PARENT AND TEACHER BELIEFS

AND

TEACHER-PUPIL INTERACTION

A Pilot Study

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ABSTRACT

This investigation reports a quasi experimental study of teachers' verbal contacts with pupils during their first year of formal schooling. It was expected that consensus of certain beliefs about teaching priorities held between teacher and parent would be related to the frequency of teacher approval expressed towards pupils - and also that the frequency of teachers' expressed disapproval towards pupils would be related to parent-teacher disensus. The gross propositions directing this study are that:

1. Parents hold a variety of beliefs concerning the activities which will facilitate success at school for their children.

2. These beliefs are transmitted to the children during the socializing process.

3. Teachers also develop a variety of beliefs concerning pupil activities which will facilitate success at school.

4. When parental socialization practices produce in their children behaviours that are in relative agreement with a particular teacher's expectations for the pupil role, teacher approval will be a characteristic feature of teacher-pupil interaction.

5. When parental socialization practices produce in their children behaviours that are in relative disagreement with a particular teacher's expectations for the pupil role, teacher expectations are affronted and teacher disapproval will be the characteristic feature of teacher-pupil interaction.

6. Parent teacher disensus-consensus will be reflected in teacher treatment of pupils and will be expressed through different patterns of verbal contact during classroom interaction.

Six statements, paired in all possible combinations, describing the different ways in which pupils might behave in order to succeed in school were presented in a questionnaire to 21 teachers of five year old school pupils. Of these 21 teachers, the six used were those holding the strongest preferences for one of each category of beliefs about school success. Over 80% of parents of children in these six classrooms completed the same questionnaire. Subsequent analysis determined which parents held views most similar to or different from their child's teacher. The 32 pupils whose parents' beliefs were most isomorphic with those of their child's teacher, and the 32 pupils whose parents' beliefs were most contrary to those of their child's teacher, were selected for the study. Of the 64 pupil subjects, half were boys and half were girls.

Each of the six teachers was observed for three hours. Two trained observers, using a radio microphone, tape recorder and written records collected data covering all teacher verbal contacts with the selected pupil subjects during the period. Only those teacher verbal contacts categorized as negative and positive sanctions or negative and positive directions, were recorded.

Analysis of the data revealed that parent-teacher disensus and consensus of beliefs is significantly related to differences in both quality and quantity of teacher verbal contacts with the children observed during their first year at school. Such differences in teacher contacts with pupils occurred independently of pupil sex status although sex status served to compound the direction of results.

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INTRODUCTION

This thesis owes its origin to a problem accentuated by a series of events and conditions that pertained in a particular New Zealand primary school. The school, situated at the growing fringe of a Government housing project was beset by the problems of rapid growth, constant changes of professional and ancillary staff, ubiquitous insecurity and a preponderance of inexperienced teachers.

Teachers, while coping with the realities of the situation were able to establish sound personal relationships with some pupils but not with others.

While many of the usually accepted principles of teaching found application in the classrooms, for many teachers the more difficult situations found some solution in the development of warm affective classroom climates. Absenteeism, aggression, theft, insecurity, aversion for particular subjects or school in general found at least some amelioration in an approach to pupils based on helping the individual feel worthy, important and secure.

From such a situation and its partial solution then, arose a series of puzzling events. Why did a change of teacher solve some pupils' problems and yet create difficulties for others? Why did personal attention and effort by one teacher reduce the deviant behaviour of boys and yet appear to increase deviant behaviour by girls? Why did different teachers' perceptions of the same pupil, even over a lengthy period, remain so disparate? Did the pupil really behave so differently for different teachers, or was it that some teachers were simply more accepting, more capable and more flexible than others.

The beginning of an answer was suggested to the writer by a series of events taking place at the conclusion of his first year at the school. Measures of pupil achievement in the basic subjects taken at that time proved somewhat below the expectations of teachers. Some rationalized the outcomes

by pointing out that intelligence tests showed their classes to be below average in ability and requested pupils of higher ability for the following year. On commencing the succeeding year, all teachers received pupil records in which pupil aptitudes were emphasized, intelligence scores omitted and pupil weaknesses minimized. Almost universal satisfaction was expressed with the types of pupils comprising the classes and with the superior abilities of the current year's class when compared with the abilities of the previous year's class. Despite the fact that general ability levels of classes had not changed, during the year, teachers expressed satisfaction with pupil progress and behaviour. Pupil achievement at the conclusion of the year appeared to be improved. While many factors were involved in such a complex situation, the possibility of a self-fulfilling prophecy condition could not be totally ignored. The real problem was beginning to emerge. What was the relationship between teacher perception of a pupil and that pupil's behaviour at school? Was knowledge about a pupil and his background in some way influencing the behaviour of a teacher toward that pupil? Could the day to day activity of teachers based on such knowledge, influence pupil achievement? Furthermore, if pupils achievements were affected by the deliberate or unconscious preferences of teachers, how were such teacher preferences manifested?

While social status and ethnic factors appeared to have some relevance in the overall situation, there were too many specific exceptions to allow for the acceptance of such factors as causative. Confrontation and discussion with militant or dissatisfied parents, when considered together with the behaviour of their children towards the respective teachers, suggested a further proposition - one believed by many teachers. Whatever the parents attitudes to the teacher, those attitudes will be reflected in some

degree in the behaviour of the child vis a vis the teacher. Such a premise had implications for the questions raised earlier and a problem which seemed possible of investigation suggested itself. Do parent and teacher agreements and disagreements about the training or education of children have an effect on teacher-pupil interactions at school? If they do have an effect, how are such agreements and differences manifested and to what degree?

Over a period of time the implications clarified. It appeared reasonable to believe that, where a teacher was in strong agreement with a parent about the treatment of children and the purposes of education, rapport between teacher and pupil would be facilitated and that on the other hand, parent-teacher disagreements would hinder teacher-pupil rapport. It also appeared reasonable to conjecture that the presence or absence of teacher-pupil rapport must in some way be expressed in teacher behaviour indicating approval or disapproval of pupil behaviour.

In order to investigate such a series of propositions, identification of parent-teacher relationships representing consensus and disensus of values and beliefs was necessary. A questionnaire was used to establish the beliefs held by parents and teachers about pupil behaviours that would facilitate pupil success at school. In addition, comparison of teachers' and parents' answers helped to identify two main types of pupils - (i.e. pupils whose parents were in close agreement with the teacher and those whose parents disagreed strongly with the teacher). Teachers' interactions with the two groups of pupils identified in this manner were observed in the normal classroom situation and similarities and differences recorded.

The first chapter of this thesis identifies the problems, determines their parameters and surveys the contribution of previous literature and empirical evidence

to their solution. Chapter two provides a theoretical basis for the solution of the problems presented and for the propositions involved. The research design and details of its operationalization are explained in chapter three. Results of the study are presented in chapter four and discussed in chapter five where final conclusions and suggestions for further investigation are stated.

Such then is the substantive background to the present study which does not seek to isolate right from wrong, the good from the bad, the desirable from the undesirable nor to profer evidence for the improvement of teaching or education. There are many variables and relationships of teaching and education about which little factual information is available. It is hoped that this study provides additional data contributing to more accurate knowledge of the antecedents of classroom behaviour.

CHAPTER I

The Problem and its Antecedents

Introduction

This chapter discusses the problem of disparity of expectations between parents and teachers and particularly that the consequence of such disparity is revealed by pupil-teacher interaction in the classroom. Initially some of the explanations of success and failure in schools are examined, particularly those that rely on social class causes. Next follows a discussion of ways in which different socialization practices may result in a variety of expectations which in turn become manifest in behaviour. These behaviours are then shown to have consequences for teacher-pupil contact in the classroom that can have harmonious or discordant characteristics. Finally, the problem of capturing the quality of teacher-pupil contact is discussed.

School Success

School is an arena, a place for striving, a place for success and for failure. It is an arena where pupil, peer and parent experience and observe success and failure - an arena where teachers facilitate success and failure - an arena from which participants emerge labelled accordingly. (See Parsons, 1959).

The reasons advanced for success and failure have ranged from God's will to teachers' whims, from pride and prejudice to race and religion.

Broadly speaking, investigation into the problem of differential success and failure has focussed on two major contributory causes - those of intelligence and environment. An understanding of the genetic basis of potential cognitive ability has resulted in a realization that little can be done to modify or control this aspect of intelligence. Moreover the problem of determining the exact degree to which behaviours arise from predominantly genetic determinants and which are predominantly the result of conditioning and socialization practices is still to be solved. Interest is

now focussed more on the environmental antecedents of actualized ability. In particular the varied socialization patterns of differing socio-economic levels have become a centre of attention for both theoretical statements and empirical research.

A Basis in Social Class

Interest in socio-economic status as a determinant of educational success has been growing in intensity since 1944 when it was suggested that schools, functioning in a society with basic inequalities, facilitate the rise of a few from lower to higher levels, at the same time serving the social system by preventing the mobility of lower class members. (Warner, Havighurst and Loeb, 1944). The concept of teachers, as representatives and enforcers of middle-class attitudes and values was stressed. Teachers were seen as seeking to train pupils into middle-class values and skills and selecting those children from the middle and lower classes who appeared to be the best candidates for promotion in the social hierarchy.

The concept of social class differentiation by teachers was extended by Warner, Meeker and Eels (1949), Havighurst (1945), Davis and Dollard (1940), Neugarten (1946), Hughes (1948), Hollingshead (1949) and Parsons (1961). In fact, in 1953 a complete issue of the Harvard Educational Review was devoted to research related to the impact of social stratification on education. These earlier studies led to an over emphasis on social class as a single cause accounting for variations in attitudes, behaviour and achievement relevant to the school system.

That social stratification phenomena are but one important factor useful as predictors or explanatory variables in educational research was pointed out by Gross (1953), who warned that social class was inadequate as the single explanatory cause of educational problems and specifically urged against confusing causation with statistical association. Broad sociological concepts are useful for systems management but are virtually useless for

individual diagnosis and treatment. Later research has shown that it is not social class as such that contributes in a cause and effect relationship to educational failure or success, but, it is the interest in social class differences that has initiated research to determine the sub-factors contributing to this success or failure. Such variables as race, economic status, language style, experiential background, maternal teaching styles, role training and mobility have all been foci for study. Increasing attention has been paid to the home environment in efforts to determine the factors contributing to variations in educational performance. Increasing attention is being devoted to the place of maternal attitudes, the place of language codes, socio-cultural features of the home and pupil-teacher classroom interaction.

The values attached to education by different social class groups was investigated by Brookover and Gottlieb (1961), who still found it necessary to warn -

"Much more examination of the intervening variables is necessary."

The relationship between social class and educational performance was discussed by Swift (1968) who reports Douglas (1964) as showing that in a nationwide sample of children controlled to equate verbal reasoning ability, upper middle-class children get three times as many selective (11+) places as children of the lower manual group, twice as many as children of the upper manual classes and one and a half times as many as white collar children.

> "Clearly we must see social class as some kind of structuring of human experience which has consequences for the learning of social and cognitive behaviour. Chances of receiving and accepting education, however it is defined, are biased according to social class".

He later points out however -

> "When we are concerned with describing the social environment of individuals and relating it to their development, a social class must be looked upon as a summarizing variable and not an effective influencing factor". Swift (1968). (Underlining mine).

When Swift's injunction is heeded one of the more pertinent factors discernable in studies of social class is

that the home environment affects child behaviour in the school situation. Discussion of this factor follows.

Home and Maternal Influence

Considerable research has focussed on the effect of the home as a socializing factor and its effect on educability - Kahl (1953), Elkin (1960), Fantini and Weinstein (1968), Joiner et al (1969), Johnson (1970), Hess and Shipman (1966, 1969) and Sugarman (1970). The kind of home in which children are reared affects both the values they hold and also their school behaviour. (Zayasuriza, 1954 in Sugarman, 1970).

Comparison of the effect of parents and peers on students' educational plans have indicated that family measures show at least an equal, and in most tests a greater, influence than do those of peers. (Bear, Roberts and Meyer, 1966). It has also been shown that how the child reacts to the teachers as models of behaviour is a function of attitudes and orientations which have been developed in the family setting. (Elkin, 1960). Again from his research on "Common Man Boys", Kahl (1953) concludes that - "the fathers of the boys in this sample were realists. They were correct in teaching their sons that what they did in school would determine their whole lives".

A study of maternal behaviour as it affects the child's cognitive functioning, attitudes towards learning and role conception was made by Bear, Roberts and Meyer (1966). Mothers' responses to two tasks were used to assess the mother's attitudes and behaviour. 163 parents of four year olds were used in this research. Passive and defensive attitudes in lower class mothers toward school were shown to have influenced the development of similar attitudes in the children. In their conclusions they conjectured about the necessity for complete resocialization of the lower class family! To quote -

> "We believe that the process involved is not so much a lack of exposure to middle-class ideas and ideals as it is a subtle but active socialization during the pre-school years into a pupil role that differs from the

> role of the middle-class child and expected by the school".

It seems reasonable to conclude then that parents define for their children, at least initially, the role the child is expected to play in the school. This role includes expectations that the child holds for the behaviour of others, and learnt responses which structure the child's interaction with his teacher, the artifacts of the classroom, the regulations of the school and his peers. The role adopted by the child can be an active assertive one whereby he embraces the educational process and becomes attached to its norms and values, it can be passive and compliant with the child feeling alienated and a stranger in a strange surrounding or it can be antipathetic and antagonistic, but it results in part from the hidden curriculum of the early years.

> "The 'Hidden Curriculum' is the vast complex set of learnings which the child acquires before he enters the formal classroom. The parents both consciously and unconsciously providing both cognitive and affective content". Fantini and Weinstein, (1968).

Sugarman (1970) was concerned with the 'culture clash' possible under such circumstances. He discusses variations between cultures and the prevailing norms of what is good and bad conduct and examines subcultures and social classes. He concludes -

> "Those who grow up in the higher status levels start to acquire skills in the use of language and the more complex forms of conceptual thought even before they begin school... For a child to have a high level of linguistic facility implies that at least one of his parents spent a good deal of time talking to him and has treated him as a person in the sense of someone whose questions and ideas although naive are to be taken seriously".

The effect of the maternal attitude toward the school and the role of the pupil has been examined by Hess and Shipman (1966). * Their four year research study indicated

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* An appendix to this report includes nearly one hundred references and abstracts concerning research and articles on this topic.

that the mother's attitude toward the school influences the young child's school behaviour, his ability to deal with adults and to perform cognitive tasks. It was concluded that mothers in the three lower class groups influenced the child's attitudes toward school by stressing that he behave and listen to the teacher. Thus the lower class child comes to regard school as an authoritarian institution rather than as a place for learning. Middle class mothers have more positive attitudes to the child and the school. They perceive the school as a resocializing institution.

> "The early years are important in part because they occur before formal schooling begins and necessarily impede or facilitate the transition to academic success. In our view many of the differences in mental ability and cognitive style that appear among different cultural and socio-economic groups can best be understood in terms of the transmission of information processing strategies from parents to children .... The child's early orientation to authority and cognitive activity facilitates or retards his ability to adopt the role of pupil when he encounters formal learning situations in the schools". Hess and Shipman (1966).

The pupil's role and attitude toward the school system is attained through indirect learning from older persons in the home environment.

> "More specifically in her everyday behaviour and through the close mother-child interaction obtaining during those early years the mother acts as the primary socializing agent of the child into the role of pupil.... Successful socialization should result in the set of behaviours conducive to learning. The mother will often express her attitudes and expectations indirectly guiding them in developing attitudes and behaviours she <u>believes</u> will be necessary for success in school.... Mothers saw school in terms of authority systems, educational systems, emotional or affective experiences and meeting new people". Hess and Shipman (1966).

The mothers' attitudes indicated that the problem was not due to a lack of respect for the school or to the belief that it was ineffective. It was due to the fact that the mothers regarded it as a distant and formidable institution with which they have had very little interaction and over which they exercised very little control. Rather than the gross

categories of social-class this research examined the effect of maternal cognitive environments in terms of individual mother-child transactions and it advanced the understanding of how social-class environment is mediated through the interaction between mother and child.

An examination of the effect of parental behaviour on children's school achievement, demonstrated that the child is socialized into modes of communication and strategies of thought that develop in response to specific interactions with salient adults particularly the mother -

> "Adaptive consequences developed by the mother are transmitted through her linguistic modes, regulatory strategies, cognitive styles and self-esteem. These early modes of dealing with the child induce similar adaptive consequences in the child". Hess (1969).

Socialization is not necessarily a result of direct teaching behaviour in the home but emerges from the child's responses to parental behaviour which itself is linked to social structure. It is a threefold interaction between home, school and social environment. It has been pointed out that the development of extreme patterns of alienation from the school is often related to inadequate support for school relevant attitudes and values by the home. (Parsons, 1959). In test of this thesis a study of 400 Aberdeen school children attempted to establish whether environmental factors were related to school progress in greater degree than one might expect as a result of the common factor of intelligence. (Fraser, 1959). The study showed that intelligence was less closely related to educational attainment than was home environment. The Plowden Report (1967) made the same point, stressing that parental attitudes count for more of the variation in children's school achievement than either the variation of home circumstances or the variation in schools.

There appears to be general consensus that social-class and parents' perceptions of the school have considerable effect on the school-relevant socialization of their children. But what is the affect of these variations in

socialization, and in what ways are the differences between parent, child and teacher manifested in the formal education process? Discussion of the problems raised by these questions follow.

Social Class and Belief Discrepancies

Socio-economic differences are manifest in discrepancies between the belief systems of different groups. Persons who fail to learn the dominant values of a group or who hold beliefs and opinions not widely shared are likely to be less well received by group members. Such persons knowledge of the norms may be abstract and theoretical, leading to alienation from the group and eventual anomy. Present data furnishes at least inherent support for the view that anomy is a by-product of the socialization process. It is a sign of the failure of socialization and of the means by which socialization is achieved, namely communication, interaction and learning.

> "Whatever interferes with ones ability to learn a community's norms or weakens ones socialization into its central patterns of belief must be considered among the determinants of anomy". McClosky and Schaar (1965).

Impact from family, neighbourhood and community limits the part that formal schooling can play in the development of beliefs, values and competence. In explanation Farber (1969) argues that where private and public cultures clash, those families and individuals whose way of life is incompatible with the public culture come to be regarded as superfluous population, with the private cultures of these families generally seen to inhibit the smooth operation of the major economic, educational and political institutions. Some of the private culture life styles diverge markedly in norms and values from the public culture which dominates the classroom. One of the results for the private culture itself is a distrust and fear of authority, and parents are thus unable to manipulate institutions for their own benefit.

Farber, in further explanation, defines competence as the ability of an individual to approximate in his or her behaviour, standards of quality which are institutionalized for

specific roles. Competence is thus seen as a social dimension. There are prescriptive roles which nearly all individuals in a particular society are expected to undertake. Failure to do so subjects individuals to various degress of social censure and approval is a function of the individuals' ability to meet institutionalized standards of performance for the role he is perceived to fill.

> "When the three sources of competence influence, (home, neighbourhood and school), are integrated in their impact on the child, the situation is optimal for the child's ultimate development of expected role competence. When however there is a discontinuity between the cues emanating from the three sources, an impediment to the development of role competence becomes a factor. Thus the clash between societal and familial contexts has the greatest detrimental affect in role competence. The greater the intensity of impact the greater the impediment as a result of the discontinuity". Farber (1969).

Not only do sub-groups develop different beliefs, values and role competencies, but they also develop differing expectations for the roles of others.

Social Class and Role Expectancy

Role Perceptions. Parental and teacher differences in perception of the teacher role has been the subject of much research.

> "The nature of the relationship, its mutuality or hostility effects the ability of the adults to contribute to the development of the child". Jenkins and Lippitt (1951).

An enquiry into how teachers perceive their role in relation to the actual and perceived expectations of parents, was undertaken by Musgrove and Taylor (1965). They found that working class parents assigned a wider range of educational objectives to teachers than did middle class parents at the primary school level. In general, teachers thought parents expected much less in moral training and much more in social advancement than they did. Teacher and parent expectations were in fact reasonably similar despite the fact that teachers did not perceive it as so. Working class parents of primary school children wish to place far

greater responsibility for behaviour training on teachers than middle class parents who felt that this was the responsibility of the home. (Musgrove, 1961).

Previously a study of teachers' role conflicts in English infant and junior schools had indicated that a major source of conflict for infant school teachers was their divergent views from the perceived expectations of parents, (Taylor, 1968). School conflict appeared to centre around the evaluation of personality and discipline in the work of the teacher. Teachers ranked discipline, personality, teaching and organization as they thought headmasters, colleagues, pupils and parents valued them and as they thought they themselves performed. The lack of agreement between the rankings was taken as a measure of conflict. For infant teachers the two main lines of conflict were the function of personality in the teacher's role and the perceived expectations of parents, and were higher in working class areas.

Further research to discover differences between parent and teacher perceptions of the teacher's role was conducted by Sieber and Wilder (1967). They used a modification of Waller's (1932) and Bidwell's (1965) categorizations of teacher styles applying their interview schedules to 1st, 5th and 10th grade teachers, mothers of these pupils, pupils of 10th grade English teachers, and the principals of the schools. All in all 2,200 subjects were subjected to open-ended interviews lasting over an hour. For the study mothers were asked to select the style that they preferred and also the style that best described the teacher of their child. By matching the mothers' preferences with their perceptions of teachers, Sieber and Wilder were able to identify those who desired teaching at odds with what they believed the teacher was actually doing in the classroom. Where mothers perceived the teacher as deviating from their expectations, 40% desired some modification in the teacher's behaviour. Where teachers perceived conformity between their expectations and the teacher's behaviour, 15% expressed a desire for the teachers to change.

> "We saw that mothers who believe that teachers are not teaching the way they would like them to teach are much more often dissatisfied with teachers. Apparently there is much room for dissatisfaction, for when we compare the teaching styles preferred by parents from the teachers' definition of their roles we find considerable discrepancy. Over two/thirds of the mothers expressed role preferences that were not in accord with the self descriptions of their child's teacher .... A discrepancy between parental and professional role expectations became even larger when mothers and principals were compared". Sieber and Wilder (1967).

Regardless of the merits of the instructional patterns it seems obvious that many parents and teachers have quite different educational philosophies. Sieber and Wilder found that -

"69% of the mothers in our study have a teacher for their child whose role definition is not in accord with their (i.e. the mother's) preferences".

Such differences in educational philosophies are not only manifested through parental role expectations for teachers but also through the educational aspirations of parents for their children. A discussion of the relationship between social class and educational aspiration follows.

Social Class and Educational Aspirations

The antecedents and consequences of educational aspiration have been the source of considerable research. (Brookover and Gottlieb, 1961; Weiner and Murray, 1963; Davis, 1964; Swift, 1968; McClosky and Schaar, 1965; Sharrock, 1968; Sugarman, 1970). In general it has been found that middle and lower socio-economic status pupils and parents have the same educational aspirations but with the lower classes it is often only a wish to achieve whereas with the middle class achievement is an expectation.

The level of a child's social class has been found to be positively related not only to aspirations but also to levels of achievement on tests of mental ability. (Lesser, Fifer and Clark, 1964). Their study examined the mental abilities of 6 year old children from a range of social and cultural

levels in New York. The hypothesis that social class was consistently related to the abilities of children, was confirmed in the fields of space conceptualization, verbal ability, number facility and reasoning ability.

The interrelationship of educational aspiration, occupational aspiration, intelligence and social status were also examined by Sewell, Haller and Straus (1957). Results showed a significant association between the level of occupational and educational aspiration and the social status of families when the level of intelligence was held constant. Their work lent support to the sociological claim that values specific to different status positions are important influences on levels of educational and occupational aspirations but suggest that status makes an independent contribution to these aspirations.

Social Class and Language

Recent research indicates that different social class sub-groups have differing language socialization patterns. Bernstein (1961), and John (1963) found that consistent social class differences in language skills emerged among children from different socio-economic levels, but interest in child-language research is long lived. For instance Tiedmann recorded the development of his son's speech patterns and published the study in 1787. To quote -

"With increasing practice in speaking, and acquisition of various words, his ideas were subjected more and more to the caprice and desires of his soul, so that more and longer series of them could be aroused and chains of thought be carried through. By this means the faculties which deal with and develop the ideas gained practice, especially the faculty of imagination".

More recently Hunt (1961); Bruner (1965); Bereiter and Engelmann (1966); Bernstein (1958); Luria (1955); Vygotsky (1962); and others have suggested that opportunity for verbalization in the early years is vital. Evidence is cited supporting the view that conceptual thinking and such school oriented abilities as reading readiness are a function

of language experience. But it seems that we are justified in taking the view that language acquisition is more than just a tool to be used in conceptual thinking.

An enquiry into the sociological determinants of perception, Bernstein (1958), showed that for the middle class child an 'elaborated language code' provides a close cognitive link between home and school. This research indicated that it was not size of vocabulary but ways of responding to experience and methods of organizing that experience that determine the difference between middle class and working class children's ability to cope with the language of the school. In this respect working class children were found to be at a disadvantage in learning situations where more complex forms of language were necessary. Even when non-verbal intelligence levels are controlled, there is a culture factor in the mode of expression of intelligence. (Bernstein, 1960).

In discussing Bernstein's work, Lawton (1968), remarks -

> "There is evidence to support the view that inadequacy of linguistic range and control is a very important factor in (school) underachievement and that linguistic inadequacy is a cumulative deficit; i.e. it is a disadvantage that generates a vicious circle of difficulties increasing in magnitude as school life progresses".

Brandis and Henderson (1970), collaborators of Bernstein at the University of London Institute of Education, examined the interrelationship between culture, social structure and the orientations toward certain uses of language. Mothers of 5 year old children were interviewed and their children tested using Raven's Progressive Matrices, Peabody Picture Vocabulary Test and the Crichton Vocabulary Scale. In addition the children's spontaneous language was recorded using small individual radio transmitters. Social class ratings of children were based on the terminal education level and occupation of both parents using the Index of Social Class by Brandis; (Appendix II, Brandis and Henderson, 1970). It was found that middle class children used more nouns, adjectives and verb types than did working class children.

The conclusion reached was that:

"... the sub-cultural influence acting through the family relationships (are) sensitizing one group of children toward greater verbal differentiation and to the ordering of their experience in a more explicit and individuated way".

Brandis and Henderson found that it was not so much the family social class position or ability level, (as indicated by W.I.S.C.), that determined a teacher's favourable estimate of a pupil's future school career, but a high 'Maternal Communication Index' score. This index gives a measure of the degree of openness of communication between the mother and the child. Where it is high the child's world is expanding and open. When it is low his world is limited and closed. When it is high the home-school relationship is open to reciprocal influence. When it is low there is insulation and often hostility between home and school.

That social classes differ markedly in their use of language for purposes of explanation and control and in willingness of mothers to respond to communications initiated by their children was demonstrated by Bernstein and Brandis (1970). The research suggests that transfer of skills as measured by ability tests (especially those of verbal ability) may well be mediated through the maternal processes of communication and control. The results indicate that sub-cultural shaping of family relationships within the middle class encourages these children to develop certain areas of language that have importance for their school experience. They suggest -

> "From the point of view of the influence of the family upon children's responsiveness to school, we need to start, not with social class as our independent variable but with an understanding of those variables which we believe to control the antecedents of educability".

In this respect a low score on the Maternal Index in the working class group was found to be associated with mothers whose views were not isomorphic with those of the school over the behaviour of the children. They were likely to see disagreement between the school and themselves over areas of

the child's behaviour that fell within the domain of the home.

Bernstein (1958), notes -

> "The speech marks out a pattern of stimuli to which the child adapts, and in the learning of this pattern his perception is organized, structured and reinforced.... The greater the differentiation of the child's experience the greater his ability to differentiate and conceptualize objects in his environment but it is the mode of established relationships that is of decisive importance because the mode determines the levels of conceptualization possible.... The middle class child is capable of manipulating the two languages, the language between social equals which approximates to a public language, and a formal language. This leads to appropriateness of behaviour in a wide range of social circumstances".

Lack of auditory stimulation in the lower class home is thought to be a factor contributing to lack of success in school, Deutsch (1963). The child lacking in language facility enters the school situation so poorly prepared to produce what the school demands, that failure is almost inevitable. In support of this general line of reasoning Commoss (1962) showed a strong positive relationship between communication ability and social status, while Warden (1968) concluded that a comparative lack of experience with symbolic systems, especially lack of language skills, is directly and positively related to difficulties in ability to learn both formal academic and informal social skills.

Several researchers have pointed out that in the early stages of child development, language is merely a means of communication but later it becomes a means for organizing experience and regulating personal actions. The relationships between the development of a child's mental processes and deprivation in language experiences is such that a child's mental activity is the outcome of the opportunities he has for communicating with members of his personal environment. Luria and Yudovitch (1959) argued that for the child, language is crucial for both the transmission of knowledge and the formation of concepts. Their well known identical twin study demonstrated that language acquisition is important for more complex mental processes and that intellectual development itself is handicapped by deprivation in the language skills.

Other studies have shown that increased ability to name objects facilitates problem solving (Pyles, 1932), classification ability, (Shepard and Schaffer, 1956) and concept attainment, (Spiker, Gerynoy and Shepard, 1956), while an investigation into the ability to generalize the application of knowledge gained in one situation to a similar but not identical situation revealed that as the difference between the situations increased, language became more and more necessary. The greater the situational discrepancy the greater was the need for language. (Kuenne, 1946).

Similarly verbal mediation, defined as talking to oneself in relevant ways when confronted with a problem to be solved or a concept to be attained (Jensen, 1966), has been shown to facilitate problem solving (Katona, 1940) while lack of verbal mediation is related to progressive retardation in deaf children (Oleron, 1957).

Deprivation, contributing to school failure, may be seen as lying in the lack of a symbolic system by which the child can organize experience.

> "An articulate person be it mother, teacher or sibling is required, to offer the necessary corroboration or negation of the child's emerging ideas. This type of feedback is readily available in the middle class home. It is rare in the lower class home. We therefore propose that this lack of an ongoing elaborated dialogue is the major experiential deficit of the deprived child".
>
> Blank and Solomon (1968).

Blank and Solomon used a language-based tutoring technique with an experimental group of 3-4 year old children. This group made significantly greater gains as judged by the Stanford Binet test than did the matched group of untutored children. One aspect of verbal corroboration in the home is accuracy and facility in the labelling ability of children.

A demonstration of the importance of labelling ability was given by John and Goldstein (1964), in their study of high and low social status students of grades I and 5. High status children in general produced the appropriate name or label while low social status children attended to unimportant detail. They suggest that the label and the object fail to

become associated for two reasons - lack of correction for mislabelling and inconsistency in labelling by close associates.

In discussing observations of mothers' verbal interactions with 4 month old babies, Kagan (1968), notes that the lower class child does not receive distinct verbal stimulation from adults and as a result is less likely to attend to human speech. He suggests that a large share of the child's desire to adopt the values and skills of society, including the wish to master the tasks of the school, is derived from a close parent-child relationship in the first few years of life. A need for close parent-school relationships is also suggested -

"It would perhaps be wise to consider paying the mothers to stay with the children, and beginning strong educational programmes for parents to educate them into the nature of the child and the nature of his psychological growth". Kagan (1968).

It would appear that the disadvantaged child lack both the richness of environment for developing models and strategies of thought and corrective feedback for their maintenance. Greenfield's data (1966) illustrates this point. She showed that among the Wolofs of Senegal simply to attend school makes a huge difference to the intellectual life of a child because in school the use of written language enforces a remoteness of reference on the language user so that he can no longer rely on pointing and simple labelling. Some environments push cognitive growth better, earlier and longer than others, and language development can be a master control of learning abilities, learning sets and a child's learning to learn. In effect language provides a means not only for representing experience, but also for transforming it.

> "Interestingly enough, it is the recent Russian literature particularly Vygotsky's (1962) book on language and thought and the work of his disciple Luria (1961) and his students Abramyan (1958) and Matsinorskaya that has highlighted these phenomena by calling attention to the so called second signal system which replaces classical conditioning with <u>an internalized language system for shaping and transforming</u>

experience itself". (Underlining mine).
Bruner (1964).

Bruner's research into the ability of children aged 5-7 years to handle a double classification matrix demonstrated a clear relationship between the children's use of language and their ability to complete the more complex patterns. In a report on conservation tests to determine which children exhibit the ability to conserve, Bruner concluded that the child who conserves at a young age must have some internalized verbal formula which shields him from the overpowering appearance of visual display. It would appear that the internalization of language utilized for labelling, categorizing and synthesizing experience develops through interactions with others in an attempt to develop communal and functional communication strategies. Language acquisition then, may be regarded as the primary technique employed in intellectual development. Children as they grow must develop methods for representing the events of their environment and must learn to link the events of the moment to past and future by the use of language. Thus if the child has inadequate language experiences his capacity to perceive and learn is less than optimal. As Bruner and Greenfield show, it is formal education which is the vital factor in determining the cut-off point in cognitive development. Part of this educative process is the internalization of language as a prerequisite for certain kinds of abstract logical thought. This point of view however avoids two issues. The child's experiential background may be rich and varied but different! His language experiences may be inadequate but only in relation to the formal educational setting. He may be ready to learn, but not what the school offers. Some movement away from compensatory techniques toward support of existing mores and skills may be justifiable. On the other hand recognition of the need for education to start 'where the child is' suggests the need for realistic evaluation of language skills and abilities at school entry age. The provision of language programmes

calculated to bring about adjustment to the school culture or supportive programmes utilizing the existing patterns and skills should necessarily follow.

Whatever the position, one thing is clear, before he enters school the child has mastered a language structure and transformational rules that are entirely functional for him. (Jean Berko, 1958; Brown, 1961; in De Cecco, 1968).

The opportunity for verbalization in the home is critical. Evidence is available to support the view that conceptual thinking and reading readiness are functions of language experience, (J. McV. Hunt, 1961), and would seem to indicate that variations in language patterns created by differing home circumstances effect not only the form of cognitive functioning but also determine the quality of the child's interactions with differing aspects of the school environment.

Social Class and School Entry

Social-class differences then, are manifest not only through divergent belief systems, divergent role expectations and varied levels of aspiration but also through modes of communication which in turn affect intellectual ability. These factors influence and are part of the behaviour with which each individual child enters school. Behavioural manifestations, created in the matrices of differing socio-economic levels, provide the cues upon which teachers act.

If the behaviours which the child brings to school are a result of his sub-cultural group membership, the language mode of that group and the attitudes and beliefs of his close family - particularly those of the mother - it seems reasonable to ask what happens at the point of contact. So far there is information to show that parental attitudes affect the school entering behaviour of children to a marked degree; (Bandura and Walters, 1963; Husen, 1956; Shirley, 1942; Scheinfeld, 1970). Bearing on this, an investigation of the relationship between parental attitudes toward a number of aspects of child rearing and the child's general adjustment to 1st grade, found that the lower ratings of the homes of the poorly adjusted

children reflected parental rejection. This lack of parental dependence - encouragement was a causal factor in the children's poor adjustment to the demands of the 1st grade situation. Medinnus (1961). However, more extensive information is lacking. Despite this there has been some conjecture about what remediation is necessary. For example Gordon (1970), while discussing intervention programmes, hypothesized that the current approach to the problem is based on the assumption that the behaviour and value systems of parents and children need to be changed. On the other hand it has been argued that the teacher as mediator of the dominant culture should set up tasks to help the child mature and use his potentialities productively - implying productiveness as acceptable in the eyes of the core culture, (Loeb, 1953), and also that it is the expectation of the teacher as agent for the adult society that determines a child's school-achieved status. (Parsons, 1961).

The need for greater school flexibility toward new entrant pupils has been strongly asserted. (Taba, 1964; Bloom, Davis and Hess, 1965; Deutsch, 1964; Bloom, 1964; and Dockrell, 1964). Their arguments rely on the contention that the various forms of persuasion that schools and teachers use, (often quite unconsciously), bring about conformity to school mores (Riessman, 1962). But the means of ensuring flexibility are less well articulated. Anderson (1969), dodges the issue.

> "Some of my colleagues who have young children say that the best thing they could do for them, is to find first grade teachers that have points of view favourable to the particular patterns of strengths and weaknesses which the children show", - while Zaluzhskaia offers condemnation but no solution -

"If the teacher and the child do not get along, it is the teacher who is to blame. Without mutual liking and trust, there is no successful education and conflicts arise even in kindergarten". Zaluzhskaia (1969).

Whether these contentions are valid or not, it is clear that teachers have certain expectations concerning pupil

behaviour and that these influence teacher-pupil interaction. In particular the influence of the pre-school environment, (as manifest by differences in beliefs, role competencies, aspirations and language facility), would appear to have consequences for the school to take into account. But despite this, there still remains an unanswered question.... in what ways do disparities between home and school affect the learning process? That a disjunction exists seems undebatable, but how it affects the child as he learns is still subject to conjecture. However, there does seem to be a good case for arguing that whatever happens is likely to happen at the point where the child, as representative of the non-school culture, comes in contact with the school culture. Clearly this occurs most in the classroom. Further, it is in the classroom that the child's behaviour will be noted for evaluation, judgement and eventual labelling. Furthermore, in the classroom it is the teacher who mainly represents the school culture and demands conformity to its norms. All this suggests that it is the contact between pupil and teacher in the classroom that warrants attention. The present study is based on this assumption and will direct its efforts accordingly. However, before it can attempt the task, some discussion of the relationship between social class and classroom interaction is necessary.

Social Class and Classroom Interaction

A basic criticism of earlier studies into the effects of social status on teachers' contacts with pupils, is that certain behaviours were categorized as desirable or undesirable from the standpoint of pupil adjustment. However these earlier studies did reveal inequalities in both quantity and quality of teacher contacts with certain groups of pupils. For example in a study of social status differentiation in the classroom, the contacts of teachers with pupils of different social classes were examined. (Hoehn, 1954).

Results failed to support the hypothesis that teachers tend to give more attention to their high than to their low status pupils but the quality of contacts showed consistent differences favouring the high status pupils. To quote -

> "The proportion of contacts which are expressions of affection or of approval of child initiated behaviours varies directly with pupils' social status. The mental hygiene value of teacher behaviour is higher for pupils of relatively high status than for pupils of relatively low status. The proportion of contacts which are conflict contacts may or may not be related to pupil social status".

The teachers tended towards more highly integrative contacts in their relationships with high status pupils, and toward conflict with low rather than with high status girls. They also had greater respect for the goals of the latter. But Hoehn concluded that -

> "there is a strong indication that non-status factors are much more important than status factors in determining the quality of teacher behaviour any given child receives in the classroom. The evidence tends to show that both quantity and quality of the teacher behaviour a child receives are partially dependent on his level of achievement. Since in most classrooms pupil status and pupil achievement are positively correlated the found tendency of teachers to favour high status over low status pupils may be simply incidental to their partiality to pupils of relatively high achievement". (Underlining mine).

The decision that teachers reacted to pupils on the basis of achievement rather than social status and that in determining the teachers reactions, status was important largely because it influenced pupil attainment, was also reached by Havighurst and Taba (1964).

Such positions are consistent with Rosenthal and Jacobson although the influence of expectations concerning pupil attainment on teacher behaviour promulgated by Rosenthal and Jacobson (1968), has been heavily criticized, e.g. Snow (1969). Later research has given support to the Rosenthal and Jacobson theory (Brophy and Good, 1969; Beez, 1970; Kranz, 1970). That differences in teachers' belief affect pupil-teacher interactions in different ways has been demonstrated - (Washburne and Hill, 1960; Harvey, Misha Prather, White and

Hoffmeister, 1968), and that teacher effect on pupil behaviour is a result of feedback from teacher to pupil and vise versa is also well established empirically. (Waimon, 1962; D.E. Hunt, 1966; Zahorik, 1968). However such feedback has strong connotations of evaluation, particularly when it relates to behavioural rather than subject matter orientations. In such circumstances the majority of teacher statements are of a sanctioning or directing nature. The effects of this are discussed below.

Teacher-Pupil Contact and its Effects

The importance of the classroom as an evaluative setting and the need for children to adapt to the ubiquitous evaluative atmosphere that dominates the school situation have been stressed by Jackson (1968). Interest in the effects of teacher evaluative behaviours vis - a - vis pupils with emphasis on reinforcement techniques is increasing, (e.g. see: Hall, Panyan, Rabon and Broden, 1968; Glynn, 1970; Withall, 1961; Medley and Mitzell, 1963; Glynn and Quinnell, 1971), and even a programmed text, in which methods for the use of reinforcement techniques by teachers are detailed, has been published. (Hunter, 1969). More specific aspects of the effects of teacher evaluative behaviour uponpupils include the effect of smiling, (Harrington, 1965), written comments, (Page, 1958); rejection, (Schwartz and Tangri, 1965); approval, (Thomas Becker and Armstrong, 1970); Rosenfeld and Zander, 1961). Van de Riet (1964), found that praise results in slower learning among underachievers but, in faster learning among non-underachievers. Evidence, although conflicting, tends to show that expression of negative affect in the classroom hinders learning, that both teacher criticism and pupil expression of hostility are negatively correlated with subject-matter learning and that absence of negative sanctioning or criticism is not a guarantee of learning but rather a partial pre-requisite for it. (Soar, 1966). (See also Campbell, 1968; Nuthall,1968).

Research has shown that where a teacher has a higher proportion of dominative contacts the pupils are more easily

distracted from schoolwork, Flanders, (unpublished paper). Flanders (1961) also studied personal-social anxiety as it affected learning situations. He concluded that student behaviour, associated with interpersonal anxiety takes precedence over achievement oriented behaviour, that 'teacher-supportive' behaviours based on private criteria elicit student hostility or withdrawal and that acceptant or student-supportive behaviours elicit problem oriented and integrative behaviours from students. These results are supported by those of Bemis and Luft (1970) who found a significant relationship between teacher and pupil behaviour and between pupil classroom behaviour and pupil cognitive behaviour.

Teachers treatment of individual students is carefully noted by other students, (Kounin and Gump, 1961). Their study demonstrated the negative effects of punitiveness on children's school behaviour and learning. Research indicates that peer groups, perceiving the teachers norms. interact with these and the behaviour of individual pupils. (Brinkman and Brinkman, 1963; Berenda, 1950; Flanders and Havumaki, 1960; Lippett and Gold, 1959).

The consistency and inequality of teacher sanctioning has been well delineated. Despite knowledge of the variability and inequality of pupil contacts, teachers had great difficulty in distributing their attention more equitably, Withall (1956). Elkin (1958) and de Groat and Thompson (1949) demonstrated the double benefits received by the academically bright child and their finding of the differential and consistent distribution of rewards to pupils, particularly boys, is further substantiated by Jackson and Lahaderne (1970) with special reference to managerial and prohibitory utterances. Differential pupil treatments according to sex have been well documented. (Brophy and Good, 1969; Davis and Slobodian, 1967; Meyer and Thompson, 1956).

Pupils' beliefs are constantly being tested by the feed-back they receive in classroom interation, an interaction which reflects a complex of agreement and disagreement between the teacher and pupils. But while the harmony or discordance

of the interactional processes may be assessed, using such measures as Withall's "Climate Index", (see final section of this chapter), classroom climates are the result of an individual teacher's interactions with individual pupils.

Evidence indicates a relationship between the patterns of teacher interaction with pupils and the attitudes of those pupils to school. For example, De Vault, Anderson, Withall and Larsen (1970), conclude:

"There seems to be clear evidence that the nature of the affective domain of the classroom is in part a product of the teacher's communication behaviour".

The individual climate existing for each pupil and teacher relationship has been shown to have its antecedents in the prior socialization experiences of both. The tenor of each teacher-pupil relationship is reflected in the quantity and quality of teacher-pupil classroom contacts. If the relationship is to be assessed, a problem arises. Which aspects of classroom interaction will best provide a measure of teacher-pupil relationships? This problem has been recognized before. Some discussion indicative of a solution is presented below.

Assessment of Teacher-Pupil Relationships

Existing systems for observing and categorizing interactional behaviour have been drawn together and presented as a unified structure by Simon and Boyer (1970.) Systems concerned with teaching effectiveness, and how teaching and learning occur, typically categorize behaviours into such areas as criticism, praise, directing, opining, questioning and lecturing and often represent the dimensions of behaviour of interest to a particular investigator. In general they are directed toward either the cognitive or affective domains. Such an orientation owes much to the pioneering study of Anderson et al (1937) into the effect of Dominative and Integrative behaviour on young children. It has been the foundation for considerable investigation of interactional processes within the classroom; (Withall, 1949, 1961, 1963, 1970; Hough and Duncan, 1970; Flanders, 1962,

1964, 1970). Interest in the affective climate of classrooms has been based on teacher reinforcement of pupil's verbal and non-verbal behaviour. (Zahorik, 1969, Soar, 1966; Jackson, 1968; Nuthall, 1968).

An historical overview of the theory and practice of classroom observation and measurement has been presented by Medley and Mitzel (1963), who stress the importance of direct observation using unambiguous and mutually exclusive categories specific to the investigator's purpose, and suggest rules for planning observation and quantifying records.

> "The first problem is deciding which behaviours and which aspects of these behaviours are to be recorded. Second is the construction of a finite set of categories into one and only one of which every unit observed can be classified. Third, the record obtained must show for each period of observation the total units of behaviour which occurred and the number classifiable in each category".

A useful model for the construction of a set of categories for classifying classroom behaviours in the affective domain is that of Withall (1949) which in turn owes its origins to the Iowa studies of Lewin, Lippitt and White (1939), whereby the effect of leadership styles on social climate and the behaviours of group members was demonstrated. Withall postulates that human behaviour is motivated by a drive toward self actualization, and is influenced by a need for self consistency, interaction with others, self directive behaviour and achievement of personal significance and private meanings in a social milieu. It is suggested that learning is most likely to occur when experiences are meaningful to the learner and occur in a non-threatening situation. Withall's basic hypotheses were ; I) The social emotional climate is a group phenomenon; 2) The teacher's behaviour is the most important single factor in creating climate in the classroom; 3) The teacher's verbal behaviour is a representative sample of her whole behaviour.

His analysis of teachers verbal statements were finally reduced from 25 to 7 exhaustive and mutually exclusive

categories. However, even though verbal behaviour may be categorized, the problem remains of making a decision about the amount of observation necessary in order to determine the verbal pattern of a particular teacher. Withall (1961), in discussing the use of the Climate Index observed -

> "It was found that the pattern based on a sample of 200 statements made by the teacher does not change appreciably as the size of the sample is increased. Indeed as few as 50 statements will differentiate between the climates of two specific activities although generalization to other situations would not be warranted", and, "The criterion of a statement is the expression of a complete idea or concept....any given remark of a teacher may be broken up into two or more statements depending on how many discrete ideas are expressed in said remark".

Withall utilized typewritten transcripts of tape recordings to classify classroom statements but Mitzel and Rabinowitz, (1953), in using Withall's Climate Index found that neither sound, due to ambient noise, nor stenographic recordings gave adequate records of a teachers' classroom behaviour. Their categorizations of teachers' statements were made in the live situation as they occurred. In discussing the Index they suggest the 'live' categorization of statements rather than a verbatim record, and conclude -

> "...the method undoubtedly is applicable in the study of...human relationships in which interaction takes place mainly on a verbal level".

The weight of evidence appears to suggest that in order to assess teacher-pupil relationships, research might well concentrate on live observation of interactional behaviours indicative of the affective quality of individual teacher-pupil interaction.

The emphasis is changing from a search for wholistic theories of learning and teaching to that of objective description - from assumptions, to data gained from tight empirical research and replication - away from comfortable generalities to specific description - from the laboratory to the 'blooming, buzzing confusion' of the classroom. The facts that emerge may,

"...Give rise to many questions that are relevant for educational practice and even more significant for administrators who are charged with the task of making efficient educational systems... Before anyone decides what education ought to be, it might be a good idea to find out what it is". Adams and Biddle (1970).

Summary

This chapter began with a problem. The problem of clarifying reasons for differential school achievement.

Success and failure at school is an area of concern not only for educators but also for parents and pupils. Reasons for success and failure are generally attributed to genetic or environmental factors. Since little can be done at present to nullify the effects of hereditary characteristics, attention has generally concentrated on the part played by environmental and socializing factors as antecedents to school achievement.

Although social-class appears to be a promising area for study, it is best described as a summarizing variable requiring further analysis. Research demonstrates that social-class differences are manifest in a variety of ways.

As a result of widely varying socializing practices, social-class differences are manifest through heterogeneity of beliefs and values, degrees of role competency, levels of educational, social and occupational aspiration and modes of communication.

Whatever the causes or manifestations of differential socializing practices, these take effect at the teacher-pupil workface - the classroom. The classroom climate may take a variety of forms but it is the result of an aggregation of interactions between one teacher and each individual pupil. Interaction may be harmonious or discordant, functional or disfunctional for each child and teacher.

If the quality and quantity of teacher-pupil interactional behaviours contribute to success or failure in school the problem arises of selecting those behaviours for observation

which are most indicative of a harmonious or discordant relationship. It is suggested that the solution may lie in classroom observation of teacher-pupil contacts indicative of the affective quality of individual interaction and arising out of the basic harmony or discordance of the teacher-pupil relationship.

CHAPTER II

Theoretical Bases for Problem Solution

Introduction

Chapter one has raised two problems. The problem of identifying disjunctions and disparities between the pupil-role expectations of parents and teachers and that of obtaining a measure of the results of such disjunctions and disparities through observations of pupil-teacher interation in the classroom. The present chapter first examines the pertinence of value-conflict theory in providing a rationale upon which investigation of the disparity problem may be based. Second it discusses the contribution made by symbolic interactionalism theory to the solution of the problem of measuring the results of expectational disparity. Then third it examines the theoretical basis for categorizing teacher-parent role-expectancies, in terms of the mode and content of pupil-teacher interactions. These three theoretical formulations provide the basis for the hypotheses of this study. The chapter concludes with a statement of definitions relating to pupil status and sanctioning and directing of pupils by teachers.

The Basis in Value-Conflict Theory

There is evidence, as chapter one shows, that individuals differ in their beliefs regardless of their status or position as parent or teacher. Chapter one also presented evidence that there is a range of consensus between some parents and some teachers over some factors of the educational milieu. Any conflict of belief between individual parents and individual teachers indicates deviance from norms or mores held by one or other. (e.g. The mores upon which the teacher bases his pupil contacts may be one of universalism while the basis for parent-child contact may be particularistic). Each may be violating the other's mores. Whatever the situation may be, the discussion of deviance from norms, whether actual or hypothetical, is dependent on the assumption that groups have agreement about the correctness of certain behaviours.

Behaviour divergent from that seen as desirable by the group constitutes deviance. If the school is singled out for examination it can be seen that the school, as an institution, acts as a catalyst and creates a degree of teacher consensus on specific norms related to the purposes of the institution.

Through a variety of direct and indirect sanctions, educational personnel attempt to limit deviance from those norms perceived as desirable. In the attempt they are confronted by pupil behaviours learned in a variety of non-school environments and by a variety of socializing practices. But even where there is no obvious disagreement over norms, consensus is by no means isomorphic because each individual's interpretation and behavioural expression results from egocentric interpretation of role behaviour proper for the situation.

Deviancy from institutionalized norms may be the result of conflicting vectors.

> "The fact that some norms are uncontrollable elements of the situation in which the individual must try to conform to other norms means that one important source of unintentional deviant behaviour may be located, paradoxically, in normative demands themselves".
> Blake and Davis, (1964).

Conflict between the normative expectancies for the contemporaneous roles of child, pupil, sibling and peer can result in severe role-conflict, leading in itself to deviant behaviour. Differential role expectancies by persons in different social groups may also lead to behaviour interpretable as desirable or undesirable depending on the interpreters status, whether parent or teacher, sibling or peer. Temporal incompatabilities induced by the role change from son or daughter to pupil, from small-group leader to large-group member can be the source of contravention of expectancy for those holding authority.

Each of these sources of conflict is concerned with role behaviour and the subjective role expectancies of others. They arise from the conflicting values of individuals. The

point of common focus for parents and teachers is the child, perceived by the one as son or daughter, by the other as pupil. Agreement and disagreement of role perceptions by individual members of these two groups, parent on one hand, teacher on the other, are a basis of conflict.

It is reasonable to suppose that investigating the normative beliefs of parent and teachers concerning the pupil role, could provide a measure of the degree of conflict and isomorphism extant. For these reasons, parent and teacher beliefs over the norms of 'proper' behaviour, (e.g. behaviour that will facilitate a child's success in school), can provide a basis for categorizing parent-teacher relationships as relatively harmonious or discordant.

The study of behavioural norms permits deductions to be made about values bearing relationship to those norms.

> "In practice we tend to find the best evidence of values in the norms themselves...it is the norms, not the values, that have the pressure of reality upon them. It is the norms that are enforced by sanctions, that are subject to the necessity of action and the agony of decision. If is therefore the norms that represent the cutting edge of social control". Blake and Davis (1964).

An investigation of value-conflict over role expectations may conveniently be made from the standpoint of what people believe others should think, or say, or do in order to achieve a particular goal.

With the problem of identifying the relationships indicative of value-conflict and value-agreement solved, there remains the contingent problem of identifying and measuring those behaviours representative of such conflict or agreement. For a solution to this second problem we turn to symbolic-interactionalism theory.

The Basis in Symbolic Interactionalism

Basic to the thought of symbolic-interactionalism is the awareness of self in two forms, the self as known and the self as knower. (James, 1890; in Martindale 1961). The self as known, (James 'me') includes the material "me", the

body and things associated with it, the social "me", or recognition from others, and the spiritual "me", the collection of ones states of consciousness and psychic faculties. Combined with this existing self are feelings of satisfaction and dissatisfaction about the self which lead to self preservation and self seeking.

The knower, (the "I" of James), is the self's perception of the self, instant by instant. The knower, like the outside observer recognizes and judges or evaluates the changes in, or state of "me".

Symbolic interactionalists argue that the social self develops in response to the opinions of others as they affect the self. From primary groups such as the family, the individual gains his initial and most formative experiences which mould his perceptions of self. The attitudes and values he develops, the norms he espouses are the result of early socializing experience. The primary group is "fundamental in forming the social nature and ideals of the individual", (Cooley, 1929), and as Cooley points out, advantageous social situations play an important part in the actualizing of heredity-based potential.

Attitudes and values of individuals are manifest as responses which are attempts to resolve particular practical situations. Such situations involve an interaction between objective conditions, the pre-existing attitudes of the individual and his conception of the attitudes of others. Adaptation to these situations enables the individual to learn role behaviour appropriate to any domain through adaptations to the demands which society places upon him.

Assimilation of, and accommodation to, the cues in the social situation, (the signs and symbols including language, of human interaction), result in the taking of roles indicated by significant others or the 'generalized other'. Language represents a class of verbal gestures which can serve as mutual and common signs to all participants in a social act.

> "One learns a significant symbol when he shares a sign referring to a common course of experience with someone else. Through the significant symbol, he is inevitably in the position of having taken the role of another. Every item of language carries with it some of the social matrix.... Role-taking is the basic process and the genesis of self as one kind of unity of the social experiences of the individual".
>
> Martindale (1961).

It is through the perception by self of the attitudes, values and behaviour of significant others that the community forms and controls the behaviour of its individual members. The most significant expressions of such values and behaviour are made in the form of language - language which expresses and reveals the role expectancies of others for specific situations.

Each child and adult brings to any specific social setting, i) role behaviours developed in the matrix of primary groups and ii) role expectations for other participants. The verbal gestures or language symbols exchanged give a significant reflection of the role expectancies each has for the other, but participants not only conform to rules themselves. Attempts to obtain the conformity of others are made by means of sanctions directed toward the person, artefacts or behaviour of those others. The use of informal sanctions controls behaviour in a relatively painless way. The degree and quality of any person's interactions (be it child, adult, teacher or pupil), with another will be affected by his role expectancies for the other and the behaviours he exhibits. Herein lies a solution to the problem of measuring the results of the expectational disparities of parent and teacher.

Parents, as significant socializing agents, determine in a major way the child's perception of the pupil role. The pupil reflects, with the reasonable accuracy inculcated by years of example and admonition, parental values and normative beliefs. When pupil behavioural manifestations of parental socialization practices are contrary to the role expectations of teachers, negative sanctioning and directing will be used

by the teacher in an attempt to obtain conformity. Where the behaviours meet teacher expectations positive sanctioning and directing will encourage continuance of those behaviours. The type and degree of sanctioning and directing addressed toward individual pupils may provide an indication of the isomorphism of parent and teacher beliefs. This has implications for teacher-pupil classroom contacts. Where consensus exists, teacher sanctioning and directing should be approving. Where disensus exists teacher sanctions and directing should be disapproving. For the pupil then changes in self develop as the response to others and dissatisfaction with self, as perceived by the "I", a reflection of the outside observer - more particularly the teacher.

The theoretical implications appear clear - Role expectancies of parents and teachers and the sanctioning - directing behaviour of teachers comprise legitimate variables upon which a study of the factors relating to school success of children may well be based.

The Basis in Transactional Mode and Content Belief Categories. Role-expectancies are beliefs concerning the correctness of behaviour in a particular situation. While the theoretical basis for behaviours arising from belief discrepancy may be found in value-conflict theory, it is useful to turn to social-contract and social-exchange theory for the basis of the beliefs themselves. Social exchange theory is predicated on the assumption that in social contexts, individuals for the sake of their mutual interests agree to give in order to receive. What they give and get, and how much, is a matter for negotiation and agreement.

> "Social exchange is a derivative of social contract. Social contract in its turn has a long history in the western intellectual tradition. First appearing in the writings of early political theorists it was aligned with matters of jurisdiction, where the contention was advanced that for their own security and self-interest men entered into a form of contract. Consequently much of the initial argument centred around the right to succeed or withdraw from the

> contract or specifically the jurisdiction of the governors. For example, feudalism was seen as a contractual relation between the king (or lord) and his vassals. Later, social contract arguments were used in disputes over the authority of the popes and the obligations of the people to the church (e.g. Investitute Contest, the Conciliar debates, the Reformation and Counter-Reformation).
>
> With the onset of the Enlightment, social contract was related to natural law. For example, Rousseau, Hobbes and Locke insisted that when society originated in a contract (explicit or tacit), each individual, in consenting, removed himself from the 'state of nature'. In this way government, with a legal system characterized by impartially administered justice, was established.
>
> A second, and related, point worth noting about social contract theory is that it has been developed not only to explain the behaviour of small groups (the lord and his vassals), but also the establishment of political institutions and international relations. In this way, social contract theory has sought to explain at both the micro and macro sociological levels.
>
> In the last two decades, interest in social exchange has increased, with Homans (1954), and Foa and Foa (1969) using the theory in the social psychological sense, and Blau (1967) and Adams (1971) treating it sociologically".
>
> Koopman (1971).

Irrespective of whether exchange is seen as social or economic, exchange theory is based on the assumption or proposition that individuals seek to maximize rewards or at least minimize punishments. Rewards and punishments including positive and negative sanctions, are of course situation specific and the commodity exchanged may be variously defined. The exchange process itself however is based on the assumption that whatever the commodity is it may be given to, or taken from, either the self or another.

Application of social-contract theory to the area of verbal interaction may be found in some form in the work of Bales, (1950); Adams and Biddle, (1967); and Bates, (1971). A recent synthesis of social-exchange theory, providing a basis for the categorization of human interactions as an exchange of status, utility or affect has been formulated by Adams whose position has been summarized succinctly by Bates (1971).

"Adams sees exchange theory as providing a basis for a view of social systems as involving an exchange of 'commodities' between members. The commodities, grossly classified as Status, Utility and Affect, are manifested as behaviour and artifacts in the system. Every social system, the argument goes, has accepted procedures by which Status is given or denied, and by which Affect and Utility are also given and denied. Adams briefly categorises the commodities in this way:

> Status. Individuals engage in Status behaviour when they engage in pecking order practices, i.e. they allocate or deny rank and recognition. Ingratiation, deference, respect, insult, contempt are terms characteristically associated with statusing behaviours.
>
> Affect. Individuals engage in Affect behaviour when they give or deny love or hate to others. Affection, care, friendliness, warmth, dislike, hate are terms characteristically associated with affect behaviours.
>
> Utility. Individuals engage in Utility behaviour when they give or deny goods or services to others. Profit, less advantageous, useful, profitable, unhelpful, are terms characteristically associated with utility behaviour.

In any given social system however, all commodities may not be equally dominant. For example, in a marital system Affect is presumed to dominate; in a military system Status does; in an economic system, Utility does. Nonetheless, all three elements are to be found to a greater or lesser extent in all systems. Adams attempts a rationalization of this thesis on the grounds that each component can be identified in all known human societies: all societies have institutionalized forms of stratification, care, and economic specialization".

The relevance of the Adams' position for the present thesis lies in the proposition that parents and teachers hold different beliefs about the relative importance of the status, utility and affect commodities in exchanges between pupil and teacher.

Just as necessary as mode in the present study is some specification of the school relevant content of the exchange. A second conceptual base for the examination of beliefs concerning behaviour can be derived from an analysis of the content of human transactions. Here the tradition of classroom research may be invoked. Although categorization

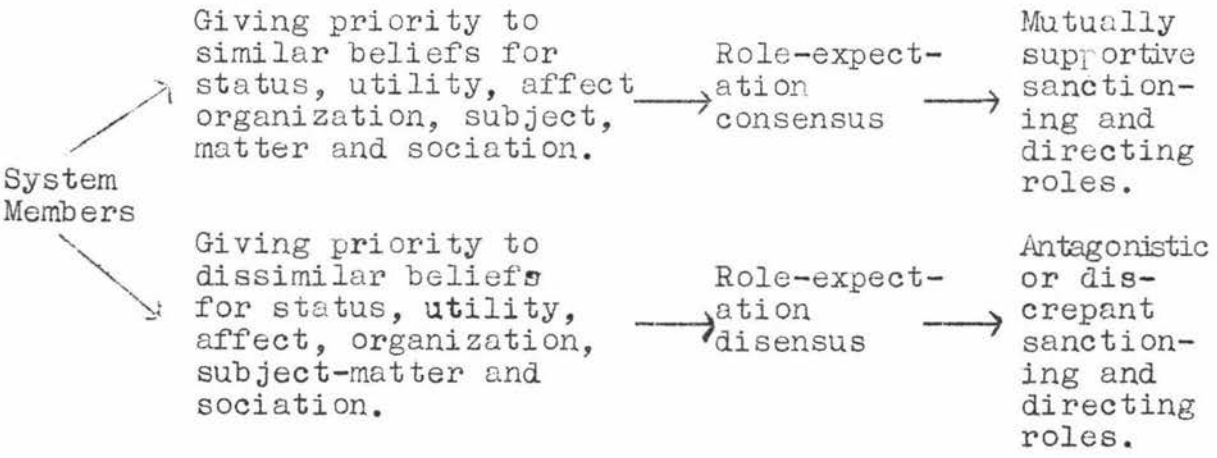
systems are now numerous, (Rosenshine and Furst identified more than 400), at the most gross level of analysis three components seem to recur with marked regularity. For convenience the Adams and Biddle categorization can be taken as representative. Their system named the content categories -

1. Subject Matter Content, referring to those communications having relevance for lesson content.
2. Sociation Content, including those communications pertaining to the process of being sociable or which represent recognized social conventions.
3. Organization Content, referring to communications having relevance for the administration and control of the classroom or school.

Because the emphasis individuals give to mode and content categories of social exchange differ there are possibilities for both consensus and disensus of role beliefs. Figure 2.1 presents the model derived from such implications.

Figure 2.1

Theoretical Model of Individual Relationships



Determining the conceptual framework of the present study in this way permits the following logical conclusion. Parents and teachers may be in a state of complete agreement, complete disagreement, or partial agreement - disagreement over all or some of the content and mode categories. In

order to recognize these separate alternatives, it has been found convenient to label the condition when parents and teachers are in agreement as 'isomorphic', and the children of the parents involved as 'Isomores'. The condition of disagreement is labelled as 'contramorphic' and the children of the parents involved as 'Contramores'. Although the partial condition has been ignored in the present study, it is apparent that the isomorphic parent-teacher relationship is not limited to a single type. In fact parent-teacher agreement may be examined from at least two points of view. The more obvious of these is the situation where parent and teacher give pre-eminence to the same content or mode category, (e.g. both believe in the prime importance of 'subject matter' in the educational setting). The children of parents involved in this type of specific isomorphic relationship are labelled 'Specific Isomores'. On the other hand, the situation may well arise where parent and teacher give priority to different mode or content categories and yet are in general agreement about the relative importance of each category. It has been found convenient to label the children of parents involved in this type of general isomorphic relationship, as 'General Isomores'.

Similarly, parent-teacher relationships that are 'Contramorphic' are not identical in degree of disagreement. It has been found convenient to use the label, 'High Contramore' when referring to children of parents having strong disagreement with the teacher, and 'Moderate Contramore' when referring to those children whose parents are in moderate disagreement with the teacher. Definitions of the pupil categories arising from this conceptual framework are presented below.

Definitions of Pupil Status

Isomore. The child of a parent who is in close agreement with the child's teacher over the order of importance of criteria for school success.

Specific Isomore. The Isomore child of a parent who gives priority to the same criterion for school success as the child's teacher.

General Isomore. The Isomore child of a parent whose order of importance for the criteria for school success closely approximates the ordering of the same criteria by the teacher.

Contramore. The child of a parent who disagrees strongly with the child's teacher over the order of importance of criteria for school success.

High Contramore. The Contramore child of a parent whose ordering of the criteria for school success in very strong disagreement with the ordering of the same criteria by the teacher.

Moderate Contramore. The Contramore child of a parent whose ordering of the criteria for school success is in moderate disagreement with the ordering of the same criteria by the teacher.

Observation Categories

Research cited previously has indicated both consistency and inequality of teachers' sanctioning and directing behaviour towards pupils of differing status. This study is concerned initially with the differences in teacher sanctioning and directing behaviour directed toward Isomores and Contramores and towards boys and girls. Teacher-to-pupil contact categories, although based on previous research categories in the affective area, have been considerably modified and limited to those aspects of teaching behaviour that are verbal and considered to reflect in some degree teachers' perceptions of the pupil role status of particular children. For this reason only dyadic statements, (i.e. those directed by a teacher toward a particular individual pupil) are considered to be of interest. The definitions of categories to be used for classroom observations are as follows.

1. Positive sanctioning. (P.S.)
These are essentially valuing responses, with the subject, (or his behaviour, or his artefacts), found to be good. The basic criteria for this category of teacher verbal behaviour are approval and appreciation. If the statement is one of praise or encouragement it is to be recorded as a positive sanction.
Examples: "Good boy", "Fine", "Very Nice".
"Yes that's right", "You're doing well", "Uh huh".
(Note that repetition of a pupil's answer which indicates that the answer is correct, is scored as P.S.).

2. Negative sanctioning. (N.S.)
These are essentially valuing responses, with the subject, (or his behaviour, or his artefacts), found to be bad. The basic criteria for this category of teacher verbal behaviour are disapproval or denigration. Generally reproach, blame, criticism, sarcasm and discouragement are to be scored as N.S.
Examples: "Naughty boy", "Jane's being naughty", "John!"
"That's not very nice", "That's not right".
"I don't like that sort of behaviour", "Be a big boy", "Crybaby".
"That's really clever", "Aren't you bright".
"Now you've broken it", "You spilt that, didn't you".

3. Positive directing. (P.D.)
These are essentially utterances of an ordering or directing nature in which the emphasis is on the pupil continuing present actions or doing something different. Positive directing emphasises "Do" rather than "Do not", "Go" rather than "Don't go", or "Do your best work", rather than "Don't make any mistakes".
Examples: "Tidy up now John", "Sit down", (not with a voice tone indicating disapproval). "Come

and help me with these Diana", "Get your reading book", "Stay in your seat".

4. Negative directing. (N.D.)

Emphasis here is on prevention of impending behaviour, or cessation of present behaviour. The child is told what not to do, rather than what to do. Negative directing emphasises "Don't", rather than "Do". "Don't put the paint there", rather than, "Put the paint in the cupboard", or "Don't make a mess", rather than, "Keep your work tidy".

Examples: "Don't forget your lunch", "Don't shut the door just yet".

The foregoing discussion of theoretical bases, the review of literature presented in chapter one and the presentation of definitions have emphasised, i) categorization of beliefs related to the pupil role and success in school, ii) consensus and disensus of parent-teacher expectations for the pupil role, and iii) sanctioning - directing behaviour as the result of conformity to, or divergence from, role-expectations. The research hypotheses for this study arise from consideration of the interaction of these three aspects of social interaction.

Hypotheses

Nearly all inferential statistical procedures must necessarily find their basis in hypotheses of the null form, (Fox, 1969, Chapter 8: Kerlinger, 1963, Chapter 9). Use of the null form is regarded as a procedural technique for determining the probability of relationships. Such relationships are developed from research based hypotheses derived from existing information and the logical consistency of theoretical statements. The following hypotheses, (stated in the research form), derive from the previous review of literature and theoretical formulations.

H1. Consensus and disensus of parent and teacher beliefs, concerning school behaviours conducive to school success, will be associated with differential teacher verbal behaviours toward individual pupils.

This general hypothesis gives rise to the following specific hypotheses.

Parent-teacher disensus will be associated with;

H1. a. more total teacher contacts,
b. fewer positive sanctions,
c. more negative sanctions,
d. more positive directions,
e. more negative directions for pupils, than will parent-teacher consensus.

Research discussed in chapter one indicated differences in the quality and quantity of teacher contacts with girls and boys. In order to determine any relationship that may exist between sex and Isomore or Contramore status it is necessary to examine the implications of boy-girl status for teacher contact behaviour.

It is hypothesized that:

Boys will receive -

H2. a. more total teacher contacts,
b. fewer positive sanctions,
c. more negative sanctions,
d. fewer positive directions,
e. more negative directions
.... than are received by girls.

The congruency of teacher-parent agreement may be examined from two points of view. These are, a) the existence of 'Specific-Isomore status', where both parent and teacher give pre-eminence to the same belief category, and, b) the existence of 'General-Isomore status', where the choice order of categories is similar, yielding a low discrepancy score, but the strongest belief is different. It is hypothesized that:

'Specific-Isomore status' will be associated

H3. a. more total teacher contacts, with;
b. more positive sanctions,
c. fewer negative sanctions,
d. more positive directions,
e. fewer negative directions ... for pupils than will 'General-Isomore status'.

The discrepancy of beliefs between parent and teacher is one of degree. The argument has been presented that the greater this discrepancy the more marked should be any trends in the teacher's behaviour towards the pupils concerned and this theoretical position provides the basis for the following hypotheses.

A high degree of parent-teacher disensus will be associated with;

H4. a. more total teacher contacts,
b. fewer positive sanctions,
c. more negative sanctions,
d. more positive directions,
e. more negative directions ... for pupils, than moderate parent-teacher disensus.

General Paradigm

The general paradigm assumed for the purpose of the present study may be illustrated (Figure 2.2) and explained as follows:

a. Parents develop beliefs concerning child behaviours that may facilitate school success.

b. Parental socialization practices result in child attitudes, beliefs and behaviours that are relatively isomorphic with parental attitudes, and beliefs concerning appropriate school behaviours.

c. Teachers develop differential beliefs concerning the behaviours that will facilitate or hinder children's success at school.

d. Where there is consensus of parent and teacher beliefs, teacher expectations are realized to a degree, and sanctioning - directive teacher behaviour tends toward emphasis on approval.

e. Where there is disensus of parent and teacher beliefs, teacher expectations are affronted, and sanctioning - directive behaviour tends toward emphasis on disapproval.

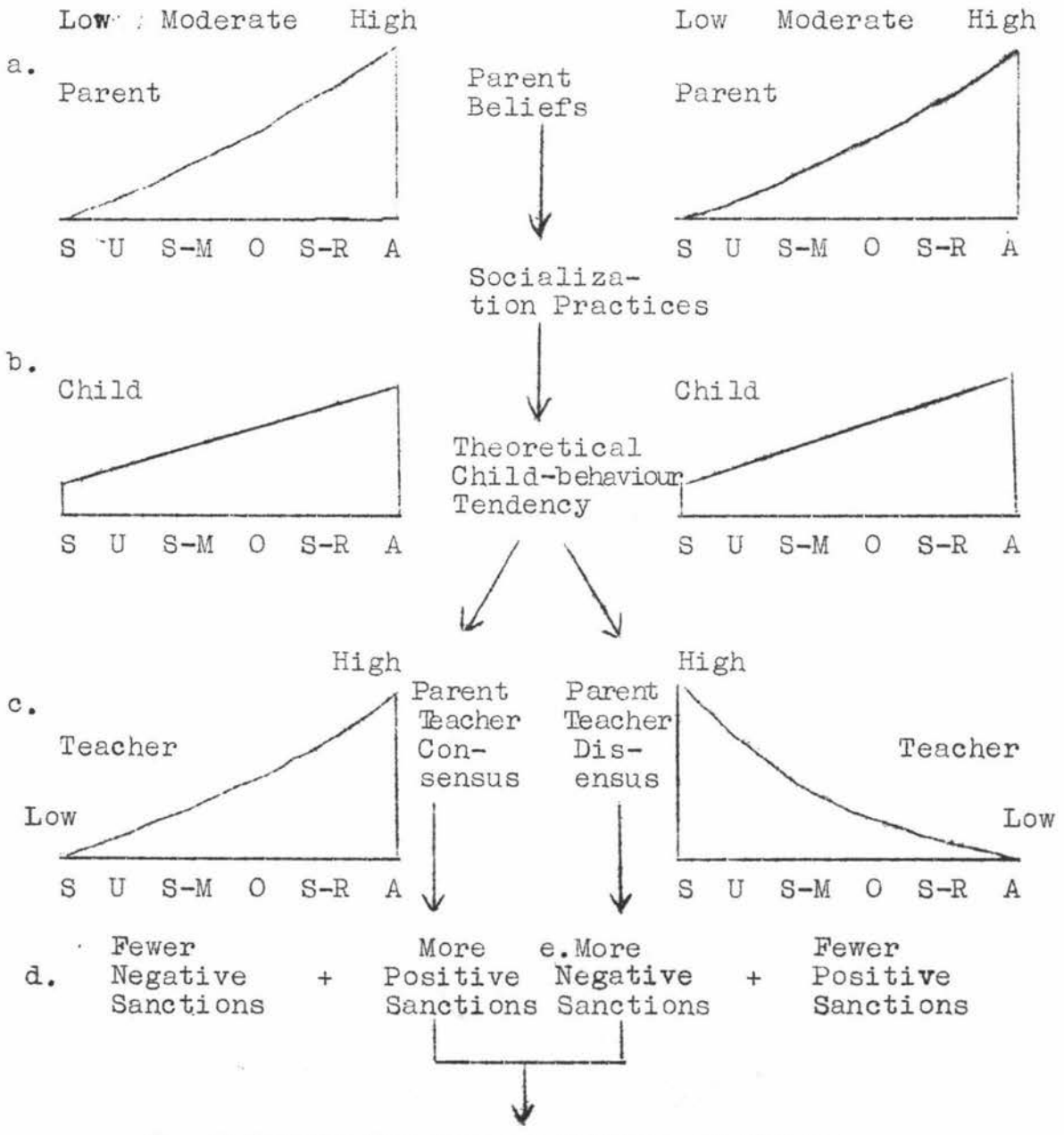
f. Support for, or disapproval of, a pupil, his behaviour, or his artefacts tends to enhance or diminish his opportunities for school success.

Previous research as presented in chapter one has determined the validity of the initial three stages and the

final stage of this model. The present study is concerned with steps d. and e.

Figure 2.2

Theoretical Model of Parent, Child and Teacher Relationships and the Results



(S = Status, U = Utility, S-M = Subject Matter, O = Organization, S-R = Social Relationships and A = Affect).

CHAPTER III

Research Design and Methodology

In the present chapter, first the research design is presented, then follows: i) details of methodology, specifically, the research instrument, ii) sample identification and selection, iii) data collection and iv) methods of data analysis.

Research Design

The variables upon which the design is based are, i) Isomore-Contramore pupils of four types; ii) Sex; iii) the six belief categories concerning behaviour and success at school, and iv) four teacher sanctioning-directing behaviours.

A model of the variables involved in the research design is presented in Figure 3.1 indicating that teacher verbal contacts with pupils of different status, (such status being dependent upon teacher belief preferences), is the focus for this study.

Figure 3.1

Research Design

TEACHER VERBAL BEHAVIOUR	X	PUPIL STATUS	X	TEACHER BELIEF PREFERENCES
		Contramores		
		High Contramores		Affect
Positive Sanctions		Moderate Contramores		Utility
Negative Sanctions	X	Isomores	X	Status
Positive Directions		Specific Isomores		Organization
Negative Directions		General Isomores		Subject Matter
		Boys		Social Relation-ships
		Girls		

For this study then, a measure of the quality and quantity of each teacher's verbal behaviour for each category of pupil is necessary.

At least one teacher clearly representing each of the six belief categories must be identified and

matched with pupils according to the pattern presented in Figure 3.2. This will ensure interaction between each teacher in each belief category and equal numbers of boys and girls, Isomores and Contramores, Specific and General Isomores, High and Moderate Contramores. The theoretical structure arising from the research design is given in Figure 3.2.

Figure 3.2 presents the number of pupils within each status required to preserve a perfect balance in operationalizing the research design. For each of six teachers, representing the six belief categories to interact with a minimum of two pupils in each status category, 16 pupils are required - 8 Isomores, (4 specific and 4 general); 8 Contramores, (4 high and 4 moderate), comprised of equal numbers of boys and girls. If a minimum requirement of two pupils for each status category is to be met a total of 96 pupils is necessary.

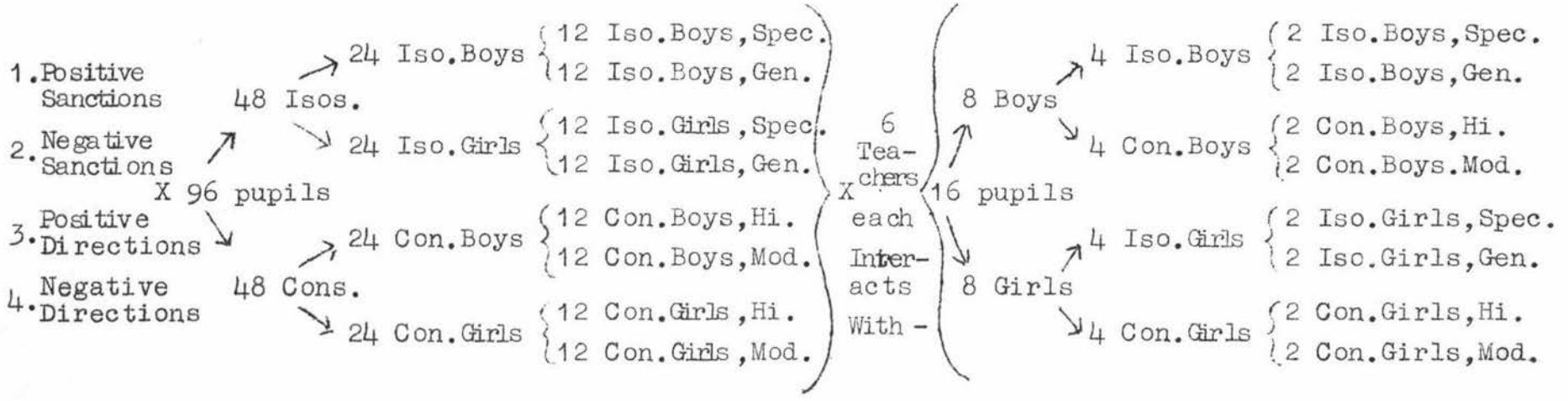
i)
The Research Instrument

In order to identify suitable samples of parents and teachers, statements indicative of parents' and teachers' concern for particular behaviours, with school success as the referrant, and arising from previous theoretical considerations, were constructed.

Chapter two presented exchange theory and the content of human transactions as the basis for categorizing role beliefs of parents and teachers. The content of human transactions has been categorized as Subject Matter, Sociation and Organization, and the modes of exchange categorized as involving Status, Utility and Affect. These six categories provide the focus for obtaining an indication of teachers' and parents' beliefs about pupil behaviours militating toward success at school. Therefore it was necessary to represent each category in a statement about pupil behaviour and school success. While school success could be a common factor in all six statements it was important that the statements representing pupil behaviour should be mutually exclusive. The statements representative of Status, Utility and Affect

Figure 3.2

Theoretical Details of Research Design



Iso. = Isomore
Con. = Contramore
Hi. = High
Mod. = Moderate
Spec. = Specific
Gen. = General

were based on behaviours indicating i) respect for status, ii) usefulness of school learning and iii) a liking for school, while those representative of Subject Matter, Sociation and Organization were based on behaviours related to i) interest in school subjects, ii) co-operation and contact with others and iii) school routines.

Initially in order to achieve clarity, exclusiveness and specificity of meanings a set of statements was devised and then subjected to scrutiny and comment by staff members of the Education Department of Massey University and to students and parents, approximately 20 in all. As a result of expressed uncertainties successive modifications were made until agreement was reached. It was decided that a conviction that Sociation was the vital factor contributing to success in school would be represented by the statement;

"To be successful at school it is (more) important for a child to show that he is friendly and co-operative with pupils and teachers."

Where the individual regards Subject Matter as the vital factor this belief was represented by the statement;

"To be successful at school it is (more) important for a child to show that he is interested in school subjects."

The belief that Organization has priority was represented by the statement;

"To be successful at school it is (more) important for a child to show that he can adjust to school organization and routine."

Similarly, Utility was represented by;

"To be successful at school it is (more) important for a child to show that he can use what he has learned."

Affect by;

"To be successful at school it is (more) important for a child to show that he likes school."

and Status was represented by the statement -

"To be successful at school it is (more) important for a child to show that he respects the teacher."

The six categories and the pupil behaviour statements for each are presented in Figure 3.3.

Figure 3.3

Six Categories of Pupil Behaviour

To be successful at school it is more important for a child to show that -

1.	He can use what he has learned.	(Utility)
2.	He likes school.	(Affect)
3.	He respects the teacher.	(Status)
4.	He can adjust to school organization and routine.	(Organization)
5.	He is friendly and co-operative with pupils and teachers.	(Sociation)
6.	He is interested in school subjects.	(Subject Matter)

The statements were incorporated into a five page questionnaire, containing the six belief statements presented in a forced choice format. Each statement was paired with every other statement resulting in fifteen separate items. Participants were asked to indicate which one of each pair was, in their opinion, more important for a child's success at school. From a trial conducted with a group of students and parents it was determined that randomization of the items led to close repetitions of some parent-teacher belief statements. This resulted in feelings of frustration and suspicions of needless repetition. For these reasons the items were placed in an order giving maximum space between repetition of each belief statement. In the succeeding trial no further objections were expressed. The format adopted is illustrated in Figure 3.4 and the complete questionnaire appears in Appendix A.

Figure 3.4

Item Format

In your opinion, to be successful at school it is more important for a child to show that -

6.	A.	He respects the teacher	( )	strongly
or				moderately
	B.	He is friendly and co-operative with pupils and teachers		slightly
7.	A.	He likes school	( )	strongly
or	B.	He is interested in school subjects		moderately
				slightly

The format provided for respondents to express their strength of preference. This was done, a) to mitigate to some degree one unfavourable aspect of forced-choice questioning methods, and b) to provide a more sensitive device for obtaining a useful statistic.

Reliability

Test-retest was used to check on instrument reliability. The initial testing was conducted with 29 adults comprising approximately equal numbers of teachers, education students and parents. Of these 25 were available for retest between four and eight weeks later. Means, standard deviations and Pearson product-moment correlations were obtained for each category and for the total category comparisons of all participants. Results are presented in Table 3.1 which indicates that correlations between test and retest scores varied from .44 to .79. When the total test-retest scores for all subjects in all categories, were compared, a test reliability score of .671 was obtained.

Table 3.1

Test-Retest Reliability Scores

	Test 1		Test 2		r1
Category	M1	S.D.1	M2	S.D.2	
Status	1.760	3.227	2.520	3.662	.514
Utility	8.000	2.958	8.360	3.397	.459
Affect	5.800	2.972	5.240	3.439	.440
Organization	4.000	2.798	3.400	2.986	.628
Subject Matter	4.520	3.162	5.160	3.446	.568
Social Relationship	7.350	3.470	6.040	3.253	.789
ALL Category Pairs	5.240	3.701	5.120	3.799	.671

(n = 25)

The range of correlations in Table 3.1, including the 'all categories' results, may be considered adequate when comparisons are made with correlations obtained using similar instruments, (Broadley, 1970; '.31-.48'; Bates, 1971; '.35-.75') and is consistent with the standards usually required. See for example, Kerlinger P432 ff.

ii)

Sample: Phase 1. (Teachers)

Procedure.

In order to gain access to an appropriate sample of teachers, permission was sought from the District Senior Inspector of Schools for the Wanganui Education District, to approach all schools of grade five and above in the Manawatu area. Schools below grade five were not included as new-entrant classes in these schools tend to contain pupils covering a relatively wide age range and the numbers available for observation would be uneconomic in terms of time.

Administration

Subsequently the headmasters of the twenty schools eligible for inclusion were approached and the purpose and methodology of the study explained. All headmasters were agreeable to their teachers participating in the study. All eligible teachers were then visited and their collaboration was requested. In discussions their complete anonymity was guaranteed and the purpose and procedures of the study explained and discussed.

Teachers from all schools contacted agreed to participate, 21 teachers in all, and questionnaires were mailed to them, once introductory visits had been completed.

Response and Scoring

All questionnairs were correctly completed and returned within three days. A points system was used for scoring with three points allocated to each belief category indicated as "strongly" preferred, two points for each belief category "moderately" preferred and one point allocated where the belief preference was "slight". Once all booklets had been scored initially, a check scoring was carried out. Teacher scores under each belief category were recorded.

Sample: Phase 2. (Parents)
Administration

The two teachers having the highest scores for each of the six categories in relation to their separate scores in the other five categories were taken for the second stage of the study. As only one teacher gave priority to Status in her selections this reduced the teacher numbers at this stage to eleven. (See Appendix B for full details.)

Each of the eleven selected teachers was visited in early October. An explanatory letter, questionnaire, booklet, and addressed return envelope were forwarded to the mothers of all pupils in the selected teachers' classes who had commenced school some time during the current year. Envelopes were addressed to mothers but pupils were used for

both delivery of envelopes to the homes and the return of questionnaires to the school. Parents received the material on the 20 October and were asked to complete the questionnaire and return it to the school by Friday 22 October.

Response Rate

Figures for the returns from individual schools are presented in Table 3.2, Schools are numbered 1-11. In the table it can be seen that response rates varied between 65% and 93%, with an average of 81%.

Table 3.2

Questionnaire Returns from Schools

School	Returns	Class Roll	Precent Returned
1	28	32	87½%
2	28	35	80%
3	27	29	93%
4	25	28	89%
5	34	39	87%
6	15	23	65%
7	28	35	80%
8	28	32	87%
9	21	29	72%
10	21	28	75%
11	27	39	69%
TOTAL	282	349	Average 81%

Analysis

For the next phase of the study it was necessary to have a sample of pupils whose composition was based on the relationship between the scores of their parents and their teachers. The number of children required for each pupil category has been presented in Figure 3.2. Parent questionnaires were scored as for teachers in phase one and the results recorded. Discrepancies between each parent's

score and that of her child's teacher were calculated, using the method detailed in Figure 3.5. The figure contains details about two parents. The basis for calculation was the same in each case: In this sample Parent 'A', (with a discrepancy score of 46 when her scores in each category are subtracted from the teacher's scores), is categorized as a Contramore with a 'Status-Organization' preference. Parent 'B', (having a discrepancy score of 7), is categorized as an Isomore with a Sociation preference. This procedure was performed for the 280 parent questionnaires. Parents were then classified as being in an Isomorphic, Contramorphic or Neutral relationship with their child's teacher.

Figure 3.5

Calculation of Discrepancy Scores

	Categories.						
	Affect	Utility	Status	Organisation	Sociation	Subject Matter	(Discrepancy Score)
TEACHER SCORES	12	4	0	2	15	9	
Parent 'A' Scores	2	0	7	7	3	1	
Parent 'A' discrepancy	10	+ 4	+ 7	+ 5	+ 12	+ 8	= 46
Parent 'B' Scores	12	+ 1	+ 3	+ 2	+ 14	+ 9	
Parent 'B' discrepancy	0	3	3	0	1	0	= 7

Parent 'A' is a Contramore in the Status-Organization area.
Parent 'B' is an Isomore in the Sociation area.

Sample: Phase 3. (Pupils)

The total parent-teacher discrepancy scores were examined for the purpose of determining Isomore and Contramore pupils. In order to ensure a sufficient number of pupils in each category, (boys, girls, Specific-Isomores, General-Isomores,

High-Contramores and Moderate-Contramores), the decision was made to classify as Isomores all those pupils whose parent-teacher discrepancy scores were 19 or less. Children whose parent-teacher discrepancy scores equalled or exceeded 28 were classed as Contramores.

Isomores were sub-divided into two categories -

a. (Specific) Those whose parents gave priority to the same category of belief as the teacher.

b. (General) Those whose parents gave priority to a category of belief different from that of the teacher, although having a discrepancy score less than 20.

Contramores were also divided into two categories -

a. (High) Children of parents whose discrepancy scores were in excess of 36 points were classified as High Contramores. (This group later included one pupil at 35 and another at 34 as replacements for absentees).

b. (Moderate) Children of parents with discrepancy scores 28-33 were classed as Moderate Contramores.

Neutrals Pupils whose parents' discrepancy scores fell between 20 - 32 inclusive were classed as Neutrals and were not used for this study.

The details of the resulting distributions of Isomores and Contramores are presented in matrix form in Figure 3.6 which indicates that on the basis selected nearly half (46%) of all pupils were Neutrals, and slightly over half were Isomores (28%), or Contramores (26%).

Figure 3.6

Matrix of Pupil Attributes

	Isomores		Contramores		Neutrals	TOTALS
	Specific	General	High	Moderate		
Boys	19	20	30	9	62	140
Girls	17	23	19	15	68	142
Sub-totals	36	43	49	24		
TOTALS	79		73		130	282

Limitations to actualizing the category numbers planned for, and presented in Figure 3.2 were caused by -

1. Insufficient pupils within some groups in some classrooms.
2. Absence of pupils, due to a mumps epidemic, who were unable to be replaced once observations were nearing completion.

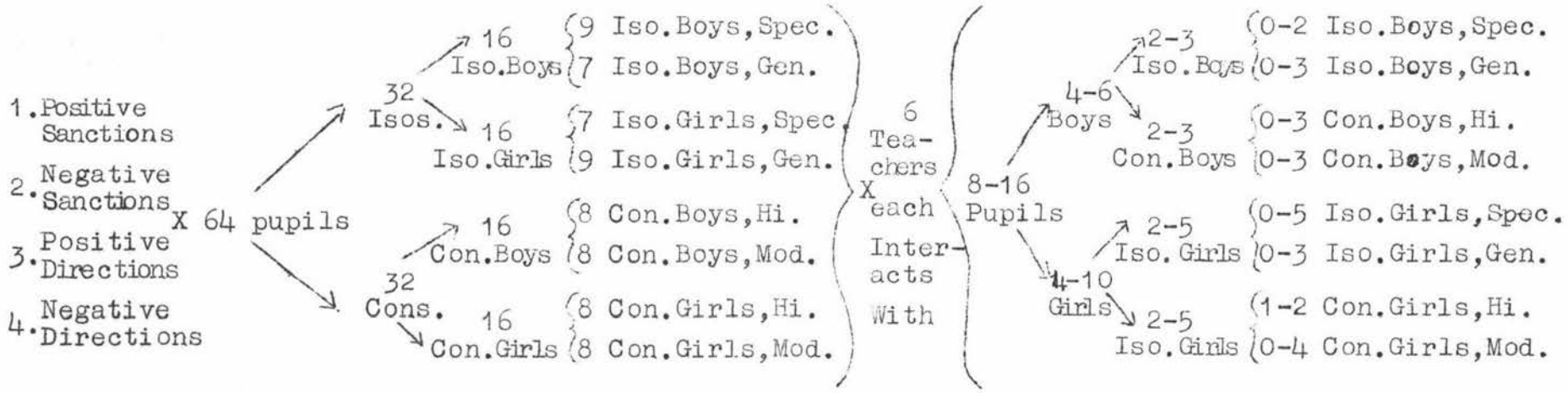
This necessitated the adoption of a modified form of the numbers in the planned research design. This is presented in Figure 3.7.

In figure 3.7 it can be seen that the total number of pupils meeting the status criteria previously established was 64. Of these half were Isomores and half Contramores with boys and girls evenly distributed. The number of pupils in each pupil-status-category, (i.e. High and Moderate Contramore, and, General and Specific Isomore), are equal and although the numbers of boy and girl Specific and General Isomores varies, these totals are also equal. (This imbalance has been corrected, for data analysis procedures, by the use of an appropriate formula.)

That the overall balance between pupil categories and teachers, (representing belief categories), has been retained, is made clear in Figure 3.8. The balance between Isomores and Contramores in each classroom has been preserved, as also has the total balance between boys and girls,

Figure 3.7

Actualized Details of Research Design



High-Contramores and Moderate Contramores and between Specific and General-Isomores.

Figure 3.8

Actual Number of Pupils in Each Research Category

Teacher Type	Isomores					Contramores				
	Boys		Girls		Totals	Boys		Girls		Totals
	Spec.	Gen.	Spec.	Gen.		Hi.	Mod.	Hi.	Mod.	
Affect	2	1	5	0	= 8	2	1	1	4	= 8
Utility	2	1	0	2	= 5	0	3	1	1	= 5
Status	0	3	1	1	= 5	1	2	1	1	= 5
Organiz-ation	2	0	0	3	= 5	0	2	2	1	= 5
Subject Matter	2	1	1	1	= 5	3	0	2	0	= 5
Sociation	1	1	0	2	= 4	0	2	1	1	= 4
Sub Totals A	9	7	7	9		8	8	8	8	
Sub Totals B	16		16			16		16		
TOTALS	32					32				

iii)

Phase 4 - Data Collection

Classroom Observation

The categories under which teacher to pupil verbal interactions were to be recorded and the directions for making categorizing decisions have been detailed on pages 41 and 42.

Method

Apparatus used for recording teacher-pupil verbal interaction included a small cordless radio-microphone transmitter and a radio receiver connected directly to a tape recorder.

All electrical and radio equipment was placed in the classroom, (as inconspicuously as possible), before the pupils arrived. Obeervers sat side by side in as unobtrusive position as possible but facing the major centre of activity. This had been ascertained on an earlier visit. The tape recorder was situated between the observers and below table level. This enabled the revolution-counter figures to be used to locate the position on the tape of specific teacher-pupil verbal contacts.

The teacher wore the cordless microphone which transmitted to the receiver and tape recorder. Volume could be adjusted to enable observers to hear everything the teacher said but at the same time ensure inaudibility for others in the classroom.

Only one teacher admitted that she was unduly conscious of the radio microphone throughout the observation sessions but other teachers claimed that it did not greatly affect their classroom behaviour. The microphone could be switched off by the wearers and they were asked to do this when conversing with any visitor such as a parent, headmaster, dental nurse or other teacher.

When the children entered the classroom the observers were introduced. Then in order to facilitate identification of pupils a self-adhesive label was attached to every child's clothing. Five different colours were used but the pre-selected Contramores were given red labels and Isomores, blue. Teachers took for granted that all pupils were being observed. Pupils were discouraged from attempting to converse with or watch observers.

Although considerable teacher-pupil contact of the sanctioning-directive type occurred at this stage of the day,

the novelty of the situation caused by the presence of observers and equipment may have created abnormal interaction patterns. Observation and recording interactions under such circumstances was felt to be unwarranted. Therefore only when classroom routines and behaviour appeared relatively 'normal' was observation begun. Settling periods preceding the actual recording, ranged from fifteen to thirty minutes. During this period observers were able to memorize the names of the pupils for whom they had specific responsibility. It was also possible to memorize the names of the other observer's subjects. This proved to be useful when one observer's subjects were objects of an unusually high degree of teacher talk.

All teacher interactions with the Isomore and Contramore pupils in addition to being tape-recorded were also recorded on a specially designed form. (See Appendix C). The forms made provision for pupils' names, identification numbers, status category, sanctions-directions columns, a brief description of salient physical or clothing features for identification purposes and a column for recording the tape recorder counter number when each verbal interaction occurred.

When a teacher addressed a pupil the comment was classified and noted as either a positive or negative sanction or direction. The following coding conventions were used:

i) Only those teacher sanctions and directions contacts directed toward subjects taking part in the study are recorded. The 4 dimensions of teacher behaviour vis-a-vis individual children, that are important for this study, are positive and negative sanctioning and positive and negative directing. Utterances directed toward a class, group, or pair of pupils, such as those involved in lecturing or teaching behaviours, reading stories or organizational announcements are not recorded.

ii) Immediately the teacher addresses a child the statement is coded P.S. for positive sanctions, N.S. for negative sanctions, P.D. for positive directions and N.D. for negative directions. Such questioning forms as "What did you do?" inferring, "Tell me what you did," or "Can you put these in the cupboard for me?" implying, "Go and put these in the cupboard", should be coded P.D.

iii) The code symbol is entered beneath the child's code number and the teacher's comment written down. (At times it is only possible to write key words rather than the whole statement).

iv) The tape recorder counter number is recorded for each statement to facilitate later checking of the record.

v) A new line of the recording sheet is used for each statement.

NOTE: Positive and negative sanctioning, while being basically inherent in the words used may also reside in the tone of voice. Observers should use as a general guide the rule that tone of voice thought to convey approval should result in a P.S. coding. Similarly a tone of voice conveying disapproval should result in N.S. coding.

Observer discrimination using tone of voice applies:

1. When the sentence form is not of a sanctioning form.
2. When the sentence form is sanctioning form but the tone of voice over-rules the semantic content.

After each observation period the tape was replayed and both observers checked both written records for omissions and errors. A summary of teacher-pupil contacts for each pupil in each verbal interaction category was then tabulated for each classroom.

Complete anonymity for teachers, schools and individual pupil has been preserved.

Pretest of the Observation System

Prior to actual observations used to record data for analysis in this study, observers -

1. Discussed the categories and tested each other on their use by making use of commonly used teacher sanctions and directions.
2. Each observer individually observed and recorded the same six pupils for the same one hour period in a non-participating classroom.
3. Observations and recordings made in 2 above were then checked individually from the tape recording.

Comparison of observer scores for the six pupils over the four categories gave a coefficient of observer agreement, (Medley and Mitzell, 1963), of .87.

4. Variations between observer decisions were discussed and a simpler more efficient recording form designed.
5. A second one hour trial was conducted under the same conditions as in trial one, using seven pupils.

The coefficient of observer agreement in this case was 96.7, with the four differences in decision being complete omissions of brief comments by the teacher. At this stage the decision was made to conduct the observations for the study.

For all teachers, observation and recording occupied three hours.

a. One hour between 9 a.m. and 10.30 a.m.
b. One hour between 10.45 a.m. and 12.15 p.m.
c. One hour between 1 p.m. and 2.30 p.m.

All teachers except one elected to have the observations take place on one day rather than have it spread over two or three days. The exception was a teacher at a school where internal arrangements made it necessary for the morning sessions to be recorded on two successive days.

iv) Analysis

Statistical Procedures

Before tests of significance are used certain assumptions must be satisfied.

> "Only when the researcher has a probability sample from a specified population can he employ tests of significance to assess the probability that the statistic is an accurate estimate of the parameter."
> "The sample must be drawn from a specified population... a general random procedure must be followed."
> Webb and Clements, (1971).

The critical assumptions necessary for the tests of significance used in this study are those concerning, 1) population, and 2) sample selection.

1. Population

The populations from which subjects were drawn for the study are -

i) Isomore and Contramore parents of five year old pupils resident in the Manawatu, during the pupils first year of formal schooling, attending schools larger than grade four.

ii) Children of the parents described in (i) above.

iii) Teachers of the children described in (i) above.

2. Pupil Sample

Parents were used only as identifiers of children's membership of one or other of the two groups. Once identification had been established the decision as to which children would become subjects for the study was determined by teacher type. Chance was the basis for pupil inclusion, in the sample, as any six teachers of the twenty one participating could have qualified for final inclusion.

Although the pupil sample was not selected by classical randomization procedures, it is believed that for the purposes of this study the sample is suitable, in that

teacher characteristics formed the criteria on which particular classrooms and hence pupil subjects, were included.

Support for this position is available.

> "Even though random sampling is required in theory on occasions, the educational researcher can probably draw meaningful inferences from sample data which have not been randomly drawn. To do this however, he should try to take precautions so that no undue factors have biased his sample selection....As one often has difficulty in drawing purely random samples in educational situations, a more reasonable guide would be to make sure that the sample has not been drawn in such a fashion that it is a biased representation of the population under study."
>
> Popham, (1967).

If tests of significance are able to be used legitimately, the next decision concerns the use of parametric or non-parametric statistics. Discussions of normal population distribution where 't' tests are to be considered, (Hays, 1963; Popham, 1967); point up the degree of latitude possible.

> "So long as the sample size is even moderate for each group, quite severe departures from normality seem to make little practical difference to the conclusions reached.... (the assumption of normality)... may be violated almost with impunity provided that sample size is not extremely small."
>
> Hays, (1963).

> "Even with these restrictions the 't' test can be used by teachers to check with precision the difference between two groups."
>
> Popham, (1967).

Despite Hays, (1963), statement; "When both samples are quite large, then both the assumptions of normality and homogeneous variance become relatively unimportant," the decision was made to use non-parametric statistics. The reasons for this decision were -

1. Use of parametric statistics for the two relationships not complying with homogeneous variance criteria would render the results open to an unnecessary degree of doubt. (See footnote).*
2. If a difference is significant using non-parametric tests there is then a high probability of significance if parametric tests had been used.
3. Assumptions concerning populations are not as stringent as for parametric tests.
4. This is a pilot study and extensions into factor analysis is not considered necessary for this stage.

Statistical Procedures

1. As an initial procedure, the Chi^2 'goodness of fit' test has been used to examine differences between obtained pupil-teacher interactional frequencies and those that might be expected from assumptions of normality, in order to provide an initial indication of the significance of any differences. The basic assumptions necessitated by the multinomial nature of the test have been honoured. That is, every observation categorized is independant of all other observations and each distinct observation qualifies for only one cell of the contingency table. There has been no pooling of the categories chosen in advance.

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* Assumptions concerning homogeneity of variance are vital to situations where the 't' test is used.

'F' ratios were calculated for the sixteen relationships to be considered. Variance homogeneity was demonstrated for fourteen of the relationships. Two results, those for negative sanctioning between Isomores and Contramores, and boys - girls, exceeded the permissible 'F' score of 2.38.

2. In order to examine the strength of statistical association between sanctioning frequencies and the independant variables, use has been made of fourfold contingency tables and Chi^2 values incorporating Yates correction for continuity where df=1. Thus Chi^2 techniques have been used to indicate the strengths of associations.

3. For the final analyses of all relationships within the major and sub-categories, the Mann-Witney U test has been applied because -

1. It is particularly suitable where both large and small samples are involved.
2. All data can be ranked.
3. It is a particularly powerful and efficient non-parametric technique.

> "This test is one of the best non-parametric techniques with respect to power and power-efficiency. It seems to be very superior to the median test in this respect, and compares quite well with 't' when assumptions for both tests are met. For some special situations it is even superior to 't'. This makes it an extremely useful device for the comparison of two independant groups....when the assumptions for 't' are not met, it may even be superior to this classical method."
>
> Hays, (1963).

Where n exceeds 15 the formula correcting for ties has been applied.

$$\sigma^2_U = \frac{N1\ N2}{12}\left[N1 + N2 + 1 - \frac{\sum_{i=1}^{G}(t^3_1 - t2)}{(N1 + N2)(N1 + N2 - 1)}\right]$$

Finally, significance levels of .05 (Mann-Whitney U), in conjunction with percentage and numerical data have been used to indicate the validity of hypotheses for the pupil sample categories specified.

CHAPTER IV

Results

The research design presented in chapter three (Figure 3.1), had three major divisions; i) Teacher verbal contacts, ii) Pupil status categories; iii) Teacher-belief categories. The operationalisations described in chapter three sought relationships amongst them. The relationships that arise from the interactions of these three components are presented in four successive sections of this chapter. They are:

1. Teachers' verbal contacts with Isomores and Contramores.
2. Teachers' verbal contacts with Boys and Girls.
3. Teachers' verbal contacts with Specific Isomores and General Isomores.
4. Teachers' verbal contacts with High Contramores and Moderate Contramores.

A summary of the results concludes this chapter and implications arising from these findings are presented in chapter five.

1. TEACHERS' VERBAL CONTACTS WITH ISOMORES AND CONTRAMORES

Isomore and Contramore status were taken as independent variables and teachers' verbal behaviours were considered the dependent variables. Total subjects numbered 64, (32 Isomores and 32 Contramores). Boy and girl subjects were evenly distributed as indicated in Table 4.6 as are the numbers of pupils in the High-Contramore, Moderate-Contramore, Specific-Isomore and General-Isomore groups.

The heterogeneity of teachers' beliefs on the one hand, and of parents' beliefs on the other, (as discussed in chapter two), is born out by the questionnaire data in Appendix B. Teachers' priorities are distributed over the six belief categories. Five teachers expressed a belief in the pre-eminence of Affect for school success, seven in Utility, two in Status, six in Social Relationships and four teachers gave pre-eminence to Subject Matter. Parents

selections are equally heterogeneous.

Parent-teacher disensus is highly probable under such circumstances. A high degree of disensus has been shown to exist for 26% of parent-teacher relationships in this study. 26% of pupils have Contramore status and are subjected to negative sanctioning and positive directing markedly above that received by other pupils.

From Table 4.1 it can be seen that, i. Contramores received more teacher contacts in all categories than Isomores; ii. girl Contramores received more teacher contacts in all categories than girl Isomores; and iii. boy Contramores received more teacher contacts in all categories except 'Positive-Sanctions' than did boy Isomores. The distribution of teacher verbal behaviours indicates significant disparity of both quantity and quality of teacher verbal contacts with Isomores and Contramores. Contramores received 97% more negative sanctions, 33% more positive directions and 35% more total teacher contacts than did Isomores. The number of teachers-to-pupils contacts for each category of verbal interaction is shown in Table 4.1

The greatest difference in frequency of verbal contacts between Contramores and Isomores occurred in negative sanctioning where Contramores received nearly twice as many contacts as Isomores.

Table 4.1

Numbers of Teachers-to-Pupils Contacts for each Pupil Category Teachers' Verbal Behaviour

Subjects		Positive Sanctions	Negative Sanctions	Positive Directions	Total Contacts
CONTRAMORES	Boys	136	150	307	593
	Girls	221	85	363	669
	TOTAL	357	235	670	1262
ISOMORES	Boys	146	74	261	481
	Girls	164	45	244	453
	TOTAL	310	119	505	934

(Negative Directing comprised only .6% of total teachers-to-pupils contacts and has been disregarded for purposes of analysis throughout the study.)

Overall Significance

The overall significance of the frequency of teacher contacts in each verbal category for Contramores as compared with those for Isomores was determined using Chi^2. A significant difference was demonstrated at the .001 level. Table 4.2 presents the frequencies of teacher contacts for each type of verbal contact subjected to the Chi^2 test, and the result.

Table 4.2

Chi^2 for Teachers' Verbal Contacts with Contramores and Isomores

Subjects	Positive Sanctions	Negative Sanctions	Positive Directions
Contramores (n=32)	357	235	670
Isomores (n=32)	310	119	505

$Chi^2 = 15.872$; $df = 2$; $p < .001$.

The negative sanction cells contribute 11.557 of the Chi^2 statistic (15.872), indicating the important effect of this variable on the total significance score, and the positive sanctioning cells contribute 4.227 of the total 15.872.

Significance of Differences for Teacher Verbal-Contact Categories (Chi^2).

In order to determine the contribution to total significance made by differences in frequencies of teacher contacts between Isomores and Contramores for each type of teacher-verbal-contact, Chi^2 was computed, using Yates

correction for continuity, for Isomore-Contramore contact frequencies in positive sanctioning, negative sanctioning, positive directing and total contacts.

The greater frequency of positive sanctioning received by Contramores is not significant. The greater frequencies of negative sanctioning, positive directing and total contacts received by Contramores are significant at a probability greater than .001 for all three categories. The relationships for these three categories are in the direction hypothesized and for the verbal contact modes is strongest or most disparate for negative sanctioning.

The same procedure was followed to compare teacher contacts in each verbal contact mode for Isomore girls versus Contramore girls and Isomore boys versus Contramore boys, in order to ascertain whether Isomore-Contramore teacher contact differences held true regardless of sex differences. Results indicate that teacher contact differences for Contramores-Isomores occurred regardless of sex status, although differences in positive directing for Isomore versus Contramore boys are not significant. Table 4.3 presents the results.

Table 4.3

(Chi^2 and p values)

Teachers' Verbal Contacts with Contramores and Isomores

	MODE			
Subjects	Positive Sanctions	Negative Sanctions	Positive Directions	TOTAL CONTACTS
Isomores V Contramores	3.316 N.S.	37.358 .001	23.189 .001	48.692 .001
Isomore Boys V Contramore Boys	.286 N.S.	25.10 .001	3.298 N.S.	11.472 .001
Isomore Girls V Contramore Girls	8.46 .01	11.70 .001	20.33 .001	41.198 .001

Significance of Difference for Teacher Verbal-Contact Categories (Mann-Witney U).

A. The data for Contramores and Isomores in each verbal contact mode was placed in rank order and the relationships compared using the Mann-Witney U test with provision for ties. Differences were shown to be significant for positive directions and total contacts and not significant for positive and negative sanctioning. Because of the Chi^2 figure for negative sanctioning ($p < .001$) this result merited further investigation which in turn led to acceptance by the investigator of .07 as indicating significance for this mode of teacher contact. (See footnote.) *

B. Results for Contramore boys versus Isomore boys indicate that the differences in frequency of negative sanctions are significant at the .05 level. Differences in all other categories of teacher contact are not significant.

C. Results for Contramore girls versus Isomore girls indicate significance for differences in frequencies of positive directions and total contacts only, at the .025 level. Table 4.4 presents the results.

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* Comparison of standard deviations and means for negative sanctions revealed that the standard deviation for negative sanctioning scores in the Contramore group was 9.081 with a mean of 7.343, whereas that for the Isomore group was 2.786 with a mean of 3.718. Calculation of the F ratio for Isomores and Contramores using negative sanctioning scores yielded, F=10.625, well beyond the limit indicating acceptable homogeneity of variance. Such lack of homogeneity precludes the use of 't' tests and restricts the precision and effectiveness of its non-parametric alternative, the Mann-Witney U. For this reason Chi^2 (.001) has been used as support for the marginal p level of .07 shown for negative sanctioning in Table 4.4. As homogeneity of variance does pertain for all other relationships, this acceptance of a marginal significance level, (at .07 rather than .05), applies only in this instance.

Table 4.4

Teacher Verbal Contacts with Isomores and Contramores

(Mann-Witney U)

Subjects	Positive Sanctions	Negative Sanctions	Positive Directions	Total Contacts
Isomores V Contramores	z = .632 NS	z = 1.499* .07	z = 2.063 .02	z = 2.015 .02
Isomore Boys V Contramore Boys	U = 130 NS	U = 80 .05	U = 95 NS	U = 99 NS
Isomore Girls V Contramore Girls	U = 97 NS	U = 94 NS	U = 75 .025	U = 72 .025

* See footnote previous page.

Percentage of Teacher Contacts Received by Isomores and Contramores

The strength and direction of these relationships is emphasised when the percentages of each type of contact are compared for Isomores and Contramores. Of the total negative sanctions uttered by teachers, the Contramore group received 66½% while the Isomore group received 33½% and this pattern is repeated for Isomore boys v Contramore boys and Isomore girls v Contramore girls. The full relationship is presented in Table 4.5.

Table 4.5

Percentage of each Teacher Verbal Category Contacts Received by Isomores and Contramores

Teacher Verbal Contact Categories	Total Isomores	Total Contramores	Difference	Boys Isomores	Boys Contramores	Boys Difference	Girls Isomores	Girls Contramores	Girls Difference
Positive Sanctions	46½%	53½%	7%	52%	48%	4%	42½%	57½%	15%
Negative Sanctions	33½%	66½%	33%	33%	67%	34%	34½%	65½%	31%
Positive Directions	43%	57%	14%	46%	54%	8%	40%	60%	20%
Total Contacts	43%	57%	14%	45%	55%	10%	40%	60%	20%
	n = 64 (32I, 32C)			n = 32 (16I, 16C)			n = 32 (16I, 16C)		

Implications of Results for Hypotheses

In null form, the general research hypothesis became;

> "Consensus and disensus of parent and teacher beliefs concerning school behaviours conducive to success at school, will not result in differential teacher verbal behaviours towards individual pupils."

Significant differences are demonstrated for negative sanctioning, positive directing and total contacts. The null hypothesis cannot be sustained. Therefore the null hypotheses concerning total teacher contacts, positive directing and negative sanctioning are rejected, the former two at the .025 level (Mann-Witney U) and the latter at the .07 level (Mann-Witney U) with support at the .001 level Chi^2, thus the research hypotheses 1a, 1c and 1d are upheld, and read;

"Parent-teacher disensus will be associated with;

H1 a. more total teacher contacts,

c. more negative sanctioning,

d. more positive directions,

- for pupils, than will parent-teacher consensus."

The null hypotheses for positive sanctioning cannot be rejected on the basis of any data presented, is thus sustained and the research hypothesis that, 'parent-teacher disensus will be associated with less positive sanctions,' is rejected.

2. TEACHERS' VERBAL CONTACTS WITH BOYS AND GIRLS

Boy status and girl status were taken as the independant variables. Teachers' verbal contacts were considered the dependent variables. Total subjects numbered 64 - (32 boys and 32 girls). Isomore and Contramore pupils were evenly distributed. See Table 4.6.

Table 4.6

Pupil Sub-category Status Numbers, in Relation to Sex Status

Subjects		Sex: Boys		Sex: Girls		Totals
CONTRAMORES	High	8	16	8	16	16
	Moderate	8		8		16
ISOMORES	Specific	9	16	7	16	16
	General	7		9		16
		32		32		64

Boys received nearly twice the frequency of negative sanctions received by girls but fewer positive sanctions, fewer positive directions and fewer total contacts. These results, (with the exception of positive directions for

Boy-Isomores versus Girl-Isomores), hold constant when teacher contacts for Boy-Contramores versus Girl-Contramores, and for Boy-Isomores versus Girl-Isomores are compared, indicating that sex status has implications for teacher verbal contacts regardless of Isomore-Contramore status.

It may be noted that the total sanctions received by girls and boys are nearly identical, (506 for boys, 515 for girls), although the frequency of negative sanctioning is markedly greater for boys and that of positive sanctioning is markedly greater for girls.

The number of teachers-to-pupils contacts for each category of teacher verbal behaviour toward Boys and Girls are presented in Table 4.7.

Table 4.7

Number of Teachers-to-Pupils Contacts for each Pupil Category

	Subjects	Positive Sanctions	Negative Sanctions	Positive Directions	Total Contacts
BOYS	Contramores	136	150	307	593
	Isomores	146	74	261	481
	TOTAL	282	224	568	1,074
GIRLS	Contramores	221	85	363	669
	Isomores	164	45	244	453
	TOTAL	385	130	607	1,122

Overall Significance (Boys v Girls)

In order to determine any initial significance of differences between the frequencies of teachers-to-pupils verbal contact in each mode with boys and with girls, the Chi^2 test was used. The difference was shown to be significant at better than the .001 level of probability.

Table 4.8 presents (i) the frequencies of teacher contacts in each mode for boys and girls which were subjected to the Chi^2 test, and (ii) the results of that test.

Table 4.8

Chi^2 for Teachers' Verbal Contacts with Boys and Girls

Subjects	Positive Sanctions	Negative Sanctions	Positive Directions
BOYS	282	224	568
GIRLS	385	130	607

$Chi^2 = 41.129$, $df = 2$, $p < .001$.

The negative sanctioning cells contribute 29.282 of the total Chi^2 statistic, (41.129), again indicating the importance of this variable for total significance, while the positive sanctioning cells contributed 11.701 of the 41.129 total.

Significance of Differences for Teacher Verbal-Contact Categories (Chi^2)

Using Yates' correction and two degrees of freedom, Chi^2 was calculated for each type of verbal interaction and for total contacts, boys compared with girls.

Significant disparity in both quantity and quality of teacher verbal behaviour toward boys and girls is indicated when sanctioning frequencies and the result of the Chi^2 tests are considered. Boys received significantly more negative sanctions (72% more), and significantly fewer positive sanctions (27% less), than girls although total teacher contacts for boys and girls differed by only 4%. The relationships for all categories are in the direction

hypothesized. Differences between positive and negative sanctioning frequencies for total boys versus total girls reach a meaningful level of significance, although when the boy/girl categories are broken down into Boy-Contramores versus Girl-Contramores, statistical significance obtains for all categories. This does not apply for sub-categories of Boy-Isomores versus Girl-Isomores. This data is presented in Table 4.9

Table 4.9

(Chi^2 and p Values)

Teacher Verbal Contacts with Boys and Girls

Subjects	Teacher Contact Modes			Total Contacts
	Positive Sanctions	Negative Sanctions	Positive Directions	
Boys v Girls	15.905 .001	24.432 .001	1.273 N.S.	1.006 N.S.
Boy Contramores v Girl Contramores	19.764 .001	17.429 .001	4.515 .05	4.475 .05
Boy Isomores v Girl Isomores	.932 N.S.	6.588 .02	.508 N.S.	.780 N.S.

The significance of boy or girl status for negative sanctioning, when related to Isomore or Contramore status is demonstrated in Table 4.9. To be a boy and a Contramore implies strong likelihood of a high degree of negative sanctioning. To be a girl and an Isomore implies a strong likelihood of a low degree of negative sanctioning.

Significance of Differences for Teacher Verbal-Contact Categories (Mann-Witney U).

Mann-Witney U

The data for boys and girls in each verbal interaction

mode and in total contacts was ranked and the Mann-Witney U test for the significance of relationships applied. The formula compensating for ties was used. One-tailed tables were used as these boy/girl relationships have been amply demonstrated through previous research and strong evidence is available for the direction of each hypothesis. Results of the Mann-Witney U test are presented in Table 4.10.

Table 4.10

Teacher Verbal Contacts with Boys and Girls

(Mann-Witney U)

Subjects	Positive Sanctions	Negative Sanctions	Positive Directions	Total Contacts
Total BOYS v Total GIRLS	z = 1.722 .05	z = 2.39 .01	z = .324 N.S.	z = .635 N.S.
Boy-Cons. v Girl-Cons.	U = 76 .03	U = 77 .05	U = 98 N.S.	U = 84 .05
Boy-Isos. v Girl-Isos.	U = 138 N.S.	U = 69 .025	U = 128 N.S.	U = 122 N.S.

In comparing the data for total boys versus total girls, statistical significance was demonstrated for both forms of sanctioning. The direction of each relationship was as hypothesized, (i.e. boys received fewer positive and more negative sanctions). Results do not indicate a significant level of difference for positive directing or total contacts.

Results for Boy-Contramores versus Girl-Contramores parallel those for boys versus girls with both sanctioning categories showing significant differences. In addition total contacts are significantly more frequent for Boy-Contramores than for Girl-Contramores.

Results for Boy-Isomores versus Girl-Isomores indicate

a significant difference for negative sanctioning only.

Percentage of Teacher Contacts Received by Boys and Girls

The direction and strength of relationships is indicated also by an examination of the percentages of each type of teacher contact received by the boy/girl groups. Table 4.11 highlights the disparity of sanctioning contacts between boys and girls, with girls receiving a markedly greater percentage of positive sanctioning (58% compared with 42% for boys) and markedly smaller percentage of negative sanctioning (37% compared with 63% for boys). These differences hold good when Contramore-girls scores are compared with those of Contramore-boys and for the negative sanctions received by Isomore-girls v Isomore-boys.

Table 4.11

Percentage of each Teacher Verbal Contact Category Received by Boys and Girls

Teacher Verbal Contact Categories	Total Boys	Total Girls	Difference	Contramores Boys	Contramores Girls	Difference	Isomores Boys	Isomores Girls	Difference
Positive Sanctions	42%	58%	16%	38%	62%	24%	47%	53%	6%
Negative Sanctions	63%	37%	26%	64%	36%	28%	62%	38%	24%
Positive Directions	48%	52%	4%	46%	54%	8%	52%	48%	4%
Total Contacts	49%	51%	2%	47%	53%	6%	51%	49%	2%
	n = 64 32B, 32G			n = 32 16B, 16G			n = 32 16B, 16G		

The lack of difference in teacher contacts in positive directing and total contacts for boys versus girls (2% - 8%) is clearly indicated in Table 4.11.

Implications of Results for Hypotheses

In null form the specific hypotheses for teacher contact with boys and girls become;

Boys will not receive significantly -

H2 a. more total teacher contacts,
b. fewer positive sanctions,
c. more negative sanctions,
d. fewer positive directions,
- than are received by girls.

Significant differences are demonstrated for positive and negative sanctioning.

The null forms of hypotheses 2b and 2c are rejected by the data presented and hence the research hypotheses that;

"Boys will receive significantly -

H2b fewer positive sanctions,
H2c more negative sanctions,
- than girls," - are sustained.

The null form of hypotheses H2a and H2d cannot be rejected on the basis of data presented and the research hypotheses stated below are therefore rejected.

"Boys will receive significantly -

(H2a) more total teacher contacts,
(H2d) more positive directions,
- than girls."

3. TEACHERS' VERBAL CONTACTS WITH SPECIFIC-ISOMORES AND GENERAL-ISOMORES

In Chapter two Specific-Isomores were defined as those pupils whose parents and teacher give priority to the same belief category. General-Isomores were defined as those pupils whose parents and teacher are in general agreement, but whose ordering of beliefs are not the same. (See pages 39 and 40 for full definition.)

Specific and General Isomore status were taken as independent variables. Frequencies of teachers' verbal

contacts with the children were considered the dependent variables. Total subjects numbered 32, (16 Specific-Isomores and 16 General-Isomores). Boys and girls were not distributed evenly, as illustrated by Table 9. Scores were corrected for uneven numbers of subjects in each category by applying a conversion formula. (See footnote).*

From Table 4.12 it can be seen that Specific-Isomore pupils received a markedly higher incidence of contacts in all categories than did General-Isomore pupils. These results are repeated when contact frequencies for Specific-Isomore girls are compared with those for General-Isomore girls. Differences between contact frequencies in all categories for Specific-Isomore boys v General-Isomore boys follow the above pattern for negative sanctioning only.

Table 4.12

(Corrected for Number of Subjects)

Number of Teacher-to-Pupil Contacts for Specific and General-Isomores

Subjects		Positive Sanctions	Negative Sanctions	Positive Directions	Total Contacts
Specific-Isomores	Girls	109.3	35.7	197.3	342.3
	Boys	62.7	40.3	120.7	223.7
	TOTAL	172	76	318	566
General-Isomores	Girls	56.5	11.7	55.7	123.6
	Boys	81.5	31.3	131.3	244.4
	TOTAL	138	43	187	368

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* Conversion Formula

$$\text{True Score} = S1 \times \frac{n2}{n1+n2} \times \frac{S1 + S2}{\left(S1 \times \frac{n2}{n1+n2}\right) + \left(S2 \times \frac{n1}{n1+n2}\right)}$$

- where S1 = Score being converted
  S2 = Other score in the pair
  n1 = Number of subjects contributing to score being converted.
  n2 = Number of subjects contributing to other score in pair.

Overall Significance

The use of Chi^2 to determine the significance of relationships between pupil categories and the frequency of teachers-to-pupils contact resulted in a probability better than .05. Table 4.13 indicates the relationships subjected to the Chi^2 test and the results of that test.

Table 4.13

Chi^2 for Teachers Verbal Contacts with Specific and General-Isomores

Subjects	Positive Sanctions	Negative Sanctions	Positive Directions
Specific-Isomores	172	76	318
General-Isomores	138	43	187

$Chi^2 = 5.117$; df 2; $p < .05$.

The positive sanctioning results contribute 3.4 of the Chi^2 statistic (5.117) indicating how marked is the difference between the ratio of positive sanctioning for Specific and General-Isomores in this category when compared with the overall ratio of contacts and those expected by chance.

Significance of Differences for Teacher Verbal-Contact Categories (Chi^2)

Using Yates' correction for continuity and one degree of freedom Chi^2 was calculated for total contacts and each type of verbal contact for Specific versus General-Isomore pupils. Results presented in Table 4.14, indicate significant differences in all categories with the exception of positive sanctioning. The significance is greatest for total contacts ($p < .001$) and positive directing ($p < .001$).

Table 4.14

Teacher Verbal Contacts with Specific-Isomores and General-Isomores

(Chi^2 and p levels)

Subjects	MODE			TOTAL CONTACTS
	Positive Sanctions	Negative Sanctions	Positive Directions	
Specific v General	1.75 N.S.	4.30 .05	16.40 .001	20.77 .001
Girl Specific v Girl General	8.19 .01	5.51 .02	38.73 .001	50.52 .001
Boy Specific v Boy General	1.00 N.S.	.45 N.S.	.16 N.S.	.38 N.S.

Significant disparity in both quantity and quality of teacher verbal behaviour toward these two groups of pupils is indicated for negative sanctioning, positive directing and total contacts by the Chi^2 tests results. The trend is most significant for girls, with Chi^2 figures of 8.19 (Positive Sanctions), 5.51 (Negative Sanctions), 38.73 (Positive Directions) and 50.52 (Total Contacts) respectively. To be a Girl-Isomore with Specific-Isomore status indicates a very strong probability of a much higher frequency of positive directing and total teacher contact than that for General-Isomore girls, and a strong probability of higher frequencies of both types of sanctions. The differences within the four types of contacts for the two groups of Boy-Isomores are not significant.

Significance of Differences for Teacher Verbal-Contact Categories. (Mann-Witney U).

Mann-Witney U

The Mann-Witney U test was applied to ranked data. Two-tailed tables were used. The higher negative sanctioning,

positive directing and total contacts were significant for Specific-Isomore pupils as against General-Isomore pupils. Significant differences were demonstrated for the frequency of teacher contact for each verbal category for girls but not for boys. The results are presented in Table 4.15.

Table 4.15

Teacher Verbal Contacts with Specific-Isomores and General-Isomores

(Mann-Witney U)

Subjects	Positive Sanctions	Negative Sanctions	Positive Directions	Total Contacts
Total Specific-Isomores v Total General-Isomores	z = 942 N.S.	z = 1.96 .05	z = 2.186 .03	z = 2.26 .025
Spec.-Iso.Girls v Gen.-Iso.Girls	U = 10 .05	U = 8 .02	U = 0 .001	U = 0 .001
Spec.-Iso.Boys v Gen.-Iso.Boys	U = 19 N.S.	U = 28 N.S.	U = 27 N.S.	U = 30 N.S.

Differences between frequency of positive directing and frequency of total teacher contacts are highly significant for Specific-Isomore girls versus General-Isomore girls. When the following sets of scores were ranked there was no overlap between the scores of these two groups.

Specific-Isomore girls' scores ranged from 2.14 for positibe directing.

General-Isomore girls' scores ranged from 19-39 for positive directing. (U = 0)

Specific-Isomore girls' scores ranged from 4.29 for total contacts.

General-Isomore girls' scores ranged from 35-77 for total contacts. (U = 0)

Percentage of Teacher Contacts Received by Specific and General-Isomores

The direction and strength of relationships discussed above is also indicated by Table 4.16 which presents the percentages of each type of teacher contact received by pupil groups. (These have been corrected for the differing numbers of subjects in each group.)

Comparisons of Tables 4.15 and 4.16, for girls' scores, reveal that percentage comparisons although showing marked discrepancies, do not reveal the degree of difference adequately.

The Mann-Witney U test demonstrates the significance only suggested by the comparison of percentages presented below. (Table 4.16).

In particular Table 4.16 indicates the marked differences (32% - 56%) between teacher contacts for Specific-Isomore and General-Isomore girls.

Table 4.16

Percentage of each Teacher-Verbal-Contact Category Received by Specific and General - Isomores

Contact Categories	Isomores			Isomore Boys			Isomore Girls		
	Specific	General	Difference	Specific	General	Difference	Specific	General	Difference
Positive Sanctions	56%	44%	12%	43.5%	56.5%	13%	66%	34%	32%
Negative Sanctions	64%	36%	28%	43.7%	56.3%	13%	75.4%	24.6%	51%
Positive Directions	63%	37%	26%	48%	52%	4%	78%	22%	56%
Total Contacts	61%	39%	22%	48%	52%	4%	73.4%	26.6%	47%

Percentage results indicate that differences in the frequencies of verbal contacts for the two types of Isomore boys are relatively minor. Differences between the frequencies

of teacher contact for the two types of Isomore girls are extreme in each of the four categories, the Specific-Isomore girls' group receiving approximately 350% more negative sanctions and positive directions than did the General-Isomore girls' group.

Implication of Results for Hypotheses

In null form the specific hypotheses for teacher contact with Specific and General-Isomores become;

Specific-Isomore status will not be associated with;

H3a more total teacher contacts,
b more positive sanctions,
c fewer negative sanctions,
d more positive directions,
- for pupils than will General-Isomore status.

The null forms of Hypotheses 3a and 3d can be rejected on the basis of the data presented and the research hypothesis that;

"Specific-Isomore status will be associated with -

H3a more total teacher contacts,
H3d more positive directions,
- for pupils, than will General-Isomore status",

is sustained.

The null forms of hypothese 3b and 3c cannot be rejected on the basis of data presented and the research hypotheses stated below must therefore be rejected.

"Specific-Isomore status will be associated with -

H3b more positive sanctions,
H3c less negative sanctions,
- for pupils than will General-Isomore status."

The null form of hypothesis H3c is rejected by the data but the direction hypothesized was in error. The following form of the hypothesis would be strongly justified by data presented.

"Specific-Isomore status, willbe associated with more negative sanctioning for Specific-Isomore pupils than for General-Isomore pupils."

4. TEACHERS' VERBAL CONTACTS WITH HIGH AND MODERATE-CONTRAMORES

High and Moderate Contramore status were taken as the independent variables. Teachers' verbal contacts were considered as dependent variables. Subjects numbered 32, with 16 High-Contramore and 16 Moderate-Contramore subjects. Boys and girls were evenly distributed as indicated in Table 4.6. High-Contramores received more positive sanctions and more total contacts than Moderate-Contramores. High-Contramore boys received more contacts in all categories than Moderate-Contramore boys. This pattern is reversed for girls with the exception of positive sanctioning.

The number of teacher-to-pupil contacts for each category are indicated in Table 4.17.

Table 4.17

Number of Teacher-to-Pupil Contacts for High and Moderate-Contramores

		Positive Sanctions	Negative Sanctions	Positive Directions	Total Inter-actions
High-Contramores	Girls	129	29	159	317
	Boys	72	79	174	325
	TOTAL	201	108	333	642
Moderate-Contramores	Girls	92	56	204	352
	Boys	64	71	133	268
	TOTAL	156	127	337	620

Overall Significance

The overall significance of difference between teacher contacts in each verbal category for High-Contramores versus Moderate-Contramores was determined using Chi^2. Table 4.18 presents the relationships subjected to the Chi^2 test and the results of that test.

Table 4.18

Chi^2 for Teachers' Verbal Contacts with High and Moderate Contramores

	Positive Sanctions	Negative Sanctions	Positive Directions
High Contramores	201	108	333
Moderate Contramores	156	127	337

$Chi^2 = 6.859$; $df = 2$; $p < .01$.

The positive sanctioning cells contribute 4.25 of the total Chi^2 statistic, (6.859), indicating the high contribution of differences in positive sanctioning frequencies to the overall significance.

Significance of Differences for Teacher-Verbal-Contact Categories (Chi^2)

Using Yates correction for continuity and df=1, Chi^2 was calculated for each type of verbal contact for High versus Moderate-Contramore pupils. Only negative sanctioning differences between High and Moderate-Contramore girls reached a significant level (.05). Results are presented in Table 4.19.

Table 4.19

Teacher Verbal Contacts with High and Moderate-Contramores
(Chi^2 and 'p' levels)

Subjects	MODE			TOTAL CONTACTS
	Positive Sanctions	Negative Sanctions	Positive Directions	
All High v All Moderate	2.71 N.S.	.69 N.S.	.006 N.S.	.174 N.S.
High Con. Girls v Mod. Con. Girls	2.93 N.S.	3.976 .05	2.666 N.S.	.864 N.S.
High Con. Boys v Mod. Con. Boys	.180 N.S.	.16 N.S.	2.605 N.S.	2.64 N.S.

Significance of Differences for Teacher-Verbal-Contact Categories. (Mann-Witney U).

A lack of significance in the results of the differences observed for all categories was demonstrated by application of the Mann-Witney U test. Table 4.20 presents the results.

Table 4.20

Teacher-Verbal Contacts with High and Moderate-Contramores
(Mann-Witney U)

	Positive Sanctions	Negative Sanctions	Positive Directions	Total Contacts
Total High v Moderate	z = 1.36 N.S.	z = .423 N.S.	z = .07 N.S.	z = .23 N.S.
Girl High v Girl Mod.	U = 18 N.S.	U = 22 N.S.	U = 22 N.S.	U = 28 N.S.
Boy High v Boy Mod.	U = 29 N.S.	U = 23 N.S.	U = 21 N.S.	U = 28 N.S.

The null form of hypothesis H4 cannot be rejected for teacher contacts with these two groups and the research hypothesis is therefore not sustained. The data does not give significant evidence for any justification for accepting the hypothesis that;

H4 "High-Contramore pupils will receive -

a. more total teacher contacts,
b. fewer positive sanctions,
c. more negative sanctions,
d. more positive directions,
- than Moderate-Contramore pupils.

5. SUMMARY OF RESULTS

i. Frequency of Teacher Contacts for Isomores v Contramores

A significant relationship has been demonstrated between, a. parent-teacher disensus, (i.e. Contramore status of pupils), and higher frequencies of i) negative sanctioning, ii) positive directing and iii) teacher contacting for Contramore status pupils, and between,

b. parent-teacher consensus, (i.e. Isomore status of pupils), and lower frequencies of i) negative sanctioning, ii) positive directing, and iii) teacher contacting of Isomore status pupils.

Differences in positive sanctioning of Isomores and Contramores were not at a significant level.

ii. Frequency of Teacher Contacts for Boys v Girls

A significant relationship between sex status and sanctioning has been demonstrated. Boys received a significantly higher frequency of negative sanctions and teacher contacts, and a significantly lower frequency of positive sanctions than did girls. These differences compounded the differences for Isomore-Contramore status.

Differences in the frequency of total contacts and positive directing for boys and girls were not significant.

iii. Frequency of Teacher Contacts for Specific-Isomores v. General-Isomores

The frequencies of negative sanctioning, positive sanctioning and total teacher contacts for Specific-Isomore pupils are significantly greater than those for General Isomore pupils.

Differences in the frequencies of positive directing received by these two groups were not significant.

A marked and significantly higher frequency of teacher contacts in all categories was recorded for General-Isomore girls as compared with Specific-Isomore girls.

iv. Frequency of Teacher Contacts for High Contramores v. Moderate Contramores

Differences in teacher contacts for these two groups were not significant for any categories of teacher contact.

CHAPTER V

Discussion and Conclusions

The problem in which this thesis had its genesis was that of identifying factors related to success and failure at school. Subsequently some of the problems behind that problem served to modify and channel the direction the study ultimately took. Early examination of previous work, revealed a preoccupation with social class as the major determinant of school achievement. The work relevant to this was then examined and the need for identification of the more specific variables controlling educability recognized. Further examination showed that studies based on social class have tended to indicate the dominant influence of parental socialization practices on school achievement. The part played by parents' and teachers' expectations for the pupil role provided the basis for this study. It then became apparent that conflict-theory contributed a point of focus for the examination of the antecedents of school achievement.

It was argued that consensus and disensus of parent-teacher beliefs were variables bearing close relationship with pupils' adjustment to, and success in school. On this basis, parent and teacher beliefs concerning the norms of proper behaviour, (behaviour that would facilitate success in school), were used to classify the parent-teacher relationship as having disensus or consensus.

A foundation in symbolic-interactionalism was delineated in chapter two as the reason for using teachers' contacts with pupils as a measure of attempts to obtain pupil conformity with teachers' role expectations. It was argued that the degree and quality of a teacher's contacts with a pupil were affected by her role expectations for that pupil and the behaviours the pupil exhibits. The present study supports this belief. The general research paradigm expressed the view that:

a. Parents develop beliefs concerning child behaviours that may facilitate school success.

b. Parental socialization practices result in attitudes, beliefs and behaviours that are relatively isomorphic with parental attitudes and beliefs concerning appropriate school behaviours.

c. Teachers also develop beliefs concerning the behaviours that will facilitate or hinder children's success at school.

d. Where there is consensus of parent and teacher beliefs, teacher expectations are realized to a degree, and sanctioning-directive behaviour will be associated with pupil support.

e. Where there is disensus of parent and teacher beliefs, teacher expectations are affronted, and sanctioning-directive behaviour will be associated with an emphasis on disapproval.

f. Support for, or disapproval of a pupil, his artefacts or behaviour will tend to enhance or diminish his opportunities for school success.

Previous research, as presented in chapter one has determined the validity of the initial three stages and the final stage of this model. The present study has indicated some validity for the statements in steps d and e.

In the following section of this chapter, results of the study are discussed and conclusions concerning those results are presented.

A. The Results of Contramore-Isomore Status

The present study gives support to the premise that the behaviours, attitudes and beliefs created by the socialization processes of the home can be related to school behaviour from a position similar to the identification of language as a factor separate from, but related to social class. To quote Bernstein and Brandis (1970):

> "We need to start not with social class as our independent variable, but with an understanding of those variables which we believe to control the antecedents of educability."

This study has isolated Isomore and Contramore status as one of the variables apparently influencing those antecedents.

The interaction between the individual teacher with her individual biases, and the individual child as a product of a particular set of environmental vectors, are shown to be closely associated with consensus and disensus of parents and teacher beliefs. The present study suggests that Isomorphism will have a high probability of being marked by low degrees of negative sanctioning and positive directing. The teacher is in effect saying by her behaviour "I approve of you, your artefacts or your behaviour and I am imposing minimal directing on your classroom activity."

In teacher-pupil contacts with Contramores, there is a very strong probability of a high incidence of negative sanctioning and positive directing. In effect the teacher is saying, "I disapprove of you, your artefacts or your behaviour and I am imposing my demands through directions to ensure continuance of what you are doing, or to bring about a change in what you are doing."

The results of this study bear out Waller's (1932) observation that the child is a source of conflict between teachers and parents because of the divergent values each group holds. Evidence has been provided to support the Jenkins and Lippitt finding, (that role perception conflict between teachers and parents is related to their behaviour toward each other), but such parent-teacher conflict has now been shown to have an apparent relationship with teacher-to-pupil behaviour.

To have parents, whose beliefs concerning behaviours functional for school success are contrary to those of the

child's first teacher on entering school, on the evidence of this study implies a high probability of that child receiving more negative sanctioning, more positive directing and more total contacts than a child whose parents and teacher are in agreement. This significant trend is not sex specific. It remains clearly valid when teacher contacts for Boy-Contramores are compared with those for Boy-Isomores, and when teacher contacts for Girl-Contramores are compared with those for Girl-Isomores.

Criticism of teachers for lack of "judicial restraint" and a propensity for making judgements (Raths, 1964), is supported by the findings, particularly when over $\frac{1}{4}$ of all teacher contacts for Contramore boys are negative sanctions. The ability of these boys to live up to the expectations imposed by the teachers as "agents of the adult society" (Parsons, 1966), is seen to be at issue. It appears reasonable to perceive the teacher as having licence from society to impose her expectations, but the expectations of teachers are as varied as those of parents. As a result, significant numbers of pupils, (26% in this study), will be unable to match up with their specific teachers' expectancies, and in terms of this study will attract disapproval.

It has been shown earlier, (de Groat and Thompson, 1949), that relatively small groups of children get the bulk of the teachers approval and disapproval, but the present study adds to the de Groat and Thompson's categories of intelligence, academic achievement and personality adjustment, another -Isomore status. If Withall is correct in his belief that learning is most likely to occur when experiences take place in a non-threatening situation, an implication of the presented data is that Contramore boys in particular are handicapped in the learning stakes. Evidence that dominative contacts disturb pupils from schoolwork, (Flanders, 1961), may well have relevance for Contramore pupils when the high level of their positive directing contacts with teachers is considered.

The effect on the children of these relatively stable patterns of approval and disapproval, has been shown to have relationship with self esteem and indirectly with school achievement. (Soar, 1966; Coopersmith, 1967; Bemis and Luft, 1970).

Evidence that "high-status" pupils experience teacher contacts of a type that contribute to better mental hygiene has already been produced, (Hoehns, 1954). The present study indicates that two of the factors contributing to this "high-status" are female and Isomore status.

To have Girl-Isomore status implies exposure to the quality and quantity of teacher verbal contacts contributing to high self-esteem; i.e. a higher ratio of positive to negative sanctions than any other group and a markedly lesser frequency of negative sanctioning. To be a Boy-Contramore implies exposure to the quality and quantity of teacher verbal contacts contributing to a decrease in self-esteem; i.e. a considerably higher ratio of negative to positive sanctions than any other group, combined with almost double the frequency of negative sanctioning of any other group. There is little possibility that such status is the result of social-class membership. None of the schools participating in this study could be reasonably described as having more than a minimal percentage of lower-class status pupils.

Warnings that social class membership was an insufficient explanation for educational problems given by Gross, (1953) and Loeb, (1953) were referred to earlier. The present study supports this belief and goes further to indicate that the specific factors of Isomorphism, Contramorphism and sex status are strongly related to both pupil and teacher classroom behaviour.

Pupil behaviours, providing cues to which the teachers react, is one of the more pertinent factors of teacher-pupil contact in that it has a significant relationship with actual teacher behaviour. Bear, (1966) showed that pupils were

socialized during the pre-school years into a role which differs from that expected by the school. The present study has shown that when general 'school' expectancy is refined to mean the expectations of a specific teacher manifested as behaviour toward the child's school entering behaviour, there are grounds for accepting the idea of culture clash.

While expression of disapproval may be necessary to bring about conformity to the norms of school behaviour, it must be remembered that these norms are those of individual teachers. The effect on a child's self-concept; (on his beliefs concerning ability to learn, his personal worth and on his perception of his status in the eyes of other pupils), is at best negative, and dependent on the individualistic expectations of the teacher. Because there does exist some consensus of beliefs between teachers, the Contramore pupil has the probability of retaining or repeating Contramore status for at least a quarter of his school years.

It may be problematical whether the blame for differential patterns of behaviour toward different groups of pupils, attributed to teachers by previously quoted writers, can be laid at the feet of teachers, for Withall has demonstrated the difficulty teachers have in distributing their attention equitably. But it has been shown that with specific training and increased awareness quite marked changes are possible. (Flanders, 1963; Hough and Amidon, 1967; Hall et al, 1968; Hough and Duncan, 1970). That the schools and teachers must adjust to the individual child has been strongly expressed. (Anderson, 1969; Zalushskaia, 1969). Anderson's advice that the best thing parents could do for their children would be to find first grade teachers who have points of view favourable to the particular patterns of strengths and weaknesses that the children show, is a strong theoretical, although impractical, position as the results of this study suggest. When the success or failure of children at school may be modified by some pupil-teacher matching process, such a process is however, worthy of further

thought directed toward practical implementation.

The results of this study are even more striking when it is realized that teachers do not know the Contramore or Isomore status of the pupils, do not know the success beliefs of the parents and in many cases have only met the parents briefly and on a level precluding discussion of points basic to this enquiry.

B. Boy Status versus Girl Status

Whereas Isomore-Contramore status is not discernible to teachers, sex status clearly is. All teachers in the present investigation were women, as is the case with the great majority of teachers of new-entrant pupils in New Zealand schools. Previous research indicating that teachers' behaviour towards boys and girls has a strong tendency toward disparity is strongly supported by the results of this study.

To be a boy implies strong probability that a pupil will receive significantly less positive sanctioning, and considerably more negative sanctioning, than if the pupil is female. This pattern is not the result of Contramore or Isomore status, as the pattern still applies when the results for Boy-Isomores are compared with those for Girl-Isomores and when the results for Boy-Contramores are compared with those for Girl-Contramores. For boys, the teachers' sanctioning themes tend strongly toward disapproval. For girls the teachers' sanctioning theme tends to be one of approval. For both boys and girls the degree of directing is almost identical.

Expression of disapproval through negative sanctioning is a legitimate strategy by which teachers seek to bring about conformity to their personal perceptions of what constitutes proper pupil role behaviour, and pupils must learn to adapt to the evaluative atmosphere of the school situation. That the behaviour of boys results in a greater frequency of directing and negative sanctioning contacts for boys than girls and that pupils recognize this and take it for granted

has already been noted by Meyer and Thompson in 1956. It appears reasonable to believe that such a cause and effect relationship exists in the home and the wider society before the child attends school.. Regardless of the cause of a higher incidence of disapproving teacher behaviour for boys it has been demonstrated by Kounin and Gump in 1961, that exposure to such disapproval decreases concern with learning and school unique values and increases the incidence of aggressive misconduct. When the effect of Boy status is compounded by Contramore status, teacher disapproval tends to reach a level which if maintained over a lengthy period may well lead to decreased interest in learning.

Negative sanctioning is necessary. It is necessary for the development of socially acceptable human beings. It is necessary for the protection of others and sometimes for the preservation of the life of the child. What is also necessary, is a realization by teachers that above certain levels, expressions of disapproval no longer provide legitimate pupil protection or socialization but in fact contribute to increased aggression and decreased attention to achievement-relevant behaviour.

When the implications of dual status are considered, (i.e. the four possibilities being, Contramore and boy, Contramore and girl, Isomore and boy, Isomore and girl), the trends become more significant. To be an Isomore-Girl is to be twice blessed. To be a Contramore-Boy is to be twice cursed. Boy-Contramores in comparison with the other three groups receive the lowest degree of positive sanctioning and almost double the negative sanctioning of any other group. Girl-Isomores on the other hand received less than one quarter of the amount of negative sanctioning received by Contramore-Boys and 10% more positive sanctioning. They received the least negative sanctioning, the least positive directing and least total teacher contacts of any of the four groups.

Girl-Contramores gained more teacher contacts, more positive directions and more positive sanctions than any other group. The high level of positive sanctioning associated with Contramore-Girl status is contrary to the original hypothesis that Contramore status will result in less positive sanctioning. This hypothesis does hold true for Boy-Contramores. The expected and actual patterns for Positive Sanctioning x Sex Status X Contramore/Isomore Status, are presented in Figure 5.1 (with actual contact figures given in brackets).

Figure 5.1

Rank Order of Groups and Incidence of Positive Sanctioning

Expected Rank Order	Actual Rank Order	
Girl-Isomores	Girl-Contramores	(221)
Boy -Isomores	Girl-Isomores	(164)
Girl-Contramores	Boy -Isomores	(146)
Boy -Contramores	Boy -Contramores	(136)

One explanation of this result may be that Contramores as a group are more salient in the teacher's perceptual field and receive a higher degree of contact in all categories of teacher verbal behaviour, and that girls as a group receive greater positive sanctioning than boys. The combination of these two tendencies may have served to place the Contramore-Girl category at the top of the ranking order for positive sanctioning and reinforce the evidence for the separate contribution of Contramore/Isomore factors to the differences in teacher contact. A second explanation, may well be that teachers may have higher expectations and make higher demands for performance from girls - a condition confirmed by Brophy and Good in 1969. Such expectations may be reflected in higher levels of generalized positive sanctioning for Girl-Contramores in an effort to raise performance levels. Further

analysis of the tape and transcript data to determine any differences in the type of positive sanctioning between Contramores and Isomores, particularly between the girl types may throw further light on this result.

Being female militates against the trend of high negative sanctioning related to Contramore status. To be male compounds those teacher sanctioning patterns of high negative sanctioning and directing.

Being an Isomore militates against the trend of high negative sanctioning related to Boy status. To be a Contramore cancels out the decreased pattern of negative sanctioning related to Girl status and greatly increases the degree of positive directing, positive sanctioning and total teacher contacts.

C. Specific-Isomore Status versus General-Isomore Status

The data presented shows that where an Isomore has parents whose strongest belief preference, (concerning behaviour facilitating success at school), is in agreement with that of the teacher there is a strong probability that this Specific-Isomore child will be the object of significantly more negative sanctions, positive directions and total teacher contacts than General-Isomore pupils whose parents are in high general agreement with the teacher.

This trend is repeated for girl Specific-Isomores versus General-Isomores. The frequencies of teacher contacts for girls having General-Isomore status,(more particularly when compared with those of girls having Specific-Isomore status), are highly significant. General Isomore girls received less teacher contacts in all categories than any other sub-group examined in this study and at a high level of significance. To present the strength of this pattern clearly, total scores for each of the girl groups, Specific-Isomore and General-Isomore are detailed in Figure 5.2.

Figure 5.2

Teacher Contacts for Specific and General-Isomore Girls

	P.S.	N.S.	P.D.	T.C.
Specific-Isomore girls	109	35	197	342
General -Isomore girls	56	11	55	123

To be an Isomore, whether boy or girl, gave increased probability of low frequencies of disapproving and directive contacts with teachers.

To have Girl-Isomore status increased the probability so that this group had the lowest frequencies of disapproving and directive contacts of any of the four major groups.

To have Girl-General-Isomore status increased the probability even further. This group received less contacts of a disapproving and directive nature than any of the eight sub-groups used for this study.

The Girl-General-Isomore group averaged 1.3 negative sanctions and 6 positive directions each, in a three hour period. In contrast with these frequencies Boy High-Contramores averaged 9 negative sanctions and 19.3 positive directions.

Theoretically one might expect that the greater the Isomorphism the less the amount of teacher contact because actual behaviours would approximate more closely to those expected. If this is so it would appear that high general teacher-parent agreement is more important for teacher-pupil harmony than specific agreement about the precedence of a single belief category.

A second explanation of this result may be related to teachers' expectation levels for each group. If teacher expectations are higher for pupils having specific agreement, the higher frequency of contact in all categories may reflect

an attempt to improve observed behaviours to the expectation level. In the same way an hypothesized lack of high expectations by teachers for boys as a group may explain the minimal differences in teachers' verbal contacts in each category for Specific-Isomore boys when compared with those for General-Isomore boys.

D. High-Contramore Status versus Moderate-Contramore Status

Results show that it is Contramore status per.se., rather than the degree of Contramorphism that is related to variance in teachers' verbal behaviours to Contramores and Isomores.

Moderate-Contramore-Boys did receive marginally fewer contacts in all contact categories of teachers' verbal behaviour than High-Contramore-Boys but the figures did not approach any meaningful level of significance.

Adequacy of Instruments

In the present study two measures were involved:

i; the measurement of parent-teacher disensus-consensus.

ii; the measurement of frequencies of four types of teacher-to-pupil verbal contacts.

The instrument used to determine disensus-consensus appeared to have significant discriminative power. All the independant variables, with the exception of High-Moderate Contramore status, proved to bear significant relationship to independant variables and indeed different independant variables were related to different dimensions of Disensus-Consensus; i.e. Isomore-Contramore status to Negative Sanctions, Positive Directions and Total Contacts; Specific-General Isomore status to Positive Sanctions, Negative Sanctions, Positive Directions and Total Contacts; High-Moderate Contramore status, (girls only), to Negative

Sanctions. That the High-Moderate Contramore dimension did not discriminate between reflected teacher contacts may well be an indication that it is Contramore status rather than the degree of that status, that has implications for teacher-pupil contact. The measure of disensus-consensus employed, appears then to display degrees of discrimination and sensitivity that justify confidence in its precision and power.

Similarly with the measures of teacher-to-pupil verbal contacts. Although the categories used, initially appeared somewhat gross and the results obtained indicate the necessity for refined categorizations, (if some of the specific queries raised in the foregoing discussions are to be answered), the measures used for the purposes of this study provided strong discriminatory power. Moreover, discriminations proved to be compatible with theoretical bases and the majority of findings are consistent with the results of previous research.

This being so, the implications of the findings for the theoretical bases established initially, merit attention.

Theoretical Implications

That the primary group is, 'fundamental in forming the social nature and ideals of the individual,' (Cooley, 1929), has been the basis of research into the antecedents of achievement which has shown that the child is largely the product of the socializing environment. Parent-teacher disensus concerning role expectations have previously been well documented. The present study gives support for the view that it is not parent-teacher disensus in general that has implications for achievement but the reflection of an individual parent-disensus with an individual teacher through teacher-pupil contacts.

Differential role expectancies by members of different social groups lead to behaviour interpretable as desirable or undesirable depending on interpreter status and the relationship between interpreters. Conflict between the normative expectancies for the contemporaneous roles of family member and pupil leads to deviant behaviour - but deviancy is a subjective perception.

Individual teachers hold individualized beliefs and values for the 'proper' pupil role. Parent-teacher disensus is not so much a gross discrepancy between the attitudes, values and beliefs of the two groups but results from attitude, value and belief discrepancies between a specific parent and a specific teacher. Parents have little hope of training children in such ways that they can avoid the consequences of disensus or attract the consequences of consensus. Neither parent nor teacher has a way of determining the role expectations of the other. Expectations of the teacher in relation to the behaviour of the educational neophyte are reflected in the verbal gestures or language symbols the teacher uses in an attempt to obtain conformity of expectation and actual behaviour. Where pupil behaviour conforms to teacher expectation, sanctioning will encourage continuance and improvement of such behaviour.

The present study has indicated that where parent-teacher consensus exists, such consensus is strongly related to teacher approval of pupil behaviour and that the existence of parent-teacher disensus is strongly related to teacher behaviours indicative of disapproval of pupils. The effects of consensus-disensus of parent-teacher beliefs are compounded by the effects of sex status. To be a boy-child involved in a teacher-parent disensus relationship is to have a high probability of exposure to teacher disapproval militating against pupil concern with learning. For the girl-child involved in a teacher-parent consensus relationship, there is high probability of exposure to teacher

approval militating for interest in school learning and adjustment to school unique values.

There is no doubt that teachers are able to adjust to various factors of classroom interaction once they develop awareness of those factors and perceive the consequences of specific types of behaviour. The possibilities of developing such awareness and perception through teacher training should not be overlooked if the school achievement and the concept of self of each individual are considered to be relevant goals.

The affective domain of the classroom is usually pictured as an entity. More important, and more pertinent for any clarification of the school success-failure problem, is perhaps the affective quality of individual teacher-pupil relationships. A relationship having impact upon each child's concept of self.

Well structured historical presentations of research and theory concerning the concept of self have been given by Phillips (1964); Coopersmith (1967); Le Benne and Greene (1969); and Purkey (1970). The effect of sanctioning behavious by parents and teachers, and the self-esteem of pupils have been well documented. (Wylie, 1963; C. Rogers, 1969; Anderson and Safar, 1967 and Brookover, 1962).

Research indicates that self-concept is developed through social contacts particularly with parents and peers. Some research has indicated a relationship between self-concept and school achievement, (Brookover, 1962; Davidson and Lang, 1960; Staines, 1956), but any simple cause and effect relationship remains to be demonstrated, (Nuthall, 1968). The difficulties of endeavouring to draw clear-cut conclusions are clearly illustrated by Staines (1958) and Erikson (1963).

> "Categorization of what a teacher says, while indicating a prevailing classroom atmosphere, gives no clue as to how effective it really is in forming the Self-picture .... This research has shown that Self-picture is probably one variable .... that contributes to the unpredictability of learning situations and that the Self can be deliberately produced by suitable teaching methods". Staines, (1958).

A major examination of the antecedants of self-esteem although focussing on the evaluative aspects, describes self-esteem 'as a complex and multidimensional concept involving power, significance, virtue and competence'. (Coopersmith, 1967). One aspect of the complexity of the relationship is illustrated by the following quotation -

> "The student who is doing well in his studies may develop negative self attitudes because he does not have the acceptance, attention and affection of others".

The possibilities are clear but the cause-effect relationship of self-concept and achievement is problematical.

Using a 'Parent Attitude Research Instrument' developed by Bell and Schaeffer (1958) and lengthy interviews, Coopersmith obtained information concerning aspects of early experience related to effective school performance. The pupils involved were attending school in the fifth and sixth grades. Only a weak, nonsignificant relationship between self-esteem and social class was found. Other conclusions, although generally related to causation of high, middle or low degrees of self-esteem in the home, do have relevance for the school situation if not for achievement as such.

It was found that, all other things being the same, a bright, competent child in a classroom of equally capable children, is likely to be lower in self-esteem than a less competent child who is markedly superior to his classmates, and that absolute, objective appraisal of capacity, performance of position does not have, for the individual, the significance of the psychological appraisal made in a personal context.

Taken as a whole the results indicate that favourable personalized treatment and evaluations by teachers and parents have beneficial effects on a child's self-esteem. Suggestion of some impact of self-esteem on achievement is implicit in Coopersmith's conclusions -

"An individual who achieves below-average performances, or encounters rebuffs in the majority of his experiences is unlikely to believe that he will lead the pack in his future encounters. A pupil who has led his class in performance.... is quite likely to believe that his future actions will be equally successful .... and will present a posture of confidence and thereby increase the likelihood of his success ..."

Some evidence is presented by Coopersmith in support of this indirect link between self-concept and achievement.

> "Our study provides clear indications that the individual with high self-esteem feels capable of coping with adversity and competent enough to achieve success, and that the individual with low self-esteem feels helpless, vulnerable, and inadequate."

However any real cause and effect relationship between school achievement and teacher behaviours of the types used in this study still remains an area for further empirical investigation. What ever degree of acceptance is given to the results of the present study, no cause and effect relationship has been demonstrated or claimed. Research, in which the independent variables of pupil status are deliberately changed is necessary. It would be expected that the pattern of higher frequencies of negative sanctioning, positive directing and total teacher contacts received by Contramores should reverse to the lower frequencies of the Isomore pattern, if Contramore status was changed to Isomore status through a change of teachers. If future replication supports the findings of the present pilot study, further investigation as suggested above appears to be clearly warranted.

APPENDIX A

Questionnaire

Massey University

Department of Education

SUCCESS IN SCHOOL

PROJECT SUPERVISOR
ERIC R. ASHCROFT

SUCCESS IN SCHOOL

This questionnaire is concerned with what children do at school and in particular the activities that may help them succeed at school.

There are six kinds of things that people think will help pupils be successful. They are listed below. Please read them carefully.

To be successful at school it is more important for a child to show that –

1. He can use what he has learned.
2. He likes school
3. He respects the teacher.
4. He can adjust to school organization and routine.
5. He is friendly and cooperative with pupils and teachers.
6. He is interested in school subjects.

DIRECTIONS:

In the questionnaire the six statements are presented in pairs. You are asked to select the ONE in each PAIR that is, in your opinion, the more important. You indicate your choice by printing in the brackets alongside, the letter (A or B) belonging to the one you prefer.

You will sometimes find the choice is hard to make because you may think both are equally important. In spite of this please be sure to select only ONE of the items.

So you may show how much you prefer the one you choose, the words 'strongly' 'moderately' and 'slightly' are printed beside each pair.

For each pair, please DRAW A CIRCLE around the word that best describes how strong your choice is.

Please do the following example for practice.

---

1. Place either A or B in the brackets alongside the item to show which alternative you think will best help a child succeed at school.

2. Draw a circle around the word at the right that best describes how strong your choice is.

	A. He likes school		strongly
or		( )	moderately
	B. He can use what he has learned		slightly

If you feel "He likes school" is more important you will have printed (A) in the brackets.

If you feel "He can use what he has learned" is more important you will have printed (B) in the brackets.

You should have drawn a circle around 'strongly' OR 'moderately' OR 'slightly'.

Please give each pair careful thought. There are no right or wrong answers, or good or bad ones. We just want to find out what you really think about the way children should behave in order to succeed in school.

This form will take approximately 20 minutes to complete.

In your opinion, to be successful at school it is more important for a child to show that –

1.	A.	He likes school		strongly
or			( )	
	B.	He can adjust to school organization and routine		moderately
				slightly
2.	A.	He respects the teacher		strongly
or			( )	
	B.	He can use what he has learned		moderately
				slightly
3.	A.	He is friendly and cooperative with pupils and teachers		strongly
or			( )	moderately
	B.	He is interested in school subjects		slightly
4.	A.	He likes school		strongly
or			( )	
	B.	He respects the teacher		moderately
				slightly
5.	A.	He can adjust to school organization and routine		strongly
or			( )	moderately
	B.	He can use what he has learned		slightly

Please check to make sure you have a letter in every pair of brackets.

In your opinion, to be successful at school it is more important for a child to show that –

6.	A.	He respects the teacher		strongly
or			( )	
	B.	He is friendly and cooperative with pupils and teachers		moderately
				slightly
7.	A.	He likes school		strongly
or			( )	
	B.	He is interested in school subjects		moderately
				slightly
8.	A.	He is friendly and cooperative with pupils and teachers		strongly
or			( )	moderately
	B.	He can adjust to school organization and routine		slightly
9.	A.	He can use what he has learned		strongly
or			( )	
	B.	He likes school		moderately
				slightly
10.	A.	He is interested in school subjects		strongly
or			( )	
	B.	He respects the teacher		moderately
				slightly

Please check to make sure you have a letter in every pair of brackets.

In your opinion, to be successful at school it is more important for a child to show that –

11.	A.	He can use what he has learned		strongly
or			( )	
	B.	He is friendly and cooperative with pupils and teachers		moderately
				slightly
12.	A.	He can adjust to school organization and routine		strongly
or			( )	moderately
	B.	He is interested in school subjects		
				slightly
13.	A.	He is friendly and cooperative with pupils and teachers		strongly
or			( )	moderately
	B.	He likes school		
				slightly
14.	A.	He respects the teacher		strongly
or			( )	
	B.	He can adjust to school organization and routine		moderately
				slightly
15.	A.	He is interested in school subjects		strongly
or			( )	
	B.	He can use what he has learned		moderately
				slightly

Please check to make sure you have a letter in every pair of brackets.

APPENDIX B

Teachers' Scores in Each Belief Category

(Teacher's Number)	BELIEF CATEGORY Affect	Utility	Status	Organ-ization	Socia-tion	Subject Matter
1	7	4	2	7	2	2
2	0	10	9	3	9	5
3	14	4	3	0	9	4
4	12	4	0	2	15	9
5	8	8	0	1	4	5
6	5	5	0	6	5	1
7	3	8	2	8	2	14
8	9	4	6	0	1	4
9	1	7	5	3	0	5
10	3	9	0	10	6	7
11	4	8	2	4	2	14
12	8	0	5	2	7	13
13	5	10	0	5	5	9
14	9	5	2	8	14	0
15	6	14	0	3	9	5
16	3	12	3	9	9	9
17	0	6	10	4	10	5
18	8	6	0	2	9	2
19	7	4	0	3	3	9
20	6	8	2	2	8	4
21	9	3	9	9	9	6

Highest Scores Underlined.

ISOMORE / CONTRAMORE (Ring One) SCHOOL. Hilltop..... SHEET (1)

Tape Count	1	Tom White Green Jersey Blonde	2	Dick Brown Tie Glasses	3	Harry Black Bandage on throat.	4	Ann Green Green Slack Suit	5	Mary Gray Red Ribbons	COMMENT
10			PS	That looks wonderful							
			PD	What is that							
			PS	Good boy							
12			X	(Inaudible)	PS	Harry's doing it nicely.					
					PD	Pick up the sissors.					
					PD	Put them in the box and help Peter with the paint.					
16							PS	Good Ann			
17	PD	In the tin.									17 Door Slammed
	PD	That can go too.									
	NS	Not there!									
	PD	Put it in the tin.									
22									NS	Sit still.	
24			NS	Dick! I've got a job for you.							
			PD	Tidy these.							
			PD	By yourself.							
			PD	See if you can.							
25	PS	Tom's sitting so nicely.									

BIBLIOGRAPHY

Adams, Raymond S. (1965) The Classroom Setting. Unpublished Ph.D. Dissertation, University of Otago.

Adams, R.S. & Biddle, B.J. (1970) "An Analysis of Classroom Activities". Mirrors for Behaviour, Vol. 7, P27.1-1 to P27.1-81.

Adams, R.S. & Biddle, B.J. (1970) Realities of Teaching. Holt, Rinehart and Winston.

Amidon, E.J. & Flanders, N.A. (1967) The Role of the Teacher in the Classroom. Minneapolis; Ass. for Productive Teaching.

Amidon, E.J. & Hunter, E. (1966) Improving Teaching : Analyzing Verbal Interaction in the Classroom. Holt, Rinehart and Winston.

Anderson, H. & Brewer, J.E. (1946) "Studies of Teachers' Classroom Personalities, II : Effect of Teachers' Dominative and Socially Integrative Contacts on Children's Classroom Behaviour". Psychological Monographs, No. 8.

Anderson, J.G. & Safar, D. (1967) "The Influence of Differential Community Perceptions on the Provision of Equal Educational Opportunity". Sociology of Education. 40:3.

Anderson, Scarvia, B. (1968) The Making of a Pupil - Changing Children into School Children. Paper presented at the Susan Colver-Rosenberg Lecture, University of Chicago; Chicago, Illinois, 1969 (July 17th).

Ashton-Warner, Sylvia. (1963) Teacher. Simon & Schuster.

Ausubel, D.P. (1963) "A Teaching Strategy for Culturally Deprived Pupils : Cognitive and Motivational Considerations". The School Review, 71:4:454-463.

Bales, R.F. (1951) Interaction Process Analysis : A Method for the Study of Small Groups. Addison-Wesley Press.

Bandura, A. & Walters, R.H. (1963) Social Learning and Personality Develop". New York: Holt, Rinehart and Winston.

Banks, Olive. (1968) The Sociology of Education. B.T. Batsford Ltd., London.

Barber, B. (1957) Social Stratification. Harcourt, Brace & World, Inc.

Bates, R.J. (1971) Disensus in the Role Set : The Case of the Teacher. Unpublished M.A. Thesis, Massey University.

Bear, Roberts and Meyer et al. (1966) Social Class Differences in Maternal Attitudes Toward the Teacher and the School. New York City. Paper delivered at the 75th An. Convention of the American Psych. Assn.

Beez, V.W. (1970) "Influence of Biased Psychological Reports on Teacher Behaviour and Pupil Performance". in Learning in Social Settings. Miles, M.W. & Charters, (eds.). Allyn & Bacon. (p328).

Bemis, Catherine A. & Luft, Max. (1970) Relationships Between Teacher Behaviour, Pupil Behaviour and Pupil Achievement. Office of Education, Washington; Bureau of Research. March 1970.

Bereiter, C. & Engelmann, S. (1966) Teaching Disadvantaged Children in the Pre-school. Prentice Hall.

Berenda, Ruth W. (1950) The Influence of the Group on the Judgements of Children. New York: King's Crown Press, Division of Columbia University Press.

Bernstein, B. (1958) "Social Class and Linguistic Development : A Theory of Social Learning", in Education Economy and Society. Halsey, Floud and Anderson (eds.). Free Press of Glencoe, 1961.

Blank, M. & Solomon, F. (1968) "A Tutorial Language Programme to Develop Abstract Thinking in Socially Disadvantaged Pre-school Children". Child Development 39:379-89.

Bloom, B. (1964) Stability and Change in Human Characteristics. New York: John Wiley and Sons Inc.

Bloom, B.S., Davis, A. & Hess, R. (1965) Compensatory Education for Cultural Deprivation. Holt, Rinehart and Winston.

Bloom, Whiteman & Deutsch. (1963) Race and Social Class as Separate Factors Related to Social Environment. Paper read to American Sociological Assn. Meeting, Philadelphia, Sept. 1963.

Brandis, W. & Henderson, D. (1970) Social Class, Language and Communication. Routledge & Kegan Paul.

Brembeck, C.S. (1966) Social Foundations of Education, A Cross-Cultural Approach. John Wiley and Sons.

Brinkman, E.H. & Brinkman, R.A. (1963) "Group Influence on the Individual in the Classroom". The Merrill Palmer Quarterly of Behaviour and Development. 9:3:195-204.

Brookover, W.B. (1940) "Person-Person Interaction Between Teachers and Pupils and Teaching Effectiveness". Jnl. Ed. Res. 34:4:272-87.

Brookover, W.B. et al., (1963) "Self-Concept of Ability and School Achievement" 1962. Sociology of Education. 37:271-278.

Brookover, W. & Gotlieb, D. (1961) "Social Class and Education", in The Social Psychology of Education. (Eds. N.L. Gage & W.W. Charters). Allyn & Bacon.

Bruner, J.S. (1964) "The Course of Cognitive Growth". American Psychologist, 19:1.

Bruner, J.S. (1965) "The Growth of the Mind". American Psychologist, 20:12:1007-1017.

Campbell, W.J. (1968) "Classroom Practices". N.Z. Jnl. of Educ. Studies, 3:2:97-124.

Campbell, W.J. (1970) Scholars in Contexts : The Effects of Environments on Learning. John Wiley and Sons Australasia Pty. Ltd.

Cody, W.W. & Goethals. (1962) "A Field Study". The Role of Schools in Mental Health, Monograph Series, No. 7, New York. Basic Books.

Coopersmith, S. (1967) The Antecedents of Self Esteem. Freeman & Co.

Davidson, Helen H. & Lang, G. (1960) "Children's Perceptions of their Teachers Feelings Toward Them Related to Self Perception, School Achievement and Behaviour". Jnl. of Exp. Ed. 29:2:107-118.

Davis, Allison. (1964) "The Structures of Rewards and Punishments in the Middle and Lower Classes". Readings for Educational Psychology (2nd edit). Fullager, Lewis & Cumbee (eds.) New York. Thomas, Y. Crowell Co.

Davis, F.R. (1969) "Environmental Influences on Substrates of Achievement Leading to Learning Disabilities". Jnl. of Learning Disabilities. 2:3:155-9.

Davis, O.L. & Slobodian, J.J. (1967) "Teacher Behaviour Toward Boys and Girls During First Grade Reading Instruction". Am. Educ. Res. Jnl. 4:261-269.

de Groat, A.F. & Thompson, G.G. (1949) "A Study of the Distribution of Teacher Approval and Disapproval Among 6th Grade Children". Jnl. of Exp. Ed. 18:57-75.

De Vault, M. Vere, Andersen, D.W., Withall, J. & Larson, E. (1970) "Mental Health and Communication". Mirrors for Behaviour. Vol. XIII. Simon & Boyer (eds.) Research for Better Schools Inc.

Deutsch, M. (1964) "Early Social Environment : Its Influence on School Adaptation". The School Dropout. Washington, National Education Association.

Dockrell, W.B. (1964) "Society, Home & Under Achievement". Psychology in Schools. 1:2:177.

Elkin, F. (1960) The Child & Society - The Process of Socialization. Random House, New York.

Elkins, Deborah. (1958) "Some Factors Related to the Choice-Status of Ninety 8th Grade Children in a School Society". Gen. Psych. Monographs. 58:2:257-258.

Erikson, E.H. (1963) Childhood & Society (2nd ed.) W.W. Norton & Co, Ltd., New York.

Erikson, Erik H. (1968) Identity: Youth and Crisis. W.W. Norton & Co. Ltd., U.S.A.

Fantini, M.D. & Weinstein, G. (1968) The Disadvantaged - Challenge to Education. Harper & Row.

Farber, Bernard, Harvey, D.L. and Lewis, M. "Community, Kinship and Competence". Research and Development Programme on Pre-school Disadvantaged Children Final Report, Vol. 3, University of Illinois, Institute of Research for Exceptional Children.

Faris, Robert E.L. (1964) Handbook of Modern Sociology. Chicago: Rand McNally & Co.

Flanders, N.A. (1961) "Personal-Social Anxiety as a Factor in Experimental Learning Situations". Jnl. of Ed. Res. 45:100-110.

Flanders, Ned A. (1965) Teacher Influence, Pupil Attitudes and Achievement. Govt. Printing Office; U.S. Dept. of Health, Edn., & Welfare; Office of Edn. Coop. Res. Monograph No. 12.

Flanders, N.A. & Havumaki. (1960) "The Effect of Teacher-Pupil Contacts Involving Praise on the Sociometric Indices of Students". Jnl. of Ed. Psych. 51:65-68.

Flanders, N.A. & Simon, A. (1970) "Teacher Effectiveness". Encylopaedia of Educational Research, 4th ed. Robt. L. Ebel (Ed.).

Flanders, N.A. (Undated) Teacher Influence in the Classroom. "I. Research on Classroom Climate". Unpublished paper.

Floud, J., Halsey, A.H. and Martin, F.M. (1956) Social Class and Educational Opportunity. Heinemann, London.

Fort, J.G. (1969) "Cultural Background and Learning in Young Children". Phi Delta Kappan. 50:7:386-388.

Fraser, E. (1959) Home Environment and the School. University of London Press.

Fullagar, W.A., Lewis, H.G. & Cumbee, C.F. (1959) Readings for Educational Psychology.

Glynn, E.L. (1970) "Classroom Applications of Self-Determined Reinforcement". Jnl. of Applied Behaviour Analysis. 3:2:123-132.

Glynn, E.L., & Quinnell, J.Y. (1971) "Modification of Non-Task Behaviour in the Classroom through Contingent Teacher Remarks". N.Z. Jnl. of Ed. Studies. 6:2:137-150.

Gordon, I.J. (1969) "The Beginnings of the Self: The Problem of the Nurturing Environment". Phi. Delta Kappan. 50:7:375-378.

Gross, Neal. (1953) "A Critique of Social Class Structure and American Educ". Harvard Ed. Rev. 23 Fall.

Hall, R.V., Panyan, M., Rabon, D. & Broden, M. (1968) "Instructing Beginning Teachers in Reinforcement Procedures which Improve Classroom Control". Jnl. of Applied Behaviour Analysis. 1:4:315-322.

Harper, R.J.C., Anderson, C.C., Christensen, C.M. and Hunka, S.M. (eds.) (1964) The Cognitive Processes - Readings. Prentice-Hall Inc.

Harrington, G.M. (1954) "Smiling as a Measure of Teacher Effectiveness". Jnl. of Educ. Res. 48:715-7.

Harris, F.R., Wolf, M.M. & Baer, D.M. (1964) "Effects of Adult Social Reinforcement of Child Behaviour". Young Children. 20:1:8-17.

Hartup, W.W. & Smothergill, N.L. (1967) The Young Child: Reviews of Research. "National Association for the Education of Young Children".

Harvey, O.J., Misha, P., White, B.J. & Hoffmeister, J.K. (1967) Teachers' Beliefs, Classroom Atmosphere and Student Behaviour. Colorado University for U.S. Dept. of Health, Education and Welfare, 28 July 1967.

Havighurst, R.J. (1954) "What N.Z. Parents Expect of the Schools". Studies of Children and Society in N.Z. Canterbury University Press.

Havighurst, R.J. (1964) The Public Schools of Chicago. The Board of Education of Chicago.

Havighurst, R.J. & Neugarten, B.L. (1962) Society and Education. Boston, Allyn & Bacon.

Havighurst, R.J. & Taba, H. (1949) Adolescent Character and Personality. Wiley & Co., New York.

Hayman, John L. (1968) Research in Education. Ohio. Charles E. Merrill Publishing Co.

Hays, W.L. (1963) Statistics for Psychologists. Holt, Rinehart and Winston, U.S.A.

Hess, R.D. (1969) Parental Behaviour and Children's School Achievement. Head-Start Research Seminar No. 5, Washington, 1969.

Hess, R.D. & Shipman, V.C. (1966) Maternal Attitude Toward the School and the Role of Pupil: Some Social Class Comparisons. Columbia University Teachers' College.

Hoehn, A.J. (1954) "A Study of Social Status Differentiation in the Classroom Behaviour of Nineteen Third-Grade Teachers". Jnl. of Soc. Psych. 39:269-292.

Hones, R.H. (1964) "Social Expectations and Cultural Deprivation". The Journal of Negro Education. 33:2:136-142.

Hough, J.B. & Duncan, J.K. (1970) Teaching - Description and Analysis. Addison Wesley Publishing Co.

Hough, J.B. (1967) "An Observational System for the Analysis of Classroom Interaction" and "Classroom Interaction and the Facilitation of Learning : The Source of an Instruction Theory". In Amidon & Hough (eds.). Interaction Analysis : Theory, Research and Application. The Addison Wesley Publishing Co.

Hunt, D.E. (1966) "A Model for Analyzing the Training of Training Adults". Merrill-Palmer Quarterly. 12:2.

Hunt, J. McV. (1961) Intelligence and Experience. Ronald Press Co., New York.

Husen, Torsten. (1956) "Home Background and Behaviour in the Classroom Situation". Research Bulletin, No. 5. Stockholm, Institute of Education, University of Stockholm, January 1956.

Hyman, R.T. (editor). (1968) Teaching: Vantage Points for Study. J.B. Lippincott Company.

Itzkoff, S.W. (1969) Cultural Pluralism and American Education. International Textbook Company.

Jackson, P.W. (1968) Life in Classrooms. Holt, Rinehart and Winston Ltd.

Jackson, P.W. & Lahaderne, H.M. (1967) "Inequalities of Teacher Pupil Contacts". Learning in Social Settings, Miles & Charters (eds). Allyn & Bacon, 1970.

Jenkins, D.H. & Lippitt, R. (1951) "Interpersonal Perceptions of Teachers, Students and Parents". Nat. Ed. Assn. Washington.

Johnson, H.A. (1970) "The Educational Needs of Economically Deprived Children". Education Digest. 37:7:45-48.

Joiner, L.M. et al. (1969) "Socio-economic Status and Perceived Expectations as Measures of Family Influence". Personnel and Guidance Journal. 47:7:655-9.

Kagan, J. (1968) "His Struggle for Identity". Saturday Review, Dec. 7, 1968.

Kahl, Joseph A. (1953) "Educational and Occupational Aspirations of 'Common Man' Boys". Harvard Ed. Rev. 23:3:1953.

Kerlinger, Fred N. (1965) Foundations of Behavioural Research. Holt, Rinehart and Winston, Inc.

Koopman, Peggy. (1971) Role Consensus and Job Satisfaction in the Educational Organization. Unpublished M.A. Thesis, Massey University.

Kounin, J.S. & Gump, P.V. (1961) "The Comparative Influence of Punitive and Non-Punitive Teachers Upon Children's Concepts of School Misconduct". Jnl. Ed. Psych. 52:42-49.

Kranz, P.L. et al. (1970) The Relationships Between Teacher Perception of Pupils, and Teacher Behaviour Towards Those Pupils. Paper delivered at AERA Annual Meeting 1970.

Lawton, D. (1969) Social Class, Language and Education. Routledge and Kegan Paul.

Lee, J.M. (1969) Foundations of Elementary Education. Allyn and Bacon, Boston.

Lesser, G.S., Fifer, G., Clark, D.H. (1964) "Mental Abilities of Children in Different Social and Cultural Groups". Co-operative Research Project No. 1635, Co-operative Research Program. Office of Education, U.S. Dept. of Health, Education & Welfare.

Lewin, K., Lippitt, R. and White, R.K. (1939) "Patterns of Aggressive Behaviour in Experimentally Created Social Climates". Jnl. Soc. Psych. 10:271-299.

Lewis, W.W. & Newall, J.M. (1962) "Analysis of Classroom Interaction Through Communication Behaviours". Jnl. of Exp. Ed. 30:4:321-22.

Lewis, W.W. & Newall, J.M. (1961) "An Analysis of Classroom Patterns of Communication". Psychological Reports. 61:9:211-219.

Lippitt, R. & Gold, M. (1959) "Classroom Social Structure as a Mental Health Problem". Jnl. of Soc. Issues. 51:1:40.

Loeb, M. (1953) "Implications of Status Differentiation for Personal and Social Development". Harvard Educational Review. 23:Fall:168-174.

Luria, A.R. & Yudovitch, I. (1959) Speech and the Development of Mental Processes in the Child. London.

McClosky, H. & Schaar, J.H. (1965) "Psychological Dimensions of Anomie". Am. Soc. Rev. 30:1:14-40.

Martindale, Don. (1961) The Nature and Types of Sociological Theory. London. Routledge and Kegan Paul.

May, F.B. & DeVault, M.V. (1967) "Hypothetical Dimensions of Teachers' Communication". Am Ed. Res. Jnl. 4:271-278.

Mitzel, H.E. & Rabinowitz, W. (1953) "Assessing Social-Emotional Climate in the Classroom by Withall's Technique". Psychological Monographs. 67:18:1-19.

Medinnus, Gene R. (1961) "The Relation Between Several Parent Measures and the Child's Early Adjustment to School". Jnl. of Ed. Psych. 52:153-156.

Medley, Donald M. & Mitzel, Harold E. (1958) A Technique for Measuring Classroom Behaviour". Jnl. of Edl. Psych. 49:2:86-92.

Medley, D.M. & Mitzel, H.E. (1963) "Measuring Classroom Behaviour by Systematic Observation". Handbook of Research on Teaching. Gage N.L. (ed.), Rand McNally & Co.

Meyer, W.J. & Thompson, G.G. (1956) "Sex Differences in the Distribution of Teacher Approval and Disapproval Among Sixth-grade Children". Jnl. of Ed. Psych. 47:7:385-396.

Musgrove, F. & Taylor, P.H. (1964) "Teachers' and Parents' Conception of the Teacher's Role". Br. Jnl. Ed. Psych. 35:171-178.

Nixon, John E. (1954) "The Mechanics of Questionnaire Construction". Jnl. of Ed. Res. XLVII:7:481-88.

Nuthall, G.A. (1968) "Types of Research on Teaching". N.Z. Jnl. Ed. Studies. 3:2:125-147.

Page, Ellis Batlen. (1958) "Teachers Comments and Student Performance - A 74 Classroom Experiment in School Motivation". Jnl. of Ed. Psych. 49:173-181.

Parsons, T. (1959) "The School Class as a Social System : Some of its Functions in American Society". Harvard Ed. Rev. 24:Fall:297-318.

Phillips, A.S. (1964) "Self Concepts in Children". Ed. Res. 6:2:104-109.

Piaget, J. (1967) Six Psychological Studies. Random House, New York.

Raths, James. (1964) "The Dignity of Man in the Classroom". Childhood Education. 40:7:339-340.

Riessman, Frank. (1962) Culturally Deprived Child. New York, Harper & Row.

Rogers, C.R. (1969) Freedom to Learn. Charles E. Merrill Publishing Company.

Rosenfeld, H. & Zander, A. (1961) "The Influence of Teachers on Aspirations of Students". Jnl. of Ed. Psych. 52:1:1-11.

Rosenthal, Robert & Jacobson, Lenore. (1968) Pygmalion in the Classroom. Holt, Rinehart and Winston, U.S.A.

Rossi, Peter H. (1961) "Social Factors in Academic Achievement : A Brief Review", in Education Economy and Society. Eds: Halsey, Floud and Anderson. The Free Press of Glencoe.

Schwartz, M. & Tangri, S. (1965) "A Note on Self-Concept as an Insulator Against Delinquency". Am. Soc. Rev. 30:922-926.

Sears, P.S. & Dowley, E.M. (1963) "Research on Teaching in the Nursery School", in Handbook of Research on Teaching. N. Gage, (ed.). Rand McNally, P814-864.

Sewell, W.H., Haller, A.O. & Straus, M.A. (1957) "Social Status and Educational and Occupational Aspiration". Am. Soc. Rev. 22:1:67-73.

Shaefer, E.S. & Bell, R.Q. (1958) "Development of a Parental Attitude Research Instrument". Child Dev. 36:329-365.

Sharrock, Anne. (1968) "Relations Between Home and School". Jnl. of Ed. Res. 10:3.

Shirley, Mary M. (1942) "Children's Adjustment to a Strange Situation". Jnl. of Ab. and Soc. Psych. 37:201-217.

Sieber, S.D. & Wilder, D.E. (1967) "Teaching Styles, Parental Preferences and Professional Role Definitions". Sociology of Education. 40:4:302-15.

Snow, Richard, E. (1969) "Unfinished Pygmalion". Jnl. Contemporary Psychology. 14:4.

Soar, Robert S. (1966) Teacher-Pupil Interaction and Pupil Growth. Paper delivered at AERA Annual Meeting, 1966.

Soar, Robert S. (1967) Pupil Growth Over Two Years in Relation to Differences in Classroom Processes. Paper delivered at AERA Annual Meeting.

Staines, J.W. (1956) "The Self Picture as a Factor in the Classroom". Br. Jnl. of Ed. Psych. 28:97-111.

Sugarman, B. (1970) "Social Class, Values and Behaviour in School", in Family, Class and Education, Craft M. (ed.). Longman, London.

Swift, D.F. (1968) "Social Class and Educational Adaptation", in Educational Research in Britain. H.J. Butcher and H.B. Pont. University of London Press.

Taba, Hilda. (1964) "Cultural Deprivation as a Factor in School Learning". Merrill-Palmer Quarterly of Behaviour and Development. 10:2:147-158.

Tanner, J.M. & Inhelder, B. (ed.) (1956) Discussions on Child Development. Tavistock Publications.

Taylor, P.H. (1968) "Teachers Role Conflicts - II. English Infant and Junior Schools". Int. J. Educ. Sci. 2:167-173.

Thomas, D.R., Becker, W.C. & Armstrong, M. (1970) "Production and Elimination of Disruptive Classroom Behaviour by Systematically Varying Teacher's Behaviour", in Learning in Social Settings". Miles and Chambers (eds.). Allyn and Bacon, 1970. P104-120.

Tiedman, Stuart C. (1942) "A Study of Pupil-Teacher Relationships". Jnl. Ed. Res. 35:9:657-64.

Unger, Sanford. (1964) "Relation Between Intelligence and Socially Approved Behaviour". Child Development. 35:1:299-301.

Van de Riet, H. (1964) "Effects of Praise and Reproof on Paired-Associate Learning in Educationally Retarded Children". Jnl. Ed. Psych. 55:3:139-143.

Vernon, P.E. (1969) Intelligence and Cultural Environment. Methuen and Co. Ltd.

Waller, W. (1932) The Sociology of Teaching. New York. Wiley.

Waetjen, W.B. (ed.). (1962) New Dimensions in Learning. Association for Supervision and Curriculum Development.

Waimon, M.D. (1962) "Feedback in Classrooms : A Study of Corrective Teacher Responses". Jnl. of Exp. Ed. 30:4:355-59.

Warden, Sandra A. (1968) The Leftouts. Disadvantaged Children in Heterogeneous Schools. Holt, Rinehart and Winston, Inc.

Warner, W.L., Havighurst, R.J. & Loeb, M.B. (1944) Who Shall be Educated. New York, Harper and Brothers.

Warner, W.L., Meeker, M. & Eells, K. (1949) Social Class in America. Science Research, Chicago.

Washburne, C. & Heil, L.M. (1960) "What Characteristics of Teachers Affect Children's Growth?" School Review. 68:4.

Weber, M. (1958) The Protestant Ethic and the Spirit of Capitalism. Scribner, New York.

Weiner, M. & Murray, W. (1963) "Another Look at the Culturally Deprived and Their Levels of Aspiration".

Withall, John. (1949) "The Development of a Technique for the Measurement of Social-Emotional Climate in Classrooms". Jnl. of Exp. Ed. 17:3:347-361.

Withall, J. (1956) "An Objective Measurement of a Teacher's Classroom Interactions". Jnl. of Educ. Psych. 47:4:203-212.

Withall, J. (1961) "The Development of the Climate Index Jnl. of Ed. Res. 45:93-99.

Withall, John. (1969) "Evaluation of Classroom Climate". Childhood Education. 45:7:403-8.

Withall, John. (1970) "Trends in Observing and Recording Classroom Interaction". Mirrors for Behaviour. Vol. XIII. Simon and Boyer (eds.). Research for Better Schools, Inc.

Withall, J. & De Vault, M.V. (1970) "Mental Health in the Classroom". Mirrors for Behaviour, Vol. XII. Simon and Boyer (eds.). Research for Better Schools, Inc.

Withall, J. & Lewis, W.W. (1963) "Social Interaction in the Classroom", In N.L. Gage (Ed.). Handbook of Research on Teaching. Rank, McNally. P683-714.

Wylie, R.C. (1963) "Children's Estimates of Their School Work Ability, As a Function of Sex, Race and Socio-Economic Level". Journal of Personality. 31:2:203-224.

Zahorik, J.A. (1968) "Classroom Feedback Behaviour of Teachers". Jnl. of Educ. Res. 62:4:147-152.

Zahorik, John A. (1969) "Teacher Verbal Feedback". Classroom Interaction Newsletter. 4:2:34-41.

Zahorik, John A. (1969) Teacher Verbal Feedback and Content Development. Paper presented at AERA Annual Meeting, 1969.

Zaluzhskaia, M.V. (1969) "From Kindergarten to School". Soviet Education. 12:1:3-11.