

**AN EXAMINATION OF BRAZILIAN TEACHERS' ATTITUDES AND PARENTS'
VIEWS ON PARENTAL INVOLVEMENT IN BRAZILIAN STATE PRE AND
PRIMARY SCHOOLS**

ELIANA MARIA BAHIA BHERING

**A thesis in partial fulfilment of the requirement for the Award of Ph.D.
Degree**

**Child Development and Learning Department
Institute of Education - University of London**



ABSTRACT

Parental involvement (PI) has increasingly become a major priority in the educational agenda. Parents are regarded as an important source for schools and teachers that largely contribute to good-quality education. Schools are expected to develop practices that include parents in activities that concern both the learning process and school practical aspects. Research on school effectiveness and improvement suggests that teachers and parents partnership is now strongly recommended in order to ensure children's school success (Mortimore et al, 1988).

This study discusses PI terminology and concepts; the process and the construction of PI theory with its models and typologies; research and evidence which has influenced this thesis; and evidence from Brazilian schools. PI typologies and models have greatly influenced this piece of work because it is argued teachers' preparedness for PI can only be examined from that knowledge. In particular, the study uses a typology of PI devised by Joyce Epstein (1989) based on PI research in American primary schools (1982, 1985, 1987, and later, extended to middle and secondary schools).

Since little attention has been paid to school PI practices in Brazil, this research aims to understand and reveal Brazilian teachers' position to PI. To pursue this aim two studies were designed to collect parents' and teachers' views about PI practices taken from Joyce Epstein's typology, research and questionnaires.

Eleven Brazilian state pre and primary schools were involved: 21 parents whose children were in the fourth grade were interviewed using a semi-structured questionnaire, and 181 pre- and primary school teachers answered a structured questionnaire. Parents' data were qualitatively analyzed and teachers' quantitative data were analyzed using factor analysis.

The results showed that Brazilian parents see PI in three different ways: help, involvement and communication. Help was related to the practical aspects of schooling; involvement was related to intellectual and

educational activities; and communication was seen as the tool for the other two categories that would need to be more effectively developed.

The findings suggest that Brazilian teachers welcome parents' support in preparing children to go to school but seemed to reject the idea of parents' helping with curriculum-related activities in the classroom and school. However, they would like parents to follow their advice and instructions for activities developed at home including homework.

The importance of positive communication and parents and children's appraisal was also highlighted. Both Brazilian teachers and parents believed that two-way communication and integration of efforts are essential elements for effective PI in Brazilian schools.

Acknowledgements

First, I should like to thank the Brazilian Sponsor Agency - CNPq - Conselho Nacional de Pesquisa, for the period they funded this research which enabled me to have the work completed.

I would like to thank, my supervisor, Dr. Iram Siraj-Blatchford to whom I will be ever grateful. Thank you, Iram, for the unconditional support throughout this time, sharp advice, enlightening comments, and very useful discussions for important decisions. Thanks also for the encouragement and reassurance and for being always available to help and push me to reach where and what I needed.

The Brazilian pre- and primary schools in Belo Horizonte, teachers, head-teachers, parents and children, I am greatly indebted for their collaboration and time spent with me. Thanks for allowing me to have access to the state schools whenever it was needed.

I would also like to thank UNIVALI, specially the Coordenação do Curso de Psicologia - Centro de Educação Superior de Ciências da Saúde the Master Course in Education and Proppex - Pro-Reitoria de Pesquisa, Pós-Graduação e Extensão, for allowing me to take the necessary time to dedicate to the final stages of my Ph.D., and for the trust, support and help in accomplishing this work.

I should like to express my eternal gratitude and love to my dear husband and children who have been ever understanding and patient. My husband for his financial backup and emotional support throughout the past years and especially during 'crisis' times when I thought I would not be able to pursue such a big commitment. I should also thank him for the great help he has given me with long and extremely enlightening discussions. He is responsible for my positive inner motivation and for all the encouragement I possibly had to carry on. My children for adding to my life such a happy and playful component that has always enabled me to see a bright and rewarding sign at the end of such a long journey.

And finally, my parents and parents-in-law, for their kind support given throughout the last few years, and for being available when my children and I most needed them, without them I would not have managed to finish it. I thank you also for being understanding and for the trust and belief in me being capable of accomplishing big projects in life.

Table of Contents

Abstract	2
Acknowledgements	4
List of Figures	12
List of Tables	15
Chapter 1 - Introduction	16
1.1 - Introduction	16
1.2 - The study in context	18
1.2.1 - Teachers' study: teachers' climate for PI	20
1.2.2 - The relevance of the study for the Brazilian Schools and community	21
Chapter 2 - PART I - Parental Involvement: Terminology, concepts, models and typologies	24
2.1 - Introduction - the case for parental involvement	24
2.2 - Parental involvement - Concepts and terminology	32
2.3 - Models of PI	37
2.3.1 - Hornby's Model	37
2.3.2 - Epstein's Model	41
2.4 - Parental Involvement Typologies	43
2.4.1 - Epstein's Typology	45
2.4.2 - Tomlinson's Typology	46
2.5 - Parental Involvement studies - relevant evidence	49
2.5.1- School climate for PI	51
2.5.1.1 - PI and SES	55
2.5.1.2 - Lessons to be learned	59

2.5.2 - Brazilian schools and PI typologies	62
2.5.3 - Some Brazilian PI evidence	64
2.6 - Conclusion	70
2.6.1 - PI stages and school climate	75
PART II - School Climate and PI - A Close Relationship	79
2.7 - Introduction	79
2.8 - Ethos and climate - related concepts	81
2.8.1 - General definitions	81
2.8.1.1 - School ethos	83
2.8.1.2 - School climate	88
2.8.1.2.1 - Studying school climate	90
2.9 - School climate and PI	96
2.10 - School climate, PI and this research - Final remarks	100
Chapter 3 - Methodology: Studying PI in Brazilian School	104
3.1 - Introduction	104
3.2 - The context of the research	105
3.2.1 - The city of Belo Horizonte	105
3.2.2 - Education	106
3.2.3 - Social life in the city of Belo Horizonte	106
3.2.4 - Religion	107
3.2.5 - Background information on the Brazilian Educational System run by the States and Municipalities	107
3.2.5.1 - From pre-school to University	107
3.2.5.2 - Pre-school and Primary teachers' training course	110
3.3 - Aims of the study	111
3.3.1 - The research objectives	112

3.3.2 - The research questions	114
3.4 - Research instruments	116
3.4.1 - Questionnaire design	116
3.4.1.1 - Type of measurement	116
3.4.2 - The teachers' questionnaire	117
3.4.3 - The parents' interview	119
3.4.4 - Triangulation	120
3.4.5 - The head-teachers interview	121
3.4.6 - Piloting the teachers' questionnaire	122
3.4.7 - Piloting the parents' questionnaire	122
3.5 - The sampling process	124
3.5.1 - The sample	126
3.5.1.1 - The schools	126
3.5.1.2 - The teachers	130
3.5.1.3 - The parents	132
3.5.1.3.1 - The parents' selection	134
3.6 - The teachers questionnaire distribution	136
3.7 - Interviewing parents	137
3.8 - Data Analysis	138
3.8.1 - Teachers' questionnaire and data analysis	138
3.9 - Factor analysis	144
3.9.1 - Factor analysis definition	144
3.9.2 - Factor analysis purpose	147
3.9.3 - Characteristics of a successful FA	148
3.9.3.1 - Factor analysis applicability	148
3.9.4 - Summary of the analysis decisions	150
3.10 - Qualitative data analysis	155
3.10.1 - The process of qualitative analysis	156
3.10.2 - Representation of qualitative analysis	157
3.11 - Methodological limitations of the study	159

Chapter 4 - Parents' study: and exchange model	162
4.1 - Introduction	162
4.2 - The opposing perspectives	162
4.2.1 - Level of involvement with schools	163
4.2.2 - The different philosophies	163
4.3 - Parents/parents relationship in relation to PI	167
4.4 - Schools and parents - a feeling of disassociation and apartness	169
4.5 - Exchanging information and opinions - a difficult task for Brazilian parents	170
4.6 - The exchange process	172
4.7 - Communication, Involvement and Help	174
4.7.1 - Involvement	175
4.7.1.1 - Those who are reluctant to involvement	177
4.7.1.2 - Aspects that influence lack of involvement	179
4.7.1.3 - Reasons for not getting involved	183
4.7.1.4 - Those who welcome involvement	186
4.7.1.5 - What else could be done	193
4.7.1.6 - Summary of the category Involvement	196
4.7.2 - Help: parents' as school helpers	196
4.7.2.1 - The Governing Body in Mineiras state primary schools: what it is and how it is set up	201
4.7.2.2 - Three ways to Help schools, teachers and children: teaching and learning, resources and practicalities	202
4.7.2.3 - A summary of the category Help	204
4.7.3 - Communication	204
4.7.3.1 - Communication and school work conditions	209
4.7.3.2 - Attempts to solve current problems that would improve some aspects of education and PI	211

4.7.3.3 - Summary of the category Communication	214
4.8 - Conclusion	214
4.8.1 - Summary of parents' data analysis	217
Chapter 5 - Teachers' climate for PI: data analysis and findings	219
5.1 - Introduction	219
5.2 - Findings - Results and Data analysis	220
5.2.1 - Descriptive analysis	219
5.2.1.1 - Frequency analysis for question 1	225
5.2.1.1.1 - Reflection on the results of frequency analysis	229
5.2.1.1.2 - Variables with means under 6 in the scale	232
5.2.1.2 - Teachers' current views about PI - Question 2	236
5.2.2 - Factor analysis	240
5.2.2.1 - Principal-axis factoring - PAF	241
5.2.2.2 - The eigenvalue	242
5.2.2.3 - Scree test	243
5.2.2.4 - Rotated factors	244
5.2.2.5 - The factors extracted by PAF model	245
5.2.2.6 - Interpretation of the factor	246
5.2.2.7 - Summary of teachers' data analysis	257
5.2.2.8 - Factors extracted by other factor models	260
Chapter 6 - Discussion and Conclusion	261
6.1 - Looking back at the research	261
6.2 - Examining the results - teachers' expectations X parents' perspectives	265
6.3 - PI models and typologies and studying PI climate	272
6.4 - Summary of the conclusions	276

6.5 - Final remarks	280
References	284
Appendixes	298
Appendix 1 - Parents' questionnaires - English and Portuguese versions	299
Appendix 2 - Teachers' questionnaires - English and Portuguese versions	306
Appendix 3 - Epstein and Salinas teachers' questionnaire	314
Appendix 4 - Climate studies	323
Appendix 5 - Correlation matrix for 40 variables - question 1	329
Appendix 6 - Principal components analysis for question 1	345
Appendix 7 - Kruskal-Wallis test - Question 1	352
Appendix 8 - Parents' data - frequencies	370
Appendix 9 - Results for students, parents and teachers (Epstein)	388
Appendix 10 - Question 2 - Teachers' data - frequencies	390
Appendix 11 - Kruskal-Wallis question 2	397

List of Figures

Chapter 2

Figure 1 - Three Stage Process - Long, 1986, 1992	33
Figure 2 - Model for Parental Involvement - Hornby, 1990	39
Figure 3 - Model of Overlapping Spheres of Influence of Families and Schools - Epstein (in Hurrelman et al eds. 1987)	42
Figure 4 - Parental Involvement Typology - Epstein, 1989	45
Figure 5 - Expected results of the six types of involvement for students, parents, and teachers - Epstein, 1995, p. 705	61
Figure 6 - The Co-operation Classroom - Coleman et al, 1992	73
Figure 7 - Developing Parental Involvement - Creating a Feeling of Belonging - James, 1994	74
Figure 8 - The Making of Home-School Relations, Atkin et al, 1988	78
Figure 9 - Culture, Climate and Ethos	82
Figure 10 - Values - The criteria by which one grades one's aims - Dancy, 1980 in Stratford, 1990	84
Figure 11 - Conceptualization of school climate based on Anderson's table 1: conceptualization of school climate with Tagiuri's (1968). Taxonomy including categories from Moos (1974) and Insel and Moos (1974).	90
Figure 12 - Interactive model showing all possible relationships among environmental dimensions and their interactions with school climate. Anderson, 1982, p. 405.	93
Figure 13 - Interactive model showing all possible relationships among environmental dimensions and their interactions with students outcomes. Anderson, 1982, p. 406.	94

Figure 14 - Interactive model showing all possible relationships among students outcomes and their interactions with school climate. Anderson, p. 407.	94
Figure 15 - School climate and PI	95
Figure 16 - Comparative aspects of school climate research and PI research.	98

Chapter 3

Figure 1 - Loop representation of analysis, Dey, 1993	157
Figure 2 - Analysis as an interactive process, Dey, 1993	158

Chapter 4 -

Figure 1 - Summary of the parents' views	217
Figure 2 - Exchange process	218

Chapter 5

Figure 1 - Group A - Type 1	226
Figure 2 - Group B - Type 1 and 2	226
Figure 3 - Group C - Type 2	227
Figure 4 - Group C - Type 4	228
Figure 5 - PI types and its links	232
Figure 6 - Means between 5 and 6	233
Figure 7 - Means between 4 and 5	234
Figure 8 - Means under 4	234
Figure 9 - Factor 1 - PAF	247
Figure 10 - Factor 2 - PAF	250
Figure 11 - Factor 3 - PAF	253
Figure 12 - Factor 4 - PAF	255
Figure 13 - Teachers' climate and PI - Summary of findings	259

Chapter 6

Figure 1 - Brazilian parents' climate	275
Figure 2 - Brazilian teachers' climate	276

List of Tables

Chapter 3

Table 1 - Total number of classes	128
Table 2 - School facilities	130
Table 3 - Teachers' years of experience and grade taught	132

Chapter 5 - Teachers' Data Analysis

Table 1 - Type 1 - Parents' Basic Obligations - Means and Standard Deviation	221
Table 2 - Type 2 - School Basic Obligations - Means and Standard Deviation	222
Table 3 - Type 3 - Parent Involvement at School - Means and Standard Deviation	223
Table 4 - Type 4 - PI in Learning Activities - Means and Standard Deviation	224
Table 5 - Type 5 - PI in Governancy and Advocacy - Means and Standard Deviation	225
Table 6 - Question 2 - Means and Standard Deviation	238
Table 7 - Kruskal Wallis for question 2	239
Table 8 - Initial Statistics - 40 variables - PAF	241
Table 9 - Final statistics - 40 variables - PAF	241
Table 10 - Rotated factors - 40 variables - PAF - Varimax	242

Chapter 1

Introduction

1.1 – Introduction

The topic of this research has been selected out of my own (positive) experience as a child, mother and professional. Its importance and long lasting results has had a great impact in my life and gradually became one of my main research interests. As a child, I was fortunate enough to go to a purposed-built state school in Belo Horizonte, Brazil where parents had a very special place in the classroom. It was part of the school routine to invite parents to watch the children work, help the teacher to know us, children, better, and have the opportunity to see closely what was going on in our school. As a mother, I had the great opportunity here in England, to accompany my own children to play groups, nursery school and infant school where parents were greatly encouraged to collaborate inside and outside the classroom. As a research interest, it all started many years ago, during my Master Course, when I first learned that researchers have been investigating that very topic. I took on the challenge to study the various forms of PI choosing it as the theme for my Master dissertation. Later, I decided to study PI from the Brazilian perspective. That was then, the beginning of this thesis.

The purpose of this research is, through mixed method analysis, to gain insight into parental involvement (PI) in state pre-schools and primary schools in Belo Horizonte - Minas Gerais - Brazil. The research has as its main aim, the description of parental involvement patterns in that context which explains the Brazilian teachers' climate for PI. The thesis reports on the pattern of parental involvement identified by a study of 181 teachers from 11 state schools. A second and smaller qualitative study that involved interviewing 21 parents provides a description of the parents' position and views to parental involvement.

To pursue its aim, this research looks at PI in relation to school climate. School climate has been largely studied as an attempt to understand the characteristics of successful schools and teachers as organisations of adults (who serve communities through educating children). This study

proposes to look at PI in the light of school climate and stresses that school is and should always be, in the majority of cases, the initiator of PI policies and practices (even in cases where there is no explicit policy or practice but there are 'common sense' decisions on parent-school contacts) and the relationship with parents. The thesis looks mainly at PI from the school's point of view but includes a small sample of parents in order to triangulate findings.

Research has led us to conclude that parental involvement - or home/school relations - is a component of effective schools that deserves special consideration. It has been largely acknowledged that schools can be more effective if families participate more actively in the school education of their children. Research from the past decades and also through the 1990s continues to show the benefits of well-designed practices of parent involvement (Epstein, in Brandt 1989). Parents, children and teachers benefit from well-designed PI policies. Parents are now considered important and essential contributors to the delivery of good-quality education. According to Epstein (1987) parents are included in the four key ingredients - teaching, curriculum, setting and parents - for better and improved education. Similarly, Mortimore et al (1988) include parental involvement in their list of twelve organisational variables for effective schools (purposeful leadership of the staff by the head teacher; involvement of the deputy head; involvement of teachers; consistency amongst teachers; structured sessions; intellectually challenging teaching; work-centred environment; limited focus within sessions; maximum communication between teachers and pupils; record keeping; **parental involvement**; and positive climate). Furthermore, Bastiani (1993) states that parental involvement is now considered as "a necessary and legitimate concern and not an extra option as it used to be in the past". Similarly, Jowett (1991) argues that "there are potential gains to be made from developing contact between home and school".

Research conducted in Britain, America and also in some other parts of the globe have shown convincingly that parent involvement is important for children's learning, attitudes to school, and aspirations. Research has suggested that PI may also contribute to more successful family environments and relations, and therefore more successful students. On the other hand, schools also benefit from this openness to parents when they become more knowledgeable about the students.

There is also growing literature, which documents the importance of school and family connections and frequent communication not only for increasing student success in school and for strengthening parent involvement programmes but also for highlighting parents' efforts to become more knowledgeable about the process of school education.

Communication between home and school has been regarded as the key to the development of meaningful partnerships. Parents have crucial information for teachers about their children's history and personality. Teachers can provide parents with helpful information about children's development at different levels of education, knowledge of particular ways of helping children, knowledge of the curriculum and what it requires from children, and about the relationships children develop at school (Weinberger, 1996). Home-school contacts can help to build home-school partnerships that support the children as students and may lead to school success (Epstein, 1996). According to Epstein (1996) partnerships are about teachers and parents sharing responsibilities as far as children's education is concerned.

There are essentially two emphases in parental involvement studies: one that looks at the ways schools and teachers have developed to involve parents with aspects of school (governing body, fund-raising etc.) and school education (curriculum and learning activities), that has led to the identification of PI types and practices. The other has investigated the effects of parent involvement programmes that involve some kind of teaching (in terms of helping/assisting children both in school and at home) of a subject such as reading or math's. The proposed study does not fall into either of these two categories since neither of these perspectives really looks at PI as one of the characteristics of school or as part of its climate. The former perspective however has guided the development of the present study and the latter has reinforced the need for further PI research and practice in contexts like Brazil. Other educational studies have provided us with some evidence that one of the components of successful schooling is PI (Mortimore et al, 1988).

Neither of the two areas of study mentioned above, or third perspective which aims to understand the teachers' position to PI in their school (school climate for PI) has been studied in Brazil. Studying PI in the

"developing" country context, such as Brazil, has been neglected due to other priorities for basic education. However, greater interest and understanding of the potential of PI in assisting school to educate children have been driving people to believe it can help families and communities to collaborate over children's development, school attendance, performance and attainment.

1.2 - The study in context

Due to our rapidly changing society, the role of professional educators and parents has been under constant review so as to ensure that children get suitable care and good education. Parents and teachers are now advised to ensure that meaningful continuity develops between home and school. A great number of studies have been carried out to address parents and school relations and help to prepare for the development of good and adequate practices both at home and school. Studies from different subjects have also applied various methodologies to study the connections between schools, families and communities in order to help the children succeed during their school years.

However in developing countries such as Brazil, it seems that the concept of shared responsibilities of schools and families has not yet been firmly understood and taken on board. There is very little evidence, apart from individual and common sense initiatives of schools and teachers, that addresses the development of parent involvement policies in Brazil. The contact with parents has been largely developed out of common sense without any previous plan or further assessment of the demands and results respectively. Despite that, the evidence from research from other parts of the world show that teachers will invariably have to deal with parents at some point in their careers. How teachers do it varies according to a number of elements and aspects. This research is based on the assumption that teachers, regardless of their place of work, have to deal with parents and therefore develop their own (or own institution's) climate for PI. Since research has suggested that PI is mainly developed from schools' (and teachers') initiative, it can be argued that PI policies may be developed from what teachers may feel able to do or what teachers feel parents and children need. That may be described as teachers' climate for PI.

Epstein (1987) has developed a theoretical model of the "overlapping spheres" that explains the partnership and shared responsibilities between home and school. The overlapping spheres represent family and school interaction - sometimes the spheres overlap and sometimes separate depending on the demand, grade level, age of the child, time in history and also the kinds of parental involvement types/practices they exercise. The extent of the overlapping is often determined by school policies and practices, or as I propose here, by the climate created by the group of teachers and other educational professionals at school in terms of disposition and readiness for the parent/school partnership/relationship.

This research represents the first of its kind, particularly in the Brazilian context, since no study has investigated PI under the light of school/teachers' climate. The literature on PI includes studies in the UK, America, Australia, Portugal and other places, that have identified a number of parental involvement practices that pre-schools and primary schools (and more recently middle and secondary schools) have implemented and adopted to respond to their own, parents' and children's demands and needs. Others have developed specific programs that involved parents in the learning process, like reading, writing and more recently with math's skills. Yet some other researchers have studied what parents expect from school, their points of view concerning their children's school education and parents' needs and demands, or even further to know what parents expect from school.

Bastiani (1993) argues that it is the schools' responsibility to initiate and develop parental involvement policies and practices and it must be professionally-led. Having said that, it seems important to investigate schools' readiness to implement policies that include parents in the process of the children's education. Parental involvement in children's school education comprises a wide range of activities that vary from helping and doing volunteer work for schools to helping children/teachers in the classroom and/or with classwork and homework as well as developing activities with the children at home that support school learning. It is necessary to identify those practices that will address parents' questions but also those which the school can effectively undertake. The parents' community includes parents from different backgrounds and therefore demands may vary enormously. It is then

equally important to examine parents' views, needs and demands and understand their perspective and experience in relation to what the school is able to provide. The ultimate aim for PI developments has always been to enable children to have more chance to be successful.

This study aims to contribute to the development of PI and add to the knowledge so far acquired in many different contexts about school climate and parent/school relations. Both studies, parent and teacher, will build on work previously done by educationalists, sociologists, psychologists and other professionals to prepare our schools for better results, relationships and quality performance.

1.2.1 - Teachers' study: teachers' climate and PI

The thesis reports on two link-studies, one of teachers and the other one of parents. The teachers' study involved collecting structured questionnaire data from 181 teachers in 11 Brazilian state pre-schools and primary schools in Belo Horizonte, Minas Gerais, in the south-eastern part of the country. The questionnaire was constructed to study the teachers' beliefs and views taken from the five types of parental involvement described by Joyce Epstein (1989 in Brandt, 1989) and others (Cyster, 1979, Jowett et al, 1991, and etc.). The relevance of this typology is discussed later in the thesis. The main aim of the study is to find a pattern of PI that reflects that particular context and its climate for PI. It is argued that:

- a) - teachers' climate may determine their readiness for PI;
- b) - schools may take different directions in implementing different types of parental involvement if they get to know their own limitations and strengths (as far as PI is concerned);
- c) - Brazilian teachers may not yet be prepared for more complex PI types such as having parents in the classroom.

Through getting to know the pattern of PI that explains teachers' limitations, weaknesses and strengths, teachers may be able to deal with parents' demands and needs more adequately. Furthermore, schools may learn to advise parents to look for the right assistance when the school may not be able to offer it.

1.2.2 - The relevance of the study for the Brazilian schools and community

State schools in Brazil have very limited resources. Schools have faced serious budget cutbacks and it has affected all its stakeholders. Teachers have suffered with it: teachers' salaries are out-of-date, teachers' training is poor (although attempts to improve it have been made by the authorities), teachers' opportunities to invest in their career is limited and therefore teachers' self-esteem, self-confidence and motivation is reported to be running very low. Brazilian teachers have been found to work double shifts in order to improve their income. However, research done in the State of São Paulo has shown that teachers' performance actually worsens under such conditions and therefore researchers have implemented projects that invite teachers to learn new skills and leave one job for another (Magina, 1997, PUC - SP, in Exame, November 1997).

On the other hand, state schools and compulsory education have made headlines in Brazilian newspapers, where it is reported that parents and children have lost faith in state schools and when there is no other alternative (like not being able to afford private schools), they have to accept it as it is. Parental involvement may follow the same pattern: family and school may not be ready to work together since they seem sceptical about one another. It seems that parents and teachers form two worlds apart and therefore do not know how to support each other.

Despite that, the research argument is that whatever the work conditions are, teachers will always have to deal with parents. Parents will also have to contact school/teachers to discuss children's education, problems (it may be done very superficially, but they inevitably hear from each other). As a consequence, teachers develop their own views on PI that may lead them to develop certain types of PI and parents develop views and opinions about teachers and schools and also practise PI.

I argue that the "climate" of this group of pre-school and primary schools is different from those in industrialised countries as summarised in Epstein's typology. The parent involvement types found somewhere else may not reflect the reality in these Brazilian schools. It is expected that a different pattern of parental involvement will emerge. The study will try to demonstrate the school (teachers) climate for implementation of

parent involvement practices. It is known that everyone in schools has ideas concerning the best way to deal with parents and what you need to do to reach successful strategies, but little evidence exists in terms of published work in the Brazilian context, to support or reject these perceptions.

Educational research in Brazilian schools has highlighted the importance of the family in the educational process. Brazilian research has shown that the community has fought for more schools in disadvantaged areas and for improved education in existing schools. Research has also shown that parents are concerned with their children's education specially when an acute lack of opportunities to attend school is observed. It is important now to study PI in Brazilian schools so as to highlight that parents and teachers may work together towards improved education, improved performance, more adequate learning situations created for the children at school and at home, and improved home-school relations. It has already been demonstrated that teachers place more importance on the parental involvement practices that are strong and well implemented in their school (Epstein, 1991). It is now important to study Brazilian teachers' views so as to understand their position to PI before advocating any policy on how PI can develop further in Brazilian state schools.

Chapter 2

PART I

Parental Involvement: Terminology, concepts, models and typologies

2.1 - Introduction - the case for parental involvement

parents (1)

Education takes place in three different but interrelated settings: home, school and community. Given that, parental involvement in school education seems to be a natural procedure since parents do not stop being responsible for the child when the child moves from home to pre-school and later to compulsory schooling. It is only natural that parents carry on being to children, among others things, their educators. The view of shared responsibilities (Epstein, 1987) and collective responsibility and partnership, (Wolfendale, 1992) echoes the ecological perspective that accounts for the influence of external environments on the functioning of families as contexts for human development (Bronfenbrenner, 1979, 1986). Not only are families a learning environment but also resourceful entities that enhance school education.

In developed countries like the UK, parent involvement has been regarded as one of the components of effective schools and therefore it deserves special consideration. As Wolfendale (1992, pp.1) states, "in the last twenty or so years, parents have become established in the educational scene, their presence is routine in many schools and classrooms, with parental representation on all governing bodies". Parental involvement has rapidly grown from being just a recommendation (Plowden Report, 1967) to one key issue among all other essential ingredients for effective education (Epstein 1987b,

¹ - The term 'Parents' will be referred to here as those who are responsible for child rearing, regardless of sex, type of family or SES. This generalisation may be seen as too simplistic, but bearing the objectives of this research in mind, family structure and gender issues are beyond the scope of this study and therefore will not be further explored here.

Mortimore et al 1988). Mortimore (1988) stated that "our findings show parental involvement in the life of the school to be a positive influence upon pupils' progress and development" (p.171).

The concept of parent involvement is not in itself new or simplistic since it has been developed from a wide range of perspectives through the last decades. The use of different terminology, such as parental involvement, participation, representation, consultation, partnership, relationship among others, has stressed different PI programs and accounted for different views. Nevertheless, all programs and views, regardless of terminology and concepts, have primarily aimed at improving parent-school relationship as part of a strategy that is committed to improving education and schools and bettering performance. PI is seen as developing within children's best interests to improving school performance and achievement, increasing children's interest in school-related activities and bettering relationships with those who promote their development. Where PI has been systematically developed according to the needs and demands of both parties, a better understanding of the children's development has been successfully achieved particularly among the parents' community. Parents have been found to be in a more empowered position when schools develop PI policies that respond to parents and children's needs (Cochran, 1986, in Wolfendale, 1992).

It is now strongly argued that PI may enhance children's interests in school activities and learning through helping them to succeed throughout the years of schooling. On the other hand, it is also argued that parents can be helped to change their attitude to school, such as from being distant and apprehensive in approaching teachers and school to feeling more comfortable and confident to exchange opinions with professionals. Ames et al (1993) concluded that 'when communications contain information that may influence parents' perceptions of their child as a learner, when they give parents a sense of efficacy, and when they make the parent feel comfortable with the school, parent involvement may be enhanced'. Both parents' and children's attitudinal changes towards school may influence the child's educational process positively. Parents may be more likely to become involved when pre-conceived ideas about school become more transparent, particularly to those who have not had a very positive experience in school in the past

(Siraj-Blatchford, 1994). Ames and Archer (1987) argue that parental beliefs and perceptions may also contribute to how children approach learning. As teachers become more approachable, they begin to perceive how parents' attitudes gradually change, while PI policies and practices are being developed. Wolfendale (1996, pp.1) states that 'most teachers now accept, however grudgingly, that there is clear and compelling evidence that greater parental interest and support leads to improved pupil achievement'. On the other hand, Epstein (1991) has shown that parental interest (in school) is more likely to increase if teachers develop policies to encourage parents to participate more actively in their children's school education (that is teachers may have the power to decide where, how and when they want parents to help them and the children). There is clear evidence to suggest that teachers' actions and practices may be more predictive of whether or not parents become involved than are the educational background and income or SES (Becker and Epstein, 1982; Epstein, 1986, 1990; Epstein and Dauber, 1991).

To date, there have been a number of studies which have specifically examined the course PI has evolved through the years (Jowett et al, 1991; Epstein and Becker, 1982; Smith, 1980). Teachers and parents have reported that when policies and practices are well designed and implemented, and understood by both parties, the benefits are worth the effort of maintaining the partnership (Epstein, 1986, 1991, Hannon, 1986). Furthermore, according to research in PI and reading, teachers and parents reported that they felt the children had also benefited from the collaboration between parents and teachers (Hannon, 1986). However, research results regarding reading scores still left some doubts about whether parental help with reading has a positive effect. Methodological issues should be carefully considered as well as other factors that may influence the results. It is a very difficult task to identify a single factor that triggers school success. Parental help is believed to be one aspect among many others. What is encouraging in this regard is that both teachers and parents invariably report that an improved relationship between school and family makes them feel more confident in their jobs and with children respectively (Epstein, 1986, 1991). This finding is encouraging since it is now acknowledged that improved parenting skills combined with schools improved and good practices lead to more confident and less troubled children both socially and academically.

Peters (1991), Bollin (1991), and Murphy (1991) examine the effects of mode of delivery of Head Start. They find that children's gains are considerable but when the programs target parents as well as children, gains were even greater. Peters, Bollin and Murphy (1991) argued that by changing academic-related parent/child interactions, the programs can create greater continuity between the child's home and school environment. Similarly, Epstein (1991) found that while gains in math's are related almost exclusively to teachers and child variables, gains in reading are related both to teaching quality and to the use of parent involvement.

The majority of parents, regardless of their SES and unless in extreme situations, want to know about school life and understand more about the curriculum and its content. Furthermore, there is an indication that when parents are given the opportunity to become involved with school the majority of parents readily take it (Zanella et al, 1997; Jowett, 1990; Smith, 1980). Evidence also indicates that parents tend to get more easily involved with their children's school education particularly in pre-school and primary school years (Smith, 1980; Epstein, 1986, Zanella et al, 1997).

Parents' participation, together with other school factors, may have an influence on children's school achievement and performance. However, evidence has not yet confirmed exactly how parents' influence may impact on children's learning process and achievement. More research is needed to measure the relationship between parental involvement and children's educational achievement. Nevertheless, research and projects that involve parents in nurseries or schools have continuously shown that parents' influences are generally positive and fruitful and that their participation is important.

Parental involvement has not been a straight forward procedure as one cannot disregard the individual differences in communities involved within similar contexts, the resources available, the objectives to be pursued and above all, to acknowledge the changing and evolving character of PI. Barriers and difficulties do arise during the process of its implementation as schools find themselves initially unprepared for what would be their ideal PI policies. Wolfendale (1992, pp.2) stresses that 'the successes vindicate the setbacks and so all the efforts are worthwhile in the longer term'.

Not only has PI research attempted to describe ways schools have developed PI practices (Hannon, 1986; Jowett, 1991, Smith, 1980; Epstein, 1982, 1986, 1991), but also it has attempted to prescribe its course of action (Epstein and Dauber, 1991) wherein teachers encourage themselves or are encouraged to develop PI practices.

PI programs differ, some are designed based on the assumption that parental involvement may help to improve children's performance and achievement. Others aim specifically to improve home/school communications. Yet others are based on the assumption that involving parents with school will allow parents to learn how to provide better home conditions for learning to take place which will help parents to understand what children do at school at different stages and grades. It will enable parents to follow their children's development more closely. Parallel to that, PI may be developed through stages. It may start from letting parents know about the school, its routine and classroom routine, curriculum planning, objectives and activities that support the curriculum, child development and most importantly help parents to see their child as a learner. Parents and teachers may start to perceive themselves as partners in the education of children and to share responsibilities.

Important projects have altered the educational process of young children, such as Head Start in America (Weikart et al in Bereiter & Engleman, 1966) and others in the UK. They have raised PI as a paramount issue specially when designing programs for the disadvantaged and for those children with special needs. From these initiatives, the influence has spread to different facets around the educational community inducing some big changes in the relationship between professionals and families/parents and encouraging PI projects.

PI research has been conducted at all levels of education, from crèches and nurseries to secondary schools. Smith (1980) has conducted a study to investigate how nurseries schools and parents had established contacts with each other. Cyster et al (1979) investigated the different ways British schools developed contact with parents and maintained relationships. Epstein (1982, 86, 91) and colleagues carried out extensive research on PI at primary, middle and secondary level in America. Jowett (1991) also

investigated the wide range of activities that are termed 'parental involvement' and described the variety of types of contact between home and school that involved pre-school children, primary years and secondary schools in the UK. Timperley and colleagues (1992) studied PI in primary and secondary schools in New Zealand where they investigated principals, chairpersons of Boards of Trustees, teachers and parents' beliefs and practices of collaboration. Research has shown different paths for different needs according to parents' demands, children's needs, schools' policies and teachers' PI practices (Lareau, 1989). However, to date, there are no straight-forward answers to the questions posed to and from schools about PI. There is no ready-to-use formula on which schools can rely to implement PI policies and practices effectively (Siraj-Blatchford, 1998). Every establishment has its own characteristics which dictate what form PI can take and be best developed. However there is a set of common findings that may be used as a starting-point when developing PI practices. These findings cannot be disregarded even when designing PI for different contexts than the ones research has been conducted.

Bloom (1981) states that families not only have a curriculum, but a teaching style as well. Bloom goes on to argue that since much of education takes place outside the schools, educators should take more advantage of those opportunities, specially when additional information about the children may be passed to them. Bloom (1981) explains " . . . , a major task of the school is to provide an educational environment which can be appropriately related to the out-of-school learning on the part of the students" (Bloom, 1981, pp. 116). It seems that, from this view, schools are responsible for developing home/school relationship if the school is to tap into out-of-school learning.

On the other hand, parents have been encouraged to participate more actively in their children's school education particularly because it is their right to have good education for their children. To stand for their children's rights requires awareness of schools' activities, aims and goals. Brazilian parents whose children attend state schools, accept schools as a government bonus rather than as a right on its own (Zanella, 1997). Brazilian parents often and mistakenly feel that it is better to have schools as they are rather than nothing.

From a social perspective, PI standards are expected to improve as parents and teachers work more closely: the general aim being that teachers will be more aware of the general needs of the vulnerability of disadvantaged families (particularly in Brazilian schools where teachers and parents belong to different social classes), and parents, on the other hand, will learn new skills that will enable them to respond/react to the schools' PI policies; improve the way they deal with children from both behavioural and learning/achievement points of view; and to see the outside world from a whole new angle (children themselves have their own view about the place they live, the friends they have and parents very often do not know their own children's points of view). All these changes are believed to lead people to a better life or better still, to a better chance in life, where education takes a crucial role.

Having briefly examined the different aspects of PI, this chapter is going to look more closely at the terminology used to describe PI concepts, models and typologies in order to understand PI as an element of school culture that influences schools' PI choices. Firstly, it will look at PI concepts and terminology. It will then proceed to the theory that has started to illuminate the paths PI has taken and may take in the years to come. Parental involvement typologies will be examined and used to discuss some of the research relevant to this study that has been carried out in the past decades, especially in the 80s and 90s and its influence on this study. It will also try to look at PI from both sides - parents (families) and teachers (schools) so as to indicate how valuable and useful PI has been for them (no research has actually looked at the long-term impact that PI may have had on teachers, parents and children, but PI research report on teachers' and parents' beliefs and views and more recently some involved secondary students' views). Finally a discussion will attempt to put this study in the context of PI developed in different parts of the world. To study Brazilian schools and its PI climate requires a careful understanding of the literature that defines PI and its use elsewhere.

Developing countries often require that a careful examination of their "culture" is carried out before a new wave of influence reaches them. Although some developing countries may have great potential for important changes in their systems, such as for PI in schools, a simple transference of knowledge acquired somewhere else may not be easily applied or even accepted by the community. The recapitulation of the

steps that PI has taken and achieved and the examination of the typologies constructed in other parts of the world will help to throw some light on the findings regarding the Brazilian schools climate and context.

As this research is not about studying effective ways that PI may be developed in its practical and day-to-day routine in specific environments, this chapter will not examine PI programs and projects that schools have developed. It will not for instance, discuss the various ways through which schools can communicate with parents and how the messages can be written or orally delivered. This may be found somewhere else where practical issues about PI implementation are discussed and advice is provided (Bastiani, 1978; Epstein, 1987b, TIPS - Teachers Involve Parents in Schoolwork). PI will be examined mostly from the schools' dimension about the typologies and models so as to assist with data analysis later on.

It is very difficult to consider and discuss PI research without intertwining it with research recommendation especially when we try to emphasise the importance of including parents in our agenda and the positive effects it may have on school and schooling. PI research has so far raised both, evidence and recommendation at the same time and only in very few studies done up to now, has PI research actually measured the effects of PI (like reading projects, Hannon, 1987). Dauber and Epstein (1993) argue that 'from recent research we have learned that schools' programs and teachers' practices of involving parents have important positive effects on parents' abilities to help children achieve grades across the school years; on parents' ratings of teachers' skills and teaching quality; on teachers' opinions about parents' abilities to help their children with schoolwork at home; on students' attitudes about school, homework, and the similarity of their school and family; and on students' reading achievement'' (Becker and Epstein, 1982; Epstein, 1982, 1986, 1991; Epstein and Dauber, 1991)'.

2.2 - Parental Involvement - Concepts and Terminology

Parental involvement has been seen from a number of different perspectives. Some see it from a political point of view (especially in

educational decision-making), others from a more sociological perspective (as parents' roles, parenting skills and family structure have changed through the decades, programs have been especially developed for those who are in the poorest section of the population, empowering parents to their rights) and yet others from a purely educational view (those who see parents as an extra source to aid learning such as reading programs). Although all researchers and authors acknowledge that all three perspectives extensively influence one another, research has been developed within specific perspectives. In some cases (like studies which have used Epstein's typology) school policies and programs may include all three main aspects (Siraj-Blatchford, 1998). For the purpose of this research, the various nuances of PI will be referred to as the literature background. The policy aspect, as it has been studied in America and UK, will not be examined here as it has little relevance for the study and there is little development as such in the Brazilian reality (the Minas Gerais state Government, has recently introduced the topic as something that schools ought to look at more carefully. Some general recommendations have also been published in order to generate more awareness about the importance of parental involvement). Brazilian studies have been primarily concerned with isolated initiatives on PI and work has been developed with communities that involve the school to a certain extent (see PI and Brazilian evidence further in this chapter). Apart from those, Brazilian parents have been extensively involved in community projects for better living and health conditions, for the right to have a school in the neighbourhood for their children through raising awareness of their needs and wishes, but not particularly to be involved with their children's school education.

The term *Parental Involvement* (PI) has been used to describe many different levels of participation: from parents' meetings and written messages to governance, volunteer work and academic support both at home and at school. *Parental Involvement* has been used as a summary for all terminology that define what it is and what it covers. PI is a terminology widely used now and from where many of its branches were created. PI has been applied to describe parent-school relationship, parent participation, parent-school initiative, and other specific programs that are particularly designed to involve parents in such things as reading schemes and assessment in special needs.

According to Brito and Waller (1992), "whilst 'involvement' has attracted much talk, and demonstration, partnership is seen as harder to implement and requires corporate effort on every one's part to sustain". Wolfendale (1985) links both terms when questioning: "Is involvement a process en route to partnership?" Partnership is often seen as a further commitment to involvement and it usually requires a more organised and systematic set of procedures. It may also include some kind of training and guidance throughout the process of establishing the partnership. Partnership, according to Brito and Waller (1992), "is a reciprocal process which, from the professionals' perspective, implies a regard for parental experience, coupled with a readiness to learn from the parents' knowledge of their offspring and respects their contribution" and parents' professional experiences. Wolfendale (1983) has described partnership as parents being "active and central in decision-making and its implementation; perceived as having equal strengths and equivalent expertise; able to contribute to as well as receive services (reciprocity); able to share responsibility so that they and professionals are mutually accountable?" (p.15). In addition to that, Pugh (1989) outlines partnership as "a working relationship that is characterised by a shared sense of purpose, mutual respect and the willingness to negotiate. This implies a sharing of information, responsibility, skills, decision-making and accountability" (p.5).

Long (1992) presents a three stage process through which PI has gone through since the Plowden Report (1969) in which partnership is the last stage to be developed.

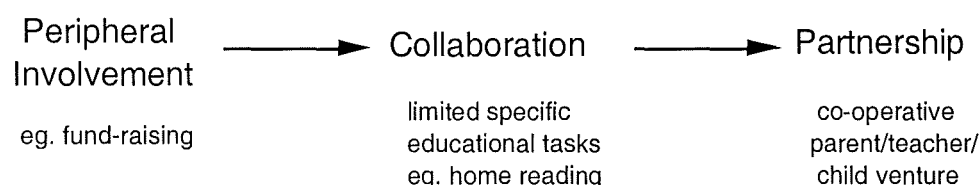


Fig. 1 - Three Stage Process - Long, 1986, 1992

The 'Peripheral Involvement' stage attempts to encourage parents to engage themselves with limited activities at school, such as fund-raising and repair work. This may eventually lead parents to get to know more about schools' work as far as education is concerned. It may also lead parents to value the school's work, and therefore get parents to support the school more substantially when a better understanding of the school's

goals is reached. This may be a rather slow process. The 'Collaboration' stage moves a step further in the acceptance of parents as educators. The parents are encouraged to become involved with certain school-related tasks such as hearing their child read at home. And finally, the last stage named 'Partnership' proposes a more extended relationship between school and family where the school may be seen as a resource centre for the community and the teacher as a facilitator of the children's learning wherever it takes place. Long (1992) explains that the process of development operates at two different levels: the school level and the individual level and that school and individuals may sometimes be at different points in the process, particularly when schools and parents do not know enough about each others' responsibilities, work and interests.

That framework shows the development of PI through the past few decades, and suggests ways through which parents have become involved with schools. It is interesting to note that Long's model also suggests, through PI evolution across the past decades, the schools have gone through a process of changing their policies according to what they were prepared for or asked for, at each point in time. This may also indicate changes in school climate for PI because of time, preparedness and demand.

Epstein (1987a) states that family-school relations have changed over the past few decades: the theories have moved away from the separation of family and school toward greater teacher-parent collaboration, co-operation and communication. Epstein (1992) argues that 'theoretical perspectives on schools and families are based on the *separate* responsibilities, *sequenced* responsibilities, *embedded* relationships, or *overlapping* responsibilities each' (p. 1140). Separate responsibilities emphasises the importance of their (schools' and parents') separate contributions to society (Parsons, 1959; Waller, 1932; Weber, 1947 in Epstein, 1992). Sequenced influence identifies a sequence of critical stages in which parents and teachers contribute in turn to child development and education (Freud, 1938; Piaget and Inhelder, 1969 in Epstein, 1992). Embedded influence is based on an ecological model of nested connections between individuals and larger groups and organisations - each contained within the next (Bronfenbrenner, 1979, 1986 in Epstein 1992). Epstein goes further to argue that 'a social organisation perspective of overlapping spheres of influence is a fourth model for understanding

and studying school and family relationships (Epstein, 1987a). The spheres can, by design, be pushed together or be pulled apart by practices and interpersonal forces in each environment.

Epstein (1994) argues that the term "school, family, and community partnership" is a better, broader term than 'parent involvement' as it expresses the shared interests and responsibilities of all institutions involved. According to Epstein, school and family partnership includes the sharing of major responsibilities for children's education and development, support of the children as students across the school years, the recognition of responsibilities and investments of the family, school and community towards equal opportunity for all children. There is recognition of the important roles other members of the family play in the children's education (such as brothers and sister, or other people responsible for the children and not only the natural parents) and other groups in the community that work with school and families to invest in the education of children whose futures affect the quality of life of the community, of the family and of the children. Epstein (1994) goes on to explain that the term 'partnership' carries an even more comprehensive meaning where partners invest and put forward resources that are expected to generate benefits to all concerned. According to Epstein, there is no other terminology to describe it better than partnership because it already implies that all parties have active roles and are committed to the improvement of PI developments.

In PI, partners - parents and teachers - are expected to work together with the sole objective of investing in children's education through motivating, guiding and helping children to become able to produce their own success. The children's success, looked at from various perspectives, is the desired result of the partnership. Success includes, improved skills, achievement and performance, positive attitudes towards learning, increase in self-esteem and independence, improved social behaviour, awareness of own talents, accomplishments, and other desired behaviour that are characteristics of successful students. PI partnership means working towards a common goal in order to pursue improved education and relationships.

Concepts and terminology will always be a controversial issue as PI can take many different forms according to educational environments. A

common definition of PI seems to be, at the moment, not yet possible because it is continuously and progressively developing and becoming more complex and sophisticated in its practices, types and policies. A single terminology may exclude emerging aspects and hide cultural habits.

Terminology in itself has little influence on how PI can be developed. It certainly helps in understanding PI in different contexts and situations. Despite the fact that PI has been used in many different terms, there is common agreement of its importance. PI has become a necessary tool for better education, better schools, teaching quality and better understanding of families structure, living standards and culture and children's point of view and rights.

Tomlinson (1991) does not try to explain the terminology used to describe parental involvement. However, Tomlinson states that "parental partnership is a major mechanism for providing a higher-level effective education for all pupils and that this will be furthered by more formalised home-school partnership schemes" (p.8). Tomlinson argues that in order to optimise the effects of schooling and raise standards for all pupils, a partnership between parents and teachers is the key to improvement.

Yet others researchers and authors have outlined key concepts in relation to some of the fundamental issues discussed in PI developments like 'Parent Power' (Wragg, 1989) that is related to empowering the participants in order to enable them to be equally involved; and to parents' and teachers' rights, and 'equal opportunities' (David, 1993; Siraj-Blatchford, 1994) that is related to minority groups, gender and race. Both discussions have greatly influenced PI development and projects and have added to its body of knowledge. Terminology may also assist when examining teachers' PI climate as it may help to identify the teachers' PI concept from their points of view.

2.3 - Models of PI

PI studies have made recommendations, reported programs and practices and introduced new elements to improve school's services. Despite this, a PI theory has not yet been established as a guideline for research and projects. PI acknowledges the importance of parent-child interaction as

well as the parent as an educator and provider of rich learning situations at home. PI has emerged from the literature that supports and emphasises that children also learn from other social settings and not only at school. The home and parents do play a major role in children's school education. That literature has played an extremely important role for the establishment of PI in our schools and certainly will influence teachers' PI climate.

The majority of studies and projects are based on recommendations, suggestions and advice taken from practical experiences and from schools that have experienced PI to some extent. Many schools have responded to demands and needs developing their own projects and policies to deal with parents out of common sense and immediate necessity. Many studies (Smith, 1980, Jowett, 1991; Cyster 1979, Stacey, 1991; Epstein, 1986) have been carried out to examine the interaction between teachers and parents at all levels of education; what nurseries and schools have been doing to involve parents in the educational process and how it has been done and changed through the years. These studies also examine the problems as well as opportunities that emerge from the creation of PI policies in different educational settings. These studies have contributed extensively to the construction of PI typologies and models from which studies may now refer to for theoretical support.

The typologies and models have also greatly and further influenced PI initiatives.

2.3.1 - Hornby's Model

Hornby (1990) states that many useful PI models that exemplify the various ways PI can be developed in schools are now widely available in the literature for those who are interested in developing the relationship/partnership further. These models reveal the evolution of PI that took place in many different contexts and situations. The models are, however, mostly based on pure practice rather than being guided by theory or policy. Hornby (1990) argues that a comprehensive, theoretical model to guide the practice of parental involvement is still missing. Hornby (1990) moved on to propose a model that combines and adapts models suggested by Bastiani (1986), Kroth (1985), Lombana (1983) and Wolfendale (1983, 1986) that may change the course of PI development.

According to Hornby, the model was also inspired by feedback from parents as well as educators.

"The model consists of two pyramids, one representing a hierarchy of parents' needs, the other a hierarchy of parents' strengths or possible contributions. Both pyramids demonstrate visually the different levels of needs and strengths of parents. Thus, while all parents have some needs and some strengths which can be utilised, a smaller number have intense need for guidance, or the capability of making an extensive contribution. The model also shows that, for parents' needs at a higher level, more time and expertise is required by professionals in order to meet these needs. Similarly, the parents who make a greater contribution require a higher level of expertise and time available." (Hornby, 1990, pp. 248).

IMAGES REDACTED DUE TO THIRD PARTY RIGHTS OR OTHER LEGAL ISSUES



Fig. 2 - Model for Parent Involvement - Hornby, G. (1990)

The model also implies that the teachers, after identifying the various needs and expertise of the parents, should acquire specific skills in order to address the identified demands effectively. Or, on the contrary, teachers may start to identify their own potential for certain levels of PI from such a model in order to anticipate the requirements for involving parents. For instance, under *Parents Strengths*, parents can provide valuable *information* concerning children's likes and dislikes, strengths and weaknesses, interests and abilities and any other relevant information that may facilitate both the teacher's work and child's learning. On the other hand, this information can only reach school if staff develop good listening and interviewing skills (Atkin et al, 1988). Hornby (1990) relates *collaboration* with educators being more flexible in the parent-professional partnership (Bastiani, 1988; Tizard et al., 1981); *resource* with practical management and communication skills (Kroth, 1985) in order to make optimum use of valuable voluntary resource; *policy* with teachers abilities to find parents who are able to contribute their expertise through membership of parent or professional organisations (Beattie, 1985; Sullivan, 1988).

Under the *Parents Needs* section, another four categories were created to describe the kinds of needs parents may have. Again, all the categories require that teachers have some kind of training to be able to address parents needs effectively: *communication* requires that the teachers develop their written and oral communication skills in order to attract parents for a better and improved relationship and understand each other (Bastiani, 1987; Harding & Pike, 1988); *liaison*, the teachers need to develop the skills of conducting formal and informal meetings with parents (Cyster et al, 1979; Howard & Hollingsworth, 1985); *education* basically refers to parent education programs that aim at parents developing strategies to help to promote their children's progress or managing their behaviour - the teachers need to develop organisational skills and the skills of group facilitation (Pugh & De'Ath, 1984); and *support* (mainly supportive counselling) requires that the teachers acquire a certain level of basic counselling skills - such as being good listeners and find practical solutions - as well as having the skills and knowledge to refer parents to other professional counsellors when they cannot deal with them (Kroth, 1985).

Hornby (1990) discusses his 'pyramids' model from the parents' needs and strengths viewpoint. It is a very useful and realistic model as it precisely acknowledges that parents may require different ways to be dealt with and many parents may choose to be involved in different ways, at different levels and to a different extent. It also acknowledges that parents have the right to be involved with school and to contribute to their children's education. It clearly emphasises that parents' viewpoints are diverse and are probably unlikely to be homogeneous.

The model also accounts for the urgent need for teachers' training that includes a preparation to deal with parents in order to enable them to develop productive relationships that will eventually lead to a stronger and more effective partnership. It may be used, as Hornby (1990) suggests, as a checklist to ensure that the schools meet parents needs and make effective use of their expertise. It may also be used against teachers' points of view, opinions and position about PI in order to identify teachers' preparedness for PI.

The Model for Parent Involvement also stresses that involving parents in education may bring enormous benefits for both parents and children. Parents may bring contributions that are not at all expected, criticisms that may not necessarily match the educational goals or even bring to school personal experiences peculiar to a rather small group of parents (like the hard-to-reach parents). Policies should always account for the minority groups who require special ways to be dealt with.

Although the core assumption for PI is to enable parents to continue to be their children's 'prime educators' (Brito and Waller, 1992, Jowett et al, 1991) in a more constructive and extended way, the process of involving parents should be reciprocal rather than based on transferring responsibilities to one another. Reciprocity is surely a crucial characteristic of PI developments if it is to be successful. Nevertheless the schools characteristics, school culture and teachers' climate should be considered just as much as the parents' limitations, needs, demands and contributions. The Model for Parent Involvement (Hornby, 1990) rightly suggests that the parents need to be heard and respected for what they are, are able to do, their availability and timing. A model for PI that accounts for the educational professionals' readiness to it is yet to be added to the literature. Teachers' PI climate is very important for a successful

partnership because it may clarify the nature of the PI practices that teachers are able to develop. Teachers are often found to be suspicious of PI as in many cases they are not trained for what they are asked to do. Therefore they find themselves unprepared to deal with a heterogeneous group of parents that demands specific skills and expertise beyond their current abilities and confidence. A model that accounts for parents' needs and strengths should be accompanied by a model that accounts for teachers' abilities and availability for covering all the needs expressed by the group of parents.

2.3.2 - Epstein' s Model

According to Epstein (1987a), the theory of overlapping spheres of influence of families and schools is represented by the overlapping spheres. The overlapping spheres illustrate the relationship between schools and families. The system shows that at any time, in any school, PI can be increased or decreased depending on the practices of teachers, administrators, schools and parents, and students. The model recognises pictorially that there are PI practices that schools and families conduct separately and some practices that they conduct jointly in order to influence children's learning and development (Epstein, 1994). When parents and teachers perform together as partners, the overlapping spheres move close together towards each other and the area of the overlapping becomes larger and vice-versa.

The overlapping spheres

IMAGES REDACTED DUE TO THIRD PARTY RIGHTS OR OTHER LEGAL ISSUES



Fig. 3 - Source: Model of overlapping spheres of influence of families and schools -

Epstein - In Hurrelmann et al (Eds.) -1987

Key: Intra-institutional interactions (lower case) - Inter-institutional interactions (upper case)

f/F -Family -/- s/S -School -/- c/C - Child -/- p/P - Parent -/- t/T-Teacher

Epstein (1987a) states that "force A represents a developmental time and history line for students, families, and schools." Epstein (1987a) argues that a pattern of separation or overlap will be constantly changing depending on the age of the children, the level of school they are, and the period of time when the children are in school. Force B represents the parents' contribution to the extent of the overlapping or separation of the spheres. Force C represents the teachers' (and schools') philosophies, policies, practices, influence and pressures. These forces will determine how close/far apart the spheres may be in different periods of time. Both forces - B and C - create a dynamic pattern of parents/teachers relations, which may be a continuing process as children move on, or the creation of new practices to address the needs and demands.

Although there is a continual adjustment in the overlap or separation of the two spheres, a drastic change or drop out of practices from either sides may represent a severe disruption to the whole system of the overlapping spheres. Force A alone does not influence Force B and C to act promptly

towards an effective relationship. It is necessary that forces B and C work for the adjustment in the overlapping or separation of the two spheres. These two forces will actually alter the overlapping patterns to create more or less overlap for families and schools at each grade level (Epstein, 1987). Epstein (1992) states that 'the extent of overlap is affected by time - to account for changes in the ages and grade levels of students and the influence of historic change on environments - and by behaviour - to account for the background characteristics, philosophies, and practices of each environment. Interactions may occur at a general institutional level, as when schools invite all students' families to events or send the same communications to all students' families, or at a personal level, as when a parent and teacher confer to discuss and assist the progress of a specific child' (p. 1140).

Although there are differences in schools' and families' obligations towards children's education, there are certainly similar aims and responsibilities that parents and teachers share. They both influence children's lives very deeply and therefore cannot be perceived as two distinct and separate forces. The identification of situations when parents and teachers are to share their concerns, will determine the suitable parental involvement type and its practices.

Thus, it is necessary to examine parents' needs, demands and availability, children's stage of development and grade, and schools' possibilities and climate for PI. All three parties are equally important for effective PI. This research, however, examines Brazilian schools' atmosphere for PI and illustrates it further with parents' views and experiences.

2.4 - Parental involvement typologies

Various different models and typologies of parental involvement in education have been developed in the last three decades. According to David (1993, pp. 99), "from the vantage point of the late 1980s, Epstein (1990) for the US, Bastiani (1987), MacBeth (1989) and Tomlinson (1991) for Britain, and Beattie for England and Wales together with France, Germany and Italy (1985) developed typologies of parental involvement". Epstein and Tomlinson see these typologies as discrete and categorise types as different ways and practices of parental involvement, whereas Macbeth sees the typologies issue as a process of development in four

progressing stages through which family-school relations develop that may or may not culminate in a partnership (see the discussion further on in this chapter).

Bastiani (1987) has summarised the trends in home-school relations as a series of quasi-historical developments. Bastiani (1987) has also recognised, through the quasi-historical perspective, the extent of conflicts in the debates and practices about different types of parental participation. Beattie (1985) was primarily concerned with 'parental participation as a form of citizen or community political involvement, although he reviewed the stages of development'. Timperley (1992) has also developed research in the light of a model that involves three dimensions described as partnership, openness and effort that recognises cultural and social expressions of collaboration.

Although other researchers (Smith, 1980; Bastiani, 1986; Cyster et al, 1979; Wolfendale, 1983; Jowett, 1991) have identified and categorised a number of parental involvement practices that nurseries and schools have used, Epstein's model is very useful because it has grouped a number of parental involvement practices into six major types of parent involvement. The six major types include the majority of the PI practices that have been found in past research and elsewhere too. The typology has been validated (up to now the five major types only) and extensively implemented in many schools in other parts of the world (USA, Portugal, Denmark and Australia, in Epstein 1996) to improve schools programs of partnerships with families and communities. Epstein states that the typology is a necessary part of a 'comprehensive program for family and school connections, in every school' (1990, pp. 133).

Although the types are described as different categories, Epstein and Dauber (1991) stress that "the five types are not 'pure' and involve some aspects that overlap, most practices that schools use to involve families in their children's education fall under one of the five types."

2.4.1 - Epstein's typology

Five Major Types of Parent Involvement
<p>Type 1 - <i>The basic obligations of parents</i> refers to the responsibilities of families to ensure children's health and safety; to the parenting and child-rearing skills needed to prepare children for school; to the continual need to supervise, discipline, and guide children at each level; and to the need to build positive home conditions that support school learning and behavior appropriate for each grade level.</p> <p>Type 2 - <i>The basic obligations of schools</i> refers to <i>communications from school to home</i> about school programs and children's progress. Schools vary the form and frequency of communications such as memos, notices, report cards, and conferences, and greatly affect whether the information about school programs and children's progress can be understood by all parents.</p> <p>Type 3 - <i>Parent involvement at school</i> refers to parent <i>volunteers</i> who assist teachers, administrators, and children in classroom or in other areas of the school. It also refers to parents who come to school to support student performances, sports, or other events, or to attend workshops or other programs for their own education or training.</p> <p>Type 4 - <i>Parent involvement in learning activities</i> at home refers to parent-initiated activities or child-initiated requests for help, and ideas or instructions from teachers for parents to monitor or <i>assist their own children</i> at home on learning activities that are coordinated with the children's classwork.</p> <p>Type 5 - <i>Parent involvement in governance and advocacy</i> refers to parents taking decision-making roles in PTA/PTO, advisory councils, or other committees or groups at the school, district, or state level. It also refers to parent and community activists in independent advocacy groups that monitor the schools and work for school improvement.</p>

Fig. 4 - Parental Involvement Typology - Epstein, Source: Brandt - 1989

A sixth type of involvement has been later suggested to be included in the typology. It extends to other institutions in the community that work towards ensuring children's well-being and education supporting school achievement and success (Epstein and Dauber, 1991).

6 - "Collaboration and exchanges with community organisations includes connections with agencies, businesses, and other groups that share responsibilities for children's education and future successes. This includes school programs that provide children and families access to community and support services, including after-school care, health services, and other resources and that co-ordinate these arrangements and

activities to support children's learning. Schools vary in how much they know and share about their communities and how much they draw on community resources to enhance and enrich the curriculum and other experiences of students." (Epstein and Dauber, 1991)

Epstein's typology is primarily linked with creating environments that will enhance children's learning and therefore that support school improvement, efforts and work. It also includes guiding and supervising parents to improved parenting skills and skills to help their children succeed at school. Types 1 to 4 are focused on the child and the family whereas types 5 is mostly concerned with sharing decision-making with educators. The latter has been found to involve a limited number of parents (Epstein and Scott-Jones, 1989) and it helps parents to understand other aspects of school.

2.4.2 - Tomlinson's Typology

Second to David (1993), Tomlinson's typology groups together Epstein's first two and second two types into two different types. Those are the formal and informal aspects of parental involvement in school matters. For instance, parents may be formally involved in governing bodies as parents governors and informally through parent organisations.

Tomlinson's typology is described as follows:

"The extent of home-school contacts could perhaps be summarised as follows:

- Contact via shared communication: visits (parents to schools, teachers to homes), letters, circulars, pupils reports, pupil records of achievement and compacts, Government reports, schools prospectuses.

- Parental involvement: :

- (a) in learning, via home-school reading and math's schemes, homework agreements, etc.

- (b) in day-to-day activities as classroom helpers, technicians, translators, materials-makers, assistants on outings, etc.

- ***Parental informal involvement*** in school matters via Parent Teachers Associations and other parent organisations. Parental fund-raising.

- *Parental formal (and legal) involvement* in school decision-making as parent-governors, and the annual parents' meeting" (1991, p.5, cited in David, 1993, p. 140).

David (1993) states that the difference between the two typologies, Tomlinson's and Epstein's, is partially because of the nature of the objectives when studying PI developments in both US and UK contexts. David (1993) goes on to say that 'Epstein, in the US, wanted to focus largely on issues to do with individual parent involvement and responsibilities. Tomlinson, in the UK, was more concerned to focus on issues to do with the wider forms of parent-school partnerships and contracts'.

In this light, I would argue that most certainly, Brazilian educational contexts may also differ in focus and perspective from both UK and US PI tendencies. PI typology in Brazilian schools should certainly include educational aspects as well as parent governors. PI in Brazilian literature up to this date, seems to be more an issue than a policy for the development of PI practices that build up for an educational partnership. It may be too early to think of a Brazilian typology as the literature does not yet indicate any patterns. However, a typology that includes recognition of parents' (and community) efforts to guarantee access to school for all and increase chances for all children to be successful, and various levels of parental involvement (as mentioned in Epstein's and Tomlinson's typologies and Beattie's ideas about parental participation) so as to account for the demands of those disadvantaged families, would certainly suit Brazilian schools and families.

Typologies may also have to include other aspects of PI such as ensuring that education reaches a sufficient quality for all and resources are kept to a certain minimum level so as to guarantee a certain quality of education, parents' committees to take action at other levels of decision-making (such as before the Ministry of Education) such as when a local community fights for their right to have a school in the area.

Brazilian studies (Vianna, 1993; Zanella, 1997) examine the communities' actions towards getting better schools and better education and highlight some important points from our context. The Brazilian Communities

Movements (such as projects for Educação Popular) aim to provide school education and educational opportunity for all. Those are very well established in Brazil but very little has been done with and for parents in as far as involving them with their children's school education and learning are concerned. Brazilian parents understand that school education is important, but fail to understand the actual objectives and goals of school and the curriculum. In this sense, parents miss out the opportunity to help the children overcome difficulties and to work alongside schools and teachers. Epstein's typology, in this sense, may only fulfil part of our Brazilian demand due to certain contextual characteristics.

Parental involvement typologies entail a close analysis of where the typologies were constructed in relation to the context where it will be applied. Typologies may vary according to time in history, from a political and sociological view; its applicability in different contexts; the changes schools may have to go through to respond to internal and external demands and considering the level of education; and last but not least, the families', parents' and children's needs and demands as well as their contributions.

On the other hand, taking the teachers' perspective, typologies may support teachers in the process to identify their own possibilities and abilities. Teachers' readiness for PI may be pointed from typologies. In this sense, typologies are very useful in many ways. Firstly it summarises different kinds of PI practices that have already been developed elsewhere; secondly it reflects different tendencies to and from PI developments and thirdly it helps future projects to identify their needs and accommodate better practices. Typologies are very important because they can help to reveal the teachers' PI climate as it will be demonstrated in this study.

2.5 - Parental Involvement studies - relevant evidence

The Plowden Report (1967) set the scene for parental involvement developments in the UK and we may learn from it. It stated that 'teachers are linked to parents by the children for whom both are responsible. The triangle should be completed and a more direct relationship established between parents and teachers. They should be partners in more than

name'. Its recommendations gave rise to a number of projects that aimed at investigating more thoroughly about what schools had been doing towards the development of PI policies and practices. It also triggered the development of PI projects that involved active parent participation in children's school and curriculum, valued parents' opinions and contributions, and examined the effects of PI and many schemes that involved home-visiting. Most importantly, the Plowden Report set the atmosphere for positive PI.

Although PI research has varied greatly in emphasis and complexity, conclusions have agreed on one important point. The common point says that unless schools pass over information to parents to keep them knowledgeable about school education there will be no active partnership and relations will not be as meaningful as they should be. As Jowett et al (1991) put it, 'the study of parental involvement is complex, given the range of activities being undertaken, the differing perspectives held by participants on the desired aims and the *ad hoc* and disparate nature of much of the work'. Nevertheless, PI research has gathered a great deal of information including descriptions of experiences (Pugh et al, 1987a, 1987b), recommendations (Bastiani, 1983), project results (Hannon, 1986; Tizard, Schofield and Hewison, 1982), surveys (Jowett, 1991, Smith, 1980) that reflect what schools have been doing since the early days of PI. As schools and families have changed, PI research has had to shift away from examining and suggesting the various ways PI can be used to combine evidence of 'the effectiveness of the collaboration and its underpinning philosophy and rationale' (Wolfendale, 1992).

Studies about PI have been carried out within three major tendencies:

(1) market-oriented, which was trying to establish a free, private market in which an unpopular school would disappear, and that has been largely related to parental choice and satisfaction (Hughes, 1994);

(2) partnership, which proposes a sense of shared family-school responsibilities (Epstein, 1987a);

and (3) instrumental, in which work is developed towards introducing new systems aiming at better educational standards (Woods, 1988).

Whatever emphasis research may focus on, research and reports stress that parental influence is a strong factor in promoting children's school success.

Macbeth (1984) concluded that ".....parental attitudes have an influence on children's attainment, even if we cannot put an exact value to that influence: there is relative dearth of contrary evidence, in-school factors seem to be related to these home factors. At the very least, home seems to influence school performance and it would appear that a strengthening of partnership between home and school could improve the quality of children's learning."(p.184). Similarly, Katz (1982) stresses that parents play a vital role in the intellectual development of the children.

Parental involvement studies were first developed at nursery and infant school levels. A lot has also been done with experience acquired from special needs research designed as assessment and intervention programs (Bishop et al, 1986; Cameron, 1986) and home-school intervention projects, like the Headstart in the USA and Comer's study (1980) for families believed to be in need of support and encouragement to proceed with their children's school education.

Having changed the view that school education should be left entirely to schools and parents were to restrict themselves to the boundaries of their home territories, PI started to move up to the top of the educational agenda together with other essential aspects of school education. Since then, studies have been carried out to investigate the various ways schools and teachers, at all levels of education, have involved parents (Cyster et al, 1979; Smith, 1980; Jowett and Baginsky, 1988; Jowett et al, 1991, Epstein, 1982, 1986 and yet many others in Europe and America), and suggestions were drawn from these studies and other projects (Bastiani, 1983). Research has greatly influenced and collaborated to further set the scene for PI in schools and homes. Schools are being slowly driven to assess their own culture in order to set an assertive climate to accommodate effective practices that involve parents in all levels and aspects of school education.

When the school is the generator of the partnership the benefits can be enormous. Epstein and Dauber (1991) state that "when teachers make parent involvement part of their regular teaching practice, parents

increase their interactions with their children at home, feel more positive about their abilities to help their children in their elementary grades, and rate the teachers as better teachers overall; and students improve their attitudes and achievement" and teachers have more information about the children that is relevant to the educational process they are responsible for. It was also found that schools benefited from it as a whole given that the climate was prone to be more open to contributions.

2.5.1 - School's climate for PI

Epstein (1982, 86, 91) has carried out PI research about teacher practices of PI and parents' reactions to teachers PI practices. Epstein has largely focused on the teachers' opinions, attitudes to PI and how teachers' PI practices affect their relationship with parents and also in relation to school policies and student achievement. Epstein and Dauber (1991) conducted large-scale studies which examined the connections between programs of parent involvement in elementary and middle schools and teachers' attitudes with the practices that teachers used to involve parents of their own students. The results of their study support the view that teachers have very different views about parents and that the extent through which parents are involved with school has a lot to do with teachers' attitudes and initiative to PI. That made me presume that the teachers' PI climate could be an essential element for PI practices to be developed by both schools and individual teachers. Thus, Epstein and Dauber's study (1991) has particularly influenced this study.

The 1991 Epstein and Dauber's study was influenced by earlier findings which showed that when teachers help parents, parents of all backgrounds can be involved productively (Dauber and Epstein, 1989, Epstein, 1986). Furthermore, there was clear evidence to suggest that teachers' actions and practices may be more predictive of whether or not parents become involved than are the status variables (Becker and Epstein, 1982; Epstein, 1986, 1990; Epstein and Dauber, 1991). Similarly, parents may be more likely to become involved when they feel comfortable with their child's school and have confidence in their child's teacher.

These findings however, have been challenged by Laureau (1987) who although recognising that family practices do vary within any group of

parents, believes that there are average differences in involvement based on parent education and social class. In response to this, Epstein and Dauber (1991) argue back saying that "part of the variation among families is due to the fact that schools vary in how much and how well they inform and involve families" (p.290). It may be that schools are not clear enough for those who need more assistance to understand schools' messages, communications, aims and goals.

Brazilian evidence states that PI may not work where schools do not confront and share with parents their opinions, aims, and expectations and vice-versa. The process of sharing with each other their culture, jobs and intentions is named as 'democratic ambience' (Zanella et al, 1997). 'Democratic ambience', as described by Zanella et al (1997) includes, among others things, parents' and children's right for good quality education, parents' right to know what school should provide to children, as well as the need to take parents' active participation on board. Under this perspective, teachers and schools need to develop policies (or create an atmosphere and 'climate') that includes those aspects if PI is to be developed more effectively in response to children's and parents' needs.

Attitudes and practices of the teachers, and not only the marital status, parents' educational backgrounds and SES, are important factors for the success of PI in schools. The argument here is no longer about parents who are better educated tend to be more easily and naturally involved with their own children's school education and many times more self-motivated to it, but rather, that teachers' and schools' preparedness to deal with parents' demands should be taken into account too. Souza (1997) and Zanella et al (1997) argue that schools should be trying by now to understand parents' demands, way of life and contributions in order to be able to use parents' help and information more effectively. It seems that parents' backgrounds should no longer be regarded as an obstacle to PI; on the contrary, teachers' climate and school preparedness may reveal why limits to PI have been set up as it has so far in Brazilian schools. Epstein and Dauber (1991) argue that unless researchers include measures of teachers' practices to involve parents, research will continue to show that disadvantaged families won't increase involvement with their children's school education.

There seems to be great variation in the nature and quality of the involvement of less educated parents. Parents' cultural and educational backgrounds may limit their involvement, but not rule out its possibility. On the other hand, variations are also found among middle-class parents since not all of them may be willing to help, prepared or able to be closely involved as their intellectual abilities would allow them to be, or simply available for school. Despite parents backgrounds, most parents need some kind of guidance to be productively involved with their children's education at any level of school education. School programs and teachers' practices, factors of which help to constitute the PI climate of the schools, are very strong variables that may predict the success of PI and the teachers and parents partnership. Epstein and Dauber (1991) have demonstrated that the school climate for PI is particularly important for the development of the right PI practices.

Epstein and Dauber (1991) also found that "teachers place more importance on their own practices in the type or types of involvement that are strong in their school as a whole". For example, "teachers' own volunteer practices correlate significantly with the strength of the school volunteer program" (p.294). It is believed that school programs may affect teachers' personal attitudes and practices but on the other hand, it may also be that teachers' personal practices might influence and affect PI policies and the decision-making. Epstein and Dauber (1991) concluded that "school programs and teachers' practices improve in concert" (p.297). PI developments should infiltrate into teachers' practice in order to establish the right climate for PI as well as to become a habit in their work routine. Support for PI among the staff was found to be very important as they stated that "highly discrepant environments (where teachers believe they differ in attitudes from others at the school) are less likely to support strong, comprehensive programs of parent involvement" (p.299). On the other hand, teachers who shared similar views and opinions about PI, were found to be in schools where PI programs and practices were stronger. It was also found that the greater the discrepancies between parents and teacher on PI matters the weaker the programs were found.

Thus, it is argued that the Brazilian teachers' PI climate may be a strong factor to the development of schools PI policies and teachers' practices in the Brazilian schools. It is vital to investigate teachers' positions to PI because, as Epstein and Dauber's study shows, internal common

understanding and support, especially to be able to develop a coherent PI process along the school years, is a crucial starting point to respond to parents' and children's needs and demands and for the development of a productive partnership. Epstein (1991) argues that "it is important to build common understanding about shared goals and common support among teachers, parents and principals so that teachers' feelings of isolation or separateness from others will decrease and so that school and family partnership will increase"(p.300-301). According to Epstein and Dauber's (1991) longitudinal data is also needed to "help document and define this continuous process in which school programs and teachers' individual practices influence each other"(p.297).

Research results also show that there are potential advantages to PI, but on the other hand, there are potential problems (Epstein and Becker, 1982). The problems are often related to the kinds of PI practices developed and the group of parents school serve, the size of the school in terms of number of students and how resourceful school is for PI (including practical issues like time and space) and yet again, the school climate for the development of PI practices. Researchers maintain that schools' profiles, particularly as far as the role of the teachers is concerned, is a critical determinant of PI in schooling (Epstein and Becker, 1982; Becker and Epstein, 1982).

According to David (1993), "most research evidence has, in fact, been oriented to trying to improve 'home-school relations' to achieve educational effectiveness". The improvement of PI practices may largely depend on school staff and staff consensus of the types of PI that should be applied in order to achieve better results in both, parents/teachers relationships and children's progress (Epstein, 1991). We may only see improvement if we understand the climate set for PI.

2.5.1.1 - PI and SES

In contrast to Epstein's views about the influence of parents' SES in PI developments, Lareau (1987) studied family-school relationships applying the sociological theory of Bourdieu's (1977a) concept of cultural capital. According to Bourdieu (1977) cultural capital refers to "... the different pedagogic actions which are carried out within the framework of the

social structure, that is to say, those which are carried out by families from the different social classes as well as that which is practised by the school, work together in a harmonious way to transmit a cultural heritage which is considered as being the undivided property of the whole society"(p.488). Bourdieu (1977a, 1977b) argues that schools draw unevenly on the social and cultural resources in the society. Lareau argues that social class differences are a strong influence on the quality of parental involvement in schooling. Furthermore, Lareau argues that "class-related cultural factors shape parents' compliance with teachers' requests for parental participation in schooling"(p.74).

Lareau's study aimed to place emphasis on the cultural differences of the communities the two schools in her study served (a working-class and a middle-class) in relation to PI, and more specifically on the academic performance. Both schools acknowledged the value of parental partnership and "spoke of being "partners" with parents" (p.76). Lareau (1987) did find significant differences in parental response to teachers' request for involvement. For instance, the quality of interaction between parents and teachers was much more substantial at the middle-class school (parents tended to be more frequent and more centred on academic matters) than at the working-class school (parents tended to be more distant, and interactions were often 'short, rather formal and serious') and in the quality of guidance parents can provide to their children at home (sometimes parents' help was claimed to be unsuccessful). Although some differences were found on parents' level of expectation, it was also found that, to the contrary of what the teachers had expressed, parents, regardless of their background, wanted their children to succeed at school, and all parents valued educational success in first and second grade. Nevertheless, Lareau concludes that parental background is a factor that one should always take into account if the relationship with school is to develop more fruitfully.

Lareau (1987) discusses PI from the parents' 'cultural' (in the sense of Bordieu's concepts) perspective. The study discusses the reflection of a larger social context within the school context; and in response to a specific program, where parents were asked to be involved with reading activities. The program was designed for a group of teachers in those two schools, who believed parental involvement in schooling is important. It is interesting to note that the school administrators supported the

teachers not only throughout the research procedure but also in their PI beliefs. The quality of the interaction between teachers and parents was also considered but the study did not make clear whether other factors, such as the use of other PI practices, or about teachers' profile, would have influenced the program and results.

Lareau concludes that the resources tied directly to social class and certain patterns of family seemed to play a large role in *facilitating* (my highlight) the participation of parents in school and that the "acceptance of a particular type of family-school relationship emerges as the result of social processes" (p.74), rather than from just parental behaviour.

In contrast with Lareau's study where parents' background was found to be a determinant of family/school relationship success, Epstein and Dauber (1991) discussed PI from the schools perspective. They found that stronger programs (that may also imply greater response from parents since stronger programs are considered as programs which involve as many parents as possible through different strategies and practices) were found in schools where teachers believed they shared similar views between themselves and parents about involvement (it is important to highlight that Epstein's study was carried out in inner-city schools).

From the sociological perspective, it is clear that socio-economic status influences parents' values and these, in turn, influence children's educational aspirations (Lareau, 1989). It is also clear that SES may influence PI developments. More specifically, SES may influence PI programs' design since we now know many different PI practices for different parents social and economic backgrounds, demands, needs and desire to be involved with school and children's learning process are important elements to be considered. Having said that, we cannot conclude that SES is the most powerful element that may determine the level of PI success. There are different levels of parental involvement, as PI models (Hornby, 1990) and typologies (Epstein, 1989; Tomlinson, 1991) have shown, that may be developed according to experiences and philosophies of both spheres, family and school (Epstein, 1987). PI policies should certainly take into consideration the SES of children and their family and accommodate their needs into adequate PI practices.

Therefore, PI practices may be best implemented when schools become aware of the characteristics of the population they serve, the parents' demands and needs, children's interests and abilities. Most of all, school's 'climate' for PI should be taken into account too before PI policies are developed to meet internal and external demands. PI is not at its best when it is inspired by sphere (family or school, Epstein, 1987) or implemented as one sole practice in environments where parents' background is varied and mostly disadvantaged. PI should not be developed to satisfy just one half of the partnership, because biased policies have already proved to be unsuccessful. Instead, schools should try to be aware of PI types and practices that work best in each context, for different groups of parents, and that teachers accept as feasible and can cope with. Epstein and Dauber (1991) state that 'schools can invest in different types of involvement to address various needs and to attain different benefits' (p.301).

Whichever emphasis - **sociological** where SES is strongly considered; or **educational**, where emphasis is placed on getting parents to understand the educational process in such way that will help to influence and enhance children's school performance - is placed on parents-school relationship and partnership, research has shown that there are benefits for all parties involved. Lareau (1987, 1989) sees it as 'a critical link in the process of social reproduction' (p.83), whereas others (Epstein, 1991, Wolfendale, 1992, Bastiani, 199), see it as a great resource for better school performance and academic success as well as improved family/school relationships.

Usually, Brazilian parents, at registration time, provide the school with some information about their own children, and in return, schools inform them about their general rules, aims and goals, facilities and services. The teachers organise a general meeting (or other occasion) where general background information about educational process is given and then, during the school year, reports about children's progress or difficulties are provided. This may have been done very superficially up to now but it can gradually be developed in more depth so parents can understand and follow their child's schooling progress more confidently. PI can only work if parents' and teachers' exchange experiences as suggested by the overlapping spheres (Epstein, 1987). The overlapping spheres acknowledge parents and schools backgrounds (experiences and

philosophies). Parent background is certainly an aspect to be carefully considered when developing policies, but teachers' input to PI policies is just as important.

Epstein's typology includes six different PI types and within each type, a number of practices may be developed. Type 2 called 'school obligations' covers school communications to parents. This type is usually covered by the vast majority of schools in any country. The extent through which those practices are covered however varies from school to school. Schools usually send messages and invitations to meetings and social events to all parents. Since communication covers quite extensively the other 5 types in Epstein typology, type 2 is extremely important and relevant. Type 3 and 4 (volunteering and learning activities) in Epstein's typology, may require teachers' close attention and careful examination as they usually require a more detailed plan of action for its implementation and follow-up. Both types may largely depend on teachers' communication with and to parents. Teachers' beliefs, ways of working with parents and preparedness for PI types play a very important role in PI developments too.

The parents' SES is undoubtedly extremely important when discussing any PI type in Brazilian context. Education, specially for birth to 10 year-old in Brazil, is closely attached to social class particularly in state school contexts. The educational debate emphasises the need for extending our knowledge about the people our state schools serve in order to promote more successful programs and students. The need to prepare teachers to be more effective with their students in the classroom as well as to prepare teachers to understand children and their families' backgrounds is also included in that debate. The latter has been considered by Brazilian professionals as crucial for a more successful educational system. If it is believed that teachers' understanding of children's backgrounds influences teachers' performance and children's achievement, the study of teachers' climate for PI in Brazilian schools may help to improve family and school relationship.

2.5.1.2 - Lessons to be learned

There are many lessons to be learned from past research. A crucial step towards improved PI development is based on the assumption which

acknowledges that all parents have a right to be involved with and to contribute to their child's formal and informal education. This has firmly come to stay and we now must explore and create every possible opportunity to develop parents and school partnership.

School is concerned with children's education, but it will inevitably have parents as their 'clients' too. PI policies, because they are very often informally made and planned in Brazilian schools, may become a challenge to many schools that may cause problems to both parties. In Brazilian schools, PI is often and readily regarded as an impossible task due to social differences between teachers and parents and even within the parents' community (Vianna, 1993), divergence and very few reciprocal interests. Vianna (1993) also points out the interests, which teachers and mothers (in Brazil like in many other countries, the vast majority of parents who get involved with school matters are mothers) may have in common. It is mainly to do with improving school resources like a fair salary for teachers, a more reasonable work timetable that would allow teachers to plan their classes, better pedagogical material and resources, better classrooms, classroom material, children's safety, etc. Parents have supported teachers in this sense in the hope that it will encourage teachers to improve the classroom performance.

When the discussion turns to classroom matters, Viana states that teachers tended to become very defensive, and in turn, parents tended to feel intimidated since there was very little space for sharing their views and opinions and establish exchanges. Vianna (1993) states that "mothers have tried to restore the relationship between teachers and pupils, and school and family, in order to re-establish the connection between groups and individuals so as to disperse personal interests and highlight a common objective. Parents believe that their common objective is the children's learning process, improved performance and better achievement" (p.42). There was clear resistance to each other and at the same time a clear concern about getting together to discuss and solve problems. Different PI types and practices may have helped to untangle the situation if PI typologies and models were known to them. PI types and practices would have also helped to identify the level of teachers preparedness to PI or create awareness for new and challenging strategies to work towards common objectives rather than personal interests.

The demands of PI vary according to level of education and age of the children, and time (as appointed in the overlapping spheres). Given that, PI practices also vary according to parents' background and availability to PI practices. Considering, children's development, parents demands and teachers' readiness to PI it is possible to design effective PI. Within a context, PI practices may also have to vary to meet different groups of parents which hold different needs, demands and availability. Epstein (1995) argues that "each PI type is likely to lead to different results, for parents, for teaching practice and for school climate" (p.705).

Epstein has continuously stated that schools have a number of choices of PI. An effective policy which blends different PI practices will help to achieve important goals, reach more parents and families and set positive school climate. Similarly, Hornby (1990) draws attention to that important aspect. School climate for PI may help enhance and maintain improved teachers', children's and parents' performance and sustain effective PI practices. School climate is strongly related to the teachers' attitude to their job, children and the environment in which they work. Teachers are the generators of a positive school climate as well as the generators of improved and effective PI policies.

Epstein (1995) highlights that "the main reason to create such a partnership is to help all youngsters succeed in school and later life (p.701) and remain at school". School climate and effective PI policies help to enhance students positive attitude to school.

Figure 5 summarises the expected results of the six types of involvement for all parts involved (Epstein, 1995, p.706) that schools and teachers can implement.

Type 1 Parenting	Type 2 Communicate	Type 3 Volunteering	Type 4 Learning at home	Type 5 Representing others Parents
<u>Help all families Establish home Environments to Support learning</u>	<u>Design More Effective Forms of Communication to Reach Parents</u>	<u>Recruit and Organize Parent Help and Support</u>	<u>Provide Ideas to Parents on How to Help Child at Home</u>	<u>Recruit and Train Parent Leaders</u>
<u>A Few Examples of Practices of Each Type</u>				
School provides sugges- tions for home conditions that support learning at each grade level.	Teachers Conduct conferences with every parent at least once a year, with follow-up as needed.	School volunteer pro- gram or class parent and committee of vo- lunteers for each room.	Information to parents on skills in each subject at each grade. Regular homework schedule (once a week or twice a month) that requires students to discuss school-work at home.	Participation and leader- ship in PTA/PTO or other parent organizations, including advisory coun- cils or committees such as curriculum, safety, and personnel.
Workshops, videotapes, computerized phone messages on parenting and child-rearing issues at each grade level.	Translators for language-minority families. Weekly or monthly folders of student work are sent home and reviewed and comments returned.	Parent Room or Parent Club for volunteers and resources for parents. Annual postcard survey to identify all available talents, times, and locations of volunteers.	Calendars with daily topics for discussion by parents and students.	Independent advocacy groups.
<u>A Few Examples of Outcomes Linked to Each Type</u>				
<u>Parent Outcomes</u>				
Self-confidence in parenting.	Understanding school programs.	Understanding teacher's job and school programs.	Interaction with child as student at home.	Input to policies that affect child's education.
Knowledge of child development.	Interaction with teachers.	Familiarity with teachers.	Support and encourage- ment of schoolwork.	Feeling control of environment.
Understanding of home as environment for student learning.	Monitoring child's progress.	Comfort in interactions at school.	Participation in child's education.	
<u>Student Outcomes</u>				
Security.	Student participation in parent-teacher conferences, or in preparation for them.	Increased learning skills receiving individual attention.	Home-work completion.	Rights protected.
Respect for parent.			Self-concept of ability as learner.	Specific benefits linked to specific policies.
Improved attendance.		Ease of communication with adults.		
Awareness of importance of school.	Better decisions about courses, programs.		Achievement in skills practiced.	
<u>Teacher Outcomes</u>				
Understanding of family cultures, goals, talents, needs.	Knowledge that family has common base of information for discussion of student problems, progress. Use of parent network for communication.	Awareness of parent interest, in school and children, and willingness to help. Readiness to try programs that involve parents in many ways.	Respect and appreciation of parents' time, ability to follow through and reinforce learning. Better designs of homework assignments.	Equal status interaction with parents to improve school programs. Awareness of parent perspectives for policy development.

Fig. 5 - Expected Results of the Six types of Involvement for students, Parents and Teachers.

2.5.2 - Brazilian schools and PI typologies

Parental involvement, as discussed by Epstein and colleagues in terms of PI types and practices, has been covered widely in industrialised countries. Within that framework, PI in Brazilian schools has not developed PI types and practices like in developed countries. Rather, Brazilian schools have been developed in traditional and old-fashioned terms where parents are formally contacted a few times during the year and messages are sent home through circulars or when children are falling behind average or due to behaviour problems. Little parental contribution and co-operation is reported to be asked for and very few programs really involve parents with school and school education more actively.

Little evidence has been produced about parents' participation in pre- and primary school programs in Brazil. Considering PI policies and practices as described in the typologies and models, Brazilian schools have done poorly. From the school's point of view, there is hardly any development that accounts for teachers' (or schools') preparedness and teachers abilities to deal with parents. From the parents' point of view, very little has been considered in the literature, apart from parents' meetings. From a sociological perspective, studies have documented that parents' and schools' have fought for better educational opportunities, better schools, and resources and improved school as well as children performance. In many cases, the community organises 'movements' that aims to raise the governments' attention to the urgent need for more crèches, pre-schools and even compulsory level schools. These kinds of activities is mainly carried out by mothers and teachers (they are mostly females in pre-school and primary schools) and Brazilian studies like to emphasise this as a mainly female operation. As it was mentioned previously, teachers and parents tend to be drawn together in their effort to get more support and resources from the government, but they tend to leave discussions about classroom issues, learning process and teaching styles for the school only.

The analyses of the Brazilian schools' climate as far as parental involvement is concerned, is therefore required to examine PI under the light of the schools' perspectives. From the study of the teachers' PI

climate (and of pre-schools and primary schools), a blend of PI practices might emerge that reflects teachers' climate for PI. Existing typologies are helpful in this process of gathering information as they summarise the way Brazilian state schools operate or might operate in the future in terms of PI policies and practices.

Using a model that has already been developed and widely implemented is very advantageous when context is not an issue. Epstein's model and typology are very helpful when schools develop programs that will support their relationship with parents. The six parental involvement types (Epstein, 1989) may also help other schools in different socio-economic and cultural backgrounds to identify and categorise specific types and its respective practices that are more suitable to their realities. It may also help to identify some other types and practices that might emerge from the practices previously observed elsewhere. It is also convenient and beneficial to examine PI in different contexts in order to identify PI patterns in Brazilian schools. Those patterns may be different from the existing PI practices and types and may bring important cultural differences in as far as PI beliefs, views and possibilities are concerned. Cultural elements greatly influence people's choices, opinions and demands. Brazilian educational professionals are usually very reluctant to accept foreign models in our schools as they value their own initiatives and efforts to meet the demand both educational and social (since PI is very much related to openness to social aspects of education).

For instance, a survey of parents' views may be needed in order to examine the parents' position, demands and needs as far as their participation in their children's school education is concerned in different context. There is sufficient evidence showing that parents, regardless of their SES, would like to be in constant contact with school especially when their children first go to crèches, nurseries and pre-schools as well as when they start compulsory education (compulsory education in Brazil starts at 7 years of age). All parents, regardless of culture and social background, care about their children's welfare and well-being. We have no reason to believe that Brazilian parents would be and think differently from other cultures in western countries. However, the extent to which parents would like to participate in their children's education may differ from other contexts, and it may be due to differences in PI needs in Brazilian schools.

The study of teachers' climate for parental involvement in the contexts of Brazilian state schools will contribute to the construction of a relevant and helpful PI identity and possibly a typology. Epstein's typology has been particularly helpful in this research because firstly, it looks at parental involvement from the point of view of the school and secondly, it provides a rich variety of situations and distinct levels in which parental involvement can be developed despite the context, and ultimately it has been validated through large-scale and longitudinal studies.

Very little has been done in this field of research as far as published work in Brazil is concerned, but there is an urgent need for its development. Up to now, Brazilian educational professionals have dealt with parents in a very superficial manner. Most of the attempts to approach and involve parents are purely based on common sense rather than on research evidence and recommendation. Publication on this topic provides a blend of shallow information and simple recommendations for parents' meetings and communication (mainly written ones). Although attempts have been made to investigate and understand schools' practices in terms of parental interaction with their children's schools, they have not provided a clear picture of the situation regarding teachers' readiness for this issue, but rather, professionals attempt to find brief explanations for the kind of difficulties both state and public schools face when dealing with parents (especially in troubled times).

2.5.3 - Some Brazilian PI evidence

Moreira (1987) states that the exchange of experiences between parents and teachers is essential for the educational process in order to guarantee continuity and coherence in their joint work. Moreira (1987) argues that schools should take advantage of parent meetings to exchange opinions and discuss and exchange experiences with parents. She argues that this kind of meetings should also be used to clarify any pedagogical aspects of school education explaining to parents how school works and its teaching methods. In addition, Moreira argues that contact with parents through the meetings may lead parents to regain confidence and therefore return to school when they feel it is needed or even to give extra help in practical issues. Moreira also suggests that written information should be more

Carefully planned and more easily understandable so that it becomes another powerful instrument of communication between parents and school. Moreira is a pedagogical supervisor for grades 1 to 3 in a public primary school. As a pedagogical supervisor, she usually runs parent meetings when she takes the opportunity to involve parents in similar activities to those which teachers develop in the classroom with children in order to promote better understanding of the teaching and learning processes in the classroom. Moreira believes that informing parents how and what children learn through giving parents the opportunity to experience what children do in classroom, parents will become more knowledgeable about school education.

Ferraz (1986) looks at the relationship between teachers and parents from another angle. Ferraz states that it is vital to take the different demands of parents into account so as to enable school to find more suitable PI policies. Ferraz, after analysing parents' profiles, identified categories such as helpful parents, aggressive parents, anxious parents, protective parents and hard-to-reach parents, and suggested ways of dealing with parents from each category accordingly. Similarly to what Hornby (1990) proposes in the parents' strengths and needs model, Ferraz emphasises that the school should develop different strategies to deal with parents in different situations and stresses that individual contacts may be the right approach for some parents before addressing some sensitive issues in big groups in general meetings. Ferraz takes state and public schools contexts into account addressing some issues that are typical in either institutions. Among other recommendations, Pinheiro highlights that establishing dialogue between teachers and parents is the most important tool for PI and in case teachers cannot make progress in that direction, the teachers should look for help somewhere else within the school.

Coelho et al (1989) argue that, due to external influences and socio-economic pressures on Brazilian families and schools during the last decade, the relationship between parents and teachers has suffered and deteriorated. Apart from external factors, Coelho et al (1989) also discuss both families' and schools' attitudes towards each other. According to Coelho et al (1989), schools state that school education is their job and should be their responsibility. Similarly, parents seemed to be happy to leave school education to schools. Although school and parents seem to agree on this point, Coelho et al report that problems often arose.

Problems were related to children's poor performance and behaviour. They conclude that an examination of those situations when parents and teachers get together to deal with problems should be carried out. They also mention that the environment where children spend their time, meaning home and school, should be carefully understood and examined. Both aspects, problems and environment, should be considered in order to enable schools and teachers to develop effective parent participation.

Developing countries like Brazil, face social problems where numbers and percentages of disadvantaged homes are extremely high and the social services are barely sufficient to provide for all. Parents are involved in social movements where the community struggle to have access to basic services: education, health, security and jobs. Parents fight for schools, better schools, better salaries for teachers, improved teaching, more assistance for special needs children. However, very little has been done to show any other level of parental participation or involvement in schooling. Education is one of the priorities in Brazil at the moment as there is still a lot to be done to improve people's quality of life. Local governments (like Distrito Federal, and in some towns in the state of Mato Grosso do Sul) are now developing a program that supports and encourages parents to send their children to school. The program emphasises the importance of parenthood, the importance of parents making sure that every child goes to school and remains at school until compulsory education is completed. The program includes paying participating parents for as long as their children keep attending school. The program also includes information for parents about their rights as well as duties as parents. Early results have shown that many parents have given up their jobs (where they usually earned a minimum salary and the amount paid by the program is the same) in order to stay home with their children (who, before the program, would stay home alone or, in most cases, in the streets) and make sure they really go to school; more children from the participating families are staying longer at school; children's performance is improving and best of all, children started to enjoy school life and now see school learning as fun.

Parallel to this, other programs have been developed, according to federal government's recommendations, that highlight the problem of child labour. The campaign slogan is 'children's work tools should be a pencil

and notebook and its place of work, school'. Parents, once again, are the main target. All the programs' emphasis is on parents' participation, parents' guidance and parents' assistance: the government's policy is to help parents help their own children succeed in school as well as in life. As a nation, we have grown to have the understanding that parents can make the difference and as a developing nation, we have started with the very basic with the poorest section of the population encouraging children to attend school. Programs are expected to spread around the country reaching all those in need.

On the other hand, efforts have also been turned to study the relationship between state schools and parents (whose children attend school regularly). Even in those situations, Brazilian schools face PI related-problems that may be simply related to lack of important, helpful and two-way communication. Lack of communication hinders other PI techniques and delay PI effectiveness.

Zanella et al (1997) found that a school in Florianópolis - Santa Catarina, and parents did not share the same views about parents' participation, often missed each others' effort to become partners, and had different expectations for the partnership. According to Zanella et al (1997) the problem often lay on lack of effective two-way communication. Frequent disagreements were likely to occur and barriers to the relationship arose regularly. Zanella et al (1997) argue that unless schools get prepared to review its style and 'culture' when dealing with parents and community, results will continue to show that a mismatch of opinions and attitudes and a lack of continuity in the work of home and school will continue to occur. Results showed that the majority of parents believed school was very important; school is the adequate environment where learning should take place, and attending school will provide a child with the chance to have a better life and therefore have a better future as a productive citizen; and 60% of the parents reported that they attended parents' meeting when invited. Parents' expectations of school education was reported to be very high. On the other hand, school staff (Zanella et al interviewed members of staff and teachers) reported that parents' participation was very limited; parents' school attendance was low; and parents' expectations, as far as what school could provide the children, were equally low. Zanella concludes that Brazilian schools should review their policies in order to establish a fruitful dialogue with parents and

with the community school served. Only then, will Brazilian schools and parents understand each other's views and demands.

Brazilian studies have highlighted that parents' participation in Brazilian schools has been restricted to mothers. Fathers are also invited to participate but school education is still largely seen as mothers' responsibility (Haddad, 1987; Vianna, 1993). Although recent research in Brazil has tried to include fathers in research about children's education, mostly because of family structure has changed, only very rarely are fathers found to be involved with schools (Carvalho, 1989) even when PI is related to external and practical aspects of school other than learning and teaching processes. Zanella et al (1997) have not specified whether fathers or even others that are the legal guardians of children were included in their study in Florianópolis. They have used the term 'parents' as a generalisation.

The Brazilian studies and government recommendations clearly show that both schools, parents and researchers are concerned with home-school relations. Brazilian research calls for attention to the basic needs for effective education to take place, but also for the understanding of parents' roles both inside and outside the home domains, and teachers' and schools' abilities to deal with complex issues involving PI. PI has also been rightly seen by Brazilian policy-makers, researchers and parents as a potential strategy that may influence children's level of school attendance, performance and achievement, parents and schools relationship (and partnership) and yet it may influence and change social behaviour. Despite that, initiatives in Brazilian schools have moved very slowly towards effective school/parents relationship.

The scope of the Brazilian published studies is very limited. Studies have only provided a limited view of the schools', teachers' and parents' PI 'climate' since only certain PI practices and types were investigated. So far, Brazilian studies have suggested that the Brazilian PI typology includes almost only parents' meetings. Apart from that, the Brazilian studies have pointed out schools' lack of strategies, resources and policies to deal with parents but barely raised other PI practices to help the situation improve. Having said that, it becomes clear that there is a need for more research about Brazilian PI practices specially considering the school perspective and potential. That may suggest different ways to use PI in

Brazilian schools that meet both parents' and teachers' needs and demands.

Brazilian studies have basically highlighted the most common form of PI used in Brazilian schools (parents' meetings); have raised questions and reasons as to why schools have not included parents in their policies; and examined parents' and teachers' opposing opinions and views about their views about each other. According to the literature, schools seemed to be restrained to technical limitations which include availability, interests, resources and training. On the other hand, Brazilian parents reported that they would like to have some kind of guidance from school (and teachers) in order to help their children succeed and possibly become school partners. These findings indicate a great potential for PI.

According to Wolfendale (1992) the school potential and readiness to PI could be translated into 'a reflector of the ethos of the school'. Complementing the whole-school policy (Bastion's whole-school approach where the whole school is committed to the development of PI) in which PI becomes a key element in the school system, the culture of the school will invariably influence decisions at any level, and the process through which decisions will be reached. Similarly, PI developments follow the same path as to which and how PI practices may be implemented. In reality, PI developments and decision-making may or may not be elaborated from institutional consensus but yet be dependent on (whole-) school support. However, even when PI isolated initiatives occur, often at the instigation of individual teachers, some kind of 'unsaid' PI policy is often found to be deeply established. Parent' meetings are a PI practice that is usually taken for granted, but often poorly prepared or prepared differently according to each individual teacher and yet according to their abilities, demands, needs, emphasis and way of doing it. Parents are generally left out in the process of preparation for those meetings.

PI seems to be a world-wide policy, even in contexts only 'potentially' inclined to develop more complex PI programs such as in Brazilian schools (as suggested in this research). PI has now been taken on board, regardless of it being 'whole school approach' or individual initiatives, in every school. Parents and teachers have been always concerned with children's education through the times, maybe from different

perspectives but certainly about common aspects that will help to educate a child into becoming a responsible citizen. We can no longer compartmentalise our knowledge, practice and obligations as teachers, since teachers' job has had to reach out for children's broader social environments. Families, on the other hand, have faced new challenges due to social changes and therefore have become more aware of the importance of following their children's development and learning process more closely. PI is an emerging issue in every school and family.

2.6 - Conclusion

Part I of this chapter has highlighted the importance of PI through examining PI concept, terminology, assumptions and PI theory, models and typology from the context of research in Brazil and other countries. PI research that emphasises the importance of the school taking the initiative of developing and implementing PI policies was examined in order to build the argument of this research. This chapter, however, does not intend to say that PI should always be seen from the school perspective. PI should be considered as a method of improving children's environment for learning. PI is about children growing up and learning and therefore adults are involved in the process. If children are the main target of PI, teachers and parents should be ready to discuss issues that concern both of them about the education of the children.

'Much of the relevant research in this area (*PI*) is focused on ideas about how children learn, and about the role of the home in emotional, social, physical and cognitive development, and in children's learning of every kind; these extents, through the evolution of the child's self-image, to the influence of the home upon children's attitudes towards themselves, their educational expectations and their anticipated roles as adults, perceived in the context of their parents' experiences, self-esteem and expectations' (Hurst, 1996, p.90) - (*italics are mine*).

The basic assumption of PI is that parents are their children's prime teachers and therefore their views and opinions should be taken into account and included in the process of decision-making about school-related issues. Improved parent:child interaction and adult:child interaction is the heart of parental involvement. Quality in these interactions is most desirable. The relationship between the parent and

the adult who jointly take responsibility for the child's education, is therefore just as important. The intention should be to formulate guidelines along which to develop and support children's educational experiences.

There may be limitations which are determined by both the extent parents desire to become involved with school (financial, social or educational support), and most importantly, by the teachers' preparedness for PI practices and school policies. The latter, labelled here as school 'climate', might determine the extent through which PI may be developed. Availability of human and material resources will influence PI developments but it should not prevent PI from being effectively used, especially in cases where finances run short. Material resources, in most cases, play a major role in the decision of which PI types and practices would address the partnership more effectively, but human resources will execute policies and use material resources to facilitate the process. Parents, teachers and school staff are the essence of PI in as far as practices are concerned. There are a number of strategies to deal and work with parents that are costless to implement, like improved forms of communication (two-way communication, one-to-one communication;; frequent exchange of information and parents meetings) but these require preparation and dedication.

The PI literature suggests that PI is closely linked with a school's climate.

As Hurst (1990) concludes that 'for the classroom practitioner there exists a wide range of issues about partnership with parents, from the parents' experience of the school's relevance to their daily lives to practitioners' experience of the parents' relevance to the professional task' (p.95). Hurst (1996) also argues that 'practitioners should find it (PI) helpful to concentrate upon what is now understood about the relationship between children's performance in all aspects of their school lives and their experiences at home in their families' (p.90).

Early child care has largely included parents in its agenda and has consistently emphasised the importance of parents' collaboration (Smith, 1980; Tizard, 1987). Other levels of education have now started to acknowledge the importance of parents' participation and value PI linking it with quality education (Epstein). Teachers no longer work on

their own in the classroom since external contributions and social influences have increasingly become stronger and more frequent into school and classrooms. Teachers have had to review their duties as educational professionals and learn further skills to be able to deal with demands from modern society. With influences also coming from developmental theory, teaching has become more interactive and child-centred than ever.

Parents tend to rate schools positively according to the parents' perception of the teachers' attitude to PI (Coleman et al, 1992) as well as to how effective the school is (Tomlinson, 1991). This clearly suggests that the responsibility of getting the parents/teachers relationship off the ground is largely delegated to schools and teachers, who are expected to perform efficiently and effectively and to approach parents in as many occasions as possible and whenever needed during the school year.

Coleman et al (1992) argue that the majority of the parents are very much dependent upon teachers to initiate involvement, particularly involvement that requires some kind of instruction to accomplish learning activities. Coleman et al (1992) highlight that *"in order to bring about high levels of involvement teachers must assume the following responsibilities:*

(1) **realise** that parent efficacy with respect to instructional involvement (collaboration) is dependent upon teacher invitation;

(2) **legitimise collaboration** through an assertion to parents of their rights and responsibilities with respect to collaboration

(3) **facilitate collaboration** by arranging for parent/teacher conversations of various kind, and by providing parents with the knowledge of curriculum and methodology they need;

(4) **encourage collaboration** by providing activities which parents and their children can do together; that is accepting the role of instructional mediator between parents and their children; and

(5) **acknowledge the results of collaboration** by providing adequate and timely information about learning activities and performance."

IMAGES REDACTED DUE TO THIRD PARTY RIGHTS OR OTHER LEGAL ISSUES



Fig. 6 - The Co-operation Classroom - Coleman et al, 1992

Figure 6 pictures well where teachers are placed in projects that aim at involving parents in classroom matters. Teachers are the centre of any possible PI strategy and development. They are the key element in PI. Research has shown that parents become more interested in PI if the teachers are, generally speaking, more receptive to them (Epstein, 1991).

There is a great need to examine the teachers' opinions, positions, attitudes, potential, readiness, willingness to PI. Teacher training, as far as PI is concerned, is still lacking in the vast majority of cases which leaves a great gap in teachers' understanding of what PI can do to assist them in their jobs. PI research projects usually propose some kind of training specifically for the group of teachers involved in the project and moreover, adapted to the specific needs of the situation.

My argument is that, in contexts like Brazil, the immediate need for PI policies combined with others factors like lack of PI strategies' studies in teachers training' courses justify the need for the understanding of a particular aspect of school climate that concerns parents. The objective is to unveil teachers' potential to PI and reveal teachers' ideas and knowledge about different PI types and practices.

The importance of knowing the teacher's position with regard to PI is stressed by James (1994) who has proposed a model that helps schools to develop PI through creating a feeling of belonging. James (1994) also places teachers at the centre of the diagram emphasising that teachers are the initiators of the whole process of involving parents with the school. As shown below (Fig. 6), PI can begin to take form from just acknowledging that parents are an important part of the educational process and should have the right to take and be part of it. The basic rules to PI are well summarised in the figure below.

IMAGES REDACTED DUE TO THIRD PARTY RIGHTS OR OTHER LEGAL ISSUES



Fig. 7 - Developing PI - Creating a feeling of belonging - Jennifer James (1994)

Parental involvement development implies costs, investment, commitment, training, and professional preparedness to work with parents. Information must be a two-way dialogue, to and from school and parents. Home and school relations, specially in Brazilian state schools, are still largely a product of good-willed professionals, very few active parents, and individual attempts to build a bridge between school and home developments. PI should move from isolated initiatives to a well-grounded policy if school climate is to be well understood. As Epstein proposes, schools should be constantly investing in having those practices that will respond to the majority of the teachers' and parents' demands and those that serve minorities. There are cases, like in some of schools in Brazil, which will require more expertise to develop program that

reaches out for the whole community and especially for hard-to-reach families. Developing countries need policies that include simple information to clarify basic aspects of child development and education. PI fully serves this purpose if well established and carried out in accordance with the school and teachers climate.

Parental involvement should be regarded as a means to improve relations at all levels - between parents, children and teachers - and at all levels of education rather than as an impediment to teaching and learning as it is often seen by professionals in developing countries. It will affect all parties and change the level of their satisfaction with each other.

Tomlinson (1991) states that 'many teachers cling to a notion of professionalism that excludes parental involvement (other than raising funds via Parent Teacher Associations) and need to be persuaded that their professionalism includes recognising the integral role of parents in the educational enterprise'. Similarly, Brazilian teachers still adhere to that position and in many cases, see the parents as not their responsibility or beyond the scope of their jobs. Having said that, the teachers study will help to unveil teachers' weaknesses in terms of what PI means to schools.

2.6.1 - PI stages and school climate

Parental involvement is an ever evolving concept and process. Its main characteristic is being a developmental concept. Macbeth (1989) has suggested that there are four stages of progression in the growth of home-school partnership:

Stage one - The self-contained School - is characterised by teacher autonomy, limited and formalised contacts with parents, little parental choice or consultation, a denial of access to school records, and with curriculum and teaching methods regarded as the teacher's domain.

Stage Two - Professional Uncertainty - is characterised by tentative experiment with home-school liaison and participation but teachers still restricting consultation and blaming homes for low pupil attainment.

Stage Three - Growing Commitment - is the stage at which the school leadership encourages liaison and consultation with parents,

recognises the value of home teaching, encourages parents onto governing bodies, and generally begins to adapt the school system to include parents.

Stage Four - The school and Family Concordat - represents the ultimate stage in the attempt to involve all families in formal schooling, recognising that home learning is part of education and the role of parents is crucial in this, and emphasising the obligation of parents to be involved and to cooperate with schools.

According to MacBeth (1987) schools can be rated in four different levels of progression in the partnership. The partnership can be also rated differently according to kinds of PI practices schools use or plan to use in the future. This procedure is similar to Epstein's spheres. PI tends to develop much in accordance with the inevitable changes (internal and external) that all participants may go through. The family and school move and change through time: they each have a 'life-cycle' and the exact point where each participant stands will influence the development of the partnership (Epstein, 1987b; Atkin, 1988). It changes and moves according to child age and school level as suggested by Epstein in the overlapping spheres.

Although theories, typologies and other initiatives are extremely important and helpful, PI will only be effectively implemented after a careful examination of the climate of school and the demands of its clients: children and parents. This, the study of teachers' PI 'climate' at the stage where no PI training has so far been provided for the teachers and no PI program exists at the time of or even before, this research took place, is the main objective of this research. Although Brazilian teachers may not be aware of the number of ways schools can involve parents in the children's education, there are rumours about Brazilian teachers struggling to deal with parents more effectively, wondering what to do to overcome difficulties when dealing with parents and reacting strongly to pressures coming from parents (in both opposite ways: as an impulse to develop good relations or to leave parents with the minimum possible). Thus there is a need to look at PI from the Brazilian school's point of view, from the very basic of PI developments so as to find realistic solutions to immediate problems.

I will finish this chapter with an statement by Atkin and colleagues (1988) and their diagram "The Making of Home/School Relations" (it interestingly adds more details to Epstein's overlapping spheres) as they both illustrate rather well parental involvement and its developmental nature.

"There is a great deal that parents know and can do, particularly with regard to their own children. This makes them a vitally important and potentially valuable resource, which most schools do not even recognise, let alone utilise effectively" (Atkin, 1988, pp. 7).

The basic assumption is still the recognition that the partnership is important specially in times of rapid changes both at home and school, but we need to be aware of the 'enormous range and diversity of home-school ingredients' (Bastiani and Wolfendale 1996, pp. 3) to establish new and effective ways of working together.

IMAGES REDACTED DUE TO THIRD PARTY RIGHTS OR OTHER LEGAL ISSUES



Fig 8 - The Making of Home/School Relations - Atkin et al (1988), pp. 24

Chapter 2

PART II

School Climate and PI: A close relationship

2.7 - Introduction

The following sections aim to examine the literature on school climate/ethos that will help to throw some light on the understanding of PI developments in Brazilian pre- and primary schools. PI is thought to be related to school climate as both are argued to present common characteristics, similar processes and help improve performance if perceived as positive.

This research examines Brazilian parents' position and state pre- and primary schools teachers' views about PI in order to reveal a PI pattern that reflects the Brazilian teachers' readiness for PI. Readiness/preparedness are concepts used here to mean the abilities Brazilian teachers might have for certain PI types and practices. Teachers' readiness/preparedness are referred to as school/teachers' climate/ethos since both involve position, views and attitudes towards improved performance. Since PI typologies and models examined earlier in this chapter comprise a very comprehensive list of PI types (also called levels by some authors) and practices that teachers have developed and implemented in schools elsewhere, it is argued that they may help to reveal teachers' readiness for some PI types (according to their own views). Brazilian teachers' views are put against the existing PI typologies and models to be analysed under its perspective (and parents' views is used to illustrate the main study). Both studies, teachers' and parents', are analysed according to PI categories that emerged from the data. It is argued that the course of PI developments may be changed if PI climate is considered and well understood.

Firstly, it is important to emphasise that this session does not aim to provide a comprehensive review of the literature on school climate and ethos as existing literature places more emphasis on school effectiveness

and student achievement than on the topic of this research. This session aims to bring out important aspects of research on climate and ethos so as to complement the understanding of findings and conclusions. As in school climate research, PI has also been considered in effectiveness research, but under the view that PI is one of the key-factors for school effectiveness (Mortimore, et al, 1988). These are indeed important aspects as to why schools should improve climate and pursue suitable PI practices. However, the focus of the present research is to examine teachers' views rather than relate positive climate, PI and student achievement.

There is little that focuses on PI and teachers' climate in the literature. Nevertheless, this session aims to examine some of the existing literature that explains what school climate is about, so that it may illuminate further the research argument.

Generally speaking, the literature states that school climate is a very important element for school improved performance and educational results. Research argues that schools should pursue positive climate/ethos in order to create the environment that is conducive to effective teaching and learning. Not only do students benefit from this, but also the school as a whole, including parents.

School climate is about people's attitude, meanings and actions and relationships. Positive climate may be understood as the ideal atmosphere for effective actions that will consequently help to achieve improved results. For parental involvement to be successful, contextually focused initiatives should be designed to create positive relationships that will support children's total development. Creating and understanding the climate for PI involves the process of identifying tendencies, views and attitudes, it is not simply choosing and applying a number of different PI practices in schools. PI may be understood as a facet of school climate which presents an evolving and unique character that is conducive to team growth, action and effectiveness rather than simply a procedure to be established simply to contact parents.

The course of PI development in schools may be more likely to be manipulated and easily predicted if teachers' disposition to PI is well understood. The general climate in Brazilian schools will not be revealed

in this particular research alone due to the complexity of school climate research and most importantly the scope of this research, but it may indicate particular tendencies to PI that in turn will reveal a certain pattern of school social relations (since PI can intensify and encourage school social relations).

The concepts of ethos and climate will be examined to help clarify the terminology that has been used to investigate schools' ways of working in different aspects of schooling like classroom, management, social relations and setting. However, it will particularly focus on aspects that may help to understand PI as part of school organisational climate as well. Thus, emphasis will be put on issues that may be applied specifically to PI.

Much of the literature on school climate and ethos, concerns the creation of a joint effort to produce an atmosphere for effective learning and teaching to take place. Having said that, I will try to lead the discussion to the point where PI, as a status of climate in school, is also seen as joint initiative (whole-school approach) pursuing improved performance and results.

2.8 - Ethos and climate - related concepts

2.8.1 - General definitions

As the concepts of ethos and climate are intrinsically related to the concept of culture, a general definition of culture is examined so as to clarify the use of terminology climate in this research.

Culture, according to the definition given by a dictionary, refers to 'all the arts, beliefs, social institutions, etc. and as a characteristic of a community, race, etc.'. Ethos is referred to as 'characteristics of a community or of a culture; code of values by which a group or society lives' and 'the prevalent tone of sentiment of a people or community'. Climate is referred as 'prevailing condition, general attitude of people to an aspect of life, policy, etc.'. Ethos, climate and culture are terms that imply a collective consensus, be it positive or hostile.

Culture seems to be the broadest terminology to refer to a set of beliefs of a larger group of people and that includes the atmosphere and

characteristics of an institution or peoples. School culture is a many-faceted issue and therefore it is necessary to exercise caution when using the term for such a specific aspect/facet of school, such as PI. School culture studies include the examination of a number of variables and involves values of all participants of the school processes and formal and informal structures (Nias et al, 1989). For that reason, culture, as it is defined here, appear to be a too broad concept involving a large number of variables.

'Ethos' seems to refer to aspects of life that drive a group of people to adopt certain attitudes according to their beliefs. Climate seem to be a tendency for a certain way that things happen and are done in an environment in response to a set of values. Climate is also often used to mean the 'atmosphere' of an environment. For example, a set of PI practices may indicate the Brazilian teachers' (and schools') climate for PI. Climate for PI may indicate teachers' preparedness for different PI types and its respective practices.

From these definitions, the term 'climate' seemed to be the most appropriate to be adopted here as the objective of this research is to examine a particular aspect of Brazilian state primary schools which include attitudes to a certain group of practices.

Figure 9 shows a summary of the general definitions described. Further examination of the terms will follow next.

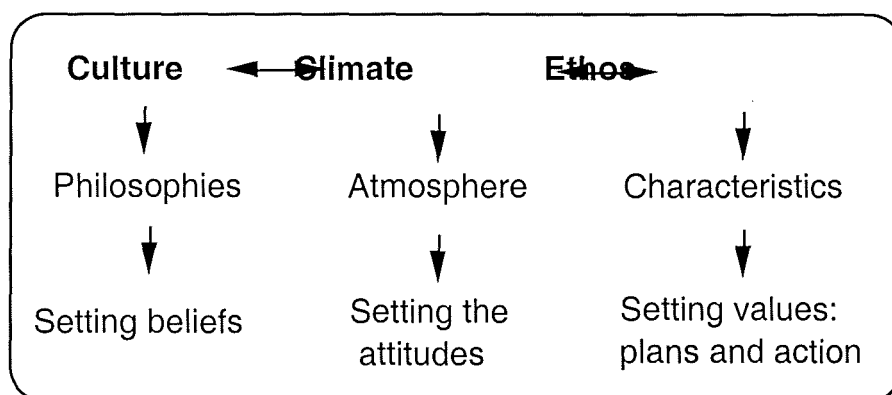


Figure 9: Culture; Climate; and Ethos

2.8.1.1 - School ethos

The term ethos in relation to school processes was firstly introduced by Rutter and colleagues in their 1979 study. The study indicated that schools had particular characteristics that may influence outcomes - pupils performance and achievement (attendance, behaviour, delinquency and academic attainment). Those characteristics formed the ethos of the school which was described as a community identity factor - 'an ethos' - which may be described within classroom management and school values; and norms of behaviour and points of view. Rutter et al (1979) argued that school ethos may have greater influence on pupil outcomes than any of the individual school process variables. Positive ethos was then discussed as an important element that schools should aim at in order to signify a positive approach/stimulus to enhance school performance and student achievement.

According to Stratford (1991), 'if the ethos or atmosphere of a school is seen as exercising a more powerful influence on the behaviour and learning of school pupils than any other single variable, then perhaps it is overriding spirit or tone which itself should be the focus for any change programme' (p.166). Stratford goes on to say that if that is a fact, then intervention should be based on knowledge of school staff views, attitudes, aims and as further along the process, a coherent way of thinking shared by the majority. Stratford (1990) earlier on states that 'there are clear indications from research that a positive ethos is required for a school to be effective. A positive ethos is established when there are signs of coherence and consistency among staff views, clearly defined goals and effective leadership' (Stratford, 1990). Setting up a positive ethos involves team work and agreement on key-issues. Similarly, Mortimore et al (1988) showed that 'in schools where all teachers followed guidelines in the same way, the impact on progress was positive. When there was a variation between teachers in their usage of guidelines, this had a negative effect' (p.251, in Stratford, 1990, p.185).

Stratford (1990) explains Dancy's (1980) concept of **ethos** as 'some synthesis of the values and expectations held and shared by members of the organisation and inherent in their procedures' (p. 185). According to Stratford (1990), school ethos is linked with school-wide consistency in guideline usage for the curriculum as well as to other school processes.

School elements should share and comply with aims and procedures in order to be more productive and effective. Dancy (1980, in Stratford, 1990) provides an overview of the elements of an ethos which the author believes, should be considered in order to reach improved outcomes. Those elements are Values, Aims, Attitudes (both intrinsic and extrinsic) and Procedure, categories which call attention to the elements of hidden aspects of school as shown in figure 10 below.



Fig. 10 - Values - The criteria by which one grades one's aims. Source: Dancy, 1980 in Stratford, 1990.

It explains the school processes which involve individuals, communities and school. The objective of the figure is to demonstrate goals that might promote positive changes to improve school climate. The argument is that if school climate is improved then outcomes, performance and achievement will in turn be enhanced. Dancy (1980) explains that values are 'the criteria by which one grades one's various aims', intrinsic and extrinsic are 'those of which inhere in the concept of education itself aims, and those which have no logical connection with the concept of education per se, though they do inevitably arise in our school system' (like the reputation of a school, p. 30) respectively; attitudes as 'attitudes to individual people and attitudes to the school itself as a social entity or community' and procedure 'is a pattern of actions, where an attitude is a pattern of felt thoughts'. According to Dancy, 'values order aims, aims

inspire attitudes. Attitudes issue in, and are exemplified by procedures (a procedure is a pattern of actions, where an attitude is a pattern of felt thoughts' (p. 32). Procedures are related to the community, individuals and to school work (organisational work, the teaching styles and the curriculum itself) in as far processes to achieve something is concerned. Similar to whole-school approach, which emphasises joint efforts, common aims, focused attitudes and similar values, Dancy's (1980) model also accounts for work consistency among staff.

Similarly, Allder (1993) states that establishing a good school ethos is a problematic issue, since it is difficult to establish parameters to measure improvements in ethos due to its natural subjectivity. Allder argues in her article that school ethos and outcomes form a cyclic system in which 'school ethos affects school outcomes and it seems that the way to achieve those outcomes is to establish a good school ethos' (p.59). However, Allder proposes that the term - ethos - needs to be understood if outcomes are to be improved. Allder (1993) goes a little beyond the idea of consistency to analyse the terminology in itself.

Allder (1993) argues that 'ethos' can be regarded as a frontier word, and that words used almost interchangeably with 'ethos' can be regarded as connecting words.'(p.62). Allder calls 'atmosphere', 'spirit', and 'climate' connecting words, while 'ethos' is a frontier word. Allder states that connecting words serve to underlie some important aspects of the concept of school ethos. Allder states that ethos is 'always located somewhere in the social system of an organisation; the ethos of a school will always be the product of what has happened previously, and in particular, with what has happened in the area of social interaction and human enterprise' (p.68). In addition, 'the ethos of a school includes the contribution to the atmosphere or mood of the organisation which the man-made environment contributes'. After examining the complex meaning of the word 'ethos' and the use of other terminology (like climate, ambience, spirit, atmosphere), Allder explains that ethos is to do with uniqueness. It is concluded that 'ethos of a school, that illusive item which is so difficult to recognise, measure or improve, is the unique, pervasive atmosphere or mood of the organisation which is brought about by activities or behaviour, primarily in the realm of social interaction and to a lesser extent in matters to do with the environment,

of members of the school, and recognised initially on an experiential rather than cognitive level' (p.69).

Rutter et al (1979) attempt to identify and analyse the differing effects that the (secondary schools in the Inner London area) schools as such have on the behaviour, attainment and general development of their pupils. Their research argued that the combination of process variables could be manipulated within schools to produce improvements in outcomes. The study of Rutter et al has contributed vastly to the discussion about how schools (ethos) can make the difference for disadvantaged children. Although much of the results and findings of the study of Rutter et al have been questioned (Hargreaves, Blackstone, Reynolds, 1980, Review Symposium) and its methodology has come under criticism, the concept of 'ethos' introduced by them has definitely changed views about school effectiveness and added new elements to the discussion of pupil's achievement.

School ethos was defined as the combined effect of the different factors of schooling. Among many other aspects, consistency among teachers was considered as very important because it proved to have had more impact on progress. Rutter et al (1979) states that 'the atmosphere of any particular school will be greatly influenced by the degree to which it functions as a coherent whole, with agreed ways of doing things which are consistent throughout the school and which have the general support of all staff' (p.192).

According to the literature, 'ethos' can be summarised as being unique to a organisation (school), has to do with social interaction of its members and is something that is experienced (rather than noticed and measured) which will have an effect on the experiences of others (Allder, 1993). Stratford (1990) points out that ethos is a community identity factor which is much in accordance with Allder's definition when it touches its uniqueness of character. Rutter et al (1979) defined ethos a combination or pattern of elements of schooling, which any school develops. Measor and Woods (1984) describes it as 'not a thing, nor a settled state of affairs with constant parameters to which all subscribe in equal measure. Our view of it rather suggests a moving set of relationships within which different groups and individuals are constantly in negotiation. It is expressed largely in symbolic form, notably in language, appearance and behaviour.

Over time, these symbols may become cryptically abbreviated, intelligible only to insiders any ethos is identified from within, in its natural setting and in terms meaningful to the inmates' (p.25).

Similarly, PI has also been argued to influence school achievement; has its unique character in every school; needs to be considered as a common goal; and has to do with social relations. Social relations may be just as subjective as school ethos since it very much depends on people's attitudes, behaviour and language.

PI, according to all typologies examined in Part I of this chapter, can embrace all kinds of (social) activities to involve parents with school. The common path goes usually from involving parents with social activities, simple communications to more complex and detailed information and demanding partnerships that include parents and learning/teaching processes and decision-making processes. From the parents' point of view, it means from being informed to feeling listened and having a voice. From teachers' perspective, it might mean a common language and attitude for a certain group of PI practices. PI may be developed to reach high standards of relationship, meaning open and honest dialogue, trust, a good understanding of views, intent, value and aims, and establishment of a productive partnership. Under this perspective, PI may be viewed as a reflector of the ethos of the school (Wolfendale, 1992). Ethos includes attitudes, experiences and philosophies (as the overlapping spheres model suggests, Epstein, 1987)) of all participants within the institution.

According to Wolfendale (1992), 'the 'culture' of any school rests upon and is composed of a host of attitudes and philosophies. Attitudes, experience and philosophies may reveal the social system of school and therefore the relationships school (and teachers) may develop between themselves and others and parents. If these attitudes and philosophies are coherent, we can describe the prevailing culture (according to Wolfendale, ethos and climate are alternative words describing the same concept), albeit in rather vague, qualitative, impressionistic terms. Usually the more discordant and discrepant within-school attitudes and philosophies are, the less it is possible to describe the culture, even 'character', of a school' (p.124). In this sense, the whole-school approach is reinforced since it emphasises group common aims, values and attitudes.

Concepts of ethos examined can be summarised as follows:

- atmosphere, community identity factor, with specific values and norms of behaviour (Stratford, 1990);
- school ethos is essentially set by the staff, (presumed) intentions and (actual) outcomes may produce a guide to school's effectiveness, and ethos may be analysed in terms of values, aims, attitudes and procedures (Dancy, 1980);
- positive ethos in relation to outcomes (Rutter et al , 1979);
- located somewhere in the social system of an organisation; something which is experienced; used in the mood sense generally associated with social interactions (Allder, 1993);
- is identified from within, in its natural setting and in terms meaningful to the inmates (Measor and Woods, 1984);
- attitudes and philosophies of all participants within the institution (Wolfendale, 1992).

2.8.1.2 - School Climate

The literature on school climate is diverse and covers a wide range of schooling aspects. Researchers agree that school climate is reflected in many school variables as well as processes that occur at different levels and settings. Climate is also perceived as the participants' view of their experiences. School climate, classroom climate and teachers' climate may influence individual attitude and behaviour and consequently set the attitude or behaviour for common use. Anderson (1982) states that 'the difficulty of defining school climate is reflected in the diversity of climate typologies that have evolved, despite their common roots' (p.368).

As it is argued in the 'ethos' literature, schools are argued to possess something called 'climate' that is unique to each organisation. Allders (1993) states that climate 'clearly still refers to the contributions of people' and that it 'always refers to social interactions in such contexts' (p. 67) where its uniqueness is taken from.

Anderson (1982) metaphorically talks about school climate research as studying 'particular threads in the tapestry of school climate' since climate may be studied from a number of different perspectives (like in

school buildings or particularly in classrooms). According to Anderson 'unifying threads in school climate research are few and fragile but even though, there are common points that researchers have pointed out. Those common points touch on its uniqueness; complexity; difficulty to measure; the fact that it is influenced by particular dimensions of the school; it affects students outcomes, behaviour, values satisfaction and personal growth; and improves the understanding and prediction of student behaviour. School climate is certainly a very broad aspect and it includes an endless list of situations and variables that belong to and form school environment.

Researchers acknowledge that there is a number of difficulties when studying school climate, since many variables may sometimes be left out and some others mistakenly included or yet too few variables considered. Some researchers argue that school climate is unattainable due to its living complexity and the number of variables to be considered and included in the analysis. Nevertheless, efforts have been made (and should be made) to understand the influence of school climate in expected school results and how certain aspects influence decisions about important school issues.

Anderson (1982) examines some researchers' definitions of school climate which includes Halpin and Croft's (1963, p.1) analogy. It explains school climate as "personality is to the individual what 'climate' is to organisation"; Nwankwo (1979, p. 268) referred to climate as 'the general 'we-feeling', group sub-culture or interactive life of the school"; and Tagiuri (1968) defined climate and atmosphere as summary concepts dealing with the total environmental quality within an organisation that includes its ecology (the physical and material aspects), its milieu (the social dimension concerned with the presence of persons and groups), its social system (the social dimension concerned with the patterned relationships of persons and groups), its culture (the social dimension concerned with belief systems, values, cognitive structures, and meaning). Anderson (1982) argues that Tagiuri's system reflects the growing consensus of many climate researchers. In this sense, school climate includes the total environmental quality within a given school building which considers a composite of variables from the four dimensions - ecology, milieu, social system, and culture as in the following figure.

<u>Categories</u> <u>Dimensions</u>	<u>Environment</u> school as the unit of concern	<u>Setting</u> smaller units inside and outside school..	<u>Situation</u> classroom climate and teacher process behavior
<u>Ecology</u>	Physical/material variables in the school that are external to participants		
<u>Milieu</u>	Variables that represent characteristics of individuals in the school.		
<u>Social System</u>	Variables that concern patterns or rules (formal) and informal of operating and interacting in the school.		
<u>Culture</u>	Variables that reflect norms, belief systems, values, cognitive structures, and meanings of persons within the school.		

Fig. 11 - Conceptualisation of school climate - based on Anderson's (1982) table 1:
conceptualisation of school climate with Tagiuri's (1968) Taxonomy, Including Categories
From Moos (1974) and Insel, and Moos (1974) - p.370.

The conceptualisation of school climate indicates some similarities between school climate and PI developments. Parental involvement may be also considered under all four categories described above (Anderson, 1982) since its development depends on the participants demands and needs, students characteristics, social relations between families and school and school characteristics. Ecology, milieu, social system and culture as described in fig. 11, are also considered by PI models, typologies and practices (as Epstein's literature points out).

2.8.1.2.1 - Studying School Climate

According to Anderson (1982), *'school climate research owes much in theory, instrumentation, and methodology to earlier work on organisational climate in both business and university contexts, and to later work on classroom climates'* (p.372). School climate researchers define school climate as something a school has, something 'out there' in the environment of the school. According to Tagiuri (1968), climate is a 'relatively enduring quality of the total environment', whereas Moos (1974) identifies social climate as 'the personality of the environment' (in Finlayson, 1987). According to Finlayson (1987), in the organisational literature, it is emphasised that climate is a product of the members' immediate experience of the organisation. Anderson (1982) defines school

climate as a 'broad construct', defined by a composite of variables from the four dimensions (ecology, milieu, social system and culture). It is emphasised in the literature that to elicit members' perceptions of the environment, researchers have used questionnaires that contain a number of different items so different variables are taken into account (OCDQ, Halpin and Croft, 1963; CCI, Pace and Stern, 1958; AI, Stern, 1970; EAT, Astin and Holland, 1961; MCI; MCI, Anderson 1973; HSCI, Stern, 1961 and others). The assumption is made that each item is meaningful to the respondents in its own terms (Finlayson, 1987) \please see appendix 4 for table on major climate studies\.

Organisation climate, and more specifically school climate, may be studied from a number of variables or groups of variables that include the characteristics of the staff, students, body of teachers, individuals, the setting itself, the classroom dynamics, a school's style, teaching methods, school's aims and goals and also the needs of each group of participants. Anderson (1982) states that:

"The image (common elements and differences of climate) varies considerably, according to the environmental dimensions (ecology, milieu, social system, or culture) considered important in creating climate. This emphasis is largely a function of the researcher's theoretical orientation. Furthermore, the image differs with the variables used to define these dimensions, and how the variables are measured. Even conclusions drawn about the effect of climate vary, depending on both the measurement techniques and the outcomes related to climate. The issue, then is whether school climate researchers are all looking for the same Beast". (p376 -377) .

(Brackets in the first line are mine)

Some researchers see individual contribution as very influential in organisational climate and others see that situational characteristics affect individual behaviour. It is actually very hard to identify aspects that may affect ('the image of') climate more strongly than the other. Causal relationship is still argued to be difficult to be established in climate research.

Figure 12 summarises information about participants, instruments, variables, and findings for climate studies (Source: Anderson, 1982). The

figure is organised following the taxonomic categories: ecology, milieu, social system, and culture. *Ecology* variables include building characteristics and school size; *Milieu* includes the characteristics of persons and groups within the school environment (teachers' characteristics, morale; student body characteristics and morale); *Social system* includes variables dealing with patterns of relationship in schools (administrative organisation, instructional program, ability grouping, administrator-teacher rapport, teacher shared decision-making, good communication, teacher-student relationships, student shared decision-making, opportunity for student participation, teacher-teacher relationships, community-school relationship, and involvement in instruction (principal involvement); *culture* variables include the values and beliefs systems of various groups within a school (teacher commitment, peer norms, co-operative emphasis, expectations, emphasis on academics, rewards and praise, consistency, consensus and clear goals).

School climate research has mainly focused on measuring school climate and student achievement and therefore discussions are usually about school variables that are believed to affect student achievement. However, as Epstein and McPartland (1976) have pointed, climate may be an outcome of a certain pattern of relations developed within school and/or between schools and children and other people (like parents). Climate may be determined by the combination of a body of teachers, a body of students, a body of parents, leadership and their individual and group attitudes, goals, aims and perceptions. In this sense, school climate is the result of a complex combination of subjective and objective elements of an organisation. On the other hand, given the complexity of relationships and exchange processes with the wider community, there may also be a causal process as Fig. 12 shows:

IMAGES REDACTED DUE TO THIRD PARTY RIGHTS OR OTHER LEGAL ISSUES



Fig. 12- Interactive model showing all possible relationships among environmental dimensions and their interactions with school climate.
Source: Anderson, 1982, p. 405.

It is interesting to note that according to the figure above the culture is formed by the milieu, ecology, social system and climate. The school climate is under the influence (and in the centre of the system) of the other elements in the system and constantly maintains in exchange with the whole system. Culture and climate have distinct positions in that system but are both influenced by one another. Thus, culture and climate may be considered separately as discussed earlier in this part II, with distinct meanings and ideas.

Anderson (1982) argues that 'the categories in Tagiuri's (1968) taxonomy provide a comprehensive assessment of the environment. The model should allow us to test not only the impact of the variables from those dimensions on climate, but also their interrelationship and impact on outcome, mediated by climate' (p. 404).

IMAGES REDACTED DUE TO THIRD PARTY RIGHTS OR OTHER LEGAL ISSUES



Fig. 13 - Interactive model showing all possible relationships among environmental dimensions and their interactions with students outcomes.
Source: Anderson, 1982, p. 406.

This model is a conceptualisation of all possible interactions among the dimensions of the environment as the student outcomes both directly and as mediated by school climate. Anderson (1982) argues that this model should be linked to multiple student outcomes as suggested in Fig. 14.

IMAGES REDACTED DUE TO THIRD PARTY RIGHTS OR OTHER LEGAL ISSUES



Fig. 14 - Interactive model showing all possible relationships among student outcomes and their interactions with school climate.
Source: Anderson, 1982, p. 407.

Anderson (1982) states that a single study could not test all the conceptually possible relationships as stated in figures 13 and 14. However, the models suggest the universe of all possible relationships from which testable research models can be derived (Anderson, 1982). Climate research reveals that a number of variables should be considered but very rarely will variables be measured since subjective elements and aspects are usually involved and are difficult to measure. However, climate research also points out that people's perceptions are vital since participants may reveal their views and opinions that complement the more objective variables. In addition, participants' views and opinions may also reveal organisation's beliefs, attitude and behaviour, and values.

As the literature indicates, school climate is a very complex issue. Similarly, school climate research is just as complex. Existing school climate knowledge has helped to understand its basic concepts and how climate is influential in school processes. Having said that, this knowledge has also helped to build this research argument. The research assumption is based on school climate concept and knowledge because it acknowledges similar characteristics of PI developments. The next figure is an attempt to relate PI and school climate and show how PI school climate may influence relationships between teachers, parents and children.

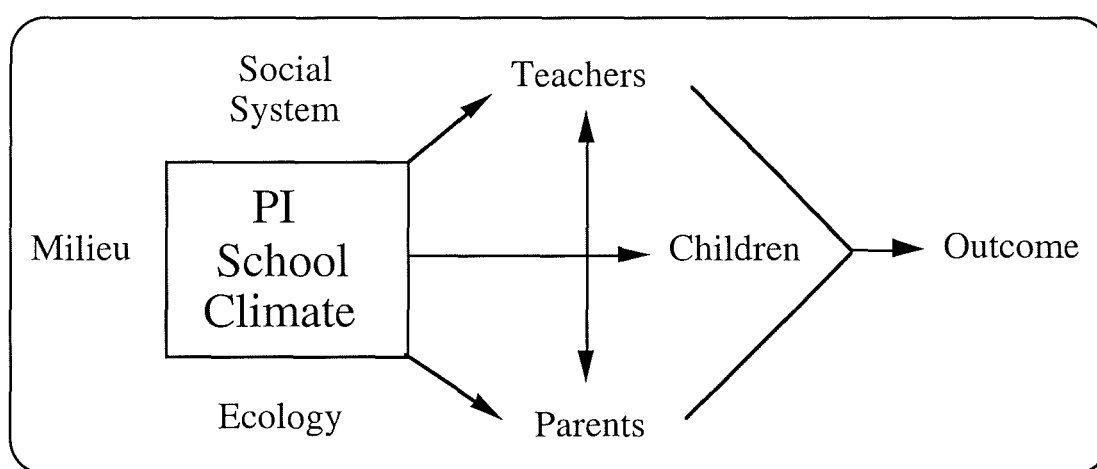


Figure 15 - School climate and PI

Having examined all that, it may be concluded that climate is closely related to what people may find important (in their social system) and how they express their views, opinions and desires in school environments (outcomes) and influences of their own characteristics and

school's environment. PI research may reveal the practices that are already in place and what people involved think about them and experience. It may go further to describe the extent to which certain practices are accepted and point out those practices that schools/teachers are prepared for (describe the climate for it) which will produce desirable outcomes.

2.9 - School climate and PI

The main argument of this research is that PI may be understood within the concepts and relations that climate is described, in the sense that teachers might have a tendency to develop certain kinds of PI practices that are more familiar to them (practices may be determined by group or individual). That is, PI practices that reflect the influences they are under (ecology, milieu, social system and culture) As argued earlier in this chapter, teachers' perceptions and views may reflect their readiness and preparedness to PI. Having said all that and examined the school climate literature more extensively than it is summarised here in this session, school climate concept and research have been used in this research to establish the framework for the studies analysis. This research has interpreted 'climate' in its very limited way because of the nature, methodology and objectives of these studies. Climate has been used as a support concept so as to complement the existing knowledge on PI under a new light and portrait the data and research results in a meaningful way. However, it is indeed acknowledged here that school climate is a more complex issue than it is used by this research.

Schools are often judged (and school choice is often based on parents' judgement and convenience) through people's judgements about its particularities, head teachers, body of teachers, teaching methods as well as its 'climate'. Participants of an institution usually have perceptions about it which may be based on differing experiences but yet contribute to form, deteriorate or improve its climate. Thus the climate or 'atmosphere' varies according to each institution or group of participants under a same system.

School achievement has been largely related to school climate (and/or ethos as mentioned earlier in this chapter) as discussions include measuring outcomes and causes for success or otherwise. However, as

Strivens (1985) states, 'academic achievement may be (at least superficially) the most readily assessed, but schools are also supposed to develop social skills and to impart 'values' to their pupils' (p.46). Strivens goes on to say that:

It is useful to make a distinction between research into school effectiveness which has taken as its main problem area the assessment of educational outcomes, and research into school climate. While there are clearly strong connections and overlapping interests, research on school climate has concentrated on exploring the first problem area referred above: the definition of a good work environment, how it may be described and most importantly, how it is created.'(p. 46).

Social relations and improved relationships between all school stakeholders is important. Studies have demonstrated this (Epstein, 1991; Lareau, 1987; Coleman, 1996). The consequences of improved relations are believed to affect achievement and performance thus, create positive climate.

PI and school climate have presented similar characteristics and similar research objectives. Both are related to social aspects, are unique in each environment, involves people's opinions, perceptions and views, aim to implement effective measures, promote effectiveness and improve school performance and students achievement. Both are believed to affect school results, be it relationships or students' achievement.

Given its similarities, it may be argued that PI is a status of school climate, that is, PI development is a result of teacher's perceptions, views and opinions; parents' contribution; and children's needs. Such aspects may be under what Anderson (1982) calls milieu, social systems and ecology.

The following figure shows a summary of the similarities of school climate and PI and the people involved. It highlights the nature of both topics which include educational and sociological perspectives (as far as social relation in school is concerned) to reveal the main characteristics of both fields of study. It also acknowledges the people involved in both issues.

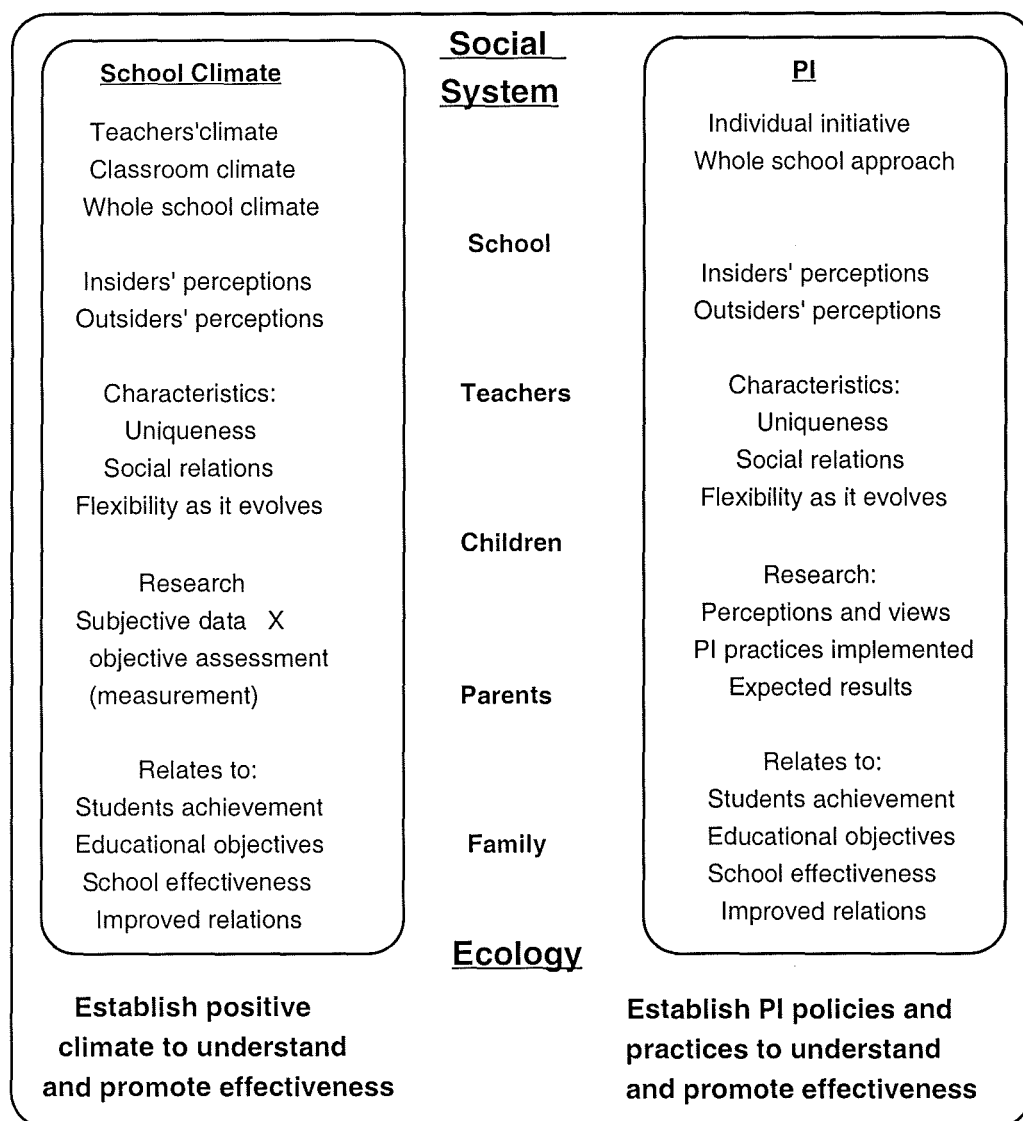


Fig. 16 - Comparative aspects of school climate and PI

Similarly, PI and school climate have a common characteristic which has to do with their nature: both may be viewed from a developmental perspective rather than within a pre-conceived framework. It changes as children move along school years, as parents progressively understand the role of school and teachers, as school climate unfolds in the participants minds, and as school develops towards adequate practices for and in the different circumstances. Both involve people's perceptions about their place of work, goals to be achieved and commitment to how aims are to be fulfilled. It is important to stress that PI may also reflect the social climate of the school through, for instance, how open schools may be to the community, or how a school welcomes parents from different backgrounds and demands. PI may also be included in Tagiuri's

taxonomy and categories (Figure 11, p.90) as it is also related to broader social systems of institutions.

According to Coleman (1996), school climate may be measured as perceived by parents and students as well. Coleman (1996) relates school climate and school improvement and explains that the procedure to improve schools involves what parents think about school performance and teachers' abilities as well as parents' perceptions of school climate. Coleman acknowledges the importance of the role parents play in school climate too. They are important to school developments too.

Why then is it important to relate PI and school climate? Interpreting PI developments as a result (or reflector as Wolfendale suggests) of school climate, may be very useful for various reasons: it may increase the understanding of people's views and demands, values, attitudes and behaviour pattern; it may also raise awareness of school social aspects that need attention; it may facilitate relationships between parents and teachers once participants understand each other's points of view and roles; and lastly, it may be important because PI is just as important as any other school feature (Mortimore, 1988) that influences achievement and that determines school climate (Rutter et al, 1979). All these aspects are now argued to have an impact on children's achievement and school performance.

The importance of PI has already been discussed in the first part of this chapter. The importance of considering the teachers' position on PI has also been shown through research that explains and relates teachers' (individual and group) initiative to active PI and parents' rating school as good, effective and open. Good and open schools are seen and considered as those which include listening to and inviting parents to participate and become more knowledgeable about school. Thus, PI involves developing further social skills and creating a positive climate for effective relationships to occur. As Rutter et al (1979) state, it is valuable to think of schools as social organisations where sets of values, attitudes and behaviour display characteristics of the school as a whole (or a group of schools that work under the same system and organisation) and push a school to find better ways to improve performance, achievement and relationships.

Brookover & Lezotte (1975) related staff attitudes, instructional programs, parental involvement and principal leadership with school achievement (improving/declining) and found that high-achieving schools are characterised by among others things, parent interest. Wynne's study (1980) showed that achievement is associated with parent involvement, teachers attitudes, and the instructional program. Both studies included elementary schools. These findings support this research argument that PI may be a product or a reflector of school climate.

Anderson (1982) reviews the research on school climate and concludes that:

"School climate has been studied with a multitude of variables, methodologies, theories, and models, resulting in a not easily defined body of research. The difficulty of defining school climate is reflected in the diversity of climate typologies that have evolved, despite their often common roots. The debate about school climate is tied to differences among researchers in theory base, variables to study (and their hypothesised interrelationships), unit of measurement choices, and the validity of subjective and qualitative data (based on participant or observer perception). Some common conclusions about school climate (considered as an independent, intervening, or dependent variable) do emerge in the literature."
(p.368)

2.10 - School climate, PI and this research - Final remarks

School climate literature is vast and complex. As Anderson (1982) suggests, school climate research has been developed from a number of perspectives (members' and outsiders' perceptions, different sets of variables, etc.) and therefore school climate researchers are not always searching for the same 'beast' although they might be studying interrelated aspects and concept of school climate. Strivens (1985) states that ' . . . we have a range of discrete research findings, where what has been seen as the central issue to one researcher fails to appear in the work of another, and the assumptions of one are taken to be the problems of another' (p.47). The diversity of ways to study and perceive climate reveals the complexity of such school aspect.

This study examines a very limited aspect of school climate since school climate was not studied as such. The main aim is to investigate the general PI climate for PI in a group of schools that share similar philosophies, practices and are supervised under the same rules and principles. School climate here is argued to be the teachers' preparedness and potential attitude to different types of PI that will emerge from examination of variables according to PI types and factor analysing 40 different PI items. The school climate concept and aspects are examined in order to complement the view about PI being a more effective school initiative if it is a product of joint efforts and whole-school approach. Positive school climate and adequate PI policies and practices have similar characteristics as far as their changeable and evolving aspects are concerned; the fact that school should pursue common principles to guide for work unity and coherence; and as important elements to be considered in order to improve school performance, children achievement and build better relationships between school and parents.

School climate/ethos research has suggested that school must become the focus for change rather than the children. Stratford (1991) and Reynolds (1987) believe that schools have to be changed by working with the existing personnel and existing resources, since it is the way these are deployed and organised which makes the crucial difference. Similarly, this research argues that PI may be implemented in Brazilian schools starting from the use of existing school resources such as the understanding of the group views about PI. Furthermore, school climate may be looked at as a building-up process towards improved school and family relationship which might emerge from the identification of problems or challenging situations. Similarly, PI developments spring from needs, demands, and problems-solving processes but above all it is accomplished by co-operative attitude and commitment of school team to parents. PI developments are born out of the participants' beliefs, philosophies, experiences, atmosphere, characteristics and attitudes (as suggested by the overlapping spheres ideas and climate research and theory). The whole-school approach encourages staff unity, the development of clear aims and rules and may improve the image and effectiveness of a school (Stratford, 1990).

The ideas originating from the whole-school approach, which emphasises the coming together to identify problems, solve them and assess the

outcomes, may be also applied to PI. Positive climate is therefore created when efforts are drawn together and aimed at the same direction. Effective PI seems to follow the same path: a group of PI practices may only work if teachers are aware of their abilities and level of responsiveness and of parents' and children's needs. To act coherently in order to obtain positive results requires teamwork and an understanding of common aims as PI literature has already pointed out. Positive and encouraging PI results are expected to reach out for teachers, parents and children just in the same way as the literature on school climate has indicated that the process of creating positive climate in school affects effective teaching and learning.

The common points between school climate (or teachers' climate) and PI seems to be that so far, research in both fields has indicated that the whole-school approach is significantly important to improve outcomes; has noticed that both are susceptible to changes as both accounts for attitudes and opinions from staff, parents, and children (students); its uniqueness in every establishment or type of organisation; both have been argued to influence students outcome as well as teachers' performance; and both are usually set by the staff and have 'hidden' elements (presumed intentions and actual outcomes).

School ethos/climate is about creating an atmosphere where everybody is encouraged to work more effectively and produce positive results at any level, be it in school administration, teachers' performance, students outcomes, parents' satisfaction, school relations or fulfilling schools goals.

Hewton (1991) concluded in the report about assessment of the value of integrating staff development within the whole school ethos, that "*there are some schools in which staff development is accepted as essential but normal in everyday life of school. Those employed by such schools suggested that if the main aim of the organisation is to provide the best possible education for the pupils in its care, then a key supporting aim, necessary to achieve this, is the planned development of individuals, groups and systems within the school. In such a climate, staff development is normal and unexceptional. Time will be found for it to take place as part of daily working life*"(p.113). Hewton warns, though, that a sense of joint venture, encouragement and satisfaction should be linked with the process of fulfilling the group aim. Hewton (1991)

illustrates it with a teacher's comment: *'You have to work extremely hard but you feel that you know what is expected of you and that there isn't a crisis just around the corner. The school has a vision and knows where it is going. That is a good feeling'* (p.113).

Similarly, parental involvement may take the same path as cited by Hewton in his study. If the sense of their 'climate' is well understood by teachers, then aims and goals are respected, desired and effectively implemented. Knowing their limits and setting PI goals as a whole-school initiative will give teachers confidence and encouragement to adopt PI techniques that lead to achieve better results for all parties concerned as well as give the whole school community clear messages and aims to be pursued.

Having said all that, it is important to point out that PI should be developed according to the needs of all those involved in the process of schooling with special attention to internal possibilities (climate). PI climate should be created aiming at improving relations between participants that in turn will influence other aspects of schooling. The point is that PI may be interpreted as a school climate too, with as enough flexibility for changes as school climate might require so as to accommodate internal and external influences and circumstances, intrinsic and extrinsic aims (Dancy, 1980). Epstein and Dauber (1991) also acknowledge the importance of a school climate for PI.

School climate research has particularly discussed case studies that include views from head-teachers, teachers, parents and students. As already mentioned, this study has focused on teachers' views and parents' opinions about PI from 11 Brazilian state schools, therefore it will reveal the general PI climate in that context and not of any particular school. The uniqueness of the PI pattern will be revealed in terms of the group of teachers of inner-city state schools and the levels of education that were involved in this research (see more of this discussion in the next chapter about Methodology).

Chapter 3

Methodology:

Studying PI in Brazilian Schools

3.1 - Introduction

Parental involvement has been largely discussed and studied for the last two decades by Bastiani 1983, 1989, 1993, 1994; Hannon - 1986, 1993; Smith - 1981; Jowett - 1991, 1992, Epstein - 1986, Epstein and Dauber 1991, Gettinger and Guetschow - 1998 and others in many countries in Europe and elsewhere. An extensive and growing literature documents the importance of school and family connections for increasing student success in school and for strengthening school programs and relations. A number of different ways to involve parents with schools and school education have been depicted from PI studies and used by many schools in order to tackle children's education more fully and effectively and develop more fruitful relationships with parents and families. Research has attempted to show the benefits PI can generate by extending it not only to the children's education but also to other aspects of schools, such as for teachers, families, communities or even to society as a whole through improved and adequate practices. The vast majority of the education literature emphasises the importance of home-school relations nowadays.

The present study of PI in Brazilian state schools takes steps similar to those taken in other countries. That is, it tries to learn about the patterns of parental involvement practices in Brazilian schools, but it goes a step further into the investigation and knowledge of PI as whole and specially in the Brazilian context. An existing parental involvement typology that has already been validated (Epstein, 1991), is used to contrast the reality of schools in a different context - a sample of 11 Brazilian state pre-schools and primary schools. The methods used, which were questionnaires and interviews, were designed to investigate the state pre-school and primary teachers' climate in terms of parental involvement and parents' respectively. The study of the Brazilian schools climate from the teachers' perceptions about PI will help to understand PI from the perspective of those who are expected to develop PI policies. The discussion is based on

the assumption that it is schools who should start to develop meaningful PI practices from the identification of their own unique potential. The PI climate in Brazilian schools may determine the future course of PI because it is also believed that if the schools are aware of their own potential for PI, better results can be reached. Bastiani (1993) states that "home-school relations should be viewed, not just in terms of the dealings between individual teachers and parents, but as a major task to be tackled by the school as a whole".

The PI pattern found in Brazilian state pre- and primary schools is believed to identify teachers' parental involvement beliefs, views and potential - called in this research as teachers' readiness and preparedness for PI development in Brazilian school and policy-making at higher levels. From the findings, policy-makers may be able to design and recommend PI programs that will address their problems more effectively, and head-teachers may become more aware of teachers' abilities before they plan actions and make decisions.

This chapter aims to describe the research steps taken to respond the research questions. It begins with a presentation of the background information about Belo Horizonte, the city where the data collection took place and a brief explanation of the Brazilian education system. The research objectives, questions and aims, are then outlined. A description of the sampling process, the sample, and instruments follows. The piloting procedure is also stated. The development of data analyses, both qualitative and quantitative, and the decisions made are then provided. A final section discusses the methodological limitations of the study.

3.2 -The context of the research

3.2.1 - The city of Belo Horizonte

The study took place in Belo Horizonte which is the third largest and most developed city in Brazil. Belo Horizonte is the Capital of Minas Gerais, which is situated in the south-eastern region of the country. The population of the city and state is approximately 2,5 million and 18 million respectively. Belo Horizonte is situated in an industrial area of the state where it is the home of chemical, metallurgical, iron or, automobile, cosmetic, textile, and food-product related industries as well

as energy related industries. Tourism has also been growing quickly attracting people from all over the country and overseas to its beautiful and unique countryside, historical sites and farms within easy access from Belo Horizonte and other capitals in the region. An international airport has recently been built to cope with the increasing public and tourist demands. Belo Horizonte is developing very rapidly and many new opportunities have been created in order to cope with internal as well as external demands.

3.2.2 - Education

As far as pre-school, primary, middle and secondary schools are concerned, the city has a good variety of options both in the private and public sectors. Although it is claimed that the state does not yet provide school for all children and that the level of illiteracy is still relatively high, there are a number of options in the private sector. There are schools with good reputation in both sectors in Belo Horizonte which are recognised by the communities they serve as hard-working schools that are moving towards improved teaching, and children learning and achievement. The social problem of the so called street- kids who are said to have no place in society let alone in the educational system provided by the Government is very complex, and to discuss it here would be beyond of the scope of this research. Higher education is also available and there is a wide range of options, both in the private and state sectors.

The state of Minas Gerais has been developing steady and impressively in recent decades, attracting international and national business of all kinds to its capital as well as to other regions of the state. This has generated an ever- increasing demand for expansion, improvement and development as far as education and employment are concerned. The capital offers a wide range of choices of professional and technical courses at secondary levels and covers most areas and fields of study at under-graduation level as well as a at post-graduation level.

3.2.3 - Social life in the city of Belo Horizonte

The city offers a wide range of social activities. There is a number of sports clubs offering all kinds of sports activities both indoors and outdoors in all city zones. There are parks with many different activities such

playgrounds, football pitches and others sports facilities, cycling and skating facilities, local arts and crafts fairs, concerts, art and folklore exhibitions etc.; public squares with miniature zoo; a large zoo with leisure and educational facilities; a number of theatres, cinemas, shopping centres, and lots of folklore festivals throughout the year, like carnival, winter festivals with ornamental street decorations and a many other events happening in each part of the city. Many of these activities are funded and organised by the municipal leisure and sports secretaries, and others are private initiatives.

3.2.4 - Religion

Although other Christian churches have been recently introduced and have spread to all regions of the state, the predominant and official religion in the state of Minas Gerais is Roman Catholicism. There are now a large number of different Christian churches that have been established in the capital and these are influencing the people greatly. However, the Catholic Church is still the most powerful and dominant influence over the people's life style. The state of Minas Gerais is very strongly dominated by the religious power and control of the Catholic Church. The people are extremely devoted to the Church despite their varied social and cultural backgrounds. The people, even those who are not church-goers, have a great respect for the religious institutions and are fervent followers of spiritual life and path dictated by the Roman Catholicism Church.

The vast majority of schools, in both private and state sectors, are strongly led by the influence and principles of Roman Catholic Church.

3.2.5 - Background information on the Brazilian Educational System run by the States and Municipalities

3.2.5.1 - From Pre-School to University Degrees

According to the new educational legislation (LDB, 1998), the educational system is now divided as follows:

Educação Infantil (0 to 6 years) - Childhood Education

Ensino Fundamental (7 to 14 years) - Fundamental School

Ensino Médio (15 to 18 years) - Middle School

Educação Superior - (Higher Education)

Childhood Education is not compulsory and unlike compulsory education (7 to 15 years) is not widely available to the general public. Although demand is extremely high, provision is generally very poor throughout the country and the number of vacancies is low especially in poorer areas. Childhood Education is divided by two different concepts: pre-schools and crèches (we may find other variations of childhood education, but generally speaking, it is now offered in this two main streams) Pre-schools are supposed to cater for children from 4 to 6 years of age (children are placed in three different classes - Year 1, Year 2, and Year 3 - corresponding to ages 4, 5 and 6) and teachers should have completed a teachers training course at least at Middle School level. Pre-schools are more education-oriented whereas crèches are more care-oriented. Crèches cater for children from 3 months to 5 years of age and may not need to have trained or qualified staff. Crèches seem to be more popular among the lower social classes because they are more widely available than pre-schools, especially in bigger centres, where private (by companies) and voluntary initiatives (specially by churches) are found. As the current legislation states, crèches may have children up to 5 years of age only, unless they have trained teachers in order to become more education-oriented. Under the new legislation, Childhood Education should cater for children from 0 to 6 years of age and workers are encouraged to be trained in order to improve quality. For the first time, the Brazilian Government has included guidelines for pre-school education in the new educational legislation, with suggestions and recommendations and a National Curriculum Parameters from where crèches and pre-schools can guide and monitor their plans of work.

Primary and Middle education are grouped together in eight years of study. It is now referred to as "Fundamental Education" (Educação Fundamental) and is compulsory to all children. It starts at the age of 7 and continues up to the age of 14/15. In practice it is divided in two separate blocks:

- From 7 to 10 years old - from 1st to 4th grade respectively. This is called "primary school" (first half of Fundamental education); there is one class-teacher responsible for all the main subjects except PE, Arts,

Music when these are available. In some schools, however, a system of 4th grade teachers for each main subject or every two subjects (like Portuguese and Math's, and Sciences and History and Geography) have been recently introduced.

- From 11 to 14/15 years old - from 5th to 8th grade respectively; it is known as "middle school" (the second half of fundamental education) when there is a teacher for each subject in the curriculum.

According to the Ministry of Education (1994), 88,4% of Brazilian children at Fundamental Education age who were attending schools regularly, attended state schools leaving only 11,6% for the private sector. (2,5% of the children were in urban areas).

From 15 to 18 years old - this used to be called "Secondary Education" and it is now referred to as "Middle School" by the new rules (1998, *Leis de Diretrizes de Base*) and includes general secondary education (all subjects of the curriculum for all pupils) and technical secondary education (special curriculum for different areas of study plus core subjects when appropriate). The secondary education has been heavily oriented to students' preparation for university entrance exams.

Higher education includes the federal and state universities and other institutions of higher education. It offers Bachelors, Degrees, licentiate courses, and post-graduation courses like specialisation (equivalent to Diploma courses in the UK), Masters Degree and Ph.D. courses and a variety of other short courses that have been very recently introduced as sequential courses and other programs (Minister da Educação, 1999).

Adult Education comprises literacy programs and short courses for young people and adults equivalent to elementary, middle and secondary education. A number of such programs are under way especially in more deprived areas of the country.

The schools in the private sector follow the same pattern as the state educational system except that there are no Adult Education programs. Instead, other alternatives like music, language and arts

courses may be found in the private sector. as the federal and state universities offer a very limited number of vacancies (considering the population of the country), the private sector has grown very fast during the last decades, in order to cope with high demand. The Government has responded to that initiative introducing on-going assessment process in every higher education establishment, to monitor teaching and learning levels, education quality, staff qualifications and production, and general resources (that is not only for the private sector).

As secondary education has been very much a preparation for university entrance exams, the private sector has developed independent courses for last year secondary students. The students attend an extra course alongside their school education so as to cover as much as possible in all subjects as well as a study revision time. This has become extremely popular and student demand dramatically outnumbers university vacancies causing competition to become really tough.

3.2.5.2 - Pre-school and Primary Teachers' Training courses

Teachers' training courses used to be at secondary level (15 to 18 years) as a technical course option. It usually took 3 years of study and it included a short period of teaching practice in a pre- and/or primary school. The course included the basic skills subjects in pre-school and primary teacher's training. It did not, however, offer the subjects in the sciences areas like chemistry, physics, biology and geometry and trigonometry. Subject teachers (arts, music, PE, etc.) have to take further education at under-graduate level according to their choice of subject. The students qualify as pre-school and primary teachers only. With the new educational legislation (LDB; 1998), all Fundamental School teachers must have an under-graduation course, except those who teach at the primary level.

There is also the under-graduate course named "Pedagogy" which gives the candidate wider career choices. It is a 3 year course and candidates graduate with a Bachelor of Arts Degree and a licentiate. In their final year of study, students can choose to specialise in the area that best suits their interests. They can choose from pre-school

education, adult education, school management for primary, middle and secondary levels, teaching supervision, and educational orientation in addition to becoming a primary, middle or secondary teacher. However the structure of the Pedagogy course may vary from institution to institution in terms of specialisation options available in the last two semesters of the course.

In order to be able to teach subjects other than Portuguese at middle and secondary levels (5th to 8th grade and Middle School according to new LDB), e.g. PE, arts and music, geography, history candidates have to do an under-graduate course in their area of interest.

According to the Ministry of Education, in 1994, 79,7% of the positions for the Fundamental Education were held by qualified teachers, being 39,7% trained at university level, and 40% trained as teachers at secondary level; 7,9% had not completed higher education, 1,7% had not completed training at Middle School level, 2,6% completed Middle School (but no teachers training at that level), 3,3% had completed Fundamental Education (up to 14 years of age), and 5,1% had not completed Fundamental Education. The legislation allows teachers to hold more than one teaching position and data considered that aspect too.

Almost 50% of this research sample were teachers trained at Middle School level and the other half of the teachers had completed higher education courses including post-graduation courses (more details are provided further in this chapter).

3.3 - Aims of the study

The aim of the present study is to investigate Brazilian state pre- and primary school teachers' readiness/preparedness and potential for parent involvement practices and policies. In order to understand the schools' readiness for certain PI practices (and/or types), teachers' perceptions about parental involvement policies and practices were thought to be examined.

The study examines teachers' views and opinions about PI practices. It is believed that a PI pattern as the teachers see it, may reflect the school climate as far as parental involvement is concerned. The

assumption is that the schools, however amateur and inexperienced they may be in terms of the development of parental involvement policies and practices, do have a particular way of viewing and exercising the relationship between teachers and parents. It is expected that the teachers' views and beliefs about parental involvement will reveal their current parental involvement climate and therefore the extent of their readiness for PI types.

A number of parental involvement practices grouped in the typology were used to examine the same concepts in a different context. As this typology (Epstein, 1989) includes a considerable number of different parental involvement practices that schools have used to improve home-schools relations, it is thought that it will also help to identify the teachers' PI climate. That typology and others models have guided the construction of the instruments and played a very important role in the analysis of the data.

It is expected that teachers may not be familiar with all types and practices of parental involvement as identified in industrialised countries. However, a questionnaire that includes a wide variety of PI practices as covered by the typologies and models examined, will help to examine the existing Brazilian schools' tendencies to PI and to understand parents' views and teachers' readiness and potential for PI. The operational mechanics of the overlapping spheres (Epstein, 1987), that is, the ways used to increase/decrease the overlapping space in the PI overlapping spheres, is believed to be particularly different in different contexts such as in developing countries like Brazil.

3.3.1 - The research objectives

The research objectives were outlined as follow:

- To examine pre- and primary school teachers' readiness/preparedness for PI through the examination of their views, beliefs and position about different PI types and practices;
- To identify the pattern(s) of PI practices that reflects that group of Brazilian teachers' PI climate;

- To contrast an existing PI typology (Epstein, 1989, p. 45) with a PI pattern that emerges from teachers' data;
- To examine a small group of parents' views and position about PI to illuminate the teachers' data and findings;
- To examine teachers' and parents' views in contrast with a PI model (Hornby, 1990);
- And to contribute to the existing knowledge about PI in a developing country context.

There is no easy formula for implementation of parental involvement policies and practices as schools are usually different in many aspects presenting very unique characteristics in terms of their needs and demands. As mentioned in Chapter 2, every school has its PI climate that may differ from other schools in similar contexts. However, not only is it necessary to examine the level of demand for parental involvement from the parents' perspective (PI types and practices as revealed in the parents' study in this research) but most importantly, to study the teachers' potential and readiness for applying what may be appropriate. Having said that, one may argue that it is then not relevant to examine the Brazilian teachers' general PI climate of 11 schools that vary in size, number of children and teachers, grades offered and as stated earlier in this research, from very recently, schools may take their own decisions as long as they implement measures within the recommended by the National Curriculum Parameters and Guidelines. Despite the fact that those differences may play a very important roles in schools (PI) decisions, those eleven schools do share important similarities. All the schools included in this research are under the State Secretary of Education of Minas Gerais policies, norms, rules and guidelines. Although recent guidelines implies some individual decisions, the schools, up to data collection period, were still working under their usual schedules that include frequent general meetings for all school head-teachers and principals in order to understand and grasp the new regulations and rules. Thus, being driven by the state rules, head-teachers work closely together, having regular meetings at the Secretary of Education to discuss problems, make decisions and plan their actions as

well as up date their knowledge and understand the new educational legislation before setting their targets that includes common aspects and particularly unique actions. Apart from that, the structure of the schools, that is, how they operate, its organisational structure and the resources available, is very similar too. Considering the population the 11 schools involved serve, schools receive children from similar social classes (which included lower to lower middle classes). School were then learning from each other strategies to deal with new regulations, implementation of new school pedagogical project, as well as strategies to deal with other issues that affect school teaching and learning.

Further to that, it is now acknowledged that PI should be first understood and recognised as a needed policy that will help to improve performance and achievement. PI is no longer seen as merely a group of practices that may be implemented at random to contact parents from time to time. Under the view that those schools maintain close relations in order to be aware of each other's common aspects and differences and come to the right decisions, it is more relevant to examine the general PI climate of teachers that work under the same conditions and rules. Examining a particular case of PI would reveal individual and specific aspects and dynamics of a single school, that it would not be relevant to other schools, whereas examining a group of teachers in eleven state schools may convey important information to start to establish PI guidelines. In addition to that, as PI is only superficially developed in Brazilian schools and that there is virtually no study about it in Brazil, a study like this will certainly add to the Brazilian knowledge about PI types and practices and cause impact in primary schools in general.

3.3.2 - The research questions

Research questions help to further clarify the directions which the research takes. Its role is to guide the researcher throughout the work so research objectives are pursued in order to answer the research questions. The use of research questions is necessary to provide a clear framework from which the research should proceed to the next stages as well as for clarifying the main objectives and aims of the study. The research questions are always the main guidance of a survey like the present study. The research questions in a survey help to focus on the project's objectives and interest.

The research questions

Before the research questions are outlined, it is necessary to recapitulate the concept of PI climate. PI climate is used in this research to suggest that the PI pattern revealed by factor analysing the teachers' data is their general climate for it. PI climate is also used in relation to teachers' PI level of readiness/preparedness for PI (as discussed in chapter 2).

- What is the Brazilian state pre- and primary school teachers' general position to PI?
- What kind of combination of PI types and practices emerges from Brazilian state pre- and primary school teachers' views? Which PI pattern seems to be perceived as feasible in that Brazilian context?
- How do Brazilian parents view PI? Are parents' PI pattern of views similar to teachers'?
- Are teachers' PI pattern similar to their views about PI current school practices?

As in the questionnaire, teachers' profile will be considered after data are examined by factor analysis. The research objectives do not aim to correlate the PI pattern with teachers' profile as this research, due to methodological decisions, cannot measure causal processes, but instead it can point out if there is any significant difference between the group of teachers in their PI views. Children's overall performance and homework completion (in percentage) as revealed by the teachers will also illustrate teachers' findings so as to portray the pupils' profile in that context.

Data were carefully explored and examined, including data about every school individually as well as all schools together as previously stated. Although teachers data analysis is planned to be carried out considering the whole group of participating teachers, results were initially shown (as followed) by group of teachers in individual schools in order to clarify further about each school (e.g. page 128 and on).

3.4 - Research instruments

3.4.1 - Questionnaire Design

Having decided the research questions and the aims of the studies, it was then decided that a questionnaire containing questions about PI types and practices would be needed for both studies. A closed-ended format with structured questions was used in the questionnaire designed for both the teachers and the parents. As a survey study requires a large number of respondents, it would be extremely difficult to design an open-ended questionnaire to interview many teachers in the short period of time that was available for data collection. In addition, given the nature of the research, a closed-ended type of questionnaire which enables collection of information from a large number of people cheaply in terms of time and cost proved to be more appropriate. Thus, a questionnaire that could be self-administered while at the same time providing the means through which to gather relevant data to fully address the research questions, was the right research instrument.

The parents' study could be designed differently since only a small group of parents was thought to be interviewed. Thus, the parents' questionnaire includes the same closed-ended question containing 40 statements about PI practices and a second part contained open-ended questions.

3.4.1.1 - Type of measurement used

An ordinal interval seven-point scale was used in the questionnaire to determine the level of importance teachers and parents place in different parental involvement practices. The seven-point scale was adopted so that interviewees could have more scope to express their views. Thus, the use of a broader scale (1 to 7) gave respondents more realistic options to position themselves within the topic investigated. The scale used in the teachers' and parents' questionnaires was as follows:

Not important at all				Very important			
1	2	3	4	5	6	7	

The major pitfall of this type of measurement is that it does not exactly indicate the extent to which respondents find the variables important. However, as the objective of the present study goes beyond merely the level of importance teachers place in each of the statements, this measurement was applied.

Since mental constructs within the social sciences cannot be observed directly, most measures tend to be ordinal. Attitudes, intentions, opinions, views etc. are all constructs which are thought to vary in degree between individuals but tend only to allow indirect ordinal measurements (Fife-Schaw - 1995). In addition, research that uses survey methods to find out what a population thinks about a certain issue cannot rely on the other types of measurements or even on other methods (like unstructured questionnaires, or interviews) to gather information unless the researcher has other means of collecting the data other than just himself. Thus this type of measurement seems to be justifiable.

3.4.2 - The teachers' questionnaire

A questionnaire was designed for final year pre-school (Year 3) and primary school teachers. The questionnaire consisted of structured questions with 40 statements about different parental involvement practices and 14 items about their opinions and views on current tendencies in their schools. The teachers' background information was also collected to be later related to the teachers' views.

The questionnaire was designed after a review of a number of instruments employed in similar studies in the United Kingdom and elsewhere. Some questionnaires (Power, 1985; Epstein 1993), some materials (Bastiani, 1983), research (Jowett, 1991; Hughes, 1994; Epstein, 1986, 1991) and articles (Epstein, 1987; Lareau, 1987) were carefully examined and relevant information taken into consideration before and

while the questionnaire was being developed. The objectives of the study were constantly referred to while the questions were being constructed.

The design of the questionnaire was largely inspired by the "Teacher Questionnaire" designed by Epstein and Salinas (1993) which was used as one of the instruments for a survey of Teachers and Parents in Elementary and Middle Grades in the USA. Joyce Epstein and Salinas's questionnaire was originally designed to explore teachers' professional judgements about parental involvement, the practices teachers were currently using at the time of the research and most importantly the partnership programs that teachers would like to see developed or improved in their schools as well as in their own classrooms.

This research has intentionally used some of the statements taken from Epstein's teachers' questionnaire (1993) as the questionnaire presents a wide range of practices that were previously allocated under the six types of parental involvement (it is important to note that Epstein's typology has been validated). Although there are a number of different ways in which schools or teachers can get parents involved with school and children's education, it was decided that the PI practices that have been summarised in Epstein's questionnaire would be appropriated. The items in Epstein and Salinas's questionnaire cover very comprehensively a great number of PI practices (see Appendix 3) which was put in such a way that the form that every practice may take, may still vary according to the context and demands. The teachers and parents were then given a selection of 40 different statements that reflected the five PI types Joyce Epstein has described. Nevertheless, the other materials that were examined prior to and while the questionnaire was being designed, have also greatly influenced the construction of the statements and questions.

It was not intended here to study Epstein's six parental involvement types any further nor its effects on all parts concerned. As it has been mentioned earlier, this research is actually using Epstein's typology to help to identify patterns of parental involvement practices in schools in a developing country educational context.

From early talks with some head teachers, it was noticed that the schools sampled seemed to be at an embryonic stage of organised parental involvement and in the very early stages of the process of PI practices

implementation (it is not scientifically known whether schools in the Brazilian context have been practising parent involvement in an organised and systematic way but it has been informally acknowledged however among the educational institutions, within the schools and other institutions, that teachers and other educational professionals and teams have been struggling to maintain positive contact with parents (and develop effective partnership.). There is very little written evidence to suggest that Brazilian schools have worked towards implementation of parent involvement policies and practices as described by researchers in other countries. Hence the questionnaire was designed to collect information about the PI pattern(s) so as to enable us to understand what kind of PI practices could actually be implemented in the near future in Brazilian pre- and primary state schools.

3.4.3 - The parents' Interview

Twenty-one parents of 4th grade children were interviewed using a semi-structured questionnaire to examine their views about parental involvement, their concerns as far as their children's overall school achievement and performance is concerned, about school in general, and about their worries concerning their children's school education. The interview includes a section of closed-ended questions and a section with open-ended questions where parents are asked to express their views, opinions, beliefs and wishes about different types and practices of parental involvement.

The two sections of the interview consisted of a structured questionnaire with 40 statements where parents were asked to answer the questions orally (in some cases the parents read the first part with me) according to instructions given. Then an open-ended section followed consisting of 7 questions where a more flexible approach was used. The parents were told they could add comments whenever and wherever they felt necessary and refer back to previous questions and answers to complement and illustrate their answers and opinions.

The parents study is quite a modest study because of its small sample. It does not intend to provide a comprehensive and generalised description of the views of parents that a larger group could have provided. The semi-structured interview was thought to provide a meaningful

description of what a small group of parents consider important for their children's school education and home-school relations. Yet, it was thought that it would be beneficial, appropriate and to say the least, fair, to include a more substantial account of this small group of parents' ideas on the topic under investigation.

The respondents reported to have felt comfortable with the whole interview procedure and with the interview itself. Parents reported to have felt relaxed to express their opinions about the topic and did not express any difficulties that might hindered the conversation. They showed great interest in the topic and were curious to know more about it.

The main advantage in this case was that I was able to carry out all the interviews myself in a very systematic and consistent way. This procedure ensured that all the parents had an equal and a fair chance to speak about their own experiences, views and beliefs and that no biased approaches were taken in either the data collection or data analysis stages.

To include a parents' study was important because it was thought crucial to attempt to include some kind of triangulation, with teachers' data however small the parents contribution may seem. The parents' study provides a very meaningful account of their views and it will certainly add more meaning to the teachers' study.

3.4.4 - Triangulation

Triangulation may be defined as the use of two or more methods of data collection in the study of one aspect of a phenomenon (Cohen and Manion, 1994). Cohen and Manion state that "triangular techniques in the social sciences attempt to map out, or explain more fully, the richness and complexity of human behaviour by studying it from more than one standpoint and, in doing so, by making use of both quantitative and qualitative data. Triangulation, according to Burgess (1984), can provide details of how various interpretations of "what happens" are assembled from different methods and from different sources. According to Cohen and Manion (1994, p. 236) there are 6 types of triangulation used in research. Although other educational studies have used four different

types of triangulation (Cohen and Manion, 1994) here I will concentrate only on the type that this research is concerned with. The 'methodological triangulation' uses either (a) the same method on different occasions, or (b) different methods on the same object of study.

In order to discuss a phenomenon more broadly, researchers use different methods to collect data and information from the same group of people or sources; or use the same methods and instruments to gather information from different sources. These mechanisms are thought to provide useful and comparable information both in longitudinal and cross-sectional studies. Interviewing people in more than one occasion may also help to produce meaningful insights and consequently enrich data triangulation. In addition, the larger the sample the more meaningful and generalised the results become.

The first part of the parents' questionnaire is the same as for teachers' and the second part gathers qualitative information using a more flexible approach so as to provide some further information about parents' views about PI. Not only does this research use different strategies for data collection - semi-structured interview and self-administered closed-ended questionnaire that gather qualitative and quantitative data respectively, it also investigates PI from different sources and perspectives - parents and teachers. Although the small parents' sample size does not allow a balanced and full triangulation (as described by the literature) with teachers' findings, the parents' study helps to illuminate and illustrate the teachers' data from another perspective in order to understand the environment in which Brazilian teachers and parents live as far as PI is concerned. However, triangulation understanding from the literature helped to interpret the study's findings when considering parents' and teachers' views.

3.4.5 - The head-teachers interview

A simple structured questionnaire was also used to interview the head-teachers to collect information about the schools' facilities and profiles (see diagrams on schools characteristics further ahead in this chapter). No questions about PI were included in the head-teachers' questionnaire because the study intended to examine the teachers' position to PI since research has indicated that PI has mainly been

school's initiative but largely delegated as teachers' responsibility for its practices.

3.4.6 - Piloting the teachers' questionnaire

The teachers' questionnaire was tested after it had been carefully designed. Piloting is always essential and an effort should be made to do it correctly. In this particular case it would be no different, however difficult it might be, to test a Portuguese questionnaire in Britain. A small group of five Brazilian infant and primary teachers resident in Britain filled in the questionnaire. They were asked to make comments, to put questions forward, to be honest about what they didn't understand or were unsure about and above all, read it carefully with a sharp critical eye to spot misleading and unclear statements. As translations were involved because the first version was designed in English, the translation was also checked by the respondents who were given both versions. Feedback was intense and very useful discussions were carried out individually with each of the respondents.

An attempt to test the questionnaire with final year students of Portuguese teachers' training course at the University of Aveiro was also made. Questionnaires were sent to Portugal and distributed to final year students of a Primary teachers training course at that university. Unfortunately data collection could not be postponed and questionnaires were returned too late, with insufficient time to be analysed before data collection took place. However, this study will be analysed later as a separate study to further understand the parent/teacher relationship from the students perspective and yet in a different context.

3.4.7 - Piloting the parents' questionnaire

As the first part of the interview was taken from the teachers' questionnaire in its exact form, there seems to be no reason for it to be tested again. Nevertheless one could argue that parents' understanding may, due to cultural, educational and social differences, be a lot different from teachers' and therefore a pilot would be required. Given that such a questionnaire was to be used with parents as well, the statements and headings were created according to the rules for questionnaire planning and design so as to be as unambiguous and straightforward as possible

with simple instructions as well as simple wording so anyone would be able to understand it and, most importantly, be able to answer the questions as expected. The pilot work was carried out to make sure that the questionnaire could be easily understood, easily self-administered (in the case of teachers) and that it would produce the relevant information.

Thus, the instrument was tested bearing in mind that parents from all backgrounds would be interviewed as well. In addition to this, teachers' questionnaires were applied prior to parents' interviews. This was a further guarantee that there would be no further problems of any kind. Moreover, by the time interviews were to be carried out, I was very familiar with the instrument which made me feel comfortable enough with the interview design, content and procedure.

In addition to all that has been stated above, a less structured approach to the interview was used - parents were allowed to make comments, put questions forward and take their time to think and elaborate before and while answering the first part of the interview, which was the more structured part. The second part of the interview flowed as a continuation of the initial conversation.

During some of the interviews, the parents reported back what they had understood of the statement before actually answering the questions. They liked, for instance, to use examples of real situations they had experienced in the past. The "pre-answer stage" was clearly not a problem of understanding because they could all explain the statements impressively well. Later and after a few interviews were carried out, a few parents expressed that they had never looked at the topic from that perspective, or thought about it in that way before. Some parents as well as some teachers actually said that they had never thought about the various ways that parental involvement could be developed. This issue is further discussed in the parents' findings chapter. However, some slight changes in the wording were occasionally made in order to ensure that parents' understanding was within expectations. This is not an uncommon procedure in qualitative studies.

Qualitative research is basically an exploratory process. According to Dey (1993) qualitative methods should be flexible enough to allow changes to be made while data collection is taking place. Nevertheless one must

always take precautions against pursuing mistaken ways to produce a description of the settings under investigation.

According to Miles and Huberman (1984), not only can qualitative research samples change during data collection but one of the advantages of using qualitative methods is that you can always improve or adjust the research instruments while data collection is actually taking place and if the researcher judges it necessary.

Miles and Huberman (1984) argue that qualitative research is an investigative process and therefore flexible instruments can be created. They also believe that there are reasons for no prior instrumentation as well as for prior instrumentation in qualitative research. Among the reasons for the latter, they state that in order to ensure that data is comparable across studies one has to use common instruments in order to be able to build theory, to improve predictions and to make recommendations about practices. I set out for the interviews with the already-designed interview partly tested but with an open mind for the untested part. Research questions and framework were freshly kept in mind in case there should be any change in the open-ended questions. This was not the case here however. The interviews proved to have worked well and no major change was necessary apart from minor wording changes.

Considering that these data were to be used alongside the teachers' data, it is worth remembering at this point that teachers were provided with a space in their questionnaires to write comments about the statements, as well as given the opportunity to discuss them. In fact, teachers were only confined to the limitations that the methodologies imposed on them - teachers' questionnaires and parents' interviews. Some had more room for explanations, discussions and argument than others. And those limitations of the methodology used due to time constraint, may well stand beyond the researcher's attempts to minimise the pitfalls of mixing qualitative and quantitative methods, particularly when using similar instruments with different groups of people.

3.5- The sampling process

For the present study, a group of 11 Brazilian inner-city pre- and primary state schools in Belo Horizonte were selected at random (among the choice available in Belo Horizonte). The name of the inner-city schools was provided by the State Secretary of Education as well as by some of the head-teachers contacted previously. Permission was given by the authorities to approach schools and to ask for help and collaboration. Having the list in hand, contacts were made by telephone followed by visits. Given that schools were extremely receptive, the number of schools selected was mainly determined by the time and resources available for data-collection (how many schools I could possibly include) and by the representation rules of the survey (number of teachers).

Firstly, why was Belo Horizonte chosen? Belo Horizonte was chosen because it is my home city so I knew the city well and some of the inner-city schools prior to my research. Both aspects facilitated enormously given the contact with schools would take less time than in an unknown place. I contacted some of the schools at the very early stages of my research to introduce my work and ask for their help, collaboration and permission for data collection. As head-teachers work very closely together, some head-teachers were able to introduce me to other schools in the inner-city area and contact with them was established immediately after this initial stage. In addition, as I grew up in Belo Horizonte and went to an inner-city pre- and primary state schools myself, I was already quite familiar with the system. Being familiar with the system and knowing some of the schools previously was an advantage for this research since access to subjects represented no problem at all.

Secondly, why inner-city state schools? The Brazilian inner-city state schools generally cater for all kinds of social and cultural backgrounds. Schools in the inner-city usually serve a range of children from the very poor to lower middle class children and more rarely to upper-middle class and upper class children. As in many other cities in Brazil, there are areas in Belo Horizonte where upper and middle classes live geographically side by side. There are working class people or even the poorest sections of the population living literally next door to wealthier neighbourhoods. This social mixture in the boroughs provides schools with a diversity of

backgrounds because children usually register in their neighbourhood state schools, although in many cases it is done according to the parents' work address. In the latter, the working-class people who are employed by the upper and middle classes families and by inner-city business, bring their children with them to attend the inner-city schools. In some other cases, some parents, who work as maids, live in families' houses with their children as they are employed in a live-in basis and so their children may also attend the inner-city school in the vicinity. Thus, the decision to select some of the schools in the inner-city area was taken on the basis that those schools would present us with children from all backgrounds. Thus, the inner-city state schools were thought to be the most representative sample of the Brazilian population and of pre- and primary schools. In addition, having a sample like, generalisation would be more likely to occur since (although, even within same State, regional differences will be always present), at the time of data collection, the local authorities guidelines (and it is a common practice throughout the country) recommended that head-teachers worked close together in order to follow the government educational plans and programs.

Thirdly, why not include state schools on the outskirts of the city? The state schools in the outskirts of Belo Horizonte as in many other Brazilian big cities, cater mainly for the working-class neighbourhoods and for the poorest people. Those schools were not included in this sample because this section of the population was expected to be already well-represented in the chosen sample. Secondly, other social classes would be under represented if not under-represented. Thirdly, those schools were not selected because access to schools and families in those areas would be more difficult, expensive and time-consuming within the resources allocated for doctoral study.

3.5.1 - The sample

3.5.1.1 - The schools

The study investigates parental involvement at pre-school and primary levels. Several state pre and primary schools in the inner-city

of Belo Horizonte were contacted and visited at the very early research stages and prior to data collection.

Eleven state pre and primary schools were then selected at random as all of the schools visited agreed to participate in the research. They were:

- three pre-schools (children from 4 to 6 years old);
- three primary schools (children from 7 to 10 years old);
- five primary schools that included the final year (Year 3) of pre-school education (children from 6 to 10 year old).

NUMBER OF CHILDREN (IN PRE-SCHOOL AND PRIMARY SCHOOL ONLY)

Number of children	Number of schools	Percent
200 to 600	2	18,2
601 to 1000	4	36,4
1001 to 1400	3	27,3
1401 to 1800	2	18,2
	-----	-----
	11	100,0

NUMBER OF TEACHERS PER SCHOOL (PRE-SCHOOL AND PRIMARY SCHOOLS ONLY)

Number of teachers	Schools
6	1
7	2
5	3
41	4
14	5
26	6
24	7
14	8
13	9
11	10
20	11
21	

Total: 181 teachers Ob. - The total number of pre-school and primary school teachers in the 11 schools was 268 (sample corresponded to 67,5%).

NUMBER OF CLASSES

SCHOOL	YEAR 3	1st GRADE	2nd GRADE	3rd GRADE	4th GRADE	TOTAL
1	9	-	-	-	-	9
2	7	-	-	-	-	7
3	6	-	-	-	-	6
4	-	11	10	10	9	40
5						41
6	5	4	6	6	3	24
7	-	12	12	10	10	42
8	-	8	10	9	9	36
9	6	11	8	11	9	45
10	1	4	1	2	2	10
11	2	5	4	4	3	18
TOTAL						278

Table 1 - Total number of classes

Obs.1 - School n° 5 did not provide the numbers for each grade, only the total number of classes.

Obs.2 - The number of teachers does not match the number of classes because some teachers work double shifts.

The majority of the schools, except the pre-schools, also run other levels of education, which may be from 5th to 8th grades (12 to 15 year old) and secondary level (16 to 18 year old). The schools usually operated in three shifts, in the morning, afternoon and evening but generally pre-school, primary and middle grade children attended morning and afternoon shifts, and last years of middle and secondary school children attended afternoon and evening shifts. The majority of the schools had a large number of pupils in all shifts.

LEVELS THE SCHOOLS OPERATE

	Number	Percent
PRE-SCHOOL ONLY	3	27,3
PRIMARY SCHOOL ONLY	2	18,2
PRE- AND PRIMARY SCHOOL	2	18,2
PRE- 1ST TO 8TH GRADE	2	18,2
1ST TO 8TH GRADE	1	9,1
PRE-,1ST TO 8TH G.,Middle Sc.	1	9,1
	-----	-----
Total	11	100,0

SHIFTS THE SCHOOLS OPERATE

	Number of schools	Percent
MORNING AND AFTERNOON	6	54,5
MORN, AFTERNOON, EVE.	5	45,5
	-----	-----
Total	11	100,0

NUMBER OF CLASSROOMS in the schools

	Number of schools	Percent
7 to 11	3	27.3
12 to 25	6	54.6
25 to 55	2	18.2
	-----	-----
	11	100.0

Obs.1 The total number of classrooms for all the 11 schools was 206.

AVERAGE NUMBER OF CHILDREN IN THE CLASSROOM (Pre- and primary schools only)

Number of children	Number of schools	Percent
25	2	18,2
28	1	9,1
34	1	9,1
35	5	45,5
38	1	9,1
42	1	9,1
	-----	-----
	11	100,0

ADULT:CHILDREN RATIOS PER CLASSROOM

Adult:children ratio	Number of schools	Percent
1,00	9	81,8
2,00	2	18,2
	-----	-----
	11	100,0

THE SCHOOLS' BUILDINGS

	Number of schools	Percent
PURPOSE-BUILT	10	90,9
NON PURPOSE-BUILT	1	9,1
	-----	-----
Total	11	100,0

Ob. 1 - The non purpose-built school was one of the pre-schools.

Table 2 summarises the number of schools in which the facilities listed were found.

	Available	Not available
Teachers' room	11	--
Parents' room	--	11
Library	11	--
Auditorium	6	5
Playground	7	4
Sports Facilities	2	9
Canteen	10	1
Outdoor space for recreation	11	--

Table 2: Schools Facilities

3.5.1.2 - The Teachers

All teachers - from Year 3 in pre-school and 1st to 4th grade in primary schools - were asked to fill in the questionnaires. The sample consisted of 181 teachers. The response rate was 67.5%, which is considered to be a very good response rate. The teachers were divided up as follow:

Grade taught

Grade	Number of teachers	Percent %
Pre-sc.	29	16
1st	40	22,1
2nd	36	19,9
3rd	42	23,2
4th	34	18,8
	-----	-----
	181	100,0

Years of experience

Experience	Number of teachers	Percent %
1 to 5 yrs.	36	9,9
6 to 10 yrs.	27	14,9
11 to 15 yrs.	37	20,4
16 to 20 yrs.	32	17,7
21 and over	49	27,1
	-----	-----
	181	100,0

Teachers' Level of Education

Level	Teachers	Percent
Middle School	90	49,7
Under-grad.	68	37,6
Post- grad.	23	12,7
	-----	-----
	181	100,0

National percentages for teachers' level of education (1st to 4th grade of primary school) in urban areas are as follows:

- 1 - Unfinished fundamental education: 0,34%
- 2 - Fundamental education: 0,97%
- 3 - Unfinished Middle school: 1,08%
- 4 - Middle school with teachers' training: 39,17%
- 5 - Middle school with other technical training: 2,49% -

Total: 4 + 5 = 39,17 + 2,49 = 41,66%

- 6 - University degree - unfinished: 6,5%
- 7 - University degree with teaching discipline: 47,45%
- 8 - University degree (other courses): 1,95% -

Total: 7 + 8 = 47,45 + 1,95 = 49,4%

Source: *Sinopse Estatística Educação Fundamental - Censo Educacional de 1994, MEC/SEDIAE/SEEC, apud Parâmetros Curriculares Nacionais - Introdução aos Parâmetros Curriculares Nacionais - Volume 1 - MEC, 1997*

Cross-tabulation according to teachers' years of experience and grade taught.

Years exp. Grade	1	2	3	4	5
1	7	5	6	1	10
2	12	4	9	6	9
3	6	6	7	5	12
4	5	9	7	11	10
5	6	3	8	9	8

Table 3 - Teachers' years of experience and grade taught

Total: 181

Years of experience:

- 1 - 1 to 5 years
- 2 - 6 to 10 years
- 3 - 11 to 15 years
- 4 - 16 to 20 years
- 5 - 21 or more years

Grade taught

- 1 - last year of pre-school
- 2 - first grade
- 3 - second grade
- 4 - third grade
- 5 - forth grade

3.5.1.3 - The parents

The main objective of this research is to examine and understand teachers' positions, readiness and preparedness to PI. However, a small qualitative study that reveals parents' views and opinions about PI was thought to be important too. Parents' PI views and experience may illustrate teachers' findings and help to understand teachers' climate for PI. Furthermore, it may be argued that parents' views, attitudes and position might influence teachers' position to PI.

33 parents' names were selected from the eight primary state schools selected. Although all the parents were contacted, it was not possible to interview them all. Among those who were not interviewed, there were three families who did not want to participate claiming that they were

very busy at that moment and would therefore not have the time for the interview; two families kept postponing our appointments until it proved to be impossible for the interview to take place; a divorced mother who was willing to collaborate despite her very busy work schedule, had a serious car accident so it was not possible to interview her; and seven families whom I could not contact, had confusing addresses; moved house and did not inform the school; worked long hours (e.g. a bar owner); had no contact telephone number, or gave neighbour's telephone number to leave messages but failed to return my calls; or were never found at home; and one parent who was ready and willing to participate lived in a neighbouring town.

Twenty-one parents of fourth grade children were then interviewed. Although no restriction whatsoever was made on the fathers' participation, all the interviews were carried out with the mothers only. This is a real problem for researchers concerned with parental involvement. As in this study, most studies refer solely, or largely, to mothers. The parents' profile was as follow:

PARENTS LEVEL OF EDUCATION

	Number of parents	Percent
Unfinished Fundamental school	1	4,8
Fundamental school	6	28,6
Middle school	9	42,9
University degree	5	23,8
	-----	-----
	21	100,0

PARENTS MARITAL STATUS

	Number	Percent
Married	14	66,7
Divorced	5	23,8
Single parent	1	4,8
Guardian	1	4,8
	-----	-----
	21	100,0

PARENTS AGE GROUP

	Frequency	Percent
30 - 39	13	61,9
40 - 49	7	33,3
50 - over	1	4,8
	-----	-----
	21	100

NUMBER OF CHILDREN IN THE FAMILY

Number of children	Number of families	Percent
1,00	5	23,8
2,00	6	28,6

3,00	7	33,3
4,00	2	9,5
6,00	1	4,8
	-----	-----
	21	100,0

The gender of the children who were in the 4th grade and whose parents were interviewed was as follows:

GENDER OF CHILDREN

	Number of children	Percent
MALE	12	57,1
FEMALE	9	42,9
	-----	-----
	21	100,0

The parents reported their children's performance as follow:

Up to 49% - below average
 50 to 69% - average
 70 to 100% - above average

CHILDREN'S PERFORMANCE

	Number of of children	Percent
Below average	5	23,8
Average	6	28,6
Above average	10	47,6
	-----	-----
	21	100,0

3.5.1.3.1 - The parents' selection

The fourth grade teachers were approached and asked to select some children whose parents they believed would be prepared to be interviewed. Permission from the schools was asked prior to this procedure. The teachers were told that children's social background didn't really matter, as long as parents were able to hold a conversation. It would, however, be preferable to include parents of children who were doing very well, those of average standard, and those who were struggling in school. This selection of criteria of parents was used because it was thought that this would present a more diverse scenario in terms of parents' experience with their children's school and that it would be a more representative sample, given that the sample size would have to be small. In addition to this, the demands from parents, children and school, vary according to children's age, grade, academic level, and other factors such as parents' own experiences with their children's school. Bearing this in mind, it was thought that the parents of fourth-grade children

would provide a broader picture of the issue, as both parents and children had experienced school for some time.

In one school, the head-teacher suggested that the parents were asked during a parents' general meeting where teachers and parents would be present and most probably well represented. The parents were expected to volunteer to collaborate with the research after a brief introduction about myself and my research project. Unexpectedly, parents other than those of 4th grade children also stepped forward willing to be interviewed and share their views with me. All parents of 4th grade children from that school were selected and it was explained to the others that I would be willing to talk to them about the topic, but the research criteria had to be strictly followed.

Most of the interviews were carried out at the parents' homes; five parents were interviewed at their offices and only in two interview situations were the fathers also present. However, the fathers chose to remain quiet throughout the procedure or just nodded at times at what the wife was saying. Although no restriction whatsoever was made on the fathers' participation, all the interviews were carried out with mothers.

The academic backgrounds of the mothers and fathers varied from incomplete middle school to post-graduate level. The parents ranged from having unskilled/semiskilled occupations to highly skilled jobs or professions.

Most of the mothers who were interviewed had jobs except for five mothers who had opted to stay home to look after their children and one, who retired at a younger age, was studying to become a primary school teacher. Among the fathers there were two who were retired, two who were currently unemployed and the others were all employed or self-employed.

Although this sample may seem rather small, it does present an interesting variety of social, economic, cultural and educational/professional backgrounds. Each and everyone of them had a very rich and unique story to tell about the experiences that had occurred during their children's school education. They all presented different

reasons for sending their children to state schools as well as different opinions about parental involvement in children's school education. The children's overall performance, as seen by the parents' viewpoints, was balanced in this sample, which helped to provide a much more realistic picture of the Brazilian context.

3.6 - The teachers' questionnaire distribution

The questionnaires were given out by me personally to all teachers except for two schools. In these two schools the head-teachers preferred to distribute the questionnaires to the teachers themselves. In some of the schools, the teachers took the questionnaires home and returned them when they had filled them in (in these cases, the teachers were asked to return the questionnaires within 10 days of distribution). In other cases, the teachers preferred to have a session at the school when they filled in the questionnaires on the spot and returned them straight way. Responses in the latter was higher.

As a way of encouraging the teachers to answer the questionnaires and as a way of thanking them for doing so, a seminar on the topic of the research was offered. Half the number of schools accepted the offer. Seminars were then organised and information was exchanged. The attendance of the seminars was remarkably good given that the teachers had very little extra time for activities other than for teaching preparation. The teachers were given the opportunity to put questions forward, and briefly describe how they experienced it individually and as a group. These seminars took place at the schools and always after the teachers had filled the questionnaires and returned them to me so they would not be influenced by the content of the seminar presented.

Except for the two cases in which the head-teachers carried out the questionnaire distribution, I was always introduced to most of the teachers and other school staff, like subject teachers and the pedagogical team, and the objectives of the study were briefly described.

Although teachers were given some space at the end of the questionnaire to add any comments they might have felt relevant and necessary, the structured questionnaire was designed to collect quantitative data. Very few teachers actually added extra information in the space provided.

268 questionnaires were distributed for all pre-school Year 3 teachers in 3 pre-schools, and 1st to 4th grade teachers in 8 primary schools. 181 questionnaires were returned which corresponds to 67,5% of the questionnaires distributed. Oppenheim (1992) believes that the self-administered questionnaire, when distributed in person and presented to the respondents stating the purpose of the study, yields a higher response rate. A 67.5% response rate was achieved which can be regarded as a fairly high response rate.

3.7 - Interviewing parents

A parents' questionnaire was designed to investigate the parents' position to PI practices. The questionnaire was designed in two parts: a very structured set of questions (to be comparable with teachers' data) and open-ended questions. This mixture of techniques was believed to help the researcher get as much information from parents as possible through a fairly flexible instrument as it also comprised open-ended questions.

Parents were given an explanation of the interview procedure (they were told that notes would be taken while they were answering the questions and every effort would be made to keep it in their own words) and were briefly introduced to the topic of the research. They were also told that data would be treated with confidentiality and therefore personal details would not be asked. Parents were asked to answer orally the structured questions followed by the open-ended interview. Both parts of the interview were designed beforehand and questions were asked within the sequence that had been prepared. A semi-structured style of interview was applied where parents were allowed to make comments and encouraged to refer back to other questions freely whenever they wanted to do so. Burgess (1984) argues that "researchers cannot rigidly apply their methods but need to be flexible in their approach and utilise a range of methods for any problem." Despite my enthusiasm to adopt a semi-structured approach to the interview, it was always possible to get the interview to unfold readily the way it had been designed into a flowing conversation as it proceeded further.

Ethical considerations

Parents and teachers were contacted after permission was given by head-teachers. As questionnaire distribution varied according to instructions given by head-teachers, in all cases, that is even when I did not have direct contact with teachers, issues like confidentiality and anonymity were discussed prior questionnaire distribution. When contact occurred, I introduced myself and the research, and explained how carefully I had been preparing all the steps of the research so confidentiality would be guaranteed for all. Approaching parents followed the same procedure. Permission was given by the school to ask teachers for help. I was referred to 4th grade teachers and they provided the names of the parents. Following this procedure, contacts were made and visits were arranged. Before starting the interview, parents were told about the issues of confidentiality and anonymity, and were requested to look at the questionnaire with me. In both cases, parents and teachers were satisfied with the way they were approached and the way the intervention was planned and carried out. And finally, schools were told that as soon as the study was written, feedback would be given in form of published work, or in any other way they would like it to be (like inviting me in for discussion). A published paper has been forwarded to them.

3.8 - Data Analysis

The following sections will describe the steps taken during the study period prior to parents' and teachers' data analysis. As both methods employed, factor analysis and qualitative analysis, are subjective methods of interpreting data, a careful study of the theory was crucial before analysis was carried out. A detailed description of the steps taken is provided so as to guide the reader through the decisions taken during the process of data analysis. This proved to be extremely productive for the research process. After each section the reader will find a summary of the analysis procedure for both studies of this research.

3.8.1- Teachers' questionnaire and data analysis

According to the structure of the questionnaire (see Appendix 2 for questionnaire) and the objectives of the research, teachers' data was thoroughly explored in order to find the best way to analyse the information gathered and to answer the research questions accordingly.

A multi-dimensional measurement was used because the research aimed to reveal a summarised PI pattern that included a number of PI practices among a list of 40 PI practices. According to Cohen and Manion (1994) " 'multi-dimensional scaling "is a way of analysing judgements of similarity between variables". Grouping together similarities in teachers' judgements about PI practices helped to find the PI pattern that emerged from the data collected in Brazilian state schools. The techniques for grouping judgements determine the number and nature of the underlying variables among a large number of measures.

The data were first explored by checking the frequencies of each variable and its means. The objective of using frequency analysis was purely to see whether there was any significant pattern in the data. The description of the data revealed responses that were put against Epstein's typology. However, it did not reveal any pattern of practices of parental involvement that would represent the teachers' position to PI in a more meaningful way.

Cross-tabulation was also applied to examine the relationship between respondents and their choices. Important information was again gathered but still not enough to tackle the research questions. Cross tabulation was also applied between variables so as to cross-check information.

Data were then grouped according to Epstein's typology and the means and standard deviations are displayed. Again, some insight was gained but it did not reveal, in an organised and summarised manner, a meaningful pattern that would reveal the Brazilian teachers' position to PI. The results provided no satisfactory answer or explanation to the research questions. However, they provided some insights as to the next logical steps to address the data. It was clear, then, that a more powerful, comprehensive and sophisticated method would be necessary. This first exploration of data indicated that data summarisation would be the ideal application because it would provide a clearer and more visible pattern of the school climate.

After this initial exploration of the data and the definition of the method to be used, the data were explored as follow:

- first, data were examined considering the whole group of teachers;

- then, as an extra way to explore data for preparation for the major data analysis procedure and for building up a deeper understanding of data, the results were also examined by splitting them in two groups: pre-school, first and second grades teachers (105 teachers); and third and fourth grade teachers (76 teachers) in order to find out if there was any differences in the pattern found in the three different groups (the whole group of teachers; the first grades (pre-school, 1st and 2nd); and final grades of primary education). However, results did not indicate any finding that would justify any change to the initial data treatment plan which is to analyse data from one group as a whole. Furthermore, the data could not be factor analysed like that because the number of respondents would not be sufficient for applying such test and would not answer the research question properly;

- then factor analysis was conducted with the whole group of teachers as previously planned in order to identify items which would be together in the factors extracted since factor analysis group together variables that appear to be measuring much the same thing;

- the next step was then to check variables found in each factor against years of experience, grade taught, and level of education in order to further examine the views expressed by the teachers according to the results of factor analysis.

To begin with, a correlation matrix was done for all the variables as is required for successful factor analysis. Factor analysis was then run to accomplish the data analysis. Data were explored in order to avoid concealment or even misinterpretation of data, since summarisation of data is often blamed when only part of what data may actually show are revealed. The analysis looked at the factors extracted from the factor analysis done with all 40 variables (present in question 1) so as to reveal the teachers' position on the various ways of involving parents with children's education.

As mentioned earlier, the first question on the teachers' questionnaire contained 40 statements about PI practices that illustrate the six major types of parental involvement described by Epstein and others (parenting; communicating; volunteering; learning at home; decision making; and

collaborating with community - Epstein, 1995 -) Please see appendix 2 for questionnaire and find the 40 statements used in the questionnaire categorised below according to Epstein's 5 PI types. I should recall here that Epstein (1991) states that the practices may sometimes fit in more than one category and that the five types are significantly interrelated. It is also important to emphasise that, because of their intimate relationship, other authors may not necessarily have the items in the same category as stated below:

Ob. (" Page 1 " and " Page 2 " are used here to signify the pages of the questionnaire as it was administered by teachers. The items in question 1 were numbered from 1 to 21 - page 1 - and 1 to 19 - page 2)

I) - Attitudes concerning **basic obligations of parents** were as follows:

Page 1:

- 2 - Parents should help their children to get ready for school.
- 6 - Parents should teach their children to behave well and show respect for the teachers.
- 5 - Parents should talk to teachers about problems the children are facing at home.
- 8 - Parents should set up a place and a time for their children to study at home.
- 13 - Parents should check that homework gets done regularly.
- 16 - Parents should encourage children to volunteer in class.
- 19 - Parents should talk to their children about what they do and learn at school.

Page 2:

- 2 - Parents should talk to their children about the importance of school.
- 3 - Parents should ask the teachers about what their children are expected to learn.
- 5 - Parents should always try to attend school social events, meetings or help school whenever they can.
- 7 - Parents should take their children to special places or events that could help children's learning.

II) - Attitudes concerning the **basic obligations of schools** were as follows:

Page 1:

- 1 - Teachers should request information about children's talents, interests, needs and health.
- 7 - School should send home communication about school that all families can easily understand and use.
- 9 - Teachers should contact parents about their children's failures and problems.
- 11 - Teachers should contact parents to discuss their children's improvement and progress.
- 12 - Schools should survey parents each year for their ideas about the school.
- 14 - Teachers should inform parents of what children are expected to learn.
- 20 - Teachers should meet individually with parents at least four times a year.

Page 2 :

- 12 - Teachers should work together towards developing different ways to have a closer relationship with parents.
- 15 - Teachers should provide parents with information on how to monitor homework.
- 16 - Schools should run parents and teachers meetings regularly.
- 19 - School is responsible for sending home communications about children's progress, difficulties or needs.

III) - Attitudes concerning **parent involvement at school - volunteering** - were as follows:

Page 1:

- 4 - Schools should run workshops for parents on educational activities programs and also after-school recreation.
- 10 - Schools should encourage teachers to have parents helping in whatever possible.
- 17 - Schools should have workshops for parents to build skills in parenting and understanding the development of the children.
- 18 - Teachers could have parents helping them in assisting the children with classwork in the classroom.

Page 2:

- 8 - Schools should have workshops for parents on creating home conditions for study time.
- 9 - Parents should serve as volunteers in school (when possible) with activities that are related to their profession or hobby.
- 11 - Parents could help teachers in the classroom whenever possible.

IV) - Attitudes concerning **parent involvement in learning activities at home** were as follows:

Page 1:

- 3 - Parents should ask teachers for specific advice on how to help their children at home with classwork.
- 15 - Teachers should assign homework that requires children to interact with parents.

Page 2:

- 1 - Teachers should advise parents to listen to their children read and encourage the children to read.
- 4 - Teachers could show parents how to practice reading, writing, and math's skills at home before a test.
- 6 - Teachers should encourage parents to listen to a story or paragraph that their children have written.
- 10 - Teachers should suggest parents to do specific activities together with their children to maximise school learning.
- 13 - Teachers should provide parents with ideas to discuss TV shows with their children at home.
- 15 - Teachers should provide parents with information on how to monitor homework.
- 18 - Teachers could inform parents on how to help their children with specific skills and subjects that they have difficulties.

V) - Attitudes concerning **parent involvement in governancy and advocacy** were as follows:

Page 1:

- 21 - Parents should be able to get involved with leadership, committees, and decision-making roles at school.

Page 2:

- 14 - Teachers should serve PTA or other school committee that involves parents.

17 - Parents should attend PTA meetings.

Epstein and Salinas (1993) designed a questionnaire that comprises most of the 40 items in the teachers questionnaire used in this research. The items however, were not comprised in the same way, order or question. Epstein and Salinas questionnaire was published with the intention of being used and managed by professionals (researchers and educational professionals) who research PI or might be interested in further understand PI in their own school (please find a copy of it in Appendix 3).

The teachers' questionnaire also included of a question which summarises the current position of the school about PI types. This question provided us with some further information about the teachers' current views and attitudes to PI in the context of the schools in which they worked. It was also intended to contrast these findings with the findings of the previous question according to the factor analysis results.

Factor analysis, its relevance, implications, and applicability to the research objectives was extensively studied before reaching the final decisions for data analysis. The final decisions for the strategies used when applying factor analysis are described in "Teachers' Data: Results, Findings and Discussion" chapter. Factor analysis is often said to be a very subjective test and therefore I decided to explore the factor analysis literature very thoroughly in order to fully understand it and apply the best factor model for teachers' data analysis according to rules of applicability for successful factor analysis. An attempt was therefore made to study it step by step, from what it is through to its requirements and models, so as to guide me through to my choice of factor model and to fulfil the requirements for adopting factor analysis as a method for analysis. Some basic information about factor analysis will be provided here so as to clarify further the research analysis decisions which are explained in more details in the Teachers' Findings chapter.

3.9 - Factor Analysis

3.9.1 - Factor analysis definition

Factor analysis is a branch of multivariate analysis that is concerned with the internal relationships of a set of variables. It was initially developed

by psychologists and was primarily concerned with hypotheses about the organisation of mental ability suggested by the examination of correlation or covariance matrices for sets of cognitive test varieties (Lawley and Maxwell, 1971, pp. 1).

According to Child (1990), the central aim of factor analysis is the "orderly simplification" of a number of interrelated measures. Child argues that "factor analysis seeks to do precisely what humans have been engaged in throughout history, that is to make order out of the apparent chaos of the environment". To organise our experiences in such a complex environment, the assimilation and communication of knowledge would be a most arduous, if not impossible, task. The work of developmental psychologists on the formation of concepts has adequately described this process. For instance, at an early stage of development, children gradually learn the characteristics which differentiate one object from another by observing and manipulating them in a variety of situations. Child argues that this cataloguing of similarities and differences has much in common with factor analysis.

Traditionally, factor analysis has been used to explore the possible underlying structure in a set of interrelated variables without imposing any preconceived structure on the outcome. At its crudest, no thought might be given to the selection of variables; rather, the data, because it happens to be reasonably large as with questionnaires or attitude scale items, is submitted for analysis in a "let's see what happens" spirit. However, uncommon for researchers to start research and data analysis in this way. In most cases, the analysis is preceded by a "hunch" as to the factors which might emerge. In having an idea and selecting test materials in the first place it must have occurred to the researcher that the tests have something in common or that some are attempting to detect markedly different things. This systematic use of the technique in exploring and classifying data is much more prevalent.

According to Child (1990), Norusis (1993), Hair et al (1987) and others, factor analysis is a generic name given to a class of multivariate statistical methods whose primary purpose is data reduction and summarisation. In a more general sense, it addresses itself to the problem of analysing the interrelationships among a large number of variables (e.g., test scores, test

items, questionnaire responses) and then explaining these variables in terms of their common underlying dimensions (factors).

Hair et al (Hair, 1987) state that 'factor analysis can be utilised to examine the underlying patterns or relationships for a large number of variables and determine whether the information can be condensed or summarised in a smaller set of factors or components'. Kim and Mueller (1978) argue that 'the distinguishing characteristic of the factor analytic approach is the assumption that observed covariation is due to some underlying common factor' (p.22). They go on to say that 'one is actually applying the factor analytic model by considering the correlation between two observed variables to be a result of their sharing of common sources factors, and not as a result of one being a direct cause of the other' (p.22).

Factor analysis is a statistical technique for representing a large number of measured variables in terms of a smaller number of unobserved, usually hypothetical variables. These second-order variables ("factors") may be largely uncorrelated, or have some "communality", overlapping with each other. In either case it is possible to identify general themes, giving a name to the statistically identified factor or factor cluster (Miles and Huberman, 1984).

Factor analysis (unlike multiple regression, discriminant analysis, or canonical correlation, in which one or more variables is explicitly considered the criterion or dependent variable and all others the predictor or independent variables) is an interdependence technique in which all variables are considered simultaneously. In a sense, each of the observed (original) variables is considered as a dependent variable that is a function of some underlying, latent, and hypothetical set of factors (dimensions). Conversely, one can look at each factor as a dependent variable that is a function of the originally observed variables (Hair et al, 1987, pp. 235).

Factor analysis assumes that the observed variables are linear combinations of some underlying (unobservable) factors. Some of these factors are assumed to be unique to each variable. Therefore, factor analysis starts with a set of observations obtained from a given sample by means of such a priori measures. Factor analysis then analyses this set of observations from their intercorrelations to determine whether the variations represented can be accounted for adequately by a number of

basic categories smaller than that with which the investigation was started (Kim, 1978b, pp. 8). Thus, data obtained with a large number of a priori measures may be explained in terms of a smaller number of reference variables (Fruchter, 1954, pp. 1). One of the objectives of factor analysis is to represent relationships among sets of variables parsimoniously. That is, one would like to explain the observed correlation using as few factors as possible. If many factors are needed, little simplification or summarisation occurs.

3.9.2 - Factor analysis purpose

The general purpose of factor analytic technique, then, is to find a way of condensing (summarising) the information contained in a number of original variables into a smaller set of new composite dimensions (factors) with a minimum loss of information; that is, to search for and define the fundamental constructs or dimensions assumed to underlie the original variables (Hair, 1987, pp. 235). In another words, when a group of variables have, for some reason, a great deal in common a factor may be said to exist. These related variables are discovered using the technique of correlation. Child (1990, pp. 2) gives an example of how this correlation works: "if one took a group of people and correlated the lengths of their arms, legs and bodies one would probably find a marked relationship between all three measures. Thus, tall men would tend to have long arms and long legs and vice versa for short men. This interconnection constitutes a factor - a factor of linear size. If, however, eye colour or left-handedness had been correlated along with the other variables, they would have been unlikely to have shown any relationship with the other three variables and consequently would not appear in the same factor of linear size".

Therefore, and as defined by Norusis (1993, pp. 47), factor analysis is "a statistical technique used to identify a relatively small number of factors that can be used to represent relationships among sets of many interrelated variables. Factor analysis helps to identify these underlying, not-directly-observable constructs". It can then be said that the basic assumption of factor analysis is that underlying dimensions, or factors, can be used to explain complex phenomena. Observed correlation between variables result from their sharing these factors. The goal of

factor analysis is to identify the not-directly-observable factors based on a set of observable variables.

Since the aim of this research was to investigate Brazilian state pre- and primary school teachers' readiness and potential for PI policies and practices in terms of an emerging PI pattern in that particular context, factor analysis seemed to be the appropriate method to be used for data analysis because it condenses the information contained in a number of original variables into a smaller set of new composite dimensions with a minimum loss of information. Factor analysis reveals a meaningful group of factors that are simple and interpretable and a set of dimensions that are latent (not easily observed) in a large set of variables. The PI pattern for that particular Brazilian context will be revealed in a more useful way.

3.9.3 - Characteristics of a Successful Factor Analysis

3.9.3.1 - Factor Analysis applicability

This section will explore the suitability of the questionnaire data for factor analysis and the appropriateness of the method to the research purpose.

a - Interdependence Technique

As factor analysis is an interdependence technique it allows all variables to be considered simultaneously. Thus, each of the observed (original) variables is considered as a dependent variable that is a function of some underlying, latent, and hypothetical set of factors (dimensions). The fact that factor analysis is an interdependence technique is very relevant to this study since all variables (rationalisations) are equally important and reflect the "mindset" of the schools and teachers under investigation.

b - Design Measurement

The designed questionnaire is of metric measurement - ordinal scales. Ordinal scales are acceptable for factor analysis.

c - Sample Size

Sample size is of key importance in the application of factor analysis since it is directly related to the reliability of the results (factors). From the literature on factor analysis, specially Child (1990) and Hair et al (1987), it is not uncommon to factor analyse a sample smaller than 100, provided certain precautions are taken.

Factor loading is a very important and directly-related issue regarding the number of cases one wants to analyse. Factor loading represents the correlation between an original variable and its factor (Hair et al, 1995). Most analysts use a rule of thumb: factor loading of ± 0.30 which is considered to meet the minimal level (Hair et al, 1995). The literature indicates that any loading above ± 0.30 is significant or salient, loading of 0.40 are considered more important and if the loading are 0.50 or greater, they are considered practically significant. Thus the larger the absolute size of the factor loading, the more the loading in interpreting the factor matrix (Child, 1990; Hair et al, 1995). These guidelines are applicable when the sample size is 100 or larger.

Having said that, factor loading of .50 was adopted so as to ensure data were properly dealt with, although factor loading of 0.40 was also explored. Thus, given the evidence, a loading of .50 ensured a more significant level.

d - Calculation of the Correlation Matrix

Factor analysis offers the analyst two alternatives ways of calculating the correlation matrix: the analyst can either examine the correlation between the variables or the correlation between the respondents. Given the objective of the present research, the best alternative is to examine the correlation between variables. Hair et al (1987, pp. 237) argue that this is the most common type of factor analysis. Factor analysis may also be applied for a correlation matrix of the individual respondents. However, this approach is not used very frequently because of computational difficulties, therefore this choice was not applied.

According to Norusis (1994), "the basic assumption of factor analysis is that underlying dimensions, or factors, can be used to explain complex phenomena. Observed correlation between variables result from their sharing these factors" (p.48). Norusis (1994) states that "since one of the

goals of factor analysis is to obtain factors that help explain these correlation, the variables must be related to each other for the factor model to be appropriate. If the correlation between the variables are small, it is unlikely that they share common factors" (p. 50). Norusis suggests that correlation should be greater than 0.30 and all variables should be correlated with at least one of the other variables in the set with a value above 0,30.

There are also other methods of verifying whether data is suitable for factor analysis. Norusis (1994) explains that apart from correlation between variables being expected to be greater than 0,30, the value of the Bartlett's test of sphericity should be large and the associate significance level should be small so that the population correlation matrix is not an identity matrix. In addition, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is an index for comparing the magnitudes of the observed correlation coefficients with the magnitude of the partial correlation coefficients (partial correlation coefficients are estimates of the correlation between the unique factors and therefore should be close to 0 when factor analysis assumptions are met - as unique factors are always assumed to be uncorrelated with each other). That is, small values for the KMO measure indicate that a factor analysis of the variables may not be a good idea. Thus, reasonably large values are needed for a good factor analysis. According to Norusis (1994), Kaiser (1974) suggests that measures in the 0.90's are *marvellous* , in the 0,80 are *meritorious* and under those values measures are *middling* 0,70, *mediocre* 0,60 or *miserable* 0,50 . Values under 0,50 for either the entire matrix or an individual variable are considered to be inappropriate and unacceptable. The teachers' data fell well within the expected results for suitability for factor analysis with values for KMO ranging from 0,74591 (*middling* to *meritorious*) to 0,93995 (*marvellous*).

3.9.4 - Summary of the analysis decisions

Abbreviations used:

PAF - *principal-axis factoring*

PCA - *principal components analysis*

ML - *Maximum likelihood*

AF - *Alpha factoring*

Factor analysis has been used to find PI pattern(s). The objective of the research is to reduce the number of original variables to a smaller and more significant set of dimensions (factors) that in turn represent the teachers' position to PI. The teachers' position to PI is referred to in this research as their potential and readiness to a certain PI practices that, in turn, represent their climate for PI.

According to Kim and Muller (1986), "factor analysis assumes that the observed (measured) variables are linear combinations of some underlying source variables (or factors). That is, it assumes the existence of a system of underlying factors and a system of observed variables. There is a certain correspondence between these two systems and factor analysis 'exploits' this correspondence to arrive at conclusions about the factors" (p.7-8). According to Hair et al (1995) 'the strength of factor analysis lies in finding patterns among groups of variables' (p.373).

Factor analysis will explore the data for possible data reduction that is meaningful, in order to examine the underlying factors as an explanation for the teachers' PI climate. With that in mind, all 40 variables used in the first question of the teachers' questionnaire were examined. The goal is to identify the not-directly-observable factors based on a set of observable variables. Factor analysis will help to group together (summarise) variables (factors) that have underlying similarities (common variance).

Assessing the appropriateness of factor analysis for the research set of data

Hair et al (1995) state that 'the factor analyst must ensure that the data matrix has sufficient correlation to justify the application of factor analysis' (p.374). Correlation matrices for 40 variables was extensively examined and verified whether values were well above 0,30 (as recommended by Norusis, 1994 and Hair et al, 1995). More than half the coefficients were found to be greater than 0,3 in absolute value which was the first indication that the data would be appropriate for the use of factor analysis.

Kaiser-Meyer-Olkin measure of sampling adequacy (also known as MSA), which is a measure used to quantify the degree of intercorrelations among the variables evaluating the appropriateness of applying factor analysis, was 0,87438. The value found is considered high enough

(considered as 'meritorious'). Values above 0,50 for either the entire matrix or an individual matrix indicate appropriateness for data to be suitable for factor analysis (Norusis, 1994; Hair et al, 1995).

The Barlett test of sphericity is a statistical test for the presence of correlation among the variables provides the statistical probability that the correlation matrix has significant correlation among at least some of the variables, with the associated significance level. Values for the test should be large and the significance should be small. Values were within expectations and were as follows: 4150,9840 and 0,00000 respectively. Factor analysis could then be proceed to its next steps as the data proved to be appropriate for factor analysis.

In order to verify whether every variable among the 40 variables in the first question also achieved acceptable levels, the same guidelines outlined above were extended to individual variables. The MSA values for each variable achieved acceptable levels (the vast majority of the variables presented values well above 0,80 which is considered 'meritorious' for 0,80 or above - 27 variables; and marvellous for 0,90 or above - 9 variables; and 4 variables achieved 0,70 or above (usually regarded as middling but still within the acceptable range). Given the above results, the overall MSA found for the set of 40 variables can be evaluated as adequate for factor analysis.

Assessing the MSA for each variable helped to decide whether all variables in the set of 40 variables should be included in the analysis. As none of them fell within the unacceptable range as classified by Kaiser (1974, as in Norusis, 1994 and Hair et al, 1995), it was then decided that all the variables would be included for factor analysis.

Factor models

According to (Hair et al, 1987) the selection of a model is based on two criteria:

- a) - the objective of the researcher conducting the factor analysis;
- b) - the extent of prior knowledge about the variance in the variables.

Hair et al (1995) state that the common factor and component analysis models are both widely utilised. Principal components analysis and

principal axis factoring (common factor analysis) were both used to explore the results and for comparison. Both alternatives were used with varimax rotation as orthogonal rotation is much simpler to understand and interpret (Kim and Muller, 1986). Principal components analysis has been used because it accounts for all the variance of a score or variable when summarising most of the original information (variance) in a minimum number of factors (usually for prediction purposes), (Kim and Muller, 1986). According to Hair et al (1995) 'when using component analysis, one must consider the total variance and derive factors that contain small proportions of unique variance and, in some instances, error variance' (p.375). They go on to say that 'the first few factors do not contain enough unique or error variance to distort the overall factor structure' (p.375).

Common factor analysis (principal axis factoring) has been also used because it identifies underlying constructs or dimensions not easily recognised in the original variables, that is to say, only the variance which is common to or shared by the tests is analysed. In principal-axis factoring an attempt is made to exclude unique variance from the analysis. As I have little knowledge about the unique error variance and would therefore wish to eliminate this variance, the common factor method may also be carried out. It has also been argued by Hair et al (1995) that common factor analysis is often viewed as more theoretically based because it uses only the latent dimensions, that is, the shared variance (Hair et al, 1995).

Principal axis factoring is usually used when the aim is primarily to identify underlying factors or dimensions not easily recognised (which is the purpose of this research), and principal component analysis is often chosen when the researcher aims to summarise most of the original information (variance) in a minimum number of factors for prediction purposes.

However, PAF has also some pitfalls over PCA. In PAF there is no single unique solution as found in PCA. For example, several different factor scores can be calculated from the factor model results for any individual respondent. The second issue involves the calculation of the estimated communalities used to represent the shared variance (communalities are not always estimable or may be invalid, e.g.. when values are found to be

greater than one or less than zero). These drawbacks have contributed to the wide-spread use of component analysis yet they may not pose as a difficult issue when deciding on an appropriate factor model.

According to Child (1990), this is the best approach to use when deciding on which factor model and rotation to use: "Gorsuch (10) suggests that several rather than one factor program should be employed with a given collection of data; this, he points out, should test the 'robustness of the factors. By robustness he means the regularity with which particular factors reappear for homogeneous cases irrespective of the analytical techniques adopted. By selecting a few methods of analysis which differ in principle, comparing the results of the rotated factors from those methods and retaining only those factors which persist whatever the methods, one might arrive at a 'maximum common denominator' for substantial dimensions within an experimental domain" (Child, 1990, p.59-60).

Following the above suggestion, PCA, PAF, ML and AF were applied to the data with both orthogonal and oblique rotation for 40 variables. The results were extensively compared and examined so as to decide on which model would extract factors that would best represent the data as teachers' climate.

According to Hair et al (1995), empirical research has demonstrated a similarity of the results in many instances by PCA and PAF (this has also been shown by this research). It has shown that, in most applications, both component analysis and common factor analysis arrive at essentially identical results, especially if the number of variables exceeds 30 or the communalities exceed 0,60 for most variables (which is the case in this study) (Hair et al, 1995).

Given that the results by both models were very similar, as shown in the Appendix section, **PAF** was used for factor interpretation as the results were more clearly defined. In addition, The PAF factor model seemed to suit the research objectives better because it considers the common variance.

Rotation

Orthogonal solutions result in factors that are uncorrelated, assuming that factors are independent of each other. Hammond (1995) argues that 'orthogonal rotation involves a transformation that forces the underlying factors to be uncorrelated' (p.371). Unlike orthogonal rotation, oblique rotations assume that variables are correlated and therefore factors may also be correlated to each other. Both rotations preserve the communalities of the variables. There is much debate about which one produces results that are a fair representation of the data. Varimax rotation is said to be the simpler technique and is more widely used, while oblique rotation often produces results that are very difficult to interpret.

Varimax rotation was used as the results obtained by the oblique rotational technique proved not to be as straightforward as with varimax rotation and therefore appeared to be less meaningful (results by PAF and PCA were almost identical with oblimin rotation). Nevertheless, results by PAF with both rotational techniques (varimax and oblimin) for the first two factors were similar except for the fact that factor 1 by oblimin rotation (structure matrix) had variables that were loaded in both factors 1 and 2 by varimax rotation; and factor 2 by oblimin rotation is factor 3 by varimax rotation. Given that the results were similar and that with varimax rotation the results were more clearly interpretable, PAF with varimax rotation was used for analysis.

3.10 - Qualitative Analysis

A qualitative treatment describes what processes are occurring and details differences in the character of these processes over time. Miles and Huberman (1984) argue that the hallmark of qualitative research is that it goes beyond how much there is of something to reveal its essential qualities.

The characteristics of qualitative research include small samples, extensive information from each respondent often collected at more than one time, and a search for meaning, ideas, and issues relevant to the research program. It may also include massive amounts of data collected over a long period of time from a number of cases, be they people, events, or processes. On the other hand, in some cases, it may produce a moderate

quantity of data, which illustrates reasonably well the purpose of the study.

The parents' data was collected on a snap-shot basis as researcher's resources were limited. Furthermore it was not intended to be used as a strong form of triangulation with teachers' data nor as a very comprehensive study. Having said that, the parents' data was gathered in order to provide a broader understanding of the parental involvement in the context studied and illustrate, with further details, the teachers' study. The study was a small but represented a very meaningful way to account for the opinions and views of this small group of parents. It was definitely not supposed to generalise the findings as this small group of 21 fourth grade parents could not possibly represent the whole community of parents from those very big schools. However, although the group was small, the study throws some light into the teachers' study because it enables one to look at the issue from both perspectives. The parents' study is not representative in number or across grades, but as it comprises all kinds of social and cultural backgrounds it examines a fairly varied group of opinions. In addition, the fact that the parents had at least four years of contact with their children's schools, it allowed us to believe that this group of parents may have expressed a fairly global and representative view of the parents' community as a whole.

3.10.1 - The process of qualitative analysis

According to Miles and Huberman (1984), qualitative analysis consists of three concurrent flows of activity: (a) data reduction, which does not necessarily mean quantification; (b) data display as an organised assembly of information that permits conclusion-drawing and taking action (when applied); and (c) drawing conclusions and verification as deciding what things mean through noting regularities, patterns, explanations, possible configurations, causal flows and propositions.

It is widely acknowledged nowadays that the writing of the qualitative analysis could start as soon as one has started planning the research and data collection (Miles and Huberman 1984, Dey, 1993). Writing could then proceed throughout data collection and as part of data collection itself. This could be done through taking notes about the setting, sample and data itself, as well as definitions of situations and objects, processes such

as sequences, changes, and turning points, strategies, relationships, events and activities (Bogdan et al (1982) in Dey - 1993).

A good starting point to qualitative data analysis is basic description. According to Wollcot (1990) description is the foundation upon which qualitative research is built. He argues that the descriptive account is likely to constitute the most important contribution the research has to make. It is then that one becomes the story teller, inviting the reader to see through your eyes what the researcher has seen, then offering researcher's own interpretation. Therefore, Wollcot goes on, one should start by presenting a straightforward description of the setting and events - carefully presented and interestingly related at an appropriate level of detail. This process must always be tied up with research questions as the guide and thinking path.

3.10.2 - Representation of qualitative analysis

Dey (1993) looks at qualitative data analysis as a series of spirals looping back and forth through various phases within the broader progress of the analysis.

IMAGES REDACTED DUE TO THIRD PARTY RIGHTS OR OTHER LEGAL ISSUES



Fig. 1 - Loop representation of analysis (Dey, 1993, pp. 264).

Dey (1993) believes that this representation emphasises the interdependence of procedures used in the analysis. Dey goes on saying that in reading and annotating data, for example, we anticipate the tasks of categorising and linking the data. While making connections between categories, we review our initial links and categories. At any particular phase in our analysis, we may return to re-reading the data or look forward to producing our account. Dey concludes that qualitative data analysis tends to be an iterative process.



Fig. 2 - Analysis as an iterative process (Dey, 1993, pp. 265).

The various stages of research analysis may be better thought of as recurrent 'phases' through which the analysis develops. Analysis, as Dey presents it, is therefore akin to a spiral which turns through successive cycles, each (hopefully) at a higher level as more evidence is accumulated and concepts and connections become clear. A list of codes can also be created before data collection - these could be pulled from research questions, hypotheses, problem areas or framework.

Similarly, Miles and Huberman (1984) present a series of tactics for testing or confirming meanings, avoid bias, and assuring the quality of conclusions. The tactics for generating meanings are: counting (number of times and consistency of judgements), noting patterns and themes; seeing plausibility; clustering (what goes with what), making metaphors; splitting variables; subsuming particulars into the general; factoring (analogue to factor analysis); noting relations between variables; finding intervening variables; building a logical chain of evidence; and making conceptual/theoretical coherence.

Following these steps and being inspired by the diagrams (Dey, 1993) have helped the process of making sense of the raw data as well as constructing a coherent analysis within the context data which was collected. Some of

the steps of generating meaning (Miles and Huberman, 1984) might have been used more extensively than others according to the levels of difficulties that arose while putting data together to build the study "story". Following the steps proved to be very effective and seemed to have helped "moving up the ladder". The moving up the ladder ran almost automatically as the process of taking the necessary steps forward was led naturally. As the volume of data in this present study was not as huge as a purely qualitative study would produce and require for a sound analysis, some of the steps suggested by Miles and Huberman were less complicated than one would have expected. For instance, putting all the data together in one big dinner-table- sized paper was the first step. It was possible to visualise all the data together and to start to construct categories and matrixes straight way without jumping back and forth hundreds of times. Then, the next steps were systematically followed.

Parents' data were transcript all together but respecting individuality, and then reorganised in categories (by subject, elements and issues) so that analysis could be advanced. Various attempts were made to create a metaphor so as to illustrate the results and help to clarify analysis, but those efforts proved to be unnecessary given that the analysis revealed meaningful and interesting connections among the information collected through the use of categories and common elements cited by the parents.

3.11 - Methodological limitations of the study

This research aimed to investigate Brazilian state school teachers' climate for PI through the survey technique. A survey provides descriptive data and therefore it is difficult to analyse data in terms of variables relationships. A survey usually entails the collection of data at only one point in time and therefore does not measure changes or elucidate causal processes. In a survey, research variables cannot be manipulated which is the reason why the researcher may not determine the cause and effect of facts.

Having said that, it is difficult to predict or infer if the teachers' PI views and position at the time of data collection, have any relationship with their past experiences (such as years of experience, grade taught or level of training), valid PI policies at the time, children's needs and demands and parents' views or even the influence of the present educational system

and curriculum guidelines. As data were collected at one point in time only, analysis was limited to how teachers perceived PI at that point in time. According to the research objectives, it may only point if there are differences in opinions according to teachers' general profile and the PI pattern expressed by teachers.

Similarly, it is difficult to predict the teachers' and schools' future action towards PI developments from the results of this research. The results may indicate the possible ways schools might follow, or facilitate the understanding of their own climate for PI. As the study has not investigated current Brazilian schools PI practices as such, it is not possible to point to those practices that were already in place and those which were not in the PI pattern found here.

Having said that and since this research could not reveal other aspects of PI in Brazilian school, the first recommendation to Brazilian educational researchers would seem to be to identify Brazilian PI practices according to the teachers' potential that will be revealed in this work in order to be able to point the direction a school might rightly take, and making use of the PI pattern found here. Other studies may be required to follow schools' and teachers' action and development that would include school PI policies, and the particular PI pattern found in this research. On the other hand, results of this research may indicate that research about more complex PI types and practices may also help school/teachers to understand the benefits of school commitment with improved education and relationship with parents and its possible influence in children's performance and achievement.

No measurement was planned to be used to assess children's achievement in relation to teachers' PI pattern. Since data were collected at the beginning of the second semester, teachers were asked to provide a percentage of their pupils' average achievement up to the middle of that school year (see questionnaire for type of question asked). As achievement was very narrowly searched, it would be very misleading to conclude that teachers' views (school climate) about PI has an effect on children's achievement in Brazilian state schools or vice-versa. It is only possible to point the kind of children's overall achievement those teachers had in their classroom according to their assessment of the children, as far as the survey data can disclose. In other words, we may

only conclude that at that point in time, Brazilian teachers, who perceived PI in the way analysis has revealed, had a certain group of students with a certain profile. Further research would have to be developed to further relate children's achievement in relation to PI in Brazilian schools using appropriate measurement for that purpose. In addition to that, we cannot tell which situation has influenced the other, that is whether PI has influenced students' performance or vice-versa, since the methodology would not allow analysis of that specific aspect in that way. In order to know that, other aspects of schooling would have had to be addressed too.

As the literature in Brazil indicates, fundamental education in that country is still lacking many basic requirements for quality education. PI may be one of them. Relationship between achievement and PI is very complex and might be strongly influenced by the socio-economic scenario that is believed to play a very important role in school performance and children's achievement. Parent and community involvement with school and school education is an essential topic for further research in that scenario.

The scope of this research, both teachers' and parents' studies, was well defined before instruments were designed. The methodological decisions were taken accordingly. It was known that PI important aspects would have to be left aside due to an extremely limited budget and time for data collection. These two aspects deeply influenced decisions related to both the methodology and the scope of the research. However, important and relevant aspects for this research were examined carefully. What I may only indicate now is, from the limitations of this research, what aspects of PI may be addressed in the future to further investigate PI in Brazilian schools in order to improve our practices for improved education, quality schools and successful relationship between school and family. Further research about PI in Brazilian schools is strongly recommended.

Chapter 4

Parents' study:

An exchange model

4.1 - Introduction

This chapter will describe and analyse the data obtained from a small sample of 21 parents of fourth grade children who were interviewed about their views and opinions on parental involvement and other related issues related. Parents' data are analysed in order to raise points for discussion and to complement and illustrate teachers' views in the main study. The analysis might not reveal a typical Brazilian PI pattern according to parents' views because the sample is rather small. Nevertheless the parents' views as discussed in this chapter, are very important because it suggests an interesting exchange pattern and obviously it does have a strong link with the main topic of this research.

The main study argues that a pattern of parental involvement types and practices that teachers feel they might be able to successfully implement in their schools (their readiness and potential for PI), may reflect the Brazilian teachers' climate for PI. However, it is also important to include parents' views and opinions in order to throw some light into the discussion of the teachers' study. It may illustrate further the teachers' choices and preferences for any particular PI pattern and may reveal important aspects of the teachers' climate.

Three different categories, named communication, help and involvement, which appear to be similar to what Epstein calls parental involvement types, group the information to explain how the parents, as a group, see their relationship with the schools and with their children (while being school pupils). The parents' opinions, attitudes and beliefs are demonstrated according to the framework created. The framework fully addresses the vast majority of the topics raised in the interviews with the parents.

4.2 - The opposing perspectives

4.2.1 - Level of involvement with schools

Parental involvement in children's education was regarded by this group of 21 parents as generally very important as well as highly useful in many ways and situations. Parents placed different degrees of importance to different forms of parental involvement according to their own needs, demands, availability, beliefs, and awareness of the opportunities they themselves and others may create to become involved with schools and to develop the relationship between the schools/teachers and families/parents.

The parents' opinions ranged from not being interested at all in becoming involved with their children's school and teaching and learning, to willingly contribute to school in all senses, from practical aspects like help with social events and fund raising, to help generate better teaching resources like a science laboratory, books for the library, text and book revision and helping children with school-related activities at home. The sample showed a variety of interests in as far as involving themselves in school. Parents also revealed that no matter how interested they might get in becoming involved with school matters, the schools had not shown any interest in having parents participation.

4.2.2 - The different philosophies

The different philosophies and beliefs of this small group of parents reflect the two main opposing theories of school and family relations:

A) - One perspective emphasises the inherent incompatibility, competition, and conflict between families and schools and supports the separation of the two institutions.

"it assumes that school bureaucracies and family organisations are directed, respectively, by educators and parents, who can best fulfil their different goals, roles, and responsibilities independently. Thus, these distinct goals are achieved most efficiently and effectively when teachers maintain their professional, general standards and judgements about the children in their classrooms and when parents maintain their personal, particularistic standards and judgements about the

children at home" (Parsons, 1959; Waller, 1932; Weber, 1974 in Epstein, 1987).

Although this perspective sounds a little old fashioned nowadays, some Brazilian parents suggested that the teachers' job should be done in the classroom and school rather than trying to involve parents with school education and classroom matters.

A parent believed that most parents would not know what to do in order to help the child with school-related activities. As far as her experience as a ballet teacher was concerned, only very rarely do parents get things done the way teachers expect. This parent claimed that only very seldom do they effectively help teachers with children's learning process because parents have no experience with formal school teaching.

Parents also argued that school represented the means through which children learn to become more independent. They strongly support this view emphasising that it is very important that children develop self-confidence, build their self-esteem and learn to be independent. This may explain why a few parents agreed that parents should not become involved with school education and the teachers' work. Issues like parents working in the classroom, help with homework or homework that requires parents assistance were very clearly related to children's process of becoming independent.

"I would like my children to become more and more independent. as children grow older they do not want their parents around all the time they want to do things their own way. I never check their homework. . I think they can do it and should be able to do it themselves " (Parent n° 1, school 9).

It was also mentioned that parents and schools/teachers have different tasks and that they should get on with them independently of each other. The parents unanimously agreed that their responsibility is their children's education outside school. This might be an indication of their unavailability for some PI types that require more dedication and closer contact with teachers and school. Some parents clearly expressed that they would not like to become involved with educational aspects of learning and teaching unless their participation was really needed.

There was however no indication that parents would not want to know about how teaching is done, teachers' teaching styles, school policies and children's performance in classroom. On the contrary, communication was quoted as essential by all parents specially those containing important information about those issues. The parents would like to see new forms of communication being developed with emphasis on informing parents of development and children's achievement, without however, expectations for developing a very close and intense relationship. They emphasise the need to be constantly in contact with each other to exchange information.

"I like to think that family and school have different tasks and as a matter of fact the relationship between parents and teachers can only develop up to a certain point, that is, in a very superficial basis. But this is not to say that we shouldn't talk, make known what we think see, maybe about something that goes wrong... and we need to exchange information... but we have to make sure we get our own job done first."
(Parent n° 1, school 9).

B) The opposing perspective to incompatibility of job description is the co-operative model:

"It emphasises the co-ordination, co-operation, and complementary nature of schools and families and encourages communication and collaboration between the two institutions. It assumes that schools and families share responsibilities for the socialisation and the educational development of the child. Teachers and parents are believed to share common goals for children that are achieved most effectively when teachers and parents work together. These assumptions are based on models of inter institutional interactions and ecological designs that emphasise the natural, nested, necessary connections between individuals, groups, and organisations" (Bronfenbrenner, 1979; Leichter, 1974; Litwak and Meyer, 1974 in Epstein, 1987).

According to Cremin (1976 in Melnick, 1991)) "every family has a curriculum" which implies that learning occurs at home too. This view is also supported by those who believe that learning begins at home. Parents engage themselves with and plan for some 'teaching' situations

since their children are young babies (Tizard and Hughes, 1984). Benjamin Bloom (1981 in Melnick, 1991) argues that families not only have a curriculum, but a teaching style as well. Bloom explains that since much of education takes place outside of school, educators must take out-of-school learning into consideration. Epstein's overlapping spheres (Epstein, 1987) illustrate these views. The two spheres - school and family - overlap when parents and schools meet to get to know and to share their views, objectives and responsibilities. The overlapping is expected to help promote children's school success. To know each other's "curriculum" and "teaching styles" and to share responsibilities are essential elements for fruitful partnership.

Some parents agreed with a joint-venture perspective, but they expressed that they did not know how to turn their beliefs into practice. The parents seemed to be unaware of the wide range of PI practices and of how their participation may influence teaching and their children's learning and performance.

"I can't see..... see anything else that we, parents, could do maybe to help teachers improve the quality of teaching, I don't know..... maybe to have a better relationship with us, I mean with all or most of the parents...". (parent n°8 , school, 3).

*"I can't really think of anything else they, the teachers and school could do to improve their teaching standards or children's performance
through developing a relationship with us, I mean parents.
 "(parent n° 6, school 8).*

This group of 21 parents expressed both set of opposing opinions. They believed it would be ideal for parents, teachers and children, if a relationship or partnership between the family and school was developed more openly and with clear objectives and procedures. They also emphasised that there is a number of problems related to PI that needs to be addressed. Parents believed that those problems were obstacles which were preventing them from having a stable relationship. There was a tendency to point at problems occurring at schools and blame schools and teachers for undesired outcomes, measures and attitudes and for the way things were taken at that time. Parents seemed to be unaware of their own contribution to those matters.

The data revealed serious communication problems (or lack of communication), difficulties in understanding each other; and misunderstandings among the school staff, the teachers, teachers and parents and also among the parents themselves. There seemed to be no consistency both parties' opinions, sometimes broken communication about important issues and no sign of clearly defined PI policies in the schools. This might be an indication as to why opposing perspectives were found and why parents were unaware of how they, school and children would benefit from a more open partnership.

Of the parents who would like to develop a relationship with schools in different levels: some would like to have a broader understanding about children's learning process; some were happy to provide the schools with practical help, some would just like it as it was but with more effective exchanges and improved communication, and yet some demonstrated no desire to be involved with school at all. The data revealed a pattern that may elucidate parents' position further.

4.3 - Parents/parents relationship in relation to PI

The parents discourse revealed an inconsistency of PI policies in those schools. The parents did not seem happy with the way schools addressed different groups of parents. The inconsistency reflected on parents' social behaviour in as far as communicating with one another and with school and teachers was concerned.

The parents did not seem to share their views and opinions with other parents or with school and teachers. Those parents who had unsuccessful attempts to discuss their concerns with teachers expressed their unwillingness to try again. Some parents expressed very strong feelings to other parents and often judged and criticised other parents (e.g. specially those parents who belonged to the 'Colegiados' (School Association, Governing Body) who were said to get special treatment). On the other hand, those parents of the Colegiado (Governing Body) argued that some other parents were not contributing to school in any way, missing parents meetings frequently and therefore would misunderstand messages from school and parents who were more involved with school matters. Yet absent parents were blamed to be always ready to complain

about school services such as the kind of assistance their children were getting specially when child needed special attention, teachers' performance in general, the way school contacted parents, and complaints about teachers' availability to the children in and outside the classroom and to the parents themselves were often heard.

The sample had two parents who were members of the Colegiados (Governing Body) and both presented different views from those parents who had never participated or become members of it. This raises an interesting point that falls back to the communication issue. Schools could not reach out to the whole group of parents. Information, as it had been provided until that point, was maybe too little, too infrequent, not clear enough and not friendly enough to invite and welcome parents to the schools. Open discussion situations seemed to have never been provided. Those who had the opportunity to work more closely with members of the Colegiados and members of school staff seemed to understand schools far better than those who were in the main stream form of communication.

Parents also expressed hostility with school discrimination between different groups of parents. Parents questioned the kind of help some parents were involved with in the schools. They claimed that there were parents who would do anything just to please certain members of school staff in order to get what they wanted and without taking any notice of what other groups of parents may think, want or find important. That is, some parents judged that schools would give easier access to those parents who usually comply with their rules (and hidden rules) and would not give the same opportunity to others who would not so easily accept the rules.

As mentioned above, parents did not seem to interact with other parents within the same school and therefore they tended to look at their own individual experiences to express their views in isolation. Opinions were expressed according to their own experiences and appeared to be detached from the context of the schools within which schools put an offer to parents. Rarely did they include other parents' views on their own individual judgements or mentioned supporting of other parents who shared the same views, or mentioned the participation and contribution of the schools in these disputes in order to clarify such points.

The fact that the parents expressed their ideas without manifesting a feeling of belonging to a larger group of parents with similar experiences within the school context might be suggesting that Brazilian schools' PI policies have not taken parents' demands, views and opinions in consideration or created an atmosphere to welcome parents. Brazilian schools, as suggested by the parents, may not yet be prepared to work more closely with parents and specially with those parents who had never expressed and shared their views with school and teachers but yet would have something to say if given the chance. Brazilian parents seemed to be reluctant to share their concerns and tended to shy away from school premises.

Parents who often keep their judgements for themselves or to a small group of people, are also known as hard-to-reach parents (Finders and Lewis, 1994). Brazilian parents seemed to fit this category not only because of opposing views from those of schools' but also because they tended to isolate themselves from other parents as well as from schools.

4.4 - Schools and parents - a feeling of disassociation and apartness

Finders and Lewis (1994) argue that until very recently, it had not been acknowledged that schools' views of parental involvement may differ from the views of many parents. Lack of good and effective communication may be to blame as the Brazilian parents study shows. School climate, as the way teachers and schools see parents, may also strongly influence that. If schools are not aware of parents' wishes and different views, PI policies may be wrongly designed and counterproductive attitude and behaviour may be established in both communities.

Having said that, it is clear now that the schools often do not succeed in addressing parents' demands if they do not listen to what parents have to say and if they do not develop different practices that address different demands. Finders and Lewis (1994) go on to state that schools as well as parents have a lot to learn from hard-to-reach parents since special intervention may have to be in place in order to reach out to all parents. Hard-to-reach parents' views and perspectives may greatly help to design more effective, detailed, complete and easy-to-read and -understand

home-school communication. Detailed information and planned contacts with such a group of parents would also address the majority of parents' demands and spread school information more effectively. Finders and Lewis (1994) argue that discussion about family involvement is often focused on what families lack and how educators can best teach parents to support instructional agendas at home. They highlight the importance of developing adequate strategies to approach families, especially for those who rarely contact school or teachers and claim that they never have the time for it. According to this group of parents, Brazilian parents and schools do not understand each other and therefore have not been working together. The foundation for PI policies is to understand parents' reasons, points of view, needs and demands. PI policies, as it is argued in this research as often determined by school climate, may reflect on parents' attitudes to school, teachers and consequently children's learning.

Parents' opposing and often confusing perspectives form a typical school scenario and instigate the creation of adequate PI policies to address parents' and children's needs. Watt (1987) states that 'not all parents can or will want to be involved in the same way: they need to find roles which they see as significant to themselves as individuals and to the benefit of their children' (p.97). As analysis indicate, Brazilian parents and schools differ in how much involved with each other they would like to be, and it suggests that parents disagree with each other in how involved they should be. The parents' analysis will show the different degrees Brazilian parents would like to become involved with Brazilian schools.

4.5 - Exchanging information and opinions - a difficult task for Brazilian parents

There were four main elements that all parents mentioned in their interviews. The elements were schools, teachers, parents and children. The group of 21 parents expressed their expectations to and opinions about themselves and all the other elements. Parents attempted to describe the roles of each element when reflecting upon the issue of PI in their own reality. Schools were seen as responsible for delivering good education and for establishing good contact with parents including effective communication. Teachers were mentioned as the means through which schools would deliver good education. Teachers were

extremely criticised and sometimes praised for doing the best they possibly could under the difficult conditions Brazilian state schools worked at that particular time. Parents often placed themselves in a weak position where they could not do much to change situations they were not happy about. The parents showed a big concern with the future of their own children as far as education is concerned. They were extremely worried about the quality of the school education their children were exposed to and how happy their children were at that moment. The relationship between the four elements appeared to be tangled and immersed in a troubled atmosphere. The majority of the parents had strong opinions about the schools and the teachers and the relationship between parents and schools as well as between teachers and their own children. The parents clearly expressed the need for more interaction between school and parents in order to become more knowledgeable of the school education.

Not only parents expressed their concern with their children's present education but they were also worried about long-term educational gains. Access to university is a hot issue for parents from when their children first start compulsory education and it remains just as hot throughout school years. Strong opinions about how schools should go about it was often discussed. University access is clearly a big worry for this group of Brazilian parents just as it is for all Brazilian parents regardless of their SES. School education in Brazil is expected to be highly oriented to university entrance exams and highly competitive from pre-school to secondary school as access to university is very much restricted to the very few who have access to 'very good' schools. The number of places in Brazilian Federal Universities is very limited and it is far way from meeting the national demand. Private universities also offer a wide range of courses but access is restricted to those who can afford to pay very high tuition fees. The debate about access to good quality education in order to guarantee access to university goes on in both sectors of education, state and public, and parents were very concerned with it. PI was also confronted with this issue. Parents would like Brazilian state schools to improve their services, train their teachers to perform better and inform them about their efforts to provide children with more stimulating lessons.

Although parents showed interest in knowing about what schools did for their children, the parents assigned themselves with a more passive involvement with their children's education. Passive involvement includes parents' opinions about school education, their expectations, but little exchange or input in order to help to fight for improved school conditions. It seemed that schools remained unaware of the parents' worries, concerns, wishes and needs. Passive involvement includes a partial, biased and self-centred attitude which does not include an exchange mechanism that guarantees the establishment of a commitment with improved education from both sides. Rather it includes criticism to other elements of the system. Passive PI reflects parents' worries, desires, needs, demands and opinions about their children's education but it lacks action towards effective partnership and desired results both in the school-parent relationship and children's performance and achievement.

4.6 - The exchange process

A potential for a very rich and active exchange process between parents and school was identified. Exchanges were being made at social, informative and practical levels inside and outside school since parents expressed their views about the schools, the teachers and their children. However this does not mean that a well balanced exchange process was taking place and an exchange procedure developed where parents and teachers would be available to each other. Parents had something to say about school, teachers and children; something to say to school and teachers, but rarely did they report to have accomplished it. When parents reported their attempts to talk to schools, much was unsuccessful and not satisfactory at all. Little has been said about feed-back from teachers on matters raised by the parents.

Effective teaching and the well-being of the children were both expected by parents and teachers respectively (see teachers' study). However, teaching was reported to be often poorly done and in many cases parents openly claimed that it was due to teachers' fault and unpreparedness to deal with the situation. Disagreements about teachers' styles were often the focus of the parents' discourses. Given that communication was reported as superficially done, it may be concluded that parents might have little knowledge about the teachers' styles apart from what their own children and others report to them. Parents' judgements may be

one-sided and inconclusive once the parents themselves reported that exchange at this level was lacking. From the parents' points of view, it seemed that they could not identify PI policies that include exchange of information and room for contributions.

The children, as they develop and grow, are influenced both by school and parents. Naturally, the exchange process is expected to accelerate because children's demands tend to change frequently and supply should accompany the process. It is then important that parents and teachers make sure suitable resources are used to promote children's development. It is important that exchange occurs as the parts involved deal with different aspects of education. Parents seemed to be aware of that but felt unable to do anything towards that.

In line with their children's interests, the parents expected schools to deliver adequate and relevant education at the right time of children's development just as the parents believed they themselves were doing for their children. Schools were then under constant pressure to move on to be more efficient in delivering adequate and effective education and yet report to parents about the educational developments. According to this group of 21 parents, it seemed, however that the schools lacked the most important tool. Communication was regarded as an essential instrument to get the exchange system going and inform the parents of the developments. According to parents, the timing of the exchange of relevant information in specific situations did not appear to be adequate. Demands and responses from both sides were said to be wrongly coordinated and often delayed.

Although the exchange system between school (and teachers) and parents was not working up to its full potentiality, the exchange process appeared to be very active but rather misused. This has led me to believe that the potential for parental involvement was definitely present. It is just a matter of identifying goals, interests, needs and demands and schools' preparedness to PI practices. The data gives indication that the parents-schools partnership has not been properly established yet but it also indicates that the Brazilian parents and schools made attempts to contact each other however unclear their goals were and despite the misunderstandings.

Epstein and Connors (1992) stated that "much like partners in business, partners in education must work hard to clarify their mutual interests in the children they share. All of the parties in a partnership must work to develop trust, organise their responsibilities, and appreciate each others' investments and contributions. Strong partnerships develop over time, as partners exchange information and work together to assess their strengths and needs, set goals, plan projects, implement practices, evaluate results, celebrate successes, and revise activities to assist their children to succeed in school." Brazilian parents acknowledged that but in a rather confusing and isolated way.

Epstein's overlapping spheres (please, refer to chapter 2 - review of literature where diagram of overlapping spheres is shown) move back and forth according to the needs, demands, experience and philosophies of family and school and common practices. The spheres constantly move under the forces of time, levels of education of the child and age of children. The two spheres operate in two levels: the "institutional level interactions involve all members or groups within schools, families, and communities; individual interactions involve one student, parent, teacher, or community member" (Epstein, 1996). Breaking these two institutions down - family and school - into its components and characteristics we find parents, children, teachers and other school staff and their mixed work styles and cultures. The culture of each individual sphere and individual element is manifested by the spheres as forces and may determine the extent of the overlapping. Similarly, in the exchange process identified by the Brazilian sample, a movement towards each other is present. However parents seemed to be sceptical about school willingness to move towards common grounds and start a partnership in the terms Epstein describes. Parents perceived common grounds in three categories: communication, involvement and help.

4.7 - Communication, Involvement and Help

The data revealed three categories to describe parents' views. The categories were communication, involvement and help.

Involvement was clearly marked as distant from their reality and understanding. The data suggested that involvement is yet to be developed. It was largely regarded as beyond parents' interests and

sometimes beyond their availability. The parents found it very difficult to identify ways that they could engage themselves with teaching- and learning-related issues. For instance, the idea of sharing with teachers their concerns about every-day classroom routine and activities was new to them. Parents expressed that this had never been considered as their responsibility or regarded as possible. Involvement with other aspects of school, such as the governing body, includes fewer parents and those who were involved with governing body claimed to have a closer relationship with school and teachers.

On the other hand, help was the word to describe their role in the process of their children's school education. Help was very much related to serving the school - that is, help schools to get the resources needed so teachers could dedicate more of their time to the children, planning, teaching and assessment. Help rather than involvement seemed to be more feasible for the parents, more related to hands-on work and within what parents see as within their abilities and skills.

Communication in itself is a parental involvement type in Epstein's typology. Parents saw it as a tool that would mediate in the other categories. In this study, the parents mentioned the ways they have been informed about school in general and also how other issues were very much linked with the way things had been put to them.

Communication exchanged between home and school seemed to give rise to many questions that were often left with no clear answers. The group of parents felt they were not communicating well with schools. The parents claimed they were not having very enlightening conversations and often language misunderstandings - e.g. the use of jargons - accrued and very frequently schools have left them in the dark.

4.7.1 - Involvement

Epstein and Connors (1992) have suggested that the term "school and family **partnership**" is a broader term and better expresses shared interests, responsibilities, investments, and overlapping influences of families and schools in children's education. They argue that the two institutions - school and family - share responsibilities for children's education and that both are needed to support children as "students".

They also maintain that school and family partnerships recognise that leadership is needed from schools to help all families obtain useful information that is not available from other sources.

On the other hand, the term parent **involvement**, according to Epstein and Connors (1992), refers to those things that some parents do on their own by their own invention and initiative. They argue that the "know-how" may be social class-based or experience-based, relying on parents' skills to locate information they want and need. They also suggest that the term "home-school relations" sounds informal and conversational, rather than planned and comprehensive.

Involvement, unlike Epstein and Connors (1992) have described it, was seen as the ways through which parents are invited or volunteered to act as the teachers' partners in the process of teaching. The teaching-related instructions for children may take place at home and/or at school. This category also includes activities which parents spontaneously do to support children's school performance, parent-child interaction when assisting or promoting learning, and those activities which are previously planned to monitor students' classwork and/or homework. Parent's activities that are teaching-related, such as those mentioned by some parents like the implementation of a sciences lab, books selection for the library, books and texts revision to be used as classroom resources, programs and projects developed to assist parents in helping with learning activities, children and teachers and educational process.

The category named **involvement** seemed to be related to intellectual work. As in any intellectual work, some training and instructions have to be provided in order to achieve improved and desired results. In this category, teachers, parents and children would be engaged with intellectual work like teaching, guidance and assistance and learning respectively. From the parents' point of view, it will usually require a preparation period for training and instructing, followed by regular contact with school and frequent feedback. As it has been pointed out in the literature (Hornby's model for PI, 1990), some PI types involves more parents than others. Similarly, Epstein and contributors have also stated that PI with learning is found to be a more complex PI type than the other types in Epstein typology. This category, because it requires training for the teachers in order to be able to instruct parents on how to do it and

close and continuous monitoring, may be the most challenging one for any school in any context as well as for parents. In Brazilian schools, this particular activity has not attracted parents at least in the first instance.

Involvement was regarded by this group of parents as beyond parents' interests, availability and maybe abilities (as they themselves judged it to be). The parents found it very difficult to identify ways they could be involved with curriculum-related issues. For instance, the idea of sharing with teachers the responsibility of teaching, however small their contribution may be, such as hearing children read in classroom or at home, or commenting on an area of the curriculum, and wherever the 'teaching' may take place, was unfamiliar to them. They expressed that they had never thought about it, had never experienced it before and therefore it had never crossed their mind as something feasible and achievable. The parents also mentioned that schools and teachers have never raised that issue as a possibility, much on the contrary, parents have never been invited to participate in that way.

Involvement with school education, as parents saw it, can be sub-divided into two sub-categories: - those who do not want to be included in the process of teaching and learning and are actually reluctant to the idea (it includes those parents who have helped their children with assignments and homework without schools' or teachers' request, but would not like to go any further than that); and those who want to be actively engaged in school activities at any level. A third sub-category could be added to include those who cannot see what (and in some cases what else) they could do and how they could do it to help improve or maintain the quality of both teaching and learning regardless of how available they might be for school.

4.7.1.1 - Those who are reluctant to involvement

The first impression is that those parents, regardless of their social and cultural backgrounds, tend to see their obligations as different from the school/teachers' obligations as far as children's school education is concerned. Parents take the welfare of their children as their own responsibility as well as to get their children ready to school. It seems that getting children ready to school means making sure that children attend school and get done what they are supposed to do and as they are told to.

This view implies a non-involvement with schools' typical obligations as the parents saw them.

"I don't think I could do what school is supposed to do for the children, which is to teach them stuff I should be doing other things, parents' stuff" (parent n° 16, school 6).

"I don't want to become involved with school as far as teaching and learning are concerned and classroom matters, or even with homework. I wouldn't like to get involved with the pedagogical aspects of education, those are not for me anyway . . . Family and school have different tasks. I don't think the parents can help the teachers, . . . parents don't always get it right, because they don't really know what and how to do school-related things." (Parent n°1, school n° 9).

"Teachers should do their job and the parents should never interfere. I don't think parents should become involved to the point where they are actually allowed in the classroom, doing the teacher's job" (parent n° 9, school n° 7).

The vast majority of parents in this sample mentioned that they would be more likely to engage themselves with other aspects of schooling rather than the curriculum and the teaching/learning processes. Although parents seemed worried with the quality of teaching in those schools they did not show any interest in becoming more knowledgeable about what could be done to change or improve teachers' abilities, teaching styles and school programs. The parents also expressed concern with the schools' and teachers' dedication and motivation towards their job but only very rarely did they extend their criticism into finding ways to remedy the situation. Suggestions were occasionally made to me but very little was said about those suggestions being reported to school or questions being directed to teachers, pedagogical team or the head-teacher. Parents reported that hardly anything had been done towards addressing the problems concerning improved school education parents were occasionally raising. Parents who mentioned they had approached school or teacher in the past for anything concerning teaching and learning were the ones whose children experienced some kind of learning or behavioural difficulty (about 25% of the parents). Those parents reported that little feedback was given to them by the school team. Consequently,

parents questioned teachers' commitment to their jobs and to their children.

"Sometimes I do get myself wondering about how well the teachers are doing their job and whether their methods and styles are the best and most suitable . . . " (parent n° 1, school n° 9).

"The teachers have been meeting fairly often now in order to have more time to up-date their knowledge and improve their practice. The children, therefore, have to leave school earlier on those days. I don't like that and I have doubts as to whether they are using this time effectively. My point is, I'm always wondering about the teachers' performance . . . their ability to teach, their habits and attitudes, . . . in truth, if they are really competent. (parent n° 2, school n° 9).

4.7.1.2 - Aspects that influence lack of involvement

The last example above summarises parents' views about in-service days and also touches the parents' dissatisfaction with teachers' performance. In addition, it reveals parents' scepticism towards teachers' and schools' commitment and dedication to what they are expected to do. The data could be split into two groups of parents according to their views about the current teacher their children were with. They were either happy or unhappy with the teachers. A number of parents (about 75%) were very suspicious of the teachers because they have had unpleasant experiences in the past with previous teachers as well as with the present teachers. Many times, parents felt that those unpleasant situations happened due to misunderstandings that occurred both in the classroom with their children and between teachers and parents. Parents failed to establish good contact with teachers and therefore hostility built up. Frustration was also mentioned for not being able to sort problems out in a satisfactory manner for both parties and specially for the children.

Some parents acknowledged that the teachers can sometimes get very busy in the classroom specially because of the number of children under her responsibility. As a result, the majority of parents felt that important moments for learning were being wasted and favourable situations missed as far as individual and small group attention and homework

corrections were concerned. Hence, the children were believed to miss a great deal of good opportunities for learning.

"I would like the teacher to correct the homework properly . . . I mean, if homework has to be done on a daily basis then feedback should also be just as punctual . . . Teaching has been really poor . . . individual attention should be the teachers' aim, so significant improvement can be noticed both ways . . I mean in the teaching as well as in the learning . . . in the children . . . I think I would have expected the teachers to be more dedicated and get the job properly done . . . " (parent n° 12, school n° 7).

Parents thought it was the school's responsibility to do their job as well as possible, improving their practice steadily in order to meet children's needs and parents' demands. Parents expected school to prepare the children for adult world through quality teaching and adequate learning situations.

The majority of the parents expressed their concern with the gap between what children experience at school and what parents expect their children to experience and get from school. It seemed that communication misunderstandings and an acute lack of knowledge of the aims of the school and educational process and the kind of social activities children would be exposed to and encouraged to do at school and at home may be to blame. Tizard (1981) research concludes that many of the problems between parents and school often arise because of parents' ignorance of educational aims, practices and priorities, their lack of interest, and the communication difficulties they may face when meeting teachers. Tizard claims that the reasons for that stem from teachers being insufficiently explicit and sensitive when communicating with parents, who, in turn, are sometimes assumed to be uncaring. Epstein emphasises that school should take the initiative to inform parents about school because only then parents may contribute positively. Brazilian parents, when presenting their views about school and teachers, may have been biased in their judgements because it seemed they did not clearly know the school rules, methods and goals. As it was mentioned before, parents failed to report their views and opinions to school. Parents expressed what they thought school should be doing in particular situations they and their children have experienced but never particularly criticised school rules as such. Rather, teachers' attitudes to themselves and

children were heavily mentioned as to be the reason why things might have gone wrong.

A parent spotted a problem that may be a consequence of lack of communication or misuse of information, and unawareness of school policies. This parent seemed to disagree with teachers' styles to deal with children at school and parents. She explained that children should be educated according to adult points of view, that is, she believed teachers sometimes acted according to children's desires, disregarding (and as in her own case, not knowing her views) parents' opinions and views and sometimes even their and teachers' own duties. This parent believed children should be respected but not always encouraged to take important decisions about things they have not been prepared for or decisions that are other people's responsibilities. This parent believed children should be always guided and that teaching should not be planned from what children like. Rather, teaching should be planned according to children's abilities and therefore may be planned in such ways that children may be pleased and find it fun. To have fun while learning, according to this parent, is fine as long as discipline is not forgotten. Discipline in the classroom and outside the classroom was a great concern for this parent. This parent found it hard to understand that children were left unattended in the school premises and little intervention was carried out during breaktime. During that time children could do whatever they wanted. This parent was pointing to a very important issue concerning parents' and children's disagreements and early adolescence problems. This parent wanted to explain to teachers what she thought her children liked and needed but also what she, herself would like their children to have at school. The teachers were believed to be often mistaken when they assumed that they were acting on behalf of the children and according to what they thought the children's needs were. This parent claimed that the teachers often believed that they knew the children well enough to be able to decide which course things should take without any outside (that meaning parents') collaboration or intervention.

This example shows that parents were failing to get their messages through and teachers were failing to hear parents' views and opinions. The combination of parents' attempt to get their message/points of view through to teachers and teachers' confidence in their job performance and knowledge of the children were apparently mismatching and often

misinterpreted. The lack of well-designed communication methods may be to blame as parents and teachers were not exchanging information at all. This would not be so worrying if parents did not express their anger at and disappointment with school and teachers, especially because these parents (about 75%), who did try to exchange opinions with teachers, had children who had experienced some kind of learning difficulty or experienced difficult moments at school.

The example above shows the *broken* exchange system very clearly:

- a) the parents: willing to provide useful information about the children, share their expectations and experiences and willing to understand the process of school education, expected school to let them know all about it;
- b) the teachers: although they were reported to be unwilling to share with parents their experiences and provide useful information, parents claimed that the teachers' message was getting through to parents, and teachers were not ready to interact with parents.

"Parents' frame of mind definitely differs from children's . . . I mean, our expectations are different from the children's, I'd like to let the teachers know this, my views on this . . . what children like and want, we, parents, also know well The teachers sometimes get us wrong in not seeing what we mean they think they know the children well enough don't need to know more about the children then it becomes really hard to keep a dialogue We may have something to add that can lead to positive results like better behaviour in both classroom and home" (parent n° 11, school n°7).

A high percentage of parents (almost 100%) reported they did not mean that they wanted unlimited participation in classroom-related matters, unlimited say on how teachers should be doing their job or even unlimited access to school or even in practical issues and decisions at school, but rather, what they would like to have is an unlimited access to teachers so as to be listened to whenever needed and respected as a parent and responsible for their children too, and as far as providing more information about their children and about the parents themselves was concerned. It seemed that parents were in need of comments and information, that Broadfoot (1989) called significant, factual, positive,

succinct, broadly based, constructive, related to learning goals, achievement oriented and free of speculation and able to be substantiated. Broadfoot (1989) reported that a study carried out in New Zealand about parents' views as to the information they would like to receive from teachers included exactly the same kind of information. Broadfoot (1989) adds that 'if every teacher had that list pinned up on his or her desk we would probably see a marked improvement in terms of the reporting that currently goes on to parents (Broadfoot, 1989, in Wolfendale, 1991). Communication will be further examined in this chapter.

The vast majority of the parents stated that they tried to visualise their children's interests in the long term and start to plan for their future as early as possible. They unanimously agreed that their children should carry on with school education in order to guarantee a better future specially with regard to being able to have access to university. This clearly showed the parents' positive attitude to school and their belief that successful schooling will lead to better chances in life. This attitude may be translated as an indication for a possible partnership (as in Epstein and Connors's concept) and as an attempt to share their responsibility with school as well as to link each others' efforts in the education and socialisation of the children. Nevertheless, this finding does not conclusively demonstrate their interest in becoming involved with the educational process itself as many parents (75%) so clearly stated their position against it. The parents wanted reassurance that their children were given good quality teaching for the acquisition of life-long learning skills and fair opportunities for success in future. They would like to be assured that their children were getting the best and that the schools were working towards improving teaching and teachers' performance in order to enable effective learning to take place. Again, this may be interpreted as a step forward to the understanding of school aims and targets.

4.7.1.3 - Reasons for not getting involved

"My main concern is to do with long-lasting learning: is my child learning well, being well prepared for the next stages of education, for example, will he be able to sit university entrance exams successfully? Has he had a good start so far?" (parent n° 12, school n° 7).

*" I don't want to be involved with teaching, but I like to help school
 . . not with teaching , . . I do help my daughter, you know, she is a bit
 lazy and she's got to be pushed sometimes but I couldn't teach, I
 don't like it anyway, I don't think I could do it well . . . But I'd certainly
 want to make sure my child is getting what she needs" (parent n° 5,
 school n° 8).*

And a parent who is also a primary teacher said:

*" Every time we had the parents in the classroom, we noticed that the
 children's behaviour changed . . . I don't think it had a positive impact on
 any of us and specially not on the children. . . . I think parents should
 only do things for school festivities, or fund raising . . . things like that."
 (parent n°6, school n° 8).*

A reason given for not getting involved was the parents' fear of failing in helping their children with school-related activities and their lack of confidence in their teaching abilities. Most of the parents had tried to help their children with homework or other school-related activities at home at some point and many continue to do so. Some do not monitor homework but check daily whether it gets done.

*"It's hard for me to understand the modern teaching methods . . . I've
 tried to, but . . . , any way, I don't think my daughter needs my help,
 she doesn't really need me to follow her that close . . . " (parent n° 17,
 school n° 4).*

*"I think homework should be for the children only. . . Maybe because I
 don't feel able to help my children with school tasks Although I'm
 usually interested in reading his school work, I don't feel confident to help
 my children do it. I wasn't a very good student myself. That's why I feel
 the school should take full responsibility for school education and do as
 much as possible to help children through, specially those who have no
 motivation for it. If I were to do something, I'd need lots of advice and
 guidance, even though I don't think I could help anyway. Particularly
 maths, I just can't do it . . it requires very sophisticated and complicated
 skills . . . (parent n° 14, school n° 6).*

Trying to help their children at home is actually the most common activity parents do as far as **involvement** is concerned. This has also proved to be popular among this small group of parents. Tizard et al (1981) made an extensive study of parental involvement in seven nursery units. They showed that helping the children at home was the most valuable and popular activity that the parents really preferred. This finding was also stressed by Tizard's (1984) later study where it was concluded that home provides an effective learning place for children because of its varied opportunities to explore the world around them. Epstein (1991) showed that parents tend to help their children more frequently during the first years of elementary school decreasing considerably their amount of attention to their children's school activities as their children grow older and become more independent. Similarly, Stevenson and Baker (1987) found that parents are more involved in school activities if the child is younger.

The parents showed great concern about their children's school education. It is worth noting that they still involved themselves in school education matters, that is, parents welcomed and appreciated teachers' efforts to keep parents informed about and aware of children's needs and progress.

Another common reason used by the parents (which was about 62% of the sample) for not getting more involved with school or school work was their working hours. They claimed that their working hours were not flexible enough to allow them to go more frequently to school. Timetable was reported to be one of a number of other obstacles to **involvement**. Some of these parents were not so reluctant to school involvement but as their work schedule would not allow active participation in school matters they did not show any commitment to school life. The parents regarded this reason as a barrier that they simply could not do anything to change that situation, and that it prevented them from doing more to school and their own children.

" I couldn't possibly be involved with school . . or with activities at school because I work full-time and my hours are not flexible at all, I mean I can't go to school unless I'm given a notice much in advance . . . But I also believe that each one of us should stick to our own job and let the others get on with theirs. I think that the school has its own way of doing things

and, I would like to believe, they know what is needed to be done." (parent n° 13, school n° 7).

"Although I try really hard to keep in touch with my child's school, . . it hasn't been possible to help them, the school . . . I work full-time . . . (parent n° 12, school n° 7).

" I work full-time and I've never been able to go to school in school hours . . I don't think I'd be of great help anyway because I can't really commit myself other than supporting school in whatever they do. I try to do what has been asked . . . but, I'm self-employed and I couldn't possibly afford to give some of my working hours to school." (parent n° 15, school n° 6).

4.7.1.4 - Those who welcome involvement

There is enough evidence now that parental involvement, encouragement, activities, and interest at home and parental participation in schools and classrooms are important and may positively influence achievement, even after students' abilities and family socio-economic status are taken into account (Epstein, 1985, 1992). Epstein (1990) argues that involvement at both levels - at home and at school - also helps parents to change their own behaviour towards schooling, school itself and parents' styles at home. Studies in the UK and USA have shown that parents would like to know more about what goes on in their children's school life and get more detailed reports on school achievement and performance. Even more hard-to-reach parents were found to be interested in at least knowing what their children do and learn at school (Finders and Lewis, 1994). Brazilian parents also manifested that wish of being informed about school.

Like other studies have shown, this data also shows that the majority of the parents, despite their social and economic background, want their children to have access to good education and to succeed in life. These parents do keep an open eye on their children's school-related activities at home. Although the parents reported that they did not know whether they were guiding their children according to the teachers' style and desire, they stated that they liked to do it and felt it was their responsibility to make sure their children were keeping up with their school obligations.

Even if these parents were only checking the homework from time to time, they also reported that although they did it only occasionally, when they did they did it very seriously. Very few parents, about 10%, did not check their children's homework mainly because they believed their children were doing very well and therefore it was not necessary to do so. Another small group of parents, about 15%, reported that their children did not like them peeping in their school bags, books and tasks so they only did it very occasionally so as to avoid unnecessary confrontation with their children. However, the whole group of parents reported they would respond positively if school were to provide them with seminars-like occasions to explain how and what the teachers and children do at school and how to influence and encourage their children to work hard, to do their best in school and stay in school until they complete secondary education. The parents' general worries about their children's school education, like homework completion, performance and achievement, have then been proved to be a universal concern.

"I think a parent should help their children with homework at home, not at school. Parents should be always around to help the children, if they need to We should be available for school-related activities that are done at home, like homework and exam preparation, so when a problem arises you'd know why . . . I do check homework, I can give my child individual attention . . . I do a lot with him at home." (parent n° 8, school n° 8).

A very small percentage of this group of parents, around 13%, expressed their interest in becoming further involved with school-related issues and activities at home and at school. Apparently, the schools have not yet organised programs that aim at assisting parents to help children with school tasks. One parent suspected that her child's school was actually trying hard to attract parents' attention to school education through activities that require parents' assistance, and through inviting parents for frequent parent meetings.

"Most of the activities my boy has had lately, require my attention in some way. I believe this may be a way that they are using to get parents' attention . . . I mean parents' attention to school education. I think they want us,

parents, to interact with our children more closely at home and encourage them to value school education." (parent n° 14, school n° 6).

Among those parents who would like **involvement** only one parent stated that she would be prepared to volunteer to help school set up new teaching resources like a science lab, or do revision of texts and books and give the teachers useful feedback. This parent was a biology university lecturer, who was very much interested in helping state schools succeed and provide good education and equal opportunities to all.

" I truly believe that by having my children in a state school I'm giving it a chance to convince me that they can do their job well. I want to believe that the government is actually able to provide the right resources for good and effective education. I could contribute a lot for this process, for the improvement of our schools. I could be used in many ways, such as for the installation of a science lab, to help to select books for the library (that is very and extremely poor in all state schools at the moment), do book and text revision for the teachers (resource books that are being used are appalling not only contentwise but also grammar mistakes), exchange ideas with the teachers about teaching material, or even help to set a balanced menu for the children I'd be willing to do that for free Unfortunately, the school hasn't been open enough to have parents, or maybe me, helping that much . . . It's been hard to convince them that I want to be part of the process of educating my children and other children too, (parent n° 2, school n° 9).

Parents, whose children were facing some kind of learning difficulties, would be promptly available to school in order to be able to help their children more effectively and to facilitate their learning process through adequate activities. They were desperate to help their children succeed at every step of the way. They would also like to be able to understand why things have taken the way to failure and desmotivation instead of being stimulated to learning. They would also like to meet other people who have been through similar experiences so as to share and exchange ideas.

"I'm a very active person, I mean I do lots of different things like running my own business, do volunteer work for the homeless children, look after my own boys and the house and still care for homeless children on a temporary basis and even as a foster parent from time to time. But I still

feel I could do more for my son who is a slow-learner and has had problems continuously, if the school gave me a green light to go ahead and have real access to school and classroom. He needs more guidance, more individual attention and that unfortunately he doesn't get, there . . .
(parent n° 18, school n° 4).

The parents' discourse reflects Epstein's PI types 3 and 4. Both types rely very much on schools' initiative to meet parents' expectations, demands and wishes. Type 3 is described as *volunteers* and it refers to those who assist teachers, administrators, and children in classrooms, parent rooms, or other areas of the school, assist children at home, and those who come to school to support student performances and events. Parental involvement in *learning activities at home* is type 4 and it refers to parent- and child-initiated activities developed at home, and teachers' ideas or instructions for parents to monitor or assist children at home on learning activities that are co-ordinated with the children's classwork or homework.

Homework is widely used in Brazilian schools at all levels of education. The schools included in this sample seemed to use this practice widely. All parents mentioned homework in a variety of ways. Parents reported that they checked on homework regularly and some said they got to know what their children were learning and doing at school through homework. Homework checks were sometimes done and assistance frequently given, but parent-initiated activities that were related to school work were not mentioned. It is unfair to affirm that parents did not do it at all, but there was no indication that they provided their children with planned activities that would reinforce school education. No parents, though, mentioned any kind of school-related activities that they developed with their children at home except for one case (see example below).

Most of the parents, except for one or two parents, reported that they did not want to engage themselves with school-like activities that are related to teaching but they would like to know about it. About 60% of the parents reported that they would look for information about their children's school education from time to time because they found it important to know about it. They reported that they have always managed to get to know what they want to know about what goes on at

school, either formally or informally, but never mentioned involvement with curriculum-related information. Although they like to know about what children learn, they did not seem to be interested in spending time with their children while children are studying. 90% of the parents stated they would not like to join in the classroom during school hours.

It seemed very rare that parents intentionally planned to discuss or exchange ideas about school or to explore themes that children had been studying and exploring at school. Doing activities that involved reading and writing together was mentioned just once. It looked as if parents were unfamiliar with these kinds of activities and also unaware that they may be already doing this kind of activities in an informal way in their everyday family life rather than doing formal reading and writing teaching. In addition, there was a certain feeling of insecurity, fear to make mistakes and lack of information on how to stimulate a child to interesting and challenging activities except for one parent who felt she was already providing her children with adequate environment and material. On the other hand, it might as well be that parents simply did not want to be involved that much with school.

" As a mother, I usually say that mothers play a very particular role in our children's life. Having said that, school performance, I think, is very much related to what the children get from home, in terms of support. Having good books around and by using them, the children get the habit from you, I make challenging activities available to them I think all these efforts help a lot. My daughter is doing brilliantly, and I think I kind of triggered her success because I'm aware that they need support at home . . . then, the children can really see the link between what they learn at school and what they can do at home . . . use what they learn at school and vice-versa". (Parent n° 19, school n° 4)

Studies about parent involvement with reading (Wolfendale 88, Hannon, 89 etc.) have shown that parents, if well informed and properly guided, do help their children improve their reading abilities through reading with and for them at home. Those activities did not take much of parents' time and parents reported that they were very pleased to see that they could make a difference in their children's achievement, development and interest in books. Unawareness of the importance of parent and child interaction to enhance children's reading skills may impede the

development of PI practices that involve learning activities at home. Brazilian parents, with a few exceptions (10%), did not seem to be aware that those situations help their children to acquire those skills. Brazilian teachers, on the other hand, may not be encouraging parents to do so.

25% of the parents population reported to be prepared to participate in programs that include parents' assistance and involvement in children's learning process. The analysis also shows that those parents whose children were having some kind of learning difficulties would like to become more acquainted with the ways they could help their children succeed in school. This confirms other studies findings about parents' efforts to help their children with special needs to overcome their learning difficulties.

Studies on special education showed that parents can be very effective, helpful and supportive in extending the work of teachers and school at home. Strategies may be specially created for parents to assist their children with suitable learning activities for different kind of disabilities that are connected with the children's classwork. Those strategies may be created according to context, children's needs, abilities and talent and obviously within parents' abilities.

A small number of parents showed some interest in becoming involved with curriculum-related activities in the future. Hornby's model shows that the extent which parents would like to be involved with certain PI practices will vary. Practices that need more teachers' time and expertise (such as in learning and teaching) may involve (and attract) fewer parents. Or, maybe parents may feel intimidated by those practices that involve more of the teachers' time and expertise due to cultural and social differences between parents and teachers and among the parents themselves. The analysis did not clearly reveal the reason why most parents felt that way, but there was indication about feeling insecure to help their children with school learning.

There is evidence that parents from all backgrounds feel prepared to spare some time to assist their children's with school-related activities and homework. There is also evidence showing that when teachers who are committed to working with parents and to help them, parents from all backgrounds can be involved productively (Dauber and Epstein, 1989,

Epstein, 1986). Epstein and Dauber (1991) also argues that the attitudes and practices of teachers are important variables to whether and how parents become knowledgeable of school matters and successful partners in their children's education. Teachers attribute parent involvement patterns to the strategies they did, or did not, use throughout a particular academic year (Epstein and Becker, 1982 and Becker and Epstein, 1982). On the other hand, Lareau (1989) argue that 'teachers ask for parental involvement; social class shapes the resources which parents have at their disposal to comply with teachers' requests for assistance' (p.2), and that social class has a powerful influence on parent involvement patterns.

Both arguments are strong and play a decisive role in PI policies. Teachers' culture and training to PI as well as parents' social class certainly help to determine the course of PI. Brazilian research argue that teachers' social class also influences community and school relations and children's performance level (Vianna, 1993; Ott, 1994). It seems common that disagreements between parents and schools and different points of view occur in Brazilian schools (Haddad, 1987) especially in the state sector. In Brazilian schools it might be that both arguments are applicable. From the parents' point of view we may conclude that teachers have not developed PI policies which promote working closely with parents especially as far as assistance to learning and teaching are concerned. School climate /teachers' culture doesn't seem to have been shaped for that. In another words, Brazilian teachers' PI pattern did not include a variety of practices. On the other hand, it may be that parents did not have the resources to comply with what teachers might have expected. Brazilian research points out that Brazilian schools have worked according to rules dictated by dominant classes (Bertoluci Ott and Moraes, 1994) and therefore only rarely do they meet working- and lower-class parents' demands and needs. Similarly Bourdieu (1977a, 1977b; Bourdieu and Passeron - 1977) argues that schools draw unevenly on the social and cultural resources of society. Bourdieu does not examine the question of parent involvement in schooling, but as Lareau (1989) states his analysis points to the importance of class and class cultures in facilitating or impeding parents' negotiations of the process of schooling. Nevertheless, what analysis has suggested, according to parents' views, is a mismatch of information, a lack of mutual contribution between parents and teachers and an obscurity of teachers' and parents' real desire to promote PI.

4.7.1.5 - What else could be done

The parents have reported that they have always tried to make sure their children were progressing well with school-related activities, and that they have always been concerned with their children's school performance and achievement. Parents whose children were not doing so well, wondered why their children had failed to succeed at school. Parents reported about fragmented information that did not fulfil their demands. The establishment of a productive dialogue with school and teachers proved to be difficult and often turned into misunderstandings and arguments.

It is known that the majority of parents from all kinds of backgrounds welcome some kind of information about teaching methods, teachers' views about their children's progress, teachers' styles in relation to what the children are supposed to learn. The majority of parents (90% - "Parents should talk to their children about what they do and learn at school") also reported that they would like to be able to discuss with their children their school experiences in order to follow their children's development.

The parents reported that they usually get engaged with home activities that ranged from homework checks to informal talks about school friends, social news from schools and festivities. It seemed unlikely that parents would ever get any further involved than that with learning activities and school tasks. That kind of parental participation, if it was ever to happen, seemed to be left to school's initiative and future parental involvement policies.

Epstein (1989) and Bastiani (1992) have both suggested that parental involvement should be school's initiative because the parents generally differ in how much they know about school and its educational aims, targets and policies as well as children's, teachers', and parents' needs. This data confirmed this view specially with regard to the small percentage of parents (10%) who felt able to develop curriculum-related activities with their children on their own. The parents failed to identify practices that would help them to be effectively involved with school

activities and their children's education. The parents would welcome any school initiative to keep them informed about their children's school education and to help them to understand school's aims and targets.

The parents clearly stated that they would not know what else they could do to help their children, the teachers and school and to collaborate with the teaching/learning process other than attending parents meetings and schools festivities, check homework regularly and contact the school when necessary or if their children had any problems. It was clear that this group of parents, except for a very small percentage, would require close guidance and assistance and consistent feedback if they were to be involved with school education. The parents themselves stated that if this kind of involvement was ever to be introduced they felt they would really need close guidance. In addition to that, as the parents themselves suggested, the teachers would have to make themselves more available and committed to the development of programs that involve parents more systematically and broadly.

" I would like someone to tell me how to do things at home that could help my child become more interested in school . . I really would like to help, but I'm hopeless. I need guidance to be able to help him, I wouldn't know what else to do, I've tried to assist him with homework . . . but I don't know if it's helped him at all." (parent n° 16, school n° 6).

" Maybe the school should be doing more for us, parents, as well, maybe explain what the children are supposed to do and learn, just tell us about these things, keep in touch more often and really seriously. . . . So we could do more for our children at home and the school." (parent n°20, school n° 4).

". . . . I'm actually happy with the school at the moment . . . I wouldn't know what else to do , I mean , what else the school could be doing for my son, or in order to get me to help them. " (parent n° 10, school n° 7).

The parents showed little knowledge about the ways they could get involved with their children's school life in general. Very little was mentioned towards supporting their children's school education both at home and at school. For instance, reading and writing with the children at home (both formally with school books or work or informally using

children's magazines, writing shopping list or even games that require those skills) was never referred to as a common practice among this group. It may be that the schools have not themselves yet identified the ways in which the parents could become more acquainted with school work, or suggested to parents what to do to stimulate learning in situations other than in classroom or even further motivate children to discuss with their parents their experiences outside family context. It may as well be that the parents themselves have not been able to express to school what they expect from school and would like them to do.

Active parental involvement in the children's school work appeared to be also very much related to children's development. A great number of parents mentioned that parental involvement (as they see it) could lead to children becoming more dependent on parents' help and assistance to complete their school work and other tasks. To foster children's independence and self-esteem, getting children to participate more actively in the classroom, getting children's concentration-span extended, increasing children's interest in school activities are issues regarded as crucial points to encourage children to be more successful, rather than getting the parents working alongside school and teachers. The parents were unable to see their participation as something that would not necessarily be related to doing things for the children.

"Children should learn to become more and more independent and I don't think, as a teacher as well as a parent, that teachers should ask parents to help their children at home either with homework or parallel teaching, I mean, try to complement school teaching at home. Parents should follow closely their children's development, keep an open eye on them but never try to do school work with them or for them. " (parent n° 6, school n° 8).

This parent has been working as a primary teacher in the same school her two daughters go to. This parent suggested that other teachers that she works closely with also share her views. However, this parent mentioned that parents may help in other ways. Similarly, some other parents felt that their children like to see their parents around engaged in school activities. That was where help was most stressed.

4.7.1.6 - Summary of the category *Involvement*:

- largely seen as separate issues:
 - school roles
 - parent roles;
- usually poorly considered and rarely thought through;
- usually not regarded as generally possible
- no involvement in the classroom.

4.7.2 - Help: Parents as school helpers

Help, according to parents, was very much needed and welcome in those Brazilian state schools. The current lack of resources is so acute that anything that may be offered to schools in terms of raising money and generating better resources is appreciated. However, that is not to say that parents were having easy and unlimited access to schools. The parents in this sample, suggested that school staff were often suspicious of offers that may have any influence on their work and classroom routine, or may influence the dominant school policy, like offers to help with teaching resources (book and text revisions) or with other educational activities. According to 80% of the parents, any help that may interfere in school or teachers' work would not be appreciated. Rather, school needed practical help in order to improve school facilities or in social events.

Help was the word to describe the parents' role in the process of their children's school education in that context. It was very much related to serving school, that is, helping schools to get needed resources so teachers could dedicate more of their time to the children, teaching, lesson planning and preparation, children's work corrections, individual planning and revision that has to be done, without having to worry with other aspects of school. They clearly stated they wanted teachers to be more effective in their teaching, more dedicated to the children, and more committed to their jobs.

Getting necessary equipment, such as a photocopy machine, TV set and a video, outdoors and indoors sports facilities, a better library with suitable books, trying to convince the Government to recruit qualified PE and Arts teachers, helping to set up festivals, finding solutions to practical

problems concerned with disadvantaged pupils were all considered to be more feasible and within the parents' abilities.

Parents believed practical help may be more available to schools if schools get to know parents more closely or simply ask for help. The vast majority of the parents felt they could contribute with some kind of help if schools gave them instructions on what schools needed and what schools wanted them to do and how to do it. The help parents could provide schools would have to be school-initiated rather than parents volunteering themselves. Parents revealed that schools had not given them the opportunity to contribute .

"I don't go to school very often, only from time to time when we're invited for parents' meetings or festivals, or when they call me for any reason. But if the school asked me for help, of course, I'd be ready to give them a hand" (parent n° 1, school n° 9).

Parents, who clearly stated they were at that time available to provide help to school, were the members of the Governing Body (20%). The remaining parents felt much more comfortable with helping schools when help was needed or asked for. Help was much more easily accepted than getting involved with teaching-related activities. All parents related training and intellectual skills with involvement and help with practical activities.

According to parents' findings, involvement was found to be related to children's independence, whereas practical help was related to teachers' performance. Some parents believed that due to current financial situation, teachers have been busy and worried trying to solve some practical problems. Those problems took up on their planning time. Some of the parents believed that the reason why some of the teachers were not performing as expected was because they did not have the necessary conditions and time for lesson planning and preparation and effective and meaningful work revision. The parents felt teachers needed to be left to do their job well and others should be responsible for creating the right circumstances for teaching and learning, for teachers and children. They believed teachers were over-loaded with paper and practical work and found little time to get on with their real job.

"I think that if I helped the school to fight to get what they need solving practical problems, I'd be actually helping the teachers get on with their real job which is to dedicate their time to teaching, lessons preparation and above all to the children, I mean, getting to know the children better. I've decided to join the Governing Body because I believed I could support the work of the school more broadly, like if school needed something, as it did just recently, then I could try to find the adequate help, . . . for instance, raise money to buy a photocopy machine which we've just done, or a video . . . or even to argue with the Education Authority over negotiations to get more resources in order to keep our PE teacher." (parent n° 3, school n° 9).

Parents suggested that by getting parents to help, school would overcome practical problems more easily and quickly. Parents have different abilities and therefore they would be able to help schools in a variety of ways. Knowing parents' abilities, according to this group of parents, schools would be able to develop the right approach when dealing with parents' demands and parents' help.

The parents pointed out a very important point which is essential for PI policies. In a school, there will be groups of parents who will be prepared to be involved with school in different levels and different activities. Hornby (1990) suggests that in the 'Model for Parental Involvement' where it is stressed that all parents might want and need information, most parents might reinforce schoolwork at home, many may be available for classroom activities and some may be involved with decision making and school policies. In Long's words (1986, 1992), parents may be involved in three different PI stages: peripheral involvement, collaboration and partnership. Parents may work with school in different stages and may take a step further as they go along. Working like that, parents believed, it would help parents to get to know each other too and therefore help each other out. Having parents in contact with each other through school-initiated activities may also help school communications. Communications from the groups would help to spread useful information about school facilities and news and children's progress more quickly and effectively within the parent community. Networking would also begin to work allowing all participants to find adequate help, information and exchange of ideas, experiences and opinions.

However, according to the majority of parents (80%), there was no indication that the schools had reached that far yet. For instance, the parents reported that very little, if hardly anything, was done towards making the school and other institution services known to the parents. In addition to that, parents reported that they had no contact with other parents other than their own friends and neighbours, with whom they would share concerns and problems. Meeting other parents would only occur in parents' meeting or social events at school. The relationship between parents and school remained very superficial.

"... I think the school or even the teachers should let us know of the kinds of help they can offer to parents.... like advice and counselling. They know I needed help but ... They usually take so long before they contact us to break the bad news. It seems that they wait until they can no longer do anything for our children, and cannot handle the problem anymore, or until problems are really serious, ... then they start asking for attention. My son has phonetic problems, we all knew that and they never told me that there was someone in the school that could work with him, help him through.... I don't understand that ... and I don't think any other parent knew that either, or if they knew, they never told me" (parent n°10, school n° 7).

Helping school was only partially done because this group of parents could only envisage help as collaborating with social activities and very occasionally with sports events. Parents who were members of the Governing Body, were found to be more involved with school practicalities and issues that required visits to the Secretary of Education of the State of Minas Gerais (since all schools included in the sample were under the State service). Those parents were actively involved with issues that are related to material resources, getting qualified staff for different subjects, contacting authorities and fighting for better schools. Those parents regarded their help as crucial to school and the only resources schools could count on in order to solve every-day problems.

Apart from one parent, no parent were found to have been engaged with helping to set up the school environment for learning experiences. It seemed that parents did not think that way. For instance, outings and excursions are common practices in all schools. Once or twice a year schools tried to organise such events. Parents could get themselves more

involved with or get invited to these kinds of events. These opportunities were usually connected with celebration of important dates or festivals and themes explored in the classroom. Through these kinds of opportunities, parents may be encouraged to learn different strategies of teaching in a more relaxing way. Parents could also join in as helpers and at the same time be encouraged to observe how teaching is developed and teaching opportunities are created. Help in the library, with artistic activities or even in the preparation for the festivals of the seasons, like Carnival, Easter, Saint John's, Christmas, Independence Day, Children's week, open-days and other festivals (these are all celebrated with great enthusiasm and joy) were not mentioned. Thus, it was possible to conclude that the lack of knowledge and information about the opportunities that parents could informally become more knowledgeable about their children's education and development or the lack of communication between parents and school might be the cause for poor PI policies. It was however not possible to know which ways schools had been using to contact parents (parents only mentioned parents' meetings and circulars containing brief information, timetable etc.) or even whether schools and teachers make that kind of information available to parents.

"I've helped school in the past, I mean with social events of course, like setting up for the event on the day, but I couldn't continue helping, not even occasionally because I've got to work full time to support my family"
(parent n° 14, school n° 6).

"I could occasionally be of some help to school to help with festivities, parties, like decorating or food organising . . . or something like that, but I don't think I could do more than that." (parent n° 15, school n° 6).

It is important to point out that the parents interviewed did not live below poverty line nor in the poorest areas of the city. Some (30%) had very simple housing in poor neighbourhoods but they were not having acute living difficulties. As they themselves stated, they had the basic which is the essential one needs to live a decent life. As mentioned in the Methodology chapter, 24% of parents had university degrees (although some did not work at all or did not work as a professional by free choice), 43% finished secondary school and 35% reached middle school. Half of the sample lived reasonably well, although only 10%

stated they could have had their children in private schools; and the other half were living on very low salaries or being helped by family members and stated that they had no alternative for their children's education other than having their children in state schools. In Brazil, state schools are said to serve the poorest sector of the population, but nowadays this scenario has been changing due to current economic crisis and level of unemployment. Middle class people only have their children attending state schools if they have gone into unstable financial situations and cannot afford private school fees. State schools in big cities are usually seen as being deprived of good and adequate resources and therefore do not have the elements of an effective school.

4.7.2.1 - The Governing Body in "Mineiras" state primary schools **- what it is and how it is set up.**

The Governing Body has, as members, parents, students over 16 years of age, teachers and other educational professionals. The participation is democratic as the decision making is always done through a vote. Everyone in the school is entitled to vote. The Governing Body exists only when a meeting is taking place. No member can make decisions without the consent of other members or have special concessions to act as an authority on his/her own in any situation outside the Governing Body. Outside the Governing Body everyone should carry on with their own responsibility as a teacher, as a parent, as a student or an educational professional.

The Governing Body can make decisions or influence the process of decision making on any pedagogical, administrative or financial aspect of school life. The Governing Body, when agreement and consensus are reached, inform the general school community of the decisions. The head-teacher then is responsible for the implementation of the decisions. It also acts as a consultative committee when members put forward opinions and suggestions from the group they represent, about issues in discussion.

The Governing Body is re-voted every year during the first month of the school year. The head-teacher calls the school community for a general meeting to explain how the Governing Body operates, its legal aspects, and about the selection of its members.

The number of representatives of each school community is established by the "estatuto" (code in force). In case the school has not yet formed their Governing Body, the number of members will be determined in the General Meeting called by the head-teacher. In order to have an equal opportunity for the two main sectors of the school community - family and school staff - a 50/50 ratio is usually agreed upon plus the head-teacher who is always a member. The Governing Body members do not have specific positions or jobs to perform, they are simply the representative of their community of parents, staff or students. In special situations, like rural schools, other ways of setting up the Governing Body may occur.

4.7.2.2 - Three ways to Help schools, teachers and children: teaching and learning, resources and practicalities.

Most of the parents reported that they were not prepared to be more engaged with school matters than they already were at that time. It is important to point out that the parents reported that they were not involved with school educational functions such as teaching or learning processes, learning-support activities, parent programmes for effective involvement and volunteer programmes for classrooms. Involvement, seen by this group of parents as intellectual help, was not reported as a very strong tendency. The parents were clearly reluctant and insecure about becoming involved in this way. Parents prefer to see these tasks as school obligations therefore teaching and instructions were largely delegated to schools and teachers. Involvement was seen as a big challenge for the majority of the parents in this sample.

The majority of parents was well aware of their lack of knowledge about school-related activities, meaning activities that would complement classroom learning and homework and the curriculum itself. As mentioned earlier in this chapter, becoming involved with children's learning process both at home and school was seen as a very unusual practice both by parents and teachers. Hence, the parents stated that they would like schools to be more committed to the improvement of their services, that is teaching and teachers' training, while parents should be more involved with other aspects of children's development.

As far as parents' help was concerned, most parents (90%) reported that schools seemed to be very suspicious about how far help and involvement could be undertaken. The parents (about 90%) were willing to accept more easily the task of helping schools with practicalities than becoming involved with learning and teaching.

Helping the schools to get what they needed seemed to be as far as the parents thought they were able to go at that point in time. However there was an exception that deserves to be mentioned. There was one parent who felt very strongly about getting involved with learning activities in other situations that were related to the curriculum. This parent was very confident about what she could do to improve school facilities to support learning process. This parent followed her child's school performance very closely; liked to report to school her views about it and often offered herself to comment and discuss teaching material, reading and writing activities and other issues related to the curriculum.

The difference between help and involvement was indicated by the parents as being more reasonable and easily done and more intellectually challenging respectively.

As mentioned in chapter II, parental involvement has been described in the last decades in many ways and many aspects and levels of education have been included in its approaches (Jowett, 1991, 1992; Bastiani, 1986; Smith, 1980). It has also been considered as a partnership or relationship between schools and parents (Cyster et al, 1979; Wolfendale, 1988; Smith, 1980) and as a form of sharing responsibilities for children's education (Epstein, 1986, 91, 92). The PI literature has influenced the parents' questionnaire because I wanted parents to confront their views with different forms and concepts of PI. However no parental involvement concept and types were given to the parents. The category 'involvement' emerged spontaneously from the parents' reports as a form of participating more actively in curriculum-related activities at home or at the school. The category 'help' was mentioned as a form of exchanging responsibilities, that is, the parents would do certain things so as to allow the teachers to get on with their jobs without having to worry with indirect-teaching-related resources and issues. The category 'communication' also emerged as an important point in their relationship with schools and teachers.

Although this group of parents seemed to be sceptical about the kinds of parental involvement they might be able to engage themselves in, the analysis shows that the parents worried about their children's school. They would like to have more open dialogue with teachers, would like to be more available if the schools were to them, and unanimously agreed that they would like the school to improve the quality of teaching and assistance to children and parents. They would like to be reassured that their children are going to get quality education and positive school experience.

4.7.2.3 - A summary of the category *Help*

- Practical help:
 - get what school needs in terms of material resources;
 - support for social events;
 - claim help from Government;
 - fund-raising;
 - and at Governing Body level.
- Help at home
 - with homework;
 - activities that were related to children's classwork and learning, were said to be developed at home very rarely;
 - with child-rearing.
- Help at school - no parent had actually been engaged in:
 - the classroom
 - the library
 - the playground
 - any teaching/learning activities at school.

4.7.3 - Communication

It is a difficult task to discuss communication as a separate issue as it is an element that greatly influences involvement and help as well as the development of the school/parents relationship at other levels. Communication was regarded as a tool that enables negotiations between parents and schools/teachers to take place. If used adequately, it might facilitate the relationship between parents and schools/teachers. It would

also help to address all other ways of exchange including those practices that do not quite fit the other two categories - involvement and help - discussed here. Using it adequately, according to that group of parents, meant to provide parents with information that addresses their concerns, that is easily understood, that reaches out for all parents, that make all school services and facilities known to all parents, and that encourages parents to believe and trust school and teachers.

On the other hand, if used for conveying messages to parents without careful planning, structure and adequate timing, it may not work as a powerful tool for improved parents/school relationship.

According to Epstein (1992), communication is a basic obligation of schools that could take many forms depending on the circumstances. Communication, as Epstein describes, refers to the responsibilities of schools for communications sent from school to home about school programs and children's progress, written and done in such a way that all families can understand, and for options for home-to-school communications.

Communication was mentioned repeatedly and in many different situations. The parents often complained about the kind of written and oral communication they were getting. The complaints were usually concerned with the quality, depth and timing of information, and how often they had met teachers and members of the pedagogical team, as well as how often they had been able to access useful information.

Most of the parents would like school communication to be covered more broadly and about different aspects of school life. For instance, parents claimed that there were always comments and rumours among the whole school community about the government failure to invest properly in our state schools and in education. Parents stated that cut-backs and tighter budgets for education, school resources and teachers' wages were always the reasons given for quality decline in teachers' performance, lack of adequate material, teachers' low salaries and proper guidance for those children in need. Frustrated teachers were said to excuse themselves for not doing their job properly. The parents, misinformed as some of the parents (20%) claimed to be, never seemed to

know precisely what schools can or cannot do in order to improve their performance, and contact with children and parents.

The parents, who were members of the Governing Body, seemed to know more deeply about school's resources but were aware that the general community of parents knew very little about it. The Governing Body members (parents) claimed that the vast majority of parents were not at all interested in what the Governing Body does and had been doing up to that point in time towards improving school facilities and services. Rather, those parents, who were members of the Governing Body felt that other parents did not support their decisions because they were misinformed or not informed at all. Thus, parents kept criticising school and teachers without any serious consistent and constructive suggestions and involvement. Communication was regarded in this example as insufficient: parents were not happy of school decisions partly because of parents' lack of involvement with schools, and partly because school was failing to inform parents with relevant details that would allow parents to make fair judgement of school decisions.

Information about school development did not seem to work as it should have or as parents expected it to. Apparently, neither side - parents or school - happen to be happy about each others' attitudes: the parents claimed that schools were not open enough to parents, and schools argued that parents did not really care about what schools have been trying to do to improve education and to maintain good relations with parents. On the other hand, a few head-teachers during informal talking with me, claimed that information about school in general, teaching methods, teachers' styles, timetable and administrative issues, had been made widely available to parents but parents had not shown any interest in getting to know about those topics. Head-teachers stated that whatever parents would like to know about school and teachers, they, as head-teachers, would be happy to inform and help them.

That misunderstanding between what schools make available to parents and what parents were actually having access to, might be suggesting that school communication was not fulfilling its purpose and reaching its targets. It might be that school communications failed to convey the desired message and as frequently as parents might have wanted or needed. The broken communication flow may discourage parents to

approach school and teachers to offer help, try to solve problems and clarify doubts. Content, frequency and timing are important aspects for effective communication to be conveyed. The lack of a communication system might also be the reason why this group of parents expressed their dissatisfaction with school, teachers and Governing Body decisions.

Ames et al (1993) identified three categories of school-to-home communications that influence parent involvement process. These categories included (1) information to parents about classroom learning activities, goals, plans, curriculum, and material (2) information to parents about their child's accomplishments, progress, effort and improvement at school, and (3) information designed to help parents assist in their child's learning at home. In Brazilian schools, more information about how schools work, teachers' teaching styles and teachers' training, school policies and priorities may certainly be relevant and necessary. It seemed that Brazilian parents needed to understand basic aspects about what schools' obligations are and how schools intend to pursue its goals and achieve better results in order to minimise disagreements and negative criticisms towards school, as Governing Body members suggested.

"I'd like school to let me know what they are doing, what their aims are, maybe send us, parents, written reports explaining the children's development in relation to what has been taught I think that the school should be doing more, like sending development and learning reports, explain children's difficulties, why things happen like that and maybe the way they are planning to act or interfere . . . in the children's education . . . for the sake of the children I mean by letting us know all this, we would feel more included in the whole business of school education." (parent n° 15, school n° 6)

The impact of teachers' messages on parental involvement may well depend on whether parents actually receive the messages and how parents interpret and give meaning to the content of the messages. As a consequence, parents' reports may provide a more accurate assessment of their awareness and evaluation of the communications (Ames et al, 1993). Communication from school must convey messages that are clearly written. The language, used both in written and oral communication, plays a very important role in parents' understanding of the messages it

carries. It is generally accepted that different forms of communicating to convey the same information may increase parents' level of understanding of school messages. The sample did not have parents from very poor backgrounds, and it did not have to reveal the parents' degree of satisfaction with school's present ways to contact parents. The sample, as mentioned earlier in this research, is not representative of the Brazilian population that have their children in state schools. Nevertheless, parents emphasised that more attention needs to be in place to this aspect of involving parents with school and children's education. Ames et al argue that parents' feeling of connectedness is very important to the beginning of a productive parent/school relationship.

Another important aspect of communication that some parents (30%) mentioned, was the use of jargons. Parents would like to understand the new teaching methods that have been recently introduced in our Brazilian state schools but the use of technical terms scared parents away. They tended to take the use of sophisticated language as an intimidating attitude that prevented them from further contact with teachers. Parents took it as a clear message to keep them away from classroom matters and school decisions. The parents would like to be able to understand the new teaching methods recently introduced in our schools as the parent below indicated:.

*" I don't think the teachers explain well what and how they do it . .
 . to us They just talk about things we, parents, don't really
 understand, like the teaching method they have recently
 implemented. I mean, I can't understand it, I'd like them to tell us
 clearly what it's all about." (parent n° 18, school n° 4).*

Although the teaching methods and styles were not at all clear to parents, there was also a lot of criticism of teachers, their teaching styles, methods, practices, material used in classroom, training, and performance. Cyster et al. (1979) found that parents' failure to understand the aims of schools led them to criticise the teachers. Simple and clear communication about school goals is certainly extremely important in the process of contacting and establishing a relationship with parents. Schools must inform parents of their aims and methods, and provide information about the teachers and their experiences as clearly and well designed as possible. It seems that Brazilian schools also need to do that. As an example, a parent

commented about those parents who were never available to school and absent when needed and invited to school and as a consequence those parents would not know school well enough to criticise and complain about the performance of the teachers and school in general.

"Absent parents dare to criticise school but they actually talk about something they don't know at all. . . . this is very unfair to school and so is it for the children I mean their own children (parent n° 11, school n°8).

Communication was lacking and exchange of feelings and opinions seemed to be lacking just the same. Brazilian parents and schools seemed to be talking different languages when talking about same issues. Although communication was seen as a tool that would weave the relationship to a useful and powerful instrument, communication, as it was, was not focused so as to put partners together. Rather, a feeling of unconnectedness was strongly perceived due to lack of communication and language misuse.

4.7.3.1 - Communication and school work conditions

The parents were sensitive to teachers' work conditions and aware that teachers' very low wages had a lot to do with teachers' motivation, performance, commitment to their job and dedication to children. Work conditions were perceived as an important factor that may lead to either improved or poor performance. The parents (100%) claimed that due to poor work conditions, teachers often withdrew from some of their responsibilities, such as making an effort to maintain closer and individual attention to every pupil and failing to invest in their own professional career. The parents also acknowledged that teachers may have lost their motivation towards their jobs because of their salaries. Poor work conditions, low salaries and lack of training were said to be the main reasons why teachers have not felt motivated to dedicate themselves to their profession. According to that group of parents, children and parents have felt the changes through the years very strongly. Children have definitely suffered the most with the educational quality decline. Not only have children and parents felt the impact of teachers' dedication to their jobs, but also relationships have been

strongly affected as teachers do not have the time for children in and outside the classroom and for parents for effective exchanges.

The parents also mentioned teachers' failure to turn up for individual consultations scheduled to occur weekly, and in other meetings, such as general meetings when all teachers are expected to attend in order to be available to parents. Being available to parents in the scheduled meetings was also believed to be part of the teachers' job as well as keeping parents informed about school and education. The parents would have liked those individual and general meetings, to be an opportunity to discuss general aspects of education as well as about their individual cases. Teachers, who were failing to reach good results both in the classrooms and in establishing good and fruitful relations with families, were said to avoid an open dialogue with the parents and were very sceptical of parents' views and opinions.

A mother reported she was unhappy with her child's teacher in as far as her teaching style was concerned. She believed the teacher was not using the most suitable methods for the group of children she had. Her child, who presented a learning disability, was part of a group of children with special educational needs. She was very concerned about her child's school education, particularly because the child did not seem to be very motivated for school education or stimulated by the teacher. That mother claimed she had been to school many times to talk about her concerns and get some advice but was never able to meet anyone at school whom she could talk to. Even scheduled times when parents could meet teachers individually, this parent did not seem to succeed in having a chance to express her opinions and views. That parent concluded after so many unsuccessful attempts that school was not open to parents. As a result she started feeling discouraged to approach school because she feared that the school and teachers would not welcome her criticism and suggestions and would not support her way of helping her child. She believed that school and parents must work together, but unfortunately she admitted she would not know how to go about it. She felt she had been left all alone to deal with her concerns and lost about what to do to assist her child. She would like to put her own judgement to school or talk to her child's teacher more regularly, but felt extremely insecure to do so.

She was also very sympathetic to teachers' causes, like low salaries and poor work conditions, but would like to see them more committed with their job and children as well as to work more closely with parents. That parent claimed that teachers were not interested in doing more than what she described as the teachers' job (teaching in the classroom for the whole group instead of giving individual attention for those children who need extra assistance) and working with parents. This parent felt teachers just wanted to get their job done in the classroom and no further involvement with schools, children and parents was even considered. The teachers' attitude to their jobs, according to that parent, was mainly due to low salaries. She also mentioned that teachers had to have more than one job to increase their income.

Low salaries have pushed Brazilian primary teachers to find a second job. Many teachers that were included in the sample of this research, had two jobs. Some teachers work in the same school, in both morning and afternoon shifts. Two teachers reported that it was very hard to find time to do everything they were supposed to because of lack of time. Teachers become overloaded with being responsible for two classes and sometimes two classes meant different grades.

4.7.3.2 - Attempts to solve current problems that would improve some aspects of education and PI

The Secretaries for Education in some Brazilian States, together with universities have developed programmes that aim to train 1st to 4th grade teachers (PUC-SP - 1997). The in-service training aims to enhance teachers' skills, in and outside classroom so as teachers start to understand how children develop and learn. The main objectives are to train teachers on the spot in order to up date their knowledge about new developments in their field of work and study; improve teaching strategies and styles so as to improve the way they deal with children, children's learning abilities and behaviour; emphasis on encouraging children to explore subjects through alternative and new ways in and outside the classroom; share and experience new situations, deal with deviant behaviour and discipline issues, and teachers are strongly encouraged to see children as learners. Learners may make mistakes and learn more effectively through them. Teachers are being prepared to deal with difficult situations as Brazilian state schools face serious problems at

all levels of education and different school aspects. These programmes also raise discussions about salaries so negotiations with government may proceed more effectively. It emphasises that teachers need to be more rewarded throughout their career in order to motivate them to improve the quality of our schools and education (Exame, September and November issues, 1997).

Some Brazilian local authorities created the 'School Scholarship' that encourages parents to stay home to make sure children do their homework and attend school regularly. Those parents who would like to stay home to look after their children may participate in the program and have a monthly allowance. The allowance is only given if the child attends school regularly. Results have shown that the level of attendance increased dramatically and the level of children repeating the same grade and dropping out decreased substantially. These initiatives combined, in-service days and increased children's level of attendance, may lead Brazilian schools, teachers and children to improve their performance and achieve better results. Both programs encourage school to maintain close contact and communication with parents.

On the other hand, parents, and particularly the parent mentioned earlier, reported that they were happy with school as far as what school was doing for their child at that moment, and would not know what else the school could do for her child and herself. Parents were able to raise and discuss important points about school, teachers, the education of their children, and quality of education, but parents still lacked the initiative to fight for their own rights. It seemed that parents did not know their own rights as parents and as citizens. Brazilian literature discusses the national educational policy which is based on values that do not regard the population state schools serve. It states that parents have not been empowered enough to fight for their own rights and for their own children. Notwithstanding, parents found it difficult to suggest ways through which parents and schools could join together for improved education and consequently parents have usually remained passive before serious problems. The system, social and educational, has still remained more powerful than parents' demands and needs and parents reacted accordingly.

That seemed to be a typical attitude of this small group of parents towards the relationship between the school and the parents. At least 90% of the sample did not seem to know what and how to do it to improve matters. The parents tended to agree that something should be done, improved, or developed to establish a more open dialogue between the parents and the teachers but failed to come up with proposals, suggestions and action that would help to improve the situation (both the relationship between parents and schools and school education, teachers' commitments to their jobs and children). However, 10% of parents, were able to find and identify ways through which they could become involved with school and their children's schooling other than offering practical help. The following example illustrates clearly the issue just mentioned above.

"... I'm not very happy about the way my child has been taught, I don't feel particularly happy with his teacher, her teaching style and performance I think there are good and bad teachers in that school and my child has just been unfortunate to have been placed in that group . . . "

" I'm happy with school at the moment, I wouldn't know what else school could be doing for my son and for me I've never had any major problems with the school so far "

" I don't think the teachers bother to work with parents maybe they are not don't feel encouraged and motivated to become more involved with parents they teach and want to go home" (Parent n°10, school 7).

That particular parent expressed opposing opinions. She claimed she was happy with school but at the same time expressed deep concern with the teacher's teaching style and performance. She feared the way the school and the teacher would react to her opinion, then she kept her views and opinions to herself. According to that parent, she had never let the school and the teachers know what her concerns were about because she felt intimidated.

Others parents in this sample shared the same concerns and had similar attitudes. A few parents reported that they felt intimidated and would never approach school either to complain or simply to let them know their opinions. They claimed it would be a waste of time given that school never met their demands. Despite that, it was unclear whether the

parents' withdrawal in this kind of situation was due to the degree of schools' openness to parents, kind of communication (and messages) from school or whether this behaviour was simply determined by parents' lack of confidence in expressing their opinions. What it seems to be clear is that communication needs to be improved both ways - home-to-school and vice-versa.

The parents claimed they have hardly had very useful conversation with school/teachers, either in groups or individually. The vast majority of parents were not pleased with the ways parents' meetings were conducted. In some cases parents' meetings were conducted with very big groups of parents and consequently, points in the meeting agenda were approached very superficially. The use of jargon was often mentioned to be used in such meetings and that was an obstacle to the establishment of fruitful dialogue with the school. Parents clearly indicated that school communication should be improved in order to be conducive to a better and more meaningful relationship.

4.7.3.3 - Summary of the category *Communication*: _

- formal communication containing practical information;
- written communication reported to be poorly and badly used;
- formal and scheduled meetings said to not work for most parents;
- other kind of information provided mostly informally to some parents;
- lack of communication when needed;
- no forms of communication were actually listed by the parents but generally reported to be poorly and ineffectively done;
- feedback, from both sides, schools and parents, also reported to be poorly and rarely done;
- communication between home and school needs to be improved and established in an effective and productive way.

4.8 - Conclusion

Communication is crucial for PI developments and it deserves special attention and great care when developing information strategies. It must be designed attentive to details so as to enable all parents to understand it properly. Communication should aim to attract parents to their children's school rather than just inform them superficially about school,

teachers, and children at school. In a context of a developing country such as that, where parents need to be approached more frequently and openly, communication should be carefully designed. Brazilian parents need help to keep their children motivated and encouraged to finish compulsory education.

Teachers', parents' and other school staff's backgrounds difference seemed to be significant in the context studied (so is it for schools in other regions of the country). Misunderstanding and disagreements seemed to happen frequently probably due to lack of common knowledge about role of school and family. Parents' reports revealed the distant nature of school and parents relationship. If schools do not develop the adequate and effective ways to convey important messages as clearly and simple as possible, communication problems will continue to happen.

The analysis revealed important information about what parents think about PI in three categories - involvement, help and communication. Communication was the bottom-line in parents' reports when discussing different aspects of PI. It emphasised the importance of an exchange of information between school and parents. It highlighted the potential for PI from the parents' perspective: parents perceived PI as an important practice. It also pointed to strengths and weaknesses from both sides. It revealed that parents did care about their children's school progress and want to know more about children's learning even though they would not like to share teaching responsibilities with teachers. Parents clearly suggested that they needed more guidance and explanation about issues that are not their expertise but nevertheless are their concerns and their own rights.

The analysis of the first part of the questionnaire also revealed that parents regarded 'involvement' (specially in the classroom) as a step much too far from their abilities and that activities that require parents' help in as far as teaching is concerned; and communication should improve consistently and steadily: schools should be responsible for establishing effective communication.

It is interesting to note that the parents' questionnaire was designed using a number statements about PI and some educational issues that school and parents should do in order to improve PI as well as (and at the same

time) children's education. Parents tended to quote those items about parents' obligations (such as getting children ready for school, teaching them to behave well, setting up a time and a place for study at home, etc.) higher than those that concerned parent involvement in teaching and learning activities (e.g. - homework that requires parents' assistance). Parents expected schools to cover the basic aspects for PI such as simple and understandable communication about children's progress and problems, while their obligations should include encourage children to make the most out of their school experiences.

Parents seemed to understand that school and parents have different tasks. Parents have a particular role to play in their children's school education which is distinct from that of school's. However, parents suggested that having different tasks should not prevent them from complementing each other's obligations. Exchange of information is welcome and needed, but further involvement with school obligations (unlike Epstein has defined in type 2, here parents perceived school obligations as high quality education) would only be possible if schools took the responsibility to guide them throughout the activities (this for about 30% of the parents) and on the other hand, a group of those parents would not even consider such involvement.

According to parents, the following items were quoted as the least important ones:

- *Teachers should assign homework that requires children to interact with parents (type IV).*
- *Teachers could have parents helping them in assisting the children with classwork in the classroom (type III).*
- *Teachers should meet parents individually at least four times a year (type II).*
- *Parents should be able to get involved with leadership, committees and decision-making roles at school (type V).*
- *Parents could help teachers in the classroom whenever possible (type III).*
- *Teachers should provide parents with ideas to discuss TV shows with their children at home (type IV).*

Qualitative analysis and frequency analysis of the parent questionnaire revealed that parents' opinions were generally very consistent in as far as what they indicated it is needed and wanted from school for both effective

PI and effective education for their children. Both analyses revealed that views about 'new' ways of becoming involved with school would not be so consistent, rather, they were troubled, confused and sometimes even contradictory, leading parents to judge and criticise schools' and teachers' performance. Lack of knowledge about schools goals and budget may also be to blame for distressed relationship. Lack of communication seemed to be one of the causes for different views and opinions from those of schools and teachers. According to the parents, clear communication is a crucial point for PI and from which Brazilian parents and school may start to develop effective relationship in the future.

4.8.1 - Summary of the parents' data analysis -

The figures below summarise the pattern of home-school relationship according to the views that group of 21 parents expressed. It is important to note that parents also find that PI should be the school initiative and responsibility while their role would be to complement what school might develop from knowledge about parents' and children's demand.

<u>Categories</u>	Regarded as	Related to	Attitude to
Involvement	school's initiative and obligation	curriculum- related activities	ad-hoc and unclear
Help		practicalities	welcome
Communication		a liason tool	expected to improve

Figure 1 - Summary of the parents' views

Figure 2 shows that communication is placed in the heart of the whole exchange process. Help and involvement may only occur when communication is recognised as the generator of fruitful relationship. The exchange system accounts for all parties involved, their places and roles in the system. Although the figure shows what parents made out of the theme, it also accounts for improved exchanges, meaningful relationship and future PI developments. Parents showed their position to PI through expressing their views, critiquing school for what is

missing, and indicating the path they might like school and teachers to take.

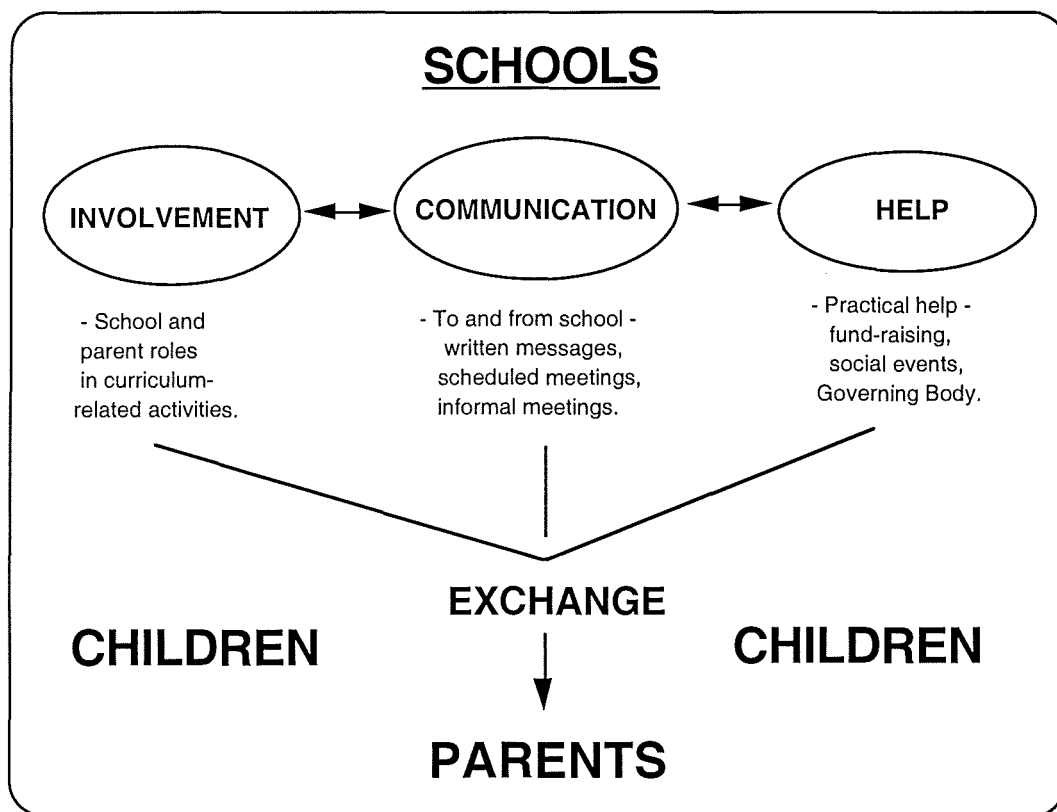


Fig. 2 - Exchange Process

Chapter 5

Teachers' climate for PI

Findings and Discussion

5.1 - Introduction

This chapter discusses the teachers' data after the analysis techniques were applied so as to satisfy the research objectives. The teachers' questionnaire was designed in order to reveal teachers' views and opinions about PI. As mentioned earlier in the methodology chapter, the first question in the teachers' questionnaire comprised 40 items about different PI practices where teachers were asked to grade the level of importance of those items that were for them (see Appendix 2 for teachers questionnaire). The findings were expected to reveal teachers' PI readiness and preparedness which in turn would reveal teachers' climate for a certain group of PI types and its respective practices. The second part of the questionnaire was mainly included for further illustration and clarification of the first main part. It was designed to reveal certain aspects of current views about PI in the Brazilian schools where the research took place.

This chapter has two major sections. The first section provides the results as obtained from initial descriptive analysis of the first question of the teachers' questionnaire. The 40 variables were firstly analysed according to Epstein's PI types. An examination of the variables from the highest means to lowest means is provided to further understand data. Then, an analysis of the variables with means under 6 were provided in order to throw some light into further analysis. Variables with means below 6 may add to initial descriptive analysis since it may represent greater variation among teachers' views. Then question 2 which is about general and current PI policies in Brazilian schools was also examined following the same principle: from highest to lowest means; then, followed by Kruskal-Wallis and Dunn's nonparametric post-hoc test.

The second section discusses results after applying factor analysis. After the data had been explored through descriptive analysis, it was concluded that a further statistical method should have to be administered as this initial analysis had not provided consistent and summarised evidence so as to satisfy the research objectives. Factor analysis proved to be the

adequate method to tackle the research questions and cover the research objectives adequately. That section displays the results from factor analysis justifying the decisions previously made for the adequate model of factor analysis.

5.2 - Findings - Results and data analysis

5.2.1 - Descriptive analysis

Frequency analysis of the 40 items in the scale used in the teachers' questionnaire was first done according to Epstein's types and practices. Then variables are going to be grouped according to means - from highest to lowest and interpretation of the frequency analysis will follow. The analysis of the tables 1, 2, 3, 4 and 5 will follow next as frequency analysis is built up along the chapter. The findings are as follows in the tables below:

I) - Attitudes concerning **basic obligations of parents** were as follows:

Type I - Basic obligations of parents	Means	St. Dev.
Parents should talk to teachers about problems the children are facing at home	6,7	0,871
Parents should help their children to get ready for school.	6,7	0,985
Parents should teach their children to behave well and show respect for the teachers.	6,5	1,153
Parents should talk to their children about the importance of school.	6,5	1,083
Parents should set up a place and a time for their children to study at home	6,5	1,288
Parents should always try to attend school social events, meetings or help school whenever they can.	6,4	1,27
Parents should check that homework gets done regularly.	6,4	1,331
Parents should encourage children to volunteer in class.	6,3	1,168
Parents should talk to their children about what they do and learn at school.	6,2	1,375
Parents should take their children to special places or events that could help children's learning.	6,1	1,492
Parents should ask the teachers about what their children are expected to learn.	5,5	1,814

Table. 1 - Type I - Parents basic obligations - means and St. Deviation

II) - Attitudes concerning the **basic obligations of schools** were as follows:

Type II - Basic obligations of schools	Means	St. Dev.
Teachers should contact parents about their children's failures and problems	6,5	1,067
Teachers should request information about children's talents interests, needs and health.	6,5	1,036
Teachers should contact parents to discuss their children's improvement and progress.	6,4	1,122
Schools should run parents and teachers meetings regularly.	6,1	1,379
Teachers should provide parents with information on how to monitor homework.	6,0	1,361
Teachers should work together towards developing different ways to have a closer relationship with parents.	5,9	1,563
Schools should send home communications about school that all families can easily understand and use.	5,7	1,678
Teachers should meet individually with parents at least four times a year.	5,6	1,903
Schools should survey parents each year for their ideas about the school.	5,6	1,645
School is responsible for sending home communications about children's progress, difficulties or needs.	5,5	1,796
Teachers should inform parents of what children are expected to learn.	5,1	1,999

Table 2 - Schools basic obligations - Means and St. Deviation

III) - Attitudes concerning **parent involvement at school - volunteering** - were as follows:

Type III - Parent involvement at school - volunteering	Means	St. Dev.
Schools should have workshops for parents to build skills in parenting and understanding the development of the children.	6,0	1,442
Schools should encourage teachers to have parents helping in whatever possible.	5,9	1,344
Schools should have workshops for parents on creating home conditions for study time.	5,7	1,661
Parents should serve as volunteers (when possible) with activities that are related to their profession or hobby.	5,5	1,793
Schools should run workshops for parents on educational activities programs and also after-school recreation.	4,9	2,051
Teachers could have parents helping them assisting the children with classwork in the classroom.	3,9	2,351
Parents could help teachers in the classroom whenever possible.	3,6	2,18

Table 3 - Parent involvement at school - Means and St. Deviation

IV) - Attitudes concerning **parent involvement in learning activities at home** were as follows:

Type IV - Parent involvement in learning - activities at home	Means	St. Dev.
Teachers could inform parents on how to help their children with specific skills and subjects that they have difficulties.	6,2	1,137
Parents should ask teachers for specific advice on how to help their children at home with classwork.	6,1	1,273
Teachers should encourage parents to listen to a story or paragraph that their children have written.	6,1	1,492
Teachers should advice parents to listen to their children read and encourage children to read.	6,0	1,511
Teachers should provide parents with information on how to monitor homework.	6,0	1,361
Teachers should suggest parents to do specific activities together with their children to maximize school learning.	5,6	1,578
Teachers could show parents how to practice reading, writing and maths skills at home before a test.	5,5	1,671
Teachers should assign homework that requires children to interact with parents.	5,3	1,841
Teachers should provide parents with ideas to discuss TV shows with their children at home.	4,7	2,02

Table 4 - Parent involvement in learning activities at home - Means, St. Deviation

V) - Attitudes concerning **parent involvement in governancy and advocacy** were as follows:

Type V - Parent involvement in governancy and advocacy	Means	St. Dev.
Parents should attend PTA meetings.	6,0	1,515
Teachers should serve PTA or other school committee that involves parents.	4,9	1,94
Parents should be able to get involved with leadership, committees, and decision-making roles at school.	4,4	1,992

Table 5 - Parent involvement in governancy and advocacy - means and st. dev.

Types I, II and IV seemed to be the strongest types that Brazilian teachers' valued the most, and which might influence their climate for PI. Before any conclusion is drawn from initial results, further examination of the frequency analysis is going to be carried out. Some items from the strongest types (as seen by the teachers) and types III and V presented lower means and are part of the group of variables that are going to be further investigated. A further investigation of the means was necessary in order to reveal whether there might be different views or whether the group of teachers actually find those variables as not so important.

5.2.1.1 - Frequency analysis for Question 1

Given that the previous section reported the descriptive statistics for all the items in part one of the questionnaire according to Epstein's typology, the purpose of this section is to highlight the variation in consensus among teachers for specific items and relate them to PI types. The groups shown are according to how important teachers reported the items.

Group A - 83 and 81% respectively scored 'very important' for the following variables: __

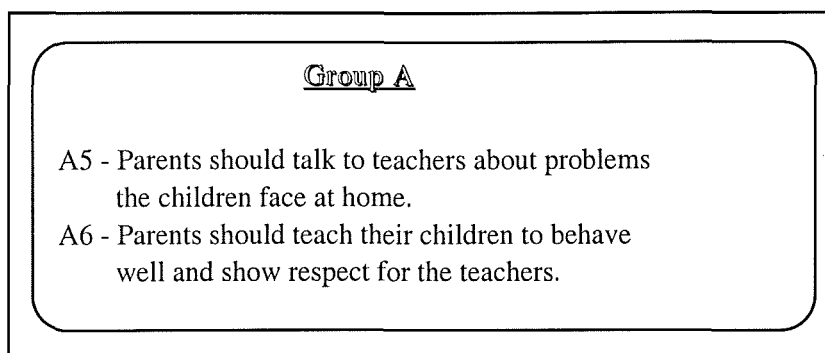


Fig 1 - Group A - Type I

Group A contains practices from Type 1 in Epstein's typology which concerns the 'basic obligations of parents'. It seems to be the teachers' top priority that parents prepare their children for school as far as good behaviour is concerned as well as teachers expected that parents to provide them with information about important life events and characteristics of the child.

Group B - 70 to 79% of the teachers scored 'very important' for the following variables:

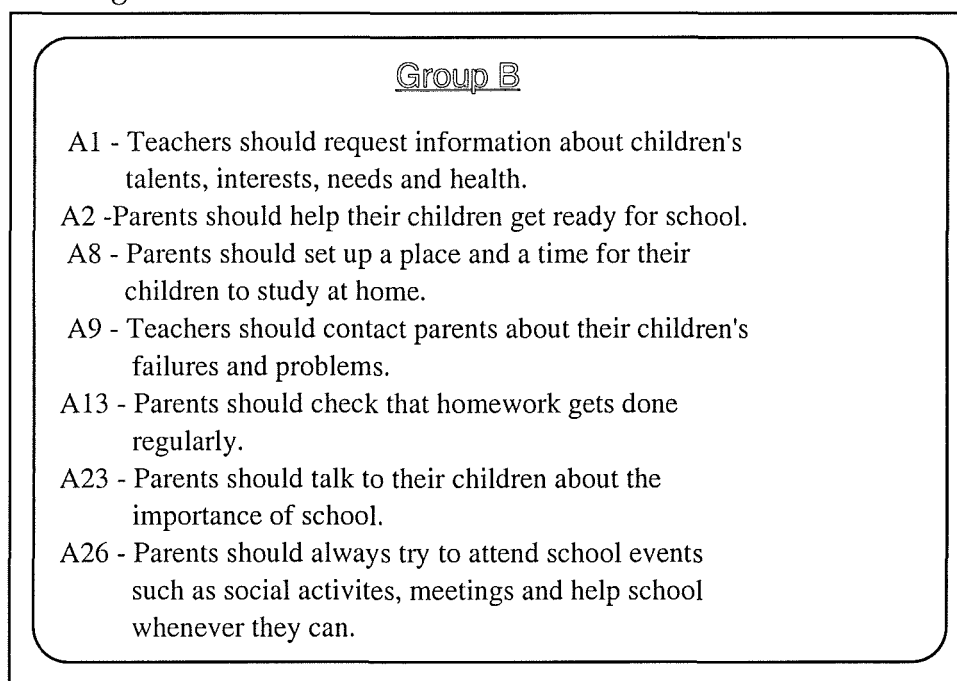


Fig 2 - Group B - Types I and II

Group B grouped items that correspond to Epstein's type 1 and 2 - parents basic obligations, school's basic obligations respectively. Type 2 is mainly concerned with communication in which, as Epstein describes it, schools should provide parents with good and varied ways to both listen to as well as to inform parents of all aspects of school, providing them with

opportunities to get to know school, teachers and their work (A1, A9). Type 1 involves parents basic obligations (A2, A8, A13, A23, A26) which we may find that some of the statements may overlap other types specially type 4 (like homework checks, setting up a place for study) but it may not involve parents' active participation in school. It is important to emphasise that the teachers in this sample seemed to value parents helping their children at home with school activities as long as they do not engage themselves with teaching, instruction and learning processes unless special demands happen. All four variables regarded as 'very important' in this particular group involves parents in the setting up of an atmosphere that encourages positive attitude to school activities; or, when special situations arise, parents should contact teachers to get advice on how to guide their children with school matters at home.

Group C - 60 to 69% of the teachers scored 'very important' for 11 items. Group C may be subdivided in two subgroups named as according to Epstein's typology:

Type 2 - Communication - School basic obligations

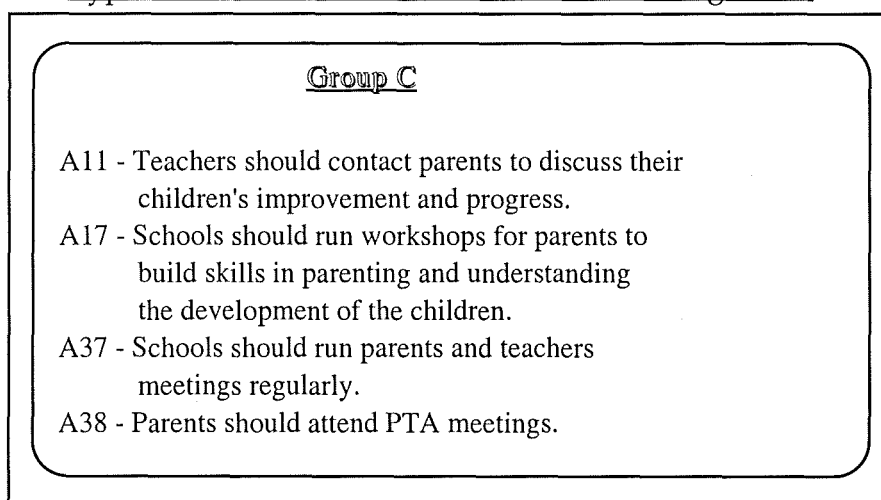


Fig. 3 - Group C - Type 2

As in group A, group C also suggests that communication seemed to be one of the teachers' greatest concerns. The findings suggested that the vast majority of Brazilian teachers believed that it is part of their job to contact parents through traditional ways such as parent/teachers meetings; to get basic information about the children, as well as contact parents when the children are not doing very well. However, a slightly smaller group of teachers also placed emphasis on communication other than exchanging information about the children, school, and PTA meetings. New ways to

relate with parents appeared to be also greatly valued. Opportunities to discuss more meaningfully with parents the progress of the children (68% of teachers), the development of the children and to enhance parents' parenting skills (59,7% of the teachers) were examples of desirable practices. It is interesting that teachers feel it is less important to tell parents about children's successes then their failure (see Group A).

Type 4 - Learning at home (and parents' obligations)

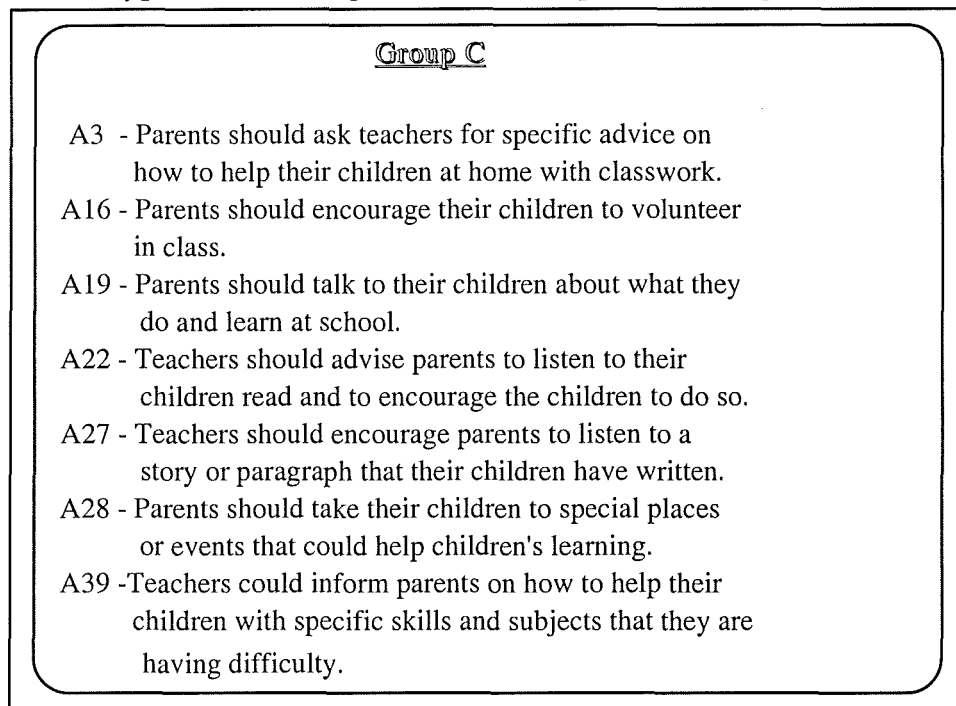


Fig. 4 - Group C - Type 4

A3 (59,7%) and A39 (59,7%) confirm results shown earlier that the teachers would like parents to help the children only when the children really need some extra assistance at home with homework or any other school-related activity or to overcome difficulties (or as teachers' judgement indicates so). In addition, it may be suggesting that the teachers seemed to be reluctant to accept parents' help when teachers' guidance is not available. Again, this result seems to be suggesting that teachers would like parents to support their work through encouraging their children to be good and well-behaved students but without any further involvement with teaching and classroom matters. Variables A16, A19, A22, A27, A28 together with variables found in group B reinforce the evidence that teachers would like parents to work alongside them but with some clear restrictions as far as teaching is concerned.

5.2.1.1.1 - Reflection on the results of frequency analysis for Question 1

The results obtained from frequency analysis mainly highlight Epstein's types 1, 2 and 4 which correspond to 'parents' basic obligations', 'school's basic obligations' and 'parent involvement in learning activities at home', respectively. The three groups of items (A, B, C) reflect what the Brazilian pre- and primary school teachers value as very important aspects of a relationship with parents. Frequency analyses indicates that basic aspects of PI, such as school communication, parents' positive attitudes to children's education and learning process, and some activities that promote learning situations at home, appeared to be strongly valued by this group of teachers. This however, does not indicate whether teachers believe that is all about how far they think PI may go in Brazilian state schools. Basic PI aspects, practices and views are expected to be (and commonly) found in any school, rural or urban, and in any part of the world. PI basic aspects may be argued to be the common ground for more complex PI practices that will involve parents' expertise and strength and teachers' time and training. Having said that, further analysis of the items is needed so as to reveal a pattern that takes into account all underlying dimensions of data and add more information to frequency analysis. However, first, I am going to comment on the frequency analysis for items that had means higher than 6 (Groups A, B and C) before moving on to those items which had means under 6.

As the literature highlights, similar PI practices may be found in more than one type. It is already known that PI types are not pure and may overlap with each other as far as PI practices under each category are concerned. Considering that PI types are not 'pure' (Epstein, 1989), and that they interplay according to school and parents' demands, we may assume that there is a strong link between the types and respective practices. It is easily recognised that some types of PI may have an intimate relationship with each other as for example, communication (type 2) is a very important tool for the development of all other PI types. Parents' data analysis demonstrated this when parents mentioned that communication was poorly practised in Brazilian schools and therefore very little was happening as far as PI was concerned. Naturally, before reaching the stage where parents become more confident to help their children with school work and trust between the parties is exercised,

communication is expected to be well developed so as to allow effective exchange of advice, instructions and comments before, during and after parents are involved in different areas of school and schooling process. Thus, a PI type may lead to the other according to demands and as relationship with parents develops and grows.

A PI type may exist on its own, interplay with other PI types, or be developed through stages (Rennie, 1996 in Pugh - Ed. 1996). The stages may go from acknowledging that the relationship is important to the stage where parents act as school and teacher partners with an active and effective exchange and participation system. The further developed the types, the more overlapped the spheres may be and the more sophisticated the relationship between school and families (teachers and parents) may get.

As frequency indicates, it seems that what Brazilian teachers valued the most was parents' basic obligations being fulfilled. From these results, it seemed that parents were expected to do their job at home so results may be felt at school allowing teachers to notice the results in classroom too. The results also included some aspects of communication that might help parents to prepare their children to school. Meetings and workshops for tips and advice as well as exchange of information are examples mentioned that might facilitate the parents' job and in turn, help teachers to understand children and their families. It seemed that teachers found that it is very important that school and teachers get to know about the children from the parents' perspective too, so they can work towards preventing problems or trying to solve difficulties along the school years.

School communication that covers beyond functional and operational aspects of school like report cards and general meetings, may lead school to produce information that make parents more knowledgeable about the learning and teaching processes as well as about child development. Becoming more knowledgeable about those issues, parents will become able to support the teachers' work without major disagreements. Teachers, if prepared and willing to run parent workshops about schools aims, teaching styles and child performance, may attract parents' attention for issues that are essential for child development. In addition, effective and simple school communication enhances parents and teachers relationships and emphasises shared responsibilities.

This first analysis of part of the teachers' data suggests that the teachers did expect parents to participate actively in their children's education but doing some 'back stage' jobs rather than really acting as 'front-stage performers'. Frequency analysis for the remaining 19 variables (which had means under 6) will further explore the data and add to our understanding of the kind of PI framework the Brazilian teachers work from.

The figure below summarises the frequency analysis as shown so far. Some of the variables, although considered initially in this chapter as belonging to type I, were put here under type IV in the figure to indicate and emphasise the overlapping nature of the types and practices (variables in italics in the figure). The figure shows the Brazilian teachers' three most valued types and its respective practices. It also intends to emphasise the evolving character of PI (top arrows - one type may lead to another type); its overlapping aspects (two-way arrows and vertical lines - types are not pure); its flexibility (bottom two-way arrows - schools should be prepared to develop strategies as needs and demands arise, new parents join in, or to complement old policies); and above all its uniqueness to Brazilian state schools.

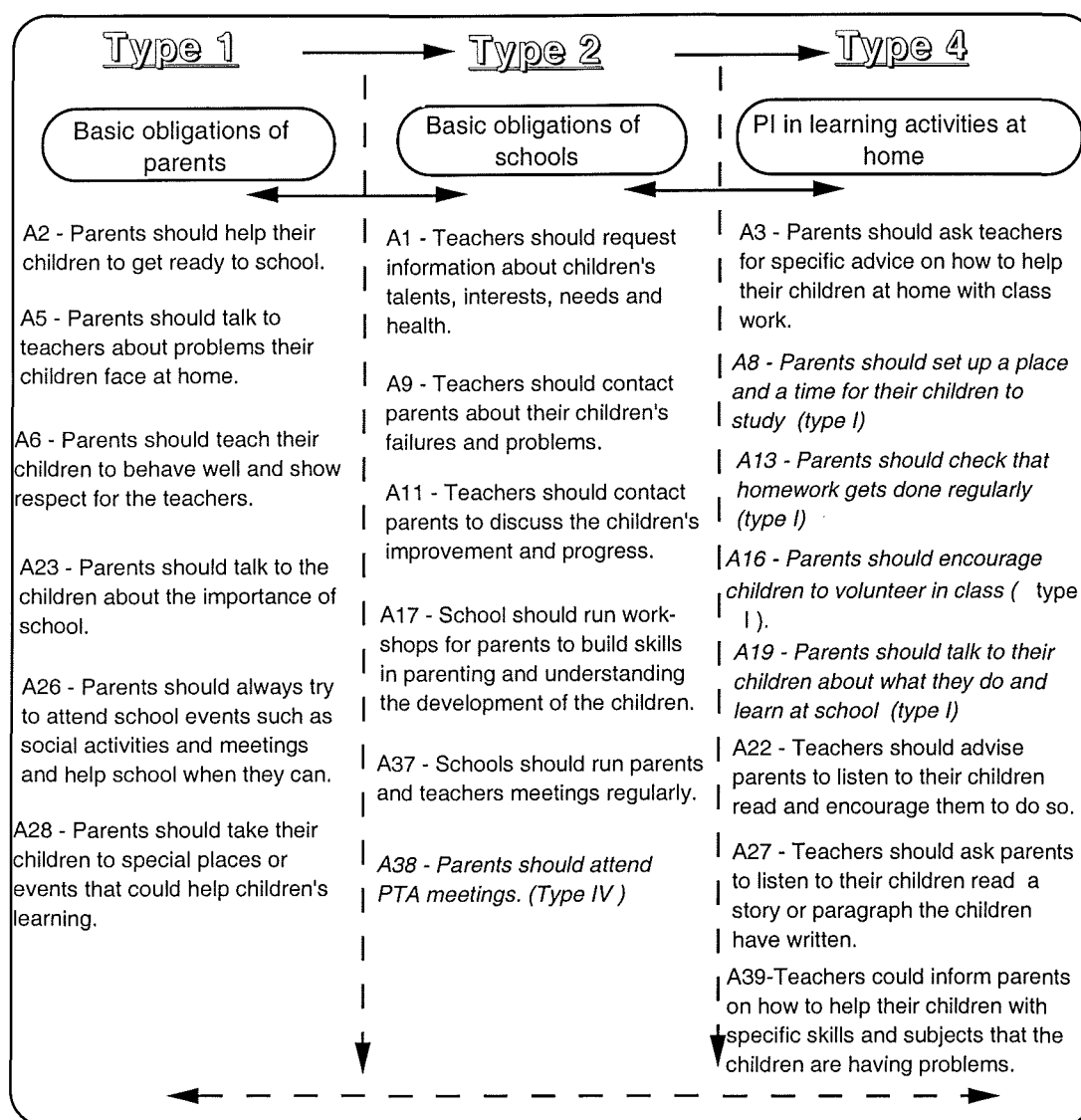


Fig. 5 - PI types and its links

5.2.1.1.2 - Variables with means under 6 in the scale

Examination of the items with means under 6 will now be described in order to further understand the data. It is important to further analyse them because the fact that teachers rated some PI practices as very important does not mean that other PI practices are unimportant for them. It might be that low means may result from either general consensus that the items are not so important or unimportant, or that there is great variation between teachers in their ratings. Results are going to be presented according to means, from highest to lowest, grouping the items separately for further discussion.

A) Variables with means between 5 and 6 were as follows:

- A7 - School should send home communication about school that all families can easily understand and use.
- A10 - Schools should encourage teachers to have parents helping them in whatever possible.
- A12 - School should survey parents every year for their ideas about all school aspects.
- A14 - Teachers should inform parents of what children are expected to learn in each of the subjects.
- A15 - Teachers should assign homework that requires children to interact with parents.
- A20 - Teachers should meet individually with parents at least four times a year.
- A24 - Parents should ask teachers what their children are expected to learn.
- A25 - Teachers could suggest parents ways to practice reading, writing and math's skills at home before a test.
- A29 - Schools should have workshops for parents on creating home conditions for study time.
- A30 - Parents should serve as volunteers in school with activities that are related to their profession or hobby.
- A31 - Teachers should encourage parents to do specific activities with their children that maximize school learning.
- A33 - Teachers should work together to develop different ways to have a closer relationship with parents.
- A40 - School is responsible for sending home communications about children's progress, difficulties or needs.

Fig. 6 - Means between 5 and 6

Fig. 6 shows from type I (parents' basic obligations with 1 item: A24), II (communication with 6 items: A7, A12, A14, A20, A33 and A40), , III (volunteer with 3 items: A10, A29, and A30) and IV (learning at home with 3 items: A15, A25 and A31). Communication (school basic obligation) was again strongly represented which may complement findings highlighted in the previous section. There is strong indication that Brazilian teachers are aware of its power for adequate changes for school improvements, better social relations and benefits may be felt in the classroom too.

Type III was also presented under this category and it highlights parents' assistance at school whenever possible as long as their expertise is taken into consideration. All kinds of collaboration may be offered to school, but as findings indicates, no expertise about schooling processes may be expected to be accepted or taken in very easily. Parents may get invited to school when it involves advice for good practice and assistance at home. This illustrate practices of type IV too that were included in this category.

B) Variables with means between 4 and 5 were as follows:

A4 - Schools should run workshops for parents on educational activity programs and also after-school recreation.
A21 - Parents should be able to get involved with leadership, committees and decision-making roles at school.
A34 - Teachers should provide parents with ideas to discuss TV shows with their children.
A35 - Teachers should serve PTA or other school committees that involve parent participation.

Fig. 7 - Means between 4 and 5

Items grouped in Fig. 7 were from types III (volunteer with 1 item: A4), IV (learning at home with 1 item: A34) and V (governancy and advocacy with 2 items: A21 and A35). The medians were 5 for all items. There seems to be not so much of a consensus about those items, but a generally spread rating across the seven-point scaling (not considering differences across grade taught, level of education or years of experience). Items A4 and A35 are found to be rated significantly different according to teachers' grade taught and years of experience respectively (see next section 5.2.1.1.2.1).

C) Variables with means under 4 were as follows:

A18 - Teachers could have parents helping them in assisting children with classwork in the classroom.
A32 - Parents could help teachers in the classroom whenever possible.

Fig. 8 - Variables with means under 4

Both items in Fig. 8 belong to Type IV (learning at home) and had medians 4. The rating for both items was found to be heavily done in the extremes of the seven-point scale, with 48 and 42 (1 and 7 point in the scale respectively) for item A18; and 46 and 32 (1 and 7 point in the scale respectively) for item A32 (not considering differences across grade taught, level of education or years of experience), being slightest more rated at level 1 in the scale. Both items refer to parents helping in the classroom. It seems that Brazilian teachers were still uncertain and sceptical about the participation of parents in the classroom and with curriculum-related activities done at school and classroom.

Frequency analysis has mainly shown that Brazilian teachers are well aware of the importance of parental involvement at this level of education, but more complex PI practices are not feasible. Given that 50% (90 teachers) of the sample had completed middle school (teachers' or technical training) only, it may be concluded that they might not feel prepared for PI in classroom though teachers were keener on parents help in areas where parents were skilled. Almost 50% of them rated the item A32 at point 3 or below in the scale; 20% were unsure (rated the item at point 4 in the scale), and 30% rated it 5 or higher. No training about PI even at its basic aspects, is offered at any level of teachers' education in Brazil, so it may be actually expected that teachers would not consider those practices as an easy and possible procedure in Brazilian schools. The sample included 68 graduated teachers whose opinions were divided as follows: half of them rated the item at point 3 or below and the other half rated at point 5 or higher. The 23 post-graduated teachers also rated the item as the graduated teachers.

While those two items may be cause for debate, the basic aspects of PI, parents' obligations and communication, have been acknowledged by both Brazilian parents' and teachers as important. Frequency analysis seemed to indicate that Brazilian teachers have strong opinions for PI that might reflect their preparedness for PI.

Hornby PI model emphasises that not all parents are prepared to collaborate at all or same levels, specially with curriculum-related activities. Instead, parents should be involved with activities that they feel prepared for it unless school is prepared to provide training for those

interested in learning new skills for more complex PI practices. That is, some parents may be capable of integrating their skills into classroom routine in terms of providing teachers with some help with teaching and assistance with classwork and others might like to try something else at school. On the other hand, from the teachers' perspective, the higher the parents' needs are (according to Hornby model), the more time and professional expertise is required from professionals. Having parents who need close assistance in the classroom may be time consuming and require teachers' further training as it will certainly involve organised, clear and detailed instructions and follow-up. The frequency analysis and results illustrate the pyramids of Hornby's PI model from the Brazilian teachers' perspective: some teachers may have the time and the necessary expertise to deal with parents in the classroom or with curriculum-related activities; some teachers would enrol themselves with governing-body issues; many teachers would integrate in their routine advice for parents about maximising school learning; most teachers seemed to agree that adequate communication is important and that may not take so much of their time if it gets done as school PI policies; and all teachers expected parents to co-operate preparing children to go to school. Teachers also have different skills for PI and school should acknowledge that just as it should acknowledge different levels of parents' abilities .

5.2.1.2 - Teachers' current views about PI - Question 2

Question 2 aimed to examine the teachers' views about PI general aspects and PI policies that were in place at the time of data collection. Items were examined from highest to lowest means. As the items in question 2 are basically related to Epstein's type III - Parent involvement at school - (aspects of PI that take place at school ranging from providing support in administrative issues and social events, assisting teachers and children in classroom and other areas of school, to attending workshops or other programmes for their own education or training), except for items 5 (Mostly when I contact parents is to discuss problems); 4 (All parents could learn to assist their children with schoolwork if shown how) and 7 (Homework should not require parents' help) that refer to types II (communication - 5) and IV (PI in learning activities at home 4 and 7) respectively. Examination of the data was done according to descending

means values rather than by type. The seven-point scaling is, for this question, according to level of agreement.

Frequency analysis indicates a general positive attitude to PI but items that are concerned with parents in the classroom, teachers' availability and homework, there seems to be a larger variation in teachers' opinions. Parents in the classroom and teachers' availability has already been discussed in the previous section as a cause for concern among Brazilian teachers since there seems to be no agreement of opinions. These aspects might be closely linked to the issue of having parents in the classroom because it may involve teachers' further training, time available for parents' instructions and for parents' performance follow-up.

Homework is a common practice in Brazilian schools, but Brazilian schools (or in any school around the world) might differ in strategies adopted to advise parents on homework assistance at home. However, parents' data analysis has already told us that there seems to be no guidance from teachers of those schools as far as homework assistance is concerned. Therefore, it may be expected that Brazilian teachers might not work along the same lines as far as strategies for homework assistance at home is concerned. That may even vary from teacher to teacher rather than from school to school only.

	Means	St. Dev.
6 - Parent involvement can help teachers be more effective with more children.	5,9	1,684
1 - Parent involvement is important for a good school.	5,8	1,617
9 - In this school, parents can work with us in various ways.	5,5	1,758
3 - Parent involvement is important for student success and the learning process.	5,3	1,958
5 - Mostly when I contact parents is to discuss problems.	5,3	2,155
8 - As a teacher, I would like to have parents acting as my partners in their children's education.	5,2	1,818
12 - This school views parents as important partners.	4,8	2,099
4 - All parents could learn to assist their children with schoolwork if shown how.	4,8	2,017
11 - Teachers in this school need in-service training to implement effective PI practices.	4,7	2,188
13 - The teachers in this school would like to have parents helping with activities outside the classroom.	4,4	2,144
2 - Parents should not get involved with classroom work in this school.	3,9	2,434
14 - Teachers in this school do not have the time or availability to work with parents.	3,8	2,239
7 - Homework should not require parents' help.	3,0	2,260
10 - Teachers in this school would not like to work with parents.	2,7	1,957

Table 6- Question 2 - means and standard deviation

The Kruskal-Wallis test was done for question 2 to examine if there was meaningful differences among the teachers' views about PI general aspects and current general PI policies according to grade taught, years of experience, level of education. No significant differences were found ($p < 0,05$) according to years of experience but significant differences were found for level of education, and grade taught which were as follows:

Level of Education

Question	Means	K W p
B1 - Parental involvement is important for a good school.	5,8	0,0014
B3 - Parental involvement is important for student success and the learning process.	5,3	0,0003
B6 - Parental involvement can help teachers be more effective with more children.	5,9	0,0248
B8 - As a teacher, I would like to have parents acting as my partners in their children's education.	5,2	0,0164
B9 - In this school, the parents can work with us through various ways.	5,5	0,0010
B10 - Teachers, in this school, would not like to work with parents.	2,7	0,0132
B14 - Teachers, in this school, do not have the time or availability to work with parents.	3,8	0,0190

Table 7 - Kruskal Wallis for question 2

It seems that differences are mostly found between teachers of levels 3 (post-grad.) and 2 and 1 (under-grad and secondary education respectively). The Dunn's test indicated significant differences between levels 1, 2 versus level 3 for B1, B3, B6, B9, B10. According to the Dunn's post-hoc test, B8 and B14 differed between the levels 1 and 3 of education. In sum, post-graduated teachers differed from the teachers from other levels of education. More qualified teachers seemed more enthusiastic about PI.

Grade - (1 - pre-school teachers; 4 - third grade teachers; and 5 - forth grade teachers)

B7 - Homework should not require parent's help (1 and 5);

B12 - This school views parents as important partners; (level 1 and 4).

B14 - Teachers, in this school, do not have the time or availability to work with parents (no difference was found here between grade taught by the Dunn's post-hoc test).

It is interesting to note that the variables which teachers seemed not to agree across the levels considered in this research are related to important dimensions for PI acceptance and implementation. According to the

literature examined, PI is now widely regarded as a crucial point for quality education and related to effectiveness. Researchers are now concerned with types of PI that may influence school performance and children's achievement. It is now widely accepted that parents of all backgrounds can help improve school and children's performance if policies include parents' involvement, participation and partnership in a meaningful way. According to the findings above, results may be indicating that Brazilian teachers have not thought clearly about PI along those lines in the extent as to reach a common view that PI may be developed further than simply a good (however close or distant) relationship with parents. There may be also indication that teachers have not considered PI as a possible practice in terms of having parents contributing more frequent and substantially for children's formal school education. The analysis of the climate for PI of the whole group may help to clarify the position teachers held for PI as a contributor to effective education and children's achievement.

Differences across schools were also examined through Kruskal-Wallis and Dunn's as a further exploration of data. However, given that the objective of this research is to examine teachers' views as a group instead of views across schools, and that one may, a priori, accept that schools, no matter how similar they might be, will have views that may differ slightly because of their clientele and specific needs. Therefore, particular PI practices may differ as well according to particular profile, but the climate, as described here in this research, might yet be similar across schools that have similar resources, location and children backgrounds.

5.2.2 - Factor Analysis

As already mentioned in the methodology chapter, factor analysis has been used to further analyse teachers' data. Factor analysis is going to explore the data for data reduction in order to examine the underlying factors as a description for the teachers' climate. Bearing that in mind, all 40 items in question 1 were included in the analysis. The goal is to identify not-directly-observable variables based on a set of observable ones, using a more sophisticated method.

The main objective of the research is to identify the latent dimensions or constructs represented in the original variables, that is, to identify a PI

pattern that will add to descriptive analysis and that represents teachers' potential and readiness for PI. Teachers' current views and beliefs are argued to be their climate for PI. The research argues that teachers' potential and preparedness for certain groups of PI practices may reveal teachers' climate for PI. Factor analysis will help to summarise variables that have underlying similarities (common variance) into factors.

5.2.2.1 - Principal-axis factoring - PAF

PAF results were used for factor interpretation as the results by that model were more clearly defined and interpretable. In addition, PAF factor model seemed to fulfil the research objectives more thoroughly since it considers the common variance. Varimax rotation with factor loading equal or above 0,50 was used. PAF - **initial statistics** is as follows:

Principal-axis Factoring						
Initial Statistics:						
Variable	Communality	* *	Factor	Eigenvalue	Pct of Var	Cum Pct
A1	,49222	*	1	12,96271	32,4	32,4
A2	,56264	*	2	3,12561	7,8	40,2
A3	,49071	*	3	2,16606	5,4	45,6
A4	,57376	*	4	1,71848	4,3	49,9
A5	,60608	*	5	1,52421	3,8	53,7
A6	,57984	*	6	1,44842	3,6	57,4
A7	,60320	*	7	1,23243	3,1	60,4
A8	,70311	*	8	1,18063	3,0	63,4
A9	,48004	*	9	1,05909	2,6	66,0
A10	,60978	*	10	1,04350	2,6	68,7

Table 8 - Initial Statistics - 40 variables - Principal-axis Factoring

PAF - **final statistics** is as follows:

Principal-axis Factoring						
Final Statistics:						
Variable	Communality	* *	Factor	Eigenvalue	Pct of Var	Cum Pct
A1	,49994	*	1	12,56929	31,4	31,4
A2	,36772	*	2	2,72987	6,8	38,2
A3	,56420	*	3	1,73989	4,3	42,6
A4	,60357	*	4	1,27501	3,2	45,8
A5	,62461	*	5	1,10362	2,8	48,5
A6	,56729	*	6	1,04260	2,6	51,2

Table 9 - Final statistics - 40 variables - Principal-axis Factoring

-Principal-axis Factoring - Varimax converged in 15 iterations.

Rotated factor Matrix is as follows:

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
A23	,75176				
A8	,74633				
A13	,73258				
A16	,71264				
A6	,65027				
A28	,58970				
A27	,53705				
A26	,52015				
A19					
A24					
A29		,71344			
A30		,62349			
A34		,60308			
A22		,56319			
A33		,50429			
A40					
A11			,74469		
A12			,62704		
A7			,58331		
A14					
A36				,64470	
A31				,51258	
A3					
A39					
A18					,65116
A32					,59345
A21					
A9					
	Factor 6	Factor 7	Factor 8	Factor 9	Factor 10
A1	,66160				
A5	,64153				
A2					
A35					
A15		,55771			
A20		,51454			
A25					
A37			,55862		
A38					
A17				,63141	
A10					
A4					,58942

Table 10 - Rotated factors - 40 variables - Principal-axis Factoring - Varimax

5.2.2.2.2 - The eigenvalue

PAF model used for 40 variables extracted 10 models. However they should not all be considered for interpretation as they may not be worth interpreting. There are some useful techniques to be used before deciding on the number of factors. One of the techniques used as a criteria for the number of factors to be extracted is the eigenvalue. Only factors having eigenvalues greater than 1 are considered significant; all factors with latent roots less than 1 are considered insignificant and therefore should

be disregarded. According to Hair et al (1995) 'using the eigenvalue for establishing a cut-off is probably most reliable when the number of variables is between 20 and 50 (in this case the number of variables is 40).

The eigenvalue (amount of variance accounted for by a factor) varies dramatically between factor 1 and the other factors by both models (PAF and Principal Component Analysis), as it can be seen in the above final statistics tables. According to the initial statistics in PAF, the eigenvalue for factor 1 is 12,96; for factor 2 is 3,12; for factor 3 is 2,16; and for factor 4, 1,71 and so forth until factor 10.

The percentage of variance criterion is another approach to decide on the number of factors to be extracted. It is an approach in which the cumulative percentages of the variance extracted by successive factors are the criterion. The purpose is to ensure practical significance for the derived factors. According to Hair et al (1995), it is not uncommon in the social sciences, to consider a solution that accounts for 60% of the total variance (and in some instances even less) as a satisfactory solution. In the case of the present research 50% of the total variance was found and may be regarded as a reasonably adequate solution.

The percentage of variance, as initial statistics indicated in PAF, is as follows: factor 1, 32,4 ; factor 2, 7,8 ; factor 3, 5,4 ; and factor 4, 1,71 thus the cumulative percentage of variance in factor 4, 49,9. Cumulative percentage for the extracted factors was 68,7.

5.2.2.3 - Scree test

The scree test is another way to define on the number of factors to be extracted before the amount of unique variance begins to dominate the common variance structure. According to Hair et al (1995), it is:

" . . . derived by plotting the latent roots (eigenvalues) against the number of factors in their order of extraction, and the shape of the resulting curve is used to evaluate the cut-off point. Starting with the first factor, the plot slopes steeply downward initially and then slowly becomes an approximately horizontal line. The point at which the curve begins to straighten out is considered to indicate the maximum number of factors to extract."

Although looking at each individual criterion is very useful, a summary of factor selection criteria is recommended by Hair et al (1995) as it is argued that the factor analyst should always strive to have the most representative and parsimonious set of factors. Looking at the eigenvalues first as a guideline for the first attempt at interpretation is a good starting-point but the other criteria after this first attempt may indicate better solutions.

There are another two ways of determining how many factors one wants to extract which are the priori criterion and heterogeneity. None of them is relevant to the present study as the number of factors was not determined previously and the sample is an homogenous one.

5.2.2.4 - Rotated Factors

The rotated factors, in both models (principal components analysis and principal-axis factoring) are almost identical with some slight variation in loading, order and number of variables. The differences are:

a) - Factor 1 by PAF has 8 variables and so has factor 1 by PCA. However variable A27 is present in both factors 1 and 2 by PCA. In this case we might only consider it in factor 2 as its loading is slightly bigger. Order in the first factor by both models (PAF and PCA) change slightly. The loading also varies but the differences should not be seen as significant enough so as to change the meaning of the factors. Factor loading is usually slightly smaller by PAF because it only accounts for the common variance whereas in PCA some unique and error variance may be included (although these are known to be very small in the first few factors extracted by PCA).

b) - Factor 2 by PAF has 5 variables whereas in PCA it has 6 variables (variable A27 in PAF joins factor 1 whereas A 27 in PCA is present in both factor 1 and 2 as explained above).

c) - Factor 3 has the same variables by both models but ordered differently.

d) - And factor 4 has 3 and 2 variables by PCA and PAF respectively where the first two variables are the same.

These comparisons of results presented above has greatly helped to decide on what factor model to be used for interpretation. So have the results found by the other factor models (Maximum Likelihood and Alpha Factoring) added to that decision. It is important to point out that the similarity of results, when comparing the results by PCA and by PAF with other rotations, has helped immensely to determine the 'common denominator' among the factors and variables. Thus, the decision to use PAF with varimax rotation was then well balanced after meticulous analysis of the results.

5.2.2.5 - The Factors extracted by PAF model

Four factors have been selected for analysis. The eigenvalues, the scree test and level of interpretability were taken into consideration before a decision was reached. Eigenvalues above 1 were considered but proved to be insufficient for the extraction of meaningful factors since PAF extracted 10 factors. The scree test was then run so as to help determine the number of factors to be considered. According to Hair et al (1995) the scree-plot is a plot of the total variance associated with each factor. Scree plot helps to determine the most important and meaningful factors, because it identifies 'a distinct break between the steep slope of the large factors and the gradual trailing off of the rest of the factors' (Norusis, 1994, p.55). This is done by including those factors that are placed in the steep slope of the large factors and disregarding the factors that are placed alongside the horizontal line in the graph, at 'the foot of a mountain' (Norusis, 1994, p.55). Level of interpretability is also important because it helps to select those factors that are meaningful and are 'common denominators' as Hammond (1995) defines.

Hair et al (1995) compare the decision about when to stop factoring to something like 'focusing a microscope: too high or too low, an adjustment will obscure a structure that is obvious when the adjustment is just right' (p.377). Hair et al (1995) go on to say that 'by examining a number of different factor structures derived from several trial solutions, the analyst can compare and contrast to arrive at the best representation of the data' (p.377). As mentioned earlier, this procedure was rigorously followed to ensure that interpretation would be done with as much care as possible and considering all important aspects of the factors.

5.2.2.6 - Interpretation of the factors

A factor is a group of variables that has some characteristics in common. In order to find out if a group of variables has something in common it is necessary to know the correlation between each pair of variables (see Appendix n° 5 for the correlation matrix for all 40 variables in question 1). Further to correlation, factor analysis primary aim is to reveal common factors. When a factor contains two or more variables with significant loading (as used in this analysis, equal or above 0,50), it is referred to as a common factor and the variance of the variables in that factor is known as common variance. Common factors account for the interrelation between variables, and therefore, the factors are bound to have a minimum of two variables to be interpretable and meaningful. According to Child (1990), the technique of extracting the factors generally endeavour to take out as much common variance as possible in the first factor. Subsequent factors are, in turn, intended to account for the maximum amount of the remaining common variance until, hopefully, no common variance remains (as seen in the results presented here).

Factors extracted by PCA to be interpreted:

A) **Factor 1** - Building children's and parents' attitudes to school education.

Factor 1 is the most important factor as it accounts for the greatest amount of variance (32,4%). Variable A23 is the most important variable as it has the largest absolute factor loading therefore it has greatly influenced the name of the factor.

A23 -Factor loading - 0,75176

- Parents should talk to their children about the importance of school.

A8 - Factor loading - 0,74633

- Parents should set up a place and a time for their children to study at home.

A13 - Factor loading - 0,73258

- Parents should check that homework gets done regularly.

A16 - Factor loading - 0,71264

- Parents should encourage children to volunteer in class.

A6 - Factor loading - 0,65027

- Parents should teach their children to behave well and show respect for the teachers.

A28 - Factor loading - 0,58970

- Parents should take their children to special places and events that could enhance learning.

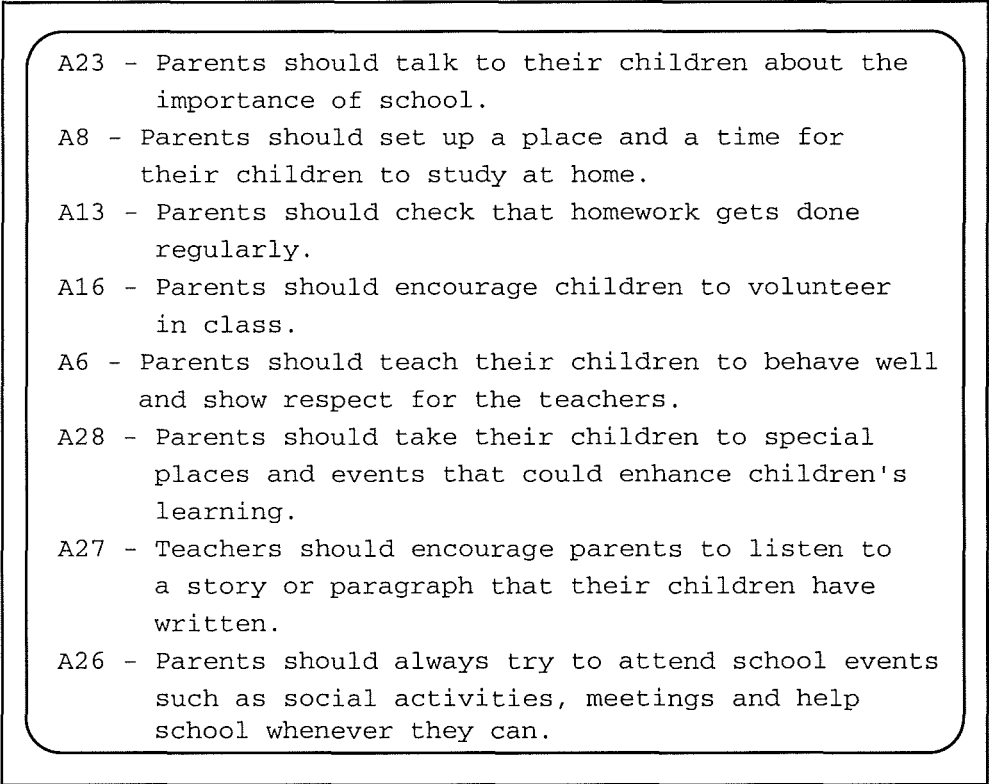
A27 - Factor loading - 0,53705

- Teachers should encourage parents to listen to a story or paragraph that their children have written.

A26 - Factor loading - 0,52015

- Parents should always try to attend and help school events, such as social activities and meetings.

Factor 1 - Parents' role in children's school education



A23 - Parents should talk to their children about the importance of school.

A8 - Parents should set up a place and a time for their children to study at home.

A13 - Parents should check that homework gets done regularly.

A16 - Parents should encourage children to volunteer in class.

A6 - Parents should teach their children to behave well and show respect for the teachers.

A28 - Parents should take their children to special places and events that could enhance children's learning.

A27 - Teachers should encourage parents to listen to a story or paragraph that their children have written.

A26 - Parents should always try to attend school events such as social activities, meetings and help school whenever they can.

Fig. 9 - Factor 1 - PAF

Factor 1 groups variables from groups A, B and C if we refer back to the initial frequency analysis. However, the results obtained from frequency analysis does not provide a pattern that groups together variables with common underlying dimensions from observable variables as factor analysis does. Thus, these results will add some further insights to the frequency analysis results.

Factor 1 stresses PI aspects that are concerned with parents' role in relation to preparing children for effective learning; parents assisting teachers at home with basic preparation for schooling; and participation in school social events. Such aspects, like parents' awareness of adequate atmosphere for studying at home, parents' moral values concerning respecting others and parents' positive attitudes to school and schooling matters as grouped in this factor, are believed to influence positively children's school performance and achievement.

Factor 1 predominantly matches Epstein's type I because it considers values and attitudes that parents are expected to nurture in themselves and children. In that sense, it may also relate to Epstein's type 4 (PI in learning activities) since type 4 also stresses parents' responsibility to assist children at home preparing the environment for learning that is related and co-ordinated with classroom activities. Thus, factor 1 may include aspects of Epstein's types 1 and 4 and may refer to the overlapping character of other PI types and practices.

Hornby (1990) suggests through his PI model that not all parents are able to join in certain PI practices. Factor 1 has grouped variables that may favour the involvement of all parents since the variables in that factor do not require further parents' training and involvement with the curriculum. Similarly, factor 1 seems to highlight aspects that correspond to PI in its initial stages as suggested by Long's three stage process (1986, 1992) -) labelled 'peripheral involvement' which is mostly concerned with activities that do not require parents to involve with classroom matters.

A26 (Parents should always try to attend school events, such as social activities and meetings and help school whenever they can) is the variable which is least loaded in the factor (0,51786). Apparently, variable A26 seems to be the odd one in the factor as it does not seem to relate to the other factors in the first instance. However, parents' participation in social events may be a way in which parents will be encouraged to approach school more spontaneously. Attending school events may lead parents to become more knowledgeable of school programs, routine, children's work and school expectations to children's performance therefore it may facilitate and promote parents to prepare their children to school education.

Factor 1 clearly highlights aspects that are concerned with activities that all parents can participate and do. Frequency and factor analysis have indicated that Brazilian teachers find parents important partners in the school educational process specially in relation to basic aspects of involvement that help to ensure children's school success.

B) - **Factor 2:** Workshops, ideas, advice, relationship - volunteer: opportunities and strategies for bringing parents to becoming involved with children's schooling processes.

A29 - Factor loading - 0,71344

- Schools should run workshops for parents on creating home conditions for study.

A30 - Factor loading - 0,62349

- Parents should serve as volunteers in school with activities that are related to their profession or hobby.

A34 - Factor loading - 0,60308

- Teachers should provide parents with ideas to discuss TV shows with their children.

A22 - Factor loading - 0,56319

- Teachers should advise parents to listen to their children read and to encourage them to do so.

A33 - Factor loading - 0,50429

- Teachers should work together to develop different ways to have a closer relationship with parents.

Factor 2 - Supporting teachers at home

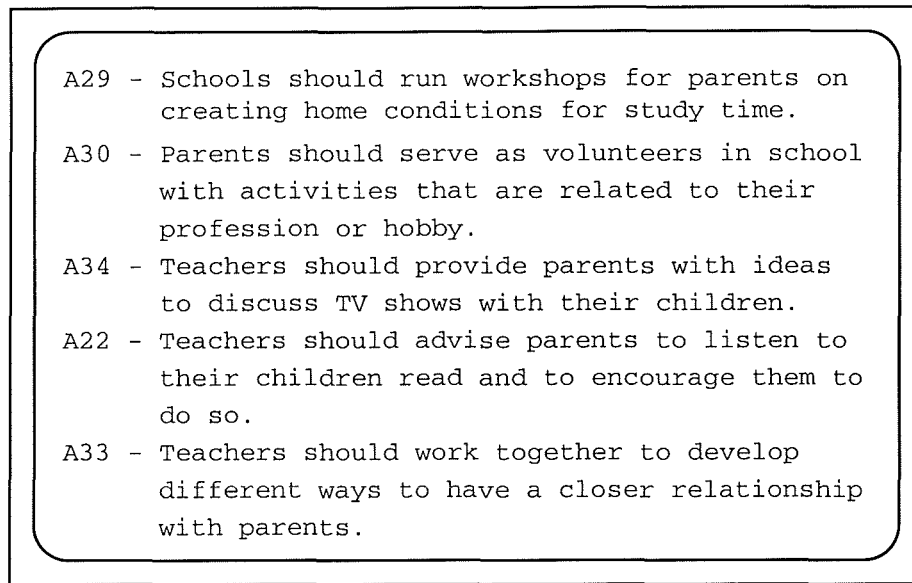
- 
- A29 - Schools should run workshops for parents on creating home conditions for study time.
 - A30 - Parents should serve as volunteers in school with activities that are related to their profession or hobby.
 - A34 - Teachers should provide parents with ideas to discuss TV shows with their children.
 - A22 - Teachers should advise parents to listen to their children read and to encourage them to do so.
 - A33 - Teachers should work together to develop different ways to have a closer relationship with parents.

Fig. 10 - Factor II - PAF

Variable A29 (Schools should run workshops for parents on creating home conditions for study) had the highest loading in both factor models (PAF and PCA) and therefore greatly influenced the name of the factor. This variable summarises well the content of the factor since all the variables are about teachers providing parents with tips and hints on what and how to help children with school work and activities that may enhance learning and in turn, support teachers' work.

Factor 2 grouped variables that complement the information found in Factor 1 as it adds new elements to the basic aspects of PI. It groups items that suggest what teachers might provide parents with. Workshops, receiving parent-volunteers, providing ideas and advice, and fostering productive relationship summarise the PI aspects which much depend on teachers' openness and preparedness to work alongside parents. Factor 2 points to a very important aspect of PI which is an exchange of expertise and abilities. Teachers provide parents with ideas on how to help their children with adequate attitude and interest and parents offer services that will promote school improvements, new opportunities for learning and better relationship with school.

Variables A30 (Parents should serve school as volunteers with activities that are related with their profession or hobby) and A33 (Teachers should work together to develop different ways to have a closer relationship with

parents) clearly have a common characteristic. For parents to be able to serve school as volunteers in what they are able to do, school should be, to say the least, open for it. 'Different ways to have a closer relationship with parents' includes a variety of PI practices that may range from very simple and traditional ways of contact with parents (such as circulars and general meetings) to a more complex exchange of information and help such as accepting parents on a volunteer basis in different situations within school facilities such as classroom, library, labs, playground and external activities.

It is interesting to note that to advise parents on creating home conditions for studying at home, ideas for discussions at home, and to listen to their children read are activities which bring parents closer to the schooling process and have a broader understanding of the learning process but yet do not invite parents to become involved with curriculum matters like planning, classroom activities, and children's assessment. This factor emphasises parents' relationship with children that encourages helping and assisting children with school matters at home as a background support.

The remaining variables in factor 2, A29 (schools should run workshops for parents on creating home conditions for study); A34 (teachers should provide parents with ideas to discuss TV shows with their children); A24 (parents should ask teachers what their children are expected to learn); and A22 (teachers should advise parents to listen to their children read and to encourage them to do so) also have a lot in common since they all deal with encouraging learning process through spontaneous activities and school/teachers assisting parents when promoting adequate environment at home for learning .

Factor 2 puts together very important ingredients for a successful relationship. School's initiative (A33), argued in this research as being the most important element to trigger effective PI developments, has been loaded in this factor. This factor also indicates that parents may contribute positively not only to the school/teachers and parents relationship but also to the learning process such as with simple reading activities (that however, may depend on parents' skills and therefore may depend upon other variables too that are not included in this factor). It highlights that parents should make an effort to respond to school's

initiative so as to enable themselves to become more knowledgeable of the school program (like in item A30 which is about volunteer work). School's initiative only, cannot act on its own for the ideal course PI should embark on. This factor emphasises the importance of both parts being pro-active towards making PI happen and it stresses the importance of active participation of both sides, parents and teachers.

It is important to highlight the fact that factor 2 adds further on to factor 1. While factor 1 emphasises what parents should do at home towards school education, factor 2 illustrates the teachers' role in order to enable both parties to work together and complement each other more effectively. Both factors suggest very clearly the basics of PI: shared responsibilities, exchanging expertise and abilities, and promoting better opportunities for successful learning.

Both factors reveal that exchange is needed. Exchange is the basis, but not a predictor, for any relationship and a very important element for a meaningful partnership. However, a relationship may be developed at different levels with different emphasis. The Brazilian climate for PI seems to be built from these basic points which emphasise that parents and teachers should acknowledge their obligations and responsibilities in order to ensure continuity of school work and home learning, successful partnership and positive atmosphere for learning.

These features of teachers' climate for PI refer us back to types 1 and 2 of Epstein's typology. Parents' and schools' obligations (communication) together ensure PI development towards a productive partnership. Type 1 and 2 together also suggest that an exchange process should get into place: parents and teachers working for the same purpose and having common goals but yet different and distinct tasks. Epstein's overlapping spheres and typology also suggest that parents and teachers do have common tasks, defined responsibilities and both may work together in order to achieve better results in both their relationship and the children's education.

C) - **Factor 3** - Communication: a positive contact with parents

A11 - Factor loading - 0,74469

- Teachers should contact parents to discuss their children's improvement and progress.

A12 - Factor loading - 0,62704

- Schools should survey parents each year for their ideas about all school aspects.

A7 - Factor loading - 0,58331

- School should send home communication about school that all families can easily understand and use.

Factor 3 - Helpful and Pro-active Communication

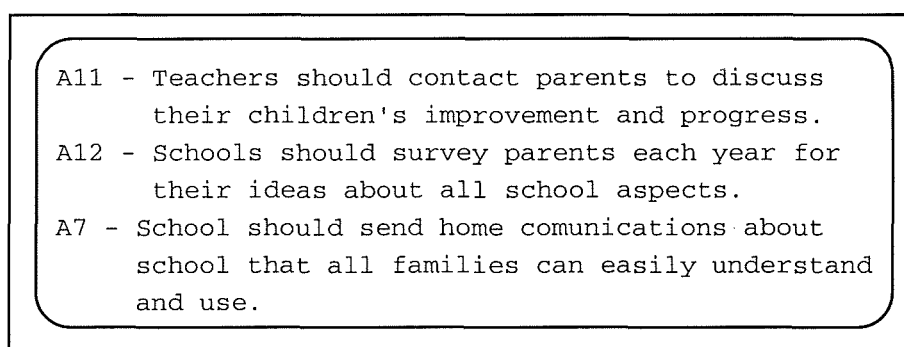


Fig. 11 - Factor III - PAF

Although factor 3 may not be considered as important as factor 1, it does not mean it is unimportant. Rather, it may bring up important aspects that adds information to the previous factors with rich insights. In this case, it adds very meaningfully to the analysis of the data as it raises another very important facet of PI which is about school being sensitive about getting parents to understand schools' various aspects.

In factor 3, variable A11 (Teachers should contact parents to discuss their children's improvement and progress) had the highest loading by both factors analysis models (PAF and PCA) that were considered for analysis. It emphasises communication that conveys positive information about the children. Factor 3 groups variables that include, very broadly, ways that school should develop communication with parents: contact parents to provide information, which might occur individually or in group, written or orally; gather useful information from parents for future school improvement; and easily understandable messages for possible feedback from parents and future partnerships.

Communication (factor 3) comes as if to round up the previous factors as it raises one of the most crucial element for successful partnership. It is important to note that the forms of communication grouped in this factor secure contacts that are essentially positive and may be seen as an invitation for partnership. That is, contacts that are primarily friendly and that includes appraisal for children's abilities, achievement and performance will most definitely draw parents' attention to collaborate and help and gradually develop more complex school/parent partnership. All variables in factor 3 correspond to Epstein's type 2 which is related to school basic obligation - communication.

Factor 3 emphasises an important aspect that the two previous factors had not particularly accounted for. Exchanging ideas was already acknowledged, but listening to parents (A12) is just as important as giving instructions and passing on important information about the schooling process and the children at home.

The parents' data analysis has revealed that without an effective two-way communication the tendency is that parents and teachers become more and more two separate entities that care for the education of children but never get to meet. Positive communication, as highlighted in this factor, may invert that scenario. Otherwise, the likelihood of problems occurring more frequently is high then. Given all the difficulties Brazilian schools, teachers and the educational system have faced throughout the past decades, it is ever so important that school encourage parents to take part in school decisions, planning, changes for improvements and develop better social relationship. It is ever so important that Brazilian parents have a clear understanding of what Brazilian school education is all about, specially about children's improvement and progress.

Another important aspect that comes up in factor 3 is that communication may be the responsibility of school and teachers. School (specially in Brazil where lower class people are often reluctant to contact school because they fear the very fact that they may not be able to understand the information conveyed or the schooling process itself) should develop skills and encourage teachers to take adequate initiatives in order to promote partnership, and respond to parents and children's needs and demand.

D - **Factor 4** - PI under teachers' instruction - an attempt to include parents in the learning process

A36 - Factor loading - 0,64470

- Teachers should provide parents with information about how to monitor homework.

A31 - Factor loading - 0,51258

- Teachers should encourage parents to do specific activities with their children that maximise school learning.

Factor 4 - Teachers' Instructions

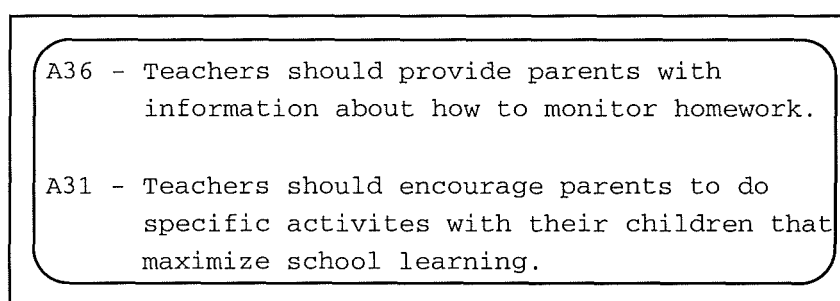


Fig. 12 - Factor IV - PAF

Although factor 4 groups only two variables, its eigenvalue is well above 1 and in the scree plot, it was situated right before the point at which the curve first begins to straighten out. It will therefore be included in the analysis as it also adds very meaningfully to the analysis.

Factor 4 is about instructing parents to assist children with school work at home and in other situations children experience with their families. This factor includes PI practices that go a little beyond what the other factors have suggested although factor 1 and 2 also include items from Epstein's type 4. It stresses parents' active participation in learning activities outside school that may help to enhance school learning.

To assist with homework and develop activities that support school learning involve teachers being more available to parents for instruction and clarifying doubts. From parents' data, it was learned that parents very often help their children with homework and school-related activities even when they are not requested to or supported by the teachers. Seldom

did they let teachers know they tried to help their children because they believed their help would not be of any value to either themselves or their children. In that attitude there was also a touch of fear and scepticism as it seemed parents were not accustomed to maintain contacts of that kind with school/teachers. Nevertheless, parents wished teachers instructed them on how to do it. Parents sometimes felt that they would rather drop that kind of help at all because they felt rather insecure about the way they were doing it.

It is important to point that teachers' findings also acknowledged the issue of helping children at home with school activities that require some information from teachers to parents in such way that will come to contribute to classroom performance.

Further analysis to teachers' data

In order to verify whether teachers differ according to grade taught, years of experience and level of education. Kruskal-Wallis was carried out with all 40 variables and the results were as follow (see Appendix 11):

Grade taught: all variables below appeared to be significantly different across grade taught ($p < 0,01$).

A4 - Schools should run workshops for parents on educational activities programs and also after school recreation (0,006).

A5 - Parents should talk to teachers about problems the children are facing at home (0,005).

A24 - Parents should ask the teachers about what their children are expected to learn (0,007).

A26 - Parents should always try to attend school events, meetings or help school whenever they can (0,004).

A32 - Parents should help teachers in the classroom whenever possible (0,006).

Level of education:

A37 - Schools should run parents and teachers meetings regularly (0,007).

Teachers seemed to differ most across grades. It is known that parents tend to become more interested in involvement when children are in

their first stages of formal education. The younger the child the more parents seem to participate and join PI initiatives. Epstein and Dauber (1991) also states that "teachers in elementary schools report significantly stronger programmes of parent involvement than teachers in middle schools" (p.294), which leads us to conclude that teachers of younger children may develop more PI practices than in other levels of education. In the context of this research, that may be applicable too.

No variables found to be significantly different by Kruskal-Wallis were found in the factors extracted. The Dunn's post-hoc test also indicated that differences found were not significant across teachers' grade taught or years of teaching experience.

5.2.2.7 - Summary of the teachers' data analysis

Looking back to the way the teachers' data have been analysed, it can be concluded that doing the top-down categorisation based on Epstein's typology helped to organise the data so as to clarify the teachers' tendency to certain PI types and practices but a further method for analysis was required so as to reveal a pattern for this particular context. In this sense, factor analysis has been used to summarise the variables into a meaningful PI pattern that is relevant for the Brazilian reality. Factor analysis has not downgraded remaining variables, rather, it has grouped together those variables that are interrelated in a summarised and meaningful way of the larger set, highlighting important aspects of PI types and practices for Brazilian state school teachers.

As stated earlier in this chapter, according to Epstein, PI types are not pure. All factors extracted that were analysed in this research included variables from more than one type as described by Epstein, except for factor 4 which accounted for 2 variables from type II only. Four PI types were included in the factors extracted. Type 5 - advocacy and governancy - was not included in any of the factors as such but may be considered too since such aspects may be within some parents' interests and abilities (as A30 mentioned in Factor 2). Having said that, a new typology pattern may emerge in different contexts indicating that a group of PI practices may form other types with specific emphasis according to 'teachers climate'.

According to teachers' and parents' findings, it seems that both have a tendency to address parental involvement practices as important issue. According to frequency and factor analysis, Brazilian teachers seemed to indicate what they might expect from parents and what they can do for the parents. It seemed that they expect parents to prepare children to go to school, to listen to teachers' advice and support teachers in what teachers may indicate as important, and exchange helpful communications. The pattern found revealed that schools do have expectations for parents that are mainly concerned with their own worries rather than what parents may wish, be able to accomplish and need.

Parents, on the other hand, were not prepared to go any further than practical PI: they acknowledged the importance of parental involvement but were still reluctant to be involved with school education that concerns the curriculum. Parents were indeed concerned with quality of school education and with their children's educational future. However they had little to say about how PI could help them ensure that quality education would be delivered for their children and about forming a partnership with school and teachers which aimed to understand what good quality education is about (both for them and for the educational system).

From that perspective, the teachers' climate for PI, as the pattern found indicates, seemed to be limited to involve parents in activities that may be developed outside school with very little that would require time for parents' training; teachers did not seem to be ready for a commitment that would enable them to build a partnership with parents in the terms described by Epstein. It is interesting to recall that no school has a parent room indicating that schools, therefore teachers, are not prepared both as far as physical space and human resources are concerned, to receive parents for any kind of activity to be developed at school or in classroom. The common area in the overlapping spheres would still seem to be narrow since parents and teachers seemed to be sharing very little. Parents and teachers seemed to understand their responsibilities as separate, that is, parents are responsible for preparing children to get ready school learning while teachers are responsible for teaching children within what the curriculum areas determine. The low level of interactions between teachers (and school as a whole) and parents as implied by teachers' data analysis and expressed by parents, clearly

indicates the lack of the most important element for establishing effective partnership: frequent contact with understandable and effective two-way communication. According to parents, there were problems (teachers' unavailability and absence when necessary, communication misunderstandings, use of jargons, few meetings, specially individual ones, ineffective general parents' meetings etc.) to be solved before clearer PI policies can be designed and partnership could take place.

On the other hand, there was also indication that both groups have positive attitudes for PI: teachers' data analysis emphasised positive communication, being sensitive to what parents might think of them and expect from them whereas parents would like to contribute with their participation in school social events and other practicalities. Both attitudes emphasise help, assistance, and exchange.

There seemed to be a well-defined climate for it: analysis indicate that parents and teachers seemed to acknowledge they had limitations and restrictions for PI partnership that include more complex PI types and practices but on the other hand, they also acknowledged the need to work alongside each other. The teachers' climate seemed to lie essentially on the model of separate responsibilities but still valuing positive collaborative communication.

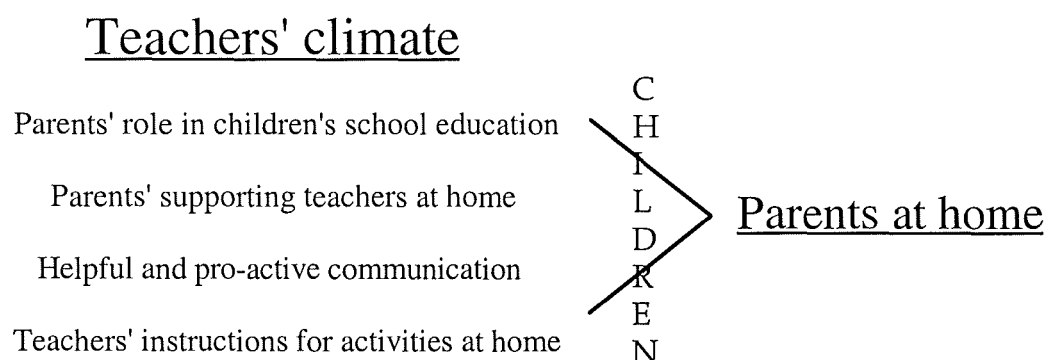


Fig 13 -Teachers' climate and PI - summary of findings

The next chapter will discuss parents' and teachers' results. It will present some conclusions looking back at the research and it will try to draw recommendations and suggestions for more research in this field.

5.2.2.8 - Factors extracted by other factor models

Other models of factor analysis (maximum likelihood and alpha factoring) were also applied with both orthogonal (varimax, quartimax and equamax) and oblique (oblimin) rotations. However, those factors proved to be either similar to the factors extracted by PAF and in the majority of cases, proved to be more confusing causing it to be more difficult to interpret (please refer to Appendix 6 for the results of Principal Component analysis as an example).

Chapter 6

Discussion and Conclusion

6.1 - Looking back at the research

There will always be PI practices in schools. There may be no clear PI policies but there may be no doubt that there will always be a climate for PI in schools. There will always be a tendency towards a certain set of PI practices that will be related to what a school wants and needs from parents and vice-versa, and to what teachers may think is appropriate for them and/or for groups of children and their parents. There will always be positive and sceptical attitudes to it as well as room for improvement as demand arises. There will always be a favourability level to certain PI pattern that may be determined by teachers' preparedness and positive attitude to it.

As the literature has indicated, it is difficult to measure school climate. It is equally complex to measure PI as to when it becomes positive so that all parties involved benefit from it. Both, school climate and PI, depend on the examination of many other aspects of school such as its characteristics, staff and children's profiles, situations related to the learning and teaching processes, parental involvement itself, changeable needs and social aspects. This might be due to the fact that PI and school climate main (and common) characteristic being the tendency to keep changing/evolving (often progressing to meet demands and developing new strategies) as problems arise and are solved, usually according to the stage of development of children, parents' demands, group of teachers and their level of preparedness to certain policies and practices, and other school characteristics (like resources availability, school structure and level of education etc.).

Although climate and PI are complex issues that may be difficult to measure, we have already evidence that positive climate and adequate PI influence school processes meaningfully. Both influence school performance and processes in

general (teachers' dedication and motivation; understanding of goals; etc.), as well as relationships (teachers/teachers; parents/teachers; teachers/children; school/community; etc.). Positive climate and PI outcome will reach out for all parties involved. Having said that, it becomes clear that to understand PI climate is relevant to the understanding of policy development that will contribute to effective schools.

This research intended to examine Brazilian teachers' readiness/preparedness for PI in as far as Brazilian state pre- and primary teachers' PI climate may look like. For that, their views, beliefs and position about different PI types and practices were examined in order to identify a possible PI pattern that reflects the teachers' PI climate. In order to pursue that aim, it was first stated that PI should be seriously taken into account as an essential school element that enables important school processes to happen. PI literature has now gathered important conclusions that account for that which is summarised in its concept, typologies, models and results that are observed and expected in schools. The literature explains PI in terms of relationship and partnership that contribute for school education and children development. The literature explains that PI may go through many stages: from simple practices to more complex parents' participation, and it may be developed differently within the same school depending on children's needs, parents' demands, abilities and availability and teachers' preparedness for it. It also highlights that there is an overlapping area as far as teachers' and parents' tasks and concerns which promote effective partnership are concerned. The overlapping area may be represented by many different but interrelated PI types and practices. Family experience and philosophy can contribute to the development of PI when it is acknowledged as important and helpful in the schooling process. The basic assumption is that learning happens as a sum of varied experiences in different environments that the person belongs to. Thus, family and school experiences are important for the child learning processes and it counts on both to cope with wider demand for effective learning.

Then, it was argued that, as research has revealed and literature suggested so far,

the responsibility of initiating and developing PI rests upon school and in turn, its teachers. It was stated that school must be the generator of the partnership but at the same time, it should allow and invite parents to reveal their views, opinions and wishes in order to act accordingly. The literature concludes that when school had clear policies and teachers acted together, that is, followed guidelines in order to reach a consensus and use common PI practices, the results pursued appeared to be more effective and positive. In addition, the literature also argues that social aspects may influence PI policies and practices but it may not be the only determinant of its success or failure. Other aspects, such as clear instructions and goals, may be stronger variables than social aspects alone.

The whole school approach was then presented under that light. It is suggested, according to the literature, that PI is also to be seen from 'the whole school approach' perspective since PI should not be developed by a teacher's isolated initiative only. Obviously, there will be situations when a teacher will have to deal with parents individually specially during troubled times, or with hard-to-reach parents, when specific measures might have to be taken. Nevertheless, individual cases may also be dealt with after teachers' consensus is reached. Further to that, the literature also suggested that PI should be flexible enough so as to involve as many parents as possible within what parents' abilities, availability and expertise may be (Hornby, 1992). Parents will definitely have different points of view, demands, needs and abilities and therefore might like to be treated accordingly, or offer specific help according to their own abilities. Thus the whole school approach emphasises joint effort to tackle challenges, to support each other decisions and to encourage establishing common ways to deal with specific aspects of schooling and specific demands. However, it is important to remember that an experience by one teacher might inspire another teacher who may go through similar PI experience.

In addition to that, it was also mentioned that creating a feeling of belonging is a crucial element for effective PI. Creating a feeling of belonging calls for teachers to come together too. It requires an understanding of each other's positions to PI. It requires teachers to understand their climate for it in order to feel ready for a

relationship with parents. Only then, may school welcome parents so parents get the chance to feel they belong there too, because they play an important role in their children's school education too.

Parents, teachers, children, relationships, partnerships, the feeling of belonging, PI policies, effective practices, position and opinions, typologies and models, whole school approach, and joint effort are also elements that influence school climate. Some authors suggest that school climate may be an outcome (of people coming together where an atmosphere will be created) and yet a generator of improved outcome. In this sense, school climate literature emphasises the creation of a positive school climate in order to create an atmosphere that is more conducive to more effective and long-lasting learning (outcome variable). Similarly, PI encourages parents and teachers to work together so they both share experiences that are relevant to the creation of healthier environments for learning, be it at home, school or yet other places that children have access to through family and school life. Thus, PI and school climate have a common aim: to create positive relationships in order to provide children with the best opportunities for learning and to be successful.

The main argument is that positive climate (atmosphere that sets the right attitude to important school issues) may help to determine success. Positive climate may only be created if there is a general commitment with clear aims that should be fulfilled. Having said that, it is argued that PI works best within that framework too: a positive PI climate is about common efforts to fulfil common aims. Common aims are about developing parent/teacher relationship in order to promote children's school success. Having said that, this research argues that PI may be best developed if those who are responsible for setting policies and putting them into practice (argued here to be school's and teachers') were aware of their own abilities. For that, it is necessary to examine the Brazilian teachers' views in order to understand their climate for it. The main argument of this research was that teachers' climate for PI is the PI pattern found through analysis of their views.

6.2 - Examining the results - teachers' expectations X parents' perspectives

Despite the fact that teachers' current PI practices (what teachers were actually using to keep in contact with parents) were not examined, results showed important features of PI for Brazilian state teachers. The results indicated the teachers' position in relation to the development of PI practices in Brazilian schools as the description of the teachers' potential and preparedness to PI.

It is important to recall that factor analysis is a technique used when the researcher wants data summarisation and the objective is to reveal a balanced set of variables that may represent the larger set of the initial observations. The factors extracted added further to what descriptive analysis revealed, indicating the Brazilian teachers' perspective about those PI practices that are related by underlying dimensions. Thus, it was expected that the factors would indicate the teachers' general climate for PI in Brazilian schools. Apparently, what Brazilian teachers would most like is parents to know what they are expected to do to support children's school education at home.

It is also important to point out that teachers do relate parents' help with children's school work and not only with parents' basic obligations (as described by Epstein as type 1), and school social functions. The factors extracted indicated that the Brazilian teachers valued parents' support (factor 1: adequate children's outings that help to enhance school learning; factor 2: creating adequate home conditions; factor 3: children's improvement and progress; factor 4: concern with maximising school learning) further than only basic child care and rearing. That is, factor 1 emphasises PI practices that are a step ahead of the basic obligations of parents. It illustrates what teachers would like parents to do when school work is the issue. On the other hand, teachers did not seem to be very interested in having parents involved with teaching, rather, they strongly pointed out those practices that are related to supporting their work, but acting more passively without actually having to be involved with teaching the children (as suggested in factor 1) at home or school.

Factor 2 takes it a little bit further when it picks up a variable that has to do with some involvement with teaching. There are some activities that teachers may not have the time to do with children in the classroom, like listening to child read a book and reading a book with or for child. This is an activity that, ideally, should be done individually and as often as possible, specially at the stages of education that this research examined (pre-school and primary school years).

Nowadays, in the majority of state schools, Brazilian teachers have far too many children in the classroom to cope with on their own and/or may not have the facilities and most probably the time to assist the children individually as they themselves would like to do (it is important to mention that helpers in the classroom are not commonly found in state schools in Brazil). It may be easier for parents to find the time when they can do that kind of activity with their children at home. Research has shown that, that kind of activity does not take very long and parents learn to do it and enjoy doing it. Nevertheless, some teaching may be involved in that activity, but that is a kind of teaching that parents can handle easily if it is well explained to them. If it is done at the level at which the child can successfully cope with (through selecting adequate books, texts, tasks and homework), parents would only have to spare a few minutes of their time to do it, without much complicated teaching or instruction involved (A22, factor 2).

That kind of activity seemed to worry Brazilian parents. They said they felt rather insecure to do that with their children because they feared that their way would not necessarily be the way teachers would agree with. Brazilian parents were also reluctant to help children with math's work. Math is a common worry among parents and it is more worrying than any other subject. There seemed to be no dialogue between teachers and parents about the issue of help children at home, even though teachers seemed to expect parents' help from home. Despite the fact that communication was not flourishing between them, not even very simple interaction between parents and children at home were observed. Simple activities like reading together and using every-day house-keeping activities for practising some math's skills that may help to boost child's self-esteem and confidence, empower parents and help teacher with practising skills learned in

the classroom, but were not picked by neither parties as a possibility for PI. Parents did not seem to be aware of that at all. They seemed to be more worried about teaching strategies to be used than actually seeing it as a way to interact with their children in order to improve their children's strategies to learn. That perspective may be showing that powerful information about school learning and life was missing as well as about how to enhance school learning informally. Parents did lack the information about powerful learning situations that may be created at home. We can also conclude that, most probably, teachers were not aware of this powerful tool which is to use everyday life situations to help children with school studies.

Factor 3 introduces a very important element for PI which is communication. It stresses the need for contact that emphasises progress, improvement, each other's views and opinions and effectiveness. On the other hand, Factor 4 highlights certain aspects of communication since it points out to the teachers' responsibility in this partnership: parents need guidance, no matter what their SES or availability and openness to become teachers' partners is likely to be.

The results seemed to suggest that teachers and parents believed they have different tasks although they have common concerns. Brazilian teachers and parents appeared to be reluctant to do what they thought should be the other's job: teachers should keep school education as their responsibility whereas parents should make sure children get prepared for school education. Therefore, the results have clearly indicated that Brazilian teachers and parents were in the first stages of PI where parents and teachers would meet through the children rather than directly to co-operatively discuss and reach decisions about how to improve situations that are conducive to effective learning. The factors extracted were all about supporting the teachers rather than actually 'being involved' in school matters more deeply.

On the other hand, parents' results showed that Brazilian parents would like to know what to do to help their child and consequently support teachers' work. However, parents also stressed that involvement with curriculum matters would

be difficult and not always possible due to a variety of reasons (such as time and self-confidence). It is important to recall that almost all parents interviewed completed fundamental education which led me to believe that, if given proper chances, they would be able to become school partners in order to improve school education and children's chance of success. When parents are illiterate, involvement requires more complex strategies and becomes more difficult because strategies will have to include some kind of parents' education too.

Factor 1 is suggesting that teachers would like parents to assist them at home preparing children to go to school; factor 2 is suggesting what teachers may be able to offer parents and may be able to take from parents (accepting parents to develop activities related to their profession and hobbies); factor 3 emphasises the basic structure of communication through discussing children's progress (some teachers claimed they were available to do that in case there was a demand), listening to parents' views and home communications; and factor 4 attempts to take parents a little bit further with simple instructions given by the teachers to assist children with school-related activities at home. Factor 4 presents very positive and encouraging findings where PI seems to be just moving from Long's first stage to second stage named 'collaboration with limited specific educational tasks (e.g. reading at home). Brazilian teachers seemed to want parents to understand what school is about, and how parents may work with issues related to the curriculum. That matched parents' findings too.

Having examined the results, I could not leave out a very important aspect of the Brazilian schools' reality that might strongly influence the decisions teachers and parents may take as far as PI is concerned. Parents, children and teachers have experienced situations that are difficult to handle. Problems that were experienced and felt at school were usually varied, including learning difficulties, lack of social skills to deal with each other, acute problems associated with family income, and lack of understanding of children's home, family and neighbourhood environment. It is known that the broader environment of the child influences its life and therefore its school performance and achievement. Having said that, social life (environments that the individual have access to)

therefore, is believed to influence school processes (Bronfenbrenner, 1979). Social problems may be likely to aggravate problems experienced and felt at school.

School problems that are socially-related are usually very difficult to be tackled in Brazilian state schools because schools have very limited scope to deal with problems that are not considered as curriculum-, teaching and learning processes or children's achievement-related. Even if children's home conditions are known to school as poor, very little can get done towards getting to know more closely about it, specially in big cities as Belo Horizonte. Solutions are often restrict to immediate needs rather than prevention measures. Social workers are often invited to school in order to help to find solutions for extreme cases, but rarely are they able to reach a decision that will influence the improvement of the situation. Home visiting, although it is considered as an adequate and effective intervention, is often beyond question as school budget is restrict to schools' basic resources. In addition, it is not expected that school perform that kind of assistance. On the other hand, parents are often invited to school when problems arise, but that seemed to be an unsuccessful strategy since the majority of parents does not come to school when necessary. PI traditional ways does not seem to tackle the common problems faced by state schools or does not seem to be an inviting strategy for partnership.

Teachers' lack of training to deal with parents pushes parents away and increases sceptical attitudes to and from school for PI policies. Lack of time (e.g. teachers working double-shifts and schools working three shifts) to dedicate to activities that could involve parents is a problem not easily solved. No physical space is available for meetings and effective follow-ups are not provided. This may explain rare individual meetings and lack of policies that encourage frequent visits to school. Lack of support for children and parents with family problems inside and outside school and no social or psychological services available in schools and last but not least, lack of adequate resources to deal with extra-curriculum issues are examples of difficulties that schools face which might influence PI policies and practices in Brazilian schools. All these aspects indeed overshadow teachers' motivation to dedicate extra time to children's problems

and progress that affect learning and to family. It actually shapes their climate for it.

Social problems may also include those problems that are not always related to poverty, but are related to children's developmental process such as peer pressure, friendship and relationship, difficulty to express their feelings, wishes and understanding, family misunderstandings, violent and aggressive behaviour among friends and towards adults, questions about their moral issues, etc. These problems seem to influence school as well as family relationships. These are common complaints by teachers at this level of education and parents. It was mentioned that those kinds of problems are strongly felt by their children and are not dealt with neither at home or at school. Parents and teachers must unite so procedures are shared and understood by both parties. PI strategies may also deal and tackle these difficulties.

As mentioned in previous chapters, Brazilian state schools serve children from various background. Similarly, teachers' background varies just as much. Brazilian researchers and authors have argued that the social impact caused by social differences is believed to strongly influence school relations with parents and community, not to say children's performance and achievement. Brazilian teachers are often confronted with different and diverse demands from children and parents. Not being able to find clear support from schools' PI policies and acute lack of abilities to deal with such situations, teachers find themselves left to deal with parents at their own discretion, personal judgement and isolated decisions. Traditionally, schools have dealt with problems through general meetings as an attempt to develop common policies that will hopefully manage to cope with diversity. As a consequence, teachers' lack of knowledge and understanding about children's reality and family life, shallow relationship with parents, misconduct judgement of situations and isolated conclusions may be the cause for delaying effective action and productive partnership. Teachers' abilities and strategies to deal with parents in such situations are claimed to be very limited.

In contexts of developing countries, schools and teachers need to acknowledge background diversity as it may mean not only problems that are difficult to handle, but also a rich diversity of positive help, collaboration and partnership, and above all, access to knowledge about the community they serve. Teachers' results highlights the need for more contact with parents in order to obtain more information about the children's talents, interests, needs, health, habits, and problems and parents' expertise. That might be a start for diverse PI developments.

Parents mentioned misunderstandings and problems, and reported to have felt rather powerless to do anything to change and improve school services. The reasons for feeling powerless included school not willing to listen to parents' views and opinions (and that reason was related to parents' low self-esteem and confidence, feeling prejudiced etc.). Parents also acknowledged that the present work conditions do not encourage the idea of forming partnership because work conditions (including human resources) are extremely poor. On the other hand, some teachers, during informal conversation after applying the questionnaire, mentioned that they found working with parents very difficult because they do not understand the school's points of view, scope of action, goals and policies (or it might be interpreted as unknown family experiences and philosophies to teachers). School's lack of flexibility to deal with new demands, to review their policies and attitudes, and to listen to parents more openly (without pre-judgement) were reflected in their words.

Both, however, acknowledged the importance of PI. Both studies have suggested what they might be able and prepared to do. Parents have indicated that they would like to help, but would not know how to do it differently from what they were already doing. Teachers seemed to sense that PI would help them and the children to be more successful but still seemed to be reluctant to accept parents' assistance which also concerned ideas for the teaching and help in the classroom. They too seemed to have a limited idea about PI. The difficulties that may be found when dealing with PI might be closely linked with their own philosophy, experience and training which do not include ability and experience

to deal with parents with flexibility, creativity and preparedness for changes if necessary.

Thus, the results found in this research reflected the general state school teachers' PI atmosphere with its possibilities and limitations, and some of the problems schools faced that influenced parents' and teachers' PI performance and decisions. It reflected their scope of action, their level of preparedness for PI and it also revealed what schools were missing in order to be able to develop PI practices that would help to solve problems and improve performance at all levels. Nevertheless, the Brazilian teachers' climate included positive attitudes too that stressed integrating efforts towards better practices and establishing effective communication. Both elements are needed in every PI stage and for every PI type. Most importantly, it revealed that PI climate is closely linked with problems that are currently beyond schools scope of action. According to the data analysis, the Brazilian PI pattern might be closely linked with measures that affect school life but are not direct and commonly dealt by school staff. In this sense, results may be indicating that social classes-related problems may also help to determine, shape and influence PI policies that will help to enhance parents/teachers relationships. That is, PI in developing countries context will have to be linked with Type 6 in Epstein's typology which accounts for other social institutions that deal with childhood and family issues.

6.3 - PI models and typologies and studying PI climate

These results suggested that parental involvement typologies may be very useful to assist schools and teachers to find out what they can actually deal with well and perform more confidently and effectively. It may help teachers to do what they themselves judge they can. On the other hand, parents, having access to school and various ways of becoming involved through clear messages from teachers, may get more encouraged to be involved with their children's education more spontaneously.

The results indicated that using scales with statements about PI types and

practices helps school to find out its tendency for certain PI practices that would not be stated in the typologies with uniqueness (as the results showed that PI types - according to the authors mentioned in the literature review chapters -, are mixed within one factor). The results helped to perceive the existing frame of mind of a group of state school teachers about PI developments in a very unique way. Similarly, the PI models also helped to interpret results because they explain its flexibility and accessibility.

PI typologies, specially Epstein's typology, acknowledge a large number of PI practices that require teachers' expertise to employ them. However, they do not account for specific aspects that reflect the reality of educational settings as far as demands, needs and preparedness are concerned. Having said that, it is important to point out that the nature of the PI pattern found in Brazilian state schools indicated that PI types were found but they indicated more than simply the types they found important. The Brazilian PI pattern found in this research points further than other typologies can explain. It also reveals the climate for PI in such schools which gives us a hint on how meaningful PI may be for them. That is, PI is acknowledged as important, but it is not well known and therefore it is not integrated in their current way of working in those schools further than in the traditional way. In addition, it can also be concluded that the SES of parents and teachers might have influenced the Brazilian PI model because needs are often related to social aspects. Other social aspects that are linked with teachers' flexibility to changes and ability to expand their relationship with parents and families, acceptance that new demands always arises in an educational context, and parents' preparedness to commit themselves even in different ways and levels may be incorporated, also play a very important role in the analysis of the PI pattern found here. Flexibility to changes does not only affect schools relationship, but also affects school performance and success, decision-making (in every aspect) and improvement.

Under this light, more research is needed in Brazilian schools about PI specially to further understand those social aspects and conditions that influence climate for PI and the decision-making process for adequate actions, and to assess how

Brazilian PI practices affect children, school and parents. The research about PI climate has been successful in revealing teachers' attitudes and tendency for it and parents' position, but has not revealed how external influences, like social and psychological aspects, influence PI climate and policies. Current policies are believed to respond to teachers and schools current abilities to deal with parents and children, but may not tackle problems and prevention measures effectively.

Research in Brazilian schools should follow national guidelines (new LDB - Lei de Diretrizes de Base for national compulsory education) which now calls attention to parent participation in the school pedagogical project and stronger PTAs. Research will then be able to indicate what is needed to transform intentions and views and basic understanding of PI concepts into effective and meaningful partnership and its effects on children, parents and teachers.

Teachers will continue to be the focus of attention and research in all aspects. The national guidelines include teachers' continuous in-service training and further training is now required for those in classroom who are under-trained until all teachers are prepared at under-graduation level (through formal education and training) for more effective education and schools. Programmes have been designed to prepare teachers to find alternative ways to old problems such as school drop-out and school failure, as well as to help children catch-up with their educational level according to age. Children are no longer to be blamed for their school failure. Instead, the national, regional and local authorities have invested in improving teachers' performance and in getting parents to help their children succeed. We can no longer afford to turn parents way since we now acknowledge that learning happens continuously (in formal and informal settings) rather than just at school. It seems that shared responsibility is now taking its adequate proportion in Brazilian education too. Nevertheless, PI research needs to follow the efforts to improve Brazilian compulsory education and promote understanding about shared responsibility in formal and informal education.

The following figures summarise the results and combine parents' and teachers'

findings so as to reveal the predominant climate in Brazilian state schools. Figures 1 and 2 show the dynamics of PI in Brazilian state schools as found here. The arrows indicate the inter-dependence of all PI aspects raised by Brazilian parents and teachers. The arrows pointing upwards indicate that basic aspects such as communication will influence more complex practices and generate reflection upon important PI features (aspects between arrows). Its boundaries (integrating efforts and essential communication) are expected to be flexible since it accounts for exchange processes and new information and participants. The two-way arrows at the bottom and top of the figures indicate the evolving system which needs to reveal and assess practices constantly since its boundaries are flexible enough to integrate new members and its demands and contributions.

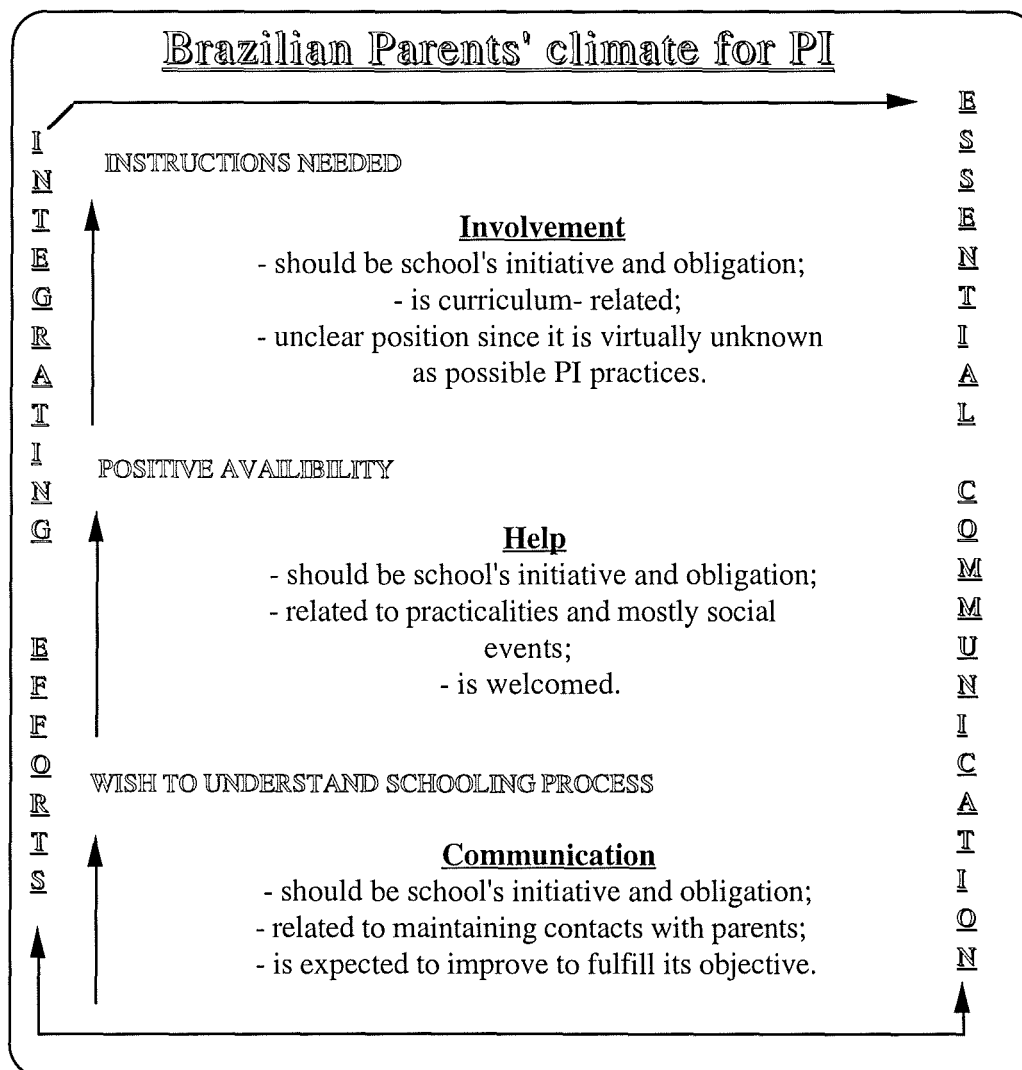


Fig. 1 - Brazilian parents' climate

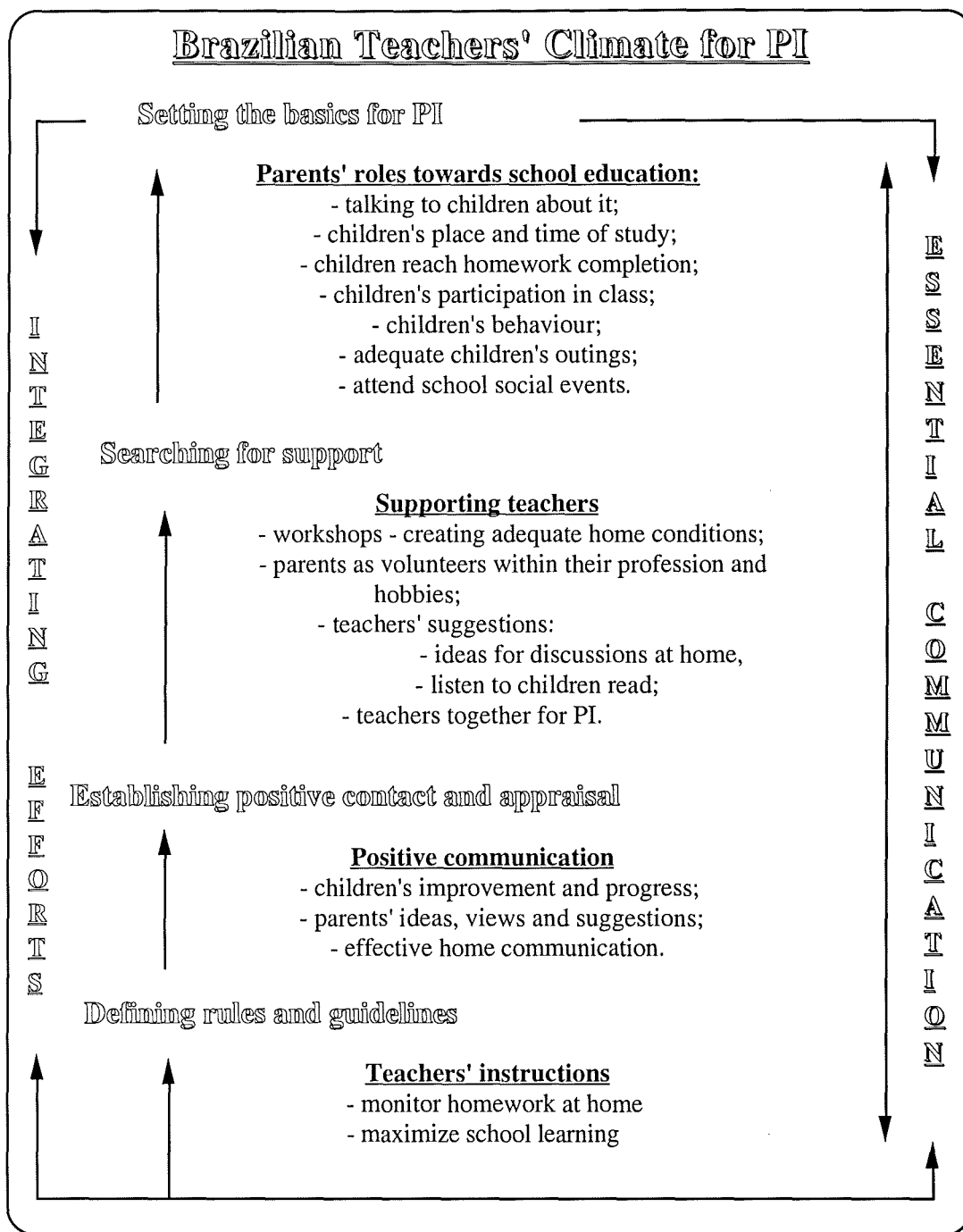


Fig 2 - Brazilian teachers' climate

6.4 - Summary of the conclusion

The figure 3 shows how intertwined results were. The arrows are as explained in the previous section for figures 1 and 2 except for the two-way arrows that link parents' and teachers' findings indicating its connections and items relationship.

Teachers' and parents' climate for PI was closely interrelated, permeated by the need for further integrating efforts and developing effective communication.

Although triangulation of data analysis was not used as such (because of the nature of data and size of samples), bringing the findings together has brought important PI aspects and allowed analysis to be more complete and meaningful. Brazilian parents' and teachers' opinions, views and concerns seemed to range from same points, but also revealed differing views. Parents' analysis indicated communication is a problem (indicating that it was poorly developed) while teachers revealed their ideas about what parents' role may be (as far as exchange of information is concerned). While parents would like more information about schooling and their children, teachers would rather have parents supporting their work without further involvement. However, as analysis of both studies is revealing, integrating efforts is noticed. It seems that from the willingness to integrate efforts (although they may not be aware of each others' views) PI in Brazilian schools may be improved and foster Brazilian teachers/parents partnership.

The climate figures highlight the basic aspects of PI and they account for problems faced in Brazilian schools that have to do with coming together to fight for better chances for Brazilian children. Emphasising the basic aspects of PI points to the social issue raised earlier in this chapter. Having complex problems and constant misunderstanding with parents due to (social) differences and values may have helped to determine the main characteristics of Brazilian state school teachers' PI climate. It is strongly believed that teachers' decisions about PI is strongly linked to social aspects of schooling that are connected to relations developed between all participants. That is, social problems reflected in school influence PI practices. That is, the PI climate may not be what Brazilian teachers might be practising at this time, but teachers cannot do much about it unless social aspects and further trained are considered.

This might have determined the stage of PI the Brazilian schools were. Setting the basics, instructions needed, searching for support, positive availability,

establishing positive contact and appraisal, wish to understand schooling process, and defining rules and guidelines indicate the early PI stage Brazilian

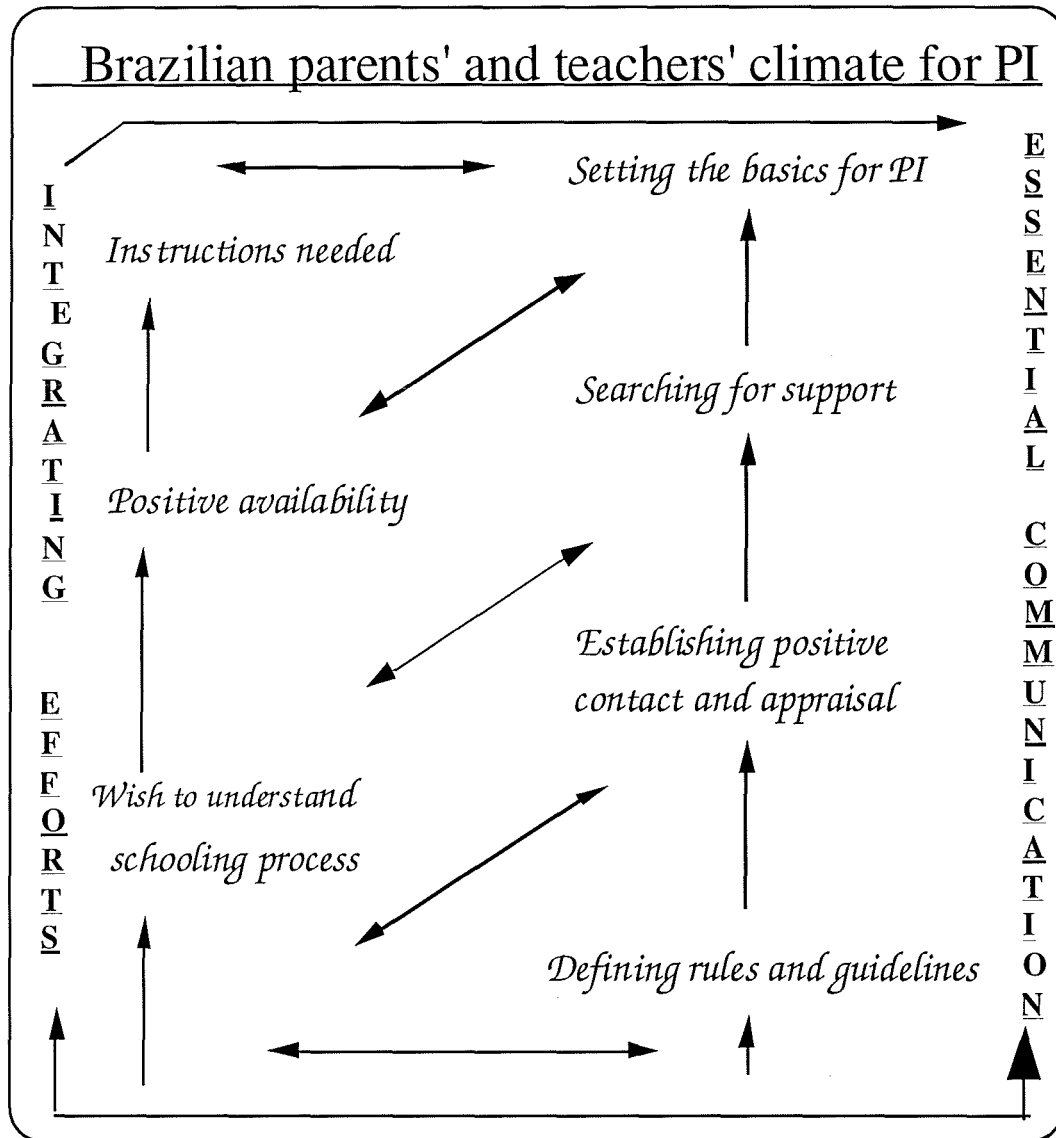


Fig. 3 - Brazilian parents' and teachers' climate for PI

teachers and parents were. It seems that clear goals and policies are still being searched and that the climate, although teachers(schools)/parents(families) relationship as revealed by parents was not as encouraging as it might be desirable for effective partnership, it may be interpreted as having enough flexibility to become in practice more positive and susceptible to incorporate initiatives that may lead to clear policies rather than being limited to traditional ways to develop PI.

Having said that, I could argue then that social class do play an important role in the success of the relationship between parents and teachers. Indeed it does. However, in Lareau's study, the schools considered themselves as partners with parents, therefore we may assume that the positive climate for PI was already set as such and in such way that it implies teachers' openness and school's clear policies for every one to follow. The difference found in Lareau's study was in responses given between parents from lower-class and middle-class parents. Lower-middle class parents did not respond to teachers' PI programs.

In this research, I now argue that social aspects (including resources available) may be linked to the PI stage Brazilian schools (teachers) might be and thus, to the climate for it. The climate for PI, as argued here, reflect their views and group position but not so much what they can count on for PI developments. Social aspects, in this research, have been related to the needs groups of children might present schools with and problems that are not school-related only, but might influence PI climate. Social class itself has not been focused in this research as one determinant for PI policies, therefore I would strongly recommend that further research should focus on understanding (social) opportunities that may be conducive to better PI practices in Brazilian schools taking into consideration external social aspects (as explained above) as well as the general teachers' climate for it. In addition, I heard many times during data collection, that schools decide to follow certain policies but local authorities do not keep up to it. Therefore, integration of efforts is needed too in a much broader sense (which means Secretary of Education must collaborate too and understand individual schools' needs. This is actually recommended in the latest LDB). If Brazilian teachers acknowledge the importance of PI but practices cannot be in place for lack of support and training, it means we need to investigate it further in order to seek effective practices for improved relationships, and to search others aspects that influence effective school performance and achievement.

6.5 - Final remarks

Parental involvement works parallel to children's development: it evolves as children change and new demands arise. Children, as they grow older, require different kinds of assistance and so do parents' demands and needs. Collaboration between parents and school (teachers) can only happen if those needs are well understood by both parties involved specially by those who are providing facilities for involvement to occur. On the other hand, PI practices can only be developed adequately if schools have a good and solid awareness of their own strength and limitation and flexibility is found. That is, a good knowledge of their own climate would help to meet parents' and children's demands and needs.

PI is an on-going process that evolves as circumstances require (as Epstein points out in the overlapping spheres as 'force A' - time, age, and grade level) and should be a flexible procedure (as suggested by Hornby model). Every opportunity to get parents to collaborate with school (and their children's education) should be regarded as precious, in order to enable parent/teacher relationship to grow into a partnership that will influence children's success both at home and school. We can no longer miss opportunities to have parents as our partners in education. That is, important lessons should be learned from the results of this research since its findings revealed that positive opportunities for parental involvement in Brazilian schools may be created despite all difficulties found. However, further research is also needed to understand the opportunities that have been missed so far and therefore needs special attention. It was not possible for this study to identify the opportunities that schools might create (and in turn, miss) when parents could be successfully involved. More research is needed to help assess school potential for PI types and practices, especially in a longitudinal basis.

The overlapping spheres, PI typologies, models, and stages are very useful for the examination of teachers' climate. Examining and identifying teachers' climate is important in order to be able to assess the PI practices used. Intervention and

action for better relationship between parents and teachers and school performance may be then followed. Future PI developments depends on clear and accurate knowledge about school, teacher's abilities and limitations, and solid understanding of parent background, demands and needs as well as experience and ability (experience and philosophy) and children's environment.

Having said that, this research has revealed Brazilian teachers' climate for PI. The position of the Brazilian teachers for PI who work under restrict conditions has now been revealed as the features of PI in such a context. It has also indicated how PI may be planned in Brazilian schools in order to produce a fruitful relationship between schools and families. Parents' data has effectively illustrated teachers' data because it exemplified very meaningfully what Brazilian parents need and agree to have. Results showed that parents and teachers think along the same lines and were aware of some of each other's limitations and needs. Teachers needed more resources in order to have more structure to deal with all aspects that may help to improve the quality of school education and parents relation. Parents needed more guidance in order to be able to assist teachers and their children more effectively. Parents also pointed out to those school aspects that needed more attention and others that required school to be more committed to develop more effective PI practices.

As already mentioned above, more research is needed in this field in Brazil. We need to understand more deeply the complex situations produced within schools that might concern PI in order to create effective strategies to involve parents that will work for our schools. There is also a need for instruments to be designed that will guide schools in the process of involving parents in different areas and aspects of school education. Instruments that will help schools and teachers to observe and know about the context they are working in and take advantage of situations that may be conducive to better relationships with parents and children and therefore improve school performance.

According to parents' data analysis, it was concluded that Brazilian parents need to learn more about school education, specially its objectives and rules, in order

to feel more powerful and in control of their children's education. Parents reported that only few parents knew about the Governing Body in schools and how to make use of it in order to get what they and their children need and have the right to. PI is also about empowering parents, to make them feel more confident about themselves and about the education their children get from the state and feel they belong to that environment too. Teachers, on the other hand, need to know more about children, their parents, family and home in order to be able to identify PI practices that will contribute to and invite parents' participation, and promote children's development. Adequate PI practices may empower all participants for productive partnership.

This research is limited, it has provided a base for future PI research in Brazilian schools since it has revealed the atmosphere for PI. The results are an important contribution for Brazilian schools and research because schools may use the results as a guideline for the development of future PI policies and practices whereas research may further investigate the school atmosphere, characteristics and philosophies that determine the extent of the success of PI initiatives. As research has indicated, climate should (and can) be improved for better results, thus further PI research that considers climate and practices used by schools and teachers may help to find ways to create positive PI climate and partnership in Brazilian schools.

In addition, the research findings may also be an indicator of the weaknesses of the teacher training courses. Since Brazilian teachers value PI as a practice that parents can do from home, that is, parents just supporting teachers without getting involved with curriculum matters, learning processes and in the classroom, it seems that they are unaware of how powerful parents' help may be, especially for troubled children. Teachers' training (initial and inservice) in Brazil should urgently include PI as part of their curriculum and routine practice. Further to this, this research suggests that it would also be desirable to focus more child development studies to be strengthen teachers' initial and inservice training. When teachers understand how children develop and learn, and that adult support and guidance both at home and at school is extremely important,

they will, at the same time, acknowledge that PI is essential, helpful and possible.

References

Allder, M. - 1993 - The Meaning of 'School Ethos' - Westminster Studies in Education, Vol.16, p. 59-69.

Ames, C.; Khoju, M.; Watkins, T. - 1993 - Parent Involvement - The Relationship Between School-to-Home Communication and Parents' Perceptions and Beliefs - Center on Families, Communities, Schools & Children's Learning, Report No. 15.

Anderson, C. S. - 1982 - The Search For School Climate: A Review of the Research, Review of Educational Research, Fall 1982, Vol. 52, No 3, P. 368-420.

Atkin, J.; Bastiani, J.; Goode, J. - 1988 - Listening to Parents: an approach to the improvement of home-school relations - London, Croom Helm.

Auerbach, E. - 1989 - Toward a Social-Contextual Approach to Family Literacy - Harvard Educational Review, Vol. 59, N° 2, pp. May.

Ball, Stephen - 1987 - The Micro-Politics of the School - Towards a Theory of School Organisation - Methuen & Co. Ltd.

Bailey, G. - 1992 - You Won't Get Me Involved - I'm a Plumber - In: Ruling the Margins: Problematising Parental Involvement - Submitted conference papers - 23rd-24th September 1992 - University of North London in association with The Institute of Education, University of London.

Barrett, M. - 1995 - Practical and Ethical Issues in Planning Research - in Breakwell, G M, Hammond, S. , Fife-Schaw (Eds.) - 1995 - Research Methods in Psychology. London: Sage Publication, pp.16-35.

Bassey, M.; Yeomans, B - 1989 - School Climate - monitoring staff opinion in a primary school - School Organization, Vol. 9; N°2, p. 219-222.

Bastiani, J. - 1978 - Written Communication between Home and School: A Report by the Community Education Working Party. Nottingham: Nottingham University.

Bastiani, J. - 1986 - Your Home-School Links - London, New Education Press.

Bastiani, J. - 1987 - Parents and Teachers 1: perspectives on home-school relations - Windsor, NFER-Nelson.

Bastiani, J. - 1988 - Parents and Teachers 2: from policy to practice - Windsor, NFER-Nelson.

Bastiani, J. - 1989 - Working With Parents - A Whole-school Approach - Nfer-Routledge.

Bastiani, J. - 1995 - Home and School - Building a Better Partnership - National Consumer Council;

Bastiani, John - 1995 - Taking a Few Risks: learning from each other - teachers, parents and pupils. London: Royal Society of Arts.

Bastiani, J. and Wolfendale, S. - 1996 - Introduction in Bastiani, J. and Wolfendale, S. - Home-School Work in Britain - review, reflection and development - London: David Fulton Publishers Ltd.

Bates, E.; Dale, P.S.; & Thal, D. - 1995 - Individual differences and their implications for theories of language development. In P. Fletcher & B. Macwhiney (Eds.), The Handbook of Child Language. Oxford: Blackwell.

Beattie, N. - 1985 - Professional Parents: parent participation in four Western Countries - London, Falmer Press.

Becker, H. J. ; Epstein, J. - 1982 - Parent involvement: A survey of teachers' practices. Elementary School Journal, vol. 83, pp. 85-102.

Benson, S.; Buckley, S.; Medrich, E. - 1980 - Families as Educators: Time use contributions to school achievement. In J. Guthrie (Ed.) School

finance policy in the 1980's: A decade of conflict. Cambridge, Mass.: Ballinger.

Bereiter, C. & Engleman, S. - 1966 - Teaching Disadvantage Pre-school Children. Englewood Cliffs, NJ: Prentice-Hall.

Bidell, T.R. & Fisher, K.W. - 1992 - Beyond the stage debate: Action, structure and variability in Piagetian theory and research. In R. Sternberg & C. Berg (Eds.), Intellectual Development. New York: Cambridge University Press.

Bloom, B. S. - 1981 - All Our Children learning: A Primer for Parents, Teachers and Other Educators. New York: McGraw-Hill.

Bourdieu, P. - 1977 - Cultural Reproduction and Social Reproduction - in J. Karabel and A. H. Halsey (Eds.) - Power and Ideology in Education, p. 487-511.. New York: Oxford University Press.

Brandt, R - 1989 - On Parents and Schools: A Conversation with Joyce Epstein. Educational Leadership, p.24-27, October 1989.

Brannen, Julia (Ed.) - 1992 - Mixing Methods: Qualitative and Quantitative Research - Avebury Ashgate Publishing Limited.

Breakwell, Glynis M - 1995 - Research: Theory and Method. in Breakwell, Glynis M.; Hammond, Sean; and Fife-Schaw, Chris (Eds.) - 1995 - Research Methods in Psychology - London: Sage Publications Ltd.

Brito, J.; Waller, H.; - 1992 - Partnership - At A Price - In: Ruling the Margins: Problematising Parental Involvement - Submitted conference papers - 23rd-24th September 1992 - University of North London in association with The Institute of Education, University of London.

Bronfenbrenner, U. - 1979 - The ecology of human development: experiments by nature and design. Cambridge, MA: Harvard University Press.

Bronfenbrenner, U. - 1986 - Alienation and the four world of childhood. Phi Delta Kappan. 67, pp. 430-436.

Bronfenbrenner, U. - 1986 - Ecology of the family as a Context fo Human Development: Research perspectives. *Developmental Psychology*, Vol. 22, N° 6, pp.723-742.

Bryant, P. E. - 1995 - Children and Arithmetic. *Journal of Child Psychology and Psychiatry*, 36, pp. 3-32.

Burgess, R G - 1984 - *In the Field - An Introduction to Field Research* - George Allen & Unwin (Publishers) Ltd;

Burgess R G - 1985 - *Strategies of Educational Research - Qualitative Methods* - The Falmer Press.

Child, D. - 1990 - *The Essentials of Factor Analysis* - 2nd Edition - Cassell Educational Limited.

Cohen, L.; Manion, L. - 1994 (4th Ed.) - *Research Methods in Education*. Routledge, London.

Coleman, P. - 1996 - The Climate Factors - *Managing Schools Today*, Vol. 5, No 4, p. 34-37, Jan 96.

Coleman, P.; Collinge, J. and Tabin, Y. - 1992 - The Learning Triad: Rethinking the Coproduction of Learning Project on Family and School Collaboration in Instruction in British Columbia, Canada. In: *Ruling the Margins: Problematising Parental Involvement* - Submitted conference papers - 23rd-24th September 1992 - University of North London in association with The Institute of Education, University of London.

Cyster, R.; Clift, P.S.; Battle, S. - 1979 - *Parent Involvement in Primary Schools* - Windsor, NFER.

Dancy, John - 1980 - The Notion of the Ethos of a School - in *The Rutter Research "Perspectives" I*. University of Exeter.

David, M. E. - 1993 - *Parents, Gender & Education Reform* - Polity Press in association with Blackwell Publishers.

Davis, A - 1995 - The Experimental method in Psychology - in Breakwell, Glynis M.; Hammond, Sean; and Fife-Schaw, Chris (Eds.) - 1995 - Research Methods in Psychology - London: Sage Publications Ltd.

de Vaus, D. A. - 1986 - Surveys in Social Research. London: George Allen and Unwin.

Dey, Ian - 1993 - Qualitative Data Analysis - A User-Friendly Guide for Social Scientists - Routledge - London and New York.

Dye, J. S. - 1989 - Parental Involvement in curriculum Matters: parents, teachers and children working together. - In - Educational Research, Vol. 31, N° 1, Feb. 1989.

Epstein, J.; Becker, H. J. - 1982 - Teachers' reported practices of parent involvement: problems and possibilities - Elementary School Journal, vol. 83, pp.103-113.

Epstein, J. - 1982 - Parent Involvement: A Survey of Teacher Practices - The Elementary School Journal, V. 83, N° 2, pp.85-102.

Epstein, J. - 1982 - Teachers' Reported practices of Parent involvement: Problems and Possibilities- The Elementary School Journal, V. 83, N° 2, pp.103-113.

Epstein, J. - 1985 - Home and School Connections in Schools of the Future: Implications of Research on Parent Involvement - In Peabody Journal of Education, (Planning the School of the Future), Vol: 62, pp. 18 - 41.

Epstein, J. - 1986 - Parents' Reactions to Teacher Practices of Parent Involvement - The Elementary School Journal, V. 86, N° 3, pp. 277-294.

Epstein, J. - 1987a - Toward a Theory of Family-School Connections: Teacher Practices and Parent Involvement. In K. Hurrelmann, F. Kaufmann and F. Losel (Eds), Social Intervential: Potential and Constraints, pp. 121-136. New York: DeGruyter.

Epstein, J. - 1987b - Parent Involvement - What Research Says to Administrators - Education and Urban Society, V.19, N°2, pp.119-136.

Epstein, J. - 1987c - What Principles Should Know About Parent Involvement. Principal, 66, 6-9.

Epstein, J. - 1987d - TIPS - Teacher's Manuals: Teachers Involve Parents in Schoolwork (TIPS) (Report P-61). Baltimore: Johns Hopkins University Center for Research on Elementary and Middle Schools.

Epstein, J.; Scott-Jones, D. - School-Family-Community Connections for Accelerating Student Progress in the Elementary and Middle Grades - In H. Levin (Ed.), Accelerating the Education of At-Risk Students.

Epstein, J. - 1990 - School and Family Connections: Theory, Research, and Implications for integrating Sociologies of Education and Family - In D. G. Unger and M. B. Sussman - Families in Communities Settings: Interdisciplinary Perspectives. pp.99-126. New York: Haworth Press.

Epstein, J.; Dauber, S. - 1991 - School Programs and Teachers Practices of Parent Involvement in Inner-City Elementary and Middle Schools. The Elementary School Journal, N° 3, 1991, pp. 289-305.

Epstein, J. - 1991 - Effects of Teacher Practice of Parent Involvement on Student Achievement in Reading and Math- in Silvern, S. B. and Hutson, B. A., Advances in Reading/Language Research, A research Annual, - Literacy Through Family, Community, and School Interaction - Vol 5 - Jai Press Inc. London, England.

Epstein, J. - 1992 - School and Family Partnerships - in Encyclopedia of Educational Research, Sixth Edition. M. Alkin (Ed.); New York: MacMillan, p. 1139-1151.

Epstein, J. - 1992 - School and Family Partnerships: Leadership Roles for School Psychologists. - In: S. L. Christenson, J. C. Conoley (Eds.) - Home-School Collaboration: Enhancing Children's Academic and Social Competence, pp. 499 - 515.

Epstein, J.; Connors, L. (1992) - School and Family Partnerships in the Middle Grades - Paper presented at RMC conference - June 1992.

Epstein, J. - 1993 - Parents' Attitudes and Practices of Involvement in Inner-City Elementary and Middle Schools - In Families and Schools in a Pluralistic Society - Chavkin, N. F. (Ed.) pp. 34-71. Albany: State University of New York Press.

Epstein, J.; Salinas, K. - 1993 - School And Family Partnerships - Survey of parents in elementary and middle grades - Parents or Guardian questionnaire - Section I - Johns Hopkins University, Center on Families, Communities, Schools and Children's Learning, Maryland, USA.

Epstein, J.; Salinas, K. - 1993 - School and Family Partnerships - Survey of teachers in elementary and middle grades - Teachers' questionnaire - Section I - Johns Hopkins University, Center on Families, Communities, Schools and Children's Learning, Maryland, USA.

Epstein, J. - 1994 - Theory to Practice: School and Family Partnership Lead to School Improvement and Student Success. In School, Family and Community Interaction: A View From the Firing Lines. Fagnoure, C. L. and Werber, B. Z. (Eds.), pp. 39-52. Boulder CO: Westview.

Epstein, J. - 1995 - School/Family/Community Partnerships, Caring for the Children We Share. Phi Delta Kappan, May, pp. 701-712.

Epstein, J., - 1996 - Perspective and Previews on Research and Policy for School, Family, and Community Partnership - Chapter 14 - In Family-School Links: How Do They Affect Educational Outcomes? Edited by Allan Booth & Judith F. Dunn. Mahwah, NJ: Lawrence Erlbaum Associates.

Gestão Escolar - Sugestões e Esclarecimentos - Estado de Minas Gerais - Secretaria de Estado da Educação.

Falcão Filho, - 1989 - Participação dos Pais no Processo Educacional: Desafio ou Impossibilidade? - Rev. Pedagógica, B.H., Vol. 7, Nº 42, p. 8.

- Ferraz, C. - 1986 - Esses Pais de Alunos - Nova Escola, Nº 2, pp. 48-51.
- Fife-Schaw, C. - 1995 - Survey and Sampling Issues. In Breakwell, Glynis M.; Hammond, Sean; and Fife-Schaw, Chris (Eds.) - 1995 - Research Methods in Psychology - London: Sage Publications Ltd.
- Fife-Schaw, C. - 1995 - Questionnaire Design. In Breakwell, Glynis M.; Hammond, Sean; and Fife-Schaw, Chris (Eds.) - 1995 - Research Methods in Psychology - London: Sage Publications Ltd.
- Finders, M.; Lewis, C.; - 1994 - Why Some Parents Don't Come to School - Educational Leadership - V. 51, nº8, May 1994;
- Finlayson, D.S. - 1975 - Organizational climate - a concept in need of attention in educational research and practice. Research Intelligence, 1, p. 22 - 36.
- Finlayson, D. - 1987 - School Climate - an outmoded metaphor; Journal of Curriculum Studies, Vol. 19, Nº 2, p.163-173 Mar-Apr 87.
- Fowler, Floyd J. , Jr. - 1993 - Survey Research Methods - 2nd Ed. - Applied Social Research Methods Series - Volume 1; SAGE Publications - International Educational and Professional Publisher - Newbury Park, London, New Delhi.
- Fullan, Michael; Hargreaves, Andy - 1992 - What's Worth fighting For In Your School? Working Together for Improvement - Open University Press.
- Hair, J. F.; Anderson, R. E.; Tatham, R. L.; Black, W. C. - 1995 - Multivariate Data Analysis with Readings - Prentice Hall International Editions.
- Hannon, P. - 1987 - A Study of the Effects of Parental Involvement in the Teaching of Reading on Children's reading Test Performance - Br. J. Educ. Psychol., 57, pp. 56-72.
- Hannon, P; Jackson, A. - 1987 - Educational home visiting and the teaching of reading - Educational Research, Vol. 29, Nº 3 - November.

Hannon, P. - 1989 - How Should Parental Involvement in the Teaching of Reading Be Evaluated? - British Educational Research Journal - Vol. 15, N° 1, pp.33-40.

Hannon, P. - 1993 - Ruling the Margins: Problematising Parental Involvement - in conditions of Learning at home and in School - Mertens et al - University of North London, 1993.

Harding, J.; Pike, G. - 1988 - Parental Involvement in Secondary Schools - London, ILEA Learning Resources Branch.

Hewison, J.; Tizard, J. - 1980 - Parental Involvement and reading attainment - Br. J. Ed. Psychol., Vol. 50, pp. 209-215.

Hornby, G. - 1990 - The Organisation of Parent Involvement - School Organisation, Vol. 10, Nos. 2 & 3, pp. 247 - 252.

Howard, S.; Hollingsworth, A. - 1985 - Linking Home and School in Theory and Practice, Journal of Community Education, 4(3), pp. 12-18.

Hughes, M; Wikeley, F.; Nash, T. - 1994 - Parents and Their Children's schools. Oxford: Blackwell

Hurst, V. - 1996 - Parents and Professionals: Partnership in Early Childhood Education - InBlenkin, G. M. and Kelly, A. V. - Early Childhood Education - a developmental curriculum - Paul Chapman Publishing Ltd, London.

James, J. - 1994 - In: Proceedings from Parental Involvement Conference, held at Baden-Powell House, Queens Gate, Knightsbridge, London, SW/5JS on 21/04/1994.

Jones, E. L. - 1986 - Social Research in Developing countries: surveys and Censuses in the Third World. London: UCL Press.

Jowett, S.; Baginsky, M.; with MacNeil, M. M.; - 1991- Building Bridges - Parental involvement in schools. NFER Research Library, Great Britain.

Katz, L. - 1982 - Contemporary Perspectives on the roles of Mothers and Teachers. Australian Journal of Early Childhood, 7.1, p. 4-15.

Kim, J; Mueller, C. W. - 1978 - Introduction to Factor Analysis - What It Is and How To Do It. Sage Publications, Inc.

Kroth, R.L. - 1985 - Communicating with Parents of Exceptional Children, 2nd Ed. - Denver, CO, Love.

Lareau, A. - 1987 - Social-Class Differences in Family-School Relationships: The Importance of Cultural Capital - Sociology of Education - V.60, pp. 73-85.

Lareau, A. - 1989 - Home Advantage - Social Class and Parental Intervention in Elementary Education - The Falmer Press, London, New York, Philadelphia

Lawley, D. N.; and Maxwell, A E - 1971 - Factor Analysis as an statistical method. London: Butterworths, Butterworth and Co. (Publishers) Ltd.

Leichter, H J - 1977 - The Family as Educator - 2nd Ed. - Teachers College - Columbia University.

Litwak, E. and Meyer, H. J. - 1974 - School, family and Neighbourhood: the Teory and Practice of school-community relations. New York: Columbia University Press.

Lombana, J.M. - 1983 - Home-School Partnerships: guidelines and strategies for educators (New York, Grune &Stratton).

Long, R. - 1992 - Parental Involvement or Parental Compliance? Parent Roles in School Improvement - In Ruling the Margins: Problematising Parental Involvement - Submitted conference papers - 23rd-24th September 1992 - University of North London in association with The Institute of Education, University of London.

Macbeth, A. in conjunction with: Corner, T.; Nisbet, S.; Ryan, D.; Stracher, D. - 1984 - The Child Between - a report on school family relations in the

countries of the European Community. Comission of the European Communities Studies Collection - Educational Series - N° 13 - Brussels.

Macbeth, A - 1989 - Involving Parents: Effective Parent-Teacher Relations. Oxford: Heinemann Educational.

Maykut, P; Morehouse, R. (1994) - Beginning Qualitative Research - A Philosophic and Practical Guide - The Falmer Press.

Meadow, S. - 1996 - Parenting Behaviour and Children's Cognitive Development - Psychology Press.

Melnick, C. R. - 1991 - Parents and Teachers as Educative Partners - International Journal of Educational Research; Vol. 15, N° 2, pp. 125-130.

Moreira, S. - 1987 - Momento de Troca e Esclarecimentos - Nova Escola - S. P., N° 12, pp. 44-46.

Mortimore, P.; Sammons, P.; Stoll, L.; Lewis, D.; Ecob, R. - 1988 - School Matters, Wells: Open Books.

Miles, M B ; Huberman, A M - 1984 - Qualitative Data Analysis - A Sourcebook of New Methods - Sage Publications.

Nias, J.; Southworth, G.; Yeomans, R. - 1989 - Staff Relationships in the Primary School - Cassell Educational Limited.

Norusis, M. J. - 1994 - SPSS Professional Statistics 6.1 - Norusis/SPSS Inc.

Oppenheim, A. N. - 1992 - Questionnaire Design, Interviewing and Attitude Measurement - New Edition. London. Pinter Publishers.

Ott, M.B.; Moraes, V.R.P. - 1994 - A Escola e a Família: Articulação e Desarticulação - Revista de Educação - AEC, p.37-66.

Peters, Bollin, and Murphy - 1991 - TÍTULO in Silvern, S. B. and Hutson, B. A., Advances in Reading/Language Research, A research Annual, - Literacy Through Family, Community, and School Interaction - Vol 5 - Jai Press Inc. London, England.

Pinto, C. - 1985 - Reunião de Pais: uma Experiência no Colégio Imaculada Conceição - Rev. Pedagógica, B. H., 3(14), 32-33.

Plowden Report - 1967 - Children and their Primary Schools (London: HMSO).

Power, T. J. - 1985 - Perceptions of Competence: How Parents and Teachers View Each Other; Psychology in the Schools, Vol. 22, pp.68-78, January.

Pugh, G.; De'Ath, E. - 1984 - The Needs of Parents: practice and policy in parent Education - London, Macmillan.

Pugh, G. - 1988 - Services for under fives: developing a co-ordinated approach - National Children's Bureau, London.

Rennie, J. - 1996 - Working with Parents - in Gillian Pugh (Ed.) - 1996 - Paul Chapman Publishing in association with the National Children's Bureau.

Rudestam, K E; Newton R R - 1992 - Surviving Your Dissertation - A Comprehensive Guide to Content and Process - Sage Publications, Inc.

Saxe, G. B., Guberman, S. R.; & Gearhart, M. - 1987 - Social Processes in early Number Development. Monographs of the Society for Research in Child Development Vol. 52. Chicago, IL: University of Chicago Press.

Siraj-Blatchford - I - 1994 - The Early Years: Laying the Foundations for Racial Equality. Stoke-on-Trent, Trentham Books.

Siraj-Blatchford, I - 1998 - Parent Involvement in Primary Schools Project in one LEA, Research Report, Institute of Education, University of London.

Smith, T. - 1988 - Parents and Pre-school - In Bastiani, J. (Ed.) - Parents and Teachers II - From Policy to Practice, NFER - NELSON.

- Smolka, A. - 1989 - Família e Escola: O Que as Crianças Percebem e Nos Dizem - Leitura - Teoria e Prática - Campinas, vol.8, nº13, pp. 33-36.
- Stevenson, D.; Baker, D. - 1987 - The Family-School Relation and the Child's School Performance - Child Development, vol. 58, pp. 1348-1357.
- Stratford, R. - 1990 - Creating a Positive School - Educational Psychology in Practice, Vol 5, 4, p.183-191.
- Strivens, J. - 1985 - School Climate: A Review of a Problematic Concept; in Reynolds, D. (Ed.) - Studying School Effectiveness, p. 45-57,
- Sullivan, M. - 1988 - Parents and Schools - Leamington Spa, Scholastic Publications.
- Tizard, B.; Hughes, M. - 1984 - Young Children Learning. London: Fontana.
- Tizard, B.; Mortimore, J.; Burchell, B. - 1981 - Involving Parents in Nursery and Infant Schools: A Resource book for teachers. - London, Grant McIntyre.
- Tizard, B.; Hewison, J. & Schofield, W N - 1982 - Collaboration Between Teachers and Parents in Assisting Children's Reading. British Journal of Educational Psychology, 52, pp. 1-15.
- Tomlinson, S. - 1991 - Teachers and Parents: Home-School Partnership. Education and Training Paper Nº 7. London: Institute for Public Policy Research.
- Viana, C. P. - 1993 - Divergências Mas Não Antagonismos: Mães e Professoras das Escolas Públicas - Cadernos de Pesquisa, Nº 86, p. 39-47, August 1993.
- Walker, J. - 1995 - Parenting in the 1990s: Great Expectations and Hard Times - Royal Society of Arts Journal, Jan/Feb., pp. 29-42.

Watt, J. - 1987 - Continuity in Early Education - Chapter 2, p. 8 - 15, In M. M. Clark (Ed.) Roles, Esponsibilities, and Relationships in the Educational of the Young Child

Wolcot, H F - 1990 - Writing Up Qualitative Research - A Sage University Paper.

Wolfendale, S. - 1983 - Parental Participation in the Education and Development of Children - London, Gordon & Breach.

Wolfendale, S. - 1986 - Involving Parents in behaviour management: a whole school approach, - Support for Learning, 1(4), pp. 32-38.

Wolfendale, S. - 1988 - Parental Partnership in Education - A case for Policy - In Bastiani, J. (Ed.) - Parents and Teachers II - From Policy to Practice - 1988 - NFER - NELSON.

Wolfendale, S. - 1992 - Empowering Parents and Teachers - Working for Children, London: Cassell.

Wolfendale, S. - 1996 - Enhancing Parental Effectiveness' in Sigston, A., Curran, P., Labram, A. and Wolfendale, S. (Eds.); Psychology in Practice: with young people, families and schools. London: David Fulton.

Yin, Robert - 1994 - Case Study Research - Design and Methods - Sage Publications.

Zanella, A.; Nuernberb, A.; Teixeira, C.; Côrte, I.; Silva, J. - 1997 - Participação dos Pais na Escola: Diferentes Expectativas - In Zanella et al (Eds.), Psicologia e Práticas Sociais, ABRAPSOSUL, Porto Alegre, Brazil.

APPENDIXES

Appendix 1

PARENTS INTERVIEW

1 - How important do you find each of the following statements. Please circle the one choice for each item that best represents your opinion.

	Not Important At All					Very Important	
1 - Teachers should request information about children's talents, interests, needs and health.	1	2	3	4	5	6	7
2 - Parents should help their children get ready to school.	1	2	3	4	5	6	7
3 - Parents should ask teachers for specific advice on how to help their children at home with classwork.	1	2	3	4	5	6	7
4 - Schools should run workshops for parents on educational activities programs and also after-school recreation.	1	2	3	4	5	6	7
5 - Parents should talk to teachers about problems the children are facing at home.	1	2	3	4	5	6	7
6 - Parents should teach their children to behave well and show respect for the teachers.	1	2	3	4	5	6	7
7 - School should send home communication about school that all families can easily understand and use.	1	2	3	4	5	6	7
8 - Parents should set up a place and a time for their children to study at home.	1	2	3	4	5	6	7
9 - Teachers should contact parents about their children's failures and problems.	1	2	3	4	5	6	7
10 - Schools should encourage teachers to have parents helping them in whatever possible.	1	2	3	4	5	6	7
11 - Teachers should contact parents to discuss their children's improvement and progress.	1	2	3	4	5	6	7
12 - Schools should survey parents each year for their ideas about the school.	1	2	3	4	5	6	7
13 - Parents should often check that homework is done.	1	2	3	4	5	6	7
14 - Teachers should inform the parents of what children are expected to learn in each subject.	1	2	3	4	5	6	7
15 - Teachers should assign homework that requires children to interact with parents.	1	2	3	4	5	6	7
16 - Parents should encourage children to volunteer in class.	1	2	3	4	5	6	7
17 - Schools should have workshops for parents to build skills in parenting and understanding the development of the children.	1	2	3	4	5	6	7
18 - Teachers could have parents helping them in assisting the children with classwork in the classwork.	1	2	3	4	5	6	7
19 - Parents should talk to their children about what they do and learn at school.	1	2	3	4	5	6	7
20 - Teachers should meet individually with parents at least four times a year.	1	2	3	4	5	6	7
21 - Parents should be able to get involved with leadership, committees and decision-making roles at school.	1	2	3	4	5	6	7

	Not important at all							Very Important
1 - Teachers should advise parents to listen to their children read and encourage the children to read.	1	2	3	4	5	6	7	
2 - Parents should talk to their children about the importance of school.	1	2	3	4	5	6	7	
3 - Parents should ask the teachers about what their children are expected to learn.	1	2	3	4	5	6	7	
4 - Teachers could show parents how to practice reading, writing, and maths skills at home before a test.	1	2	3	4	5	6	7	
5 - Parents should always try to attend school social events, meetings or help school whenever they can.	1	2	3	4	5	6	7	
6 - Teachers should encourage parents to listen to a story or paragraph that their children have written.	1	2	3	4	5	6	7	
7 - Parents should take their children to special places or events that could help children's learning.	1	2	3	4	5	6	7	
8 - Schools should have workshops for parents on creating home conditions for study time.	1	2	3	4	5	6	7	
9 - Parents should serve as volunteers in school (when possible) with activities that are related to their professions or hobbies.	1	2	3	4	5	6	7	
10 - Teachers should suggest parents to do specific activities together with their children to maximize school learning	1	2	3	4	5	6	7	
11 - Parents could help teachers in the classroom whenever possible.	1	2	3	4	5	6	7	
12 - Teachers should work together towards developing different ways to have a closer relationship with parents.	1	2	3	4	5	6	7	
13 - Teachers should provide parents with ideas to discuss TV shows with their children at home.	1	2	3	4	5	6	7	
14 - Teachers should serve PTA or other school committee that involves parents.	1	2	3	4	5	6	7	
15 - Teachers should provide parents with information on how to monitor homework.	1	2	3	4	5	6	7	
16 - Schools should run parents and teachers meetings regularly.	1	2	3	4	5	6	7	
17 - Parents should attend PTA meetings.	1	2	3	4	5	6	7	
18 - Teachers could inform parents on how to help their children with specific skills and subjects that they are having difficulties.	1	2	3	4	5	6	7	
19 - School is responsible for sending home communications about children's progress, difficulties or needs.	1	2	3	4	5	6	7	

1 - What is your greatest concern as a parent about your child school education? _____

2 - What school practice(s) to involve parents would you be interested in, or would you like to school to develop?

3 - What do you think you could do to help your child's school?

4 - What do you think you could do to help your child with school-related activities, his/her school performance and achievement?

5 - What do you think school could do to help you with your child school education?

6 - What else do you think you and school/teacher could do to ensure your child school success?

7 - What would be the best thing school could do to help you help your child with school-related activities and his/her school success?

P.S - The next version is the parents' questionnaire in Portuguese as it was administered.

	Sem Importância Nenhuma						Muito Importante
1 - Os professores devem pedir aos pais informações sobre as crianças, como seus interesses, talentos, dificuldades, saúde, etc.	1	2	3	4	5	6	7
2 - Os pais devem preparar as crianças para a sua entrada na escola.	1	2	3	4	5	6	7
3 - Os pais devem pedir aos professores algumas idéias de como ajudar os filhos com tarefas escolares.	1	2	3	4	5	6	7
4 - A escola deve aconselhar aos pais sobre o que promover para as crianças, como atividades recreativas e educativas.	1	2	3	4	5	6	7
5 - Os pais devem informar os professores de algum problema que os filhos estejam tendo ou enfrentando na vida familiar.	1	2	3	4	5	6	7
6 - Os pais devem ensinar os filhos a respeitar os professores e a se comportarem bem na escola.	1	2	3	4	5	6	7
7 - A escola deve enviar aos pais, com frequência, informações sobre a escola de maneira clara e simples.	1	2	3	4	5	6	7
8 - Os pais devem organizar um espaço e estipular uma hora para os filhos se dedicarem aos estudos em casa.	1	2	3	4	5	6	7
9 - Os professores devem informar sempre aos pais sobre os problemas que os filhos tem na escola.	1	2	3	4	5	6	7
10- A escola deve incentivar seus professores a ter os pais os ajudando quando e no que for possível.	1	2	3	4	5	6	7
11- Os professores devem informar aos pais sobre o progresso que os filhos tiveram.	1	2	3	4	5	6	7
12- A escola deve se interessar pelas opiniões que os pais tem à respeito da escola.	1	2	3	4	5	6	7
13- Os pais devem verificar com uma certa frequência se os filhos fazem exercícios de casa.	1	2	3	4	5	6	7
14- É tarefa dos professores informar aos pais sobre o o que é esperado que as crianças aprendam em cada matéria durante o ano.	1	2	3	4	5	6	7
15- As crianças devem ter exercícios para fazer em casa que também exijam uma interação com os pais.	1	2	3	4	5	6	7
16- Os pais devem incentivar os filhos a participarem mais ativamente das aulas.	1	2	3	4	5	6	7
17- A escola deve promover encontros com os pais com o objetivo de mostrar-lhes maneiras de compreender melhor o desenvolvimento das crianças.	1	2	3	4	5	6	7
18- Os pais podem ajudar os professores a dar mais assistência às crianças dentro da sala.	1	2	3	4	5	6	7
19- Os pais devem conversar com os filhos à respeito do que eles aprendem e fazem na escola.	1	2	3	4	5	6	7
20- Os professores devem ter uma reunião individual com os pais de seus alunos pelo menos 4 vezes por ano (a cada bimestre).	1	2	3	4	5	6	7
21- Os pais devem ter o direito de se envolver em tomadas de decisões na escola.	1	2	3	4	5	6	7

	Sem Importância Nenhuma							Muito Importante
1- Os professores devem aconselhar aos pais que ouçam os filhos lerem o que eles estão aprendendo.	1	2	3	4	5	6	7	
2- Os pais devem conversar com seus filhos à respeito da importância de ir à escola.	1	2	3	4	5	6	7	
3- Os pais devem perguntar na escola o que é esperado que as crianças aprendam no devido ano.	1	2	3	4	5	6	7	
4- Os professores devem sugerir aos pais maneiras de eles ajudarem os filhos a se preparar para uma avaliação.	1	2	3	4	5	6	7	
5- Os pais devem ir à escola sempre que puderem, seja para reuniões, festividades ou prestar ajuda.	1	2	3	4	5	6	7	
6- Os professores devem aconselhar aos pais que leiam e ouçam os filhos lerem o que eles escreveram.	1	2	3	4	5	6	7	
7- Os pais devem explorar com os filhos eventos e lugares que se relacionem com a aprendizagem escolar.	1	2	3	4	5	6	7	
8- A escola deve colocar à disposição dos pais conselhos sobre como criar condições adequadas em casa para os filhos estudarem.	1	2	3	4	5	6	7	
9- Os pais podem ajudar a escola se voluntariando para fazer tarefas que se relacionem com suas habilidades e profissões.	1	2	3	4	5	6	7	
10- Os professores devem sugerir atividades para os pais fazerem com seus filhos em casa que auxiliem o ensino escolar.	1	2	3	4	5	6	7	
11- Os pais podem ajudar os professores na sala de aula quando possível.	1	2	3	4	5	6	7	
12- Os professores, numa mesma escola, devem trabalhar juntos para desenvolver maneiras alternativas de estabelecer uma relação mais próxima com os pais dos alunos.	1	2	3	4	5	6	7	
13- A escola deve orientar os pais na escolha de programas de TV e também como conversar com as crianças sobre os mesmos.	1	2	3	4	5	6	7	
14- Professores devem participar ativamente da Associação de Pais.	1	2	3	4	5	6	7	
15- Os professores devem orientar os pais em como ajudar os filhos com o "Para Casa".	1	2	3	4	5	6	7	
16- A escola deve promover encontros dos professores com os pais.	1	2	3	4	5	6	7	
17- Os pais devem ir aos encontros da Associação de Pais.	1	2	3	4	5	6	7	
18- Os professores devem aconselhar aos pais em como ajudar os filhos em atividades e matérias que eles apresentam dificuldades.	1	2	3	4	5	6	7	
19- A escola deve enviar aos pais relatórios com descrições sobre o progresso e/ou dificuldades das crianças.	1	2	3	4	5	6	7	

1- Qual é a sua maior preocupação em relação a educação escolar de seu filho? _____

2 - Quais as maneiras que você se interessaria para se envolver na educação escolar de seu filho?

3 - Como você acha que você poderia ajudar a escola do seu filho?

4 - O que você acha que você poderia fazer para ajudar o seu filho em relação ao seu rendimento escolar e atividades escolares que ele deve fazer em casa?

5 - O que você acha que a escola poderia fazer para te ajudar em relação ao seu filho? _____

6 - Na sua opinião, o que seria melhor que a escola fizesse para te ajudar a ajudar o seu filho com as atividades relacionadas com a escola? _____

7 - O que mais você e a escola poderiam fazer para ajudar um ao outro para o sucesso escolar de seu filho?

Appendix 2

TEACHERS' QUESTIONNAIRE - PORTUGUESE VERSION

Prezado(a) professor(a),

Estou desenvolvendo um projeto de pesquisa sobre o envolvimento de pais com a escola (jardins de infância e escolas primária), os professores e o ensino. Para saber a sua opinião sobre o assunto, gostaria que você respondesse este questionário. É muito importante que você me faça este favor, pois assim poderei, no futuro próximo, dar sugestões em como lidar melhor com os pais. Um dos objetivos deste trabalho é explorar várias maneiras e estratégias diferentes para uma melhora no nível de aprendizagem e rendimento escolar dos alunos.

Preciso obter um número grande de professores que respondam esse questionário para que essa pesquisa possa contribuir com o processo educacional de nossas crianças: **conto com a sua participação! !**

Estarei visitando a sua escola com frequência durante o mês de Agosto para recolher o seu questionário respondido.

Obs. - O seu questionário será tratado com sigilo e os resultados desse projeto estarão disponíveis para a sua escola assim que a pesquisa estiver completa.

OBRIGADA!

INSTRUÇÃO PARA O PREENCHIMENTO DO QUESTIONÁRIO

Para as questões nas páginas 2 e 3, por favor, marque um número, de 1 a 7, para cada frase, de acordo com o grau de importância que melhor demonstre a sua realidade profissional dentro do contexto de seu trabalho atual.

Por exemplo, se você achar que a frase abaixo é "muito importante" dentro do contexto de seu trabalho, marque o número 7.

Os professores devem sempre
fazer a chamada no início do dia

Sem Importância Nenhuma							Muito Importante
1	2	3	4	5	6	7	

	Sem Importância Nenhuma							Muito Importante
1 - Os professores devem pedir aos pais informações sobre as crianças, como seus interesses, talentos, dificuldades, saúde, etc.	1	2	3	4	5	6	7	
2 - Os pais devem preparar as crianças para a sua entrada na escola.	1	2	3	4	5	6	7	
3 - Os pais devem pedir aos professores algumas idéias de como ajudar os filhos com tarefas escolares.	1	2	3	4	5	6	7	
4 - A escola deve aconselhar aos pais sobre o que promover para as crianças, como atividades recreativas e educativas.	1	2	3	4	5	6	7	
5 - Os pais devem informar os professores de algum problema que os filhos estejam tendo ou enfrentando na vida familiar.	1	2	3	4	5	6	7	
6 - Os pais devem ensinar os filhos a respeitar os professores e a se comportarem bem na escola.	1	2	3	4	5	6	7	
7 - A escola deve enviar aos pais, com frequência, informações sobre a escola de maneira clara e simples.	1	2	3	4	5	6	7	
8 - Os pais devem organizar um espaço e estipular uma hora para os filhos se dedicarem aos estudos em casa.	1	2	3	4	5	6	7	
9 - Os professores devem informar sempre aos pais sobre os problemas que os filhos tem na escola.	1	2	3	4	5	6	7	
10- A escola deve incentivar seus professores a ter os pais os ajudando quando e no que for possível.	1	2	3	4	5	6	7	
11- Os professores devem informar aos pais sobre o progresso que os filhos tiveram.	1	2	3	4	5	6	7	
12- A escola deve se interessar pelas opiniões que os pais tem à respeito da escola.	1	2	3	4	5	6	7	
13- Os pais devem verificar com uma certa frequência se os filhos fazem os exercícios de casa.	1	2	3	4	5	6	7	
14- É tarefa dos professores informar aos pais sobre o o que é esperado que as crianças aprendam em cada matéria durante o ano.	1	2	3	4	5	6	7	
15- As crianças devem ter exercícios para fazer em casa que também exijam uma interação com os pais.	1	2	3	4	5	6	7	
16- Os pais devem incentivar os filhos a participarem mais ativamente das aulas.	1	2	3	4	5	6	7	
17- A escola deve promover encontros com os pais com o objetivo de mostrar-lhes maneiras de compreender melhor o desenvolvimento das crianças.	1	2	3	4	5	6	7	
18- Os pais podem ajudar os professores a dar mais assistência às crianças dentro da sala.	1	2	3	4	5	6	7	
19- Os pais devem conversar com os filhos à respeito do que eles aprendem e fazem na escola.	1	2	3	4	5	6	7	
20- Os professores devem ter uma reunião individual com os pais de seus alunos 4 vezes por ano (a cada bimestre).	1	2	3	4	5	6	7	
21- Os pais devem ter o direito de se envolver em tomadas de decisões na escola.	1	2	3	4	5	6	7	

	Sem Importância Nenhuma							Muito Importante
1- Os professores devem aconselhar aos pais que ouçam os filhos lerem o que eles estão aprendendo.	1	2	3	4	5	6	7	
2- Os pais devem conversar com seus filhos à respeito da importância de ir à escola.	1	2	3	4	5	6	7	
3- Os pais devem perguntar na escola o que é esperado que as crianças aprendam no devido ano.	1	2	3	4	5	6	7	
4- Os professores devem sugerir aos pais maneiras de eles ajudarem os filhos a se prepararem para uma avaliação.	1	2	3	4	5	6	7	
5- Os pais devem ir à escola sempre que puderem, seja para reuniões, festividades ou prestar ajuda.	1	2	3	4	5	6	7	
6- Os professores devem aconselhar aos pais que leiam e ouçam os filhos lerem o que eles escreveram.	1	2	3	4	5	6	7	
7- Os pais devem explorar com os filhos eventos e lugares que se relacionem com a aprendizagem escolar.	1	2	3	4	5	6	7	
8- A escola deve colocar à disposição dos pais conselhos sobre como criar condições adequadas em casa para os filhos estudarem.	1	2	3	4	5	6	7	
9- Os pais podem ajudar a escola se voluntariando para fazer tarefas que se relacionem com suas habilidades e profissões.	1	2	3	4	5	6	7	
10- Os professores devem sugerir atividades para os os pais fazerem com seus filhos em casa que auxiliem o ensino escolar.	1	2	3	4	5	6	7	
11- Pais podem ajudar os professores na sala de aula quando possível.	1	2	3	4	5	6	7	
12- Os professores, numa mesma escola, devem trabalhar juntos para desenvolver maneiras alternativas de estabelecer uma relação mais próxima com os pais dos alunos.	1	2	3	4	5	6	7	
13- A escola deve orientar os pais na escolha de programas de TV e também como conversar com as crianças sobre os mesmos.	1	2	3	4	5	6	7	
14- Professores devem participar ativamente da Associação de Pais e Mestres.	1	2	3	4	5	6	7	
15- Os professores devem orientar os pais em como ajudar os filhos com o "Para Casa".	1	2	3	4	5	6	7	
16- A escola deve promover encontros dos professores com os pais.	1	2	3	4	5	6	7	
17- Os pais devem ir aos encontros da Associação de Pais e Mestres.	1	2	3	4	5	6	7	
18- Os professores devem aconselhar aos pais em como ajudar os filhos em atividades e matérias que eles apresentam dificuldades.	1	2	3	4	5	6	7	
19- A escola deve enviar aos pais relatórios com descrições sobre o progresso e/ou dificuldades das crianças.	1	2	3	4	5	6	7	

3 - Por favor, circule um número, de 1 a 7, que melhor represente a sua opinião sobre cada frase abaixo.

	Discordo Totalmente					Concordo Totalmente	
1 - Ter os pais envolvidos com a escola é importante para o bom funcionamento dela.	1	2	3	4	5	6	7
2 - Na nossa escola os pais não devem ajudar os professores na sala de aula.	1	2	3	4	5	6	7
3 - Ter os pais envolvidos com a escola ajuda o processo de aprendizagem das crianças.	1	2	3	4	5	6	7
4 - Os pais, em geral, poderiam ajudar os filhos com exercícios se os professores mostrassem como.	1	2	3	4	5	6	7
5 - Na maioria das vezes, quando eu entro em contacto com pais individualmente é para resolver problemas.	1	2	3	4	5	6	7
6 - Ter os pais envolvidos com a educação escolar de seus filhos, nos ajudaria a ser mais eficientes com os alunos.	1	2	3	4	5	6	7
7 - Os exercícios de casa não devem requisitar a participação dos pais.	1	2	3	4	5	6	7
8 - Eu, como professor, gostaria de trabalhar mais com os pais como meus parceiros na educação escolar de seus filhos.	1	2	3	4	5	6	7
9 - Os pais das crianças da nossa escola podem estar envolvidos conosco em vários aspectos.	1	2	3	4	5	6	7
10 - Na nossa escola, os professores não querem trabalhar com os pais dos alunos.	1	2	3	4	5	6	7
11 - Os professores, na nossa escola, precisam de treinamento e ajuda para envolverem os pais na educação escolar dos filhos.	1	2	3	4	5	6	7
12 - A nossa escola vê os pais como nossos parceiros na educação das crianças.	1	2	3	4	5	6	7
13 - Na nossa escola, os professores contam com a ajuda dos pais das crianças para a realização de atividades escolares desenvolvidas fora da sala de aula.	1	2	3	4	5	6	7
14 - Os professores, na nossa escola, não tem tempo nem disponibilidade para trabalhar com os pais.	1	2	3	4	5	6	7

Qual a porcentagem dos seus alunos que estão:

___ Acima da média

___ Na média

___ Abaixo média

Qual a porcentagem dos seus alunos que em geral:

___ Completam os exercícios de casa

___ Completam parte dos exercícios de casa

___ Não completam os exercícios de casa

Qual a série que você está lecionando este ano? _____

Qual é o seu curso de mais alto nível? _____

Há quantos anos você está trabalhando como professor primário/de pré-escola? _____

Se precisar, por favor, use o verso desta página para comentários.

OBRIGADA!

TEACHERS' QUESTIONNAIRE

1 - How important do you find each of the following statements. Please circle the one choice for each item that best represents your opinion.

	Not Important At All					Very Important	
1 - Teachers should request information about children's talents, interests, needs and health.	1	2	3	4	5	6	7
2 - Parents should help their children get ready to school.	1	2	3	4	5	6	7
3 - Parents should ask teachers for specific advice on how to help their children at home with classwork.	1	2	3	4	5	6	7
4 - Schools should run workshops for parents on educational activities programs and also after-school recreation.	1	2	3	4	5	6	7
5 - Parents should talk to teachers about problems the children are facing at home.	1	2	3	4	5	6	7
6 - Parents should teach their children to behave well and show respect for the teachers.	1	2	3	4	5	6	7
7 - School should send home communication about school that all families can easily understand and use.	1	2	3	4	5	6	7
8 - Parents should set up a place and a time for their children to study at home.	1	2	3	4	5	6	7
9 - Teachers should contact parents about their children's failures and problems.	1	2	3	4	5	6	7
10 - Schools should encourage teachers to have parents helping them in whatever possible.	1	2	3	4	5	6	7
11 - Teachers should contact parents to discuss their children's improvement and progress.	1	2	3	4	5	6	7
12 - Schools should survey parents each year for their ideas about the school.	1	2	3	4	5	6	7
13 - Parents should often check that homework is done.	1	2	3	4	5	6	7
14 - Teachers should inform the parents of what children are expected to learn in each subject.	1	2	3	4	5	6	7
15 - Teachers should assign homework that requires children to interact with parents.	1	2	3	4	5	6	7
16 - Parents should encourage children to volunteer in class.	1	2	3	4	5	6	7
17 - Schools should have workshops for parents to build skills in parenting and understanding the development of the children.	1	2	3	4	5	6	7
18 - Teachers could have parents helping them in assisting the children with classwork in the classwork.	1	2	3	4	5	6	7
19 - Parents should talk to their children about what they do and learn at school.	1	2	3	4	5	6	7
20 - Teachers should meet individually with parents at least four times a year.	1	2	3	4	5	6	7
21 - Parents should be able to get involved with leadership, committees and decision-making roles at school.	1	2	3	4	5	6	7

	Not important at all							Very Important
1 - Teachers should advise parents to listen to their children read and encourage the children to read.	1	2	3	4	5	6	7	
2 - Parents should talk to their children about the importance of school.	1	2	3	4	5	6	7	
3 - Parents should ask the teachers about what their children are expected to learn.	1	2	3	4	5	6	7	
4 - Teachers could show parents how to practice reading, writing, and maths skills at home before a test.	1	2	3	4	5	6	7	
5 - Parents should always try to attend school social events, meetings or help school whenever they can.	1	2	3	4	5	6	7	
6 - Teachers should encourage parents to listen to a story or paragraph that their children have written.	1	2	3	4	5	6	7	
7 - Parents should take their children to special places or events that could help children's learning.	1	2	3	4	5	6	7	
8 - Schools should have workshops for parents on creating home conditions for study time.	1	2	3	4	5	6	7	
9 - Parents should serve as volunteers in school (when possible) with activities that are related to their professions or hobbies.	1	2	3	4	5	6	7	
10 - Teachers should suggest parents to do specific activities together with their children to maximize school learning	1	2	3	4	5	6	7	
11 - Parents could help teachers in the classroom whenever possible.	1	2	3	4	5	6	7	
12 - Teachers should work together towards developing different ways to have a closer relationship with parents.	1	2	3	4	5	6	7	
13 - Teachers should provide parents with ideas to discuss TV shows with their children at home.	1	2	3	4	5	6	7	
14 - Teachers should serve PTA or other school committee that involves parents.	1	2	3	4	5	6	7	
15 - Teachers should provide parents with information on how to monitor homework.	1	2	3	4	5	6	7	
16 - Schools should run parents and teachers meetings regularly.	1	2	3	4	5	6	7	
17 - Parents should attend PTA meetings.	1	2	3	4	5	6	7	
18 - Teachers could inform parents on how to help their children with specific skills and subjects that they are having difficulties.	1	2	3	4	5	6	7	
19 - School is responsible for sending home communications about children's progress, difficulties or needs.	1	2	3	4	5	6	7	

2- Please circle the number that best represents your opinion in each of the statements below.

	Strongly disagree						Strongly agree
1 - Parent involvement is important for a good school.	1	2	3	4	5	6	7
2 - Parents should not get involved with classroom work in this school.	1	2	3	4	5	6	7
3 - Parent involvement is important for student success and the learning process.	1	2	3	4	5	6	7
4 - All parents could learn to assist their children on schoolwork at home, if shown how	1	2	3	4	5	6	7
5 - Mostly when I contact parents individually, it's to discuss problems.	1	2	3	4	5	6	7
6 - Parent involvement can help teachers be more effective with more children.	1	2	3	4	5	6	7
7 - Homework should not require parent's help.	1	2	3	4	5	6	7
8 - As a teacher, I would like to have parents acting as my partners in their children's education.	1	2	3	4	5	6	7
9 - In this school, the parents can work with us in various ways.	1	2	3	4	5	6	7
10 - Teachers in this school, would not like to work with parents	1	2	3	4	5	6	7
11 - Teachers in this school, need in-service education to implement effective parent involvement practices.	1	2	3	4	5	6	7
12 - This school views parents as important partners.	1	2	3	4	5	6	7
13 - The teachers, in this school, would like to have parents helping with activities outside the classroom.	1	2	3	4	5	6	7
14 - Teachers in this school, do not have the time or the availability to work with parents .	1	2	3	4	5	6	7

3 - About what percent of your pupils are:

___ Above average in achievement

___ Average in achievement

___ Below average in achievement

100%

4 -About what percent of your pupils usually:

___ Complete all of their homework on time

___ Complete only part of homework on time

___ Never complete homework on time

100%

5 - What grade are you teaching this year?_____

6 - What is your highest education? _____

7 - How many years have you been working as a pre-school/primary teacher?_____

If you would like to add any comment or ideas, please do use the space below and overleaf.

Thank you very much for your help.

Appendix 3

SCHOOL AND FAMILY PARTNERSHIPS

Survey of Teachers in Elementary and Middle Grades

Date: _____

Dear Teacher:

Our school is working to learn more about how schools and families can assist each other to better understand and improve family and school connections. The questions in this survey were developed by teachers and administrators working with researchers at Johns Hopkins University. They also designed questions for families to learn about their ideas and needs. Many teachers and families have completed the surveys as a first step toward improving their schools' practices of partnerships.

The results of our surveys will be tabulated and shared with you. We will use the results to plan school and family partnership projects for the future.

All information you provide is completely confidential. Responses will be grouped to give this school a "portrait" of present practices, opinions, and trends. No one is ever identified individually. Of course, your participation is voluntary and you may leave any question unanswered. To make the results useful for our school, however, we need every teacher's ideas and experiences. We are counting on you to help.

Please complete the survey and return it to: _____.
You may seal it in an envelope if you wish.

THANK YOU VERY MUCH FOR YOUR HELP!

NOTE: In all questions in this booklet, "parent" means the adult in the family who has the most contact with the school about the child.

Feel free to expand your answers in the margins or back page of the booklet.

Q-1. The first questions ask for your professional judgment about parent involvement. Please CIRCLE the one choice for each item that best represents your opinion and experience.

	Strongly Disagree	Disagree	Agree	Strongly Agree
a. Parent involvement is important for a good school.	SD	D	A	SA
b. Most parents know how to help their children on schoolwork at home.	SD	D	A	SA
c. This school has an active and effective parent organization (e.g., PTA or PTO).	SD	D	A	SA
d. Every family has some strengths that could be tapped to increase student success in school.	SD	D	A	SA
e. All parents could learn ways to assist their children on schoolwork at home, if shown how.	SD	D	A	SA
f. Parent involvement can help teachers be more effective with more students.	SD	D	A	SA
g. Teachers should receive recognition for time spent on parent involvement activities.	SD	D	A	SA
h. Parents of children at this school want to be involved more than they are now at most grade levels.	SD	D	A	SA
i. Teachers do not have the time to involve parents in very useful ways.	SD	D	A	SA
j. Teachers need in-service education to implement effective parent involvement practices.	SD	D	A	SA
k. Parent involvement is important for student success in school.	SD	D	A	SA
l. This school views parents as important partners.	SD	D	A	SA
m. The community values education for all students.	SD	D	A	SA
n. This school is known for trying new and unusual approaches to improve the school.	SD	D	A	SA
o. Mostly when I contact parents, it's about problems or trouble.	SD	D	A	SA
p. In this school, teachers play a large part in most decisions.	SD	D	A	SA
q. The community supports this school.	SD	D	A	SA
r. Compared to other schools, this school has one of the best school climates for teachers, students, and parents.	SD	D	A	SA

Q-2. Teachers contact their students' families in different ways. Please estimate the percent of your students' families that you contacted this year in these ways:

a. Letter or memo	NA	0%	5%	10%	25%	50%	75%	90%	All
b. Telephone	NA	0%	5%	10%	25%	50%	75%	90%	All
c. Meeting at school	NA	0%	5%	10%	25%	50%	75%	90%	All
d. Scheduled parent-teacher conference	NA	0%	5%	10%	25%	50%	75%	90%	All
e. Home visit	NA	0%	5%	10%	25%	50%	75%	90%	All
f. Meeting in the community	NA	0%	5%	10%	25%	50%	75%	90%	All
g. Report card pick-up	NA	0%	5%	10%	25%	50%	75%	90%	All
h. Performances, sports, or other events	NA	0%	5%	10%	25%	50%	75%	90%	All

Q-3. Some teachers involve parents (or others) as volunteers at the school building. Please check the ways that you use volunteers in your classroom and in your school THIS YEAR. (CHECK all that apply in columns A and B.)

A. In my CLASSROOM, volunteers...

- ☐ (a) I do NOT use classroom volunteers
- ☐ (b) Listen to children read aloud
- ☐ (c) Read to the children
- ☐ (d) Grade papers
- ☐ (e) Tutor children in specific skills
- ☐ (f) Help on trips or at parties
- ☐ (g) Give talks (e.g., on careers, hobbies, etc.)
- ☐ (h) Other ways (please specify) _____

B. In our SCHOOL, volunteers...

- ☐ (a) Are NOT USED in the school now
- ☐ (b) Monitor halls, cafeteria, or other areas
- ☐ (c) Work in the library, computer lab, or other area
- ☐ (d) Teach mini-courses
- ☐ (e) Teach enrichment or other lessons
- ☐ (f) Lead clubs or activities
- ☐ (g) Check attendance
- ☐ (h) Work in "parent room"
- ☐ (i) Other ways (please specify) _____

THIS YEAR, how many volunteers or aides help in your classroom or school?

C. Number of different volunteers who assist me in a typical week = _____.

D. Do you have paid aides in your classroom? ☐ NO ☐ YES (how many? _____)

E. Number of **different** volunteers who work anywhere in the school in an average week = _____
(approximately)

Q-4. Please estimate the percent of your students' families who did the following THIS YEAR:

a. Attend workshops regularly at school	0%	5%	10%	25%	50%	75%	90%	100%
b. Check daily that child's homework is done	0%	5%	10%	25%	50%	75%	90%	100%
c. Practice schoolwork in the summer	0%	5%	10%	25%	50%	75%	90%	100%
d. Attend PTA meetings regularly	0%	5%	10%	25%	50%	75%	90%	100%
e. Attend parent-teacher conferences with you	0%	5%	10%	25%	50%	75%	90%	100%
Understand enough to help their child at home:								
f. ...reading skills at your grade level	0%	5%	10%	25%	50%	75%	90%	100%
g. ...writing skills at your grade level	0%	5%	10%	25%	50%	75%	90%	100%
h. ...math skills at your grade level	0%	5%	10%	25%	50%	75%	90%	100%

Q-5. Schools serve diverse populations of families who have different needs and skills. The next questions ask for your judgment about specific ways of involving families at your school. Please CIRCLE one choice to tell whether you think each type of involvement is:

NOT IMPORTANT	=> NOT IMP	(Means this IS NOT part of your school now, and SHOULD NOT BE.)
NEEDS TO BE DEVELOPED	=> DEV	(Means this IS NOT part of your school now, but SHOULD BE.)
NEEDS TO BE IMPROVED	=> IMPRV	(Means this IS part of your school, but NEEDS TO BE STRENGTHENED.)
A STRONG PROGRAM NOW	=> STRONG	(Means this IS a STRONG program for most parents AT ALL GRADE LEVELS at your school.)

TYPE OF INVOLVEMENT

AT THIS SCHOOL...

a. WORKSHOPS for parents to build skills in PARENTING and understanding their children at each grade level.	NOT IMP	DEV	IMPRV	STRONG
b. WORKSHOPS for parents on creating HOME CONDITIONS FOR LEARNING.	NOT IMP	DEV	IMPRV	STRONG
c. COMMUNICATIONS from the school to the home that all families can understand and use.	NOT IMP	DEV	IMPRV	STRONG
d. COMMUNICATIONS about report cards so that parents understand students' progress and needs.	NOT IMP	DEV	IMPRV	STRONG
e. Parent-teacher CONFERENCES with all families.	NOT IMP	DEV	IMPRV	STRONG
f. SURVEYING parents each year for their ideas about the school.	NOT IMP	DEV	IMPRV	STRONG
g. VOLUNTEERS in classrooms to assist teachers and students.	NOT IMP	DEV	IMPRV	STRONG
h. VOLUNTEERS to help in other (non-classroom) parts of the school.	NOT IMP	DEV	IMPRV	STRONG
i. INFORMATION on how to MONITOR homework.	NOT IMP	DEV	IMPRV	STRONG
j. INFORMATION for parents on HOW TO HELP their children with specific skills and subjects.	NOT IMP	DEV	IMPRV	STRONG
k. Involvement by families in PTA/PTO leadership, other COMMITTEES, or other decision-making roles.	NOT IMP	DEV	IMPRV	STRONG
l. Programs for AFTER-SCHOOL ACTIVITIES, recreation, and homework help.	NOT IMP	DEV	IMPRV	STRONG

Q-6. Teachers choose among many activities to assist their students and families. CIRCLE one choice to tell how important each of these is for you to conduct at your grade level.

HOW IMPORTANT IS THIS PRACTICE TO YOU?

	NOT IMPORTANT	A LITTLE IMPORTANT	PRETTY IMPORTANT	VERY IMPORTANT
a. Have a conference with each of my students' parents at least once a year.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
b. Attend evening meetings, performances, and workshops at school.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
c. Contact parents about their children's problems or failures.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
d. Inform parents when their children do something well or improve.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
e. Involve some parents as volunteers in my classroom.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
f. Inform parents of the skills their children must pass in each subject I teach.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
g. Inform parents how report card grades are earned in my class.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
h. Provide specific activities for children and parents to do to improve students' grades.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
i. Provide ideas for discussing TV shows.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
j. Assign homework that requires children to interact with parents.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
k. Suggest ways to practice spelling or other skills at home before a test.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
l. Ask parents to listen to their children read.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
m. Ask parents to listen to a story or paragraph that their children write.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
n. Work with other teachers to develop parent involvement activities and materials.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
o. Work with community members to arrange learning opportunities in my class.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
p. Work with area businesses for volunteers to improve programs for my students.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
q. Request information from parents on their children's talents, interests, or needs.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
r. Serve on a PTA/PTO or other school committee.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP

Q-7. The next questions ask for your opinions about the activities that you think should be conducted by the **parents of the children you teach**. Circle the choice that best describes the importance of these activities **at your grade level**.

PARENTS' RESPONSIBILITIES	NOT IMPORTANT	A LITTLE IMPORTANT	PRETTY IMPORTANT	VERY IMPORTANT
a. Send children to school ready to learn.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
b. Teach children to behave well.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
c. Set up a quiet place and time for studying at home.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
d. Encourage children to volunteer in class.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
e. Know what children are expected to learn each year.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
f. Check daily that homework is done.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
g. Talk to children about what they are learning in school.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
h. Ask teachers for specific ideas on how to help their children at home with classwork.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
i. Talk to teachers about problems the children are facing at home.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
j. Attend PTA/PTO meetings.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
k. Serve as a volunteer in the school or classroom.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
l. Attend assemblies and other special events at the school.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
m. Take children to special places or events in the community.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP
n. Talk to children about the importance of school.	NOT IMP	A LITTLE IMP	PRETTY IMP	VERY IMP

Q-8. The next question asks how you perceive others' support for parent involvement in your school. Please circle one choice on each line. How much support does each give now to parent involvement?

	Strong Support	Some Support	Weak Support	No Support
a. You, personally	STRONG	SOME	WEAK	NONE
b. Other teachers	STRONG	SOME	WEAK	NONE
c. The principal	STRONG	SOME	WEAK	NONE
d. Other administrators	STRONG	SOME	WEAK	NONE
e. Parents	STRONG	SOME	WEAK	NONE
f. Others in community	STRONG	SOME	WEAK	NONE
g. The school board	STRONG	SOME	WEAK	NONE
h. The district superintendent	STRONG	SOME	WEAK	NONE

Q-9. Over the past two years, how much has the school involved parents at school and at home?

- ☐ (1) School involved parents **less this year** than last
☐ (2) School involved parents **about the same** in both years
☐ (3) School involved parents **more this year** than last
☐ (4) Don't know, I **did not teach** at this school last year

The last questions ask for general information about you, your students, and the classes you teach. This will help us understand how new practices can be developed to meet the needs of particular schools, teachers, and students.

Q-10. YOUR STUDENTS AND TEACHING

A. (a) What grade(s) do you teach THIS YEAR? (Circle all that apply.)

PreK K 1 2 3 4 5 6 7 8

(b) If you do not teach, give your position: _____

B. How many **different students** do you teach each day, on average?

Number of different students I teach on average day = _____

C. Which best describes your teaching responsibility? (CHECK ONE)

- ☐ 1. I teach several subjects to **ONE SELF-CONTAINED CLASS**.
☐ 2. I teach **ONE** subject to **SEVERAL DIFFERENT CLASSES** of students in a departmentalized program.
☐ 3. I teach **MORE THAN ONE** subject to **MORE THAN ONE CLASS** in a semi-departmental or other arrangement.
☐ 4. Other (please describe): _____

D. Check the subject(s) you teach in an average week (PLEASE CHECK ALL THAT APPLY):

- | | | | |
|--|---|---|---|
| <input type="checkbox"/> (a) Reading | <input type="checkbox"/> (c) Social Studies | <input type="checkbox"/> (i) Advisory | <input type="checkbox"/> (m) Other (describe) _____ |
| <input type="checkbox"/> (b) Language Arts/English | <input type="checkbox"/> (f) Health | <input type="checkbox"/> (j) Physical Education | |
| <input type="checkbox"/> (c) Math | <input type="checkbox"/> (g) Art | <input type="checkbox"/> (k) Home Economics | |
| <input type="checkbox"/> (d) Science | <input type="checkbox"/> (h) Music | <input type="checkbox"/> (l) Industrial Arts | |

E. (a) Do you work with other teachers on a formal, interdisciplinary team? ☐ No ☐ Yes

(b) If YES, do you have a common planning time with all of the teachers on your team? ☐ No ☐ Yes

F. (a) On average, how many minutes of homework do you assign on most school days?

none 5-10 25-30 35-45 50-60 over 1 hour

(b) Do you typically assign homework on weekends?

yes _____ no _____

G. About how many hours each week, on average, do you spend contacting parents?

- ☐ (a) None
☐ (b) Less than one hour
☐ (c) One hour
☐ (d) Two hours
☐ (e) Three hours or more

H. About what percent of your students are:

- _____ % (a) African American
_____ % (b) Asian American
_____ % (c) Hispanic American
_____ % (d) White
_____ % (e) Other _____
100%

I. About how many of your students are in (circle the estimate that comes closest):

- | | | | | | | |
|---------------------------|----|-----|-----|--------|--------|---------|
| (a) Chapter 1 | 0% | 10% | 20% | 30-50% | 60-80% | 90-100% |
| (b) Special education | 0% | 10% | 20% | 30-50% | 60-80% | 90-100% |
| (c) Gifted and Talented | 0% | 10% | 20% | 30-50% | 60-80% | 90-100% |
| (d) Free or reduced lunch | 0% | 10% | 20% | 30-50% | 60-80% | 90-100% |

- J. About what percent of your students are:
- _____ % (a) Above average in achievement
- _____ % (b) Average in achievement
- _____ % (c) Below average in achievement
- 100%

- K. About what percent of your students:
- _____ % (a) Promptly deliver memos or notices home from the school
- _____ % (b) Complete all of their homework on time

Q-11. YOUR EXPERIENCE AND BACKGROUND

- A. What is your experience?
- _____ (a) Years in teaching or administration
- _____ (b) Years in **this school**

- B. What is your gender?
- _____ (a) Male
- _____ (b) Female

- C. What is your highest education?
- _____ (a) Bachelor's
- _____ (b) Bachelor's + credits
- _____ (c) Master's
- _____ (d) Master's + credits
- _____ (e) Doctorate
- _____ (f) Other (describe) _____

- D. How do you describe yourself?
- _____ (a) African American
- _____ (b) Asian American
- _____ (c) Hispanic American
- _____ (d) White
- _____ (e) Other (describe) _____

Q-12. OPTIONAL: We would value your ideas on the following questions if you have a few more minutes.

- a. What is the most successful practice to involve parents that you have used or that you have heard about?

- b. In what ways could better partnerships with families help you as a teacher?

- c. In what ways could better partnerships with the community help you as teacher?

- d. In what ways has parent involvement changed over the past year or two at this school? Give examples.

- e. Do you have any other ideas or comments that you would like to add? (Feel free to add other pages.)

PLEASE RETURN THIS BOOKLET TO _____

You may seal it in an envelope if you wish.

THANK YOU VERY MUCH FOR YOUR HELP!

Appendix 4

TABLE III
Summary Data from Major Climate Studies

Study	Climate Instruments	Participants	Variables		Findings
			Independent	Dependent	
Anderson (1970)	SDI	All teachers and all 10th grade students in a stratified random sample of 18 secondary schools in Ontario, Canada	bureaucratic structure participant position student alienation	student alienation bureaucratic structure	Teachers and students differ in perception of bureaucracy, as do alienated and nonalienated students. Bureaucratic structure predicts alienation, but accounts for only minimum of its variance.
Anderson & Tissier (1973)	SDI	All 10th grade students in a stratified random sample of 17 secondary schools in Ontario, Canada	school variables (building, bureaucratic structure) student characteristics (background, alienation, program)	student aspirations	Variance in student aspirations is due mostly to student characteristics and not to school variables. The effect of student background on aspirations is mediated through bureaucratic structure and alienation.
Andrews (1965)	OCDQ	All teachers in 165 self-selected schools in Alberta, Canada	grade level staff characteristics teacher satisfaction principal effectiveness school effectiveness climate type and dimensions	climate type and dimensions school achievement	Overall climate type is not related to any of the independent variables, but particular climate dimensions are related to staff characteristics, teacher satisfaction, principal effectiveness, a school achievement. Elementary and secondary schools do not differ in climate type.
Brimm & Bush (1978)	student questionnaire	Random sample of 420 students from 5 secondary schools in Tennessee	student involvement (activist/nonactivist) instructional program interpersonal relationships academic norms	student satisfaction	Greatest student satisfaction is associated with academic norms, while greatest dissatisfaction is associated with activities. Activists and nonactivists differ on several variables.
Brookover & Lezotte (1979)	staff questionnaires and interviews	All staff members in a deliberate sample of 8 elementary schools in Michigan	activities facilities staff attitudes instructional programs parent involvement principal leadership	school achievement (improving/declining)	High-achieving schools are characterized by high evaluations and expectations, academic time allocation, principal leadership, accountability, satisfied teachers, parent interest, and limited use of special programs.
Brookover & Schneider (1975)	staff and student questionnaires and observations	Random sample of 3,072 students, 114 teachers, and 24 principals in a deliberate sample of 24 outlier elementary schools in Michigan	student and teacher climate dimensions school composition (race, SES) community location	school achievement student futility	Student futility and teacher expectations account for most of the achievement variance. Student futility is predicted largely by expectations and academic norms. High- and low-achieving schools differ on climate when composition and community are controlled.
Brookover, et al. (1979)	staff and student questionnaires	Staff and students in 3 random samples and 1 matched sample of Michigan elementary schools: (1) state sample of 68 schools (8,078 students, 327 teachers, 1 principal) (2) black sample of 30 schools (4,737 students, 177 teachers, 1 principal) (3) white sample of 61 schools (6,729 students, 276 teachers, 1 principal) (4) sample of 4 schools matched on SES and race	school composition (race, SES) school social structure staff characteristics climate dimensions	school achievement student self-concept student self-reliance	Climate accounts for a significant amount of the variance in all dependent variables (race and SES controlled), especially for black sample. Some social structure variables associated with achievement: instructional program, student responsibility, teacher expectations, principal leadership.

TABLE III—Continued

Study	Climate Instruments	Participants	Variables		Findings
			Independent	Dependent	
Duke & Perry (1978)	staff and student interviews	41 teachers, 90 students, and 12 other staff in 18 deliberately selected schools in California	school size student responsibility rules/discipline teacher characteristics	school discipline	Good school discipline is associated with small size, student responsibility, logical rules, teacher interpersonal skills.
Edmonds & Fredericksen (1978)	records, staff questionnaires	staff and 6th grade students in 812 northern elementary schools (data set from EEOS)	school composition (SES) student background (SES, race) teacher attitudes and characteristics instructional program parent involvement student behavior and attitudes	school achievement	SES composition alone does not explain achievement differences which are related to teacher attitudes, instructional programs, parent involvement, student attendance, and expectations. Schools are not equally effective for all groups of students. Achievement is not related to teacher characteristics.
Ellett, Masters, & Pool (1978)	SS, MSI	6,151 4th grade students in 89 elementary schools and 1,018 teachers in 41 elementary schools in Georgia	climate dimensions (teacher and student)	school achievement school attendance	Achievement and attendance are best predicted by Educational Effectiveness and Lack of Difficult Cohesiveness is negatively related to achievement but positively related to attendance.
Ellett, Payne, Masters, & Pool (1977)	SS, MSI, LEI	3,350 elementary students from 35 schools, 3,613 secondary students from 10 schools, and 1,300 teachers from a deliberate sample of districts in Georgia	climate dimensions (teacher and student) school level	school achievement school attendance	Teacher and student perception of climate are relatively independent. Achievement and attendance in elementary schools are negatively associated with Difficulty. Achievement in secondary schools is positively associated with Difficulty, while attendance is positively associated with Diversity and Intimacy.
Epstein & McPartland (1976)	QLS	3,206 secondary and 1,060 elementary students in 39 schools in Maryland	student behavior student background student personality student aspirations student achievement teacher evaluations	climate dimensions	Climate is related to student behavior, background, personality, aspirations, achievement, and to teacher evaluations.
Feldvebel (1964a, b)	OCDQ	Approximately 900 5th grade students in a stratified random sample of 30 elementary schools in northeast Illinois	school composition (SES) climate type and dimensions school and staff characteristics	climate type and dimensions school achievement	Climate dimensions related to principal behavior (but not overall climate type) are related to school composition and school achievement. Achievement variance is mostly explained by school composition, expenditures, student turnover, and 2 principal climate dimensions.
Flagg (1964)	OCDQ	6th grade teachers in 10 elementary schools in Newark, New Jersey	school size climate type principal characteristics teacher turnover	student achievement climate type	Climate type is related to school size, teacher turnover, and principal characteristics, and is not related to student achievement.
Hale (1965)	OCDQ	teachers in 13 schools	climate dimensions	school achievement	Only language achievement (in math and reading) is related to any climate dimensions.
Herr (1965)	HSCI	725 secondary students in a school in northern New Jersey	student grade level student sex student achievement student ability student background student involvement	climate dimensions	Significant differences in climate perception exist between grade levels, levels of achievement, ability, family background, involvement.

TABLE III—Continued

Study	Climate Instruments	Participants	Variables		Findings
			Independent	Dependent	
Kalis (1980)	teacher questionnaire	All teachers in one deliberately selected school (after a strike)	teacher tenure teacher experience	climate	Climate is negatively related to tenure and to amount of experience
Kimpston & Sonnabend (1975)	staff questionnaire	All teachers ($n = 1134$) in a stratified random sample of 20 secondary schools in the Twin Cities area, Minnesota	instructional program (innovative/noninnovative) staff characteristics (age, experience, position, sex, and education)	climate	Climate is related to staff characteristics, with women, principals older staff, more experienced staff, and more educated staff holding more positive views. Teachers are more positive at innovative schools.
Klitgaard & Hall (1973a, b)	6 data sets	Data from outlier elementary and secondary schools in 6 nationwide samples	staff and student characteristics parent involvement facilities/equipment school reputation school processes	school achievement	Overachieving schools have more parent involvement, better equipment, smaller classes, fewer disadvantaged students, better discipline, better reputation, more white teachers, and a nonurban location.
Lezotte & Passalacqua (1978)	records	Random selection of 2,500 students from 20 elementary schools in Model Cities area, Detroit	prior student achievement (background) school building	student achievement	School building accounts for significant variance in achievement beyond the influence of prior achievement.
Licata, Willower, & Ellett (1978)	RSD, LEI, MSI, principal performance questionnaire	188 11th grade and 226 4th grade students from 1 elementary and 1 secondary school in south Georgia	climate dimensions principal performance school level	school "robustness"	Secondary school "robustness" related to clear goals, interpersonal relationships, cooperativeness, diversity, student involvement, student satisfaction, and principal involvement. Elementary school "robustness" associated with principal involvement.
Maxwell (1967)	OCDQ	All principals ($n = 10$) and a sample of 129 teachers from 10 urban elementary schools in Michigan	staff position teacher attitude climate dimensions	school achievement climate type and dimensions	Teacher and principal perception of climate are relatively independent. Achievement is related to principal Consideration (positive) and teacher Disengagement (negative).
McDill & Rigsby (1973)	staff and student questionnaires	All students ($n = 20,345$), teachers ($n = 1,029$), and principals ($n = 20$) in 20 secondary schools deliberately selected for diversity from 7 geographical areas of the U.S.	climate dimensions school social structure student background school composition (SES) student sex	student aspirations student achievement	Climate accounts for significant variance in student achievement and aspirations with student background controlled. Climate differences exist for sex. Social structure variables also affect achievement and aspirations (peer values, parent involvement, instructional program, teacher education).
McPartland & Epstein (1975b)	student questionnaire	6,185 students from 23 elementary, 10 middle, and 6 high schools of a suburban district in Maryland	climate (open/closed) student background (SES)	student achievement	School openness accounts for little variance in achievement, when student background is controlled. Open climates tend (nonsignificantly) to be positively related to achievement for high SES students and negatively related for low.
Miller (1968)	OCDQ	About 400 teachers from 29 elementary schools in a city in Minnesota	climate type and dimensions	school achievement (with ability and SES controlled)	Climate type is related to school achievement, with teacher dimensions more important than principal dimensions.
Mitchell (1968)	HSCI	All 12th grade students ($n = 2,819$) in 11 deliberately selected secondary schools	climate dimensions school composition (SES, ability)	student aspirations	Schools differ significantly in climate. Academic norms are highly related to aspirations after partialling school composition.
Morocco (1978)	ESES	Students in 30 elementary schools in one district in a	school size (large/small)	climate dimensions	Smaller schools are higher on di

TABLE III—Continued

Study	Climate Instruments	Participants	Variables		Findings
			Independent	Dependent	
New York State Dept. (1976)	staff questionnaires and observation	Unspecified number of schools in New York state (for Regression and Outlier studies), plus 14 deliberately selected schools (Observational study)	staff attitudes and characteristics instructional program district size facilities/equipment school attendance discipline/rules	school achievement	dimensions of Practicality, Propriety, and Scholarship. Achievement is related to district size (negative), teacher education and salary, disciplinary instructional program, staff commitment and expectations. Achievement is not related to facilities, attendance, or teacher age, sex, or marital status.
Nwankwo (1979)	OCDQ	400 teachers from 40 secondary schools in Nigeria, including both deliberate and random samples	school discipline	climate type	School discipline is associated with climate type: good discipline with open climates; poor discipline with closed climates.
Phi Delta Kappa (1980)	case history, observation, interviews, questionnaires	Deliberate selection of 8 high-achieving urban elementary schools in the U.S.	staff characteristics instructional programs parent involvement school processes facilities/equipment	school achievement	High achieving schools have principal leadership, high staff expectations and commitment, good interpersonal relationships, academic time allocation, parent involvement, financial support, good discipline/rules. Facilities and equipment are not important variables.
Rutter et al. (1979)	staff and student questionnaires and observation	3,485 students (aged 10 and 14) selected from a deliberate sample of 12 secondary schools in south London	student background school organization school processes school composition (SES, ability)	student behavior student attendance student achievement student delinquency	Schools vary widely on outcomes, but are internally consistent. Differences in outcome are most strongly related to school process variables, except for delinquency which is most affected by school composition. Organization variables do not affect outcomes.
Surgeant (1967)	OCDQ	33 principals and 1,024 teachers in a random sample of 33 secondary schools in an urban area of Minnesota	school size principal personality school departments staff position teacher satisfaction school effectiveness community location	climate type and dimensions	Staff position, teacher satisfaction and perceived school effectiveness are associated with differences in climate type, but school department, size, and community are not. Principal personality is related to some climate dimensions but to climate type.
Schneider, Glasheen, & Hadley (1979)	student questionnaire	1,780 9th grade students from all high schools ($n = 4$) in a medium-sized eastern city	student background student attendance school attendance school building climate	student grade point average student achievement (standardized test)	Student background accounts for more variance in achievement than in GPA, but attendance counts for more in GPA than achievement. The influence of climate is great in nonselective schools, while SES predominates in selective schools.
Watkins (1968)	OCDQ	48 principals and 1,188 teachers in 48 elementary and secondary schools in one county of Georgia	principal characteristics school and staff size staff position staff accountability	climate type	Climate type is related to school and staff size, staff accountability, and staff position.
Weber (1971)	observations	4 high-achieving inner city schools deliberately selected from 17 schools in 7 large cities	student background instructional program staff characteristics facilities/equipment school processes	school achievement	High-achieving schools have principal leadership, high expectations, academic time allocation, good discipline, regular student evaluations. Variables not affecting achievement include class size, ability grouping, staff ethnicity, facilities, student background.
Wiggins (1972)	OCDQ	About 715 teachers and principals from 35 randomly selected schools in a large urban district in southern California	staff position principal characteristics	climate type	Teacher and principal perception of climate are relatively independent. Principal behavior is generally not

TABLE III—Continued

Study	Climate Instruments	Participants	Variables		Findings
			Independent	Dependent	
ower, Eidell, & oy (1967)	PCI	945 teachers, 181 principals, 180 counselors from elementary and secondary schools in 13 deliberately selected districts in Pennsylvania and New York	staff position staff experience staff characteristics staff dogmatism school level	pupil control attitude dogmatism	related to climate type, which remains stable with principal turnover. Pupil control attitudes differ significantly for school level, staff position, staff experience, dogmatism. Dogmatism differs significantly for staff position, age, sex, and experience.
ower & Licata (1975)	PCI	291 students and all teachers ($n = 92$) in a deliberate sample of 2 secondary schools in Pennsylvania and New Jersey	school discipline (traditional/open)	pupil control attitudes of teachers student satisfaction	School discipline is associated with custodial pupil control attitudes of teachers and with greater student satisfaction with school life.
nnie (1980)	staff and student interviews and observations; school documents	Staff and students from 40 deliberately selected schools, including public/private, elementary/secondary in the Chicago area	student attitudes staff attitudes instructional program parent involvement discipline/rules activities	Student character development student achievement climate (school spirit) school discipline	Character development is associated with student and staff attitudes. Achievement is associated with parent involvement, teacher attitudes, and the instructional program. Climate is associated with discipline/rules, student attitudes, activities, staff attitudes. Discipline is associated with instructional program and discipline/rules.

Appendix 5

□

----- FACTOR ANALYSIS -----

Analysis number 1 Listwise deletion of cases with missing values

Correlation Matrix:

	A1	A2	A3	A4	A5	A6	A7
A1	1,00000						
A2	,28095	1,00000					
A3	,25954	,33341	1,00000				
A4	,27640	,19413	,35027	1,00000			
A5	,48866	,41070	,37314	,19993	1,00000		
A6	,06851	,34823	,27547	,02735	,33766	1,00000	
A7	,20820	,08906	,26080	,36572	,19836	,18923	1,00000
A8	,12229	,43512	,26244	,23673	,41753	,50059	,37787
A9	,26461	,21091	,26638	,19034	,31895	,09122	,35959
A10	,22406	,18789	,39566	,30198	,30837	,17244	,35442
A11	,26801	,15936	,30926	,29793	,16451	,02336	,44767
A12	,21309	,18351	,21423	,33765	,11935	,03522	,54070
A13	,18780	,40893	,21718	,19511	,44683	,48131	,24957
A14	,20134	,13947	,30112	,37821	,10575	,18621	,51284
A15	,17397	,20225	,26426	,25617	,17166	,19901	,30619
A16	,10869	,33680	,28712	,22376	,37617	,47019	,34659
A17	,09797	,04617	,34894	,21792	,14030	,12835	,33947
A18	,18281	,20099	,25031	,27744	,15999	,09858	,34622
A19	,22055	,31581	,30485	,10637	,34240	,36004	,24153
A20	,05023	-,00945	,19784	,29364	,06966	,07215	,29644
A21	,17475	,13040	,21236	,39741	,12904	-,09590	,33946
A22	,01360	,18753	,26029	,25109	,12262	,38865	,33322
A23	,14045	,36602	,17400	,09456	,43603	,55115	,31671
A24	,15501	,19474	,32744	,40497	,24256	,36359	,40703
A25	,03407	,11359	,13196	,18862	,00650	,24847	,36049
A26	,10040	,14387	,16551	,01726	,31863	,23767	,26028
A27	-,04072	,11145	,24944	,28722	,17142	,39334	,42652
A28	,05583	,27239	,21863	,19711	,35384	,28277	,34219
A29	,13122	,20361	,25262	,38766	,21711	,20715	,36899
A30	,06020	,24292	,20610	,30552	,21124	,14694	,26348
A31	,04700	,21746	,34930	,22549	,08808	,25807	,35341
A32	,09174	,16858	,27998	,19217	,15748	,09943	,25855
A33	,06869	,17368	,23814	,28031	,08704	,13259	,27209
A34	,10628	,19544	,18586	,39326	,14800	,11646	,30791
A35	,34494	,20067	,15788	,41638	,26043	,01988	,16946
A36	,14129	,19220	,44075	,35606	,19864	,24755	,26660
A37	,05128	,13931	,12170	,11623	,04051	-,04087	,22089
A38	,15863	,27980	,09461	,12573	,25581	,22235	,29213
A39	,25889	,30149	,35057	,22396	,27770	,24215	,38479

□

----- FACTOR ANALYSIS -----

	A1	A2	A3	A4	A5	A6	A7	
A40	,27800	,10745	,25677	,29746	,22508	,16546	,37361	
	A8	A9	A10	A11	A12	A13	A14	
A8	1,00000							
A9	,40820	1,00000						
A10	,33164	,29570	1,00000					
A11	,15213	,31059	,45881	1,00000				
A12	,25217	,24494	,39152	,64035	1,00000			
A13	,64392	,24857	,23648	,10168	,30929	1,00000		
A14	,39751	,23047	,30853	,36580	,44187	,31634	1,00000	
A15	,30536	,27370	,41672	,29680	,33408	,33053	,38794	
A16	,59268	,30158	,27913	,12222	,17208	,64087	,49301	
A17	,24544	,24963	,48073	,36018	,30639	,30432	,48188	
A18	,24643	,25536	,34664	,23489	,35451	,25408	,26503	
A19	,44118	,23478	,32800	,17282	,24595	,52760	,24696	
A20	,12654	,11983	,29972	,43859	,31959	,14224	,34749	
A21	,07813	,30209	,24517	,29511	,44272	,15678	,31503	
A22	,48397	,19847	,40690	,27361	,37132	,41638	,37116	
A23	,59297	,33164	,24628	,08610	,19308	,62487	,25901	
A24	,45061	,16688	,42178	,21318	,31056	,47894	,52404	
A25	,33092	,22722	,15736	,23245	,28454	,21770	,39547	
A26	,44400	,38026	,35781	,20483	,20731	,50605	,32834	
A27	,48624	,21719	,31739	,16923	,33123	,49955	,39794	
A28	,46772	,32472	,28719	,12693	,23032	,58156	,32771	
A29	,35990	,22693	,44543	,34089	,34370	,36440	,37563	
A30	,34795	,17267	,38851	,15966	,27583	,36658	,34404	
A31	,32756	,28310	,33012	,28423	,27423	,25622	,35753	
A32	,26415	,28473	,43090	,25092	,32256	,25815	,30022	
A33	,41069	,35641	,39620	,27167	,33116	,33815	,37047	
A34	,26779	,20530	,43050	,35466	,37519	,27590	,29461	
A35	,08408	,16887	,18898	,12933	,25596	,17325	,24222	
A36	,26780	,26270	,22673	,26654	,28903	,29897	,30058	
A37	,06165	,16160	,25342	,12704	,24500	,16041	,26376	
A38	,37222	,24252	,19629	,05802	,12013	,41360	,23023	
A39	,27969	,25718	,27205	,31727	,28203	,40007	,33282	
A40	,28974	,17527	,35563	,36618	,38063	,26374	,43784	

	A15	A16	A17	A18	A19	A20	A21
A15	1,00000						
A16	,42365	1,00000					
A17	,36333	,42337	1,00000				
A18	,36909	,30919	,20435	1,00000			
A19	,31218	,41688	,40079	,20640	1,00000		

□

----- FACTOR ANALYSIS -----

A15	A16	A17	A18	A19	A20	A21
-----	-----	-----	-----	-----	-----	-----

A20	,46640	,22621	,37170	,22222	,21568	1,00000	
A21	,35333	,14695	,21515	,40699	,10791	,31039	1,00000
A22	,49377	,43123	,30910	,34358	,41935	,34370	,20448
A23	,28646	,53997	,26675	,15169	,52372	,07418	,04697
A24	,41518	,54231	,42120	,31014	,41738	,26313	,15038
A25	,50479	,30839	,27644	,28222	,14099	,36527	,26182
A26	,32350	,50439	,41320	,16965	,42185	,14038	,14644
A27	,34717	,51672	,30087	,31918	,48398	,23463	,15447
A28	,27746	,50919	,37066	,19716	,45076	,12473	,18584
A29	,35609	,38652	,33361	,21052	,45045	,35815	,23146
A30	,27410	,35455	,35013	,21550	,40891	,15107	,20735
A31	,43261	,35123	,46793	,12732	,36773	,28694	,07044
A32	,41851	,24559	,22884	,58454	,22444	,29476	,29372
A33	,29451	,30913	,29599	,22044	,39630	,18732	,23520
A34	,36867	,24173	,30582	,32328	,26578	,28184	,30757
A35	,23845	,16794	,22422	,24418	,21900	,14317	,26380
A36	,31913	,32745	,34643	,21293	,32128	,35023	,14074
A37	,24077	,14314	,40410	,03175	,22840	,20035	,26922
A38	,20069	,34667	,23439	,00613	,40420	,07639	,12146
A39	,35799	,35530	,24183	,15136	,39222	,19058	,15809
A40	,42311	,30365	,28948	,22697	,40146	,37016	,18526

	A22	A23	A24	A25	A26	A27	A28
--	-----	-----	-----	-----	-----	-----	-----

A22	1,00000						
A23	,50760	1,00000					
A24	,53273	,45463	1,00000				
A25	,39230	,33515	,39119	1,00000			
A26	,35320	,63319	,39976	,35020	1,00000		
A27	,78430	,53305	,61736	,38035	,43768	1,00000	
A28	,45155	,61500	,55412	,22184	,54944	,65478	1,00000
A29	,60663	,40207	,46401	,32314	,39989	,60783	,48374
A30	,46002	,42527	,43190	,25823	,48377	,48761	,48016
A31	,44956	,36921	,50377	,36480	,33903	,48361	,39408
A32	,40606	,21695	,37977	,29816	,30865	,31696	,22847
A33	,57631	,46256	,45420	,27663	,37212	,52690	,43099
A34	,49414	,35790	,33292	,30696	,37027	,40391	,29590
A35	,20828	,23478	,34487	,17121	,17714	,16907	,22512
A36	,48972	,25419	,44723	,32599	,22004	,51062	,28141
A37	,13458	,12081	,30263	,17191	,31829	,22402	,29958
A38	,26955	,46956	,35397	,11691	,40455	,30761	,51330
A39	,43036	,47963	,48938	,31348	,38094	,51169	,51891
A40	,50834	,29883	,51641	,28924	,29784	,47848	,33014

□

----- FACTOR ANALYSIS -----

	A29	A30	A31	A32	A33	A34	A35
--	-----	-----	-----	-----	-----	-----	-----

A29	1,00000						
A30	,65143	1,00000					
A31	,44053	,39626	1,00000				
A32	,34925	,32149	,30873	1,00000			
A33	,49539	,44603	,44443	,40168	1,00000		
A34	,58477	,51424	,28597	,44126	,44954	1,00000	
A35	,36922	,36516	,19989	,22475	,26323	,33331	1,00000

A36	,44134	,29711	,53632	,32615	,28225	,30137	,34255
A37	,24475	,16949	,28255	,10215	,19656	,17546	,28666
A38	,45187	,37501	,33625	,12186	,30771	,20520	,37207
A39	,39402	,31459	,44045	,23208	,32333	,26907	,30030
A40	,53297	,32569	,30150	,36351	,38592	,38629	,31998

	A36	A37	A38	A39	A40
A36	1,00000				
A37	,31601	1,00000			
A38	,21890	,33318	1,00000		
A39	,51192	,28894	,39891	1,00000	
A40	,35340	,21406	,26615	,47178	1,00000

1-tailed Significance of Correlation Matrix:

'.' is printed for diagonal elements.

	A1	A2	A3	A4	A5
A1	.				
A2	,00006	.			
A3	,00021	,00000	.		
A4	,00008	,00441	,00000	.	
A5	,00000	,00000	,00000	,00348	.
A6	,17973	,00000	,00009	,35739	,00000
A7	,00246	,11658	,00020	,00000	,00372
A8	,05050	,00000	,00018	,00067	,00000
A9	,00016	,00219	,00014	,00514	,00001
A10	,00121	,00566	,00000	,00002	,00001
A11	,00013	,01607	,00001	,00002	,01345
A12	,00199	,00670	,00189	,00000	,05476
A13	,00568	,00000	,00166	,00424	,00000
A14	,00328	,03057	,00002	,00000	,07827
A15	,00958	,00316	,00016	,00025	,01043
A16	,07263	,00000	,00004	,00123	,00000

□

----- FACTOR ANALYSIS -----

	A1	A2	A3	A4	A5
A17	,09474	,26855	,00000	,00160	,02980
A18	,00688	,00333	,00034	,00008	,01572
A19	,00142	,00001	,00002	,07705	,00000
A20	,25096	,44977	,00380	,00003	,17571
A21	,00932	,04008	,00205	,00000	,04170
A22	,42789	,00574	,00020	,00033	,05004
A23	,02966	,00000	,00957	,10273	,00000
A24	,01860	,00431	,00000	,00000	,00050
A25	,32444	,06394	,03830	,00550	,46541
A26	,08935	,02666	,01298	,40881	,00001
A27	,29314	,06764	,00035	,00004	,01052
A28	,22767	,00010	,00155	,00391	,00000

A29	,03914	,00299	,00030	,00000	,00166
A30	,21040	,00049	,00269	,00001	,00216
A31	,26492	,00164	,00000	,00114	,11919
A32	,10968	,01165	,00007	,00478	,01712
A33	,17910	,00969	,00062	,00007	,12199
A34	,07723	,00419	,00612	,00000	,02339
A35	,00000	,00338	,01689	,00000	,00020
A36	,02890	,00477	,00000	,00000	,00367
A37	,24651	,03071	,05133	,05960	,29411
A38	,01647	,00007	,10259	,04584	,00025
A39	,00022	,00002	,00000	,00122	,00008
A40	,00008	,07497	,00024	,00002	,00116

	A6	A7	A8	A9	A10
--	----	----	----	----	-----

A6	,				
A7	,00537	,			
A8	,00000	,00000	,		
A9	,11100	,00000	,00000	,	
A10	,01013	,00000	,00000	,00003	,
A11	,37748	,00000	,02046	,00001	,00000
A12	,31894	,00000	,00031	,00044	,00000
A13	,00000	,00035	,00000	,00037	,00068
A14	,00604	,00000	,00000	,00090	,00001
A15	,00362	,00001	,00001	,00010	,00000
A16	,00000	,00000	,00000	,00002	,00007
A17	,04254	,00000	,00043	,00035	,00000
A18	,09338	,00000	,00041	,00026	,00000
A19	,00000	,00053	,00000	,00073	,00000
A20	,16722	,00003	,04481	,05405	,00002
A21	,09953	,00000	,14791	,00002	,00044
A22	,00000	,00000	,00000	,00370	,00000
A23	,00000	,00001	,00000	,00000	,00042
A24	,00000	,00000	,00000	,01237	,00000

□

----- FACTOR ANALYSIS -----

	A6	A7	A8	A9	A10
--	----	----	----	----	-----

A25	,00037	,00000	,00000	,00105	,01719
A26	,00064	,00020	,00000	,00000	,00000
A27	,00000	,00000	,00000	,00166	,00001
A28	,00006	,00000	,00000	,00000	,00004
A29	,00257	,00000	,00000	,00106	,00000
A30	,02420	,00017	,00000	,01005	,00000
A31	,00023	,00000	,00000	,00006	,00000
A32	,09147	,00022	,00016	,00005	,00000
A33	,03760	,00011	,00000	,00000	,00000
A34	,05923	,00001	,00013	,00278	,00000
A35	,39528	,01129	,13023	,01153	,00542
A36	,00039	,00014	,00013	,00018	,00107
A37	,29246	,00140	,20485	,01488	,00029
A38	,00131	,00003	,00000	,00050	,00405
A39	,00051	,00000	,00007	,00024	,00011
A40	,01301	,00000	,00004	,00914	,00000

	A11	A12	A13	A14	A15
A11	.				
A12	,00000	.			
A13	,08660	,00001	.		
A14	,00000	,00000	,00001	.	
A15	,00002	,00000	,00000	,00000	.
A16	,05059	,01027	,00000	,00000	,00000
A17	,00000	,00001	,00002	,00000	,00000
A18	,00073	,00000	,00028	,00016	,00000
A19	,01000	,00042	,00000	,00040	,00001
A20	,00000	,00001	,02806	,00000	,00000
A21	,00003	,00000	,01753	,00001	,00000
A22	,00010	,00000	,00000	,00000	,00000
A23	,12457	,00460	,00000	,00022	,00005
A24	,00198	,00001	,00000	,00000	,00000
A25	,00082	,00005	,00162	,00000	,00000
A26	,00284	,00255	,00000	,00000	,00000
A27	,01138	,00000	,00000	,00000	,00000
A28	,04431	,00091	,00000	,00000	,00008
A29	,00000	,00000	,00000	,00000	,00000
A30	,01590	,00009	,00000	,00000	,00009
A31	,00005	,00009	,00025	,00000	,00000
A32	,00033	,00000	,00023	,00002	,00000
A33	,00011	,00000	,00000	,00000	,00003
A34	,00000	,00000	,00009	,00003	,00000
A35	,04135	,00025	,00984	,00051	,00061
A36	,00014	,00004	,00002	,00002	,00001
A37	,04417	,00044	,01550	,00017	,00055

□

----- FACTOR ANALYSIS -----

	A11	A12	A13	A14	A15
A38	,21895	,05361	,00000	,00091	,00337
A39	,00001	,00006	,00000	,00000	,00000
A40	,00000	,00000	,00017	,00000	,00000

	A16	A17	A18	A19	A20
A16	.				
A17	,00000	.			
A18	,00001	,00289	.		
A19	,00000	,00000	,00265	.	
A20	,00110	,00000	,00132	,00177	.
A21	,02419	,00181	,00000	,07409	,00001
A22	,00000	,00001	,00000	,00000	,00000
A23	,00000	,00014	,02075	,00000	,16048
A24	,00000	,00000	,00001	,00000	,00017
A25	,00001	,00008	,00006	,02917	,00000
A26	,00000	,00000	,01121	,00000	,02972
A27	,00000	,00002	,00001	,00000	,00074
A28	,00000	,00000	,00390	,00000	,04717
A29	,00000	,00000	,00222	,00000	,00000
A30	,00000	,00000	,00179	,00000	,02118

A31	,00000	,00000	,04382	,00000	,00005
A32	,00043	,00097	,00000	,00119	,00003
A33	,00001	,00003	,00143	,00000	,00578
A34	,00052	,00001	,00000	,00015	,00006
A35	,01192	,00121	,00046	,00153	,02726
A36	,00000	,00000	,00200	,00001	,00000
A37	,02729	,00000	,33568	,00099	,00342
A38	,00000	,00075	,46737	,00000	,15336
A39	,00000	,00052	,02098	,00000	,00509
A40	,00002	,00004	,00106	,00000	,00000

A21	A22	A23	A24	A25
-----	-----	-----	-----	-----

A21	,				
A22	,00288	,			
A23	,26505	,00000	,		
A24	,02166	,00000	,00000	,	
A25	,00019	,00000	,00000	,00000	,
A26	,02459	,00000	,00000	,00000	,00000
A27	,01894	,00000	,00000	,00000	,00000
A28	,00613	,00000	,00000	,00000	,00134
A29	,00086	,00000	,00000	,00000	,00000
A30	,00255	,00000	,00000	,00000	,00022
A31	,17301	,00000	,00000	,00000	,00000

□

----- FACTOR ANALYSIS -----

A21	A22	A23	A24	A25
-----	-----	-----	-----	-----

A32	,00003	,00000	,00168	,00000	,00002
A33	,00072	,00000	,00000	,00000	,00008
A34	,00001	,00000	,00000	,00000	,00001
A35	,00017	,00245	,00073	,00000	,01060
A36	,02940	,00000	,00028	,00000	,00000
A37	,00012	,03544	,05261	,00002	,01033
A38	,05168	,00012	,00000	,00000	,05852
A39	,01677	,00000	,00000	,00000	,00001
A40	,00627	,00000	,00002	,00000	,00004

A26	A27	A28	A29	A30
-----	-----	-----	-----	-----

A26	,				
A27	,00000	,			
A28	,00000	,00000	,		
A29	,00000	,00000	,00000	,	
A30	,00000	,00000	,00000	,00000	,
A31	,00000	,00000	,00000	,00000	,00000
A32	,00001	,00001	,00099	,00000	,00001
A33	,00000	,00000	,00000	,00000	,00000
A34	,00000	,00000	,00003	,00000	,00000
A35	,00853	,01145	,00116	,00000	,00000
A36	,00146	,00000	,00006	,00000	,00002
A37	,00001	,00122	,00002	,00045	,01128
A38	,00000	,00001	,00000	,00000	,00000
A39	,00000	,00000	,00000	,00000	,00001

A40	,00002	,00000	,00000	,00000	,00000
-----	--------	--------	--------	--------	--------

	A31	A32	A33	A34	A35
--	-----	-----	-----	-----	-----

A31	,				
A32	,00001	,			
A33	,00000	,00000	,		
A34	,00005	,00000	,00000	,	
A35	,00349	,00118	,00017	,00000	,
A36	,00000	,00000	,00006	,00002	,00000
A37	,00006	,08561	,00400	,00907	,00005
A38	,00000	,05111	,00001	,00279	,00000
A39	,00000	,00083	,00000	,00012	,00002
A40	,00002	,00000	,00000	,00000	,00001

	A36	A37	A38	A39	A40
--	-----	-----	-----	-----	-----

A36	,
-----	---

□

----- FACTOR ANALYSIS -----

	A36	A37	A38	A39	A40
A37	,00001	,			
A38	,00153	,00000	,		
A39	,00000	,00004	,00000	,	
A40	,00000	,00190	,00015	,00000	,

Extraction 1 for analysis 1, Principal Axis Factoring (PAF)

Initial Statistics:

Variable	Communality *	Factor	Eigenvalue	Pct of Var	Cum Pct
A1	,49222 *	1	12,96271	32,4	32,4
A2	,56264 *	2	3,12561	7,8	40,2
A3	,49071 *	3	2,16606	5,4	45,6
A4	,57376 *	4	1,71848	4,3	49,9
A5	,60608 *	5	1,52421	3,8	53,7
A6	,57984 *	6	1,44842	3,6	57,4
A7	,60320 *	7	1,23243	3,1	60,4
A8	,70311 *	8	1,18063	3,0	63,4
A9	,48004 *	9	1,05909	2,6	66,0
A10	,60978 *	10	1,04350	2,6	68,7
A11	,66652 *	11	,93324	2,3	71,0
A12	,66675 *	12	,89425	2,2	73,2
A13	,71933 *	13	,79319	2,0	75,2
A14	,58928 *	14	,73495	1,8	77,0
A15	,60094 *	15	,66465	1,7	78,7

A16	,67900	*	16	,66126	1,7	80,4
A17	,63462	*	17	,62239	1,6	81,9
A18	,57243	*	18	,59905	1,5	83,4
A19	,56443	*	19	,55784	1,4	84,8
A20	,48764	*	20	,51684	1,3	86,1
A21	,50431	*	21	,47060	1,2	87,3
A22	,79794	*	22	,45044	1,1	88,4
A23	,76975	*	23	,43655	1,1	89,5
A24	,67903	*	24	,40416	1,0	90,5
A25	,54026	*	25	,39235	1,0	91,5
A26	,68108	*	26	,35092	,9	92,4
A27	,85059	*	27	,34363	,9	93,2
A28	,71375	*	28	,32268	,8	94,0
A29	,71603	*	29	,29512	,7	94,8
A30	,60499	*	30	,28586	,7	95,5

□

----- FACTOR ANALYSIS -----

Variable	Communality	*	Factor	Eigenvalue	Pct of Var	Cum Pct
A31	,60125	*	31	,26116	,7	96,1
A32	,57375	*	32	,23848	,6	96,7
A33	,59671	*	33	,22050	,6	97,3
A34	,54898	*	34	,21039	,5	97,8
A35	,52214	*	35	,19199	,5	98,3
A36	,64104	*	36	,17495	,4	98,7
A37	,49982	*	37	,16562	,4	99,1
A38	,54056	*	38	,14744	,4	99,5
A39	,62676	*	39	,11508	,3	99,8
A40	,56094	*	40	,08327	,2	100,0

PAF extracted 10 factors. 12 iterations required.

Factor Matrix:

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
A27	,74141				
A24	,72664				
A22	,72418				
A29	,71433				
A28	,67007				
A23	,66259	-,51664			
A16	,65873				
A13	,64114				
A8	,63743				
A39	,62389				
A33	,61542				
A30	,61514				
A26	,61365				
A31	,60863				
A14	,60776				
A40	,60720				
A19	,60354				
A15	,59945				

A10	,58299
A34	,58179
A36	,58101
A7	,57840
A17	,56683
A12	,53448
A32	,52047
A38	
A25	
A3	

□

----- FACTOR ANALYSIS -----

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
A4					
A9					
A18					
A20					
A2					
A37					
A11		,50664			
A6					
A21					
A5			,59415		
A1			,58720		
A35					

	Factor 6	Factor 7	Factor 8	Factor 9	Factor 10
A27					
A24					
A22					
A29					
A28					
A23					
A16					
A13					
A8					
A39					
A33					
A30					
A26					
A31					
A14					
A40					
A19					
A15					
A10					
A34					
A36					
A7					

A17
A12
A32
A38
A25

□

----- FACTOR ANALYSIS -----

Factor 6 Factor 7 Factor 8 Factor 9 Factor 10

A3
A4
A9
A18
A20
A2
A37

A11
A6
A21

A5
A1

A35

Final Statistics:

Variable	Communality	* Factor	Eigenvalue	Pct of Var	Cum Pct
	*				
A1	,49994 *	1	12,56929	31,4	31,4
A2	,36772 *	2	2,72987	6,8	38,2
A3	,56420 *	3	1,73989	4,3	42,6
A4	,60357 *	4	1,27501	3,2	45,8
A5	,62461 *	5	1,10362	2,8	48,5
A6	,56729 *	6	1,04260	2,6	51,2
A7	,55924 *	7	,81501	2,0	53,2
A8	,66530 *	8	,78460	2,0	55,1
A9	,42250 *	9	,65313	1,6	56,8
A10	,56612 *	10	,57879	1,4	58,2
A11	,76383 *				
A12	,57441 *				
A13	,64357 *				
A14	,56653 *				
A15	,58688 *				
A16	,68698 *				
A17	,71164 *				
A18	,55793 *				
A19	,46851 *				
A20	,44577 *				
A21	,47370 *				
A22	,76649 *				

----- FACTOR ANALYSIS -----

Variable	Communality * Factor	Eigenvalue	Pct of Var	Cum Pct
A23	,75859 *			
A24	,61817 *			
A25	,45971 *			
A26	,65485 *			
A27	,81975 *			
A28	,64780 *			
A29	,71346 *			
A30	,58324 *			
A31	,55640 *			
A32	,56510 *			
A33	,50035 *			
A34	,54026 *			
A35	,55201 *			
A36	,61525 *			
A37	,40759 *			
A38	,49971 *			
A39	,60375 *			
A40	,50911 *			

VARIMAX rotation 1 for extraction 1 in analysis 1 - Kaiser Normalization.

VARIMAX converged in 15 iterations.

Rotated Factor Matrix:

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
A23	,75176				
A8	,74633				
A13	,73258				
A16	,71264				
A6	,65027				
A28	,58970				
A27	,53705				
A26	,52015				
A19					
A24					
A29		,71344			
A30		,62349			
A34		,60308			
A22		,56319			

□

----- FACTOR ANALYSIS -----

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
A33		,50429			
A40					
A11			,74469		
A12			,62704		
A7			,58331		
A14					
A36			,64470		
A31			,51258		
A3					
A39					
A18				,65116	
A32				,59345	
A21					
A9					
A1					
A5					
A2					
A35					
A15					
A20					
A25					
A37					
A38					
A17					
A10					
A4					

Factor 6 Factor 7 Factor 8 Factor 9 Factor 10

A23
A8
A13
A16
A6
A28
A27
A26

□

----- FACTOR ANALYSIS -----

Factor 6 Factor 7 Factor 8 Factor 9 Factor 10

A19					
A24					
A29					
A30					
A34					
A22					
A33					
A40					
A11					
A12					
A7					
A14					
A36					
A31					
A3					
A39					
A18					
A32					
A21					
A9					
A1	,66160				
A5	,64153				
A2					
A35					
A15		,55771			
A20		,51454			
A25					
A37			,55862		
A38					
A17				,63141	
A10					
A4					,58942

□

----- FACTOR ANALYSIS -----

Factor Transformation Matrix:

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Factor 1	,55467	,46794	,31542	,30390	,25986
Factor 2	-,72611	,07519	,46005	,04219	,31435
Factor 3	,06896	-,37639	,15217	-,13051	,14379
Factor 4	-,31584	,34152	-,14075	,00986	-,37900
Factor 5	,06017	-,57880	,21403	,35541	-,42998

Factor 6	,12471	-,09255	,27295	-,65921	,25347
Factor 7	,10805	-,36095	-,27473	-,14981	,27252
Factor 8	-,13532	,00180	-,65364	,16036	,39896
Factor 9	-,10677	-,12626	,00584	,22681	,22933
Factor 10	,00604	,16513	-,15109	-,47777	-,36631

	Factor 6	Factor 7	Factor 8	Factor 9	Factor 10
Factor 1	,17757	,27802	,24776	,16260	,13177
Factor 2	,00394	,28289	-,02388	,15204	,22614
Factor 3	,85197	-,22557	-,07264	,07634	,06980
Factor 4	,25819	-,24460	,69638	-,03848	,08455
Factor 5	-,10928	,25666	,27517	,38275	-,06583
Factor 6	-,23679	-,12019	,40341	,25164	-,32556
Factor 7	-,10775	,26350	,36182	-,32738	,60557
Factor 8	,08264	,09710	,07699	,56070	-,18161
Factor 9	,14498	,28580	,22951	-,55512	-,63645
Factor 10	,26166	,70079	-,14088	,06004	-,06628

□

----- FACTOR ANALYSIS -----

Analysis number 1 Listwise deletion of cases with missing values

Correlation Matrix:

	A1	A2	A3	A4	A5	A6	A7
A1	1,00000						
A2	,28095	1,00000					
A3	,25954	,33341	1,00000				
A4	,27640	,19413	,35027	1,00000			
A5	,48866	,41070	,37314	,19993	1,00000		
A6	,06851	,34823	,27547	,02735	,33766	1,00000	
A7	,20820	,08906	,26080	,36572	,19836	,18923	1,00000
A8	,12229	,43512	,26244	,23673	,41753	,50059	,37787
A9	,26461	,21091	,26638	,19034	,31895	,09122	,35959
A10	,22406	,18789	,39566	,30198	,30837	,17244	,35442
A11	,26801	,15936	,30926	,29793	,16451	,02336	,44767
A12	,21309	,18351	,21423	,33765	,11935	,03522	,54070
A13	,18780	,40893	,21718	,19511	,44683	,48131	,24957
A14	,20134	,13947	,30112	,37821	,10575	,18621	,51284
A15	,17397	,20225	,26426	,25617	,17166	,19901	,30619
A16	,10869	,33680	,28712	,22376	,37617	,47019	,34659
A17	,09797	,04617	,34894	,21792	,14030	,12835	,33947
A18	,18281	,20099	,25031	,27744	,15999	,09858	,34622
A19	,22055	,31581	,30485	,10637	,34240	,36004	,24153
A20	,05023	-,00945	,19784	,29364	,06966	,07215	,29644
A21	,17475	,13040	,21236	,39741	,12904	-,09590	,33946
A22	,01360	,18753	,26029	,25109	,12262	,38865	,33322
A23	,14045	,36602	,17400	,09456	,43603	,55115	,31671

Appendix 6

□

----- FACTOR ANALYSIS -----

Analysis number 1 Listwise deletion of cases with missing values

Extraction 1 for analysis 1, Principal Components Analysis (PC)

Initial Statistics:

Variable	Communality	*	Factor	Eigenvalue	Pct of Var	Cum Pct
A1	1,00000	*	1	12,96271	32,4	32,4
A2	1,00000	*	2	3,12561	7,8	40,2
A3	1,00000	*	3	2,16606	5,4	45,6
A4	1,00000	*	4	1,71848	4,3	49,9
A5	1,00000	*	5	1,52421	3,8	53,7
A6	1,00000	*	6	1,44842	3,6	57,4
	1,00000	*	7	1,23243	3,1	60,4
A8	1,00000	*	8	1,18063	3,0	63,4
A9	1,00000	*	9	1,05909	2,6	66,0
A10	1,00000	*	10	1,04350	2,6	68,7
A11	1,00000	*	11	,93324	2,3	71,0
A12	1,00000	*	12	,89425	2,2	73,2
A13	1,00000	*	13	,79319	2,0	75,2
A14	1,00000	*	14	,73495	1,8	77,0
A15	1,00000	*	15	,66465	1,7	78,7
A16	1,00000	*	16	,66126	1,7	80,4
A17	1,00000	*	17	,62239	1,6	81,9
A18	1,00000	*	18	,59905	1,5	83,4
A19	1,00000	*	19	,55784	1,4	84,8
A20	1,00000	*	20	,51684	1,3	86,1
A21	1,00000	*	21	,47060	1,2	87,3
A22	1,00000	*	22	,45044	1,1	88,4
A23	1,00000	*	23	,43655	1,1	89,5
A24	1,00000	*	24	,40416	1,0	90,5
A25	1,00000	*	25	,39235	1,0	91,5
A26	1,00000	*	26	,35092	,9	92,4
A27	1,00000	*	27	,34363	,9	93,2
A28	1,00000	*	28	,32268	,8	94,0
A29	1,00000	*	29	,29512	,7	94,8
A30	1,00000	*	30	,28586	,7	95,5
A31	1,00000	*	31	,26116	,7	96,1
A32	1,00000	*	32	,23848	,6	96,7
A33	1,00000	*	33	,22050	,6	97,3
A34	1,00000	*	34	,21039	,5	97,8

□

----- FACTOR ANALYSIS -----

Variable	Communality	*	Factor	Eigenvalue	Pct of Var	Cum Pct
A35	1,00000	*	35	,19199	,5	98,3
A36	1,00000	*	36	,17495	,4	98,7
A37	1,00000	*	37	,16562	,4	99,1
A38	1,00000	*	38	,14744	,4	99,5
A39	1,00000	*	39	,11508	,3	99,8
A40	1,00000	*	40	,08327	,2	100,0

PC extracted 10 factors.

Factor Matrix:

Factor 1 Factor 2 Factor 3 Factor 4 Factor 5

246

A27	,73947	
A24	,73701	
A22	,72553	
A29	,71918	
A28	,67767	
A23	,66424	-,52616
A16	,66423	
A13	,64870	
A8	,64395	
A39	,63371	
A33	,63011	
A30	,62560	
A40	,62147	
A31	,62050	
A26	,62046	
A19	,61943	
A14	,61937	
A15	,61017	
A10	,59421	
A34	,59401	
A7	,58981	
A36	,58965	
A17	,57107	
A12	,54463	
A32	,53074	
A25	,50828	
A38	,50681	
A3		

A9
A18
A20

□

- - - - - F A C T O R A N A L Y S I S - - - - -

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
A11		,50209			
A6		-,50152			
A21					
A1			,68485		
A5			,63603		
A2					
A35					
A37					

	Factor 6	Factor 7	Factor 8	Factor 9	Factor 10
A27					
A24					
A22					
A29					
A28					
A23					
A16					
A13					
A8					
A39					
A33					
A30					
A40					
A31					
A26					
A19					
A14					
A15					
A10					
A34					
A7					
A36					

A17
A12
A32
A25
A38
A3
A4
A9
A18

□

- - - - - F A C T O R A N A L Y S I S - - - - -

	Factor 6	Factor 7	Factor 8	Factor 9	Factor 10
A20					
A11					
A6					
A21					
A1					
A5					
A2					
5					
A37					

Final Statistics:

Variable	Communality	*	Factor	Eigenvalue	Pct of Var	Cum Pct
A1	,69041	*	1	12,96271	32,4	32,4
A2	,52460	*	2	3,12561	7,8	40,2
A3	,72422	*	3	2,16606	5,4	45,6
A4	,74721	*	4	1,71848	4,3	49,9
A5	,71064	*	5	1,52421	3,8	53,7
A6	,67138	*	6	1,44842	3,6	57,4
A7	,68829	*	7	1,23243	3,1	60,4
A8	,71826	*	8	1,18063	3,0	63,4
A9	,67962	*	9	1,05909	2,6	66,0
A10	,70091	*	10	1,04350	2,6	68,7
A11	,78293	*				
A12	,65819	*				
A13	,70161	*				
A14	,66666	*				
A15	,68110	*				
A16	,74114	*				
A17	,77948	*				
A18	,67378	*				
A19	,56391	*				
A20	,60309	*				
A21	,63331	*				
A22	,77524	*				
A23	,77618	*				
A24	,67241	*				
A25	,64573	*				
A26	,72245	*				

□

- - - - - F A C T O R A N A L Y S I S - - - - -

Variable	Communality	*	Factor	Eigenvalue	Pct of Var	Cum Pct
A27	,79899	*				
A28	,67863	*				
A29	,72950	*				
A30	,66576	*				
A31	,68393	*				

A32	,67754	+
A33	,61689	+
A34	,62841	+
A35	,70814	+
A36	,72832	+
A37	,64821	+
A38	,61820	+
A39	,68242	+
A40	,66343	+

VARIMAX rotation 1 for extraction 1 in analysis 1 - Kaiser Normalization.

VARIMAX converged in 12 iterations.

Rotated Factor Matrix:

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
A13	,76667				
A8	,76538				
A16	,76252				
A23	,73531				
A6	,70484				
A28	,59460				
26	,51786				
A24					
A19					
A29		,73056			
A30		,68489			
A34		,67237			
A33		,60628			
A22		,59114			
A27	,52700	,53096			
A11			,72102		
A7			,70732		

□

- - - - - F A C T O R A N A L Y S I S - - - - -

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
A12			,69540		
A14					
19					
A36				,73477	
A31				,63822	
A3				,56429	
A39					
A18					,72934
A32					,65674
A21					,55632
A1					
A5					
A2					
A35					
A37					
A38					
A20					
A15					
A40					
A25					
A17					
A10					

A4

	Factor 6	Factor 7	Factor 8	Factor 9	Factor 10
A13					
A8					
A16					
A23					
A6					
A28					
A26					
A24					
A19					
A29					
A30					

□

----- FACTOR ANALYSIS -----

	Factor 6	Factor 7	Factor 8	Factor 9	Factor 10
A34					
3					
A22					
A27					
A11					
A7					
A12					
A14					
A9					
A36					
A31					
A3					
A39					
A18					
A32					
A21					
A1	,78332				
A5	,69674				
A2					
A35					
A37		,73729			
38		,53980			
A20			,65219		
A15			,57336		
A40			,51109		
A25					
A17				,64858	
A10				,58756	
A4					,70179

Factor Transformation Matrix:

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Factor 1	,54243	,49010	,32427	,31717	,25575

□

----- FACTOR ANALYSIS -----

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Factor 2	-,70573	,03877	,44159	,02583	,34056
Factor 3	,03893	-,36038	,15117	-,09289	,16439
Factor 4	-,33340	,30669	-,11650	,01439	-,40704
Factor 5	,07915	-,59815	,17059	,46302	-,42934
Factor 6	,15109	-,23171	,36244	-,50616	,21148
Factor 7	,18711	-,28981	,00313	-,15360	,16324
Factor 8	-,07072	-,17873	-,66457	,21100	,55624
Factor 9	-,15964	-,02164	,17848	,44080	,20427
Factor 10	-,02136	,08059	-,17157	-,39611	-,13812

	Factor 6	Factor 7	Factor 8	Factor 9	Factor 10
Factor 1	,17701	,23534	,25468	,16879	,11980
Factor 2	-,04905	-,01073	,30810	,16365	,25410
Factor 3	,84704	-,07998	-,25817	,09883	,09905
Factor 4	,24985	,70855	-,18749	-,05317	,11350
Factor 5	-,06228	,19706	,32820	,23987	-,01314
Factor 6	-,24210	,48458	-,14354	,18484	-,37816
Factor 7	-,08818	,25453	,18488	-,65307	,54545
Factor 8	-,00381	,30415	,09816	,25071	-,04958
Factor 9	,09768	,06982	-,06828	-,58428	-,58796
Factor 10	,32639	-,01561	,74941	-,09850	-,33097

□

Appendix 7

NPar Tests

Kruskal-Wallis Test

Ranks

	GRADE	N	Mean Rank
A1	1,00	29	101,17
	2,00	40	85,49
	3,00	36	97,32
	4,00	42	89,98
	5,00	34	83,38
	Total	181	
A2	1,00	29	92,19
	2,00	40	90,45
	3,00	36	102,89
	4,00	42	84,13
	5,00	34	86,53
	Total	181	
A3	1,00	29	103,90
	2,00	40	98,70
	3,00	36	87,68
	4,00	42	81,37
	5,00	34	86,35
	Total	181	
A4	1,00	29	116,62
	2,00	40	101,00
	3,00	36	79,29
	4,00	42	86,63
	5,00	34	75,18
	Total	181	
A5	1,00	29	103,28
	2,00	40	89,05
	3,00	36	99,10
	4,00	42	91,61
	5,00	34	73,50
	Total	181	
A6	1,00	29	98,31
	2,00	40	91,00
	3,00	36	92,71
	4,00	42	87,43
	5,00	34	87,37
	Total	181	
A7	1,00	29	114,34
	2,00	40	87,46
	3,00	36	93,17
	4,00	42	88,25
	5,00	34	76,35
	Total	181	
A8	1,00	29	104,19
	2,00	40	86,51
	3,00	36	96,88
	4,00	42	89,99
	5,00	34	80,06
	Total	181	

Ranks

	GRADE	N	Mean Rank
A9	1,00	29	102,22
	2,00	40	91,04
	3,00	36	94,82
	4,00	42	92,18
	5,00	34	75,88
	Total	181	
A10	1,00	29	111,67
	2,00	40	93,79
	3,00	36	98,85
	4,00	42	77,21
	5,00	34	78,81
	Total	181	
A11	1,00	29	102,41
	2,00	40	90,70
	3,00	36	104,68
	4,00	42	84,71
	5,00	34	74,90
	Total	181	
A12	1,00	29	113,45
	2,00	40	82,72
	3,00	36	92,67
	4,00	42	87,75
	5,00	34	83,84
	Total	181	
A13	1,00	29	92,55
	2,00	40	94,31
	3,00	36	88,99
	4,00	42	89,57
	5,00	34	89,68
	Total	181	
A14	1,00	29	118,57
	2,00	40	83,60
	3,00	36	94,72
	4,00	42	84,71
	5,00	34	80,01
	Total	181	
A15	1,00	29	106,50
	2,00	40	92,99
	3,00	36	93,28
	4,00	42	89,64
	5,00	34	74,71
	Total	181	
A16	1,00	29	98,38
	2,00	40	91,88
	3,00	36	98,69
	4,00	42	84,67
	5,00	34	83,35
	Total	181	

Ranks

	GRADE	N	Mean Rank
A17	1,00	29	112,67
	2,00	40	97,63
	3,00	36	86,17
	4,00	42	82,13
	5,00	34	80,79
	Total	181	
A18	1,00	29	100,24
	2,00	40	84,65
	3,00	36	103,64
	4,00	42	86,25
	5,00	34	83,07
	Total	181	
A19	1,00	29	100,78
	2,00	40	93,46
	3,00	36	91,24
	4,00	42	86,21
	5,00	34	85,43
	Total	181	
A20	1,00	29	100,29
	2,00	40	85,35
	3,00	36	104,43
	4,00	42	83,31
	5,00	34	85,00
	Total	181	
A21	1,00	29	108,40
	2,00	40	99,88
	3,00	36	82,18
	4,00	42	89,32
	5,00	34	77,13
	Total	181	
A22	1,00	29	102,55
	2,00	40	92,34
	3,00	36	97,74
	4,00	42	90,50
	5,00	34	73,06
	Total	181	
A23	1,00	29	93,90
	2,00	40	100,46
	3,00	36	101,67
	4,00	42	84,68
	5,00	34	73,91
	Total	181	
A24	1,00	29	116,83
	2,00	40	98,43
	3,00	36	88,96
	4,00	42	81,19
	5,00	34	74,51
	Total	181	

Ranks

	GRADE	N	Mean Rank
A25	1,00	29	89,60
	2,00	40	88,57
	3,00	36	103,65
	4,00	42	92,40
	5,00	34	79,91
	Total	181	
A26	1,00	29	95,98
	2,00	40	94,45
	3,00	36	107,39
	4,00	42	86,51
	5,00	34	70,88
	Total	181	
A27	1,00	29	103,93
	2,00	40	93,60
	3,00	36	92,67
	4,00	42	86,58
	5,00	34	80,60
	Total	181	
A28	1,00	29	108,33
	2,00	40	97,22
	3,00	36	91,04
	4,00	42	84,35
	5,00	34	77,07
	Total	181	
A29	1,00	29	107,19
	2,00	40	98,03
	3,00	36	90,85
	4,00	42	86,98
	5,00	34	74,06
	Total	181	
A30	1,00	29	102,71
	2,00	40	92,64
	3,00	36	97,94
	4,00	42	89,30
	5,00	34	73,84
	Total	181	
A31	1,00	29	106,50
	2,00	40	94,47
	3,00	36	100,79
	4,00	42	77,14
	5,00	34	80,44
	Total	181	
A32	1,00	29	106,43
	2,00	40	93,26
	3,00	36	109,61
	4,00	42	75,67
	5,00	34	74,41
	Total	181	

Ranks

	GRADE	N	Mean Rank
A33	1,00	29	91,12
	2,00	40	99,93
	3,00	36	87,89
	4,00	42	88,56
	5,00	34	86,71
	Total	181	
A34	1,00	29	112,28
	2,00	40	93,69
	3,00	36	90,68
	4,00	42	85,80
	5,00	34	76,46
	Total	181	
A35	1,00	29	111,36
	2,00	40	94,38
	3,00	36	78,29
	4,00	42	89,95
	5,00	34	84,41
	Total	181	
A36	1,00	29	110,50
	2,00	40	97,45
	3,00	36	86,44
	4,00	42	86,37
	5,00	34	77,32
	Total	181	
A37	1,00	29	101,50
	2,00	40	92,60
	3,00	36	80,97
	4,00	42	87,80
	5,00	34	94,74
	Total	181	
A38	1,00	29	94,69
	2,00	40	94,72
	3,00	36	96,15
	4,00	42	89,96
	5,00	34	79,29
	Total	181	
A39	1,00	29	104,50
	2,00	40	97,01
	3,00	36	91,11
	4,00	42	89,86
	5,00	34	73,71
	Total	181	
A40	1,00	29	114,88
	2,00	40	86,49
	3,00	36	95,54
	4,00	42	88,63
	5,00	34	74,06
	Total	181	

Test Statistics^{a,b}

	A1	A2	A3	A4	A5	A6	A7
Chi-Square	5,121	5,404	5,698	14,281	14,656	2,027	10,225
df	4	4	4	4	4	4	4
Asymp. Sig.	,275	,248	,223	,006	,005	,731	,037

Test Statistics^{a,b}

	A8	A9	A10	A11	A12	A13	A14
Chi-Square	7,757	8,165	11,858	11,118	7,921	,484	11,933
df	4	4	4	4	4	4	4
Asymp. Sig.	,101	,086	,018	,025	,095	,975	,018

Test Statistics^{a,b}

	A15	A16	A17	A18	A19	A20	A21
Chi-Square	6,406	3,873	10,733	4,885	2,525	6,088	8,029
df	4	4	4	4	4	4	4
Asymp. Sig.	,171	,424	,030	,299	,640	,193	,091

Test Statistics^{a,b}

	A22	A23	A24	A25	A26	A27	A28
Chi-Square	7,870	11,665	14,071	4,121	15,643	4,788	9,198
df	4	4	4	4	4	4	4
Asymp. Sig.	,096	,020	,007	,390	,004	,310	,056

Test Statistics^{a,b}

	A29	A30	A31	A32	A33	A34	A35
Chi-Square	8,500	6,608	9,155	14,595	2,016	8,224	7,558
df	4	4	4	4	4	4	4
Asymp. Sig.	,075	,158	,057	,006	,733	,084	,109

Ranks

	YRSEXP	N	Mean Rank
A3	1,00	36	92,18
	2,00	27	85,52
	3,00	37	98,30
	4,00	32	93,58
	5,00	49	85,96
	Total	181	
A4	1,00	36	93,29
	2,00	27	94,74
	3,00	37	98,66
	4,00	32	75,23
	5,00	49	91,77
	Total	181	
A5	1,00	36	91,58
	2,00	27	99,31
	3,00	37	87,45
	4,00	32	86,20
	5,00	49	91,81
	Total	181	
A6	1,00	36	91,17
	2,00	27	77,74
	3,00	37	96,59
	4,00	32	91,16
	5,00	49	93,86
	Total	181	
A7	1,00	36	80,31
	2,00	27	90,41
	3,00	37	87,74
	4,00	32	93,33
	5,00	49	100,12
	Total	181	
A8	1,00	36	91,01
	2,00	27	87,52
	3,00	37	96,76
	4,00	32	81,89
	5,00	49	94,51
	Total	181	
A9	1,00	36	90,54
	2,00	27	98,35
	3,00	37	85,27
	4,00	32	82,72
	5,00	49	97,02
	Total	181	
A10	1,00	36	82,29
	2,00	27	110,19
	3,00	37	93,92
	4,00	32	79,53
	5,00	49	92,11
	Total	181	

Ranks

	YRSEXP	N	Mean Rank
A11	1,00	36	89,26
	2,00	27	100,74
	3,00	37	83,59
	4,00	32	84,83
	5,00	49	96,53
	Total	181	
A12	1,00	36	84,38
	2,00	27	100,61
	3,00	37	90,91
	4,00	32	78,03
	5,00	49	99,11
	Total	181	
A13	1,00	36	98,61
	2,00	27	87,61
	3,00	37	100,55
	4,00	32	87,19
	5,00	49	82,55
	Total	181	
A14	1,00	36	76,22
	2,00	27	95,52
	3,00	37	102,01
	4,00	32	78,47
	5,00	49	99,23
	Total	181	
A15	1,00	36	90,99
	2,00	27	91,70
	3,00	37	85,65
	4,00	32	88,45
	5,00	49	96,33
	Total	181	
A16	1,00	36	92,04
	2,00	27	92,78
	3,00	37	109,01
	4,00	32	86,44
	5,00	49	78,63
	Total	181	
A17	1,00	36	78,92
	2,00	27	97,17
	3,00	37	102,81
	4,00	32	94,95
	5,00	49	84,98
	Total	181	
A18	1,00	36	88,58
	2,00	27	86,50
	3,00	37	90,70
	4,00	32	93,14
	5,00	49	94,08
	Total	181	

Ranks

	YRSEXP	N	Mean Rank
A19	1,00	36	86,13
	2,00	27	90,94
	3,00	37	108,15
	4,00	32	79,73
	5,00	49	89,02
	Total	181	
A20	1,00	36	93,19
	2,00	27	99,61
	3,00	37	87,86
	4,00	32	79,86
	5,00	49	94,29
	Total	181	
A21	1,00	36	103,40
	2,00	27	83,50
	3,00	37	81,05
	4,00	32	83,38
	5,00	49	98,51
	Total	181	
A22	1,00	36	91,38
	2,00	27	90,00
	3,00	37	89,36
	4,00	32	81,75
	5,00	49	98,55
	Total	181	
A23	1,00	36	90,74
	2,00	27	81,54
	3,00	37	96,62
	4,00	32	85,92
	5,00	49	95,48
	Total	181	
A24	1,00	36	90,82
	2,00	27	91,00
	3,00	37	101,41
	4,00	32	86,58
	5,00	49	86,16
	Total	181	
A25	1,00	36	101,64
	2,00	27	77,74
	3,00	37	84,76
	4,00	32	90,92
	5,00	49	95,26
	Total	181	
A26	1,00	36	86,15
	2,00	27	88,80
	3,00	37	95,09
	4,00	32	90,61
	5,00	49	92,94
	Total	181	

Ranks

	YRSEXP	N	Mean Rank
A27	1,00	36	89,57
	2,00	27	83,85
	3,00	37	100,74
	4,00	32	84,17
	5,00	49	93,09
	Total	181	
A28	1,00	36	93,85
	2,00	27	87,89
	3,00	37	101,01
	4,00	32	82,47
	5,00	49	88,63
	Total	181	
A29	1,00	36	81,10
	2,00	27	90,00
	3,00	37	104,97
	4,00	32	79,31
	5,00	49	95,91
	Total	181	
A30	1,00	36	78,46
	2,00	27	96,30
	3,00	37	111,49
	4,00	32	76,83
	5,00	49	91,08
	Total	181	
A31	1,00	36	82,14
	2,00	27	105,98
	3,00	37	97,22
	4,00	32	89,08
	5,00	49	85,82
	Total	181	
A32	1,00	36	74,92
	2,00	27	100,87
	3,00	37	83,89
	4,00	32	89,78
	5,00	49	103,54
	Total	181	
A33	1,00	36	89,14
	2,00	27	96,50
	3,00	37	89,89
	4,00	32	83,20
	5,00	49	95,27
	Total	181	
A34	1,00	36	76,97
	2,00	27	92,24
	3,00	37	91,76
	4,00	32	85,42
	5,00	49	103,69
	Total	181	

Ranks

	YRSEXP	N	Mean Rank
A35	1,00	36	74,71
	2,00	27	101,76
	3,00	37	92,09
	4,00	32	76,31
	5,00	49	105,81
	Total	181	
A36	1,00	36	83,83
	2,00	27	92,83
	3,00	37	98,49
	4,00	32	90,13
	5,00	49	90,17
	Total	181	
A37	1,00	36	78,22
	2,00	27	94,50
	3,00	37	97,91
	4,00	32	100,91
	5,00	49	86,78
	Total	181	
A38	1,00	36	80,74
	2,00	27	95,41
	3,00	37	102,12
	4,00	32	81,58
	5,00	49	93,87
	Total	181	
A39	1,00	36	93,81
	2,00	27	88,85
	3,00	37	98,49
	4,00	32	82,19
	5,00	49	90,22
	Total	181	
A40	1,00	36	85,32
	2,00	27	97,24
	3,00	37	90,92
	4,00	32	79,77
	5,00	49	99,13
	Total	181	

Test Statistics^{a,b}

	A1	A2	A3	A4	A5	A6	A7
Chi-Square	2,774	1,392	2,000	4,106	2,637	4,844	3,723
df	4	4	4	4	4	4	4
Asymp. Sig.	,596	,846	,736	,392	,620	,304	,445

Test Statistics^{a,b}

	A8	A9	A10	A11	A12	A13	A14
Chi-Square	3,331	4,523	7,318	3,928	5,114	5,894	8,315
df	4	4	4	4	4	4	4
Asymp. Sig.	,504	,340	,120	,416	,276	,207	,081

Test Statistics^{a,b}

	A15	A16	A17	A18	A19	A20	A21
Chi-Square	1,042	10,599	6,385	,519	8,021	3,065	5,760
df	4	4	4	4	4	4	4
Asymp. Sig.	,903	,031	,172	,972	,091	,547	,218

Test Statistics^{a,b}

	A22	A23	A24	A25	A26	A27	A28
Chi-Square	2,696	3,225	2,325	4,453	1,097	3,288	3,376
df	4	4	4	4	4	4	4
Asymp. Sig.	,610	,521	,676	,348	,895	,511	,497

Test Statistics^{a,b}

	A29	A30	A31	A32	A33	A34	A35
Chi-Square	6,937	11,754	4,727	8,110	1,747	6,065	11,584
df	4	4	4	4	4	4	4
Asymp. Sig.	,139	,019	,316	,088	,782	,194	,021

Test Statistics^{a,b}

	A36	A37	A38	A39	A40
Chi-Square	1,796	5,591	5,969	2,337	3,890
df	4	4	4	4	4
Asymp. Sig.	,773	,232	,201	,674	,421

a. Kruskal Wallis Test

b. Grouping Variable: YRSEXP

Oneway

NPar Tests

Kruskal-Wallis Test

Ranks

	EDUC	N	Mean Rank
A1	1,00	90	92,86
	2,00	68	86,01
	3,00	23	98,48
	Total	181	
A2	1,00	90	95,49
	2,00	68	86,08
	3,00	23	87,96
	Total	181	
A3	1,00	90	85,42
	2,00	68	99,37
	3,00	23	88,11
	Total	181	
A4	1,00	90	87,94
	2,00	68	93,33
	3,00	23	96,07
	Total	181	
A5	1,00	90	93,15
	2,00	68	87,04
	3,00	23	94,30
	Total	181	
A6	1,00	90	96,27
	2,00	68	87,32
	3,00	23	81,24
	Total	181	
A7	1,00	90	85,23
	2,00	68	94,82
	3,00	23	102,26
	Total	181	
A8	1,00	90	91,58
	2,00	68	90,29
	3,00	23	90,83
	Total	181	
A9	1,00	90	89,12
	2,00	68	89,54
	3,00	23	102,67
	Total	181	
A10	1,00	90	87,01
	2,00	68	92,50
	3,00	23	102,17
	Total	181	
A11	1,00	90	86,57
	2,00	68	96,32
	3,00	23	92,63
	Total	181	
A12	1,00	90	87,31
	2,00	68	90,09
	3,00	23	108,15
	Total	181	

Ranks

	EDUC	N	Mean Rank
A13	1,00	90	95,26
	2,00	68	83,91
	3,00	23	95,28
	Total	181	
A14	1,00	90	90,60
	2,00	68	90,74
	3,00	23	93,33
	Total	181	
A15	1,00	90	92,01
	2,00	68	93,21
	3,00	23	80,52
	Total	181	
A16	1,00	90	96,74
	2,00	68	85,93
	3,00	23	83,52
	Total	181	
A17	1,00	90	91,16
	2,00	68	88,97
	3,00	23	96,37
	Total	181	
A18	1,00	90	89,22
	2,00	68	91,08
	3,00	23	97,72
	Total	181	
A19	1,00	90	94,12
	2,00	68	83,59
	3,00	23	100,70
	Total	181	
A20	1,00	90	86,75
	2,00	68	100,68
	3,00	23	79,00
	Total	181	
A21	1,00	90	88,57
	2,00	68	94,18
	3,00	23	91,11
	Total	181	
A22	1,00	90	94,30
	2,00	68	85,24
	3,00	23	95,13
	Total	181	
A23	1,00	90	91,19
	2,00	68	89,23
	3,00	23	95,50
	Total	181	
A24	1,00	90	92,42
	2,00	68	88,12
	3,00	23	93,96
	Total	181	
A25	1,00	90	92,04
	2,00	68	92,07
	3,00	23	83,76
	Total	181	

Ranks

	EDUC	N	Mean Rank
A26	1,00	90	91,15
	2,00	68	90,63
	3,00	23	91,52
	Total	181	
A27	1,00	90	90,10
	2,00	68	87,97
	3,00	23	103,48
	Total	181	
A28	1,00	90	88,56
	2,00	68	91,09
	3,00	23	100,30
	Total	181	
A29	1,00	90	86,33
	2,00	68	90,96
	3,00	23	109,39
	Total	181	
A30	1,00	90	91,69
	2,00	68	88,38
	3,00	23	96,04
	Total	181	
A31	1,00	90	84,07
	2,00	68	95,71
	3,00	23	104,22
	Total	181	
A32	1,00	90	87,94
	2,00	68	95,04
	3,00	23	91,04
	Total	181	
A33	1,00	90	87,69
	2,00	68	91,70
	3,00	23	101,89
	Total	181	
A34	1,00	90	92,08
	2,00	68	87,07
	3,00	23	98,41
	Total	181	
A35	1,00	90	88,88
	2,00	68	95,16
	3,00	23	87,00
	Total	181	
A36	1,00	90	84,48
	2,00	68	93,41
	3,00	23	109,39
	Total	181	
A37	1,00	90	81,41
	2,00	68	96,15
	3,00	23	113,28
	Total	181	
A38	1,00	90	86,78
	2,00	68	91,75
	3,00	23	105,30
	Total	181	

Ranks

	EDUC	N	Mean Rank
A39	1,00	90	87,27
	2,00	68	90,68
	3,00	23	106,54
	Total	181	
A40	1,00	90	89,97
	2,00	68	94,65
	3,00	23	84,26
	Total	181	

Test Statistics^{a,b}

	A1	A2	A3	A4	A5	A6	A7
Chi-Square	2,198	2,546	3,617	,689	1,469	4,311	2,931
df	2	2	2	2	2	2	2
Asymp. Sig.	,333	,280	,164	,708	,480	,116	,231

Test Statistics^{a,b}

	A8	A9	A10	A11	A12	A13	A14
Chi-Square	,045	2,446	1,890	1,987	3,247	3,313	,056
df	2	2	2	2	2	2	2
Asymp. Sig.	,978	,294	,389	,370	,197	,191	,972

Test Statistics^{a,b}

	A15	A16	A17	A18	A19	A20	A21
Chi-Square	1,150	3,132	,440	,500	3,399	4,926	,457
df	2	2	2	2	2	2	2
Asymp. Sig.	,563	,209	,803	,779	,183	,085	,796

Test Statistics^{a,b}

	A22	A23	A24	A25	A26	A27	A28
Chi-Square	1,729	,408	,381	,551	,011	2,109	1,243
df	2	2	2	2	2	2	2
Asymp. Sig.	,421	,816	,826	,759	,995	,348	,537

Test Statistics^{a,b}

	A29	A30	A31	A32	A33	A34	A35
Chi-Square	4,138	,454	3,962	,734	1,712	,915	,744
df	2	2	2	2	2	2	2
Asymp. Sig.	,126	,797	,138	,693	,425	,633	,689

Test Statistics^{a,b}

	A36	A37	A38	A39	A40
Chi-Square	5,296	10,029	3,122	3,187	,838
df	2	2	2	2	2
Asymp. Sig.	,071	,007	,210	,203	,658

a. Kruskal Wallis Test

b. Grouping Variable: EDUC

Appendix 8

□

EDUC level of education

Value Label	Value	Frequency	Valid Percent	Cum Percent
unfinished middle sc	1,00	1	4,8	4,8
primary and middle	2,00	6	28,6	33,3
secondary	3,00	9	42,9	76,2
degree	4,00	5	23,8	100,0
Total		21	100,0	
Mean	2,857	Median	3,000	Std dev ,854

Valid cases 21 Missing cases 0

MARITAL marital status

Value Label	Value	Frequency	Valid Percent	Cum Percent
married	1,00	14	66,7	66,7
divorced	2,00	5	23,8	90,5
single parent	3,00	1	4,8	95,2
guardian	4,00	1	4,8	100,0
Total		21	100,0	
Mean	1,476	Median	1,000	Std dev ,814

Valid cases 21 Missing cases 0

□

AGE age of parents

Value Label	Value	Frequency	Valid Percent	Cum Percent
30 - 39	1,00	13	61,9	61,9
40 - 49	2,00	7	33,3	95,2
50 - over	3,00	1	4,8	100,0
Total		21	100,0	
Mean	1,429	Median	1,000	Std dev ,598

Valid cases 21 Missing cases 0

KIDS number of children

Value Label	Value	Frequency	Valid Percent	Cum Percent
	1,00	5	23,8	23,8
	2,00	6	28,6	52,4
	3,00	7	33,3	85,7
	4,00	2	9,5	95,2
	6,00	1	4,8	100,0
	Total	21	100,0	

Mean 2,476 Median 2,000 Std dev 1,250

Valid cases 21 Missing cases 0

□

A1

Value Label	Value	Frequency	Valid Percent	Cum Percent
	3,00	1	4,8	4,8
	6,00	8	38,1	42,9
	7,00	12	57,1	100,0
	Total	21	100,0	

Mean 6,429 Median 7,000 Std dev ,926

Valid cases 21 Missing cases 0

A2

Value Label	Value	Frequency	Valid Percent	Cum Percent
	4,00	1	4,8	4,8
	5,00	5	23,8	28,6
	6,00	2	9,5	38,1
	7,00	13	61,9	100,0
	Total	21	100,0	

Mean 6,286 Median 7,000 Std dev 1,007

Valid cases 21 Missing cases 0

□

A3

Value Label	Value	Frequency	Valid Percent	Cum Percent
	1,00	1	4,8	4,8
	2,00	1	4,8	9,5
	3,00	2	9,5	19,0
	4,00	4	19,0	38,1
	5,00	5	23,8	61,9
	6,00	1	4,8	66,7
	7,00	7	33,3	100,0
	Total	21	100,0	

Mean 5,000 Median 5,000 Std dev 1,817

Valid cases 21 Missing cases 0

A4

Value Label	Value	Frequency	Valid Percent	Cum Percent
	2,00	3	14,3	14,3
	3,00	3	14,3	28,6
	4,00	3	14,3	42,9
	5,00	6	28,6	71,4
	6,00	3	14,3	85,7
	7,00	3	14,3	100,0
	Total	21	100,0	

Mean 4,571 Median 5,000 Std dev 1,630

Valid cases 21 Missing cases 0

□

A5

Valid Cum

Value Label	Value	Frequency	Percent	Percent
	4,00	1	4,8	4,8
	5,00	2	9,5	14,3
	6,00	3	14,3	28,6
	7,00	15	71,4	100,0
	Total	21	100,0	

Mean 6,524 Median 7,000 Std dev ,873

Valid cases 21 Missing cases 0

A6

Value Label	Value	Frequency	Valid Percent	Cum Percent
	2,00	1	4,8	4,8
	5,00	3	14,3	19,0
	6,00	2	9,5	28,6
	7,00	15	71,4	100,0
	Total	21	100,0	

Mean 6,381 Median 7,000 Std dev 1,244

Valid cases 21 Missing cases 0

□

A7

Value Label	Value	Frequency	Valid Percent	Cum Percent
	2,00	1	4,8	4,8
	4,00	3	14,3	19,0
	5,00	3	14,3	33,3
	6,00	4	19,0	52,4
	7,00	10	47,6	100,0
	Total	21	100,0	

Mean 5,857 Median 6,000 Std dev 1,424

Valid cases 21 Missing cases 0

A8

2/12

Value Label		Value	Frequency	Valid Percent	Cum Percent
		4,00	2	9,5	9,5
		5,00	2	9,5	19,0
		6,00	3	14,3	33,3
		7,00	14	66,7	100,0
			-----	-----	
	Total		21	100,0	
Mean	6,381	Median	7,000	Std dev	1,024
Valid cases	21	Missing cases	0		

□

A9

Value Label		Value	Frequency	Valid Percent	Cum Percent
		4,00	1	4,8	4,8
		5,00	1	4,8	9,5
		6,00	5	23,8	33,3
		7,00	14	66,7	100,0
			-----	-----	
	Total		21	100,0	
Mean	6,524	Median	7,000	Std dev	,814
Valid cases	21	Missing cases	0		

A10

Value Label		Value	Frequency	Valid Percent	Cum Percent
		1,00	1	4,8	4,8
		2,00	1	4,8	9,5
		4,00	1	4,8	14,3
		5,00	6	28,6	42,9
		6,00	6	28,6	71,4
		7,00	6	28,6	100,0
			<hr/>	<hr/>	
	Total		21	100,0	
Mean	5,476	Median	6,000	Std dev	1,601
Valid cases	21	Missing cases	0		

3/5

A11

Value Label	Value	Frequency	Valid Percent	Cum Percent	
	2,00	1	4,8	4,8	
	3,00	2	9,5	14,3	
	4,00	1	4,8	19,0	
	5,00	4	19,0	38,1	
	6,00	3	14,3	52,4	
	7,00	10	47,6	100,0	
		-----	-----		
	Total	21	100,0		
Mean	5,714	Median	6,000	Std dev	1,586

Valid cases 21 Missing cases 0

A12

Value Label		Value	Frequency	Valid Percent	Cum Percent
		2,00	1	4,8	4,8
		3,00	5	23,8	28,6
		5,00	2	9,5	38,1
		6,00	4	19,0	57,1
		7,00	9	42,9	100,0
			<hr/>	<hr/>	
	Total		21	100,0	
Mean	5,429	Median	6,000	Std dev	1,805

Valid cases 21 Missing cases 0

A13

Value Label	Value	Frequency	Valid Percent	Cum Percent
	1,00	1	4,8	4,8
	3,00	1	4,8	9,5
	4,00	2	9,5	19,0
	5,00	1	4,8	23,8
	6,00	1	4,8	28,6
	7,00	15	71,4	100,0

	Total	21	100,0
Mean	6,095	Median	7,000
		Std dev	1,700

Valid cases 21 Missing cases 0

A14

Value Label	Value	Frequency	Valid Percent	Cum Percent
	1,00	3	14,3	14,3
	2,00	3	14,3	28,6
	3,00	3	14,3	42,9
	4,00	6	28,6	71,4
	6,00	2	9,5	81,0
	7,00	4	19,0	100,0
	Total	21	100,0	

Mean	3,905	Median	4,000	Std dev	2,071
------	-------	--------	-------	---------	-------

Valid cases 21 Missing cases 0

□

A15

Value Label	Value	Frequency	Valid Percent	Cum Percent
	1,00	4	19,0	19,0
	2,00	5	23,8	42,9
	3,00	3	14,3	57,1
	5,00	3	14,3	71,4
	6,00	2	9,5	81,0
	7,00	4	19,0	100,0
	Total	21	100,0	

Mean	3,714	Median	3,000	Std dev	2,283
------	-------	--------	-------	---------	-------

Valid cases 21 Missing cases 0

A16

Valid Cum

202

Value Label		Value	Frequency	Percent	Percent
		3,00	1	4,8	4,8
		4,00	1	4,8	9,5
		5,00	4	19,0	28,6
		6,00	3	14,3	42,9
		7,00	12	57,1	100,0
			-----	-----	
	Total		21	100,0	
Mean	6,143	Median	7,000	Std dev	1,195
Valid cases	21	Missing cases	0		

□

A17

Value Label		Value	Frequency	Valid Percent	Cum Percent
		1,00	1	4,8	4,8
		2,00	1	4,8	9,5
		3,00	3	14,3	23,8
		4,00	2	9,5	33,3
		5,00	3	14,3	47,6
		6,00	8	38,1	85,7
		7,00	3	14,3	100,0
	Total		21	100,0	
Mean	4,952	Median	6,000	Std dev	1,717
Valid cases	21	Missing cases	0		

A18

Value Label		Value	Frequency	Valid Percent	Cum Percent
		1,00	7	33,3	33,3
		2,00	5	23,8	57,1
		3,00	2	9,5	66,7
		4,00	1	4,8	71,4
		5,00	4	19,0	90,5
		7,00	2	9,5	100,0
		Total	21	100,0	
Mean	2,905	Median	2,000	Std dev	2,022
Valid cases	21	Missing cases	0		

□

A19

Value Label		Value	Frequency	Valid Percent	Cum Percent
		4,00	1	4,8	4,8
		5,00	1	4,8	9,5
		6,00	8	38,1	47,6
		7,00	11	52,4	100,0

	Total		21	100,0	
Mean	6,381	Median	7,000	Std dev	,805

Valid cases 21 Missing cases 0

A20

Value Label		Value	Frequency	Valid Percent	Cum Percent
		1,00	2	9,5	9,5
		2,00	2	9,5	19,0
		3,00	7	33,3	52,4
		4,00	5	23,8	76,2
		6,00	1	4,8	81,0
		7,00	4	19,0	100,0
		Total	21	100,0	
Mean	3,857	Median	3,000	Std dev	1,905

Valid cases 21 Missing cases 0

□

A21

Value Label	Value	Frequency	Valid Percent	Cum Percent
	1,00	9	42,9	42,9
	2,00	5	23,8	66,7
	4,00	2	9,5	76,2
	5,00	1	4,8	81,0
	6,00	1	4,8	85,7
	7,00	3	14,3	100,0

2.7

	Total	21	100,0		
Mean	2,810	Median	2,000	Std dev	2,272
Valid cases	21	Missing cases	0		

A22

Value Label		Value	Frequency	Valid Percent	Cum Percent
		2,00	3	14,3	14,3
		3,00	3	14,3	28,6
		4,00	3	14,3	42,9
		5,00	6	28,6	71,4
		6,00	1	4,8	76,2
		7,00	5	23,8	100,0
			-----	-----	
	Total		21	100,0	
Mean	4,667	Median	5,000	Std dev	1,742
Valid cases	21	Missing cases	0		

□

A23

Value Label		Value	Frequency	Valid Percent	Cum Percent
		4,00	1	4,8	4,8
		6,00	3	14,3	19,0
		7,00	17	81,0	100,0
			<hr/>	<hr/>	
	Total		21	100,0	
Mean	6,714	Median	7,000	Std dev	,717
Valid cases	21	Missing cases	0		

A24

Value Label	Value	Frequency	Valid Percent	Cum Percent
	1,00	3	14,3	14,3

2,00	3	14,3	28,6
3,00	4	19,0	47,6
4,00	4	19,0	66,7
5,00	2	9,5	76,2
6,00	2	9,5	85,7
7,00	3	14,3	100,0

Total	21	100,0
-------	----	-------

Mean 3,810 Median 4,000 Std dev 1,990

Valid cases 21 Missing cases 0

□

A25

Value Label	Value	Frequency	Valid Percent	Cum Percent
	1,00	5	23,8	23,8
	2,00	3	14,3	38,1
	3,00	2	9,5	47,6
	4,00	1	4,8	52,4
	5,00	5	23,8	76,2
	6,00	3	14,3	90,5
	7,00	2	9,5	100,0
Total		21	100,0	

Mean 3,714 Median 4,000 Std dev 2,148

Valid cases 21 Missing cases 0

A26

Value Label	Value	Frequency	Valid Percent	Cum Percent
	5,00	2	9,5	9,5
	6,00	3	14,3	23,8
	7,00	16	76,2	100,0
Total		21	100,0	

Mean 6,667 Median 7,000 Std dev ,658

Valid cases 21 Missing cases 0

□

A27

Value Label		Value	Frequency	Valid Percent	Cum Percent
		1,00	3	14,3	14,3
		2,00	3	14,3	28,6
		3,00	1	4,8	33,3
		4,00	4	19,0	52,4
		5,00	1	4,8	57,1
		6,00	1	4,8	61,9
		7,00	8	38,1	100,0

	Total		21	100,0	
Mean	4,524	Median	4,000	Std dev	2,358

Valid cases 21 Missing cases 0

A28

Value Label		Value	Frequency	Valid Percent	Cum Percent
		3,00	1	4,8	4,8
		4,00	3	14,3	19,0
		5,00	6	28,6	47,6
		6,00	5	23,8	71,4
		7,00	6	28,6	100,0
	Total		21	100,0	
Mean	5,571	Median	6,000	Std dev	1,207

Valid cases 21 Missing cases 0

□

A29

Value Label	Value	Frequency	Valid Percent	Cum Percent
	1,00	2	9,5	9,5
	2,00	3	14,3	23,8
	3,00	2	9,5	33,3
	4,00	5	23,8	57,1
	5,00	2	9,5	66,7
	6,00	3	14,3	81,0
	7,00	4	19,0	100,0

	Total	21	100,0		
Mean	4,286	Median	4,000	Std dev	2,004

Valid cases	21	Missing cases	0
-------------	----	---------------	---

A30

Value Label	Value	Frequency	Valid Percent	Cum Percent
	1,00	1	4,8	4,8
	3,00	2	9,5	14,3
	4,00	3	14,3	28,6
	5,00	7	33,3	61,9
	6,00	4	19,0	81,0
	7,00	4	19,0	100,0
	Total	21	100,0	

Mean	5,048	Median	5,000	Std dev	1,532
------	-------	--------	-------	---------	-------

Valid cases	21	Missing cases	0
-------------	----	---------------	---

□

A31

Value Label	Value	Frequency	Valid Percent	Cum Percent
	2,00	3	14,3	14,3
	3,00	3	14,3	28,6
	4,00	2	9,5	38,1
	5,00	7	33,3	71,4
	6,00	3	14,3	85,7
	7,00	3	14,3	100,0
	Total	21	100,0	

Mean	4,619	Median	5,000	Std dev	1,627
------	-------	--------	-------	---------	-------

Valid cases	21	Missing cases	0
-------------	----	---------------	---

A32

Value Label	Value	Frequency	Valid Percent	Cum Percent
-------------	-------	-----------	---------------	-------------

1,00	11	52,4	52,4
2,00	3	14,3	66,7
3,00	1	4,8	71,4
4,00	1	4,8	76,2
5,00	5	23,8	100,0

Total	21	100,0
-------	----	-------

Mean	2,333	Median	1,000	Std dev	1,713
------	-------	--------	-------	---------	-------

Valid cases	21	Missing cases	0
-------------	----	---------------	---

□

A33

Value Label	Value	Frequency	Valid Percent	Cum Percent
	1,00	1	4,8	4,8
	2,00	3	14,3	19,0
	3,00	3	14,3	33,3
	4,00	2	9,5	42,9
	5,00	3	14,3	57,1
	6,00	5	23,8	81,0
	7,00	4	19,0	100,0
	Total	21	100,0	

Mean	4,619	Median	5,000	Std dev	1,936
------	-------	--------	-------	---------	-------

Valid cases	21	Missing cases	0
-------------	----	---------------	---

A34

Value Label	Value	Frequency	Valid Percent	Cum Percent
	1,00	6	28,6	28,6
	2,00	8	38,1	66,7
	3,00	1	4,8	71,4
	4,00	2	9,5	81,0
	5,00	1	4,8	85,7
	6,00	1	4,8	90,5
	7,00	2	9,5	100,0
	Total	21	100,0	

Mean	2,762	Median	2,000	Std dev	1,972
------	-------	--------	-------	---------	-------

Valid cases	21	Missing cases	0
-------------	----	---------------	---

A35

Value Label		Value	Frequency	Valid Percent	Cum Percent
		1,00	2	9,5	9,5
		2,00	1	4,8	14,3
		3,00	2	9,5	23,8
		4,00	5	23,8	47,6
		5,00	3	14,3	61,9
		6,00	3	14,3	76,2
		7,00	5	23,8	100,0
	Total		21	100,0	
Mean	4,667	Median	5,000	Std dev	1,932
Valid cases	21	Missing cases	0		

A36

Value Label	Value	Frequency	Valid Percent	Cum Percent	
	1,00	1	4,8	4,8	
	2,00	4	19,0	23,8	
	3,00	3	14,3	38,1	
	4,00	2	9,5	47,6	
	5,00	2	9,5	57,1	
	6,00	4	19,0	76,2	
	7,00	5	23,8	100,0	
	Total	21	100,0		
Mean	4,524	Median	5,000	Std dev	2,064
Valid cases	21	Missing cases	0		

□

A37

Value Label	Value	Frequency	Valid Percent	Cum Percent
	4,00	2	9,5	9,5
	5,00	4	19,0	28,6

		6,00	7	33,3	61,9
		7,00	8	38,1	100,0
			-----	-----	
	Total		21	100,0	
Mean	6,000	Median	6,000	Std dev	1,000
Valid cases	21	Missing cases	0		

A38

Value Label		Value	Frequency	Valid Percent	Cum Percent
		1,00	1	4,8	4,8
		4,00	9	42,9	47,6
		5,00	3	14,3	61,9
		6,00	2	9,5	71,4
		7,00	6	28,6	100,0
			-----	-----	
	Total		21	100,0	
Mean	5,048	Median	5,000	Std dev	1,596
Valid cases	21	Missing cases	0		

□

A39

Value Label		Value	Frequency	Valid Percent	Cum Percent
		5,00	3	14,3	14,3
		6,00	8	38,1	52,4
		7,00	10	47,6	100,0
			-----	-----	
	Total		21	100,0	
Mean	6,333	Median	6,000	Std dev	,730
Valid cases	21	Missing cases	0		

A40

Value Label	Value	Frequency	Valid Percent	Cum Percent
-------------	-------	-----------	---------------	-------------

1,00	1	4,8	4,8
2,00	1	4,8	9,5
3,00	4	19,0	28,6
4,00	4	19,0	47,6
6,00	2	9,5	57,1
7,00	9	42,9	100,0

Total	21	100,0
-------	----	-------

Mean 5,048 Median 6,000 Std dev 2,037

Valid cases 21 Missing cases 0

□

CHILDACH

Value Label	Value	Frequency	Valid Percent	Cum Percent
	1,00	5	23,8	23,8
	2,00	6	28,6	52,4
	3,00	10	47,6	100,0
Total		21	100,0	

Mean 2,238 Median 2,000 Std dev ,831

Valid cases 21 Missing cases 0

SEXCHILD

Value Label	Value	Frequency	Valid Percent	Cum Percent
	1,00	12	57,1	57,1
	2,00	9	42,9	100,0
Total		21	100,0	

Mean 1,429 Median 1,000 Std dev ,507

Valid cases 21 Missing cases 0

□

Appendix 9

Type 1 Parenting	Type 2 Communicating	Type 3 Volunteering	Type 4 Learning at home	Type 5 Decision- Making	Type 6 Collaborating with community
<u>Results for students</u> Awareness of family supervision; respect for parents. Positive personal qualities, habits, beliefs, and values, as taught by family. Balance between time spent on chores, on other activities, and on homework. Good or improved attendance. Awareness of importance of school.	<u>Results for students</u> Awareness of own progress and of actions needed to maintain or improve grades. Understanding of school policies on behavior, attendance, and other areas of student conduct. Informed decisions about courses and programs. Awareness of own role in partnerships serving as courier and communicator.	<u>Results for students</u> Skill in communicating with adults. Increased learning of skills that receive tutoring or targeted attention from volunteers. Awareness of many skills, talents, occupations, and contributions of parents and other volunteers.	<u>Results for students</u> Gains in skills, abilities, and test scores linked to homework and classwork. Homework completion. Positive attitude toward school-work. View of parent as more similar to teacher and home as more similar to school. Self-concept of ability as learner.	<u>Results for students</u> Awareness of representation of families in school decisions. Understanding that student rights are protected. Specific benefits linked to policies enacted by parent organisations and experienced by students.	<u>Results for students</u> Increased skills and talents through enriched curricular and extracurricular experiences. Awareness of careers and of options for future education and work. Specific benefits linked to programs, services, resources, and opportunities that connect students with community.
<u>For parents</u> Understanding of and confidence about parenting, child and adolescence development, and changes in home conditions for learning as children proceed through school. Awareness of own and others' challenges in parenting. Feeling of support from school and other parents.	<u>For parents</u> Understanding school programs and policies. Monitoring and awareness of child's progress. Responding effectively to students' problems. Interactions with teachers and ease of communication with school and teachers.	<u>For parents</u> Understanding teacher's job, increased comfort in school, and carry-over of school activities at home. Self-confidence about ability to work in school & with children or to take steps to improve own education. Awareness that families are welcome & valued at school. Gains in specific skills of volunteer work.	<u>For parents</u> Know how to support, encourage, and help student at home each year. Discussions of school, class-work, and homework. Understanding of instructional program each year and of what child is learning in each subject. Appreciation of teaching skills. Awareness of child as a learner.	<u>For parents</u> Input into policies that affect child's education. Feeling of ownership of school. Awareness of parents' voices in school decisions. Shared experiences and connections with other families. Awareness of school district, and state policies.	<u>For parents</u> Knowledge and use of local resources by family and child to increase skills and talents or to obtain needed services. Interactions with other families in community activities. Awareness of school's role in the community and of community's contribution to school.
<u>For teachers</u> Understanding families' backgrounds, cultures, concerns, goals, needs, and views of their children. Respect for families' strengths and efforts. Understanding of student diversity. Awareness of own skills to share information on child development.	<u>For teachers</u> Increased diversity and use of communications with families and awareness of own ability to communicate clearly. Appreciation for and use of parent network for communication. Increased ability to elicit and understand family views on children's programs and progress.	<u>For teachers</u> Readiness to involve families in new ways, including those who do not volunteer at school. Awareness of parents' talents and interests in school and children. Greater individual attention to students, with help from volunteers.	<u>For teachers</u> Better design of home-work assignments. Respect of family time. Recognition of equal helpfulness of single-parent, dual-income, and less formally educated families in motivating and reinforcing student learning. Satisfaction with family involvement and support.	<u>For teachers</u> Awareness of parent perspectives as a factor in policy development and decisions. View of equal status of family representatives on communities and in leadership roles.	<u>For teachers</u> Awareness of community resources to enrich curriculum and instruction. Openness to and skill in using mentors, business partners, community volunteers, and others to assist and augment teaching practice. Knowledgeable, helpful referrals of children and families to needed services.

Appendix 10

B1

Value Label	Value	Frequency	Valid Percent	Cum Percent
	1,00	6	3,3	3,3
	2,00	6	3,3	6,6
	3,00	9	5,0	11,6
	4,00	7	3,9	15,5
	5,00	27	14,9	30,4
	6,00	33	18,2	48,6
	7,00	93	51,4	100,0
	Total	181	100,0	

Mean 5,840 Std dev 1,617

Valid cases 181 Missing cases 0

B2

Value Label	Value	Frequency	Valid Percent	Cum Percent
	1,00	53	29,3	29,3
	2,00	12	6,6	35,9
	3,00	18	9,9	45,9
	4,00	22	12,2	58,0
	5,00	15	8,3	66,3
	6,00	8	4,4	70,7
	7,00	53	29,3	100,0
	Total	181	100,0	

Mean 3,939 Std dev 2,434

Valid cases 181 Missing cases 0

□

B3

Value Label	Value	Frequency	Valid Percent	Cum Percent
	1,00	16	8,8	8,8

2,00	5	2,8	11,6
3,00	13	7,2	18,8
4,00	22	12,2	30,9
5,00	18	9,9	40,9
6,00	32	17,7	58,6
7,00	75	41,4	100,0

Total	181	100,0
-------	-----	-------

Mean 5,304 Std dev 1,958

Valid cases 181 Missing cases 0

B4

Value Label	Value	Frequency	Valid Percent	Cum Percent
	1,00	21	11,6	11,6
	2,00	9	5,0	16,6
	3,00	13	7,2	23,8
	4,00	30	16,6	40,3
	5,00	30	16,6	56,9
	6,00	24	13,3	70,2
	7,00	54	29,8	100,0

Total	181	100,0
-------	-----	-------

Mean 4,807 Std dev 2,017

Valid cases 181 Missing cases 0

□

B5

Value Label	Value	Frequency	Valid Percent	Cum Percent
	1,00	22	12,2	12,2
	2,00	8	4,4	16,6
	3,00	9	5,0	21,5
	4,00	14	7,7	29,3
	5,00	19	10,5	39,8
	6,00	19	10,5	50,3
	7,00	90	49,7	100,0

Total	181	100,0
-------	-----	-------

Mean 5,304 Std dev 2,155

Valid cases 181 Missing cases 0

B6

Value Label	Value	Frequency	Valid Percent	Cum Percent
	1,00	10	5,5	5,5
	2,00	2	1,1	6,6
	3,00	7	3,9	10,5
	4,00	10	5,5	16,0
	5,00	17	9,4	25,4
	6,00	26	14,4	39,8
	7,00	109	60,2	100,0
	Total	181	100,0	100,0

Mean 5,961 Std dev 1,684

Valid cases 181 Missing cases 0

□

B7

Value Label	Value	Frequency	Valid Percent	Cum Percent
	1,00	81	44,8	44,8
	2,00	9	5,0	49,7
	3,00	16	8,8	58,6
	4,00	27	14,9	73,5
	5,00	12	6,6	80,1
	6,00	9	5,0	85,1
	7,00	27	14,9	100,0
	Total	181	100,0	

Mean 3,083 Std dev 2,260

Valid cases 181 Missing cases 0

B8

Value Label	Value	Frequency	Valid Percent	Cum Percent
	1,00	8	4,4	4,4
	2,00	13	7,2	11,6
	3,00	9	5,0	16,6

4,00	26	14,4	30,9
5,00	27	14,9	45,9
6,00	30	16,6	62,4
7,00	68	37,6	100,0

Total	181	100,0
-------	-----	-------

Mean 5,282 Std dev 1,818

Valid cases 181 Missing cases 0

□

B9

Value Label	Value	Frequency	Valid Percent	Cum Percent
	1,00	8	4,4	4,4
	2,00	5	2,8	7,2
	3,00	16	8,8	16,0
	4,00	17	9,4	25,4
	5,00	18	9,9	35,4
	6,00	36	19,9	55,2
	7,00	81	44,8	100,0
	Total	181	100,0	

Mean 5,564 Std dev 1,758

Valid cases 181 Missing cases 0

B10

Value Label	Value	Frequency	Valid Percent	Cum Percent
	1,00	87	48,1	48,1
	2,00	11	6,1	54,1
	3,00	16	8,8	63,0
	4,00	32	17,7	80,7
	5,00	13	7,2	87,8
	6,00	13	7,2	95,0
	7,00	9	5,0	100,0
	Total	181	100,0	

Mean 2,713 Std dev 1,957

Valid cases 181 Missing cases 0

□

B11

Value Label	Value	Frequency	Valid Percent	Cum Percent
	1,00	26	14,4	14,4
	2,00	11	6,1	20,4
	3,00	16	8,8	29,3
	4,00	16	8,8	38,1
	5,00	29	16,0	54,1
	6,00	19	10,5	64,6
	7,00	64	35,4	100,0
	Total	181	100,0	

Mean 4,790 Std dev 2,188

Valid cases 181 Missing cases 0

B12

Value Label	Value	Frequency	Valid Percent	Cum Percent
	1,00	20	11,0	11,0
	2,00	9	5,0	16,0
	3,00	23	12,7	28,7
	4,00	21	11,6	40,3
	5,00	21	11,6	51,9
	6,00	22	12,2	64,1
	7,00	65	35,9	100,0
	Total	181	100,0	

Mean 4,878 Std dev 2,099

Valid cases 181 Missing cases 0

□

B13

Value Label	Value	Frequency	Valid Percent	Cum Percent
	1,00	24	13,3	13,3
	2,00	21	11,6	24,9
	3,00	20	11,0	35,9
	4,00	26	14,4	50,3

5,00	19	10,5	60,8
6,00	24	13,3	74,0
7,00	47	26,0	100,0
Total		181	100,0

Mean 4,409 Std dev 2,144

Valid cases 181 Missing cases 0

B14

Value Label	Value	Frequency	Valid Percent	Cum Percent
	1,00	53	29,3	29,3
	2,00	8	4,4	33,7
	3,00	18	9,9	43,6
	4,00	26	14,4	58,0
	5,00	24	13,3	71,3
	6,00	22	12,2	83,4
	7,00	30	16,6	100,0
Total		181	100,0	

Mean 3,807 Std dev 2,239

Valid cases 181 Missing cases 0

□

Appendix 11

	N	Mean	Std Dev	Minimum	Maximum
B1	181	5,83978	1,61650	1,00	7,00
B2	181	3,93923	2,43394	1,00	7,00
B3	181	5,30387	1,95830	1,00	7,00
B4	181	4,80663	2,01692	1,00	7,00
B5	181	5,30387	2,15547	1,00	7,00
B6	181	5,96133	1,68445	1,00	7,00
B7	181	3,08287	2,26048	1,00	7,00
B8	181	5,28177	1,81755	1,00	7,00
B9	181	5,56354	1,75834	1,00	7,00
B10	181	2,71271	1,95656	1,00	7,00
B11	181	4,79006	2,18838	1,00	7,00
B12	181	4,87845	2,09937	1,00	7,00
B13	181	4,40884	2,14443	1,00	7,00
B14	181	3,80663	2,23884	1,00	7,00
GRADE	181	3,06630	1,36056	1,00	5,00

----- Kruskal-Wallis 1-Way Anova

B1
by GRADE

Mean Rank Cases

105,62	29	GRADE = 1
94,82	40	GRADE = 2
93,04	36	GRADE = 3
83,58	42	GRADE = 4
81,03	34	GRADE = 5

181 Total

		Corrected for ties	
Chi-Square	D.F. Significance	Chi-Square	D.F. Significance
4,5989	4 ,3310	5,3805	4 ,2504

----- Kruskal-Wallis 1-Way Anova

B2
by GRADE

Mean Rank Cases

81,36	29	GRADE = 1
92,82	40	GRADE = 2
73,33	36	GRADE = 3
102,25	42	GRADE = 4
101,88	34	GRADE = 5

181 Total

Chi-Square	D.F.	Significance	Corrected for ties Chi-Square	D.F.	Significance
8,5259	4	,0741	9,0118	4	,0608

—

----- Kruskal-Wallis 1-Way Anova

B3
by GRADE

Mean Rank Cases

107,84	29	GRADE = 1
81,32	40	GRADE = 2
95,03	36	GRADE = 3
85,04	42	GRADE = 4
91,12	34	GRADE = 5

181 Total

			Corrected for ties		
Chi-Square	D.F.	Significance	Chi-Square	D.F.	Significance
5,1186	4	,2753	5,5668	4	,2339

----- Kruskal-Wallis 1-Way Anova

B4
by GRADE

Mean Rank Cases

81,26	29	GRADE = 1
98,64	40	GRADE = 2
100,97	36	GRADE = 3
92,92	42	GRADE = 4
77,40	34	GRADE = 5

181 Total

			Corrected for ties		
Chi-Square	D.F.	Significance	Chi-Square	D.F.	Significance
5,5045	4	,2393	5,7340	4	,2199

—

----- Kruskal-Wallis 1-Way Anova

B5
by GRADE

Mean Rank Cases

85,07	29	GRADE = 1
80,75	40	GRADE = 2
83,83	36	GRADE = 3
109,58	42	GRADE = 4
92,75	34	GRADE = 5

181 Total

Chi-Square	D.F.	Significance	Corrected for ties Chi-Square	D.F.	Significance
7,8975	4	,0954	9,0536	4	,0598

----- Kruskal-Wallis 1-Way Anova

B6
by GRADE

Mean Rank Cases

111,09	29	GRADE = 1
90,89	40	GRADE = 2
77,43	36	GRADE = 3
88,58	42	GRADE = 4
91,35	34	GRADE = 5

181 Total

Chi-Square	D.F.	Significance	Corrected for ties Chi-Square	D.F.	Significance
6,7679	4	,1487	8,7053	4	,0689

—

----- Kruskal-Wallis 1-Way Anova

B7
by GRADE

Mean Rank Cases

73,90	29	GRADE = 1
79,40	40	GRADE = 2
88,17	36	GRADE = 3
99,79	42	GRADE = 4

111,38 34 GRADE = 5

181 Total

Chi-Square	D.F.	Significance	Corrected for ties Chi-Square	D.F.	Significance
11,4826	4	,0216	12,7226	4	,0127

----- Kruskal-Wallis 1-Way Anova

B8
by GRADE

Mean Rank Cases

98,05	29	GRADE = 1
91,74	40	GRADE = 2
97,83	36	GRADE = 3
87,58	42	GRADE = 4
81,10	34	GRADE = 5

181 Total

Chi-Square	D.F.	Significance	Corrected for ties Chi-Square	D.F.	Significance
2,5374	4	,6380	2,7121	4	,6071

—

----- Kruskal-Wallis 1-Way Anova

B9
by GRADE

Mean Rank Cases

109,41	29	GRADE = 1
--------	----	-----------

88,16	40	GRADE = 2
96,25	36	GRADE = 3
82,17	42	GRADE = 4
83,99	34	GRADE = 5

181 Total

Chi-Square	D.F.	Significance	Corrected for ties Chi-Square	D.F.	Significance
5,8639	4	,2095	6,5160	4	,1638

----- Kruskal-Wallis 1-Way Anova

B10
by GRADE

Mean Rank Cases

87,36	29	GRADE = 1
91,84	40	GRADE = 2
87,19	36	GRADE = 3
93,74	42	GRADE = 4
93,76	34	GRADE = 5

181 Total

Chi-Square	D.F.	Significance	Corrected for ties Chi-Square	D.F.	Significance
,5493	4	,9685	,6230	4	,9605

—

----- Kruskal-Wallis 1-Way Anova

B11
by GRADE

Mean Rank Cases

92,12	29	GRADE = 1
93,28	40	GRADE = 2
91,24	36	GRADE = 3
92,56	42	GRADE = 4
85,19	34	GRADE = 5

181 Total

Chi-Square	D.F.	Significance	Corrected for ties Chi-Square	D.F.	Significance
,5445	4	,9690	,5756	4	,9657

----- Kruskal-Wallis 1-Way Anova

B12
by GRADE

Mean Rank Cases

111,38	29	GRADE = 1
96,68	40	GRADE = 2
91,90	36	GRADE = 3
71,56	42	GRADE = 4
90,00	34	GRADE = 5

181 Total

Chi-Square	D.F.	Significance	Corrected for ties Chi-Square	D.F.	Significance
10,6620	4	,0306	11,2793	4	,0236

—

----- Kruskal-Wallis 1-Way Anova

B13

by GRADE

Mean Rank Cases

103,86	29	GRADE = 1
93,38	40	GRADE = 2
102,74	36	GRADE = 3
79,17	42	GRADE = 4
79,43	34	GRADE = 5

181 Total

Chi-Square	D.F.	Significance	Corrected for ties Chi-Square	D.F.	Significance
7,4374	4	,1145	7,6609	4	,1048

----- Kruskal-Wallis 1-Way Anova

B14
by GRADE

Mean Rank Cases

64,98	29	GRADE = 1
95,45	40	GRADE = 2
89,64	36	GRADE = 3
98,60	42	GRADE = 4
100,01	34	GRADE = 5

181 Total

Chi-Square	D.F.	Significance	Corrected for ties Chi-Square	D.F.	Significance
9,3527	4	,0529	9,7200	4	,0454

N	Mean	Std Dev	Minimum	Maximum
B1	181	5,83978	1,61650	1,00 7,00
B2	181	3,93923	2,43394	1,00 7,00
B3	181	5,30387	1,95830	1,00 7,00

4/25

B4	181	4,80663	2,01692	1,00	7,00
B5	181	5,30387	2,15547	1,00	7,00
B6	181	5,96133	1,68445	1,00	7,00
B7	181	3,08287	2,26048	1,00	7,00
B8	181	5,28177	1,81755	1,00	7,00
B9	181	5,56354	1,75834	1,00	7,00
B10	181	2,71271	1,95656	1,00	7,00
B11	181	4,79006	2,18838	1,00	7,00
B12	181	4,87845	2,09937	1,00	7,00
B13	181	4,40884	2,14443	1,00	7,00
B14	181	3,80663	2,23884	1,00	7,00
YRSEXP	181	3,17127	1,47891	1,00	5,00

—

----- Kruskal-Wallis 1-Way Anova

B1
by YRSEXP

Mean Rank Cases

89,93	36	YRSEXP = 1
96,07	27	YRSEXP = 2
92,14	37	YRSEXP = 3
87,50	32	YRSEXP = 4
90,42	49	YRSEXP = 5

181 Total

Corrected for ties					
Chi-Square	D.F.	Significance	Chi-Square	D.F.	Significance
,4344	4	,9796	,5083	4	,9727

----- Kruskal-Wallis 1-Way Anova

B2
by YRSEXP

Mean Rank Cases

97,58	36	YRSEXP = 1
69,41	27	YRSEXP = 2
96,49	37	YRSEXP = 3
85,72	32	YRSEXP = 4
97,37	49	YRSEXP = 5

181 Total

Chi-Square	D.F.	Significance	Corrected for ties Chi-Square	D.F.	Significance
6,6086	4	,1581	6,9851	4	,1367

—

----- Kruskal-Wallis 1-Way Anova

B3
by YRSEXP

Mean Rank Cases

84,69	36	YRSEXP = 1
83,57	27	YRSEXP = 2
109,08	37	YRSEXP = 3
90,08	32	YRSEXP = 4
86,67	49	YRSEXP = 5

181 Total

Chi-Square	D.F.	Significance	Corrected for ties Chi-Square	D.F.	Significance
5,8142	4	,2135	6,3232	4	,1763

----- Kruskal-Wallis 1-Way Anova

B4
by YRSEXP

Mean Rank Cases

84,97	36	YRSEXP = 1
86,28	27	YRSEXP = 2
95,50	37	YRSEXP = 3
85,34	32	YRSEXP = 4
98,33	49	YRSEXP = 5

181 Total

Chi-Square	D.F.	Significance	Corrected for ties Chi-Square	D.F.	Significance
2,2998	4	,6808	2,3957	4	,6634

—

----- Kruskal-Wallis 1-Way Anova

B5
by YRSEXP

Mean Rank Cases

87,29	36	YRSEXP = 1
79,15	27	YRSEXP = 2
89,55	37	YRSEXP = 3
107,66	32	YRSEXP = 4
90,47	49	YRSEXP = 5

181 Total

Chi-Square	D.F.	Significance	Corrected for ties Chi-Square	D.F.	Significance
4,8291	4	,3053	5,5360	4	,2366

----- Kruskal-Wallis 1-Way Anova

B6
by YRSEXP

Mean Rank Cases

92,51	36	YRSEXP = 1
82,13	27	YRSEXP = 2
106,35	37	YRSEXP = 3
76,91	32	YRSEXP = 4
92,39	49	YRSEXP = 5

181 Total

		Corrected for ties			
Chi-Square	D.F.	Significance	Chi-Square	D.F.	Significance
6,3301	4	,1758	8,1422	4	,0865

—

----- Kruskal-Wallis 1-Way Anova

B7
by YRSEXP

Mean Rank Cases

78,65	36	YRSEXP = 1
98,28	27	YRSEXP = 2
93,22	37	YRSEXP = 3
96,06	32	YRSEXP = 4
91,08	49	YRSEXP = 5

181 Total

		Corrected for ties			
Chi-Square	D.F.	Significance	Chi-Square	D.F.	Significance
2,8853	4	,5772	3,1969	4	,5254

----- Kruskal-Wallis 1-Way Anova

B8
by YRSEXP

Mean Rank Cases

80,54	36	YRSEXP = 1
103,09	27	YRSEXP = 2
90,28	37	YRSEXP = 3
99,88	32	YRSEXP = 4
86,77	49	YRSEXP = 5

181 Total

Chi-Square	D.F.	Significance	Corrected for ties Chi-Square	D.F.	Significance
4,1178	4	,3903	4,4013	4	,3544

—

----- Kruskal-Wallis 1-Way Anova

B9
by YRSEXP

Mean Rank Cases

84,56	36	YRSEXP = 1
102,94	27	YRSEXP = 2
99,86	37	YRSEXP = 3
88,97	32	YRSEXP = 4
83,79	49	YRSEXP = 5

181 Total

			Corrected for ties		
Chi-Square	D.F.	Significance	Chi-Square	D.F.	Significance
3,9841	4	,4082	4,4272	4	,3513

- - - - - Kruskal-Wallis 1-Way Anova

B10
by YRSEXP

Mean Rank Cases

85,25	36	YRSEXP = 1
83,02	27	YRSEXP = 2
93,80	37	YRSEXP = 3
89,42	32	YRSEXP = 4
98,54	49	YRSEXP = 5

181 Total

			Corrected for ties		
Chi-Square	D.F.	Significance	Chi-Square	D.F.	Significance
2,2096	4	,6973	2,5062	4	,6435

—

- - - - - Kruskal-Wallis 1-Way Anova

B11
by YRSEXP

Mean Rank Cases

82,82	36	YRSEXP = 1
90,48	27	YRSEXP = 2
111,57	37	YRSEXP = 3
87,45	32	YRSEXP = 4
84,08	49	YRSEXP = 5

181 Total

			Corrected for ties		
Chi-Square	D.F.	Significance	Chi-Square	D.F.	Significance
7,5829	4	,1081	8,0159	4	,0910

----- Kruskal-Wallis 1-Way Anova

B12
by YRSEXP

Mean Rank Cases

88,29	36	YRSEXP = 1
90,00	27	YRSEXP = 2
97,00	37	YRSEXP = 3
86,64	32	YRSEXP = 4
91,86	49	YRSEXP = 5

181 Total

			Corrected for ties		
Chi-Square	D.F.	Significance	Chi-Square	D.F.	Significance
,8259	4	,9349	,8737	4	,9283

—

----- Kruskal-Wallis 1-Way Anova

B13
by YRSEXP

Mean Rank Cases

100,35	36	YRSEXP = 1
96,65	27	YRSEXP = 2
79,50	37	YRSEXP = 3
80,72	32	YRSEXP = 4

96,42 49 YRSEXP = 5

181 Total

Chi-Square	D.F.	Significance	Corrected for ties Chi-Square	D.F.	Significance
4,9983	4	,2875	5,1485	4	,2724

- - - - - Kruskal-Wallis 1-Way Anova

B14
by YRSEXP

Mean Rank Cases

93,38	36	YRSEXP = 1
73,80	27	YRSEXP = 2
85,96	37	YRSEXP = 3
104,31	32	YRSEXP = 4
93,85	49	YRSEXP = 5

181 Total

Chi-Square	D.F.	Significance	Corrected for ties Chi-Square	D.F.	Significance
5,5379	4	,2364	5,7554	4	,2182

B1
by EDUC

Mean Rank Cases

85,33	90	EDUC = 1
87,28	68	EDUC = 2
124,17	23	EDUC = 3

hms

181 Total

Chi-Square	D.F.	Significance	Corrected for ties Chi-Square	D.F.	Significance
10,6161	2	,0050	12,4202	2	,0020

----- Kruskal-Wallis 1-Way Anova

B2
by EDUC

Mean Rank Cases

93,78	90	EDUC = 1
85,82	68	EDUC = 2
95,41	23	EDUC = 3

181 Total

Chi-Square	D.F.	Significance	Corrected for ties Chi-Square	D.F.	Significance
1,0809	2	,5825	1,1425	2	,5648

—

----- Kruskal-Wallis 1-Way Anova

B3
by EDUC

Mean Rank Cases

79,58	90	EDUC = 1
94,37	68	EDUC = 2
125,74	23	EDUC = 3

181 Total

Chi-Square	D.F.	Significance	Corrected for ties Chi-Square	D.F.	Significance
14,6693	2	,0007	15,9537	2	,0003

----- Kruskal-Wallis 1-Way Anova

B4
by EDUC

Mean Rank Cases

85,17	90	EDUC = 1
97,77	68	EDUC = 2
93,80	23	EDUC = 3

181 Total

Chi-Square	D.F.	Significance	Corrected for ties Chi-Square	D.F.	Significance
2,3175	2	,3139	2,4141	2	,2991

—

----- Kruskal-Wallis 1-Way Anova

B5
by EDUC

Mean Rank Cases

88,73	90	EDUC = 1
97,12	68	EDUC = 2
81,78	23	EDUC = 3

181 Total

			Corrected for ties		
Chi-Square	D.F.	Significance	Chi-Square	D.F.	Significance
1,8073	2	,4051	2,0719	2	,3549

----- Kruskal-Wallis 1-Way Anova

B6
by EDUC

Mean Rank Cases

88,27	90	EDUC = 1
86,38	68	EDUC = 2
115,37	23	EDUC = 3

181 Total

			Corrected for ties		
Chi-Square	D.F.	Significance	Chi-Square	D.F.	Significance
5,7505	2	,0564	7,3967	2	,0248

—

----- Kruskal-Wallis 1-Way Anova

B7
by EDUC

Mean Rank Cases

87,72	90	EDUC = 1
95,01	68	EDUC = 2
91,98	23	EDUC = 3

181 Total

Corrected for ties

Chi-Square	D.F.	Significance	Chi-Square	D.F.	Significance
,7607	2	,6836	,8428	2	,6561

----- Kruskal-Wallis 1-Way Anova

B8
by EDUC

Mean Rank Cases

81,20	90	EDUC = 1
96,88	68	EDUC = 2
111,98	23	EDUC = 3

181 Total

			Corrected for ties		
Chi-Square	D.F.	Significance	Chi-Square	D.F.	Significance
7,6909	2	,0214	8,2204	2	,0164

—

----- Kruskal-Wallis 1-Way Anova

B9
by EDUC

Mean Rank Cases

82,31	90	EDUC = 1
90,88	68	EDUC = 2
125,39	23	EDUC = 3

181 Total

			Corrected for ties		
Chi-Square	D.F.	Significance	Chi-Square	D.F.	Significance
12,3883	2	,0020	13,7659	2	,0010

----- Kruskal-Wallis 1-Way Anova

B10
by EDUC

Mean Rank Cases

95,22 90 EDUC = 1
94,96 68 EDUC = 2
62,80 23 EDUC = 3

181 Total

Chi-Square	D.F.	Significance	Corrected for ties Chi-Square	D.F.	Significance
7,6313	2	,0220	8,6555	2	,0132

—

----- Kruskal-Wallis 1-Way Anova

B11
by EDUC

Mean Rank Cases

90,32 90 EDUC = 1
96,36 68 EDUC = 2
77,83 23 EDUC = 3

181 Total

Chi-Square	D.F.	Significance	Corrected for ties Chi-Square	D.F.	Significance
2,1811	2	,3360	2,3057	2	,3157

----- Kruskal-Wallis 1-Way Anova

B12
by EDUC

Mean Rank Cases

89,77 90 EDUC = 1
88,43 68 EDUC = 2
103,41 23 EDUC = 3

181 Total

Chi-Square	D.F.	Significance	Corrected for ties Chi-Square	D.F.	Significance
1,5044	2	,4713	1,5915	2	,4512

—

----- Kruskal-Wallis 1-Way Anova

B13
by EDUC

Mean Rank Cases

93,76 90 EDUC = 1
84,24 68 EDUC = 2
100,20 23 EDUC = 3

181 Total

Chi-Square	D.F.	Significance	Corrected for ties Chi-Square	D.F.	Significance
2,0885	2	,3520	2,1513	2	,3411

----- Kruskal-Wallis 1-Way Anova

B14
by EDUC

Mean Rank Cases

99,04	90	EDUC = 1
88,95	68	EDUC = 2
65,61	23	EDUC = 3

181 Total

			Corrected for ties		
Chi-Square	D.F.	Significance	Chi-Square	D.F.	Significance
7,6246	2	,0221	7,9241	2	,0190

