	NS	NS	NS	S	S
5	NS	NS	NS	NS	NS	NS	NS
6	NS	S	NS	NS	NS	S	NS
7	NS	S	NS	NS	NS	NS	NS
8	NS	NS	NS	NS	NS	NS	NS
9	NS	NS	NS	NS	NS	NS	NS
10	NS	NS	NS	NS	S	NS	NS
11	NS	NS	NS	NS	NS	S	NS
Item 27	NS	NS	NS	NS	NS	NS	NS
Item 40	NS	NS	S	NS	NS	NS	NS
Item 41	NS	NS	NS	NS	NS	NS	NS

NS = NOT SIGNIFICANT AT 5% LEVEL

S = SIGNIFICANT AT 5% LEVEL

NB.: Computer generated significance levels are indicated in the text.

Hypothesis number 08 was found tenable in seven instances and only in seven instances were the results of testing found significant. The variable of sex, alone produced significant results for factors three and four. The variables of contact yielded significant results for factor six and eleven (table 6.3).

The findings reveal that teachers on the whole do not differ in their perception of classroom disturbance. The respondents perceive this condition as occurring with the same intensity.

Fifty-two comma nine percent of teachers perceive classroom disturbance as occurring within normal range and 6.6 percent perceive children as fearful and inhibited. Teachers who perceived this condition as highly abnormal constituted 40.5 percent of the sample. On a dichotomous scale the percentage is in favour of those who perceive this condition as occurring within the normal range.

A more recent study (Cumes, 1986) lends support to the observation that the eleven factors can be divided into two categories. Cumes' study yields two behavioural components. Emotionally disturbed children tend to be classified into two broad categories namely "conduct problem" and "personality problem", or "Factor I and Factor II", or "acting out and undersocialized". Children who belong to the first cluster are exclusively disruptive (conduct disorders) and those who belong to the second cluster are predominantly detached.

Teachers do not differ in their perception of impatience as it is manifested by pupils. Fifty-one comma six percent of teachers admit that impatience is an abnormality manifested in the classroom. Pupils who obtain high scores on this factor are impulsive and unconcerned about the quality and neatness of their work.

The variable of sex does not influence perception of impatience among teachers. Though statistically not significant, female teachers tend to rate problem behaviour as more serious, and appearance and destruction of property as less serious, than do male teachers. Male teachers on the other hand, consider sex problems as less serious than do female teachers (Berlin, 1959; Cumes 1986).

The problem of disrespect-defiance evokes different perceptions among teachers. The impact of the variable of sex was statistically significant. This means that male and female teachers perceive this condition differently. While some perceive pupils as manifesting this condition excessively, others perceive disrespect-defiance as moderate or basically lacking in class.

Fifty-eight comma two percent of teachers claim that disrespect-defiance is under control in the classroom. Forty-one comma eight percent of teachers consider this condition problematic in the classroom. Pupils showing this

condition are responsible for serious disruption of the relationship between themselves and total educational or academic setting.

In the same vein, Cumes (1986) has shown that children designated as emotionally disturbed in terms of the statistical method of discriminant analysis manifest diverse traits. He mentions the following characteristics : a tendency to lose contact with the classroom process, inability to maintain attention, preoccupation with one's thoughts which have no relation with what goes on in the classroom. These indicate inappropriate behaviour. Affected children were however not blatantly disrespectful and defiant of teachers, but were hard to bring under control.

Teachers perceive "external blame" differently. The results obtained were statistically significant for this factor. This means that primary school pupils, are perceived by their teachers as either intropunitive, or extrapunitive in their approach to success or failure of their endeavour.

Only 29.7 percent of teachers reported "external blame" as a problematic condition in the classroom. More than 70 percent of subjects claim that "external blame" is not a problem in the classroom. This implies that pupils are less likely to attribute their failures or successes to external circumstances. Pupils demonstrate confidence in their



involvement with academic tasks. There are significant differences in teachers perceptions of the way pupils manifest external blame.

There were no significant differences in teachers' responses to how pupils manifest achievement anxiety. Teachers perceive achievement anxiety in the same way.

A high percentage (65%) of teachers perceive pupils as manifesting moderate achievement anxiety. Only 34 percent of the sample perceive this condition as troublesome and interfering with the child's optimal functioning.

Fifty-two comma nine percent of teachers perceive external reliance as moderately manifested in the classroom. A negligible percentage of teachers perceive this condition as abnormally low. It is however 46.6 percent of teachers who claim that primary school pupils cannot make independent decisions in the classroom.

An alarming 69 percent of the sample indicates that comprehension is apparently lacking or deficient among primary school pupils. This reflects learning problems or difficulties. Only 31 percent of the subjects perceive primary school pupils as capable of comprehending what is presented in the classroom. This explains the high failure and dropout rates among black primary school pupils. Usually,

those who survive make a "springbok jump". This is a common phrase used to describe those who get automatic promotion from primary school to high school. Usually, such pupils reach standard ten with a carryover of learning problems.

The inattentive-withdrawn tendency is a serious problem in primary schools. This is indicated by 53.9 percent of teachers. Children with this condition have a tendency to lose contact with what goes on in the classroom and are incapable of maintaining attention, or are preoccupied with thoughts unrelated to activities of the lesson. This accounts for a large proportion of underachievers. Teachers do not differ in the way they perceive this problem.

More than 60 percent of teachers do not perceive irrelevant responsiveness as a problem in class. Only 36.6 percent of the respondents claim that pupils manifest inappropriate behaviour, and make a negative contribution in the classroom. Teachers do not differ with regard to the way they perceive irrelevant responsiveness among primary school pupils.

Just like comprehension, creative initiative is apparently lacking (48.2%) among primary school pupils. Only 45% of teachers claim that pupils manifest a moderate creative initiative in class. This signifies a lack of involvement in the learning environment and indicates learning difficulties. Teachers differ in their perception of creative-initiative. Statistically significant results were obtained for this factor.

Many primary school pupils are manifestly detached and withdrawn (42.6%). Fifty-four comma five percent of teachers perceive pupils as manifesting a moderate need for closeness to the teacher. A negligible percentage (2.9%) perceives an excessive need for closeness. Teachers differ in their perception of this condition.

The results obtained on the question of inability to change from one task to another, were statistically not significant. Significant results were obtained for the desire to quit and no significant results were obtained for slowness to accomplish tasks that are assigned. Teachers do not differ in their perception of slowness to accomplish tasks condition among primary school pupils.

#### 6.1.2 THE RELATIONSHIP BETWEEN PERCEPTION OF LEARNING - BEHAVIOUR PROBLEMS AND RESPONDENTS' DIMENSIONS

The second question the study attempted to answer was on the association between teachers characteristics and eleven factors. The appropriate statistical test was chosen for this purpose (chapter 5). The relationship between teachers' five characteristics and a list of eleven factors produced significant results (table 5.18). The relationship is statistically significant for the first and second computations. Computation numbers 3, 4 and 5 have statistically insignificant results. A relationship exists

between variables of the first set and variables of the second set. For example the coefficient for canonical variables of the first and second sets relate in the following manner : classroom disturbance: and sex = .32, and class .30; and age -0.72; and experience .46, and contact .25.

The cutoff point for a significant canonical correlation coefficient is .30 (chapter 4). It is obvious from the above example that teachers' characteristics like sex, class, age and experience are highly related to the perception of classroom disturbance. This indicates that teachers' characteristics play significant roles in the judgement of pupils' behaviour within the school or classroom situation. This is in consonance with findings reported in educational literature (Williams, 1974; Sparks, 1952; Berlin, 1959; Rutter, 1967; Spivack and Swift 1967; Ziv, 1970; Spivack and Swift, 1972; Cumes, 1986).

### 6.1.3 TEACHERS' VIEWS ON DIAGNOSIS, TREATMENT AND MANAGEMENT

This study also attempted an assessment of teachers' views with regard to three activities namely diagnosis, treatment and management. In this study the effect of teachers' particulars on perception of the three activities has not produced changes that have reached statistical significance. Table 5.3.1 contains a mean score and a standard deviation

score for each item. For Set I, the lowest standard deviation has a value of .70 and the highest has a value of 1.12. This shows that all mean scores for this set are within two standard deviation units from the line of symmetry in a normal probability curve. The smaller the standard deviation value, the closer are the individual scores to the central tendency. By analogy, the closer the mean values for individual items, the more closely related are the views expressed by respondents. Table 5.3.1 contains such values for diagnosis, treatment and management.

The findings reveal that teachers do not differ in their views on how management should be carried out. There are however significant interactions for certain activities. With regard to diagnosis, the three-way (SXCXE) interaction is significant at the 9% level. With regard to treatment the two-way interactions are significant. These are SXC interaction ( $p=.0358$ ) and CXE interaction ( $p=.0025$ ). Since the items for the three sets were formulated on the basis of scientific literature on Special Education, and these items were subjected to validation through factor analysis (chapter three), they have sound scientific truth. As such, these items can be used as building blocks for a model of intervention.

#### 6.1.4 TEACHERS' RECOMMENDATIONS ON INTERVENTION STRATEGIES

An attempt was made in this study to obtain teachers' opinions on suitable methods of intervention for a child

with learning and behaviour problems. To this end, an open-ended scale was used. Teachers were requested to make five recommendations for intervention strategies for learning problems, and another five for behaviour problems. Not all subjects gave the required number of recommendations. These recommendations were classified into various categories. The frequency of an idea within a category was noted. Ideas were ranked i.e. statement with the highest frequency received rank order number one, and percentage for each frequency was also noted. This was done for learning problems (table 5.22) and for behaviour problems (table 5.23).

It is worth mentioning that for both learning and behaviour problems, the ordinal strength of teachers' recommendations became apparent. A detailed discussion of the results of testing hypothesis number four appears in section 5.3.3.4 of chapter five.

## 6.2 PATTERNS OF LEARNING AND BEHAVIOUR PROBLEMS

The use of anova to analyse teachers' factor scores has produced a picture of learning and behaviour problems manifested in KwaZulu primary schools. Children in KwaZulu primary schools manifest problems in the following areas : impatience, comprehension, initiative-withdrawn and creative initiative. The study reveals that teachers have many children who display or manifest these learning problems in the classroom. A small number of children display various

forms of behavioural problems or patterns. These behavioural patterns are classroom disturbance, disrespect defiance, external blame, achievement anxiety, external reliance, irrelevant-responsiveness and need for closeness. Teachers admit that these behavioural patterns occur within normal range.

Their manifestation is as follows :

External blame 70.3%

Achievement anxiety 65.3%

Irrelevant-responsiveness 63.4%

Disrespect-defiance 58.2%

Need for closeness to the teacher 54.5%

External reliance 52.9%

Classroom disturbance 52.9%

The order in which teachers endorse learning problems which are commonly occurring disturbances is as follows :

Comprehension 69%

Inattentive-withdrawn 53.9%

Impatience 51.6%

Creative-initiative 48.2%

Cumes (1986) used discriminant analysis and classified these factors into function one comprising of inattentive-withdrawn, classroom-disturbance and irrelevant-responsiveness; and function two involving closeness to the teacher and creative initiative.

From the results of the present study, distinct patterns emerged, reflecting the degree of manifestation of the problem in the classroom. Comprehension receives rank order number one. It is the most troublesome. Primary school pupils in KwaZulu have problems in understanding what is taught in the classroom. These pupils are inattentive, withdrawn, impatient and lack creative initiative. For behavioural problems, external blame ranks one, followed by achievement anxiety, irrelevant-responsiveness, disrespect-defiance, need for closeness, external reliance and classroom disturbance. The order of presentation of these problems is based on percentages of teachers who endorse each problem. This illustrates the degree or extent of manifestation of the behaviour problem.

The emerging picture of learning and behaviour problems is not significantly different from those of other population groups, locally or abroad. The table below provides evidence of the comparisons. Mean scores for South African white experimental subjects are related to mean scores for South African black subjects. This has a two fold implication : that teachers were able to correctly and honestly identify a child with learning or behaviour problems; and secondly that, the DESB scale is a useful and valid instrument for use.



TABLE 6.4 DESB FACTOR MEANS

	N	1	2	3	4	5	6	7	8	9	10	11
+ American Grade 2 Subjects	809	8.7	8.6	5.1	5.7	7.5	12.0	13.2	7.9	6.3	11.2	15.0
+ South African Grade 2 Experimental	192	10.5	15.3	9.2	9.2	11.4	21.6	9.6	16.2	11.9	9.4	14.8
+ South African Grade 2 Control	150	9.6	8.5	5.6	5.8	8.6	12.6	14.2	8.3	7.1	12.9	15.9
* S.A. Blacks A-5 Grades	380	13.1	14.7	8.5	8.7	10.7	19.3	8.2	14.9	9.7	8.4	10.6

N = Sample size

\* = Current Study

+ = Cumes, 1986:72

1 = classroom disturbance

7 = comprehension

2 = impatience

8 = inattentive withdrawn

3 = disrespect-defiance

9 = irrelevant responsiveness

4 = external blame

10 = creative initiative

5 = achievement anxiety

11 = need for closeness to the

6 = external reliance

teacher

### 6.3 SPECULATIVE INTERVENTION MODEL

On the grounds of previous findings and discussion, it is pertinent to make suggestions for intervention. An attempt is made to develop a prospectus for rendering help to children perceived and identified as having problems. Taking decisions about a model for intervention is also important because psychological health care among blacks in South Africa is lacking. It is indeed a debilitating phenomenon which accounts for the high failure rate, dropout rate and low attainment levels of black pupils. The role of school psychology in black education cannot be overlooked.

It is obvious from the responses of the study sample that psychological help is desperately needed. Generally speaking, "the best psychotherapy the school can give a child is success in his educational endeavours" (Fifield, 1967:66). Psychology must play a role with regard to learning and behaviour problems. The psychologist must lead principals and staff members to a better understanding of the child and his problems. This is generally referred to as Child Study and Consultation. This approach criticizes the idea that most teachers are better prepared in techniques, curricula and methods of teaching than in understanding the child. Teacher training programmes emphasize "what" and "how" to the total exclusion of "who".

The diagnostic approach, on the other hand, preoccupies itself with measurement of ability, personality, and instructional objectives. This approach seems purely psychometrically oriented.

The functioning of psychologists takes place at two levels : direct and indirect service systems. The direct service level involves diagnosis, child study, and making specific recommendations. Indirect service level would involve research and consultation. Research is the key to national development and progress. In addition to research, the role of the school psychologist is neglected in black education in South Africa. School psychologists can function as curriculum consultants. Many of the problems associated with underachievement are curricular in nature. Education is heavily loaded with measurements, like examination results for individuals or whole country. School psychologists are needed to evaluate this data. They are experts in curriculum evaluation programmes. The most important role, school psychologist must fulfil is that of a coordinator of all psychological and health care services within the community. This is done for the benefit of pupils. School psychologists have a role to play in the education of children and in the scientific endeavour for the betterment of education.

A fairly comprehensive review of literature (Sibaya, 1989) indicates a marked dearth of material specific for

psychological services delivery among Blacks in South Africa. This literature review makes it possible to state with a degree of precision that the limitation of current psychological services delivery models or system in African schools, is sizeable. This consideration coupled with the findings of the present study motivate speculation about introducing of an alternative model for delivery of psychological services in African schools.

#### 6.3.1 ASSUMPTIONS UNDERLYING A PROPOSED ALTERNATIVE MODEL IN THE DELIVERY OF PSYCHOLOGICAL SERVICES

The assumptions are based partly on the findings of this study, and also partly on literature review. A major finding of this study was that there are two clusters of problems. The first cluster constitutes learning problems while the second cluster constitutes behaviour problems. The ratio was 4:7 between the first and second clusters. Pupils manifest diverse problems. There is therefore a need for an interdisciplinary approach to these problems.

This study has also revealed that teachers perceive many problems in the same way. A rather global point is expressed by teachers in relation to diagnosis, treatment and management of problems.

Literature review (Roberts, 1970; Shaw, 1967; Gilmore and Chandy, 1973) reveals that teachers endorse as highly desirable functions of psychologists, the following activities : liaison activities involving communication with outside agencies; educational-guidance activity; individual therapy with pupils and parents; extracurricular activities; follow up studies; coordinating guidance for individuals; work with teachers; attention to emotional and learning problems. This is a comprehensive list and requires a wide range of services and a team of specialists.

An examination of tables 5.22 and 5.23 reveals arrays of psychological services. These are recommendations made by teachers. Those listed in the upper ranks are : participation of pupils in extracurricular activities; parental involvement; referral of cases; various method of handling these children and application of behaviour modification techniques.

The nature of these recommendations implies a different setting for rendering psychological help to pupils. This could be a setting for coordinating inputs from parents and professionals, where case conferences can be properly handled. Speculations are therefore made with regard to the use of the child and family guidance centre as an alternative model for the delivery of psychological services in African schools. These assumptions (Sibaya, 1989)

underlie or rest on the use of child and family guidance centres in rendering school psychological services. Some of these assumptions are :

- (i) The use of a child and family guidance centre enables professionals to coordinate their efforts on an ongoing basis. Such coordinated services are more efficient and cost-effective.
- (ii) A review of literature on psychological and related health services in schools (Haslam and Valletutti, 1975; Meyers et al., 1977; Apter and Conoley, 1984; Millman, Schaefer and Cohen, 1980; Reynolds and Gutkin, 1982; Burman and Reynolds, 1986; Elliott and Witt, 1986) lends support to the proposed plan of services delivery.
- (iii) This approach presupposes a psycho-social setting in services delivery. This situation affords both cognitive assessment and development/personality assessment of the pupil.
- (iv) This perspective advocates ways for focusing on the interactions of pupils with critical aspects of their environment i.e. the microsystem, mesosystem, exosystem and macrosystem. Every clinical assessment

procedure must explore these areas. The systems approach enables psychologists to investigate various aspects of the child adequately.

- (v) The centre initiates intervention programmes instead of waiting for referrals. The principle of "prevention is better than cure" holds true in this instance. Just like Community Psychology, the centre emphasizes promotion, utilisation and enhancement of already existing strengths of the community. The point to be emphasized is that preventative approaches aimed at reducing the potential number of children at risk, is more powerful than curative approaches.
- (vi) The Child and Family Guidance Centre would provide for a comprehensive psychological services delivery system in Black schools, interprofessional collaboration and coordination of activities of professionals with differing degrees of specialization.
- (vii) The child is assessed within the context of his family, and the wider social environment. In this manner, parents get first hand knowledge about their child. After all, the child is an individual in society, and the referral problem is not his property, but the outcome of interaction.

- (viii) Psychological services are made available on a local basis, and within the reach of the community. It is in an ideal position, to serve as a nodal centre, in a community-based approach to psychological services.
- (ix) It uses the systems approach whereby, treatment is not confined to the index child, but family members are also involved. When all is said and done, parents have primary responsibility over their children.
- (x) It offers the best opportunity, for the use of a consultation model, in dealing with school problems. Psychologists using this approach, interact with another professional, who works directly with the child. This is an indirect service delivery model. The psychologist is a consultant, and the teacher is typically the consultee, and the child, the client.
- (xi) The multidisciplinary team (MDT) approach, enables the centre to render diversity of services, and to improve the quality of family and community life. The centre is thus inclusive rather than restrictive. Furthermore, the services are continuous, successive and administered with a minimum of delay. This is unlike our usual discrete, prolonged and fragmented delivery of psychological services.



- (xii) The centre functions in close co-operation with other specialists, organisations and agencies. The role of the centre is thus integrative, co-operative and comprehensive rather than super-ordinate.

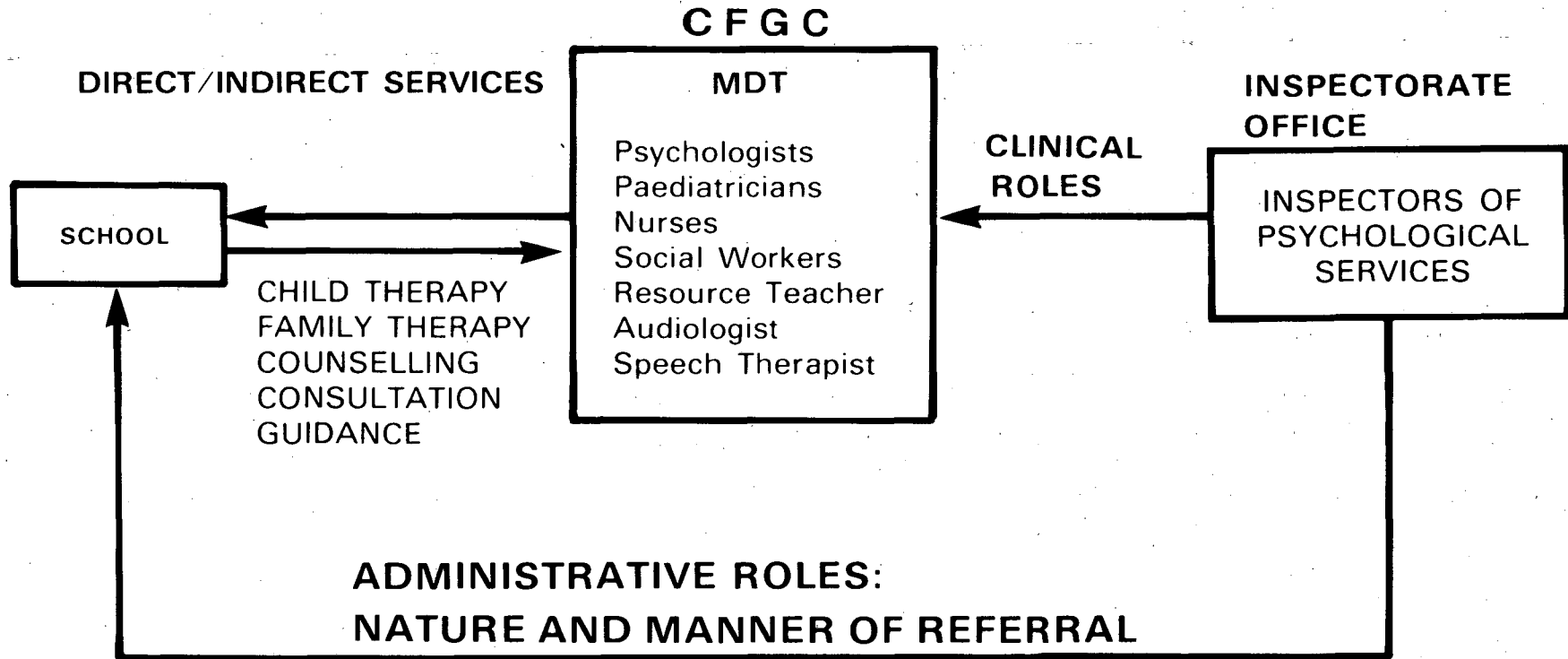
#### 6.3.2 PROPOSED MODEL OF PSYCHOLOGICAL SERVICES DELIVERY IN AFRICAN/BLACK SCHOOLS

This study proposes a model for psychological work in schools, based on the primary task of : helping children overcome learning and behaviour problems, and helping the school accomplish its educational mission.

#### MODEL A: ALTERNATIVE MODEL FOR DELIVERY OF PSYCHOLOGICAL SERVICES IN AFRICAN SCHOOLS

FIGURE 6.1

# MODEL A: AN ALTERNATIVE MODEL FOR DELIVERY OF PSYCHOLOGICAL SERVICES IN AFRICAN SCHOOLS



REFERRAL

THERAPY

INSPECTION

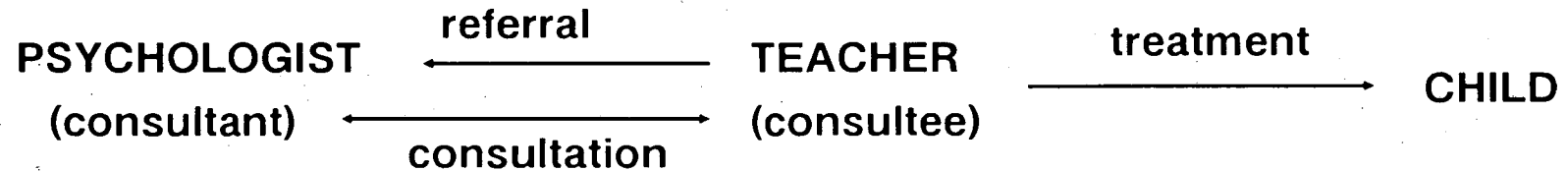
**FIGURE 6.2**

**MODEL B: DIRECT & INDIRECT SERVICE DELIVERY MODELS**

**DIRECT SERVICE DELIVERY MODEL**



**INDIRECT SERVICE DELIVERY MODEL**



Model A is an illustration of the positioning and relation of three bodies namely, the school, members of the multi-disciplinary team (MDT) in the Child and Family Guidance Centre (CFGC), and the inspectorate office. In this model, current inspectors of psychological services will provide equipment for the MDT to pursue their clinical roles.

Inspectors of psychological services will also examine the nature and manner of referrals made by the school. They will also serve as a link between the MDT and clients or parents.

The list of members of the MDT is not complete. It is simply intended to illustrate types of professionals who must serve on a permanent and/or consultative basis.

The position between the school and the MDT embraces the nature of services available to clients. These may be direct or indirect, depending upon the presenting case. Intervention strategies listed only constitute some and not all therapeutic procedures rendered by the MDT.

The school will serve as a referral source. Parents can however refer children to the clinic on their own volition. Basically, inspectors will fulfil their role of inspecting whether : work is carried out properly, and conditions are conducive for that. The school will send referrals and the MDT will administer therapy.

Model B is an extract from Model A. It shows the nature of direct and indirect services delivery systems. It is part of Model A. It is intended for illustration only and is not a different procedure.

### 6.3.3 CONSULTATION AND PSYCHOLOGICAL SERVICES DELIVERY IN AFRICAN SCHOOLS

Consultation takes its point of departure from the fact that behaviour in the classroom is a function of both intrapersonal and environmental factors. This procedure deemphasizes or discards traditional psychodiagnosis which is tedious and time consuming. This method or approach will work well in traditional black culture. Among Blacks in South Africa there are very few, if any, standardized media for diagnosis, and professionals with clinical expertise.

An indirect service to African children will meet large numbers of children with learning and behaviour problems. It is one way the impact of school psychologists can be felt. Psychologists can increase the benefits of their expertise widely through consultation.

Despite this apparent plethora of attention to consultation (Meyers et al., 1977; Fine and Tyler, 1971; Singer, Whiton

and Fried, 1970; Meyers, 1973) African schools in this country are devoid of consultation practices. Even where inspectors of psychological services visit schools, personal contact with school personnel is absolutely lacking. Inspectors of psychological services usually administer ability and aptitude, paper and pencil tests. This can be conducted with or without teachers' assistance. These records are scored and kept. The current system of psychological services in Black schools in this country does not provide for an assessment of social, educational, emotional and behavioural aspects of the child. The legacy of this approach is emphasis placed on psychometric testing rather than on psychological assessment and intervention. In this situation, the problems of children recede into the background. Learning and behavioural problems of pupils are not amenable to testing.

The methods of consultation are varied (Meyers et al., 1977; Meyers, 1973). Amongst other methods, behaviour modification and consultee-centered case consultation are the most widely used. Teachers would need inservice training in some techniques of consultation.

The most important advantage of consultation is that it permits the rendering of psychological assistance across race boundaries. In this way the shortage of professionally trained psychologists in Black education will be overcome.

#### 6.4 CONCLUSION

Chapter six was concerned with a discussion of findings, and attempted to create a model for psychological services in Black schools. Learning and behaviour problems prevailing in primary schools were clearly identified. The proposed model for intervention is intended to overcome pupils' problems. Educational theory and practices can only flourish when preceded by therapeutic procedures propounded in this thesis. This holds true particularly for Blacks in South Africa. These are problems Blacks must unravel before the advent of the new South Africa. There should be no carryover of problems from the previous system of education. The therapeutic procedures advanced in this thesis are essential for black pupils.

## CHAPTER SEVEN

### 7.0 SUMMARY, GENERALISATION AND RECOMMENDATIONS

#### 7.1 SUMMARY

##### 7.1.1 THE PROBLEM

In this study the problem investigated was teachers' perceptions of the nature of learning and behavioural problems as they are manifested in KwaZulu primary schools.

##### 7.1.2 THE AIM OF THE STUDY

The aim of the study was to achieve the following objectives:

- (i) To discover the nature of childrens's learning and behaviour problems as manifested in KwaZulu primary schools.
- (ii) To find out whether there is any relationship between : perception of learning and behaviour problems, and the following teachers' particulars :
  - (a) teacher's sex
  - (b) class taught i.e. junior primary, senior primary or combined school



- (c) teacher' age in years
  - (d) teacher's experience in years
  - (e) teacher's frequency of contact with inspectors of psychological services.
- (iii) To determine the modus operandi that can be followed to provide for diagnosis, treatment and management of these learning and behaviour problems.
- (iv) To assess teachers' recommendations for intervention strategies with regard to learning and behaviour problems.

### 7.1.3 HYPOTHESES DEVELOPED

Hypothesis number one : There will be no significant effects (interaction effects between the variables and main effects of variables) between the sex of teachers, the experience of teachers, the yearly contact with inspectors of psychological services and perception of the nature of learning and behavioural problems as measured by FACTORS 1 to 11 and NONFACTOR ITEMS : 27, 40 and 41.

Hypothesis number two : No relationship exists between the nature of perception of learning and behavioural problems, and the following teachers' particulars :

- (a) sex
- (b) class/type of school
- (c) age
- (d) teaching experience
- (e) frequency of contact with inspectors

Hypothesis number three : There will be no significant effects (interaction effects between the variables and the main effects of the variables) between the sex of teachers, the experience of teachers, the yearly contact with inspectors of psychological services and perception of the modes of diagnosis, treatment and management of learning and behaviour problems.

Hypothesis number four : The percentage of teachers who endorse specific recommendations conforms to an ordinal scale of measurement.

#### 7.1.4 METHODOLOGY

Chapter one consists of motivation for investigation in this field, statement of the problem, aims of the study and a plan for the organisation of the whole scientific report. Chapter two provides a theoretical background to the study. Chapter three details the research design and methods used in this study. A standardized scale was used to measure

teachers' perceptions of learning and behaviour problems among primary school pupils. This scale is called the Devereux Elementary School Behaviour rating scale (DESB). The 47 items measured by the Devereux scale define eleven behaviour factors (learning and behaviour problems) plus three additional items. Section two of the questionnaire consisted of items constructed and validated through the method of factor analysis by the researcher. Data were collected from a sample of primary school teachers. Chapters four, five and six are concerned with empirical investigation, data analysis and discussion of findings respectively. Advanced statistical techniques were used in the analysis of data. Chapter seven concludes the research project and makes recommendations for an improved psychological services delivery system.

#### 7.1.5 RESULTS

The following conclusions were arrived at :

- (i) Teachers do not differ in their perceptions of the nature of learning and behaviour problems. These problems are perceived as constituting two distinct clusters namely, learning problems and behaviour problems. Of these two clusters, learning problems were perceived the most troublesome in the classroom. KwaZulu primary school children manifest the following

learning problems : impatience, comprehension, inattentive-withdrawn and creative initiative. These children also manifest the following behaviour problems : classroom disturbance, disrespect-defiance, external blame, achievement anxiety, external reliance, irrelevant responsiveness and need for closeness to the teacher. By all standards of comparisons, learning problems are prepotent over behaviour problems among primary school pupils in KwaZulu.

- (ii) The study indicates that teachers' characteristics (sex, experience, contact with other professionals) do influence their judgement or perception of certain children's problems. Teachers' characteristics were found to have a tremendous influence on perception of certain learning and behaviour problems.
- (iii) The assessment of teachers' views with regard to the manner of conducting diagnosis, treatment, and management has revealed that teachers do not differ with regard to management.
- (iv) On the basis of teachers' recommendations about therapy, (intervention procedures), lists of therapies for learning and behaviour problems were compiled. An examination of the recommendations

reveals that they are rational therapeutic procedures. As such, these recommendations would benefit children with learning and behaviour problems. In addition, these recommendations are accommodated in the proposed model for intervention.

- (v) On the basis of findings from the present investigation and review of literature, a proposal is made for an alternative model for psychological services delivery in African schools. It is hoped this model will meet the needs of children with learning and behaviour problems.

## 7.2 GENERALISATION

In general, this study has answered the questions raised in the first chapter. The findings of the present study can be extended as more powerful generalisations. This can be done with a measure of certainty because the study adhered to the principles of a scientific procedure. The relatively large sample was selected through a random procedure (chapter three). The instrument that was used is a standardized scale with additional items validated separately. It is logical to conclude that the findings of the present study hold true for all primary school teachers in KwaZulu. Teachers in KwaZulu perceive learning and behaviour problems as two distinct clusters. Primary school children would manifest

these problems in exactly the same way as observed by the study sample. The percentage of teachers who endorse specific recommendations would increase proportionately with an increase on sample size. There is ample evidence to support the proposed model of intervention.

This study has high applicability. The researcher has chosen a researchable topic and the variables introduced in this study lend themselves to quantification, analysis and meaningful interpretation.

### 7.3 RECOMMENDATIONS

Although this study has achieved its objectives, several limitations exist. These are the areas it could not cover due to financial and time restrictions. This study confined itself to a small area of learning and behaviour problems among primary school pupils. It has therefore opened the following avenues for further research :

- (i) This study investigated teachers' perceptions of learning and behaviour problems among primary school pupils. It is desirable to investigate teachers' perceptions of (a) specific forms of deviant behaviour like school refusal, truancy, school phobia, neuroses, psychopathic tendencies etc. (b) learning and behaviour problems at post primary school levels.

- (ii) There is a need for a study of teachers' perceptions of deviant behaviour in the classroom and how these perceptions affect teacher-child relationships. Perhaps identifying a child as a problem child would influence a teacher's manner of approach to the child. The child's reaction to the teacher needs assessment as well.
- (iii) Not only should future studies be concentrated in the identification of problem children, intervention strategies should also be examined, for example :
- (a) A study of teachers' perceptions of school psychological services in KwaZulu, is a necessity.
  - (b) An examination of some bases of teachers' content or discontent with school psychological services in KwaZulu.
  - (c) The feasibility of a consultation model for KwaZulu school psychological services.
  - (d) An investigation into the actual and desired role functions of inspectors of psychological services in KwaZulu.

- (e) A consideration of role delineation among auxilliary services professionals.
- (iv) As a matter of highest priority, we need to examine or research the policy of control of psychological work and health related services in KwaZulu schools.
- (v) While we focus on exceptional children who deviate from normality in a downward direction, there is a need for knowledge of teachers' perceptions of gifted children and other exceptional cases in the upward direction.
- (vi) On the whole, it appears that the central problem area requiring further research is that of diagnosis and intervention strategies with children who manifest learning and behaviour problems. This must be achieved in a cost-effective way with optimal utility of existing resources.
- (vii) It has emerged clearly from the present study that learning and behaviour problems at secondary or high school levels should be urgently investigated.
- (viii) We need to examine learning and behaviour problems through the use of a wide variety of approaches. The use of a questionnaire method may have its own limitations.



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- 258 -

APPENDIX A

DEVEREUX ELEMENTARY SCHOOL BEHAVIOUR  
RATING SCALE (DESB)

The scale used in the pilot study

QUESTIONNAIRE

- 1 This is a questionnaire on pupils' learning and/or behaviour problems, as we see or observe them in the classroom situation.
- 2 Do not write your name or the child's name on this questionnaire.
- 3 You are requested to think about one child who has a learning and/or behaviour problem, in your class. There may be many children who have learning and behaviour problems in your class. CHOOSE ONE whom you have been watching over the past months and you can best describe his or her problems.
- 4 Rate this child in accordance with instructions accompanying this questionnaire.
- 5 Your ratings should be based on your own experiences with the child.
- 6 Consider only your impressions of the child, that is how does the child appear to you? Ignore what others have said about the child.

- 7 As much as possible, your ratings must be based on the outward behaviour of the child, that is what you have actually observed about the child. Do not try to interpret what you think might be going on in the child's mind.
- 8 Rate each item quickly. If you are unable to reach a decision on a particular item go on to the next item. Come back later to attend to those you have skipped.
- 9 Rate every item or question.
- 10 Please supply all the particulars required on the following pages.

THANK YOU FOR ASSISTING US

PLEASE TURN TO THE NEXT PAGE

SECTION ONE

PLEASE MAKE A CROSS  IN THE APPROPRIATE SPACE

A TEACHER'S PARTICULARS:

1 SEX .....

1 MALE	2 FEMALE
-----------	-------------

2 WHAT CLASSES DO YOU TEACH?

1 JUNIOR PRIMARY SCHOOL	2 SENIOR PRIMARY SCHOOL	3 COMBINED SCHOOL
----------------------------------	----------------------------------	-------------------------

3 HOW OLD ARE YOU? AGE  
IN YEARS:

1 20-24 YRS	2 25-29 YRS	3 30-34 YRS	4 35-39 YRS
5 40-44 YRS	6 45-49 YRS	7 50-54 YRS	8 55+ YRS

4 FOR HOW LONG HAVE YOU BEEN  
TEACHING? YEARS:

1 0-4 YRS	2 5-9 YRS	3 10-14 YRS
4 15-19 YRS	5 20-24 YRS	6 25+ YRS

5 HOW OFTEN DO YOU MEET INSPECTORS OF PSYCHOLOGICAL  
SERVICES IN YOUR SCHOOL?

1 NO CONTRACT WITH THEM	2 ONCE A YEAR	3 TWICE A YEAR	4 THREE TIMES A YEAR	5 FOUR TIMES OR MORE
-------------------------------	---------------------	----------------------	----------------------------	----------------------------

B PLEASE FILL IN PARTICULARS ABOUT THE CHILD:

- (1) FIRST LETTER OF CHILD'S (2) CHILD'S INITIALS: .....  
SURNAME: .....
- (3) SEX OF THE CHILD: ..... (4) AGE OF THE CHILD: .....
- (5) CLASS OR STANDARD OF THE CHILD: .....

KEEP THIS INFORMATION AT THE BACK OF YOUR MIND AS YOU RATE  
THE CHILD

PLEASE TURN TO THE NEXT PAGE

YOU HAVE CHOSEN ONE CHILD WHO HAS LEARNING AND/OR BEHAVIOUR PROBLEMS IN YOUR CLASS. THE STATEMENTS OR ITEMS LISTED BELOW DESCRIBE SOME OF HIS/HER BEHAVIOUR.

YOU ARE GOING TO RATE THE BEHAVIOUR OF THIS CHILD. WRITE YOUR RATING NUMBER FOR EACH STATEMENT IN THE BOX AT THE END OF EACH STATEMENT. FOR STATEMENTS 1 TO 26 USE THE RATING SCALE BELOW:

---

Very Frequently	Often	Occasionally	Rarely	Never
5	4	3	2	1

---

COMPARED WITH THE AVERAGE CHILD IN THE NORMAL CLASSROOM SITUATION HOW OFTEN DOES THE CHILD: .....

STATEMENT

RATING

1 Start working on something before getting the directions (instructions) straight?

2 Say that the teacher does not help him enough (i.e. won't show him how to do things, or answer his questions)?



---

Very Frequently	Often	Occasionally	Rarely	Never
5	4	3	2	1

---

- 3 Bring things to class that relate to current topic (e.g. exhibits, collections, articles, etc.)?
- 4 Tell stories or describe things in an interesting and colourful fashion (e.g. has an active imagination etc.)?
- 5 Speak disrespectfully to the teacher (e.g. call teacher names, treat teacher as an equal, etc.)?
- 6 Initiate classroom discussions?
- 7 Act defiant (i.e. will not do what he is asked to do, says: "I won't do it")?
- 8 Seek out the teacher before or after class to talk about school or personal matters?
- 9 Belittle or make derogatory remarks (remarks intended to lower dignity, status or authority) about the subject being taught (e.g. "spelling is stupid")?

---

Very Frequently	Often	Occasionally	Rarely	Never
5	4	3	2	1

---

- 10 Get the point of what he reads or hears in class?
- 11 Have to be reprimanded (warned) or controlled by the teacher because of his behaviour in class?
- 12 Poke, torment, or tease classmates?
- 13 Annoy or interfere with the work of his peers (classmates) in class?
- 14 Tell stories which are exaggerated and untruthful?
- 15 Give an answer that has nothing to do with a question being asked?
- 16 Break classroom rules (e.g. throw things, mark up desk or books etc.)?
- 17 Interrupt when the teacher is talking?

---

Very Frequently	Often	Occasionally	Rarely	Never
5	4	3	2	1

---

- 18 Quickly lose attention when teacher explains something to him (e.g. becomes fidgety (restless), looks away, etc.)?
- 19 Offer to do things for the teacher (e.g. clean the blackboard, empty waste basket, get the duster etc.)?
- 20 Make you doubt whether he is paying attention to what you are doing or saying (e.g. looks elsewhere, has a blank stare (gaze) or faraway look, etc.)?
- 21 Introduce into class discussion personal experiences or things he has heard which relate to what is going on in class?
- 22 Get openly disturbed about marks (scores) on a test (e.g. may cry, get emotionally upset, etc.)?
- 23 Show worry or get anxious about knowing the "right" answers?

---

Very Frequently	Often	Occasionally	Rarely	Never
5	4	3	2	1

---

- 24 Look to see how others are doing something before he does it (e.g. when a teacher gives a direction, etc.)?
- 25 Complain teacher never calls on him (e.g. that teacher calls on others first, etc.)?
- 26 Make irrelevant remarks during a classroom discussion?

PLEASE TURN TO THE NEXT PAGE

FOR STATEMENTS 27 to 47 USE THE RATING SCALE BELOW:

---

Extremely	Distinctly	Quite a bit	Moderately	A little	Very slightly	Not at all
7	6	5	4	3	2	1

---

COMPARED WITH THE AVERAGE CHILD IN THE NORMAL CLASSROOM SITUATION, TO WHAT DEGREE IS THE CHILD: .....

- 27 Unable to change from one task to another when asked to do so (e.g. has difficulty beginning a new task, may get upset or disorganized, etc.)?
- 28 Oblivious to (unaware of) what is going on in class (i.e. Not "with it", seems to be in own "private" closed world)?
- 29 Reliant (dependent) upon the teacher for directions and to be told how to do things or proceed in class?
- 30 Quickly drawn into the talking or noise-making of others (i.e. stops work to listen or join in)?

---

Extremely	Distinctly	Quite a bit	Moderately	A little	Very slightly	Not at all
7	6	5	4	3	2	1

---

31 Outwardly nervous (appears to be  
anxious) when a test is given?

32 Unable to follow directions  
(instructions) given in class (i.e.  
needs precise directions before he  
can proceed successfully)?

33 Sensitive to criticism or correction  
about his school work (e.g. gets angry,  
sulks, seems 'defeated', etc.)?

34 Prone to (more than usually likely to)  
blame the teacher, the test, or external  
circumstances when things don't go well.

35 Able to apply what he has learned to a  
new situation?

36 Sloppy (unsystematic and untidy) in his  
work (e.g. his products are dirty or  
marked up, wrinkled, etc.)?

---

Extremely	Distinctly	Quite a bit	Moderately	A little	Very slightly	Not at all
7	6	5	4	3	2	1

---

- 37 Likely to know the material when called upon to recite in class?
- 38 Quick to say work assigned is too hard (e.g. "you expect too much", "I can't get it", etc.)?
- 39 Responsive or friendly in his relationship with the teacher in class as against being cool, detached or distant)?
- 40 Likely to quit (abandon) or give up when something is difficult or demands more than usual effort?
- 41 Slow to complete his work (i.e. has to be prodded (stimulated), takes excessive time)?
- 42 Swayed (influenced) by the opinion of his peers (classmates)?

---

Extremely	Distinctly	Quite a bit	Moderately	A little	Very slightly	Not at all
7	6	5	4	3	2	1

---

43 Difficult to reach (communicate with) (e.g. seems preoccupied with his own thoughts, may have to call him by name to bring him out of himself or to draw his attention?)

44 Unwilling to go back over his work?

COMPARED WITH THE AVERAGE CHILD IN THE NORMAL CLASSROOM SITUATION, TO WHAT DEGREE DOES THE CHILD: .....

45 Like to be close to the teacher (e.g. hug or touch the teacher, sit or stand next to teacher, etc.)?

46 Have difficulty deciding what to do when given a choice between two or more things?

47 Rush through his work and therefore make unnecessary mistakes?



SECTION TWOINSTRUCTIONS:

HERE ARE SOME WELL-KNOWN WAYS OF GIVING ASSISTANCE TO PUPILS WITH DIFFERENT TYPES OF LEARNING AND/OR BEHAVIOUR PROBLEMS. PLEASE INDICATE, BY MEANS OF A CROSS IN ONE BOX OUT OF FIVE BOXES NEXT TO EACH STATEMENT, HOW IMPORTANT EACH WAY OF GIVING ASSISTANCE IS TO YOU.

EXAMPLE

	Extremely important	Very important	Important	Of little importance	Of no importance
Giving advice to a pupil who disrespects teachers.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inviting a minister of religion to give advice to a pupil who disrespects teachers.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Extremely important	Very important	Important	Of little importance	Of no importance
48 The inspector of psychological services must administer tests to all pupils.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
49 The inspector of psychological services must examine the child who has a problem.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50 The inspector of psychological services must study the report written by the teacher about the child who has a problem.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
51 The inspector of psychological services must discuss the child's problem with the teacher.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- |   | Extremely important      | Very important           | Important                | Of little importance     | Of no importance         |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 52 The parents of a child who has a problem must take part in the discussion of their child's problem.      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 53 If treatment of a learning or behaviour problem can be done within the school so much the better.        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 54 The child who has a learning problem must be referred or sent to an out-of-school agency for treatment.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 55 The child who has a behaviour problem must be referred or sent to an out-of-school agency for treatment. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

	Extremely important	Very important	Important	Of little importance	Of no importance
56 Learning or behaviour problems of pupils can be handled successfully within the school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
57 The child who has a problem must be treated by a specialist within the school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
58 There must be special classes within the ordinary school for assisting children with learning or behaviour problems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
59 The parents of a child who has a problem must be involved in the treatment of their child.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Extremely important	Very important	Important	Of little importance	Of no importance
60 The inspector of psychological services must work together with the teacher in carrying out the treatment of a problem child.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
61 The inspector of psychological services must work alone when treating a child who has a problem.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
62 The inspector of psychological services, parents and the teacher must work together in treating a child who has a problem.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Extremely important	Very important	Important	Of little importance	Of no importance
63 The inspector of psychological services must only make recommendations in the treatment by the teacher alone, of a problem child.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
64 Teachers have knowledge about how to teach a problem child.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
65 Teachers have knowledge about how to assist in the treatment of a problem child.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
66 Teachers have knowledge about how to manage behaviour problems in the classroom.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Extremely important	Very important	Important	Of little importance	Of no importance
67 Teachers have knowledge about how to manage learning problems in the classroom.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
68 Teachers have knowledge about how to treat behaviour problems of pupils.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
69 Teachers rely on specialist help for treatment of learning problems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
70 Teachers depend on out-of-school specialists for treatment of behaviour problems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

71 ARRANGE IN ORDER OF IMPORTANCE TO YOU, at least five activities that you recommend for helping a child who has a learning problem:

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

72 ARRANGE IN ORDER OF IMPORTANCE TO YOU, at least five activities that you recommend for helping a child who has a behaviour problem:

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....



- 280 -

## APPENDIX B

Devereux Elementary School BehaviourRating Scale Normative and Reliability Data


---

Age and IQ Data Describing the Normative Group

Grade level	N	Mean	Age* SD	Mean	IQ SD
				**	
Kgtn.	101	66	4	-	-
1	121	78	5	109	10
2	118	91	5	107	12
3	107	102	5	112	15
4	132	114	5	109	14
5	108	126	5	106	12
6	122	136	7	108	11

---

\* Expressed in months

\*\* No IQ data was available on the kindergarten sample.

(From : Spivack &amp; Swift, 1967:30).

- 281 -  
APPENDIX C

Devereux Elementary School Behaviour Rating Scale Normative and Reliability Data

Means and Standard Deviations of DESB Scores at Each Grade Level and Over the Entire Sample

FACTORS K	Grade Levels						Sample	
	1	2	3	4	5	6		
1	11.2(5.1)	9.7(4.4)	8.7(4.5)	10.3(4.9)	9.8(4.2)	9.7(4.4)	10.2(5.2)	9.9(4.7)
2	8.9(4.3)	9.6(4.7)	8.6(4.5)	10.0(4.7)	10.9(4.6)	10.2(4.6)	9.7(3.5)	9.7(4.6)
3	6.1(3.0)	5.2(2.0)	5.1(2.1)	5.9(2.9)	5.6(2.8)	6.3(3.1)	6.3(2.8)	5.8(2.7)
4	7.2(4.2)	5.6(2.8)	5.7(2.8)	7.1(4.5)	6.4(4.1)	6.5(3.7)	6.9(3.6)	6.5(3.8)
5	5.0(2.7)	9.4(5.0)	7.7(3.9)	8.2(3.9)	8.9(4.9)	9.9(4.3)	3.6(3.8)	8.3(4.3)
6	14.3(6.0)	13.4(5.7)	12.0(5.3)	10.0(7.0)	14.9(6.7)	13.8(5.8)	14.1(5.6)	13.7(6.1)
7	13.1(3.7)	13.1(3.9)	13.2(3.1)	12.9(3.9)	12.6(3.5)	13.0(3.7)	12.3(3.9)	12.9(3.7)
8	8.3(4.8)	9.7(5.5)	7.9(4.1)	9.1(5.5)	10.8(6.0)	9.4(4.6)	9.3(5.2)	9.3(5.2)
9	8.1(3.6)	7.9(3.1)	6.3(3.1)	7.4(3.0)	7.7(3.5)	8.0(3.5)	7.0(3.4)	7.5(3.3)
10	11.8(4.1)	11.5(4.2)	11.2(3.6)	11.6(3.9)	11.4(4.3)	11.9(3.5)	10.9(4.1)	11.4(4.0)
11	14.1(4.2)	15.3(5.1)	15.0(4.7)	14.4(4.9)	14.5(4.6)	14.9(4.3)	12.6(4.2)	14.4(4.7)
ADDITIONAL ITEMS								
27	2.3(1.4)	2.6(1.5)	2.2(1.4)	2.1(1.4)	2.7(1.8)	2.7(1.5)	2.4(1.5)	2.4(1.5)
40	2.6(1.8)	2.8(1.7)	2.1(1.4)	2.3(1.8)	2.7(1.9)	2.7(1.7)	2.7(1.6)	2.6(1.7)
41	2.5(1.7)	2.8(1.7)	2.1(1.6)	2.7(1.9)	3.1(2.1)	2.8(1.8)	2.8(1.9)	2.7(1.9)

\* The kindergarten mean is small since only two of the four items can be rated (items 23 and 33) relate to tests, and these are not given in kindergarten. (From : Spivack & Swift, 1967:31)

## APPENDIX D

Test-retest means; correlations and errors of measurement

FACTORS	Means (SDs)		Test retest correlations	Standard Errors of Measurement
	Initial	Retest		
1	10.5 (4.9)	9.9* (4.4)	.91	2.0
2	10.7 (5.0)	9.5* (4.2)	.88	2.4
3	6.0 (3.0)	5.6* (2.6)	.87	1.5
4	6.9 (3.9)	6.2* (3.4)	.87	1.9
5	8.8 (4.5)	8.0* (4.0)	.85	2.4
6	14.7 (6.4)	13.7* (5.6)	.87	3.1
7	12.3 (3.6)	12.4 (3.4)	.86	1.8
8	10.2 (5.6)	9.6**(4.9)	.89	2.6
9	7.8 (3.6)	7.6 (2.9)	.88	1.7
10	11.0 (3.8)	11.2 (3.7)	.87	1.9
11	13.8 (4.6)	14.2**(4.4)	.89	2.1
ADDITIONAL ITEMS				
27	2.5 (1.6)	2.5 (1.5)	.72	1.1
40	2.7 (1.8)	2.3* (1.4)	.80	1.3
41	2.9 (1.9)	2.7**(1.8)	.71	1.1

\* Significant at the .01 level.

\*\* Significant at the .05 level.

(From : Spivack & Swift, 1967:32).

- 283 -

## APPENDIX E

Relationship between factor and additional item scores  
and reading and arithmetic classroom achievement grades\*

FACTORS	Grade Levels						
	1	2	3	4	5	6	
	R:N=53 A:N=53	R:N=73 A:N=50	R:N=106 A:N=106	R:N=131 A:N=53	R:N=86 A:N=39	R:N=87 A:N=122	
1 Classroom Disturbance	R	-24	-22	-37	-28	-29	-21
	A	-30	-37	-20	-39	-40	-34
2 Impatience	R	-54	-30	-37	-29	-45	-10
	A	-54	-47	-27	-50	-43	-46
3 Disrespect- Defiance	R	-08	-14	-22	-22	-22	-27
	A	-20	-27	-11	-22	-26	-28
4 External Blame	R	-13	-20	-16	-21	-16	-27
	A	-07	-39	05	-22	-35	-28
5 Achievement Anxiety	R	-15	-09	00	-20	-05	-27
	A	03	-27	06	08	-50	-68
6 External Reliance	R	-77	-38	-59	-38	-51	-27
	A	-62	-47	-50	-35	-56	-68
7 Comprehen- sion	R	89	50	77	45	63	25
	A	71	51	72	47	74	78
8 Inattentive- Withdrawn	R	-74	-37	-52	-30	-48	-15
	A	-65	-32	-49	-45	-63	-65
9 Irrelevant- Responsive- ness	R	-39	-17	-40	-35	-07	-12
	A	-45	-36	-20	-37	-50	-25
10 Creative Initiative	R	60	-41	39	42	35	21
	A	50	13	43	34	-04	55
11 Need Close- ness to teacher	R	51	46	-02	08	04	-05
	A	32	06	06	05	-01	21

Additional Items

27 Change	R	-73	-29	-50	-33	-47	-19
	A	-58	-55	-45	-39	-68	-65
40 Quits	R	-74	-23	-52	-26	-43	-31
	A	-59	-52	-48	-55	-44	-67
41 Slow	R	-55	-24	-42	-20	-32	-25
	A	-44	-40	-49	-48	-57	-71
* Significant correlation values are :	N	.05	.01				
		50	.27	.35			
		70	.23	.30			
		100	.20	.25			
		125	.17	.23			

(From : Swift and Spivack, 1968:143)

## APPENDIX F

## AMERICAN AND SOUTH AFRICAN GRADE 2 DEVEREUX FACTOR MEANS

Factors		1	2	3	4	5	6	7	8	9	10	11
1	N=809	8.7	8.6	5.1	5.7	7.5	12.0	13.2	7.9	6.3	11.2	15.0
2	N=192	10.5	15.3	9.2	9.2	11.4	21.6	9.6	16.2	11.9	9.4	14.8
3	N=150	9.6	8.5	5.6	5.8	8.6	12.6	14.2	8.3	7.1	12.9	15.9

Note :

1 = American

2 = S.A. Experimental

3 = S.A. Control

(From : Cumes, 1986:72)

APPENDIX G

THE SCALE USED IN THE FINAL STUDY

QUESTIONNAIRE

- 1 This is a questionnaire on pupils' learning and/or behaviour problems, as we see or observe them in the classroom situation.
- 2 Do not write your name or the child's name on this questionnaire.
- 3 You are requested to think about one child who has a learning and/or behaviour problem, in your class. There may be many children who have learning and behaviour problems in your class. CHOOSE ONE whom you have been watching over the past months and you can best describe his or her problems.
- 4 Rate this child in accordance with instructions accompanying this questionnaire.
- 5 Your ratings should be based on your own experiences with the child.
- 6 Consider only your impressions of the child, that is how does the child appear to you? Ignore what others have said about the child.



- 7 As much as possible, your ratings must be based on the outward behaviour of the child, that is what you have actually observed about the child. Do not try to interpret what you think might be going on in the child's mind.
- 8 Rate each item quickly. If you are unable to reach a decision on a particular item go on to the next item. Come back later to attend to those you have skipped.
- 9 Rate every item or question.
- 10 Please supply all the particulars required on the following pages.

THANK YOU FOR ASSISTING US

PLEASE TURN TO THE NEXT PAGE

SECTION ONE

PLEASE MAKE A CROSS  IN THE APPROPRIATE SPACE

A TEACHER'S PARTICULARS:

1 SEX .....

1 MALE	2 FEMALE
-----------	-------------

2 WHAT CLASSES DO YOU TEACH?

1 JUNIOR PRIMARY SCHOOL	2 SENIOR PRIMARY SCHOOL	3 COMBINED SCHOOL
----------------------------------	----------------------------------	-------------------------

3 HOW OLD ARE YOU? AGE  
IN YEARS:

1 20-24 YRS	2 25-29 YRS	3 30-34 YRS	4 35-39 YRS
5 40-44 YRS	6 45-49 YRS	7 50-54 YRS	8 55+ YRS

4 FOR HOW LONG HAVE YOU BEEN  
TEACHING? YEARS:

1 0-4 YRS	2 5-9 YRS	3 10-14 YRS
4 15-19 YRS	5 20-24 YRS	6 25+ YRS

5 HOW OFTEN DO YOU MEET INSPECTORS OF PSYCHOLOGICAL  
SERVICES IN YOUR SCHOOL?

1 NO CONTRACT WITH THEM	2 ONCE A YEAR	3 TWICE A YEAR	4 THREE TIMES A YEAR	5 FOUR TIMES OR MORE
-------------------------------	---------------------	----------------------	----------------------------	----------------------------

B PLEASE FILL IN PARTICULARS ABOUT THE CHILD:

(1) FIRST LETTER OF CHILD'S (2) CHILD'S INITIALS: .....

SURNAME: .....

(3) SEX OF THE CHILD: ..... (4) AGE OF THE CHILD: .....

(5) CLASS OR STANDARD OF THE CHILD: .....

KEEP THIS INFORMATION AT THE BACK OF YOUR MIND AS YOU RATE  
THE CHILD

PLEASE TURN TO THE NEXT PAGE

YOU HAVE CHOSEN ONE CHILD WHO HAS LEARNING AND/OR BEHAVIOUR PROBLEMS IN YOUR CLASS. THE STATEMENTS OR ITEMS LISTED BELOW DESCRIBE SOME OF HIS/HER BEHAVIOUR.

YOU ARE GOING TO RATE THE BEHAVIOUR OF THIS CHILD. WRITE YOUR RATING NUMBER FOR EACH STATEMENT IN THE BOX AT THE END OF EACH STATEMENT. FOR STATEMENTS 1 TO 26 USE THE RATING SCALE BELOW:

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Very Frequently	Often	Occasionally	Rarely	Never
5	4	3	2	1

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COMPARED WITH THE AVERAGE CHILD IN THE NORMAL CLASSROOM SITUATION HOW OFTEN DOES THE CHILD: .....

<u>STATEMENT</u>	<u>RATING</u>
1 Start working on something before getting the directions (instructions) straight?	<div style="border: 1px solid black; width: 40px; height: 25px; margin-left: auto;"></div>
2 Say that the teacher does not help him enough (i.e. won't show him how to do things, or answer his questions)?	<div style="border: 1px solid black; width: 40px; height: 25px; margin-left: auto;"></div>

---

Very Frequently	Often	Occasionally	Rarely	Never
5	4	3	2	1

---

- 3 Bring things to class that relate to current topic (e.g. exhibits, collections, articles, etc.)?
- 4 Tell stories or describe things in an interesting and colourful fashion (e.g. has an active imagination etc.)?
- 5 Speak disrespectfully to the teacher (e.g. call teacher names, treat teacher as an equal, etc.)?
- 6 Initiate classroom discussions?
- 7 Act defiant (i.e. will not do what he is asked to do, says: "I won't do it")?
- 8 Seek out the teacher before or after class to talk about school or personal matters?
- 9 Belittle or make derogatory remarks (remarks intended to lower dignity, status or authority) about the subject being taught (e.g. "spelling is stupid")?

---

Very Frequently	Often	Occasionally	Rarely	Never
5	4	3	2	1

---

- 10 Get the point of what he reads or hears in class?
- 11 Have to be reprimanded (warned) or controlled by the teacher because of his behaviour in class?
- 12 Poke, torment, or tease classmates?
- 13 Annoy or interfere with the work of his peers (classmates) in class?
- 14 Tell stories which are exaggerated and untruthful?
- 15 Give an answer that has nothing to do with a question being asked?
- 16 Break classroom rules (e.g. throw things, mark up desk or books etc.)?
- 17 Interrupt when the teacher is talking?

---

Very Frequently	Often	Occasionally	Rarely	Never
5	4	3	2	1

---

- 18 Quickly lose attention when teacher explains something to him (e.g. becomes fidgety (restless), looks away, etc.)?
- 19 Offer to do things for the teacher (e.g. clean the blackboard, empty waste basket, get the duster etc.)?
- 20 Make you doubt whether he is paying attention to what you are doing or saying (e.g. looks elsewhere, has a blank stare (gaze) or faraway look, etc.)?
- 21 Introduce into class discussion personal experiences or things he has heard which relate to what is going on in class?
- 22 Get openly disturbed about marks (scores) on a test (e.g. may cry, get emotionally upset, etc.)?
- 23 Show worry or get anxious about knowing the "right" answers?

---

Very Frequently	Often	Occasionally	Rarely	Never
5	4	3	2	1

---

24 Look to see how others are doing something before he does it (e.g. when a teacher gives a direction, etc.)?

25 Complain teacher never calls on him (e.g. that teacher calls on others first, etc.)?

26 Make irrelevant remarks during a classroom discussion?

PLEASE TURN TO THE NEXT PAGE



FOR STATEMENTS 27 to 47 USE THE RATING SCALE BELOW:

Extremely	Distinctly	Quite a bit	Moderately	A little	Very slightly	Not at all
7	6	5	4	3	2	1

COMPARED WITH THE AVERAGE CHILD IN THE NORMAL CLASSROOM SITUATION, TO WHAT DEGREE IS THE CHILD: .....

- 27 Unable to change from one task to another when asked to do so (e.g. has difficulty beginning a new task, may get upset or disorganized, etc.)?
- 28 Oblivious to (unaware of) what is going on in class (i.e. Not "with it", seems to be in own "private" closed world)?
- 29 Reliant (dependent) upon the teacher for directions and to be told how to do things or proceed in class?
- 30 Quickly drawn into the talking or noise-making of others (i.e. stops work to listen or join in)?

---

Extremely	Distinctly	Quite a bit	Moderately	A little	Very slightly	Not at all
7	6	5	4	3	2	1

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31 Outwardly nervous (appears to be  
anxious) when a test is given?

32 Unable to follow directions  
(instructions) given in class (i.e.  
needs precise directions before he  
can proceed successfully)?

33 Sensitive to criticism or correction  
about his school work (e.g. gets angry,  
sulks, seems 'defeated', etc.)?

34 Prone to (more than usually likely to)  
blame the teacher, the test, or external  
circumstances when things don't go well.

35 Able to apply what he has learned to a  
new situation?

36 Sloppy (unsystematic and untidy) in his  
work (e.g. his products are dirty or  
marked up, wrinkled, etc.)?

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Extremely	Distinctly	Quite a bit	Moderately	A little	Very slightly	Not at all
7	6	5	4	3	2	1

---

37 Likely to know the material when called upon to recite in class?

38 Quick to say work assigned is too hard (e.g. "you expect too much", "I can't get it", etc.)?

39 Responsive or friendly in his relationship with the teacher in class as against being cool, detached or distant)?

40 Likely to quit (abandon) or give up when something is difficult or demands more than usual effort?

41 Slow to complete his work (i.e. has to be prodded (stimulated), takes excessive time)?

42 Swayed (influenced) by the opinion of his peers (classmates)?

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Extremely	Distinctly	Quite a bit	Moderately	A little	Very slightly	Not at all
7	6	5	4	3	2	1

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43 Difficult to reach (communicate with) (e.g. seems preoccupied with his own thoughts, may have to call him by name to bring him out of himself or to draw his attention?)

44 Unwilling to go back over his work?

COMPARED WITH THE AVERAGE CHILD IN THE NORMAL CLASSROOM SITUATION, TO WHAT DEGREE DOES THE CHILD: .....

45 Like to be close to the teacher (e.g. hug or touch the teacher, sit or stand next to teacher, etc.)?

46 Have difficulty deciding what to do when given a choice between two or more things?

47 Rush through his work and therefore make unnecessary mistakes?

SECTION TWOINSTRUCTIONS:

HERE ARE SOME WELL-KNOWN WAYS OF GIVING ASSISTANCE TO PUPILS WITH DIFFERENT TYPES OF LEARNING AND/OR BEHAVIOUR PROBLEMS. PLEASE INDICATE, BY MEANS OF A CROSS IN ONE BOX OUT OF FIVE BOXES NEXT TO EACH STATEMENT, HOW IMPORTANT EACH WAY OF GIVING ASSISTANCE IS TO YOU.

EXAMPLE

	Extremely important	Very important	Important	Of little importance	Of no importance
Giving advice to a pupil who disrespects teachers.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inviting a minister of religion to give advice to a pupil who disrespects teachers.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Extremely important	Very important	Important	Of little importance	Of no importance
48 The inspector of psychological services must administer tests to all pupils.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
49 The inspector of psychological services must examine the child who has a problem.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50 The inspector of psychological services must discuss the child's problem with the teacher.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
51 The parents of a child who has a problem must take part in the discussion of their child's problem.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Extremely important	Very important	Important	Of little importance	Of no importance
52 The child who has a learning problem must be referred or sent to an out-of-school agency for treatment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
53 The child who has a behaviour problem must be referred or sent to an out-of-school agency for treatment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
54 The child who has a problem must be treated by a specialist within the school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
55 There must be special classes within the ordinary school for assisting children with learning or behaviour problems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Extremely important	Very important	Important	Of little importance	Of no importance
56 The parents of a child who has a problem must be involved in the treatment of their child.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
57 The inspector of psychological services must work together with the teacher in carrying out the treatment of a problem child.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
58 The inspector of psychological services must work alone when treating a child who has a problem.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
59 The inspector of psychological services, parents and the teacher must work together in treating a child who has a problem.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



	Extremely important	Very important	Important	Of little importance	Of no importance
60 Teachers have knowledge about how to teach a problem child.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
61 Teachers have knowledge about how to assist in the treatment of a problem child.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
62 Teachers have knowledge about how to manage behaviour problems in the classroom.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
63 Teachers have knowledge about how to manage learning problems in the classroom.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Extremely important	Very important	Important	Of little importance	Of no importance
64 Teachers have knowledge about how to treat behaviour problems of pupils.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
65 Teachers rely on specialist help for treatment of learning problems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
66 Teachers depend on out-of-school specialists for treatment of behaviour problems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

67 ARRANGE IN ORDER OF IMPORTANCE TO YOU, at least five activities that you recommend for helping a child who has a learning problem:

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68 ARRANGE IN ORDER OF IMPORTANCE TO YOU, at least five activities that you recommend for helping a child who has a behaviour problem:

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.....  
.....

**University of  
Zululand**

**Universiteit van  
Zoeloeland**



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Ref./Verw.

6 JULY 1989

- 306 -

The Assistant Director: Mr W Harper  
KwaZulu Department of Education and Culture  
Private Bag X04  
ULUNDI 3838

Dear Sir

REQUEST FOR PERMISSION TO DO RESEARCH WITH TEACHERS AS SUBJECTS:  
MEHLESIZWE, HLABISA AND UMLAZI NORTH CIRCUITS

I am an educational psychologist and a staff member in the Department of Educational Psychology at this University, and I am writing to you to request for permission to do research into the behaviour and learning problems in the primary school level.

The proposed research is intended to be a contribution to the understanding or knowledge of learning and behaviour problems. There is a generally held belief that if these problems are detected at an early stage in the education of a child, preventative and/or therapeutic work can be effective.

The study attempts to answer the following questions:

1. What is the nature of teachers' perceptions of learning and behaviour problems?
2. Are there any variables which influence the perceptions of these problems?
3. How these problems can be tackled?
4. To what extent can teachers assist in the management of these problems?
5. What do teachers recommend as an efficient way of handling these problems?

I have enclosed herewith the following:

- i) The research proposal accepted by the University of Stellenbosch,
- ii) A rating scale or questionnaire to be completed by primary school teachers.

Thanking you for giving this matter your attention.

Yours sincerely

Patrick Themba Sibaya  
Dept. Educational Psychology

- 307 -

ANNEXURE B

A letter from Mr W.G. Harper

Chief Education Planner

UMNYANGO WEMFUNDO  
NAMASIKO



DEPARTMENT OF EDUCATION  
AND CULTURE

DEPARTEMENT VAN ONDERWYS EN KULTUUR

Ikheli Locingo : Telegraphic Address : INKANYISO Telegrafiese Adres :	Isikhwama Seposi : X04 Private Bag : Ulundi. Privaatsak :	Ucingo : Telephone : 0358-203608 Telefoon :
Imibuzo : Enquiries : Navrae : W.G. Harper (Mr)	Usuku : Date : Datum : 1989 . 07 . 06	Inkomba : Reference : Verwysing : 8/2

Mr P.T. Sibaya

Department of Educational Psychology

University of Zululand

Private Bag X1001

KWA DLANGEZWA

3886

Sir

1. Your submission of 1989.07.06 has reference.
2. The Department of Education and Culture has given positive consideration to your request and permission is granted for you to implement the proposed research project.
3. The Department expects that you will :
  - 3.1 Negotiate access to all schools with the relevant officials.
  - 3.2 Respect the confidentiality of participants responses.
  - 3.3 Supply the Department of Education and Culture with a copy of the completed dissertation.
4. The Department wishes you every success in your worthy endeavour.

Yours sincerely

W.G. HARPER : CHIEF EDUCATION PLANNER



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- 308 -

18-10-89

The Principal

Dear Sir/Madam

COVERING LETTER SENT TO ALL SCHOOL PRINCIPALS : RESEARCH ON  
LEARNING AND BEHAVIOURAL PROBLEMS OF PUPILS

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My research looks at learning and behavioural problems of pupils. What specific benefits this research holds for the teacher and the pupil? Briefly stated, the benefits are the understanding of the nature of pupils' problems and planning for remedial schools in our education.

I have enclosed the following documents:

1. This research has the approval of the KwaZulu Department of Education and Culture. A copy of the letter is attached.
2. Copies of the letter from the Chief Educational Planner were also sent to the Circuit Inspectors concerned.
3. Copies of the questionnaire to be given to and completed by teachers in your school.

Once completed the questionnaires will be kept in the Principal's office. These will be collected from you by me or anyone assisting me in this project.

Thanking you for giving this matter your immediate attention.

Yours sincerely

Patrick T. Sibaya  
Senior Lecturer  
Department of Educational Psychology

