1990

Digital image processing using mathematical morphology

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IDENTIFYING LANGUAGE LEARNERS AT RISK : PRE-PRIMARY INTO

YEAR 1

BY

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Abstract

Some children in schools in Western Australia may be at risk of developing learning or behavioural difficulties because they have a difficulty in language learning which is uncomplicated by any other obvious cause. Local research by Zubrick (1984) has revealed that, even at the Pre-primary and Year 1 level, such children are perceived to be less academically able than their peers. In an effort to improve identification rates for these children, Zubrick (1984) interviewed parents of children referred for speech therapy, and parents of children not referred for speech therapy, to determine the extent to which they felt that some behaviours were either related, or not related, to difficulty in language learning.

The present study examined the extent to which 79 Pre-primary and Year 1 teachers from 2 school districts of the Ministry of Education of Western Australia agreed or disagreed with some of Zubrick's findings. Generally, teachers in this study and parents in Zubrick's study were seen to be in agreement on the behavioural correlates of difficulty in language learning selected for inclusion in this study, particularly on those behaviours directly related to language performance, such as *Speech is difficult to understand*, and *Cannot make self clearly understood*. The conclusion was drawn that any differences observed between the teachers in this study and the parents in Zubrick's study may have occurred because of the differences in setting between the home and the school, and the differing opportunities available to parents and teachers to observe the effect of some behaviours on the language performance of individual children.

This study also sought to determine the degree to which participating teachers felt that they had the necessary knowledge, skills and training to confidently identify children having difficulty in language learning within their classrooms,

and whether or not they felt that making that identification was part of their role. The majority of teachers in this study indicated that identifying children having difficulty in language learning was part of their role. While the teachers were generally confident that they had the necessary knowledge and skills and training to make that identification, they indicated a need for more training in this area. Comments revealed that the teachers in the study felt that there was a lack of resources, such as access to guidance officers, speech pathologists and other professionals, to assist them in the identification, diagnosis and remediation of children having difficulty in language learning which is uncomplicated by any other obvious handicap.

Declaration

I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any institution of higher education; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.

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ACKNOWLEDGEMENTS

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Chapter 1

Introduction

Background

Some children attending primary school in Western Australia may have difficulty in one or more aspects of language learning. The difficulty occurs in the absence of any obvious cause such as hearing loss, otitis media, mental retardation, physical disability, mental disorder, or low intelligence. Further, the difficulty may only become apparent as children are exposed to the increasing language demands of the school setting. It is important that children having difficulties in language learning be identified in Pre-primary or Year 1 so that, if necessary, effective intervention techniques can be employed in order to alleviate future learning difficulties and/or behaviour problems.

There is evidence to show that difficulty in oral and written language at school can be preceded by difficulties in oral language at an earlier age. The evidence has been provided by researchers using longitudinal studies (e.g. Bishop & Adams, 1990), retrospective studies (e.g. Rutter, Tizard & Whitmore, 1970, cited in Bishop et al., 1990), and mass screening programmes which have included a follow-up component (e.g. Gray, 1988). Behavioural correlates of difficulty in language learning have also been widely reported in the literature. However, Zubrick (1984, p. 3) indicates that "little systematic research has addressed the behavioural correlates of language impairment, despite clear clinical reports in the literature of behavioural sequelae or consistent behaviour problems in language disordered children."

Theoretical Framework

Carrow-Woolfolk and Lynch (1982) suggest that language is a complex phenomenon. Their feeling is that no theory of language acquisition can be ignored, since each may explain at least some part of the process. Carrow-Woolfolk (1988) discusses a number of theories emanating from particular views of language development, showing how the adoption of each viewpoint has changed the way in which difficulty in language learning has been perceived and described in the clinical setting. These theories are discussed chronologically, beginning with the neuropsychological theory. Carrow-Woolfolk indicates that this theory focuses on language as a physiological function of the brain. Neuropsychological theorists claim that there are different types of language difficulties, depending on the degree and type of brain dysfunction. The behaviourist theory which follows does not, however, acknowledge different types of language difficulties. While the former focuses on language as an inherent brain function, the latter claims that language is a learned behaviour resulting from antecedents and consequences of language behaviour. Thus, its proponents claim that language difficulties occur when there is a difference between the language behaviours of children and of adult models.

Carrow-Woolfolk's discussion of the theories which followed the behaviourist theory shows an increasing focus on the nature of language itself, in order to develop explanations of difficulty in language learning. For example, the information processing theorists describe language as a relationship between input and output processes. For these theorists, difficulty in language learning thus becomes a deficit in the function of any of the processes in the sequence. Linguistic theorists extend the focus by concentrating on language as a system of abstract rules. For linguistic theorists, difficulty in language learning is based on difference, rather than deficit. Proponents of this view indicate that

differences can be detected when children and their peers are placed on developmental indices.

Carrow-Woolfolk indicates that the cognitive organisation view which follows builds on from these theories, focusing on language as one of many (similar) cognitive tasks. However, those subscribing to this theory claim that difficulty in language learning is a result of basic problems in learning systems, rather than just a language difficulty. Under this view, it seems that children with difficulty in language learning would also have other learning problems.

In the most recent of the theories described by Carrow-Woolfolk, a return to a focus on the processes of language to explain difficulty in language learning can be seen. Advocates of this theory, the pragmatic theory, focus on communication as the prime function of language. Therefore, they see difficulty in language learning occurring as a result of a breakdown in some, or all, of the interactive processes of communication.

However, Emmitt and Pollock (1991) are among those who acknowledge that, although many of these theories have had some impact, it is the behaviourist theory which has dominated education for many years. Teaching practices developed from this theoretical base have relied heavily on habit formation using a stimulus/response paradigm. Difficulty in any aspect of learning (including language) has thus been said to occur when learners fail to respond to stimuli in the manner of adult models. Any variations in the nature, cause or characteristics of the difficulty have often been overlooked when intervention/remediation strategies have been planned or implemented.

Recent trends in education in Western Australia have seen a shift away from this view, with the adoption of the theory of language learning and language teaching known as the Whole Language Approach. This approach has had input from both psycholinguistics and sociolinguistics. Emmitt and Pollock

(1991) define the former as the investigation of processes involved in language and the mind and the latter as the use of language in varying social contexts.

Cambourne (1988) is a major exponent of the Whole Language Approach. He bases his view of the teaching/learning paradigm on two key assumptions, the first of which is central to the discipline of psycholinguistics. This assumption is that the oral and written forms of language are only superficially different in that, regardless of the form of language being presented, the mind is only concerned with one function -- the making of meaning. The second of his assumptions comes from the discipline of sociolinguistics and acknowledges the ways in which children master the complexities of oral language as they learn to talk within the family setting. He describes learning to talk not only as a stunning intellectual achievement, but also as one which is usually achieved painlessly and without formal instruction.

In developing these assumptions into a model of teaching and learning Cambourne acknowledges the validity of the differing cultural and linguistic styles which each learner brings to the task of language acquisition. He recognises that there may be different reasons for difficulty in language learning and does not attempt to determine a single causatory factor.

Cambourne rejects traditional approaches to assessment, such as the allocation of numerical grades or the determination of reading ages through the use of set criteria. Instead he advocates the careful observation of children engaged in language learning both across time and in a number of settings, as a means of determining the nature of any difficulty. This approach has been formalised by researchers such as Clay (1972) and Goodman (1980).

There has also been, in the description and assessment of language learning, a widespread use of developmental language indices favoured by the linguistic theorists. Some of these indices, such as that given by Sheridan (1985), are

chronologically based and prescriptive in their view of age appropriate behaviour. Sheridan charts language behaviours in the young child by the month or year, listing precise descriptions of behaviours such as "chuckles and laughs: 3 months" , "beginning to ask questions (what? where?) and offer simple information: about 24 months", or "conventional grammar usage: 5 years".

Other developmental indices such as the First Steps programme (a Ministry of Education initiative in Western Australia) establish a hierarchical model of developmental stages in language learning. Proponents of these indices acknowledge differing maturational rates of children, and stress that the stages of development they describe should not be linked to chronological age or year levels within the education system.

Clay (1991), however, exposes the problematic nature of such indices. She questions the assumption that all children will move through similar developmental stages or indeed have similar learning experiences. She indicates that developmental indices ignore the fundamental differences which occur not only between cultures which are obviously different, but also between cultures which appear to be similar, or between subsections of the same culture. Additionally, Clay suggests that individual learners may appear to ignore certain stages, prefer to develop their skills in other ways, or move on to parts of higher or lower stages in a totally different manner from that prescribed.

I have no difficulty in accepting the tenets of Cambourne's theory, the rationale which underlies it, or the key assumptions on which it is based. I can also appreciate that, for many educators, developmental indices may be a useful tool in that they can provide clues as to the stage at which the language learner may be operating. My dilemma lies in the acceptance of the use of

observation of language behaviours *only* to determine whether or not children are having difficulty in language learning, particularly with reference to the Pre-primary and Year 1 age group. While both the careful observation of children engaged in language learning tasks and the use of developmental indices may be useful strategies for the identification of children having difficulty in language learning, they make no allowance for children who do not progress through the normal channels of development. Nor do they encourage the teacher to look beyond the presenting language behaviour to determine the influence of such factors as cultural variation, context or social constructs. Further, they do not acknowledge the behavioural correlates found by Zubrick (1984) to be reliable indicators of an underlying difficulty in language learning. It is important to recognise that many behaviours which were shown in her study to be indicative of this difficulty may not appear to be connected to language. For example, extreme shyness may be a personality or cultural trait, but may also be indicative of difficulty in language learning. Aggressive or violent behaviour may occur as a result of difficulty in language learning and may not only be a behavioural or emotional disorder. A lack of interest in any language-based learning task may well be due to a lack of understanding as to the nature and requirements of the task rather than to a lack of motivation, a lack of interest in the context in which the task is presented, or a sign of low intelligence.

It is reasonable to assume that as language-based learning tasks become more complex then difficulty in language learning should become easier to detect. In Pre-primary or Year 1 children, however, such difficulties may be hidden from the observer. Children beginning to have difficulty in more complex language tasks may develop behaviours such as copying or mimicking other learners; never taking risks; becoming aggressive; using only familiar or rehearsed language structures; refusing to engage in protracted

conversation; relying on familiar adults or other children to interpret, explain or request on their behalf; and never (or rarely) asking questions or seeking explanations. At this stage of development when learning tasks are based in oral, aural, or non-verbal areas of language, teacher recognition of behaviours such as the foregoing would seem to be important if early detection of difficulty in language learning is to occur and appropriate action is to be taken.

Purpose of the Study

This study is an extension of the work carried out by Zubrick (1984) with parents. However, the focus of this study is on the perceptions of teachers in relation to behaviours which may or may not be related to difficulty in language learning. It seeks to examine the extent to which Pre-primary and Year 1 teachers agree that the behaviours identified by parents as being related to difficulty in language learning may be associated with that language difficulty. The study also seeks to determine the extent to which Pre-primary and Year 1 teachers agree that some of the behaviours shown by the parents in Zubrick's study not to be related to difficulty in language learning may be related to that language difficulty. Similarities and differences between the views of teachers in this study, and the parents in Zubrick's study, will also be explored by establishing the order of relative importance of each behaviour for both groups.

In the preparation of this study, little research was found on the way in which teachers in Pre-primary and Year 1 classes in schools in Western Australia describe their confidence in their ability to identify children having difficulty in language learning, or whether they feel that making that identification is part of their role. It would seem to be relevant to investigate these issues since researchers such as Illerbrun and Greenough (1983), Patterson and Wright (1990), and Kemp (1986) are among many who indicate that teachers may feel that the identification of children having difficulty in language learning is not

part of their role, or that they do not have the necessary knowledge, skills or training to confidently make that identification.

Definitions

For the purposes of this research the following definitions have been adopted.

Language

Language is defined as the construction and sharing of meaning among culturally aligned groups. It is global in nature; is a complex interplay of many systems; and is central to any learning regardless of the discipline.

From Emmit and Pollock (1991, Chap. 1).

Difficulty in Language Learning

Difficulty in language learning occurs when the learner fails to either convey meaning in, or extract meaning from, an interchange in one or more of the modes or genres of language appropriate to their level of maturation and development. Therefore, in this research, the term will be used to describe persistent language behaviours that are different from those expected within the school setting, considering a child's chronological age. It will relate only to those children whose different language behaviours cannot be explained by difficulty or delay in their mental, physical or emotional development. This definition refers only to those children having difficulty learning English as their mother tongue, and does not refer to children having difficulty in learning another language, nor to children learning English as a second language.

This definition is based on Speaking and Listening (Draft Edition), Curriculum Programmes Branch, Ministry of Education of Western Australia.

Pre-primary

The term refers to the year spent by children (who are usually turning 5 that year) in a designated Pre-primary centre within the Ministry of Education in Western Australia prior to entering the first year of formal education.

Year 1

The term refers to the first year of formal schooling within the Ministry of Education of Western Australia system. Children usually turn 6 during this year.

Plan of the Thesis

The remainder of this thesis is set out in accordance with the following outline.

Chapter 2

Chapter 2 presents a review of the literature associated with behavioural correlates of difficulty in language learning. The chapter commences with a discourse on the nature of language, followed by a discussion on those issues which may affect the identification of difficulty in language learning in Pre-primary and/or Year 1 children. The chapter concludes with a summary and the research questions.

Chapter 3

Chapter 3 opens with a description of the selection of subjects and the instrument chosen to collect data to answer the research questions. A description of the design of the questionnaire and the validity and reliability measures taken to ensure valid data collection follows. The chapter concludes with a description of the procedures used to carry out data collection.

Chapter 4

This chapter describes procedures used to carry out data analysis, the results of data analysis, and discussion of results for each research question. The chapter concludes with a summary on the findings in relation to each of the research questions.

Chapter 5

Chapter 5 contains a general discussion on the findings of this study, followed by acknowledgement of the limitations of both this study, and the study on which it was based. The chapter concludes with a discussion on the implications of the findings from this study for classroom practice and for future research.

Chapter 2

Review of Literature

The Nature of Language.

Any discussion on the nature of language is made difficult because language, as a tool for communication, "is among the most complex human functions" (Hallahan & Kaufmann, 1991, p. 218). Further, the term *language* means different things to different people depending on their individual perspective. Cambourne (1988) indicates that some educators have previously viewed *language* as a series of discrete, unconnected skills which have been taught under such arbitrary headings as phonics, spelling, grammar, writing, or reading. Language has also been seen as separate from other subject areas such as mathematics, science, art, social studies, or music.

A number of researchers, including Emmitt and Pollock (1991), are assisting educators to change this view as the principles of such theories as the Whole Language Approach are accepted. Emmitt and Pollock define language as "a complex and abstract phenomenon that can be realised through a number of verbal and non verbal codes which are centred on the construction and sharing of meaning among culturally aligned groups" (p. 5). They also discuss the role of language as being the means by which we can structure our world and make sense of our environment. From their discussion they conclude that language cannot be divorced from thinking or from learning in any sphere of human activity. They see learning as not just the acquisition of a series of facts, but rather as the ability to discover relationships between pieces of information and to develop concepts from available information.

Difficulty in Language Learning.

Many terms have been used in the literature to describe, name or categorise difficulty in language learning. For example, Cantwell and Baker (1987) make use of the term *developmental language disorder*, which they indicate is synonymous with such terms as *dysphasia, developmental childhood aphasia, minimal brain damage, oligophasia, congenital auditory imperception, developmental word deafness, language retardation, delayed language development,* or *language disability.* However, Fletcher (1990) indicates that the complexity of defining the concept of *language* and "the absence of any clear aetiology and the lack of precise clusters of linguistic symptoms make many of these terms imprecise" (p. 427). Zubrick (1984) also acknowledges that definitions of *speech* and *language* have varied across time, and that this has compounded difficulties of definition from an historical perspective. Definition of *difficulty in language learning* has been further complicated because such difficulty can occur in conjunction with many other physical, mental or emotional disorders, or in isolation. It may also be culturally based, occur as a result of context, or be socially constructed.

In her research, Zubrick (1984) has resolved this issue from a clinical perspective by establishing that "there is consensus that clear differentiations can be made between pure-speech, pure-language and speech-and-language impaired children" (p. 21). She has also accepted the findings of Wolfus, Moscovitch and Kinsbourne (1980) who, after consideration of a broad range of neuropsychological and language data, reported two subgroups of language disability -- an expressive group, and a receptive/expressive group.

Parameters for this research, however, are set within Pre-primary and Year 1 classrooms in mainstream schools in Western Australia, where teachers do not generally have access to such a detailed body of knowledge on the nature of

difficulty in language learning. Within this setting English speaking children who have either speech-and-language or pure language disorders may not be obviously impaired. They may not be referred to a clinician, with the result that the nature of their difficulty may never be identified. Alternatively, they may be referred for diagnosis much later in their school career, by which time they have already experienced years of failure and considerable loss of self esteem.

Such children are at risk of developing learning difficulties and/or behavioural difficulties in conjunction with their language difficulties, and it becomes progressively harder to intervene effectively as they are moved through the education system. As previously acknowledged, difficulty in one area of language may well precede or be linked to difficulty in another. Mann and Brady (1988) indicate that there is a great deal of consensus among researchers that many instances of difficulty in learning to read can reflect problems in one or both of the following areas: (a) language processing, and (b) awareness of phonological structure. Both of these skills are developing in Pre-primary and Year 1 children, and at this stage effective remediation strategies can be implemented without drawing undue attention to the fact that children are not succeeding with more academic tasks.

The term *difficulty in language learning* is used in this research in preference to such terms as *language disorder, developmental language disorder* or *language disability*. The term is used to describe any different, persistent language behaviours in Pre-primary and/or Year 1 children which are inappropriate for their chronological age when they are speaking, listening, reading or writing. The focus in this study is, however, on speaking and listening behaviours as most Pre-primary, and some Year 1, children do not have highly developed reading and writing skills. It should be noted that this definition refers only to those children having difficulty learning English as their

mother tongue and does not refer to children having difficulty learning a second language, nor to children learning English as a second language.

Incidence of the Difficulty.

Statistical information on the incidence of difficulty in language learning varies widely from source to source. A 1989 screening project initiated by the Speech Pathology section of the Health Department of Western Australia on the 1984 birth cohort indicates that the incidence of difficulty in speech and/or language learning was 11.65%. This figure was collated on the basis of clinical follow-up of cases referred by parents who identified their child as having difficulty in language learning. Parents made that identification by assessing their child on 10 behaviours. The behaviours were obtained by selecting the 10 most sensitive items from the 90 described by Zubrick (1984) as being possibly associated with difficulty in language learning. Gender differences were reported for that survey population, with 65% of those detected being male and 35% female.

Cantwell and Baker (1987, p. 8) also acknowledge gender differences when they indicate that their research reveals that approximately three males are affected for every female in what they term as *developmental language disorder*. They define this disorder as "a disturbance or delay in the acquisition of language that cannot be explained by general mental retardation, hearing impairment, neurological impairment, or physical abnormalities" (p. 11).

Evidence presented to the Senate Standing Committee on Education and the Arts (1984) resulted in the following information being presented in paragraph 9.47 of the Australian National Language Policy:

> ...Experience in the United States and United Kingdom indicates that seventeen per cent of children may be disadvantaged by language

incompetence. A South Australian survey of State Schools indicates that the figure could be as high as eighteen and a half per cent or two in every nine children.

Three possible reasons have been given in the policy for the lack of statistics. Firstly, the lack of facilities may have inhibited referral of children for treatment by teachers or other professionals. Secondly, the behaviour of children in the classroom may cloud identification of the problem until they are much older. Thirdly, the lack of adequate statistics may also be an artefact of the lack of teacher training in the nature and function of language and the identification of language difficulties.

Concept of Transience.

A concept which may also affect the identification of difficulty in language learning in the young child is that of transience. This issue has been addressed by Bishop and Edmundson (1987) who investigated the effect of transient difficulty as opposed to persistent difficulty. In some cases difficulty in language learning may appear to resolve naturally as the child grows and matures, and the difficulty is therefore said to be transient.

Bishop and Edmundson (1987) suggest that in such cases early identification and intervention may create more problems than it solves in terms of reduced teacher expectation of performance levels in children so identified, increased levels of parental anxiety, and loss of self esteem or heightened self consciousness in the children. However, their concerns would appear to be negated by the findings of Rutter and associates (cited in Duane, 1988) who carried out a number of studies on the Isle of Wight in the United Kingdom. Duane maintains that the longitudinal nature of those studies demonstrated that, in the absence of any specific attempts at remediation, not only does the difficulty persist but the population of underachievers within a general

population tends to enlarge. He comments that unfortunately, these data seem to have had little impact on education. Hallahan and Kaufman (1991) also stress that "all communication disorders carry social penalties", and indicate that "disorders of this function do not always yield to intuitive or commonsense solutions" (p. 218).

Discussions such as this highlight the need for early identification even if no immediate intervention is planned. It would therefore seem desirable that teachers are aware of the importance of such issues. In many cases, a lack of teacher awareness of the significance of such issues may mean the difference between a child being referred for appropriate help or not being referred in time for effective remediation to be able to occur.

Concept of Relativity.

Identification of difficulty in language learning may be further complicated by the concept of relativity discussed by Zubrick (1984, p. 21). This concept reflects the notion that by a given age children should have gained control over certain aspects of behaviour or have achieved certain levels of linguistic competence.

An example of how this can complicate the issue of identification of difficulty in language learning in the Pre-primary or Year 1 child is that of mastery of the sounds of language. For example, teachers could reasonably expect that by the age of 6 a child has command over most of the single sounds of language. Any child having difficulty enunciating 4 or more single sounds may well be suspected of having difficulty with oral language. A speech therapist, however, may or may not see this as a difficulty depending on the particular sounds and the way in which the child uses articulatory organs to produce the sounds. A parent may feel that the child's speech is representative of the way in which the

family speaks and is therefore acceptable, or conversely feel extreme anxiety since no other family members have spoken this way.

The concept of relativity in oral language and some associated speech and language behaviours has been addressed in a series of benchmarks or developmental milestones established over time by therapists, psychologists, linguists, and other professionals. These benchmarks, however problematic, have provided the basis for the expectation that an individual child will achieve a certain performance level in oral language by an approximate chronological age. Appendix A gives 2 examples of how such benchmarks may be presented. The first lists expected performance against chronological age in months and years, and the second is in the form of a checklist put out by the Speech Pathology section of the Health Department in Western Australia for use in Pre-primary centres.

The concept of relativity is not as easily addressed in relation to behaviours which are not directly language related but which may be significant in the identification of difficulty in language learning. Zubrick (1984) discusses a number of reasons why this could be so, indicating that judgements on behaviour are subjective and can be affected by a number of variables such as age, gender, parental expectations, and the persistence of behaviours across time. In her research Zubrick acknowledges that parents and teachers are the most important adults in the lives of young children, but indicates that parents are in a much better position than teachers to observe a greater range of their children's behaviour in wider contexts and across longer periods of time. She acknowledges that parents are generally good observers of their children's speech and language, quoting research by Weber, Kushnir and Weber (1982) as showing evidence that in instances where, when parent and teacher reports are in conflict, the parents generally have been shown to be correct.

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Zubrick also indicates that parents are ultimately responsible for determining the degree of assistance that children might receive, based on their view of the relativity of any difficulties in behaviour and/or language learning detected by the classroom teacher.

Parents and teachers, however, observe the child in very different domains. The class teacher has the opportunity to observe the child interacting with a large group of peers in a number of specific task settings and may be in a position to detect the presence of any difficulty in language learning and the need for possible referral for further diagnosis and/or intervention. It would therefore seem to be important to determine the extent to which teachers agree or disagree with the significance of various behaviours already identified by parents and clinicians as being reliably associated with difficulty in language learning. It would also appear to be useful to ascertain the degree of confidence felt by teachers in dealing with any issues related to the identification of difficulty in language learning within the classroom.

Child Behaviours

Behaviours within the school setting of children who may have difficulty in language learning are widely reported in the literature. A number of terms have been used to describe either the behaviour or the accompanying language related difficulty. For example, Lipson (1981) indicates that:

> .....a child with a *language disorder* may be distractable, easily frustrated and have a short attention span. He quickly acquires a reputation for failing to follow directions....The child may have above average ability to understand language, and above average intelligence, but will often have trouble expressing himself (p. 201).

Griffith (1980) describes the child with a generalised, relatively *mild motor impairment* often known as the *clumsy child*. She indicates that these children may often be blamed for behaviour they cannot help, such as untidiness, poor performance at games, messy eating, extremely poor handwriting, and great difficulty in reading and writing.

On the other hand Connor (1987) describes the behaviour of the quiet child who may have an *anxiety syndrome* related to a lack of communicative ability. He indicates that such children are reluctant to answer, disclose less, will not seek help, do poorly in group work, and never (or rarely) draw attention to themselves by behaving badly.

Cooper, Moodley and Reynell (1978, cited in Illerbrun & Greenough, 1983) indicate that the frustration felt by children who are unable to communicate effectively sometimes leads to antisocial behaviour. In this situation it is often the behaviour which becomes the focus, rather than the underlying difficulty in language learning.

Such reports, however, appear to do little to clarify the issues from the teachers' perspective. They are generalised, and do not discriminate between children with difficulty in language learning and those with associated handicaps. They are rarely linked to a particular age group, and lack strength in their discussion since they are often not backed up by specific research.

Zubrick (1984) carried out a research project which addressed these issues in two ways. Firstly, she examined the concept of behavioural correlates of difficulty in language learning from an historical perspective by carrying out a detailed literature review. Secondly, she approached practising clinicians on a number of occasions to verify the validity of the behavioural correlates identified in that review and to add any which were currently felt to be significant. This procedure enabled her to list 90 behaviours out of a possible

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200 which could be significantly associated with difficulty in language learning (Appendix B).

To test the strength of the relationship of each behaviour to an underlying difficulty in language learning, Zubrick established a sample of 825 children in the 4 - 7 year old age group. The parents of each child were interviewed by a speech pathologist or a trained research assistant and asked to indicate whether each behaviour was (a) not true, (b) sometimes true, or (c) very true for that child. The sample consisted of 2 groups, the first of which contained 413 children referred to speech therapy clinics in the Perth Metropolitan area for treatment between August and December, 1983. The referred group was assessed by a speech pathologist before inclusion in the study. Children were excluded where there were hearing difficulties, associated developmental handicaps, a history of seizures, any neurological or psychiatric history, low IQ, oro-facial anomalies, and/or dysarthrias. A random sample control group of 412 children was selected from the same pre-schools or schools attended by the clinical group. The control group was matched according to age and gender.

Detailed statistical analysis showed that 4 individual behaviours discriminated extremely well between referred children having difficulty in language learning and their randomly chosen counterparts, and a further 21 behaviours discriminated moderately well between the 2 groups. Zubrick made distinctions on the strength of the effect of each behaviour by examining the amount of variance captured by the independent variable (namely clinical status, i.e. referred or not referred for speech therapy). These behaviours are listed in descending order of significance in Table 2.1

Table 2.1

Significant Behavioural Indicators of Difficulty In Language Learning

(Zubrick, 1984)

1. Cannot make self clearly understood to others	14. Physically attacks others
	15. Refuses to talk
2. Speech is difficult to understand	16. Does not relate to other children
3. Cannot say all sounds correctly	17. Finds instructions hard to follow
4. Cannot retell a message accurately	18. Is shy
5. Is not active in conversation	19. Siblings talk for him/her
6. Says very little	20. Does not tell stories
7. Is reluctant to join in groups	21. Only talks to one person
8. Likes constancy	22. Talk is difficult with friends
9. Needs time to adjust	23. Poor school work
10. Does not ask questions	24. Clings to adults
11. Is reluctant to talk in groups	25. Does not enjoy stories
12. Is withdrawn	26. Poor concentration
13. Acts too young	

NB Numbering indicates the relative order of importance of each of the behaviours in Zubrick's (1984) study.

Zubrick's study is of importance to the present work since the research was carried out on a local population, is comparatively recent, and is one of the few studies which has examined the area of behavioural correlates of difficulty in

language learning. She reports that the results of her study "are in accord with Cantwell et al (1980) in that, as a group, speech-and-language handicapped children do have a higher prevalence of behaviour problems than a matched group of non-referred children" (p. 105).

Analysis of each of the 90 behaviours individually also led Zubrick to conclude that there were 12 behaviours which did not discriminate referred from non-referred children on any variable taken into consideration i.e. clinical status, age, gender, or socio-economic status. Table 2.2 lists those behaviours.

Table 2.2

Behaviours Not Associated With Difficulty In Language Learning

(Zubrick, 1984)

Has allergies	Has asthma
Has sudden changes in mood or feeling	Is impulsive
Follows things better when shown	Is accident prone
Suffers from earache	Unusually naughty
Is clumsy	Whines
Gets bored with toys quickly	Visits the doctor frequently

One of the limitations of Zubrick's study is that she does not appear to address the issue of cultural influences, nor that of children from non-English speaking backgrounds. A further limitation is that Zubrick uses data obtained from parents only to determine the significance of each of the behaviours which were listed by practising clinicians, or compiled from previously validated

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studies. Nevertheless, her findings have sufficient strength to make it seem to be important to establish teacher agreement on the extent to which those behaviours either may, or may not, be associated with an underlying difficulty in language learning. Accurate identification of children having difficulty in language learning in the Pre-primary or Year 1 classroom may well rest on the expertise of the teacher in correctly identifying those behaviours which are significant and those which are not, in conjunction with any other testing or assessment which may occur.

Formal Processes of Identification

Standardised Tests

Standardised tests are often used as a diagnostic tool by school guidance officers or other professionals to decide whether or not a child should be referred for further investigation. Strickland and Morrow (1989) outline common concerns in their discussion of the problems associated with the use of such tests, including the fact that the tests frequently do not reflect the skills and knowledge that are developing in young children. They indicate that such tests often reflect an outdated theoretical base and may focus only on a narrow set of specific skills. Additionally, it is of major concern that frequently these tests only allow for a limited range of responses to be classified as correct, thereby negating the linguistic background and cultural experiences of individual children.

Given these common concerns it would therefore seem to be important, when using such tests, not only to consider other aspects of children's language performance, but also to note the persistent presence of any of the behaviours shown by Zubrick to be significantly associated with difficulty in language learning.

Screening Programmes

In some areas, screening programmes are used to detect learning difficulties across whole school populations. Patterson and Wright (1991) point out that early screening programmes, which may or may not include an assessment of speech, language and hearing, are often not efficient at identifying children with subtle or inconsistent difficulty in language learning. Such children are clearly at risk of their difficulty intensifying as their schooling progresses, as has been previously acknowledged in this study with reference to the findings of Rutter and associates (p. 14). Aram, Ekelman and Nation (1984) also suggest that the language disorders recognised in pre-school years are often the beginning of long standing language, academic and/or behavioural problems.

Zubrick asked teachers to determine the academic standing of children included in her study, indicating that parents are generally not able to competently judge this aspect of their children's performance. She reports that generally, children with language difficulties are perceived by teachers to be doing far worse academically than their non-referred counterparts, and even at these early stages of schooling the secondary effects of a primary language disability may be making themselves felt. Her findings seem to reflect the concerns of Patterson and Wright (1990) in so far as they underline the importance of using all available means to detect children having difficulty in language learning as early as possible.

It may also be that where such screening measures are in use, reliance is placed on their efficiency to such an extent that teachers and other professionals are not sensitised to the possibility of difficulty in language learning not being detected. This would seem to support the premise that such

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professionals should be familiar with both the nature and range of difficulties in language learning and associated behavioural correlates.

The Referral Process

The nature of the referral process operating in Pre-primary and Primary schools in Western Australia can also be a complicating factor in the identification of children with difficulty in language learning. Illerbrun and Greenough (1983) describe the process as being linear in nature. Children suspected of having difficulty may be referred by the class teacher to the school psychologist via the principal. The psychologist, in turn, may refer children to a centre for further diagnosis. At the centre the children may be seen by a number of therapists from different disciplines. At each stage of the referral process factors other than the actual identification of the nature of the difficulty may become important. Such factors may include time constraints, the availability of professional diagnostic services, the degree of severity of the difficulty in relation to other children in the process, the child's perception of what is happening, and the willingness of parents to cooperate and participate. The end result of the process can be that little or no information in terms of the actual nature of the difficulty may be passed back to the class teacher in a form which can be readily understood or acted upon.

A second factor of significance in the identification of children having difficulty in language learning and which also relates to the referral process is that of time. By the time a teacher suspects that a child's difficulties may be language related (rather than behavioural, emotional, medical or due to low intelligence) and the child goes through the referral process, it is usually halfway through the school year. In this situation the referral process may be of little value since, by the time the child is assessed and any reports made, it is close to the end of the school year. The following year may well see staff changes, the

child may change schools, or there may be no continuity of record keeping which could alert the following teacher as to the nature of the difficulty or the special needs of the child.

The fact that the referral process exists, however, means that once again reliance may be placed on its efficiency, and individual teachers may feel that the identification of any difficulty in language learning is not in their domain. They may lack confidence in the ability of the parents to report accurately on results of any testing or assessment in cases where there is a time lag between the assessment at a clinic and the sending of a report to the school. Teachers may also feel a lack of confidence in either the process or the reports that it produces because of the lack of consultation between the various disciplines and/or the technical nature of those reports. There would appear to be little research which seeks to ascertain teachers' views in this area.

Teacher Expertise and Efficiency

Expertise

Zirkelbach and Blakesley (1985) suggest that a major component in the identification of difficulty in language learning in the classroom is that of teacher expertise in separating the contribution of poor or deficient oral language from that of low intelligence, perceptual dysfunction or lack of motivation. Context and cultural influences may also affect performance, and should not be ignored when assessing difficulty in language learning.

While some teachers may readily identify an obvious difficulty in oral language, such as stuttering, or difficulty in using articulatory organs to produce certain sounds, they may not realise the significance of an apparently minor difficulty or behaviour which may or may not increase as the child progresses through the education system. Patterson and Wright (1990) reinforce this observation.

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They suggest that teachers or other school personnel do not perceive the impact of such difficulties, and that this prevents identification of the problem until children are much older. They also suggest that many teachers are lacking in an understanding of the academic effects of difficulty in language learning. Clay (1972) suggests that teachers need to develop their expertise in the observation of childrens' language behaviours if they are to develop their ability to detect abnormalities in language development. Illerbrun and Greenough (1983) feel, however, that many teachers lack that expertise because they have not had sufficient training in the nature and functions of language. They further suggest that many teachers may view the identification and diagnosis of difficulty in language learning as a complicated task to which they have nothing to offer in the way of skills.

A second component of teacher expertise relates to the way in which teachers deal with parents or prime caregivers in order to establish accurately the behaviour and language capabilities of the individual child. This would seem to be significant when one considers the findings of researchers such as Kemp (1986) and Waggoner and Wilgosh (1990). Kemp states that parents are expert at developmental assessment since it is something in which they are involved from the moment the child is born. Research carried out by Kemp (1987), however, reveals that support available to parents of children with learning problems indicates a professionally worrying situation. Many of these parents, when expressing their concerns to the class teacher, are not taken seriously. Kemp feels that teachers are too gentle and generally try to be supportive when what is needed is professional insight and firm actions.

Waggoner and Wilgosh (1990) report similar findings after establishing the shared experiences of a group of parents of children identified as having learning difficulties. Seven of the eight families they interviewed had had

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negative experiences with the school in that the teachers did not accept that the children had problems.

The importance of teacher expertise in asking the right questions at interview in order to gain useful and accurate information is stressed by both Lynch (1979) and Cantwell and Baker (1987). Lynch has based the development of her Pre-screening Language Checklist on the assumption that the adults who have daily contact with the child are able to make valuable observations of that child if they are asked the right questions. Nevertheless, Cantwell and Baker (1987) have found weaknesses in parents' estimates of their child's competence in the comprehension of spoken language. They suggest that this is possibly due to the fact that children may respond appropriately to instructions because of situational cues, non-verbal cues, or chance, rather than because of true linguistic comprehension of the command.

Observations such as these highlight the need to ascertain the standing of teachers of young children not only in their levels of expertise and confidence in their ability to detect difficulty in language learning but also in their levels of confidence and expertise in the interviewing of parents.

Efficiency

A plethora of checklists and rating scales has been developed for teachers to use in the identification of children experiencing difficulties in either learning and/or language. This may indicate that teachers' ability to do so, unaided, is questionable. Simner (1986) claims that rating scales are necessary because teachers' global judgements might not be accurate, even though they have had the opportunity to become well acquainted with children in their classes.

This observation is reinforced by Lynch (1979) in the rationale for the development of her Pre-screening Checklist. Prior to inservicing in the use of

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her checklist, teachers tended to over identify children with articulation defects such as stuttering or stammering. She makes the observation that before the checklist was used, teachers identified some 42% of children as having difficulty in this area, but fewer than 1% were found to have significant symptoms when assessed clinically.

The Australian Association of Special Education (para. 9.52, Australian National Language Policy, 1984) considers that the early identification of children having difficulty in language learning could be made more efficient through close parent / teacher cooperation. No research investigating this hypothesis has been located, but Handen, Feldman and Honigman (1987) have raised and investigated the extent of parent/teacher agreement on the assessment of developmentally delayed children's behaviour. They indicate that there is a lack of research on the most efficient way to identify these children, be it through clinicians, therapists, teachers and/or parents working alone or together. Their research shows that over four areas of assessment the lowest area of agreement between parents and teachers was found in the language section of their questionnaire. Handen et al., indicate that their findings show that overall there is sufficient disagreement to cast doubt on the ratings of children that are made by just parents alone or just teachers alone. Given the importance of language in the social standing and life experiences of the individual it would seem that research investigating this area would be of value.

Conclusions

From the preceding review certain conclusions can be drawn. In the first instance it would seem that more children may be affected by difficulty in language learning than has previously been acknowledged by educators. In making this conclusion gender differences must be acknowledged, since it has

been shown by a number of researchers that more boys than girls in the Pre-primary and Year 1 age group may be affected. These children are at risk of developing learning difficulties, behavioural problems and loss of self-esteem if their difficulty is either undetected or not correctly identified.

It would appear that the testing, screening and referral programmes currently in use are not as efficient in the identification of children having difficulty in language learning as has previously been supposed. Further, accurate identification of these children in Pre-primary and Year 1 may depend heavily on the professional expertise of the teacher both in assessing the nature of the difficulty and in interviewing the parents in order to gain useful and accurate information.

It would also appear that teachers of Pre-primary and Year 1 children should be aware of the links between difficulty in speaking and difficulty in learning to read, as established by Mann and Brady (1988).

A number of the issues discussed in this review of literature indicate the desirability of using as many means as possible to identify children at risk in language learning. It would therefore seem to be appropriate in this study to investigate the extent to which teachers agree that those behaviours identified by the parents in Zubrick's study as being related to difficulty in language learning may be, in their experience, related to that difficulty. It would also seem to be appropriate to determine the extent to which teachers agree that those behaviours shown by the parents in Zubrick's study not to be related to difficulty in language learning may be, in their experience, related to that difficulty.

A further area of concern raised in the review of literature relates to that of teacher expertise in the identification of children at risk of having an underlying difficulty in language learning. Therefore this study also seeks to determine

how confident Pre-primary and/or Year 1 teachers feel in their ability to identify language learners having difficulty in their classroom, their understanding of the terms used by speech therapists and other professionals, their need for further training, and whether or not they feel that identifying language learners having difficulty is part of their role.

Variables

In view of some of the issues raised in this review, it may be relevant to determine whether responses to any research involving teacher recognition of these behaviours could be affected by 3 variables.

Firstly, many researchers such as Zubrick (1984) and Kemp (1987) provide evidence that parents are better judges than teachers of the developmental progress of their children. Therefore, it is possible that there may be a significant difference in responses to behavioural correlates of difficulty in language learning between those teachers who are parents and those who are not.

Secondly, Lynch (1979) noted a significant difference in teacher responses to her checklist designed to detect children having difficulty in language learning after the teachers had been inserviced in its use. At the time that this research is being conducted Pre-primary teachers have one day per week free for preparation, access to speech pathologists or other professionals, or for inservice training. In both survey districts the Speech Pathology Section of the Health Department of Western Australia is using speech pathologists to give Pre-primary teachers inservicing in the use of a checklist (see Appendix A) to identify children having difficulty in language learning. Therefore, it is possible that there may be a difference in responses between Pre-primary teachers and Year 1 teachers, since Year 1 teachers have not had the same opportunities for access to other professionals.

Thirdly, the Australian National language Policy (1984) acknowledges the significance of the initial period of training for all teachers in both the nature and functions of language, and the way in which difficulty in language learning may be described. Each decade since 1960 has seen significant changes in educational philosophy and the training of teachers. Therefore, it is possible that there may be a difference in responses between those teachers trained prior to 1970; those trained between 1970 and 1980; and those trained post 1980.

Research Questions.

1. To what extent do Pre-primary and Year 1 teachers agree that some of the behaviours shown by the parents in Zubrick's (1984) study to be indicative of an underlying difficulty in language learning may be related to that language difficulty?

2. To what extent do Pre-primary and Year 1 teachers agree that some of the behaviours shown by the parents in Zubrick's (1984) study not to be related to difficulty in language learning may be related to that language difficulty?

3. In relation to research questions 1 and 2, to what extent are there differences in responses between:

(a) those teachers who are parents and those who are not;

(b) Pre-primary teachers and Year 1 teachers;

(c) teachers trained prior to 1970; those trained between 1970 and 1980; and those trained post 1980.

4. How does the relative order of importance of the behaviours selected for inclusion in this study compare with the relative order of importance of the same behaviours in Zubrick's (1984) study?

5. To what extent do Pre-primary and Year 1 teachers feel that:

   (a) they have the knowledge, skills and training to confidently identify children having difficulty in language learning and;

   (b) that the identification of children having difficulty in language learning is part of their role?

Chapter 3

Method

Introduction.

This chapter opens with a description of the selection of subjects and the instrument chosen to collect data to answer the research questions. A description of the design of the questionnaire and the validity and reliability measures follows. The chapter concludes with a description of the procedures used to carry out data collection.

Subjects

Investigation of the research questions was carried out by means of a questionnaire posted to 147 Pre-primary and Year 1 teachers at 47 schools in 2 districts of the Ministry of Education in Western Australia. The 2 districts were selected as a convenience sample. Teachers of a combined Year 1/2 class were classified as Year 1 teachers in this study. Pre-primary and Year 1 teachers at Special Education Centres or Language Development Centres were excluded on the basis of both their specialised knowledge and their contact with speech therapists and other professionals on a regular basis.

Thus, the subjects for this study were the 28 Pre-primary and 51 Year 1 teachers from the 2 districts who returned the completed questionnaire. This made a final sample size of 79 out of the possible 147, giving a response rate of 55.1%. Nevertheless, 82.9% of the schools contacted are represented by the response of at least one teacher on the staff.

Instrument

Deschamp and Tognolini (1983) suggest that the questionnaire is an appropriate means of data collection where (1) information is required from a

large number of people, (2) those people are dispersed geographically, (3) respondents are to be given the security of anonymity, or, (4) insufficient time or resources are available for less impersonal methods of collecting information. Each of these criteria was satisfied in choosing a questionnaire as the means of data collection for this investigation.

Questionnaire Design

A preliminary questionnaire was designed to record teacher responses to statements relating to a number of research questions on a 5 point scale. This preliminary questionnaire was modified after piloting, when 1 section was omitted. (The omitted section is discussed in section 3.5, Procedure, under the heading of Validity.) A copy of the preliminary questionnaire is included in Appendix C.

The final questionnaire, a copy of which is included in Appendix D, has 4 sections. The first section collects demographic data in order to answer research question 3. Research questions 1 and 2 are combined to form the second section, while statements relating to research question 4 are in a third section. The remaining section of the questionnaire will be discussed briefly at the conclusion of this section, since it relates to data not discussed in the final results.

Items included in each section are ordered randomly. An explanation of the significance of each point on the 5 point scale is given at the beginning of each section, together with a brief statement relating to the purpose of that section.

Final Questionnaire, Page 1

This section of the final questionnaire relates to research question 3. Consideration of some of the issues reported in Chapter 2 of this study led to the conclusion that teacher responses to possible behavioural correlates of

difficulty in language learning included in the questionnaire may be affected by three variables. Therefore, a cover page for the questionnaire was designed v ch sought demographic information to determine the possible effects of each of these 3 variables. The variables are discussed individually in the following paragraphs.

Variable 1 relates to the parental status of respondents, and is presented in research question 3 (a).

To what extent are there differences between the responses of those teachers who are parents and those who are not?

Many of the researchers acknowledged in this study indicate that parents were good judges of developmental progress. The assumption was therefore made that those respondents who were parents may have a different view of the behaviours which might or might not be related to an underlying difficulty in language learning from those who were not parents.

Variable 2 relates to the possible difference in responses between Pre-primary and Year 1 teachers, and is presented in research question 3 (b).

To what extent are there differences between the responses of Pre-primary teachers and Year 1 teachers?

It has been shown in Chapter 2 that there are differences in the way in which educational services are delivered in Pre-primary and Year 1 classrooms in Western Australia. Until fairly recently, Pre-primary teachers have undergone a different training course in their initial period of teacher training. Pre-primary teachers also have a full-time aide working alongside them in the Pre-primary Centre, thus enabling them to spend more time with individual children. In addition, those Pre-primary centres which do not have full-time sessions have one day per week free for preparation, inservicing, and contact with other

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professionals. Therefore, the assumption was made that there might be differences in responses between the 2 groups.

Variable 3 relates to the length of time which has elapsed since each respondent completed his or her initial period of teacher training, and is presented in research question 3 (c).

To what extent are there differences in responses of teachers trained prior to 1970; between 1970 and 1980; and those trained post 1980?

Each decade since the 1950's has seen major changes in the way in which teachers have been trained. In order to examine the possible effects of such changes on responses to survey items, respondents were asked to indicate the year in which they completed their initial period of training.

Final Questionnaire, Pages 3 & 4

This section of the questionnaire addressed research questions 1 and 2.

1. To what extent do Pre-primary and Year 1 teachers agree that some of the behaviours shown by the parents in Zubrick's (1984) study to be indicative of an underlying difficulty in language learning may be related to that difficulty?

2. To what extent do Pre-primary and Year 1 teachers agree that some of the behaviours shown by the parents in Zubrick's (1984) study not to be related to difficulty in language learning may be related to that language difficulty?

In this section, statements concerning both the behaviours related to difficulty in language learning and those not related were combined to give a total of 30 statements. The section began with the following introduction:

Research shows that some behaviours may be linked to difficulty in language learning. In your experience, how likely is it that the following behaviours could be indicative of an underlying difficulty in language learning?

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Respondents were then asked to indicate the degree to which they felt that the behaviour either was or was not related to difficulty in language learning on a 5 point Likert scale which ranged from *Strongly Agree* to *Strongly Disagree*. On the scale, the central point was a neutral, or *Undecided*, category.

Deschamp and Tognolini (1983) highlight the fact that "more problems are created by overly long questionnaires than from questionnaires which omit important questions" (p. 4). Therefore, in this study, a decision was made to limit the number of items presented to respondents to 30, even though Zubrick identified 26 behaviours that she considered were linked to an underlying difficulty in language learning, and 12 behaviours which she considered were not related to that difficulty.

Of the 30 statements on pages 3 and 4, 19 were identified by Zubrick as being related to difficulty in language learning. These 19 items were chosen from the 26 shown by Zubrick to have a positive connection with difficulty in language learning. Zubrick indicated that those items which account for 2-13% of the variance on the independent variable *Clinical Status* (i.e. referred or not referred for speech therapy) have a small effect, those accounting for 13-26% of the variance have a moderate effect, and those capturing 26% or more of the variance have a considerable effect. On this basis, a cut off point of 18% or more was chosen for the present study since each behaviour that explains 18% or more of the variance could be said to have at least a moderate relationship to an underlying difficulty in language learning. In Table 3.1 all 26 items are presented, with the items omitted in this study shown in italics.

Table 3.1

Significant Behavioural Indicators of Difficulty in Language Learning

Zubrick (1984)

Cannot make self clearly understood to others (46%)	Physically attacks others (21%)
Speech is difficult to understand (41%)	Refuses to talk (21%)
Cannot say all sounds correctly (38%)	Finds instructions hard to follow (19%)
Cannot retell a message accurately (37%)	Is shy (19%)
Is not active in conversation (25%)	Does not relate to other children (19%)
Says very little (25%)	Siblings talk for him/her (19%)
Is reluctant to join in groups (25%)	*Does not tell stories (17%)*
Likes constancy (24%)	*Only talks to one person (16%)*
Needs time to adjust (24%)	*Talk is difficult with friends (16%)*
Does not ask questions (24%)	*Poor school work (16%)*
Is reluctant to talk in groups (24%)	*Clings to adults (15%)*
Is withdrawn (23%)	*Does not enjoy stories (13%)*
Acts too young (22%)	*Poor concentration (13%)*

Note: The figure in brackets denotes the amount of varianc explained by each behaviour on the variable *clinical status* i.e. referred or not referred for speech therapy, in Zubrick's (1984) study.

Items shown in italics were omitted from this study

Eleven of the 12 behaviours shown by Zubrick to be unrelated to difficulty in language learning were also included in this section of the questionnaire. The exception was the behaviour *Visits the doctor frequently.* This was omitted since teachers, in many instances, would be unaware of this information.

The wording used in the tables and in the questionnaire for the present study varied slightly from that used by Zubrick in the questionnaire she presented to parents. In her study, some of the behaviours were presented positively, e.g. the behaviour *Does not ask questions* was presented as *Asks a lot of questions*. Responses to these items were then reverse coded to maintain consistency. In the present study, consistency is maintained by wording all the statements as behaviour problems. The wording is taken from the tables presented in Appendix B of Zubrick's study (Graphic Summaries of Percentage of Referred and Non-referred Boys and Girls for Whom Each Behaviour was Reported), with the addition of prepositions to improve readability where appropriate. For example, the behaviour *Shy* is presented in the tables and in the questionnaire for this study as *Is shy*.

Research Question 4.

How does the relative order of importance of the behaviours selected for inclusion in this study compare with the relative order of importance of the same items in Zubrick's (1984) study?

A comparison of the way in which teachers and parents determine the relative order of importance of these behaviours may give an indication of the way in which parents and teachers perceive the behavioural profile of children having difficulty in language learning. Differences between the profile determined by parents and that determined by teachers may provide a partial explanation as to why some children having difficulty in language learning are not detected in time for effective remediation to be implemented. Thus the relative order of importance of items on pages 3 and 4 of the questionnaire was compared to that of Zubrick's (1984) study.

The section on page 5 of the final questionnaire addressed research question 5. This section of the questionnaire was modelled on the format *Assign a Value*, as described by Deschamp and Tognolini (1984, p. 9).

To what extent do Pre-primary and/or Year 1 teachers feel that:

(a) they have the knowledge, skills and training to confidently identify children having difficulty in language learning and;

(b) that the identification of children having difficulty in language learning is part of their role?

Deschamp and Tognolini indicate that in this format the same set of alternative responses is provided for a number of items under a common heading. Thus, a rating scale was used to determine whether teachers agreed or disagreed with a series of statements. Each of the statements included in the questionnaire will be justified in the following paragraphs.

Statement 1: *I am confident that I have the knowledge and skills needed to identify children having difficulties in language learning.*

Illerbrun and Greenough (1983) are among those who suggest that some children having difficulty in language learning may not be referred for further treament and/or assessment because some teachers may not feel confident that they have the necessary knowledge and skills needed to make that identification.

Statement 2: *I have had sufficient training to confidently refer children for further assessment.*

The National Language Policy (1984) received submissions suggesting that many teachers may not have had sufficient training in either the nature or functions of language in order to make referrals for further assessment. Kemp

(1986) also suggests that teachers may not have the necessary insights when firm or decisive action is needed to persist with appropriate referrals.

Statement 3: *I understand the terms used by speech therapists and other professionals.*

Discussion on the nature of language and difficulty in language learning in Chapter 2 of this study highlight the complexity of framing meaningful and precise terminology in relation to the identification and description of difficulty in language learning. Teachers may be given any one of a number of terms to describe a particular aspect of difficulty in language learning by speech pathologists or other professionals, depending on the meaning each clinician may ascribe to that difficulty. This item, therefore, sets out to determine how far teachers think that they understand the terms used.

Statement 4: *I feel that more training is needed for Pre-primary and Year 1 teachers in the identification of difficulties in language learning.*

This statement was included in order to give teachers the opportunity to express their feelings on the necessity for more training to identify children having difficulty in language learning. A general impression obtained from many of the sources quoted in Chapter 2 of this study is that some reseachers feel that teachers may not have had enough relevant training in this area.

Statement 5: *I feel that the identification of children having difficulty in language learning is not the role of the classroom teacher.*

This statement was included to determine how far teachers feel that the identification of children having difficulties in language learning is part of their role.

Teacher Comments

Following the last statement, a space was included on the questionnaire for comments, so that any teachers who wished to do so could elaborate their feelings in relation to any of the issues raised. I felt that such comments may indicate the way in which statements were interpreted by respondents, and may provide additional insight into some of the findings.

Final Questionnaire, Page 2

Initially the final questionnaire was designed to gather data relating to questions on a number of issues raised in Chapter 2. These issues included teacher recognition and acceptance of the concept of transience, teacher recognition of the links between speaking and reading, and teacher recognition of the possibility of gender differences.

Visual scanning of data obtained on the statements on transience, gender differences, and the relationship between speaking and reading revealed contradictory results, possibly relating to weaknesses in questionnaire design. Consequently no further analyses were performed on the data from these sections. Therefore, only those parts of the questionnaire which relate to the final research questions will be discussed and reported in Chapter 4.

Procedure

Validity

A Preliminary Questionnaire was piloted in draft form with 3 Pre-primary and 3 Year 1 teachers from schools not in the survey districts. I was present during the pilot test to note any comments regarding the design, contents, layout, and readability of the questionnaire. The same preliminary questionnaire was also shown to a university lecturer in Language Education.

Following this procedure, an amendment was made to the layout of the cover page by inserting the word *optional* next to the box relating to the age of the respondent. The comment was made that some respondents may be antagonised if asked to reveal their age, and that this may compromise their attitude towards the completion of the remainder of this section of the questionnaire.

Major headings for each of the sections on the first page were also highlighted by using bold printing to improve readability and provide a clearer layout.

In addition, the section of the questionnaire which related to teachers' perceptions of the role of parents in the identification of their child as having difficulty in language learning (on page 5 of the Preliminary Questionnaire) was deleted. Pilot test respondents indicated two areas of concern: (a) that the content appeared to be unrelated to the rest of the questionnaire, and required considerable effort to focus on task requirements, and (b) that it was difficult to generalise where parent relationships were concerned. Further, the lecturer also indicated that the area of parent/teacher relationships was a research topic in its own right, and that it would need to be treated in greater detail than was proposed in this study in order to gather meaningful data.

The lecturer also recommended a change to the instruction given at the top of page 5 as it was very detailed, and could have influenced responses by revealing too much of the theoretical framework on which the study was based. A copy of the Final Questionnaire is included with the total research package sent to schools in Appendix D.

Content validity was then further addressed by presenting the purpose of the study, the revised research questions and the revised questionnaire to 4 speech pathologists, 1 of whom was a Senior Lecturer in Speech and Hearing Sciences at Curtin University, 2 of whom were practising clinicians, and 1 who

was studying for a Master's Degree. All were asked to assess whether or not the questionnaire would provide appropriate data to answer the research questions. All indicated that the questionnaire design should achieve this aim and that the questionnaire was easy to read and to follow. However, 1 raised the question of definition, querying whether respondents would confuse *speech* with *language*. This point was considered, but it was decided not to change the instructions given at the beginning of each section, since more confusion might be created than would be solved by the inclusion of a lengthy section on definitions. Further, teachers involved in the pilot study had not indicated any difficulty with these terms.

Reliability

The internal consistency of the section relating to research Questions 1 and 2 (on teacher agreement with the behavioural correlates of difficulty in language learning identified by Zubrick, 1984) was calculated using a Cronbach Alpha Coefficient. This revealed a reliability coefficient of .90 on those behaviours shown by Zubrick to be significantly associated with difficulty in language learning. Using the same test, a reliability coefficient of .71 was established on those behaviours shown by Zubrick not to be related to difficulty in language learning. This indicates that this section of the questionnaire is reliable.

Distribution and Collection of Questionnaires

Prior to distribution of the questionnaire a list of the schools in the 2 districts was obtained from the District Offices. Each school was then contacted by telephone and asked to provide information on the number of Pre-primary, Year 1, and Year 1/2 teachers at the school. A package (Appendix D) was posted to the Principal of each school which included a covering letter seeking permission for the research to be conducted in the school, a numbered

questionnaire for each Pre-primary, Year 1 and Year 1/2 teacher, and self-addressed, stamped envelopes for the return of questionnaires.

Returned questionnaires were checked on a master sheet which showed the number of Pre-primary, Year 1, and Year 1/2 teachers at each school. Since each questionnaire was numbered, and individual numbers allocated to specific schools, a record was kept of the responses from each category of teachers while still preserving respondent anonymity. This also enabled follow-up letters to be sent only to those teachers who had not replied i.e. letters were addressed to either *The Pre-primary Teacher*, *The Year 1 Teacher*, or *The Year 1/2 Teacher* at each school. The exception was where there was more than one teacher in each category in any one school. In this instance reminder notices were sent only to the category of teachers from which no reply had been received for that school.

A reminder notice addressed to each respondent (by year level taught) was sent through the Ministry of Education Courier system 5 days later. A hand-written note bearing Christmas Greetings and a reminder to respondents that they could telephone the researcher for a replacement copy of the questionnaire was posted 21 days after the first posting of the package. The second notice was sent only to those who had not already responded.

Summary

Seventy nine subjects participated in this study, representing 83% of the schools contacted. A questionnaire was chosen as the instrument for data collection, and its design discussed. Justification for the selection of each item was included in the discussion. The measures undertaken to ensure content validity and reliability were discussed, and the procedures used in implementing the research were outlined.

Chapter 4

Results and Discussion

Introduction

This chapter describes procedures used to carry out data analysis, the results of data analysis, and discussion of results for each research question. The chapter concludes with a summary of the findings in relation to each of the research questions.

Data Analysis

Data analysis was carried out using SPSS for Windows, Release 5.0.1.

For the questionnaire, responses were coded:

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
5	4	3	2	1

On page 5 of the questionnaire, in the section relating to teachers, the numbers are presented to give a continuum ranging from 1 (*not at all*) to 5 (*very much so*).

In relation to the demographic data collected, 2 respondents failed to indicate the year level they were currently teaching, did not complete the section giving the length of time since they had completed their initial period of training, and did not indicate their parental status. A third respondent did not indicate parental status. Since failure to complete this information did not affect data for research questions 1, 2 or 4, these questionnaires were included in data analysis.

Of the 81 questionnaires returned, two questionnaires were classified as invalid, and were excluded from any data analysis. In both cases respondents

had failed to complete one or more sections of the questionnaire relating to Research Questions 1, 2 or 4. Thus, the final sample size was 79.

Teacher Response to Behaviours Related to Difficulty in Language Learning: Zubrick (1984)

Research Question 1:To what extent do Pre-primary and Year 1 teachers agree that some of the behaviours shown by the parents in Zubrick's (1984) study to be indicative of an underlying difficulty in language learning may be related to that difficulty

Preamble

As previously indicated, data to answer this question were collected on a 5 point Likert scale. The 19 behaviours (of the 26 identified by Zubrick, 1984) selected for inclusion in this study have been grouped into 2 categories for ease of interpretation and for more detailed discussion. Firstly, there are those behaviours which could be said to be directly related to language performance. Results for this group of 11 behaviours are presented in Table 4.1. Secondly, there are those behaviours identified by Zubrick which are indirectly related to language performance but are more closely related to the personality or behaviour of the speaker. Results for this group of 8 behaviours are presented in Table 4.2.

Following this, Table 4.3 shows the relative order of importance of each of the 19 behaviours as determined by the teachers in this study, and the relative order of importance of the same behaviours as determined by the parents in Zubrick's (1984) study.

A table showing full results is included in Appendix E. However, for ease of reporting the percentage of respondents who agreed strongly, or agreed, have been combined, as have the responses of those who strongly disagreed, or those who disagreed.

Behaviours which are Directly Language Related

Results

Table 4.1 shows the percentage of teachers who agreed, disagreed, or were undecided as to the relationship between each of the 11 language behaviours and an underlying difficulty in language learning.

Table 4.1

Teacher Response to Behaviours which are Directly Language Related

Statement	Agree	Undecided	Disagree
Finds instructions hard to follow	97.5%	1.3%	1.3%
Speech is difficult to understand	84.8%	8.9%	6.3%
Cannot make self clearly understood to others	83.5%	5.1%	11.5%
Cannot say all sounds correctly	83.5%	6.3%	10.1%
Cannot retell a message accurately	78.5%	6.3%	15.2%
Siblings talk for him/her	68.4%	15.2%	16.5%
Is not active in conversation	68.3%	10.1%	21.5%
Refuses to talk	55.7%	22.8%	21.6%
Says very little	50.6%	15.2%	34.2%
Does not ask questions	50.6%	25.3%	24.1%
Is reluctant to talk in groups	44.3%	22.8%	32.9%

N = 79

Agreement responses.

From the *Agree* column it can be seen that, with one exception, over 50% of the teachers in this survey felt that each of these behaviours was likely to be

indicative of an underlying difficulty in language learning. The 4 most popular behaviours attracted a very high agreement rating of more than 80%. Responses of the teachers, however, suggested that the behaviour *Finds instructions hard to follow* was most likely to be indicative of a difficulty in language learning, with 98% of the sample indicating agreement. This was 13 % higher than the next highest level of agreement with any other behaviour. The exception in this group of behaviours was the behaviour *Is reluctant to talk in groups.* Less than half of the teachers in this survey felt that this behaviour may be indicative of an underlying difficulty in language learning.

It can be seen that the behaviours which most teachers agree may be indicative of difficulty in language learning are those which can be readily observed in teacher / student interactions. The behaviours which attracted the lowest levels of agreement relate more to the behaviour of students in a group setting, such as the behaviours *Is reluctant to talk in groups, Does not ask questions* and *Says very little.*

Undecided responses.

Responses in the *Undecided* category show that 25% or fewer of the teachers in this study did not express an opinion on the possibility of a relationship between any of these behaviours and an underlying difficulty in language learning. The behaviour about which teachers were most undecided was *Does not ask questions,* which attracted a 25% *Undecided* response. Twenty three percent of teachers were also undecided as to the likelihood of a relationship between the behaviours *Is reluctant to talk in groups,* and *Refuses to talk,* and difficulty in language learning.

In this category, it should be noted that only 1% of respondents were undecided as to the relationship between the behaviour *Finds instructions hard to follow,* and difficulty in language learning.

<u>Disagreement responses</u>.

Responses in the *Disagree* category show that 34% of the teachers in this study did not think that the behaviour *Says very little* could be related to an underlying difficulty in language learning. The behaviour *Is reluctant to talk in groups* also attracted a 33% disagreement that it could be so related. Generally, responses in the *Disagree* category were higher than in the *Undecided* category. The most notable exception was the behaviour *Finds instructions hard to follow*, which only attracted a response of 1% in the disagreement category.

<u>Discussion</u>

Results in Table 4.1 show that teachers in this study generally agreed with Zubrick's findings concerning the views of parents on the relationship between these 11 behaviours and the possibilty of an underlying difficulty in language learning.

The behaviour which teachers felt was most likely to be indicative of difficulty in language learning was *Finds instructions hard to follow*. It is possible that this result reflects the school setting, in that failure to follow instructions correctly and within a specified time limit can have an obvious effect on the day-to-day functioning of the classroom. Within the classroom, failure to follow instructions is readily apparent and its effect on the capacity of the individual child to perform in language tasks can be easily noted. Children who fail to follow instructions may fit the profile of a child having difficulty in language learning as given by Lipson (1981), who indicated that such children quickly acquire a reputation for failing to follow instructions.

The 3 behaviours which attracted a less than 51% agreement from teachers in this survey were the behaviours *Says very little, Does not ask questions,* and *Is*

reluctant to talk in groups. This could be a reflection of the Pre-primary or Year 1 setting, in that children often take time to adjust to the larger group in the early stages of their schooling. Children may also be reluctant to participate until they are familiar with their surroundings and have developed a rapport with the teacher. However, it may also be that quiet children attract less attention, and thus may not be as readily observed as children with more obvious difficulties. The Australian National Language Policy (1984) indicated that some children having difficulty in language learning may not be detected because their behaviour conceals their difficulty most effectively. Children displaying these 3 behaviours may be concealing the fact that they cannot participate actively in speaking and listening in the Pre-primary or Year 1 classroom because they are unable to do so at the same level as their peers. Further, children displaying these behaviours may fit the profile given by Conner (1987) when he described the quiet child as one who may have an anxiety syndrome related to a lack of communicative ability.

Patterson and Wright (1991) indicate that many teachers may be unaware of the significance of seemingly minor persistent behaviours and their relationship to later academic difficulties for children who have difficulty in language learning. Each of the behaviours discussed in the preceding paragraph have been shown in previous research to have a close relationship with difficulty in language learning, and may be representative of the behaviours referred to by Patterson and Wright. Zubrick (1984) indicated that earlier researchers such as Caceres (1971), Chess and Rosenberg (1974), Fitzsimmons (1958), Ingram (1959), Myklebust (1954), and Solomon (1961) have found a relationship between shyness, failure or reluctance to speak, anxiety, difficulty with peer relationships, and difficulty in language learning. Further, more current researchers such as Cantwell and Baker (1981) and Wiig and Semmel (1981)

also acknowledge the relationship between these behaviours and difficulty in language learning.

Additionally, Mann and Brady (1988) have found a great deal of consensus among past and present researchers that difficulty in learning to read can reflect problems in language processing and awareness of phonological structure. Where children say very little, do not ask questions and are reluctant to talk in groups in the Pre-primary or Year 1 classroom it could be difficult to assesss their progress in either of these areas.

Behaviours Indirectly Related to Language

Results

Table 4.2 shows the responses of teachers in this study to those behaviours which are indirectly related to language.

Agreement responses.

From the *Agree* column it can be seen that only the behaviour *Is withdrawn*, attracted a greater than 50% agreement that it may be related to difficulty in language learning. Five behaviours, of the 8 in this table, attracted levels of agreement from teachers in this study of between 40% and 49% that they may be related to an underlying difficulty in language learning. The 5 behaviours are *Is reluctant to talk in groups, Likes constancy, Needs time to adjust, Acts too young* and *Does not relate to other children.*

The behaviour *Physically attacks others* attracted a 39% agreement that it may be related to an underlying difficulty in language learning. The lowest area of agreement was in relation to the behaviour *Is shy*, which attracted only a 25% response that it may be related to difficulty in language learning.

Table 4.2

Teacher Responses to Behaviours Indirectly Related to Language

Statement	Agree	Undecided	Disagree
Is withdrawn	59.5%	17.7%	22.8%
Needs time to adjust	49.4%	22.8%	27.8%
Is reluctant to join in groups	49.4%	22.8%	27.9%
Does not relate to other children	48.1%	21.5%	30.4%
Acts too young	45.6%	24.1%	30.4%
Likes constancy	42.9%	22.1%	35.1%
Physically attacks others	39.2%	26.6%	34.1%
Is shy	25.4%	21.5%	53.2%

N = 79

Undecided responses.

Generally, more teachers were undecided as to the relationship between these behaviours and difficulty in language learning than for the behaviours which are directly related to language, with a range of 18% - 27% in the undecided category. Nevertheless, it should be noted there was only 1 behaviour on which more than a quarter of the teachers were undecided as to its relationship to difficulty in language learning. This was the behaviour *Physically attacks others*.

Disagreement responses.

Responses to behaviours in this group were higher in each instance in the *Disagree* category than in the *Undecided* category. The highest area of

disgreement was in relation to the behaviour *Is shy*. Over 50% of teachers in this study felt that this behaviour was not related to difficulty in language learning.

Of the remaining responses in the *Disagree* category, 4 behaviours (*Likes constancy, Acts too young, Physically attacks others, Does not relate to other children*) attracted a greater than 30 % response that they were not related to difficulty in language learning, and 3 (*Is reluctant to join groups, Needs time to adjust, Is withdrawn*) a greater than 20% response that they were unrelated to difficulty in language learning.

Comments.

A comment on the questionnaire from 2 respondents in relation to the behaviour *Is shy* indicated a strong feeling that the behaviour was much more related to the personality of the child, and could in no way be said to be related to an underlying difficulty in language learning. Five teachers also commented that many of the behaviours in this group could have occurred as a result of social factors or low self esteem, and several wrote lengthy comments as to the effect of home backgrounds, too much watching of television and poor diet.

Discussion

Cooper, Moodley and Reynell (1978, cited in Illerbrun & Greenough, 1983) have indicated that the frustration felt by children who are unable to communicate effectively sometimes leads to antisocial behaviour. Their feeling is that it is often the behaviour which becomes the focus, rather than the underlying difficulty in language learning. This concern has been echoed by Griffiths (1980), Patterson and Wright (1991) and others. Children who like constancy, do not relate to other children, are withdrawn, are reluctant to join in

groups, need time to adjust, act too young, are shy, or physically attack other children can quickly become isolated from the mainstream group, particularly in the Pre-primary or Year 1 setting, because of their anti-social behaviour.

Comments on the questionnaires indicated that, for behaviours in this group, some teachers focus on those behaviours occurring as a result of personality, lack of ability, low self esteem or maturational delay than on investigating the possibilty that the behaviour may be occurring as a result of a difficulty in language learning. Lipson (1981) reinforces this observation, indicating that many experienced classroom teachers do not make the association between the persistent presence of some behaviours and the possibility that an underlying difficulty in language learning may be the cause of those behaviours.

Relative Order of Importance of Behaviours in the Present Study, and Zubrick's (1984) Study

Results

Table 4.3 shows a comparison of the relative order of importance of the 19 behaviours presented in Tables 4.1 and 4.2 by the teachers in this study, and the parents in Zubrick's study. In her study, Zubrick found that 4 behaviours discriminated most clearly between children referred for speech therapy and those not referred. These were the behaviours *Cannot make self clearly understood to others, Speech is difficult to understand, Cannot say all sounds correctly,* and *Cannot retell a message accurately.* In the present study, these behaviours were rated 2, 3, 4, and 5 respectively. Teachers rated the behaviour *Finds instructions hard to follow* as the behaviour most likely to be indicative of difficulty in language learning, while in Zubrick's study this behaviour was 17th in relative order of importance.

Table 4.3

Relative Order of Importance of Behaviours in the Present Study, and Zubrick's (1984) Study

Present Study Teachers	Behaviours	Zubrick's Study Parents
1	Finds instructions hard to follow	17
2	Speech is difficult to understand	2
3	Cannot make self clearly understood to others	1
4	Cannot say all sounds correctly	3
5	Cannot retell a message accurately	4
6	Siblings talk for him/her	19
7	Is not active in conversation	5
8	Is withdrawn	12
9	Refuses to talk	15
10	Says very little	6
11	Does not ask questions	10
12	Needs time to adjust	9
13	Is reluctant to join groups	7
14	Does not relate to other children	16
15	Acts too young	13
16	Is reluctant to talk in groups	11
17	Likes constancy	8
18	Physically attacks others	14
19	Is shy	18

From the table it can be seen that 9 of the 19 behaviours had a noticeable difference in order of relative importance i.e. of 4 places or greater. As has been shown, the first of these was the behaviour *Finds instructions hard to follow.* A second behaviour having a large difference was the behaviour *Siblings talk for him/her,* which was 6th in relative order of importance from teacher responses, and 19th from the responses of parents. The behaviour *Likes constancy* was 17th in order of relative importance from teacher responses, and 8th in the relative order of importance from parent responses.

Two behaviours had a difference of relative order of importance of 6 places -- the behaviours *Refuses to talk,* and *Is reluctant to join in groups.* The former was 9th in relative order of importance from teacher responses, and 15th in relative order of importance from the responses of parents. The latter was 13th in relative order of importance for teachers, and 7th for parents.

The behaviour *Is reluctant to talk in groups* was 16th in relative order of importance from the responses of teachers, and 11th from the responses of parents.

The remaining areas of any significant difference were in the behaviours *Is withdrawn, Says very little,* and *Physically attacks others,* each of which show a difference of 4 places in relative order of importance.

Discussion

The differences in relative order of importance are of interest in that, in the first instance, they may reflect differences in the setting between home and school. Parents have many opportunities to observe their own child in relation to others, in contrast to the class teacher, who of necessity must be much more concerned about group dynamics and the functioning of the group as a cohesive and harmonious unit.

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In the second instance, however, it is possible that these differences may help to explain why some children having difficulty in language learning are not detected by teachers in Pre-primary and Year 1. Simner (1986) indicates that, while teachers may have had the opportunity to become well acquainted with the children in their class, nevertheless their global judgements are not always accurate when making decisions as to whether or not children may be experiencing difficulty in language learning. It is of interest that the behaviours *Says very little, Needs time to adjust, Is reluctant to join in groups, Is reluctant to talk in groups, Likes constancy,* and *Physically attacks others* were all higher in relative order of importance for parents than they were for teachers. Each of these behaviours requires more time to observe than is perhaps available to a Pre-primary or Year 1 teacher. These behaviours have all been found to have an historical relationship with difficulty in language learning, as has been acknowledged earlier in this chapter in the discussion on Table 4.1.

Conversely, it is also of interest that the behaviours *Finds instructions hard to follow, Siblings talk for him/her* and *Is withdrawn* were higher in relative order of importance for teachers than for parents. It may be that these behaviours are more obvious to teachers because they are so noticeable within the classroom setting, whereas parents may accept each of these behaviours as being characteristic of the individual child, rather than cause for concern.

Although the differences in relative order of importance have been highlighted, it should, nevertheless, be noted that there are many similarities between the two lists. This is most obvious in relation to those behaviours which are directly related to language performance, indicating that both parents and teachers are aware that these behavioural correlates are of significance in the identification of children having difficulty in language learning.

Research Question 2: To what extent do Pre-primary and Year 1 teachers agree that some of the behaviours shown by the parents in Zubrick's (1984) study not to be related to difficulty in language learning may be related to that language difficulty?

Table 4.4

Teacher Responses to Behaviours Not Related to Difficulty in Language Learning Zubrick (1984)

Statement	Agree	Undecided	Disagree
Has allergies	44.3%	32.9%	22.8%
Has sudden changes in mood or feeling	20.2%	27.8%	51.9%
Follows things better when shown	13.9%	16.5%	69.6%
Suffers from earache	19.0%	26.6%	54.4%
Is clumsy	30.3%	34.2%	35.4%
Has asthma	53.2%	31.6%	15.2%
Is impulsive	43.0%	34.2%	22.8%
Is accident prone	48.1%	31.6%	20.3%
Unusually naughty	38.0%	24.1%	38.0%
Whines	62.0%	21.5%	16.4%
Gets bored with toys quickly	43.1%	32.9%	24.1%

N = 79

Results

Data to answer this question are presented in Table 4.4. The categories *Strongly Agree* and *Agree* have again been combined, as have the categories *Strongly Disagree* and *Disagree*. Zubrick (1984) indicated that each of the

behaviours listed in this table captured none of the variance on any of the variables she examined in relation to the differences between children referred for speech therapy and those not referred. Therefore, the behaviours have been listed in the same order in which they appeared on the questionnaire.

Responses in the *Agree* column indicate the percentage of teachers who agree that the behaviour may be related to difficulty in language learning. Responses in the *Disagree* column indicate the percentage of teachers who feel that the behaviour may not be related to difficulty in language learning. A detailed copy of results is included in Appendix E.

Agreement responses.

From Table 4.4 it can be seen that 2 behaviours, *Has asthma* and *Whines*, attracted a greater than 50% agreement that they may be related to difficulty in language learning. Four other behaviours, *Has allergies, Is impulsive, Is accident prone* and *Gets bored with toys quickly*, attracted a greater than 40% agreement that they may be related to difficulty in language learning, and the remaining behaviours attracted a less than 40% agreement that they may be related to difficulty in language learning. The behaviour *Follows things better when shown* attracted the lowest level of agreement that it may be related to difficulty in language learning.

Undecided responses.

Responses in the *Undecided* column show that generally, more teachers in this study were undecided about the relationship of these behaviours to difficulty in language learning than they were about the behaviours listed in Tables 4.1 and 4.2. For 8 of the 11 behaviours in this group more than 26% of the teachers were undecided about the relationship of the behaviour to difficulty in language learning.

The *Disagree* column in Table 4.3 shows that 3 behaviours attracted a greater than 50% response, indicating that over half of the teachers in this study thought that these behaviours were not related to difficulty in language learning. The behaviour *Follows things better when shown* attracted a 70% response in this category, *Suffers from earache* a 54% response, and *Has sudden changes in mood or feeling* a 52% response.

Discussion

Generally, in this group of behaviours, some of the teachers' views were consistent with Zubrick's findings and some were not. In Table 4.1 (Behaviours Directly Related to Language) none of the behaviours attracted an undecided response greater than 25%, and in Table 4.2 (Behaviours Indirectly Related to Language) only 1 behaviour attracted an undecided response greater than 26%. In this table, however, the undecided column attracted a 26% or greater response for 8 of the 11 behaviours

Sixty two percent of the teachers in this study indicated agreement that *Whining* is likely to be related to difficulty in language learning. This is difficult to explain, although it may be that teachers who feel that this behaviour is related to difficulty in language learning are focussing on voice production or tonal deficiencies, rather than the effect of this behaviour on the whole range of speaking, listening, reading and writing behaviours.

Over half of the teachers in the study also indicated that the behaviour *Has asthma* was related to difficulty in language learning. Young children with asthma tend to have frequent absences from school. It may be that teachers were thinking more of the learning experiences missed during those absences

rather than of the actual effect of the condition on childrens' ability to learn language, since it is difficult to see how the medical condition of asthma could affect that ability. Over 40% of the teachers in this study also felt that allergies were likely to be related to difficulty in language learning. This is also difficult to interpret, since it is hard to see a connection between an allergic reaction to a substance and difficulty in language learning. When considering the effect of the health of children on their ability to learn language, it may be that teachers are accustomed to thinking generally in terms of missed learning opportunities rather than thinking specifically of language difficulties and behavioural correlates. This observation is reinforced by Patterson and Wright (1990) who indicate that, although recent concerns in the field of education have focussed on children at risk academically, specific foci on children with speech, language or hearing problems have been noticeably absent.

It can be concluded that responses to this group of behaviours by teachers in the study were generally inconclusive, with more teachers undecided about the relationship between these behaviours and difficulty in language learning than for either of the two groups of behaviours discussed previously.

<u>Demographic Variables</u>.

Research question 3 was asked in order to determine whether or not there were any differences in responses to research questions 1 and 2 in relation to 3 variables.

3. In relation to Research Questions 1 and 2, to what extent are there differences in responses between:

 (a) those teachers who are parents and those who are not;

 (b) Pre-primary teachers and Year 1 teachers;

 (c) teachers trained prior to 1970; those trained between 1970 and 1980; and those trained post 1980?

Results

A 2 x 2 x 3 Analysis of Variance was performed with Alpha set at .05. The independent variables were *Parental Status* (parent or not parent), *Year Level Taught* (Pre-primary or Year 1), and *Training* (completion of initial period of training prior to 1970, 1970-1980, or post 1980)   The dependent variable was the sum of the 19 items found by Zubrick to predict referral status of children found to have difficulty in language learning, and the 11 items found by Zubrick to be unrelated to that status.

No significant difference in the mean score of those teachers who were parents ($\underline{M}$ = 64.25), and those who were not parents was found ($\underline{M}$ = 68.14), $\underline{F}$ (1 , 66) = 2.1, $\underline{p}$ > .05.

Similarly, there was no significant difference between the mean scores of those teachers who were Pre-primary teachers ($\underline{M}$ = 68.58), and those who were Year 1 teachers ($\underline{M}$ = 63.95), $\underline{F}$ (1, 66) = 5.4, $\underline{p}$ > .05.

Further, there was no significant difference between teachers trained prior to 1970 ($\underline{M}$ = 63. 63), those trained in the period 1970 - 1980 ($\underline{M}$ = 65.76), and those trained post 1980 ($\underline{M}$ = 66.34), $\underline{F}$ (2, 66) = .19, $\underline{p}$ > .05.

Discussion

A lack of any significant result from the Analysis of Variance may seem to contradict the views of many of the researchers acknowledged earlier in the Review of Literature. When considering the variable *Parental Status,* however, it may be that parents are good judges of developmental progress only in relation to their own child, about whom they have the opportunity to build up an intimate body of knowledge. Such knowledge may not be transferred to the global setting of the classroom, where the parent/teacher has to be more concerned with the functioning of the class as a whole.

In relation to the variable *Year Level Taught*, the fact that no differences were found in the responses of Pre-primary teachers and Year 1 teachers may indicate that either the training given by speech therapists to Pre-primary teachers in this study has not changed teachers' perceptions of difficulty in language learning or that the the First Steps inservicing given to both Pre-primary and Year 1 teachers by the Ministry of Education in Western Australia has had a more powerful effect. It may also be that both Pre-primary and Year 1 teachers develop similar knowledge on behaviours which may or may not be related to difficulty in language learning as a result of their classroom experiences, and that any methods of training may have little impact on this.

Results for the variable *Training* indicated that pedagogical differences experienced by teachers in their initial period of training had no relationship to responses. It could be that little attention has been given to the nature and functions of language, or difficulty in language learning, in those training courses. It may also be that the theories which have driven educational practice in classrooms in the past have not usually sought explanations of children having difficulty in language learning, but rather have concentrated on how successful language learners learn. From their initial period of training, therefore, some teachers may not be aware that some children may have difficulty in language learning which can occur in the absence of any known cause.

Teacher Confidence and Role in Identification

Research Question 4: To what extent do Pre-primary and Year 1 teachers feel (a) that they have the knowledge, skills and training to confidently identify children having difficulty in language learning and, (b) that the identification of children having difficulty in language learning is part of their role?

<u>Preamble</u>

Data to answer this question are presented in Figures 4.1, 4.2, 4.3, 4.4, and 4.5. Respondents were asked to indicate their response to 5 statements on a continuum of 1 (not at all) to 5 (very much so). Each Figure represents the responses to one statement.

<u>Teacher Role</u>

<u>Results</u>
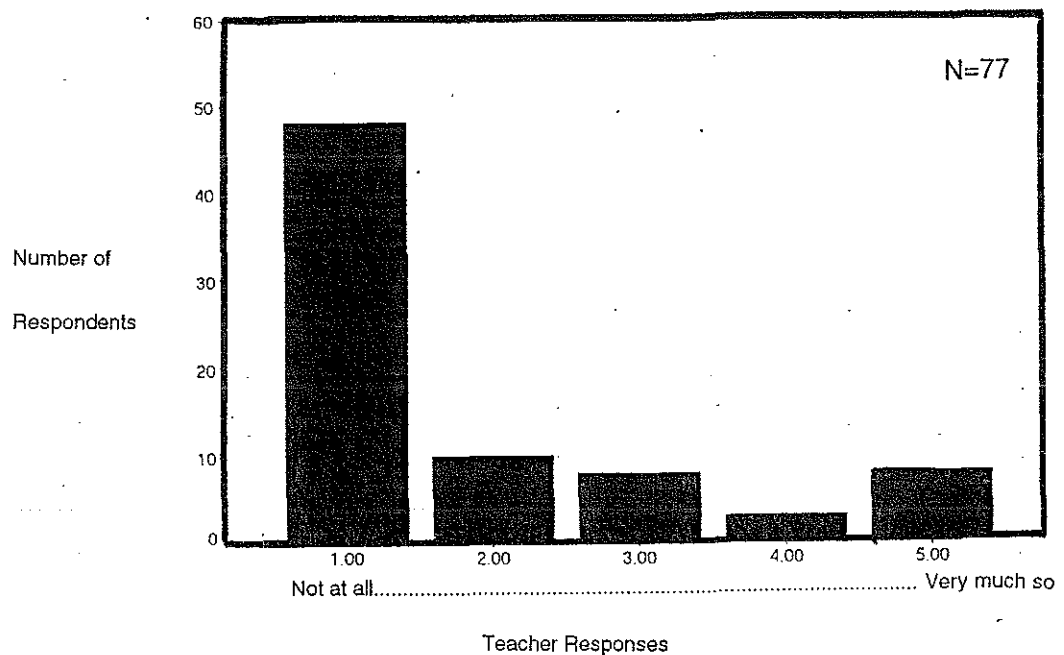
<u>Figure 4.1</u>: Teacher response to the statement: I feel that the identification of children having difficulty in language learning is not the role of the classroom teacher.

Figure 4.1 shows that 58 of the 77 respondents, (75%), circled ratings 1 and 2 (not at all) to respond to this statement, indicating that they agreed that the identification of children having difficulty in language learning is the role of the classroom teacher.

Eight respondents (10%) circled a rating of 3, indicating neutrality in relation to this issue. Eleven respondents (14%) circled the ratings 4 and 5 (very much so), indicating that they felt that the identification of children having difficulty in language learning is the role of the classroom teacher.

Comments on the questionnaires from 8 respondents indicated agreement that the identification of children having difficulty in language learning is the role of the classroom teacher, with the reservation that the identification of the actual nature of the difficulty and the implementation of subsequent remediation programmes is not.

Discussion

I was aware that this statement could have been difficult for the respondents to answer because of the negative wording, that is, it is *not* the role of the classroom teacher to identify children having difficulty in language learning. However, pilot test respondents answered without any hesitation, and comments on returned questionnaires indicated agreement with their interpretation of the statement.

It can be seen that the data show that the majority of teachers surveyed thought that they had an important role to play in the identification of children having difficulties in language learning. This suggests that teachers in this study do not agree with the view put forward by Illerbrun and Greenough (1983) that teachers may feel that the identification of children having difficulty in language learning is not part of their role.

Teacher Confidence

Results
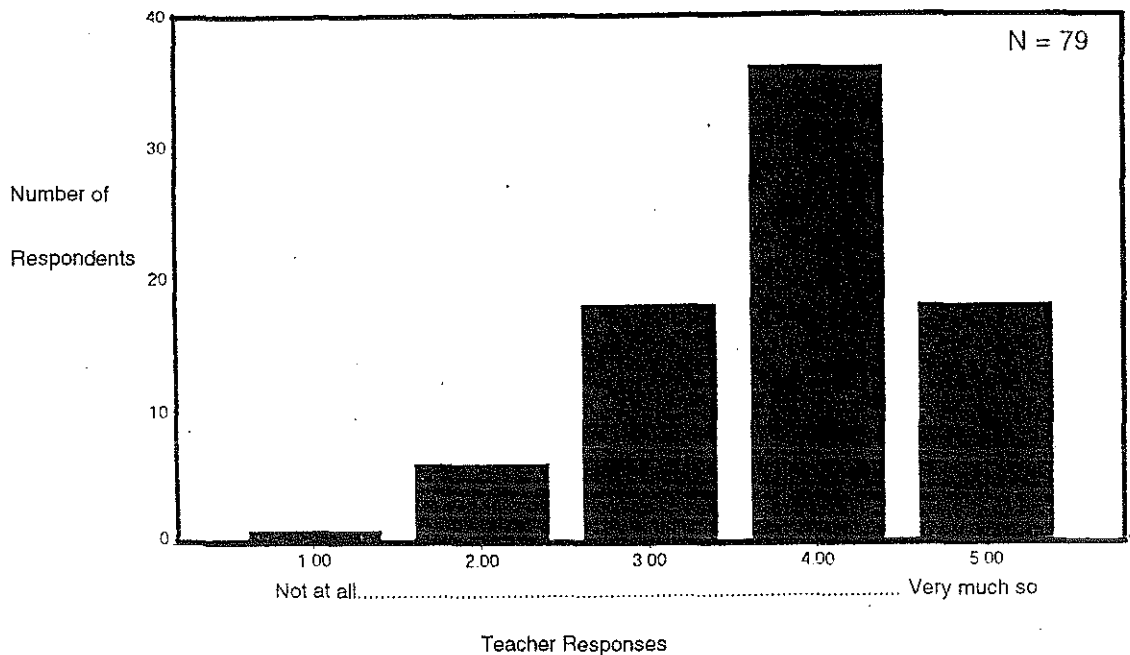
Figure 4.2: Teacher response to the statement: I am confident that I have the knowledge and skills needed to identify children having difficulty in language learning.

Results in Figure 4.2 show that only 7 respondents (8%) circled the ratings 1 and 2, indicating that they are not confident that they have the knowledge and skills needed to identify children having difficulties in language learning. Eighteen respondents (23%) circled rating 3, indicating no strong feelings in relation to this statement. Fifty four respondents (68%) circled ratings 4 and 5, indicating confidence that they can identify children having difficulties in language learning with the knowledge and skills that they already have.

Discussion

The results in this Figure are in direct contrast to the view expressed by Illerbrun and Greenough (1983), who indicated that many teachers might not feel confident that they have the necessary knowledge and skills to identify children having difficulty in language learning.

Further, a major concern expressed by researchers such as Patterson and Wright (1990), Kemp (1986), Lipson (1981), Zirklebach and Blakesey (1985), and others (acknowledged in the National Language Policy, 1984) is that teachers may not have the knowledge and skills to identify children having difficulty in language learning.

It is possible that those teachers surveyed in the present study think that they have the necessary knowledge and skills, when in fact, they do not. This conclusion would seem to be reinforced by information contained in the National Language Policy (1984). In para. 9.51, on the need for early intervention, the Australian Association of Special Education estimated that some 10% of children having difficulty in language learning in the absence of any other known cause are not identified until the school years 1-3, by which time they have become identified as children having learning difficulties or behavioural problems, rather than children having difficulty in language learning. Further, in para. 9.52, a spokesperson for the same association indicated that, to be able to accurately identify language difficulties from learning or behavioural difficulties, a teacher must have a sound basic knowledge of the development of language and what is normal for any given child. Where this knowledge is lacking, identification of difficulty in language learning becomes extremely problematic, unless the teacher is very skilled, experienced and well trained.

Therefore, although the data suggest that many of the teachers in this study feel that they have the knowledge and skills to identify children having difficulty in language learning, it would seem that further research is necessary if this finding is to be fully explained.

Teacher Understanding

Results
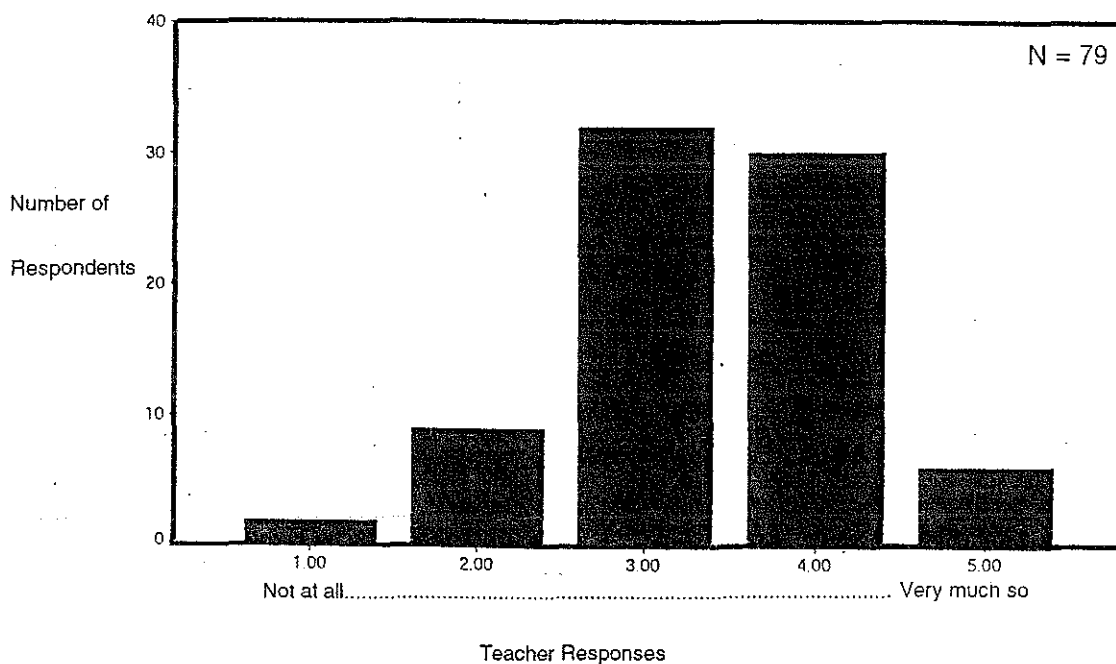
Figure 4.3: Teacher response to the statement: I understand the terms used by speech therapists and other professionals.

Figure 4.3 shows that 11 respondents (14%) circled ratings 1 and 2, indicating that they do not fully understand the terms used by speech therapists or other professionals. Thirty two respondents (41%) circled rating 3, indicating that they are undecided about their understanding of the terms used by speech therapists and other professionals. Thirty respondents (38%) circled rating 4,

and 6 (8%) circled rating 5 indicating that they understood the terms used by speech therapists and other professionals.

Thus, the results show that over half of the teachers in this study said that either they did not understand terms used by speech therapists and other professionals, or were undecided as to their level of understanding of such terms. Nevertheless, 46% were confident that they did understand the terms.

Discussion

As acknowledged in the Review of Literature in this study, there is confusion in relation to terminology in the field of difficulty in language learning. Many terms are used to describe varying difficulties. However, as Fletcher (1990) has indicated, the complexity of defining the concept of language, the lack of precise clusters of linguistic symptoms, and the lack of any clear aetiology make many of these terms imprecise. As new theories on the learning of language have been advanced, new descriptors for various kinds of language difficulty have been coined. This confusion is also acknowledged by researchers such as Cantwell and Baker (1987). Results in Figure 4.3 seem to suggest that many teachers in the present study are also unsure as to the meaning of many of the terms used by practising speech therapists. This may be a reflection of the general confusion prevailing in research in this field. Results shown in this figure may also be an indication that there is a lack of dissemination of information to classroom teachers in relation to the use of generally accepted terms for difficulty in language learning. Teachers who are unaware of the meaning and use of those terms which are accepted by clinicians may be unaware of the implications of the conditions so described.

Results
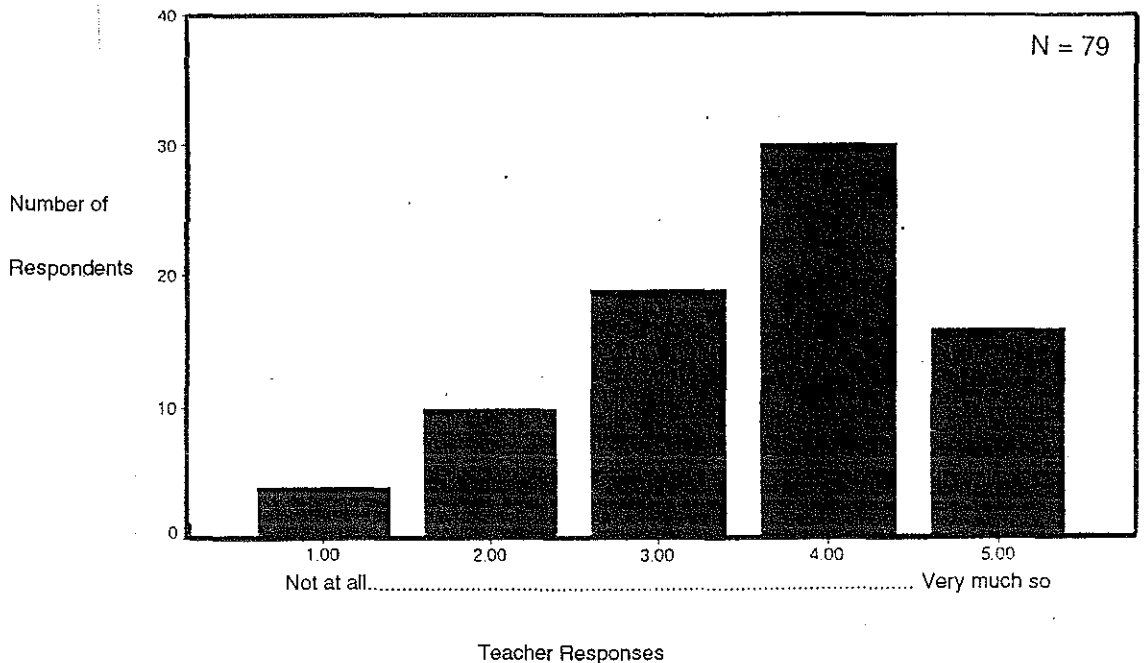
Teacher Responses

Figure 4.4: Teacher response to the statement: I have had sufficient training to confidently refer children for further assessment.

Figure 4.4 shows that 14 respondents (18%) circled ratings 1 and 2, indicating that they do not think that they have had sufficient training to confidently refer children for further assessment. Nineteen respondents (24%) circled rating 3, indicating that they have no strong feelings in relation to this statement. However, 46 respondents (58%) circled ratings 4 and 5, indicating that they are confident that they have had sufficient training to refer children having difficulty in language learning for further assessment.

In relation to this issue, some respondents commented that it was their classroom experience, and experiences as a parent, which had enabled them

to develop the knowledge and skills to identify children having difficulty in language learning, rather than any training they had experienced in the course of their teaching career.

Discussion

Researchers such as Kemp (1986), Patterson and Wright (1991) and submissions reported in the Australian National Language Policy (1984) suggest that children having difficulty in language learning may not be being identified because teachers do not have sufficient training to either identify, or refer, such children for further assessment. Nevertheless, many of the teachers in this study have indicated that they feel that they have had sufficient training. This difference of opinion may have occurred as a result of the type of inservice training given to Pre-primary and Year 1 teachers by the Ministry of Education in Western Australia which could lead teachers to think they have sufficient training, when in fact they have not.

For example, many Pre-primary and Year 1 teachers throughout Western Australia have had a considerable amount of inservice training under the First Steps programme, mentioned in Chapter 1 of this study. This programme relies heavily on the use of developmental continua to chart the learning progression of individual children through a series of pre-determined stages in a number of areas, such as spelling, reading, writing and oral language.

However, experience has shown that the First Steps inservicing concentrates on the use of the continua, and the development of appropriate teaching strategies, rather than on what is within the range of *normal* language development in each of the areas covered. Nor does the training programme assist participating teachers to develop their skill. in the identification of children who may need referral for further diagnosis or intervention because they have a language difficulty which is not accompanied by any other obvious

handicap. Clay (1991) has exposed the problematic nature of the use of such developmental indices when she questions the assumption that all children will move through similar developmental stages, or, indeed, have similar learning experiences when exposed to the same teaching strategies. Further, she indicates that such indices ignore any differences which may occur as a result of cultural, social or contextual differences.

Additional Teacher Training

Results
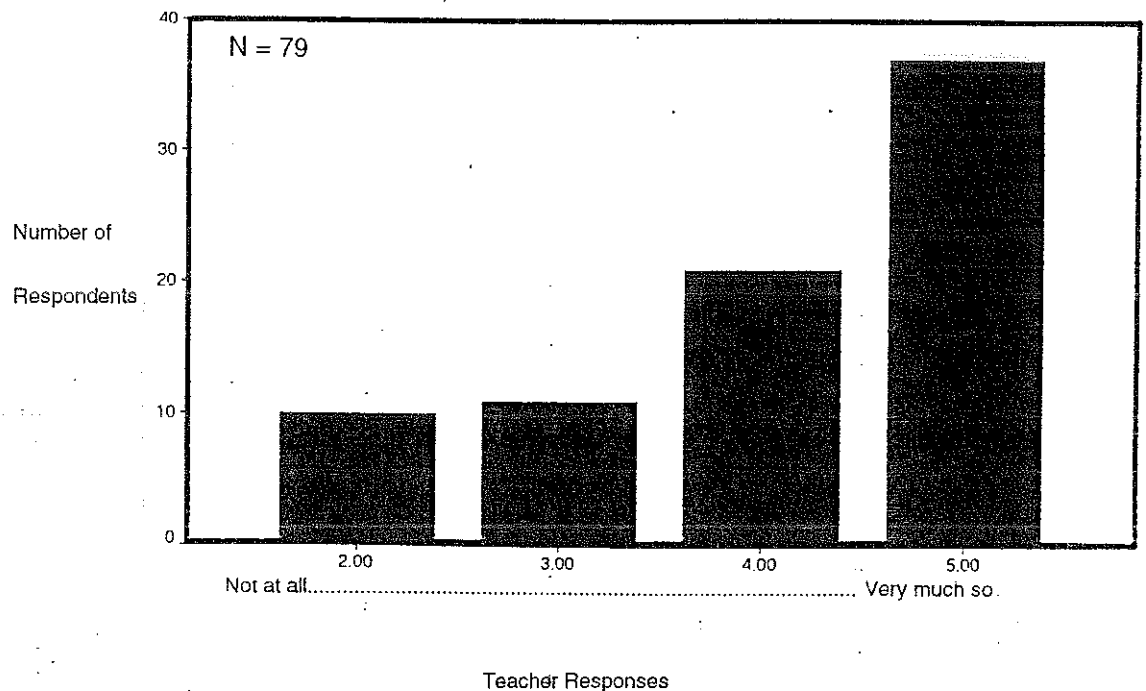
Figure 4.5: Teacher response to the statement: I feel that more training is needed for Pre-primary and Year 1 teachers in the identification of difficulties in language learning.

In response to this statement no respondents circled rating 1, and 10 respondents (13%) circled rating 2 indicating their feeling that more training is not needed. Eleven respondents (14%) circled rating 3, indicating a neutral

response. Fifty eight respondents (73.4% of the sample) circled ratings 4 and 5, indicating that they feel that more training is needed for Pre-primary and Year 1 teachers if they are to identify children having difficulties in language learning.

One respondent commented, in relation to this issue..."I am confident in my ability to identify children who give me cause for concern... however this does not come from my training but rather from my gut feeling and my experiences as a parent...it concerns me that so many teachers are convinced that difficulties in Pre-primary can be put down to lack of maturity. More training is definitely needed". A second respondent indicated that she was aware that she didn't understand terms used in relation to the identification and description of difficulty in language learning, and felt that no training was currently being given to help teachers understand these issues. Therefore she felt that there was a great need for more training. A third respondent commented that she had undertaken training on her own initiative in order to compensate for the lack of inservicing given on the nature of difficulties in language learning, and remediation strategies within the classroom. Other respondents mentioned terms such as *dyslexia,* and expressed the desire to be better informed about the specific nature of such conditions and their diagnosis and remediation, particularly in relation to children who may not be eligible for help outside the classroom because their difficulty is mild or moderate.

Discussion

Results shown in Figure 4.5 at first appear to contradict those of Figure 4.2 and 4.4, which showed that teachers in this study felt that they had sufficient knowledge and skills to identify children having difficulty in language learning, and that they had had sufficient training to make that identification. The results must, however, be seen in relation to the huge input of Ministry of Education

First Steps programme. This programme has involved collaborative teaching in schools classified as high priority schools in terms of language skills, and has also involved many hours of inservicing for teaching staff not involved in the collaborative programme. The Ministry initiative has also involved the production and distribution of booklets designed to provide on-going classroom reference materials. It may be, that although teachers are appreciative of the opportunity to participate in such programmes, they are also aware that the programmes do not help them to deal appropriately with children who seem to be making little or no progress in language learning, despite the implementation of any number of different teaching strategies in the classroom setting.

Data from Figure 4.5 seem to suggest that teachers in this study feel that they have adequate training in some areas relating to the identification of children having difficulties in language learning, but that they are aware that there is much more to be learned if these children are to be identified quickly and appropriate intervention strategies are to be implemented.

Summary

Data to answer research question 1 were presented in two groups to facilitate discussion. Overall, it could be seen that teachers generally agreed with the parents in Zubrick's study, particularly in relation to those behaviours which were directly related to language performance. Where there were differences, they related mainly to behavioural correlates which could be said to be related more to the personality and general behaviour of the speaker. It may be that teachers do not have the time or the opportunity to observe closely the effects of these behaviours on the language capabilities of individual children, since they must, of necessity, be concerned with the management of a large group of children.

In answer to research question 2, which related to those behaviours found by the parents in Zubrick's (1984) study not to be related to difficulty in language learning, teachers felt that there was a relationship between some of these behaviours and difficulty in language learning. This was particularly so in those behaviours which related to children's health, such as *Has asthma*, or *Has allergies*. Generally however, it seems that teachers were more undecided about the relationship of these behaviours to difficulty in language learning than they were for the behaviours discussed in relation to research question 1.

Data analyses on demographic information to answer research question 3 revealed that there were no differences in responses to each of the behaviours between teachers who were parents and teachers who were not parents; Pre-primary teachers and Year 1 teachers; and those teachers trained prior to 1970, between 1970 and 1980, and post 1980.

A comparison of the relative order of importance of the behaviours as determined by the responses of teachers in this study, and the responses of parents in Zubrick's study was undertaken to answer research question 4. This revealed some differences between the responses of teachers and those of parents, which may perhaps be explained by differences in the home setting and that of the school.

Data to answer research question 5 showed that generally, teachers in this study felt confident that they had the necessary knowledge, skills and training to identify children having difficulty in language in their classrooms. They also indicated clearly that making that identification was part of their role as the classroom teacher. However, the majority indicated that there was a need for more training in this area. It was stressed in a number of comments that teachers needed this training because of the lack of assistance available

outside the classroom to assist them in the identification and remediation of children having difficulty in language learning uncomplicated by any other known cause.

Chapter 5

Conclusion

Introduction.

This chapter contains a general discussion on the findings of this study, followed by acknowledgement of the limitations of both this study, and the study on which it was based. The chapter concludes with a discussion on the implications of the findings from this study for future research and for classroom practice.

Concluding Discussion.

Some children in schools in Western Australia may be at risk of developing learning or behavioural difficulties because they have a difficulty in language learning which is uncomplicated by any other obvious cause such as hearing loss, otitis media, mental retardation, physical disability, mental disorder or low intelligence. Local research by Zubrick (1984) has revealed that, even at the Pre-primary and Year 1 level, these children are perceived to be much less academically able than their peers. In an effort to improve the identification rates for these children, Zubrick interviewed 825 parents to determine the extent to which those parents felt that some behaviours may be either related, or not related to difficulty in language learning.

The present study examined the extent to which Pre-primary and Year 1 teachers from 2 school districts of the Ministry of Education of Western Australia agreed or disagreed with the findings in Zubrick's study. Generally, teachers and parents were seen to be in agreement on behavioural correlates of difficulty in language learning, particularly in relation to those behaviours directly related to language performance, such as *Speech is difficult to understand,* and *Cannot make self clearly understood to others.* It may be

that any differences which have occurred between the teachers in this study and the parents in Zubrick's study have arisen because of the differences in setting and context between the home and the Pre-primary or Year 1 classroom. It was noticeable that teachers felt that behavioural correlates associated with the health of children may have a relationship with difficulty in language learning, whereas parents did not. While parents made no association between such behaviours as *Has asthma* and *Has allergies* and difficulty in language learning, teachers in this study did. The conclusion was drawn that teachers may think more in terms of lost learning opportunities for children who have frequent absences from the classroom, than on the effect of these behaviours on the language learning capabilities of individual children.

Researchers acknowledged in Chapter 2 of the present study indicated that the level of knowledge, skills and training of teachers may have an impact on the identification of children having difficulty in language learning. The findings in this study revealed that participating teachers felt that they had the necessary knowledge, skills and training to identify children having difficulty in language learning. Nevertheless, the majority indicated that more training was needed. From the comments, these teachers indicated that such additional training is needed if these children are to be appropriately identified and effective remediation strategies implemented. Many teachers in this study commented on the lack of available resources, and indicated a degree of frustration that the needs of children were clearly visible but the means to cope with those needs appeared to be lacking.

Limitations

In the first instance there are limitations of Zubrick's (1984) study which, of necessity, affect the present study. Zubrick made no provision to deal with such factors as cultural or social influences, or the possible effect on responses

by participants from non-English speaking backgrounds. Further, she did not ask the teachers of the children in her study to participate, other than to give a standard report on the academic status of the selected children.

These factors have limited the present study in that Pre-primary and Year 1 teachers may often attribute the persistent presence of certain behaviours to cultural, social or language differences rather than to difficulty in language learning per se. This issue was not addressed in either study. Further, data to answer research questions in this study were also obtained under different conditions from those prevailing in Zubrick's (1984) study. Whereas in Zubrick's study data were collected by a speech therapist or trained research assistant, in the present study data collection relied on teachers' response to a mailed questionnaire. This method of data collection excluded the collection of any ethnographic data related to socio-cultural aspects of the identification of difficulty in language learning in the classroom.

Another limitation of this study is the size of the sample, which was smaller than that used in Zubrick's study. It was, nevertheless, large enough for meaningful data analysis.

Implications for Further Research.

One of the implications for future research of this study is that more work needs to be done on teacher recognition and acceptance of the significance of those behaviours which have been shown both historically and currently to have a relationship with difficulty in language learning. If a valid profile of children having difficulty in language learning, which is uncomplicated by any other known handicap, is to be developed then teachers, clinicians, parents, and the children themselves (where feasible) must be equally involved so that all aspects of such a profile can be fully explored.

There also seems to be a need for further research on the development and use of checklists which will assist teachers to identify children having difficulty in specific areas of language if these children are to be identified, diagnosed and remediated within the classroom setting. The First Steps programme provides such a checklist for skill development in specific areas. However, there appears to be a need for teachers to be able to identify the nature of language difficulty in terms of the difficulty itself, rather than its manifestations. That is, to be able to determine whether the difficulty is receptive or expressive, or a combination of both, whether the difficulty is a general learning difficulty or a language difficulty, and whether or not the difficulty is occurring as a result of social, emotional, behavioural or cultural variation. While a plethora of such checklists is already in existence, their use does not appear to be widespread, and it would seem that little research has been implemented into their suitability for use in schools in Western Australia. Trialling of such checklists with large groups of teachers would seem to be desirable.

Implications for Educational Practice.

Results obtained from this study seem to indicate that one of the implications for classroom practice relates to the needs of teachers for more training on the nature and functions of language and the identification of the nature of specific difficulties in language learning. One way of implementing this training would be for speech pathologists to work in the classroom alongside teachers. This would allow for a team approach in which the specialist knowledge of both teachers and speech pathologists could be combined.

Teachers may be assisted in their task of providing an appropriate classroom based education for children having difficulty in language learning in the absence of any known cause if more local research was carried out to determine their needs in this area, and more practical ways of identifying these

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children could be found. It may be that increased teacher training on the nature and functions of language, difficulty in language learning, and knowledge about behavioural correlates of such difficulties may be one way to achieve a more equitable educational outcome for those children who are currently not being identified in time for effective remediation strategies to be implemented.

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Appendix A

Two examples of checklists for oral language benchmarks.

Example 1: Patterson and Wright (1990, p. 95)

Example 2: Speech Pathology Section, Allied Health (Mt. Henry Hospital), 1990.

APPENDIX A

A Checklist for the Classroom Teacher

1. _____ Speech is not understandable to strangers
2. _____ Does not use speech sounds appropriate for age
3. _____ Speech sounds like "baby talk" when compared to other children of same age
4. _____ Is unable to make sense out of his/her environment
5. _____ Doesn't understand cause-and-effect
6. _____ Doesn't have age-appropriate social language skills (e.g., when to ask questions, what words/topics to avoid)
7. _____ Can't find sources of sounds
8. _____ Doesn't follow simple directions
9. _____ Doesn't recognize descriptions of objects or events
10. _____ Cannot answer questions about activities or experiences that occurred previously in the classroom
11. _____ Has limited vocabulary (especially when exposed consistently to adults with extensive vocabulary)
12. _____ Uses shorter sentences than other children of same age
13. _____ Doesn't have words for common objects and experiences
14. _____ Sentence structure is inappropriate for age
15. _____ Exhibits stress or tension when speaking
16. _____ Avoids speaking situations
17. _____ Avoids saying certain appropriate words
18. _____ Uses five or more repetitions of a sound or of the same word
19. _____ Sentence has more than one dysfluency
20. _____ Voice always sounds like a cold or sore throat
21. _____ Loses voice for a prolonged period more than once a year
22. _____ Voice is hoarse or harsh
23. _____ Voice is too high-pitched
24. _____ Voice is too low-pitched
25. _____ Voice is too soft
26. _____ Voice is too loud
27. _____ Voice is monotone
28. _____ Isn't talking by age 2
29. _____ Doesn't respond to loud sounds
30. _____ Watches other children to see what to do during oral directions
31. _____ Has a cold, allergy or earache most of the time
32. _____ Has other family members with a hearing loss
33. _____ Seems to ignore or miss what is being said
34. _____ Seems to confuse or misunderstand what is being said
35. _____ Acts as if she/he understands (smiles, nods) even when it isn't so.

APPENDIX B

Speech-Sound Developmental Ages According to Templin (1957) and Poole (1934)

Speech Sound	Templin (75% criterion)	Poole (100% criterion)
m	3	3.5
n	3	4.5
h	3	3.5
p	3	3.5
f	3	5.5
w	3	3.5
b	4	3.5
ng (sing)	3	4.5
y (you)	3.5	4.5
k	4	4.5
g	4	4.5
l	6	6.5
d	4	4.5
t	6	4.5
s	4.5	7.5
r	4	7.5
ch	4.5	not tested
v	6.5	6.5
z	7	7.5
zh (measure)	7	6.5
th	6	7.5
j (jug)	7	not tested
sh	4.5	6.5
th (the)	7	6.5

APPENDIX C

Guidelines for Differentiating a Stutterer from a Nonfluent Child

1. Facial tremors caused by excessive tension
2. Speaks cautiously
3. Speaks very rapidly, almost compulsive
4. Speaks too loudly or softly
5. Evidence of struggle and tension while speaking
6. Blocks the airflow
7. Raises the pitch or volume during dysfluencies
8. Accompanying body movements during dysfluencies
9. Signs of embarrassment while speaking
10. Uneven repetitions
11. Use of the schwa vowel on his/her repetitions
12. Many repetitions (5 or more) during a word
13. Stops in the middle of a word, backs up and starts over
14. Evidence of avoiding certain words
15. More than one dysfluency during a sentence

From *Treating the School Age Stutterer: A Guide for Clinicians* by Carl W. Dell, Jr. (published by Speech Foundation of America, 1986, not copyrighted).

Teacher Checklist
Communicative behaviour: Problem   No problem

1   Speech

     Uses speech sounds correctly
     for age. For this age, most
     speech sounds should be produced
     correctly. One or two consistent
     errors may be present. Should be
     intelligible all the time to
     familiar and unfamiliar people

2   Grammar

     Uses a variety of sentences
     including longer and more complex
     sentences e.g those joined with
     "because", "so that", "if", "when".
     Makes few grammatical errors

3   Expressing ideas

     Describes experiences accurately,
     logically and in sufficient detail
     for a listener to understand

4   Vocabulary

     Has a large vocabulary and uses
     this effectively to express ideas.
     Learns new vocabulary easily and
     incorporates this into own sentences.

5   Understanding

     Follows teachers instructions and
     questions on first telling without
     requiring further explanation.
     Quickly learns school routines

6   Classroom behaviour

     (a) with teacher
     Uses formal greetings. Obtains
     teacher attention appropriately.
     Listens when teacher addresses
     group and remains on-topic if
     called to respond

     (b) with peers
     Gains entry to group by acceptable
     method. Takes turns being leader/
     follower. Initiates and responds
     to peers' conversation

7   Specific language skills

     Constructs comprehensible
     personal narrative.
     Participates in shared book
     activity

8   Fluency

     Speaks fluently (without
     excessive pauses, repetitions,
     false statements)

9   Voice

     Uses a normal voice

Appendix B

List of behaviours investigated by Zubrick (1984) for the significance of their relationship to an underlying difficulty in language learning.

NB Zubrick reverse coded 15 checklist items, which were reworded to reflect positive behaviours, while the remaining 75 behaviours identified behaviour problems. Items reverse coded were behaviour checklist items 47, 48, 49, 53, 54, 55, 64, 74, 82, 85, 86, 115, 119, and 121.

Section C - Page 2

Below is a list of items that describe children.
For each item that describes your child, now or within the past 6 months, please
circle number 2, if the item is very true or often true of your child. Circle 1 if the item is somewhat
or sometimes true of your child. If the item is not true of your child, circle the 0.

						DO NOT MARK
0	1	2	43.	Acts too young for his/her age		71
0	1	2	44.	Argues a lot		72
0	1	2	45.	Asthma		73
0	1	2	46.	Allergies		74
0	1	2	47.	Asks a lot of questions		75
0	1	2	48.	Accepts changes in routine		76
0	1	2	49.	Actively joins in conversation		77
0	1	2	50.	Bad tempered, grumpy		78
0	1	2	51.	Bossed around by other children		79
0	1	2	52.	Brothers or sisters talk for him/her		80
0	1	2	53.	Can make himself/herself understood clearly to others		81
0	1	2	54.	Can say all sounds correctly		82
0	1	2	55.	Can retell a message accurately		83
0	1	2	56.	Complains of ear ache		84
0	1	2	57.	Clings to adults or too dependent		85
0	1	2	58.	Complains of not having any friends		86
0	1	2	59.	Cries a lot		87
0	1	2	60.	Clumsy		88
0	1	2	61.	Daydreams or gets lost in his/her thoughts		89
0	1	2	62.	Demands a lot of attention		90
0	1	2	63.	Disobedient at school/kindergarten		91
0	1	2	64.	Easy going		92
0	1	2	65.	Enjoys playing with messy things		93
0	1	2	66.	Enjoys being told/read stories		94
0	1	2	67.	Enjoys being with older rather than younger children		95
0	1	2	68.	Fears going to school/kindergarten		96

						DO NOT MARK
0	1	2	69.	Follows things better when shown rather than told how to do them.		97
0	1	2	70.	Feels or complains that nobody loves him/her		98
0	1	2	71.	Feels worthless or inferior; feels she's/he's not as good as others.		99
0	1	2	72.	Fearful/anxious		100
0	1	2	73.	Finds instructions hard to follow		101
0	1	2	74.	Gets along well with other children		102
0	1	2	75.	Gets hurt a lot, accident prone		103
0	1	2	76.	Gets in many fights		104
0	1	2	77.	Gets teased a lot		105
0	1	2	78.	Gets bored with toys quickly		106
0	1	2	79.	Has trouble hearing		107
0	1	2	80.	Ignores instructions		108
0	1	2	81.	Is reluctant to talk in groups		109
0	1	2	82.	Is happy to begin a conversation with unfamiliar people		110
0	1	2	83.	Impulsive/does things without thinking		111
0	1	2	84.	Inattentive; doesn't pay attention		112
0	1	2	85.	Is happy to leave mother/father		113
0	1	2	86.	Is easy to manage		114
0	1	2	87.	Is reluctant to join in groups		115
0	1	2	88.	Likes to be alone		116
0	1	2	89.	Likes things to remain the same		117
0	1	2	90.	Naughty at home		118
0	1	2	91.	Nervous, highstrung or tense		119
0	1	2	92.	Disliked by other children		120
0	1	2	93.	Needs a long time to "warm" to new situations/people		121

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Section C - Page 3

Not true	Somewhat/sometimes true	Very true			DO NOT MARK
0	1	2	94.	Needs to have instructions and questions repeated	122
0	1	2	95.	Physically attacks people, especially if upset.	123
0	1	2	96.	Poor school work	124
0	1	2	97.	Poor concentration; can't pay attention for long	125
0	1	2	98.	Poorly co-ordinated	126
0	1	2	99.	Prefers playing with older children	127
0	1	2	100.	Prefers playing with younger children	128
0	1	2	101.	Prefers playing with one toy at a time	129
0	1	2	102.	Refuses to talk	130
0	1	2	103.	Repeats himself/herself, when he/she talks	131
0	1	2	104.	Restless; hyperactive; can't sit still	132
0	1	2	105.	Secretive; keeps things to self	133
0	1	2	106.	Self-conscious or easily embarrassed.	134
0	1	2	107.	Shows off/clowns around	135
0	1	2	108.	Spends a lot of time alone	136
0	1	2	109.	Speech is difficult to understand	137
0	1	2	110.	Says very little	138
0	1	2	111.	Shy or timid	139
0	1	2	112.	Stares blankly	140
0	1	2	113.	Stubborn; pigheaded; strong-willed	141
0	1	2	114.	Sudden changes in mood or feeling	142
0	1	2	115.	Talks too much	143
0	1	2	116.	Teases a lot	144
0	1	2	117.	Temper tantrums	145
0	1	2	118.	Tries to avoid going to school or kindergarten	146
0	1	2	119.	Tells me stories she/he knows	147
0	1	2	120.	Talks better to children than adults	148

Not true	Somewhat/sometimes true	Very true			DO NOT MARK
0	1	2	121.	Talks easily with friends	149
0	1	2	122.	Underactive, slow moving, lacks energy	150
0	1	2	123.	Unhappy, sad, depressed	151
0	1	2	124.	Unusually naughty	152
0	1	2	125.	Uses gestures and/or grunts instead of talking	153
0	1	2	126.	Visits doctor frequently	154
0	1	2	127.	Very concerned with neatness, cleanliness	155
0	1	2	128.	Whining	156
0	1	2	129.	Withdrawn, doesn't get involved with others	157
0	1	2	130.	Worries a lot	158
0	1	2	131.	Will only talk to one person, not to a group of people.	159
0	1	2	132.	Will only talk to people he/she knows well	160

Please write in any problems your child has that concern you, that were not listed previously.

0	1	2	133.	161
0	1	2	134.	162
0	1	2	135.	163

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Preliminary Questionnaire for the present study.

Teacher Questionnaire

Please tick or fill in the appropriate boxes:

Age.. _____

_____

	Pre-primary	Year 1

Currently Teaching.. _____   _____

Year of completion of initial teacher training.......... _____

Any higher degrees (please specify degree, year completed, major/minor areas of study. If you have completed more than one degree, please give details of the most recent completed).

Example: B.Ed. 1990 major-maths, minor-computing.

....

....

Studies currently in progress: (Please specify the course and major/minor areas of study).

....

....

....

Parental Status................................... number of children _____

Ages..   Boys   Girls

Parts 1 and 2

Please indicate your response to the following statements listed below by marking the adjoining scale.

Note: **SA.........Strongly Agree**   **D..........Disagree**
       A...........Agree   **SD........Strongly Agree**
       U...........Undecided

1. Difficulty in speaking can affect progress in learning to read   SA   A   U   D   SD

2. Where children are having difficulties in speaking, listening, reading or writing in Pre-primary or Year 1 they may not grow out of it   SA   A   U   D   SD

3. All children with langauge difficulties have abnormalities in their speech   SA   A   U   D   SD

4. There is always a reason (eg brain damage, perceptual dysfunction or low intelligence) why a child might have difficulty in language learning   SA   A   U   D   SD

5. Children having difficulty in one or more aspects of language learning may not grow out of their difficulties without assistance   SA   A   U   D   SD

6. There may be no obvious cause for a difficulty in language learning   SA   A   U   D   SD

7. Boys take longer to mature than girls and are therefore more likely to grow out of a difficulty in language learning   SA   A   U   D   SD

8. Some children take longer to mature than others, and their difficulties in language learning will resolve given time.   SA   A   U   D   SD

9. More boys are likely to have difficulty in language learning than girls   SA   A   U   D   SD

10. You can expect some children to have difficulty in language learning in Pre-primary or Year 1 but they usually catch up.   SA   A   U   D   SD

Part 3

The Whole Language Approach integrates speaking, listening, reading and writing, and indicates that difficulty in one area may well precede or be linked to difficulty in another. Research is also showing that some behaviours may be indicative of an underlying difficulty in language learning. Please indicate your response to the following behaviours on the adjoining scale.

Note: Strongly Agree........Indicates that you consider the behaviour to be related to difficulty in language learning

Agree................... Indicates that you feel the behaviour is likely to be related to difficulty in language learning

Undecided............ Have no opinion

Disagree................ Indicates that you consider it unlikely that the behaviour is related to a difficulty in language learning

Strongly Disagree..Indicates that you consider the behaviour to be not related to difficulty in language learning.

		SA	A	U	D	SD
1.	Has allergies	SA	A	U	D	SD
2.	Has sudden changes in mood or feeling	SA	A	U	D	SD
3.	Finds instructions hard to follow	SA	A	U	D	SD
4.	Physically attacks others	SA	A	U	D	SD
5.	Is not active in conversation	SA	A	U	D	SD
6.	Says very little	SA	A	U	D	SD
7.	Is withdrawn	SA	A	U	D	SD
8.	Is reluctant to join groups	SA	A	U	D	SD
9.	Can not make self clearly understood to others	SA	A	U	D	SD
10.	Does not relate to other children	SA	A	U	D	SD
11.	Follows when shown	SA	A	U	D	SD

12. Does not ask questions   SA   A   U   D   SD

13. Likes constancy   SA   A   U   D   SD

14. Needs time to adjust   SA   A   U   D   SD

15. Can not say all sounds correctly   SA   A   U   D   SD

16. Suffers from ear ache   SA   A   U   D   SD

17. Is clumsy   SA   A   U   D   SD

18. Refuses to talk   SA   A   U   D   SD

19. Is withdrawn   SA   A   U   D   SD

20. Is reluctant to talk in groups   SA   A   U   D   SD

21. Siblings talk for him/her   SA   A   U   D   SD

22. Is impulsive   SA   A   U   D   SD

23. Is accidence prone   SA   A   U   D   SD

24. Acts too young   SA   A   U   D   SD

25. Unusually naughty   SA   A   U   D   SD

26. Can not retell a message accurately   SA   A   U   D   SD

27. Is shy   SA   A   U   D   SD

28. Whines   SA   A   U   D   SD

29. Speech is difficult to understand   SA   A   U   D   SD

30. Gets bored with toys quickly   SA   A   U   D   SD

Part 4

Many researchers feel that children having difficulty in language learning can be identified by close cooperation between parents and teachers. It is important to know how teachers feel about the role played by parents in the identification of their child as a language learning having difficulty. Please pick a number from the scale below to show how well each word or phrase describes how you feel about parents and their capability to identify their child as having difficulty in language learning. Circle the appropriate number on the scale next to each statement.

Scale

Never   1   2   3   4   5   **Always**

Parents:

a.	Aware unaware of difficulty	1 2 3 4 5
b.	Are accurate	1 2 3 4 5
c.	Are useful	1 2 3 4 5
d.	Exaggerate child's capabilities	1 2 3 4 5
e.	Deny existence of difficulty	1 2 3 4 5
f.	Tend to blame school or teacher	1 2 3 4 5
g.	Are interested	1 2 3 4 5
h.	Act on suggestions	1 2 3 4 5
i.	Are helpful	1 2 3 4 5
j.	Are aware of difficulty	1 2 3 4 5
k.	Are keen to discuss	1 2 3 4 5
l.	Follow through on suggested action	1 2 3 4 5
m.	Listen carefully	1 2 3 4 5
n.	Volunteer information freely	1 2 3 4 5
o.	Feel defensive	1 2 3 4 5
p.	Compare child with siblings	1 2 3 4 5
q.	Compare own child with peers	1 2 3 4 5
r.	Reject teacher's suggestions	1 2 3 4 5
s.	Will try other avenues of assistance	1 2 3 4 5
t.	Feel that the teacher/school should resolve the difficulty	1 2 3 4 5
u.	Are not interested	1 2 3 4 5
v.	Accept teacher's suggestions/opinions	1 2 3 4 5

Any other comments:..

....

....

....

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Part 5

This section relates to how confident you feel in identifying children at-risk in your classroom. Please select and circle 1 number for each statement.

		Scale					
Not at all	**1**	**2**	**3**	**4**	**5**	**Very much so**

1. I am confident that I have the knowledge and skills needed to identify children having difficulties in language learning   1 2 3 4 5

2. I have had sufficient training to confidently refer children for further assessment   1 2 3 4 5

3. I understand the terms used by speech therapists and other professionals   1 2 3 4 5

4. I feel that more training is needed for Pre-primary and Year 1 teachers in the identification of difficulties in language learning   1 2 3 4 5

5. I feel that the identification of children having difficulties in language learnings is not the role of the classroom teacher   1 2 3 4 5

Please add any other comments...

....

....

....

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....

The research package posted to schools, including the final questionnaire.

23/11/92

Dear Principal

I am a Year 1 teacher at John Septimus Roe Anglican Community School. I am also completing a thesis as part of my Bachelor of Education Degree at Edith Cowan University. The title of my research proposal is "Identifying Language Learners at Risk: Pre-primary into Year 1".

I would appreciate it if you could distribute the enclosed questionnaires to your Pre-primary and Year 1 teachers. The questionnaire will take about 12 minutes to fill in, and each has a stamped and addressed envelope included so that the completed questionnaire can be returned with a minimum of inconvenience. I do not need to know the teachers' names. However each questionnaire has been numbered so that I can check replies received against the number of questionnaires distributed. All replies will be confidential, and no single questionnaire will be quoted in the final research report. Once the information has been compiled the completed questionnaires will be destroyed.

If you would like to know more about the research proposal or the research findings please do not hesitate to contact me. I appreciate your cooperation, particularly at such a busy time of the year.

Yours sincerely

Dee Jordan

23/11/92

Dear Teacher

My name is Dee Jordan and I am a Year 1 teacher at John Septimus Roe Anglican Community school in Mirrabooka. I am also completing an Honours Degree at Edith Cowan University, and for this degree I am conducting research into the identification of children having difficulty in language learning in Pre-primary and Year 1. I would really appreciate if you could complete the questionnaire and return it to me as soon as possible. (It should take about 12 minutes to complete). A stamped and addressed envelope is included for your convenience.

Your response to the questionnaire will be confidential and no single questionnaire will be quoted in the final research report. All questionnaires will be destroyed once the information from them has been collated.

I do not need to know your name although I do need some information in terms of your professional training and parental status. You will notice that this questionnaire has been numbered - this is only so that I can check replies received against the number of questionnaires sent out.

I believe that my research may be of use to teachers, principals and administrators in the development of future policy in relation to the identification of children at risk of having difficulty in language learning within the school setting. I also believe that my research is important *because it is classroom based*, and it is for this reason that I am seeking your support - your return is vital if my statistical calculations are to be valid. Please don't hesitate to contact me if you have any queries or are interested in the results of the project.

Thank you for your cooperation at an extremely busy time of the year.

Yours sincerely

Dee Jordan

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Teacher Questionnaire

Please tick or fill in the appropriate boxes:

Age	_____	(optional)
	Pre-primary	Year 1
Currently Teaching	_____	_____

Qualifications

Year of completion of initial teacher training _____

Any higher degrees (please specify degree, year completed, major/minor areas of study. If you have completed more than one degree, please give details of the most recent completed).

Example: B.Ed. 1990 major-maths, minor-computing.

....
....

Studies currently in progress: (Please specify the course and major/minor areas of study).

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

Parental Status

Number of children _____

Boys	Girls
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Please indicate your response to the following statements listed below by marking the adjoining scale.

Note: SA.........Strongly Agree   D...........Disagree
         A............Agree   SD........Strongly Agree
         U...........Undecided

1. Difficulty in speaking can affect progress in learning to read	SA	A	U	D	SD
2. Where children are having difficulties in speaking, listening, reading or writing in Pre-primary or Year 1 they may not grow out of it	SA	A	U	D	SD
3. All children with langauge difficulties have abnormalities in their speech	SA	A	U	D	SD
4. There is always a reason (eg brain damage, perceptual dysfunction or low intelligence) why a child might have difficulty in language learning	SA	A	U	D	SD
5. Children having difficulty in one or more aspects of language learning may not grow out of their difficulties without assistance	SA	A	U	D	SD
6. There may be no obvious cause for a difficulty in language learning	SA	A	U	D	SD
7. Boys take longer to mature than girls and are therefore more likely to grow out of a difficulty in language learning	SA	A	U	D	SD
8. Some children take longer to mature than others, and their difficulties in language learning will resolve given time.	SA	A	U	D	SD
9. More boys are likely to have difficulty in language learning than girls	SA	A	U	D	SD
10. You can expect some children to have difficulty in language learning in Pre-primary or Year 1 but they usually catch up	SA	A	U	D	SD

Research shows that some behaviours may be linked to difficulty in language learning. In your experience, how likely is it that the following behaviours could be indicative of an underlying difficulty in language learning. Please indicate your response on the adjoining scale.

Note: **Strongly Agree.........** Indicates that you consider the behaviour to be related to difficulty in language learning

Agree..................... Indicates that you feel the behaviour is likely to be related to difficulty in language learning

Undecided.................. Have no opinion

Disagree................... Indicates that you consider it unlikely that the behaviour is related to a difficulty in language learning

Strongly Disagree.......... Indicates that you consider the behaviour to be not related to difficulty in language learning.

1. Has allergies	SA	A	U	D	SD
2. Has sudden changes in mood or feeling	SA	A	U	D	SD
3. Finds instructions hard to follow	SA	A	U	D	SD
4. Physically attacks others	SA	A	U	D	SD
5. Is not active in conversation	SA	A	U	D	SD
6. Says very little	SA	A	U	D	SD
7. Is withdrawn	SA	A	U	D	SD
8. Is reluctant to join groups	SA	A	U	D	SD
9. Can not make self clearly understood to others	SA	A	U	D	SD
10. Does not relate to other children	SA	A	U	D	SD
11. Follows things better when shown	SA	A	U	D	SD

12. Does not ask questions	SA	A	U	D	SD
13. Likes constancy	SA	A	U	D	SD
14. Needs time to adjust	SA	A	U	D	SD
15. Can not say all sounds correctly	SA	A	U	D	SD
16. Suffers from ear ache	SA	A	U	D	SD
17. Is clumsy	SA	A	U	D	SD
18. Refuses to talk	SA	A	U	D	SD
19. Has asthma	SA	A	U	D	SD
20. Is reluctant to talk in groups	SA	A	U	D	SD
21. Siblings talk for him/her	SA	A	U	D	SD
22. Is impulsive	SA	A	U	D	SD
23. Is accidence prone	SA	A	U	D	SD
24. Acts too young	SA	A	U	D	SD
25. Unusually naughty	SA	A	U	D	SD
26. Can not retell a message accurately	SA	A	U	D	SD
27. Is shy	SA	A	U	D	SD
28. Whines	SA	A	U	D	SD
29. Speech is difficult to understand	SA	A	U	D	SD
30. Gets bored with toys quickly	SA	A	U	D	SD

This section relates to how confident you feel in identifying children at-risk in your classroom. Please select and circle 1 number for each statement.

	Scale					
Not at all	**1**	**2**	**3**	**4**	**5**	**Very much so**

1. I am confident that I have the knowledge and skills needed to identify children having difficulties in language learning   1 2 3 4 5

2. I have had sufficient training to confidently refer children for further assessment   1 2 3 4 5

3. I understand the terms used by speech therapists and other professionals   1 2 3 4 5

4. I feel that more training is needed for Pre-primary and Year 1 teachers in the identification of difficulties in language learning   1 2 3 4 5

5. I feel that the identification of children having difficulties in language learnings is not the role of the classroom teacher   1 2 3 4 5

Please add any other comments..

....

....

....

....

....

....

....

23/11/92

Dear Teacher

Earlier this week you should have received a questionnaire from me. The questionnaire is part of my research investigating the identification of children having difficulties in language learning from the classroom. If you have filled in the questionnaire and returned it, thank you very much. If you have mislaid the reply paid envelope please give me a ring and I will send you another. I would appreciate if I could have all the questionnaires returned to me by the 1st of December.

Many thanks for your cooperation and time at a busy time of the year.

Yours sincerely

Dee Jordan

Appendix E

Detailed Tables of results for research Questions 1 and 2.

Teacher Response to Behaviours Related to Difficulty in Language Learning:

Zubrick (1984)

Item	Statement	SA	A	U	D	SD
1	Cannot make self clearly understood to others	32.6%	50.6%	6.4%	8.9%	1.3%
2	Speech is difficult to understand	26.6%	58.2%	8.9%	6.3%	0.0%
3	Cannot say all sounds correctly	21.5%	62.0%	6.3%	10.1%	0.0%
4	Cannot retell a message accurately	12.7%	65.8%	6.3%	15.2%	0.0%
5	Is not active in conversation	13.9%	54.4%	10.1%	17.7%	3.8%
6	Says very little	13.9%	36.7%	15.2%	30.4%	3.8%
7	Is reluctant to join in groups	5.1%	44.3%	22.8%	26.6%	1.3%
8	Likes constancy	2.6%	40.3%	22.1%	32.5%	2.6%
9	Needs time to adjust	3.8%	45.6%	22.8%	25.3%	2.5%
10	Does not ask questions	6.3%	44.3%	25.3%	22.8%	1.3%
11	Is reluctant to talk in groups	5.1%	39.2%	22.8%	31.6%	1.3%
12	Is withdrawn	6.3%	53.2%	17.7%	21.5%	1.3%
13	Acts too young	1.3%	44.3%	24.1%	44.3%	1.3%
14	Physically attacks others	11.4%	27.5%	26.6%	27.8%	6.3%
15	Refuses to talk	11.4%	44.3%	22.8%	20.3%	1.3%
16	Does not relate to other children	5.1%	43.0%	21.5%	29.1%	1.3%
17	Finds instructions hard to follow	38.0%	59.5%	1.3%	1.3%	0.0%
18	Is shy	1.3%	24.1%	21.5%	49.4%	3.8%
19	Siblings talk for him/her	5.1%	63.3%	15.2%	16.5%	0.0%

N = 79

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Teacher Response to Behaviours Not Related to Language:

Zubrick (1984)

Statement	SA	A	U	D	SD
Has allergies	7.6%	36.7%	32.9%	20.3%	2.5%
Has sudden changes in mood or feeling	2.5%	17.7%	27.8%	45.6%	6.3%
Follows things better when shown	0.0%	13.9%	16.5%	58.2%	11.4%
Suffers from earache	3.8%	15.2%	26.6%	44.3%	10.1%
Is clumsy	2.5%	27.8%	34.2%	31.6%	3.8%
Has asthma	16.5%	36.7%	31.6%	13.9%	1.3%
Is impulsive	7.6%	35.4%	34.2%	21.5%	1.3%
Is accident prone	5.1%	43.0%	31.6%	19.0%	1.3%
Unusually naughty	5.1%	32.9%	24.1%	32.9%	5.1%
Whines	7.6%	54.4%	21.5%	16.5%	0.0%
Gets bored with toys quickly	5.1%	38.0%	32.9%	20.3%	3.8%

N = 79