

**An Action Research Mixed Method Evaluation of
the Implementation of an Anxiety
Intervention/Prevention Program for Year Three
Children at a Language Development Centre
Preparing to Enter into Mainstream Education**

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Declaration

I declare that this thesis is my own account of my research and contains as its main content work which has not previously been submitted for a degree at any tertiary educational institution.

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ABSTRACT

This study examines the effectiveness of implementing a modified cognitive behavioural (CBT) anxiety intervention/prevention program to meet the specific needs of speech and language impaired (SLI) children enrolled in a Language Development Centre (LDC), as they prepare to exit the LDC and enter into mainstream education. The study implemented the anxiety CBT program over two consecutive school years incorporating two different Year 3 cohorts (age range 7 to 9 years) and is reported in three stages.

The first study aimed to modify an anxiety CBT intervention/prevention program (namely the FRIENDS for Life program) for SLI children enrolled in Year 3 at a LDC as they prepared to exit the LDC and enter into mainstream education. All children offered the program participated in the study however, parent participation was low.

Previous research (Barrett et al, 1996, Barrett, 1999; Bett, 2002; Mendlowitz, 1996 & Rapee et al, 2005) found that in order for anxiety intervention/prevention programs to be efficacious for children, the program focus needed to include parents. The inclusion of parent participation for children with language impairment is considered essential, as the children are more likely to benefit from having the CBT strategies consolidated and supported at home (Bett, 2002).

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Therefore, the second study involved a re-implementation of the modified FRIENDS for Life program to a second cohort of SLI children in Year 3 the following year. Due to low participation of parent involvement in the first study, this study aimed for improved parent involvement and participation of the parent FRIENDS for Life sessions.

Thirty-two children participated in study one and thirty-three children participated in study two. Both studies used an action research mixed method evaluation approach to gain a comprehensive assessment of the effectiveness of the program. The outcomes, using standardised outcome measures showed no significant difference between the control group and the intervention group. However using program specific descriptive and non-traditional measures indicate that differential and positive changes were attained for the intervention group.

Investigation of a complex data set using a variety of methods during various points in the evaluation process provided complementary information, this formed the foundation for more comprehensively assessing children with speech/language impairment. The intervention groups developed an increased awareness of their own and other people's emotions and most importantly they developed a wider array of 'emotion language' when compared to the control group at post intervention. In addition, the intervention group attained a sound understanding of the FRIENDS plan and skills at post intervention.

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A one year follow-up, of the original study, to explore the long-term benefits of the FRIENDS program for SLI children was not completed following a poor response rate. This is discussed and explored as it may benefit the way future research is conducted for families of children with SLI.

The studies highlighted the benefits of the FRIENDS program for children with SLI and the need to explore more effective ways to increase parent participation at the FRIENDS for Life parent sessions. Implications of the findings are examined, alongside limitations and directions for future research.

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PREFACE

In introducing this study, and in the tradition of participant – observer methodology (Jorgensen, 1993), I feel that it is important to clarify my background experience that has crucially influenced my role, actions and perception within this study. Primarily, it is important to be aware of my pre-existing involvement with the Language Development Centre (LDC) at the centre of this study. This involvement spans three levels:

1. I have been a psychologist at the LDC.
2. I have been a teacher at the LDC.
3. I am a parent of two children who were diagnosed with language impairment.

For a period of two years, I was contracted by the LDC to psychometrically assess children to determine whether they met the criteria for entry to the centre. Specifically, this assessment is to determine whether they meet the criteria of having intelligence within the normal range, but have moderate-severe language impairment which seriously affects their progress at school. The assessment involves administering the WPSSI-R, writing psychological reports, meeting with the parents and language program co-ordinator to review the report findings and recommendations.

I worked as a relief teacher at the LDC for a period of five years after my sons exited the LDC. My personal experience with LDC, together with a

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background interest and educational experience of children with special educational needs enabled me to effectively utilise these skills to teach the LDC children taking into consideration their specific language and learning needs. This knowledge was particularly beneficial in this study as it provided the foundation from which to effectively interpret data and to modify the FRIENDS program to meet the specific learning needs of language impaired children.

Two of my sons attended the LDC during pre-primary and Year 1. One of my sons attended from pre-primary to Year 1. He had a diagnosis of Hyperlexia, Semantic and Pragmatic Difficulties¹, and difficulty with receptive language and auditory processing. Another son attended for three terms in Year 1 as there were concerns about his semantic and narrative ability¹. Some difficulty was noted with his expressive language although he was still within the average range for expressive and receptive language. During this time I worked as a volunteer teacher at the school. Socialising and support with other parents in similar circumstances enabled me to learn more about the trials and tribulations of their experiences and consolidated my growing knowledge of the effects of language impairment on the child and also on the family.

My intertwining background experiences led to my interest in this research question and influenced the way I conducted this study as a FRIENDS

¹ Terms defined in Glossary

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facilitator and as a researcher. I was able to consider the parent's and teacher's perspective together with a first hand understanding of the difficulties of the language impaired child. This knowledge enabled me to develop a methodology that was very sensitive to children with language impairment and their accompanying school environment. In saying this, I was also very mindful to take a reflective stance throughout to be vigilant to the potential for over-involvement or participant bias.

Additionally, I felt that the traditional methods of writing a research paper lacked some of the thinking and decision making which influenced each study. So in keeping with the participant – observer methodology I added a reflection page at the end of the discussion section for each study. These pages provided the opportunity for me to document my observations, concerns and thoughts which would otherwise be lost, with the intention for these reflections to benefit future research for children with speech and language disorders.

CHAPTER ONE

INTRODUCTION

The mastery of language forms the basis of our communication and integration within the world around us. It requires establishing interconnections between phonological, syntactic and semantic information (Chiat, 2000). However, for some, acquiring language is fraught with difficulties, and communication problems can leave one isolated (Beitchman, Wilson, Johnson, Atkinson, Young, Adlaf, Escobar & Douglas, 2001; Cohen, Davine, Lipsett & Isaacson, 1993; Gallagher, 1999). Many professionals, teachers and parents have been concerned with observations of a relationship between language impairment and a number of issues impacting on quality of life and relationships such as: social isolation (Brinton, Fujiki, 2006; Brinton, Robinson & Fujiki, 2004; Hart, Fujiki, Brinton & Hart, 2004; Conti-Ramsden & Botting, 2004), emotional regulation (Fujiki, Brinton, & Clarke, 2002; Fujiki, Spackman, Brinton & Hall, 2004), the ability to recognise emotions in others (Brinton, Spackman, Fujiki & Ricks, 2007; Spackman, Fujiki, Brinton, Nelson & Allen, 2005), self esteem (Jerome, Fujiki, Brinton & James, 2002; Lindsay, Dockrell, Letchford & Mackie, 2002), anxiety (Beitchman, Wilson, Johnson, Atkinson, young, Adlaf, Escobar & Douglas, 2001) and behaviour problems in children (Brownlie, Beitchman, Escobar, Young, Atkinson, Johnson, Wilson & Douglas, 2004; Brinton & Fujiki, 1999; Gallagher, 1999; van Daal, Verhoeven & van Balkom, 2007). This research explores the effectiveness of an early intervention anxiety

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intervention/prevention social skills program for children with speech and language difficulties. But first, in light of the small number of intervention research with this population, the introduction to the study will contextualise the current project by examining the prevalence of anxiety disorders, the relationship between psychological distress and speech/language impairment, reviewing research that identifies a relationship between language impairment and emotional/behavioural problems; and by considering relevant assessment literature from other areas. Because of its centrality to this research, a definition of speech/language impairment is warranted.

Speech and Language Impairment

Speech and language impairment is broken down into the two specific areas of *speech* and *language*. *Speech* disorders refer to difficulties with the physical production of sound and can involve difficulty with articulation (the aspect of pronunciation that involves bringing articulatory organs together so as to shape the sounds of speech), phonology (*a failure to use speech sounds appropriate for individual age and dialect*) and fluency (*i.e. stuttering*). *Language disorder* is a general term which refers to difficulties with the communication system that enables an individual to function in society. It is further categorised into receptive language difficulties (*difficulty understanding others*), expressive language difficulties (*difficulty sharing, thoughts, ideas and feelings*) and semantic-pragmatic disorder (*Semantic: the ability to understand the meaning of words/phrases and sentences*).

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Pragmatic: the use of language in social settings) (Leitão, 2001). Figure 1 depicts how speech and language difficulties can encompass a wide range of difficulties, and associated with other conditions and areas of special educational need (McMinn, 2006).

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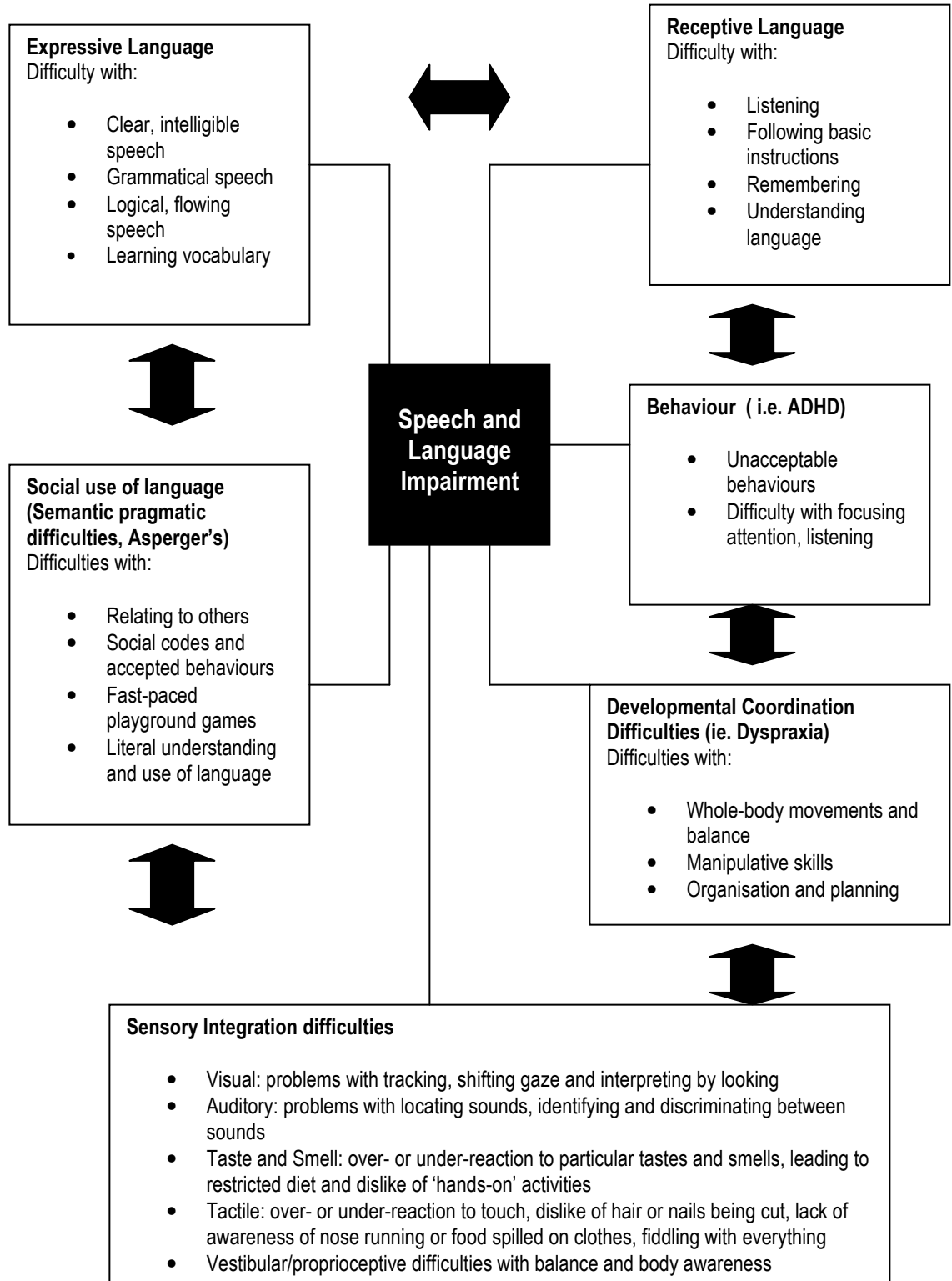


Figure: 1: A diagram depicting how speech and language Impairment can encompass a wide range of difficulties * (McMinn, 2006, p.4)

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Language impaired compared to speech impaired:

Most of the literature (Beitchman et al., 2001; Brinton et al 2007; Brinton & Fujiki, 2006; Cohen et al., 1993; Gallagher, 1999; Spackman et al 2005) examining the relationship between language impairment and social and emotional problems, identifies that language impaired, rather than speech impaired indicates a trend towards higher rates of emotional/behavioural problems when compared to non-language impaired children. The research theorise that children identified with only speech problems tend not to have difficulty with the receptive and expressive levels of language, therefore they can understand and be a part of social communication and interaction. In contrast, children identified with specific language impairment can have difficulty with the expressive and receptive levels of language. Therefore, the rules of social communication can prove difficult for children with language impairment. For these children, early experience with rejection from social groups, because of their inability to communicate appropriately, may exacerbate their social isolation thus causing externalising and internalising emotional and behavioural problems (Beitchman et al, 2001; Brinton et al, 2002; Brinton, Fujiki, Cambell Spencer & Robinson, 1997; Brinton & Fujiki, 1999, 2006; 2001; Cohen et al, 1993; Fujiki, Brinton, Hart & Fitzgerald, 1999).

Anxiety Disorders

In the Australian population, mental health problems affect approximately 14% of children and adolescents. Of that 14%, 3.5% experience anxiety and

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depression (Sawyer et al 2000, 2001). An Australian mental health survey from 2004-2005 revealed that 7% of people aged 17 years and younger experienced mental health problems (Australian Bureau of Statistics, 2007) One in six children suffers from anxiety severe enough to interfere with their family life, school work and/or social function, and overall quality of life (Boyd, Kostanski, Gullone, Ollendick, & Shek; 2000; Dadds & Spence 2001; Dadds, Spence, Holland, Barrett, & Laurens, 1997; Sawyer et al, 2000). For others, anxiety symptoms in childhood appear to act as a significant risk for other disorders, especially anxiety disorders and depression (Cole et al, 1998). However, extensive research conducted for the Australian Government examining the mental health problems and disorders of Australian children reveal that only one in four young people with anxiety problems receive professional help (Sawyer et al, 2000). Behavioural and environmental factors have been identified as influencing the development of anxiety disorders in childhood (Beitchman et al, 2001; Brinton et al, 1999; 2000; Cohen et al, 1993; Fujiki et al, 1999). Having an anxiety disorder can be disabling for children and can be characterised by worry, significant distress or irrational fear (Barrett, Farrell, Ollendick & Dadds, 2006; Donovan & Spence, 2000; Manassis & Hood, 1998); shyness, timidity and emotional restraint when exposed to unfamiliar people, situations and environments (Donovan & Spence, 2000; Fujiki, Spackman et al 2004); and/or school difficulties, poor social skills and oppositional behaviour (Beitchman et al 2001; Manassis and Hood,1998).

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Psychological Distress & Speech/Language Impairment

Research indicates an interrelationship between language impairment, social interaction/acceptance and mental health issues (Beitchman et al, 1996a, 1996b, 2001; Beitchman & Young, 1997; Benasich, Curtiss & Tallal, 1993; Bett, 2002; Cohen et al, 1993; Gallagher, 1999; Manassis & Hood, 1998). Often children who have been identified as language impaired undergo an intensive language program to rectify their language difficulties. However, even these children can continue to have difficulty integrating with their peers (Brinton et al, 1997; Fujiki Brinton, Hart & Fitzgerald, 1999;), are often socially isolated (Brinton & Fujiki, 1999; Brinton & Fujiki, 2006; Brinton, Robinson & Fujiki, 2004; Conti-Ramsden & Botting, 2004; Hart, Fujiki et al, 2004; Hubbard & Coie, 2001) and experience mental health issues (Beitchman et al, 1986a, 1986b, 2001; Benasich, Curtiss & Tallal, 1993; Brownlie et al, 2004; Cohen, Davine, Horodezky, Lipsett & Isaacson, 1993).

Being language impaired, rather than speech impaired is associated with a trend towards higher rates of emotional/behavioural problems when compared to non-language-impaired children (Beitchman et al., 2001; Cohen et al., 1993; Gallagher, 1999). That is, children identified with only speech problems do not have difficulty with the receptive and expressive levels of language, therefore they are more likely to understand and be a part of greater social communication and interaction. In contrast, children identified with specific language impairment can have difficulty with the society's rules of social communication. These children are likely to experience early

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rejection from social groups because of their inability to communicate appropriately and are viewed as 'different', exacerbating their social isolation and leading to externalised and internalised emotional and behavioural problems (Beitchman et al, 2001; Brinton, Fujiki, Cambell, Spencer & Robinson, 1997; Brinton & Fujiki, 1999; 2001; Brownlie et al, 2004; Cohen et al, 1993; Fujiki, Brinton, Hart & Fitzgerald, 1999). For others, this can be further impacted with managing the ever increasing difficulty of academic school work which can also cause additional stress and anxiety as they struggle to keep up with their peers (Gallagher, 1999).

Language impairment and emotional/behavioural problems

A study conducted by Cohen et al (1993) examined the prevalence of unsuspected language impairments in 4-12 year old psychiatric outpatients (N=288). The psychiatric disorders were attributed to externalising problems which included oppositional behaviour, hyperactivity and aggression. The internalising problems included anxiety, depression and social withdrawal. Results indicated that "approximately one third of the child outpatients referred solely for a psychiatric disorder were found to have a language impairment on examination" (p.599). Beitchman et al (1996a, 1996b, 2001) examined the association between early childhood speech and language disorder, and psychiatric disorders. The longitudinal study conducted by Beitchman et al (2001) examining speech/language impairment, identified anxiety and social phobias as internalising problems which increased into adulthood. The study investigated 142 children who were identified as

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language impaired and compared them with non-language impaired peers over a 14 year period. The findings indicated that children without receptive language problems showed superior social adjustments, throughout each period investigated. In contrast, the children identified with early language impairment, which included receptive and expressive language difficulties, had significantly higher rates of anxiety disorder. This was especially prevalent in young adulthood. At the age of 5 years, the language impaired children exhibited externalised and internalised emotional and behavioural problems which continued into teenage years and early adulthood. At the age of 19 years, these children with language impairment were found to develop social avoidance and anxiety. For most participants, social phobia was the specific diagnosis of the anxiety disorder, whereas others had affective and substance use disorders which started in the teen years (Beitchman, Douglas, Wilson, Johnson, Young, Atkinson, Escobar & Taback, 1999).

Beitchman et al (2001) study did not identify causality; however, the data supported an associated risk between language impairment and the later development of anxiety disorders. In addition, socioeconomic factors were not taken into account. However, a previous study by Beitchman et al (1997) identified a relationship between higher socioeconomic status and better academic performance as protective factors guarding against the development of emotional and behavioural problems. Gender differences were not identified, but as there were fewer female participants, this lack of significance may be related to statistical power. Subsequent studies have

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replicated the findings of this study (Brinton, Fujiki, 1999; Brinton, Fujiki, Campbell Spencer & Robinson, 1997).

Language impairment and social problems

Research indicates that a common lag in the development of young children is expressive language production (Irwin et al., 2002). Typically developing two year olds have a spoken vocabulary of at least 50 words (Coplan et al, 1982; Paul & Kellogg, 1997; Rescorla, 1989). Children with a lag in their expressive language production tend to grow out of their early delays and catch up with their peers and thus are considered 'late talkers' (Paul & Shiffer, 1991). A study by Glogowska, Roulstone, Enderby & Peters (2000) indicated that 40% to 60% of children with only expressive language delay outgrow their difficulties. However, a substantial number of the 'late talkers' remain delayed in expressive language (Thal & Tobias, 1994). The consequences of language impairment indicates that between 50% and 90% of expressive language delay children continue to exhibit language difficulties through childhood (Bird, Bishop & Freeman, 1995) and those with a range of language problems will have more persistent linguistic, literacy and social difficulties (Beitchman et al., 2001; Glogowska et al., 2000). Delays in language development may be associated with poor acquisition of emotional competencies and socialisation skills (Brinton et al., 1997; Brinton & Fujiki, 1999; Fujiki et al., 1999; Irwin et al., 2002).

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In terms of causality, Irwin et al (2002) speculated that language is inherently a social and cultural behaviour; therefore, lags in expressive language would in all likelihood be associated with delays in the acquisition of social-emotional and behavioural competencies. The relationships between language facility, emotional functioning, and behavioural regulation were identified by several studies (Greenberg, Kusche, Cook, & Quamma, 1995; Lochman & Dodge, 1994). Language skills facilitate the ability for self reflection, verbal mediation, response inhibition and behavioural direction.

Socially, language facilitates the processing of social cues, framing of interpretative attributions, affect identification, social problem solving and the anticipation of social consequences. Mostow, Izard, Fine & Trentacosta (2002) found that children's understanding of emotion across a broad range of dimensions (including the identification, experience, and expression of emotion and knowledge of antecedents) was related to their social acceptance. Children who were considered 'popular' were found to be better able to detect the social intentions of their peers than were other children (Cassidy & Asher, 1992). Brinton et al (1997) found that children with speech and language impairment experienced more difficulty entering the ongoing interactions and collaborative activity, resulting in less integrated peer interaction. Dale (1996) and Gallagher (1999) reported that developing emotion language, by developing a broader and more varied vocabulary to refer to emotions, increases the ability to recognise emotions in oneself and

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in others. This, in effect, enables discrimination among varied feelings and their intensity, emotion regulation and self reflection.

Brinton et al., (1997) investigated the ability of children with specific language impairment to access and participate in an ongoing interaction to determine the causal link between language impairment and social-emotional problems. Children with specific language impairment were compared with a control group of same age peers with a history of no academic problems and behavioural or communication difficulties (N=18, mean CA 10.3years SD=1.3). The study examined (through observation) how each child with language impairment accessed ongoing interactions between typical peers, and once they had gained access, how well they integrated with these children in group play. The results indicated that the children with specific language impairment, particularly the boys, had more difficulty entering the ongoing interaction between their peers. Furthermore, those that did access the peer social group were less integrated into the interactions. However, the causal link remains speculative. First, poor language skills may limit social interaction. Language comprehension influences how well participants understand ongoing verbal interactions. A poor grasp of these skills therefore affects contributions to these interactions. Second, it is possible that language impairment may be considered a disabling condition, as the child may be viewed as 'different', causing social rejection (Benasich et al, 1993). It can be concluded that the link between linguistic and social competence is

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closely intertwined and therefore intervention for language problems should integrate the development of social functioning and behaviours.

A review conducted by Gallagher (1999) examined the overlap between co-occurring emotional/behavioural problems and language problems in several studies. They found that numerous studies identify children who have emotional/behavioural problems are at an increased risk for language problems. Similarly, children with language problems are at risk of emotional/behavioural problems (Beitchman et al, 1996b, 2001, 2005; Fujiki, et al., 2004; Irwin et al., 2002). The language problems have included deficits in vocabulary, comprehension, expressive and the pragmatics of language. The emotional/behavioural problems identified have included inattention, immaturity, impulsivity, hyperactivity, frustration, aggression, conduct disorders, low self-esteem, low self-confidence, social withdrawal, depression, and anxiety. Longitudinal studies by Beitchman et al (1996b, 2001) have identified that issues such as anxiety and low self esteem increase into adulthood for children with speech and language disorders. Therefore they may benefit from early intervention to help combat these prospective problems (Beitchman, 2005).

Intervention Proposals

The literature identifies a relationship between language impairment and social, emotional and behavioural problems (Beitchman & Young, 1997; Benasich, Curtiss & Tallal, 1993; Cohen et al, 1993; Gallagher, 1999;

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Beitchman et al, 1996a, 1996b, 2001; Manassis & Hood, 1998). Many children recognized with language impairment have been identified with emotional and behavioural problems and these have included low self-esteem, low self-confidence, social withdrawal, depression and anxiety (Brinton & Fujiki, 2006; Brinton, Robinson & Fujiki, 2004; Brinton et al, 1999; Brownlie et al, 2004; Conti-Ramsden & Botting 2004; Fujiki et al, 1999; Gallagher, 1999; Horwitz, et al, 2003; Irwin, Carter & Briggs-Gowan, 2002; Jerome et al, 2002; Kaiser et al, 2000; Lindsay et al, 2002; Manassis & Hood, 1998). Cohen et al, 1993 proposes that children being treated for mental health issues should be routinely screen for unsuspected language impairment because of the high correlation between language impairment and emotional/behavioural issues. Interestingly, many children who have been identified with language impairment and have participated in an intervention language program, continue to exhibit difficulties with anxiety issues, social withdrawal and social isolation (Gallagher, 1999). Given the potentially serious life consequences for children with language impairment, the implementation of an early intervention/prevention program for these children has been identified as a priority (Al-Yaman et al, 2002, CDHAC, 2000, & Sawyer, 2000). Further, it has been suggested that to aid children with language impairment with their development of social competence, it is helpful to expand their language repertoire and develop a varied vocabulary referring to emotions and interactive language (Gallagher, 1999). Hubbard (2001) also theorised that children who can identify with their own emotions

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are more able to identify other people's emotions and therefore become more socially competent.

The development of interpersonal skills, such as teaching conflict resolution strategies, gives children the opportunity to join activities with other children (Fujiki et al, 1999). Anxiety management skills can teach children to identify anxiety/worry symptoms and learn effective strategies to manage these symptoms (Barrett, 2004). Thus, research findings suggest that, language intervention programs should include strategies to reduce anxiety levels, teach anxiety management skills (Beitchman et al, 1999; 2002; Gallagher, 1999), develop social communication skills (Brinton, et al, 1997; Brinton & Fujiki, 1999; Fujiki et al, 1999) and teach social and emotional language (Gallagher, 1999).

An extensive literature search failed to identify any relevant studies which evaluated the implementation of a program generated for children with language impairment with the intent to teach them anxiety management skills. However, a pilot program (Bett, 2002) was developed to integrate social skills development with anxiety management for pre-school children with speech/language impairment. The findings of the study indicated that there was an improved use of targeted skills in social interaction and improvements in internalised and externalised problems, at three month follow up. However the study's focus was on social skills development for children with language impairment incorporating anxiety management, whereas the objective for this

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study is to develop an anxiety management intervention/prevention program specifically for children with language impairment. Considering the promising findings of Bett's study (2002) and previous research findings, it is important to look at the literature which reviews the implementation of a generalised anxiety prevention/intervention program for children regardless of their risk status. Such a program may potentially benefit all children with language impairment.

FRIENDS for Life

The FRIENDS for Life program (Barrett, 2004) (referred to forthwith as FRIENDS) is a universal school-based anxiety intervention/prevention program which teaches children (7 to 16 years) strategies for coping with challenging situations, and anxiety, as well as developing emotional resilience within a group format. In addition, the program provides two parent sessions to provide the parents/caregivers an opportunity to learn about the program and develop the FRIENDS strategies to support their child's involvement in the FRIENDS program.

The FRIENDS program originated from the Coping Koala anxiety treatment program (Barrett, Dadds, & Rapee, 1991) and Kendall's (1990) Coping Cat anxiety treatment program. The core component of the program is Cognitive Behaviour Therapy (CBT) management strategies for anxiety (relaxation, exposure, cognitive strategies and contingency management), addressing cognitive (mind), physiological (body) and learning (behaviour) components.

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The program is centred on the acronym *FRIENDS* to assist participants to remember the core components of the strategies taught in the program - F- *Feelings*; R – *Remember to relax. Have quiet time*; I – *I can do it! I can try my best!*; E – *Explore solutions and Coping Step Plans*; N – *Now reward yourself! You've done your best!*; D – *Don't forget to practise*; S – *Smile! Stay calm for life!* In addition, the symbolism drawn from the word *FRIENDS* incorporates the core components of the *FRIENDS* program (Barrett, 2004).

Participants learn that:

- Their body is their *FRIEND* that tells them when they are feeling nervous or worried.
- It is important to be their own *FRIEND* and reward themselves when they try to do their best.
- Having *FRIENDS* is important as they can provide social support and help you feel happier.
- *FRIENDS* can help us cope more effectively when we are confronted with difficult situations.

The sessions focus on developing skills and techniques to cope with and manage anxiety, by working within the framework of a (i) peer learning model, (ii) experiential learning and parental participation. The peer learning model provides a 'naturalistic' environment which enables the participants to learn by observation, helping others and practising newly learnt skills in a safe environment. Experiential learning encourages the participants to learn from their own experiences, through active role learning, brainstorming and

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building upon past experiences. This process aims to empower participants and build self-confidence.

The program offers two parent sessions covering information about the FRIENDS program and information about the early signs of emotional distress in children. These sessions aim to empower the parents to support their child with the newly acquired FRIENDS skills. The FRIENDS program has a FRIENDS for Life Group Leader's Manual (Barrett, 2004) and participants are provided with a FRIENDS for Life Workbook (Barrett, 2004). The workbook provides participants with activities, information, homework activities and is a useful tool for future reference. Parental support and guidance, for children with language impairments, also plays an important part in a child's development of social skills, social language and management of anxiety (Barrett, 1999; Bett, 2002; Irwin et al., 2002). Research has indicated enhanced benefits of including parents as part of the therapeutic training as this improved the positive changes in children with anxiety disorders (Barrett, 1999; Mendlowitz, Manassis, Bradley, Scapillato, Miezig & Shaw, 1999).

FRIENDS is a well researched program with long term benefits established at one year follow up and up to six years post-treatment (e.g. Barrett, Farrell, Ollendick & Dadds, 2006; Barrett & Turner, 2001; Dadds, Holland, Barrett, Laurens & Spence, 1999; Lowry-Webster, Barrett & Dadds, 2001; Barrett, Duffy, Dadds & Rapee, 2001; Lowry-Webster, Barrett & Lock, 2003; Shortt,

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Barrett & Fox 2001). FRIENDS for Life has been acknowledged by the World Health Organisation as an innovative program (WHO, 2004). Research observations indicate that children at post-treatment yield clinically significant treatment effects in about 65% to 85% of participants (Lowry-Webster et al, 2003). It has been shown to have parent and teacher acceptability (Lowry-Webster, et al, 2001; Lowry-Webster et al, 2003), effective parental training (Barrett, Dadds & Rapee, 1996; Mendlowitz et al., 1999), to be equally effective across cultures (e.g. Cooley-Quille, Boyd, & Grados (in press), Barrett, Sonderegger, & Sonderegger, 2001) and effective long-term outcomes over one, two and six years (Barrett et al, 2006; Lock & Barrett, 2003, Lowry-Webster et al, 2003). Figure 2 illustrates the FRIENDS program used in school-based trials.

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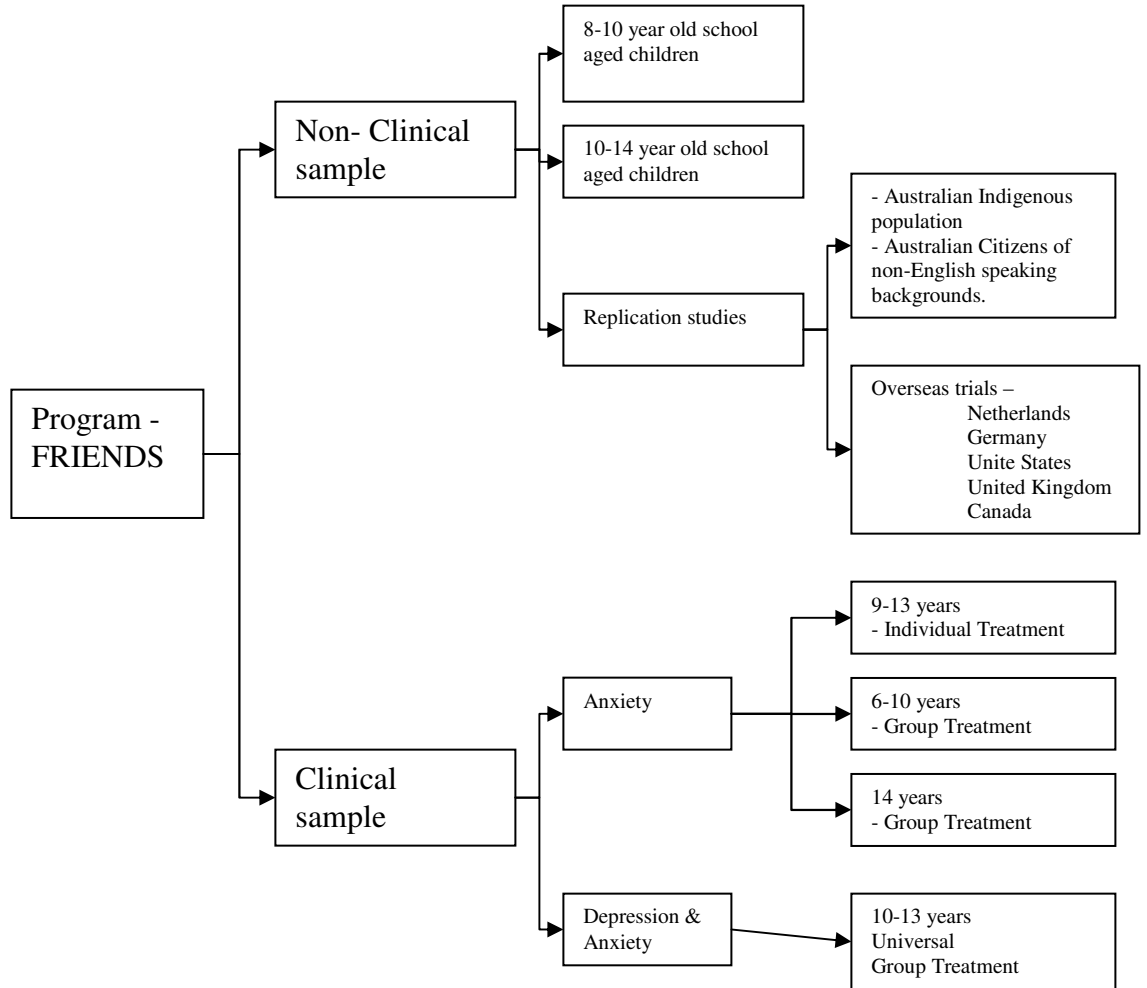


Figure 2: A summary of the FRIENDS program in school-based trials.

The Study

The aim of the study was to implement the FRIENDS anxiety intervention/prevention program over two separate school years with children in Year 3 attending a Language Development Centre (LDC) for their language impairment. These children were preparing to enter into mainstream education at the end of Year 3. The school identified that these children display an observable increase in their level of anxiety behaviour in Year 3 due to the compulsory transition as they show signs of agitation and

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restlessness. This increase in anxiety behaviour often is noticed in the parents concern and worry about their children moving from the supportive environment into much larger class-rooms and away from the intensive language program. For most, these children will exit into mainstream education with their language impairment diagnosis intact, despite remediation. The school became increasingly aware that this transition seemed to be a high risk time for developing chronic anxiety symptoms and associated social complications as it is a major transition for the children.

The LDC program is an intensive language program for children with language disorders. Part of the program integrates strategies to develop and enhance social skills, social interaction and behaviour management. However, they do not implement strategies to directly reduce anxiety levels or build emotional resilience. The aim of integrating an anxiety intervention/prevention program into the LDC Year 3 syllabus was to provide the children with strategies that they could apply to daily living, which could protect them against stress and change. A group format was adopted utilising peer and parental support.

This study aimed to integrate the FRIENDS for Life program with the LDC syllabus for children in the intensive language program. The intent was to teach strategies to build emotional resilience, develop important coping and problem solving skills, which are known to aid children in their social interaction and enhance development of social skills. Second, it aimed to

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provide the parents with information and knowledge of these strategies so they could support and encourage their child during the transition to the new school and ongoing (challenging) life experiences. Third, this program aimed to assess the modification required to the FRIENDS program to specifically accommodate the children in Year 3 with language difficulties. Once modified, the programme would be implemented to a second group of participants in the following school year. Fourth, the study aimed to assess the effectiveness of the intervention/prevention program at one year follow-up by assessing self-esteem, anxiety and depression as well as assessing the learning of the core principles of FRIENDS. Finally, this study aimed to compare these findings with data from language impaired children from two of the LDC's satellite Year 3 classes who did not participate in the FRIENDS for Life program. The purpose was to compare the adjustment of the children from the satellite Year 3 classes with the children in the intervention group as they moved through the LDC program, specifically to assess self-esteem and any signs of anxiety and depression.

CHAPTER TWO

METHODOLOGY

Methodology Considerations

Due to the exploratory nature of the study, methodological options need to be carefully considered as this is a sub-clinical population which is especially vulnerable. Moreover, there is only a small sample. An action research (Reason & Bradbury 2008) mixed method evaluation approach (Tashakkori & Teddlie 2003) was used to evaluate the effectiveness of this pilot program. The mixed method research style of enquiry encourages an exchange between objective and subjective information obtained from both standardised and non-standardised methods. Integrating the two methods builds on their complementary strengths, minimising the weaknesses of a single approach and strengthens the data collection from each approach. Therefore it can increase both the validity and reliability of the evaluation data (Sharp & Frechtling, 1997).

The action research component of the study enables the systematic collection of information that is designed to bring about change through reflective and interactive practice. It enables the orientation of practice focused on the improvement of assessment/education encounters by three phases;

1. Look - building a concept/project and gathering information;
2. Think - interpreting and exploring the concept/program;
3. Act - resolving issues and problems associated with developing the concept/program.

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This enables a spiral form of enquiry/assessment enabling formative and summative evaluations on the planning and implementation of the program (Smith, 1996; 2001). Figure 3 illustrates the action research spiral form of assessment which enabled the modifications and development of an anxiety intervention program specifically for children with speech/language impairment. This was possible as formative and summative evaluations were undertaken after each session.

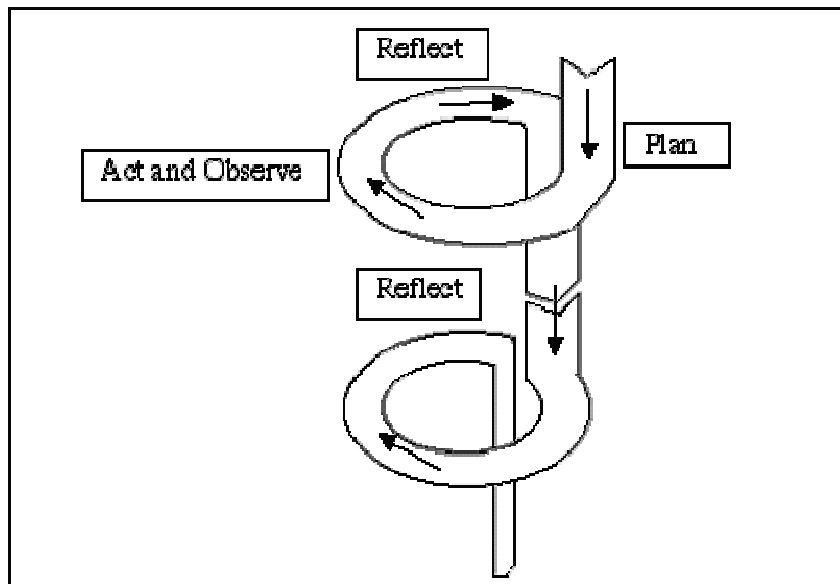


Figure 3: Action research spiral of assessment enabling formative & summative evaluations on the planning and implementation and outcomes of the FRIENDS Program –(Source McTaggart et al, 1982).

This action research mixed method evaluation style is appropriate as this is a vulnerable population and the sample size is small. It supports the exploratory and confirmatory requirement of the study and allows an evaluation of the effectiveness of each component of the program as it progresses. This enables modifications and the development of a program made to fit the needs of this specific population. Monitoring the outcomes from a micro as

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well as macro level, and incorporating both formative and summative evaluations enables continuous assessment of the program (Richardson, 2004).

The mixed method approach facilitated the use of traditional standardised self-report measures together with non-standardised measures consisting of questionnaires designed specifically for this study (Child Knowledge & Behaviour Assessment; Parent Knowledge & Behaviour Assessment; Acquired FRIENDS Knowledge Measure; Student Feedback; Parent Feedback – Appendix A - E) These questionnaires included open ended questions to encourage comment and personal responses in acknowledgement of (i) the preliminary status of intervention research in this area and (ii) the non-clinical sample with which we are working – hence targeted symptoms and issues may not show significant change and indeed may not turn out to be the most salient issues in this special group.

The use of additional questionnaires provides the opportunity to measure changes and the acquisition of skills resulting from the implementation of the FRIENDS program which may not have been adequately captured by traditional psychometric measures of symptom change alone. The use of formative and summative evaluations enables an exchange between objective and subjective information obtained from the standardised and non-standardised methods used in this study. Mixed method approaches utilise

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reviewing the data from several approaches to establish the veracity of findings (Frechtling, Sharp & Westat, 1997).

As the population for this study has language impairment, feedback from the children, parents and teachers will be valuable as it will enable a more comprehensive feedback. The following taxonomy (figure 4) illustrates the methodological choices made in the current study and also how these methodological choices build upon, and extend methods used in past studies. The taxonomy is intended to highlight key elements of the design of enquiry used for this study, specifically, the purpose, participants, the constructs and abilities which are to be measured and the specific measures chosen and/or developed for this purpose. The boxes highlighted in grey emphasise areas that have been uniquely added in this study given the limitations identified in previous research (Barrett, 1999; Barret et al, 1996; Barret et al, 2001; Barrett & Tuner, 2001) and discussed in Chapter One, pg 20.

The significant unique additions are as follows:

- Participants for these studies have language impairment, and hence obtaining data from the parents and teachers as well as the children themselves was considered crucial to enable a more comprehensive assessment of the effectiveness of the program, rather than relying on the feedback from the children alone.
- The teacher report Strength and Difficulties Questionnaire (SDQ-TR) was included in the data collection to provide additional information

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from the teacher's perspective to compare with the parent report SDQ (SDQ-PR).

- In addition, the Piers-Harris – self concept questionnaire was included to explore the children's perspective of themselves in light of their speech/language difficulties and to determine whether this was an additional risk factor.

As this study is based on previous FRIENDS for Life studies (Barrett, 1999; Barret et al, 1996; Barret et al, 2001; Barrett & Tuner, 2001; Shortt et al, 2001) the standardised measures for this study were chosen because they were the same/ or similarly based as those used in the previous research (i.e.: CDI-Depression, SCARS – Anxiety). However, due to budget restrictions for this research, the Child Behaviour Checklist (CBC) was replaced with a similarly based standardised measure, Strengths and Difficulty Questionnaire (SDQ). The measures chosen for this research are described in detail in the Measures section in this chapter (pg: 35 - 41)

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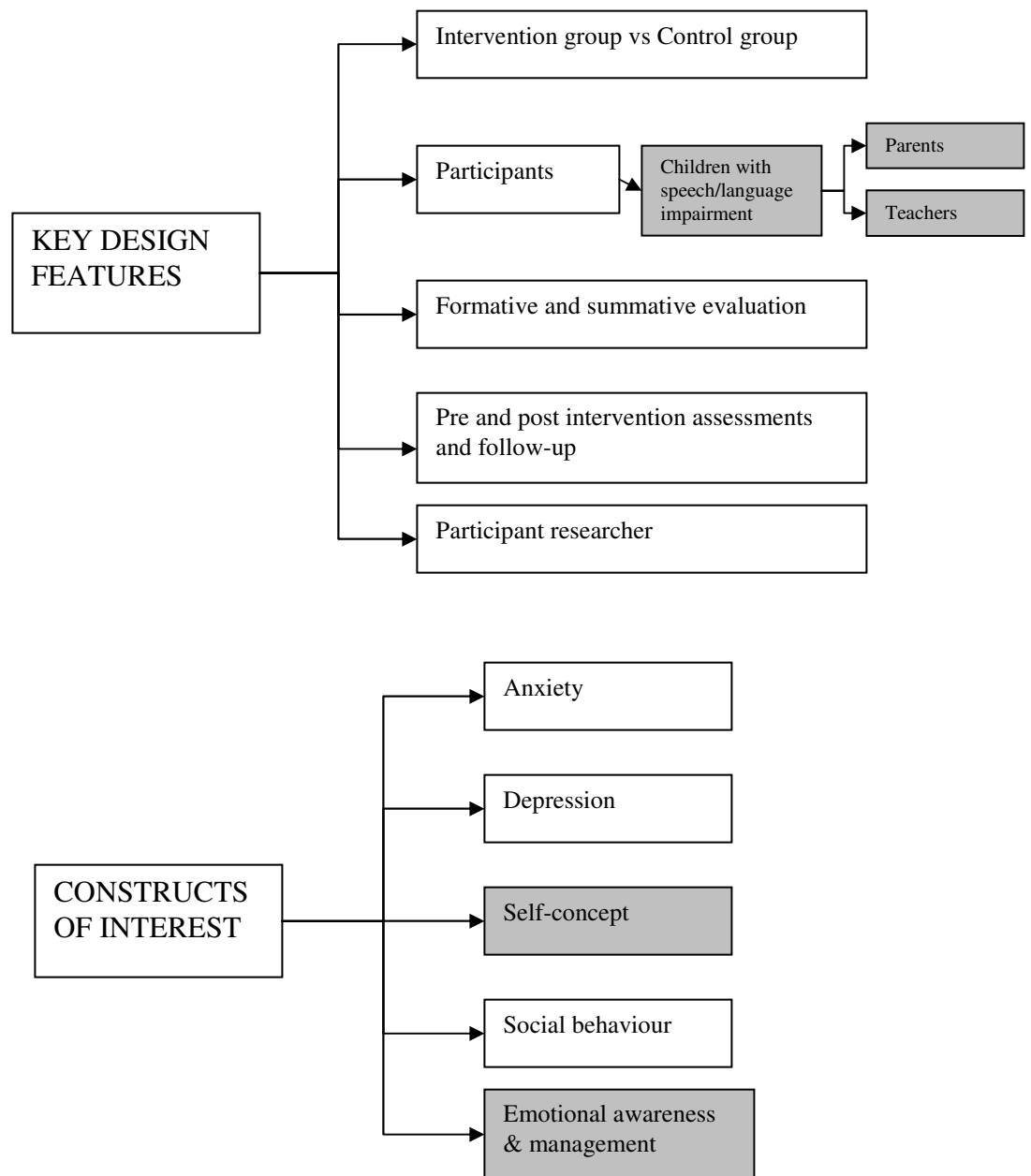


Figure 4: A taxonomy highlighting the key elements of the design of enquiry used for this study, specifically; the purpose, participants, constructs and abilities to be measures, and the specific measures chosen/developed for this purpose. The boxes highlighted in grey emphasise areas that have been uniquely added in the study.

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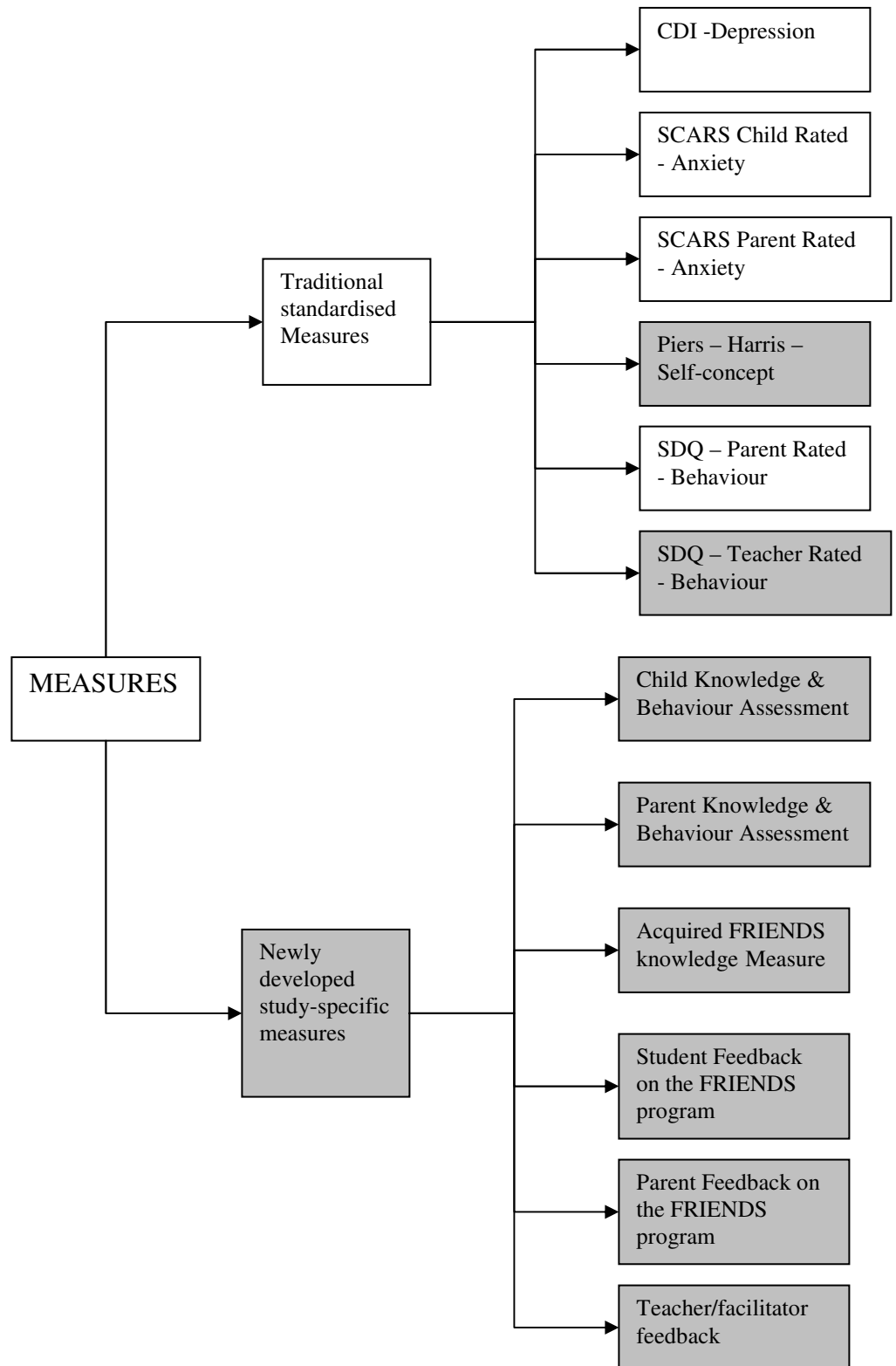


Figure 4 Cont.: A taxonomy highlighting the key elements of the design of enquiry used for this study, specifically; the purpose, participants, constructs and abilities to be measures, and the specific measures chosen/developed for this purpose. The boxes highlighted in grey emphasise areas that have been uniquely added in the study.

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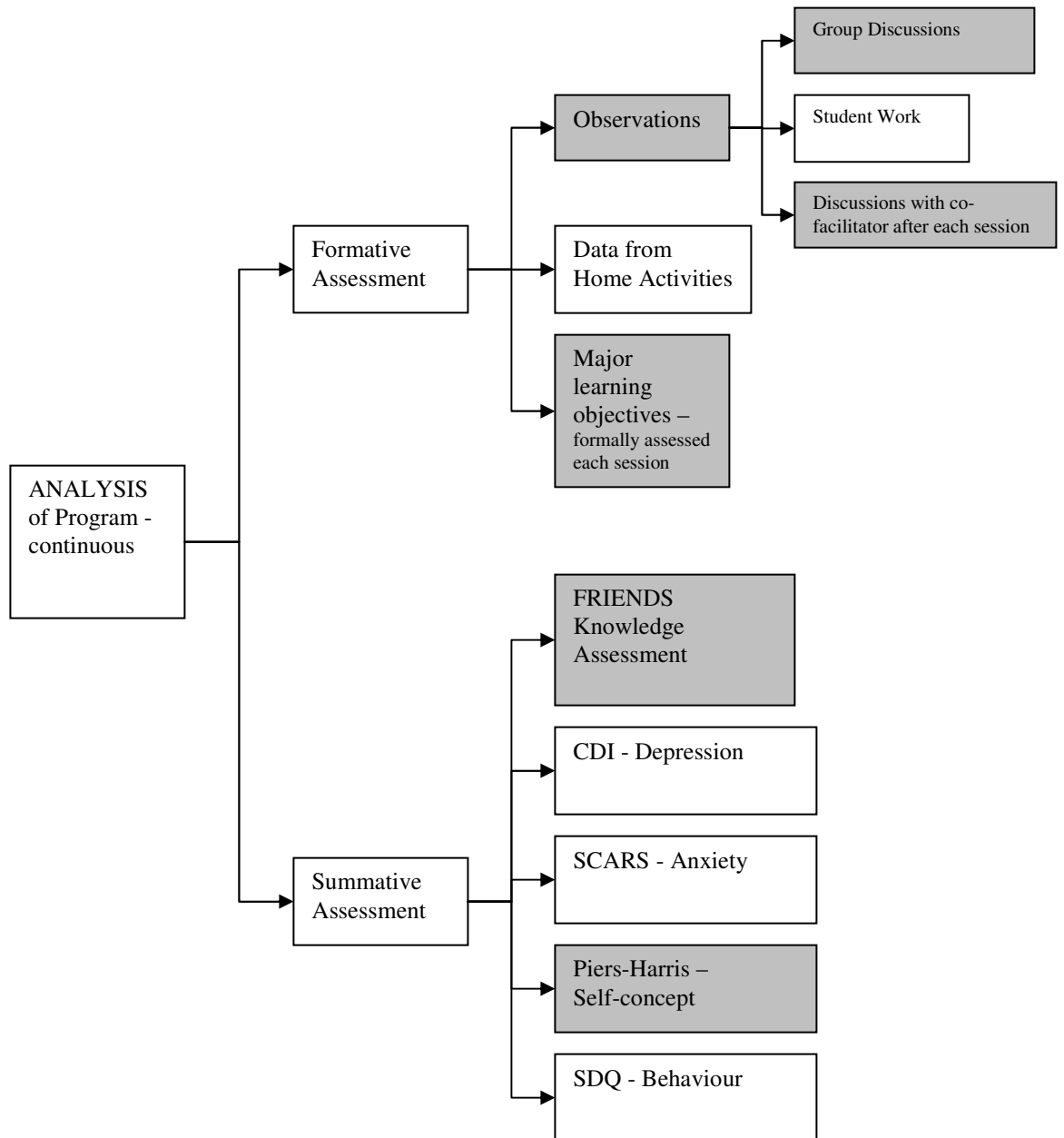


Figure 4 Cont.: A taxonomy highlighting the key elements of the design of enquiry used for this study, specifically; the purpose, participants, constructs and abilities to be measures, and the specific measures chosen/developed for this purpose. The boxes highlighted in grey emphasise areas that have been uniquely added in the study.

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The following is an outline of the three studies investigated in this paper:

FRIENDS 2005 Study: Initial implementation and evaluation of FRIENDS for Life program for children in Year 3 (n = 32; 15 Intervention, 17 Control) preparing to exit the LDC and enter into mainstream education. Any modifications of the FRIENDS for Life program to meet the specific needs of children with speech and language disorders will be implemented in the FRIENDS 2006 Study.

FRIENDS 2006 Study: Implementation and evaluation of the modified FRIENDS for Life program for children in Year 3 (n = 33, 19 Intervention, 13 Control), the following year, preparing to exit the LDC and enter into mainstream education. The aim of this study was to firstly, incorporate the modifications to the FRIENDS program to meet the specific academic level the children at the LDC – taking into account their language difficulties. Secondly, modify the parental component – to increase and/or enhance parental participation.

FRIENDS 2005 Follow-up Study: To assess the longer term effectiveness of the intervention program for participants from the FRIENDS 2005 Study – during follow up and feedback after 12 months as the participants have undergone a major transition from the LDC into mainstream education.

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Measures

All children, parents and teachers completed a battery of self-report² and informant-rater questionnaires at multiple points in time as summarised in Table 1 page 34 and as elaborated below. Examination of this combination of qualitative and quantitative measures afforded the potential for comprehensive insight into changes occurring in each child participant.

² The questionnaires were not technically self-report as all the self-report questionnaires were read to the children.

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TABLE 1: Outline of Administration of Measures for Intervention Group at Pre & Post Intervention

	Pre-Intervention	Session 1	Session 2	Session 3	Session 4	Session 5	Session 6	Session 7	Session 8	Session 9	Session 10	Post-Intervention	Booster session 1	Booster session 2
CDI	✓											✓		
SCARS-Child	✓											✓		
SCARS-Parent	✓											✓		
Piers-Harris	✓											✓		
SDQ-Parent	✓											✓		
SDQ-Teacher	✓											✓		
Child Knowledge & Behaviour Assessment	✓											✓		
Parent Knowledge & Behaviour Assessment	✓											✓		
Acquire FRIENDS Knowledge Measure							✓					✓		
Student Feedback												✓		
Parent Feedback												✓		
Observation - Group discussion		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
-Student work		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
- Discussion with co-facilitator		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
Home Activities													✓	✓
Major Learning Objectives		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓

Anxiety, Depression Self-Concept and Behaviour Measures

Spence Children's Anxiety Scale (SCAS; Spence, 1997).

The Spence Children's Anxiety Scale is a 45 item children self report measure for 8 to 12 year olds, which is designed to evaluate symptoms relating to *separation anxiety, social phobia, obsessive-compulsive disorder, panic attack agoraphobia, generalised anxiety, and fear of physical injury*. Children are asked to rate on a 4-point scale ranging from *never* (0) to *always* (3), the frequency with which they experience each symptom. The resultant score can range from 0 to 114. Clinical cut off is 42 (rounded) (Spence, 1994). This measure is normed on an Australian population and has been found to have high internal consistency ($r = .90$), high split half reliability ($r = .90$), adequate test-retest reliability ($r = .60$), as well as showing good convergent and divergent validity (Spence, 1997, 1998).

Spence Children's Anxiety Scale – Parent Form (SCAS, Spence, 1997)

The Spence Children's Anxiety Scale – Parent Form is a 39 item informant-rated version of the above questionnaire. This measure is normed on an Australian population and has been found to have high internal consistency (.89), good convergent and divergent validity which was noted to be highest for subscales that consisted of items that were observable (e.g. separation anxiety). In general, the SCAS-parent form has been found to be relatively reliable and valid instrument for the assessment of children when used in combination with the SCAS-child version (Nauta, Scholing, Rapee, Abbott, Spence & Waters, 2003).

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Children's Depression Inventory (CDI; Kovacs, 1981).

The CDI is a widely used measure of self-rated assessment of depressive symptoms for school aged children and adolescents (aged 7 to 17 years) (Cole & Turner, 1993). It is sensitive to changes in depression over time and is an acceptable index of the severity of the depressive disorder (Kovacs, 1992). Numerous research studies have supported the reliability and validity of the CDI (eg., Saylor, Finch, Spirito & Bennett, 1984). Reporting coefficients ranging from .39 to .71 with various samples. The CDI has 27 items which consist of three statements of different severity. The child is required to choose one statement that best describes him or her in the last two weeks. The items cover the consequences of depression as they relate to functioning in school and with peers. Each item is scored 0-2, and the sum of all items yield the total CDI. Score range from 0-54, with higher scores indicating more depressive symptoms. There are five scales which measure Negative Mood, Interpersonal Problems, Ineffectiveness, Anhedonia and Negative Self Esteem. Each of these scales yield scores ranging from 0-16. Previous research has suggested that a total score above 17 indicate a high likelihood of significant depressive symptomatology (Craighead, Curry & Ilardi, 1995).

The Way I Feel About Myself – The Piers-Harris Children's Self-Concept Scale (Piers & Harris, 1996). The Piers-Harris Children's Self-Concept Scale (Piers-Harris) is a self-report questionnaire consisting of 80 items

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presented in a yes/no format. The test is standardised and recommended for use with children aged 8 to 18 years (Jeske, 1985) and covers six subscales: *behaviour, intellectual and school status, physical appearance, anxiety, popularity, and happiness-satisfaction*. A total self-concept score is generated by summing the scores from all the scales with a total score in the possible range of 0 to 80. A high total score indicates a favourable self-concept, whereas lower scores are associated with a low self-concept. Therefore a *T*-score below 50 is an indicator of low self-concept, and a *T*-score below 40 is a serious indicator of low self-concept. The scales have been reported to show good test-retest reliability, internal consistency, validity and reliability estimates for the total score ranged from .88 to .93 (Piers, 1984). It is important to note that there is no available research which tested the validity and reliability of this self-report measure with children with speech and language difficulties. With this in mind, the questionnaire was read aloud to the child participant to control for reading and comprehension difficulties with items/words explained if required.

Strength and Difficulties Questionnaire – Parent Form (Goodman, 1997).

The SDQ is a brief behavioural screening questionnaire for 3-16 year olds. The 25 items are divided between 5 scales of 5 items each: *emotional symptoms, conduct problems, hyperactivity/inattention; peer relationship problems and prosocial behaviour*. Each item is rated: *not true, somewhat true or certainly true*. Somewhat true is always scored as 1, but the scoring of Not True and Certainly True varies with the item, with a score of either 0

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or 2. The total difficulties score is generated by summing the scores from all the scales except the prosocial scale. The resultant score can range from 0 to 40. A total difficulties score ranging from 14 to 16 receive a *borderline* rating, while scores from 17 to 40 receive an *abnormal* rating. The impact supplement enquires whether the respondent thinks the young person has a problem, and if so, further enquires about distress, chronicity, social impairment and burden to others. The follow-up version of the SDQ also includes an additional two questions *Has the intervention reduced problems? Has the intervention helped in other ways?* This measure has been found to have good test-retest (.70 to .85), internal consistency (0.51 to 0.76) and an acceptable measure of criterion validity (Goodman, 1997).

Strength and Difficulties Questionnaire – Teacher Form.

The SDQ teacher form is a slightly modified informant-rated version of the SDQ parent form. The 25 items and impact supplement are included. Impact supplement questions pertaining to the difficulties interfering with the child's everyday life only explore *peer relationships* and *classroom learning*, excluding *home life* and *leisure activities*. As with the SDQ parent form, reliability, internal consistency and criterion validity were of an acceptable level (Goodman, 1997).

Emotional Knowledge and Behaviour Measures

Additional self-rated and informant-rated knowledge and behaviour measures were specifically designed for this study to ascertain whether the

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participants already had in place skills and behavioural strategies which the FRIENDS program aimed to teach.

Child Knowledge & Behaviour Assessment (Appendix A).

The self-rated Child Knowledge & Behaviour Assessment was specifically designed to ascertain what strategies (if any) a child uses to relax (i.e. *How do you relax?*), make someone feel good, problem solve, feel good about themselves, whether they have negative thoughts about themselves, what they do to change them into positive thoughts and how they prepare themselves to do something which makes them feel nervous. In addition, the child is asked how they noticed when they felt *happy, sad, angry, worried* and *afraid*. The child is then asked whether they noticed when someone else was feeling *happy, sad, angry, worried* and *afraid*, and to describe how they noticed these emotions (*How can you tell when they are feeling happy? etc.*).

Parent Knowledge & Behaviour Assessment (Appendix B).

The informant-rater Parent Knowledge & Behaviour Assessment was specifically designed in the same format as The Child Knowledge & Behaviour Assessment for comparability of the parent's perception of their child's knowledge and behaviour assessment.

Acquired Knowledge Measure

A questionnaire was devised specifically for this study to assess the participants' learned knowledge gained from the program. This questionnaire differs from the previously described Knowledge and Behaviour Measures as it is specifically designed to test the child's learned knowledge gained from attending the program about the main topics taught in the program.

Post Program Acquired FRIENDS Knowledge Measure (Appendix C)

The Acquired FRIENDS Knowledge questionnaire consisted of eight questions which related to the main topics from the FRIENDS for Life program – *What do the following letters stand for? F-R-I-E-N-D-S; Why do we use relaxation? When should we reward ourselves? Can you name an activity that makes you feel good? How can you tell when you are feeling worried – what happens to your body/mind? What are helpful thoughts – How do they make you feel? What are unhelpful thought – How do they make you feel? What are some plans that we can use when we are problem solving?*

Treatment Acceptability Measures

Student Feedback (based on the FRIENDS Child Social Acceptability Measure, Barrett, Lowry-Webster, Turner & Johnson, 1998; Appendix D).

The children were asked to rate how much they enjoyed the FRIENDS program and individual components of the program using a 5-point scale

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from 1 (not a lot/not useful) to 5 (a lot/extremely useful). Questions included items such as: *How much did you learn about feeling? How often do you use the ideas taught in the FRIENDS program?*

Parent Feedback (based on the FRIENDS Parent Social Acceptability Measure, Barrett, Lowry-Webster, Turner & Johnson, 1998; Appendix E).

The parent's questionnaire focused on the parents' final evaluation of the FRIENDS program and to provide feedback on the program using a 5-point scale. The items related to the parent sessions (*How useful did you find the parent sessions*), usefulness of the FRIENDS skills (*How useful do you find the FRIENDS skills for enhancing your child's coping skills*) and managing situations (*How useful do you think the FRIENDS skills will be in managing a) Your child's big feelings/ b) Difficult situations? c) Your child's transition into mainstream education?*) (Other questions can be found in Appendix E).

Procedure

Pre-intervention assessment

Pre-intervention measures were completed by all participating children. This took place during normal class time. I undertook the assessment sessions and set each of the sessions up with an opportunity to build rapport, provide a rationale for our one-on-one session and provide an opportunity to answer any questions they had. All children were rewarded with a sticker and a selection of a non-food item from a reward box (i.e. Pencils, pens, sticker books). All questionnaires were read aloud to the children to control for reading and comprehension difficulties (items/words were explained if required), and were administered individually to each child. It is difficult to determine each child's level of comprehension of the questionnaire, however all effort was made during the one-on-one sessions to assist the children to understand the questions being asked. As I have experience working with children at the LDC this enabled me to be aware of gaining eye contact, watch for facial expressions and body language to determine whether they understood the questions asked. In addition I would explain words or phrases into a simpler form. The pre-intervention measures for the parents were sent home from school in the communication folder via the child participants and were sent back to the school after completion. The teachers completed pre-intervention measures during specifically allocated d.o.t.t. (duties other than teaching) time (Refer to Appendix F for an example of the recruitment letters).

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Intervention Group (FRIENDS)

On completion of the pre-intervention screening, the FRIENDS program (Barrett, 2004) commenced at the school during the normal allocation of Health/Personal Development lessons. The program was administered by me as I was an accredited facilitator of the FRIENDS program and it provided the opportunity to evaluate the program as it progressed. This enabled modifications to fit the needs of this specific population, hence the action research mixed method evaluation style of inquiry.

Assistance was received from the class room teacher and, during five of the ten sessions, an independent clinical psychologist also assisted with the facilitation of the program. This allowed the group to break into smaller groups to enable a more comprehensive and supportive learning environment for each child, thus taking into account any learning difficulties the children may experience. In addition, the teacher provided feedback as to whether the session was at a level the children could understand or required it to be simplified further to meet their comprehension level. In most senses, the program followed the protocols outlined in the FRIENDS manual and followed the format of previous FRIENDS research (Lowry-Webster et al, 2001; Lowry-Webster et al, 2003). The program consisted of 10 sessions which each ran for 70 minutes, with one session held per week. The program was implemented over a period of fourteen weeks to accommodate for swimming lessons and school holidays. On completion of

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the 10 sessions, two booster sessions followed after one month and three months and continued with the same format as the previous sessions. Post assessments were conducted two weeks after the completion of the initial 10 FRIENDS session.

FRIENDS for Parents

The parents were offered three parent sessions which were conducted by the researcher. The initial session (information session) provided the parents with background information and a rationale about the study and FRIENDS program. The two additional parent sessions (FRIENDS parent sessions) were provided for parents interested in their child's involvement in the FRIENDS program. These were conducted at separate times to the child program. I surveyed the parents about their preferred time for the parent sessions and chose the most popular times.

Session one of the FRIENDS parent session was conducted on two occasions (morning and afternoon session) between session 3 and 4 of the children's FRIENDS program. The last session was conducted at the conclusion of the children's FRIENDS program. Parents who were unable to attend any session were offered the opportunity to have an individual information session, however this was not taken up by any parent. Due to the small number of parents who attended the parent sessions, a letter was sent to all the parents to gain information about changes which could be made to the program so that parents involved in future programs might

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attend the parent sessions (Appendix G). Of the 15 parents participating in the program, three responded to the letter.

Sessions 1 and 2 provided the parents who attended with comprehensive information about what the children were learning in the FRIENDS program, and information about anxiety and depression. Additionally, session 2 of the FRIENDS parent session introduced parents to child management skills (planned ignoring, reinforcement skills, giving and backing up clear instructions) and information about rewards, encouraging desirable behaviours, modelling appropriate behaviour, recognising potential difficult situations, family partnerships, and how to use these skills to manage their child's anxiety and their own anxiety. Parents were informed that the FRIENDS program was beneficial even if the child did not present with anxiety as it can assist them to develop good coping skills as a preventative towards anxiety. (Refer to Appendix H for intervention group questionnaire, parent session and FRIENDS information letters). The parents who attended the parent sessions received a FRIENDS folder which included:

- Summarised information about anxiety and depression,
- FRIENDS plan and strategies,
- Child management skills
- Effective rewards
- How to encourage desirable behaviour
- The importance of modelling appropriate behaviour
- Outline of potential challenging situations

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Available resources and services

At week one and week five, the parents received a letter, to explain that the program had commenced and instructions regarding the homework activities (Appendix I). On completion of the FRIENDS program, all parents received their child's workbook, which included the modified activity and home work sheets, together with a covering letter outlining the FRIENDS program, the symbolism drawn from the word FRIENDS and the importance of reinforcing the program to develop consolidation of the core concepts of the program (Appendix J). This was presented to the parents via the children's end of term four portfolio (this is a folio presentation of the child's classroom work for the semester).

Comparison Group

Parents and children of the comparison group were from the Year 3 satellite⁴ classes of the Language Development Centre. They were informed that they would be followed up at regular intervals to learn more about the adjustment of children as they move through the Language Development Centre, specifically to assess self-esteem and any signs of anxiety and depression. They were informed that they would be offered an information session at the end of the assessment period (term 4) to provide them with an opportunity to learn more about adjustment in children and strategies for

⁴ Refer to Glossary

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copied with challenging situations. They were asked to complete all assessment measures at the beginning of term 2 and again at the end of term 3 (*Parents: SCAS-parent form; SDQ and Parent Knowledge & Behaviour Assessment. Child: CDI, SCAS-child form, Piers-Harris, Child Knowledge & Behaviour Assessment*). Parents were informed that if their child met the diagnosis for any psychological disorder, after the second assessment period, or if the parent requested treatment then they were referred for individual treatment and excluded from any other follow-up assessment. (Refer to Appendix K for an example of the control group Questionnaire letters).

Teachers

Individual meetings were organised for each of the teachers involved in the program. The aim and intention of the meeting was to explain the background and rationale of the study, clarify the emotional and behavioural risk associated with language impairment, provide information about the FRIENDS program and to provide the credentials regarding the researcher/facilitator.

Post Program

An ethical condition of the study was to contact each parent whose children rated in the clinical range for symptoms of anxiety and depression after treatment. The purpose of the individual meetings with each of these

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parents was to provide an opportunity to discuss the results of the assessment and to gain permission from the parent to pass this information onto the LDC in light of planning for the child's emotional and educational transition into mainstream education.

A meeting was then conducted between the LDC transition teacher and the mainstream teacher to provide an opportunity to discuss the specific needs of the child who rated in the clinical range for symptoms of anxiety and depression, and to provide support from the LDC. As part of this process, an initial meeting was conducted with the facilitator of the FRIENDS program and the transition meeting teachers to provide background information about the study and the FRIENDS plan/strategies. The transition teachers were presented with a FRIENDS information sheet and available community health services and recourses to pass onto the mainstream teachers if required(Appendix L). In addition, they were provided with the names of the children who were flagged in the clinical range for depression and anxiety symptoms and who received permission from their parents to pass on this information for transition preparation purposes. This information was provided so that the child's new teacher could monitor the child's transition taking into account that transition can be difficult for most children and that it can be more difficult for children with language impairment.

CHAPTER THREE

FRIENDS 2005 study Goals:

The goal of FRIENDS 2005 study is to assess preliminary results obtained from implementing the standard FRIENDS program for children with speech and language problems compulsorily exiting a LDC and entering into mainstream schooling. It is hypothesised that participants of the intervention group would achieve lower rates of self-reported anxiety, depression and self-concept symptoms than the control group at three points; post assessment, three months and later, one year follow-up.

Considering the difficulties the participants have with the semantics and comprehension of language, it is postulated that an analysis of the effectiveness of the FRIENDS program would not be comprehensive using traditional standardised measures alone and indeed relevant changes may not be captured by these measures given the uniqueness of the sample. Further measures were undertaken to test whether the intervention participants had developed newly acquired 'emotion language' (Dale, 1996 & Gallagher, 1999) from the FRIENDS program about anxiety/worry and strategies to manage 'big' emotions. Secondly, an examination was undertaken of the children's self-reported emotion rating, aiming to assess whether they were better able to identify with their own feelings and other people's feeling at pre and post treatment, compared to the control group. In addition, feedback on the acceptability of the program to the children, parents and facilitators was obtained. This information was intended to

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provide basis for improvements within the program as it progressed to provide the best and most ethical intervention possible.

FRIENDS 2005 Study

METHOD

Participants

Thirty two children participated in the study (9 females, 23 males). They were aged between 7 and 9 years and were recruited from a Year 3 Language Development Centre (LDC) and two year three classes from its satellite schools in the Fremantle region within the Perth metropolitan area in W.A. Fifteen children (4 females, 11 males) and their parents from the LDC made up the intervention group (after drop out and refusal, n=2). The remaining 17 children (5 females, 12 males) and their parents, from the two satellite LDC classes, were allocated as the control group (after refusal and dropout, n=1).

All children enrolled at LDC have a diagnosis of speech and/or language disorder/difficulties and were of average to above average intelligence with sound adaptive behaviours at enrolment as determined through a cognitive assessment. All children were enrolled at the LDC from Kindergarten through to Year 3. The speech/language disorder in this sample varied and included language delayed, semantic and comprehension difficulties, receptive and expressive language disorder, phonological (processing) difficulties, dyspraxia, metalinguistic delay and syntactic difficulties.

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Consent rate for families approached for participation was 91.7%. Parents of children in the intervention group were also invited to participate in three parent sessions. The parents of the children in the control group were offered a parent information session at the end of the project, to learn about anxiety, depression and a range of management strategies.

Attrition

Not all participants attended all the FRIENDS sessions, therefore they were not all exposed to the entire program. However, as the participants had specific language problems, each lesson began with a detailed review of the previous session, allowing the participants who missed a session to be exposed to the session's major themes which were consolidated in the subsequent session. No specific measures were made of group session attendance, therefore attrition was defined as any child who withdrew from the program and/or left the school. The rate of attrition was low, with only one child leaving to attend a new school, over the six month period. Furthermore, all children who returned the signed consent forms participated in the program, even if their parents did not return completed questionnaires, pre and post intervention (because it was part of the school program).

RESULTS

FRIENDS 2005 Study

Overview of Results Section:

The results section is divided into two parts. In the first section, a formative analysis examines the acceptability of the FRIENDS Program, as rated by the parents and children participants. The second section reviews the summative data which firstly examines the pre and post child and parent reports. Secondly, the effects of the intervention on the self-report measures are examined. Thirdly, the children's emotion identification rating and the post FRIENDS program assessment results will be reviewed.

Section1. Formative Analysis

Modifications to the FRIENDS Program:

During implementation of the FRIENDS program, modifications were made to the program in response to formative evaluation findings, to make it more accessible and age appropriate (adaptation from Year 5 to Year 2 – 3 level) specifically to accommodate for reading and writing difficulties. Modifications included transposing some of the activities from the student workbook onto individual A4 sheets which had fewer written words, more illustrations and larger writing lines. Any topic or story, which was in the workbook, was modified onto A2 cards, and included illustrations and speech bubbles. Additionally, topic introduction and major themes were presented on A2 cards, thus enabling the class to work through some of the activities together as a class group, then breaking into smaller groups to work either

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individually within a group format or working as a small discussion group. A further advantage of the A2 cards was that they enabled topics and theme to be presented over several sessions to foster consolidation of the major themes, activities and learning objectives. Homework activities were sent home each week in a specially prepared FRIENDS homework folder, designed for this study. Activities were presented in the same format as the FRIENDS homework activity sheet with some modifications. Modification included, simplifying the wording, providing writing lines and specifying the due date. The children received a sticker for returned homework activity sheets, which was placed on their sticker sheet in their homework folder (Appendix F-1). However, the return rate was poor, therefore by week four the children were rewarded with a sticker together with a (non-food item) treat for returned activity sheets. This resulted with an increase in returned homework activities from, initially, two to three children, up to, finally, eight to ten children.

FRIENDS Program Acceptability Measures and Feelings Identification Pre and Post Intervention.

The FRIENDS program received positive feedback from parents and children. Table 2 – 4 presents the acceptability of the program as rated by children and their parents from the intervention group. Parents' ratings are displayed in Table 2. Of the 15 participants, 11 of the parents responded to the questionnaires. Of these 11, all responded that the FRIENDS skills were 'useful', 'very useful' or 'extremely useful' for enhancing their child's coping

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skills, managing their child's big feelings and transition into mainstream education. Eight parents supported, the importance for schools to implement programs, such as FRIENDS, into the curriculum. In regards to how much they, as parents, learnt about enhancing their child's coping skills, nine parents reported that they 'kind of' learnt some information, with five parents reported learning 'a lot'. Notably none of the 11 parents reported learning 'nothing' from the FRIENDS program even though very few attended the parent sessions. In terms of the third section, which explored comparing before and after attending the program with their ability to encourage their child to recognise feelings, talk about feelings and manage their feelings. Only nine of the 11 parents completed this section. All nine parents reported positively in this section, such that they were more able to encourage their child to recognise, talk and manage their feelings. Parent's comments which reflect this are as follows:

Case 13 : "He is able to stand up in class and express himself a lot more"

Case 10: "It has helped the whole family and not just John in this regard"*

Case 1 : "With both my children this has been useful, I am able to prepare and encourage them through situations and teach them both that what they are feeling is normal"

Parents were asked whether they were able to help and support their child to do the home activities. Seven reported 'yes', three reported 'yes' and 'no', indicating that '*travel and after school activities*' created difficulties with completing the home tasks, and one parent did not respond to the question.

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Table 2

Acceptability of the FRIENDS Program as Rated by Parents from the Intervention Group

N = 11	Not useful	Somewhat useful	Useful	Very useful	Extremely useful	Could not Attend
How useful did you find the parent sessions?	1		1		5	4
How useful do you find the FRIENDS skills for enhancing your child's coping skills?			3	3	5	
How useful do you think the FRIENDS skills will be in managing						
a) Your child's big feelings			2	5	4	
b) Difficult situations		1	2	4	4	
c) Your child's transition into mainstream education			2	5	4	
How useful do you think the FRIENDS skills are with:						
a) Helping your child build emotional resilience?		1	5	4	1	
b) Protecting your child against stress and change?			5	4	2	
c) Developing important coping and problem solving skills your child can apply to daily living?		1	3	2	5	
	Not a lot	Kind of	A little	Somewhat	A Lot	
How important is it for schools to implement programs such as FRIENDS into the curriculum?		1	2		8	
How much did you learn about enhancing your child's coping skills		2	3	1	5	
How much do you think your child learnt about coping?			2	5	4	
How often does your child use the skills taught?		2	4	4	1	
	No more	more	Somewh at more	A lot more	Much more	Did Not Respond
In comparison with before attending the program, how well do you think you are able to:						
a) Encourage your child to recognise his/her feelings		2	4		3	2
b) Encourage your child to talk about his/her feelings		2	2	1	4	2
c) Encourage your child to manage his/her feelings?		2	4		3	2
		Yes	No	Yes & No	Did not respond	
Were you able to help and support your child do the home activities?		7		3	1	

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Table 3 displays the intervention group parent’s evaluation of the severity of their child’s problems since coming to the service of the FRIENDS program. Of the 10 parents who responded, six parents reported that their child’s problems were ‘a bit better’ with three parents reporting ‘much better’. Closing comments made by the parents reflect their support and acceptance of the program for their child as can be seen in the quotes below:

Case 13: “I think the program has been fantastic for both the parents and the children...”

Case 4: “The program has given Bill a lot of confidence...”*

Case 1: “I think this has been a very important learning tool for me and my children, thank you”

Case 10: “I found the homework quite easy and stimulating for the whole family.”

Case 11: I’m really glad Jill and I have had a chance to change to make all our thoughts better and more productive.”*

TABLE 3

SDQ – parent form Impact rating for Intervention group at Post Assessment.

(N = 10)	Much worse	A Bit worse	About the Same	A Bit Better	Much Better
Since coming to the service, how are your child's problems:			1	6	3
		Not at all	A little	A medium amount	A great deal
Has coming to the service been helpful in other ways, e.g. providing information or making the problems more bearable?			3	2	5

NB: Based on the ratings from parents who returned the questionnaire.

The FRIENDS program received positive evaluation from the children, which is depicted in Table 4. Of the 15 participants, 13 of 15 rated that they enjoyed the FRIENDS program ‘a lot’. Ten children reported that they had learnt ‘a lot’ about feelings and how to cope with these feelings.

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The children were asked to rate each of the anxiety management tools taught in the FRIENDS program. For relaxation, helping others to feel good, changing unhelpful thoughts into helpful thoughts and the Coping Step Plan, 10 of the children rated that these tools were ‘extremely useful’. Thinking helpful thoughts was rated ‘useful’ by five of the children and nine of the children rated it as ‘extremely useful’. For recognising feelings in self, 12 children gave a rating of ‘useful’, ‘very useful’ or ‘extremely useful’ and recognising feelings in others was rated by 13 children as ‘useful’ or ‘extremely useful’.

Table 4
Acceptability of the FRIENDS Program as Rated by Child Participants

(N = 15)	Not a lot	kind of	A Little	Some	A lot
How much did you enjoy the FRIENDS program?	2				13
How much did you learn about feelings?	1		4		10
How much did you learn about how to cope with feeling worried or nervous?	1		4		10
How often do you use the ideas taught in the FRIENDS program?	5	2	4		4

(N = 15)	Not useful	Somewhat Useful	Useful	Very Useful	Extremely Useful
How useful did you find the:					
a) Relaxation exercise	1	1	3		10
b) Helping others to feel good?	1		2	1	10
c) 6 Block problem solving plan?	3	1	7		4
d) Thinking helpful thoughts?	1		5		9
e) Changing unhelpful thoughts into helpful thoughts	1		4		10
f) Coping Step plan?	2		3		10
g) Recognising feelings in self?	3		2	1	9
h) Recognising feelings in others?	1		5		8

Section 2: Summative Analysis:

Pre-Post Child and Parental Reports

Prior to statistical analyses, the data were screened for the presence of outliers and violations of the assumptions of univariate measure analysis of covariance (ANCOVA). Results of evaluation of the assumptions of normality of sampling distributions, linearity, homogeneity of variance, homogeneity of regression, and reliability of covariates were satisfactory for most measures. Excluded from analysis were the teacher response for the SDQ and the parent response for the SCAS as they did not meet the assumptions of ANCOVA. The original sample of 32 child participants were retained throughout the analysis. Parent participation varied for each group at pre and post assessment.

Effects of Intervention on the Self-report Measures:

The mean and standard deviations for the child self-report measures at pre- and post-intervention are presented in Table 5. To examine the immediate effect of treatment on the self-report measures and to control for pre-intervention differences on three of the dependent variable, a 2 (condition: intervention vs control) x 2 (time: pre-treatment vs post-treatment) univariate measure analysis of covariance (ANCOVA) was used. The three covariates used in this analysis were the pre-treatment CDI, SCAS-child rated and Piers-Harris measures. The results were analysed for universal effects for all children. From pre- to post-intervention for scores for all children on the

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SCAS, CDI and Piers-Harris the univariate measure ANCOVA shows that there was a significant difference in change of mean score over time on pre- and post-assessment for SCAS, ($F(1,29)=131.08, p<.05$), CDI ($F(1,29)=5.32, p<.05$) and Piers-Harris ($F(1,29)=206.27, p<.05$). However, the effect for group was nonsignificant for SCAS ($F(1,29)=0.6, ns$), CDI ($F(1,29)=1.511, ns$) and Piers-Harris ($F(1,29)=2.21, ns$).

TABLE 5

Mean scores for child self-report measures for intervention and control group at pre and post assessment

Variables	Group			
	Pre		Post	
	Intervention (N = 15)	Control (N = 17)	Intervention (N = 15)	Control (N = 17)
	Mean \pm SD	Mean \pm SD	Mean \pm SD	Mean \pm SD
CDI	8.00 / 7.14	10.65 / 7.17	10.00 / 5.66	9.82 / 7.90
SCAS	34.20 / 20.76	32.18 / 21.08	34.07 / 19.21	39.29 / 26.45
Piers Harris	58.73 / 10.997	58.94 / 11.261	55.47 / 11.51	59.65 / 11.678

Notably most children were in the normal range on these measures prior to beginning assessment. Children with clinical ratings for anxiety, depression and self-concept were subsequently extracted from the universal group and considered as a small number of case studies. Eyeballing the data for this small clinical sample indicated that the children in both the intervention and control groups moved in different directions, some improved, some got worse and some stayed the same. This was not analysed further as there was no trend across cases. For interested readers the data is presented in Appendix M

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Table 6 presents the mean and standard deviation for the teacher and parent self-report measures at pre and post intervention. To examine the immediate effect of treatment on the parent-report measures and to control for pre-intervention differences on two of the dependent variables, a 2 (condition: intervention vs control) x 2 (time: pre-treatment vs post-treatment) univariate measure analysis of covariance (ANCOVA) was used. The two covariates used in this analysis were the pre-treatment SCAS-parent rated and SDQ-parent rated measures. The data screening revealed that the SCAS-*PR* was found not to meet the assumptions of normality of sampling distributions even after attempting a transformation; therefore it was excluded from further analysis. Notably however, post-hoc analysis showed the means for both groups were within the normal range and not noteworthy. For interested readers the data is presented in Appendix N.

In terms of the SDQ-parent form for all children at pre- and post-intervention, the univariate measure ANCOVA shows that there was a significant difference in change of mean score over time at pre and post-intervention ($F(1,21)=59.37, p<.05$). However, the effect for group was nonsignificant ($F(1,21)=.05, ns$).

Teacher's measures for all children gained from the SDQ-teacher rated, was not analysed in this study. The decision to not include the data was based on clinical observation which suggested that the teachers involved in the study had extreme stylistic and interpretive differences which influenced

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and affected the way they viewed the children on this measure. As this study had a small sample, these different styles became very pronounced in the results of the SDQ for both groups. One teacher scored every one of the pupils positively, whilst another teacher scored the pupils negatively.

Table 6

Mean Scores for Parent and Teacher Measures for Intervention and Control Group at Pre and Post Assessment

Variables	Groups			
	Pre		Post	
	Intervention (N = 15)	Control (N = 17)	Intervention (N = 15)	Control (N = 17)
SDQ Teacher rated	Mean ±SD 11.47 / 6.357	Mean ±SD 6.47 / 3.538	Mean ±SD 12.00 / 8.255	Mean ±SD 7.24 / 4.265
SCAS Parent rated	(N = 13) 24.46 / 17.723	(N = 14) 14.71 / 11.505	(N = 10) 17.80 / 9.852	(N = 16) 12.38 / 7.256
SDQ Parent rated	15.62 / 8.402	13.14 / 5.600	15.20 / 8.203	12.81 / 5.076

Feelings Identification pre and post intervention

Table 7 presents the intervention and control groups responses to whether they are able to identify with their own feelings and other people's feelings at pre and post intervention. Five feelings were examined; these were happy, sad, angry, worried and afraid. In order to develop an overall perception of emotions/feelings the children were able to identify with at pre and post intervention, the children were asked whether they could identify 'whether they felt these feelings' and whether they could identify 'when someone else felt these feelings'. The children were also provided with an opportunity to elaborate on their responses by giving examples i.e.: *How can you tell when you feel happy, what happens to your body / thoughts?*

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How can you tell when somebody else feels happy? Gallagher (1999) and Dale (1996) previously reported that in order to aid language impaired children with their social competence they need to develop emotion language. Therefore having a broad array of words to describe their emotions increases their ability to recognise emotions in themselves and others, they are then able to reflect on them, regulate their intensity and discriminate among feelings of variable intensity. An analysis of the responses from the children illustrates that the children in the intervention group display an increased use of emotion language at post intervention. It is important to note that the data collected for the identification of feelings was not analysed by interjudge agreement, this was due to time restraints.

The emotion, 'happy' was generally recognised by the intervention and control group at pre and post intervention, with a small drop in the number of children who could recognise having this feeling at post intervention. At pre intervention, 14 of 15 of the intervention group, reported that they recognised when they felt happy, with comments such as:

Case 6: "I have a very big smile"

Case 1: "Funny feeling inside my tummy"

Case 12: "Body gets happy, heart gets happy, everything happy"

In general the intervention and control group at pre-intervention expressed that they recognised when they were happy by the activity they were doing, rather than by sensations, thoughts or they 'didn't know', this is evident by such comments shown below:

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Intervention Group

Case 9: "When I play on the computer"

Case 11: "I start being friendly with other people"

Case 13: "Going to cool places"

Control Group

Case 16: "When dad comes home"

Case 21: "I just say yes"

Case 22: "I laugh and run away"

Other comments made by the control group reflected an awareness of happy sensations or thoughts as can be seen by the following comments:

Case 26: "In here (chest) a little light on"

Case 29: "Heart glows"

Case 17: "I think nice stuff"

At post intervention, 12 of 15 of the intervention group reported they were able to recognise feeling happy by generally identifying with sensations and an increased use of emotion language, rather than by an activity alone.

Comments expressed used multiple indicators such as:

Case 12: "My face and lips feels light"

Case 11: "I don't get angry or cross at people, my face goes up – I smile!"

Case 2: "I feel excited in my body"

Case 3: "I have a big smile, I'm in a good mood"

In comparison, at post intervention, 12 (70.6%) of the control group participants reported that they were able to detect when they were happy and three (17.6%) reported that 'sometimes' they could tell that they were happy. Comments made by the children, again, generally reflect an activity or situation rather than sensation or thought indicated to them that they are happy. Comments made generally used single, concrete ideas such as:

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Case 24: "Doing something"

Case 22: "I'm brave when I do good stuff"

Case 26: "Because I Done something good"

Case 18: "Because, I forget!"

Other comments made by the control group reflected that some children recognised a sensation or thought as an indicator to feeling happy, such comments were:

Case 23: "Smile"

Case 19: "Feel it inside brain and body"

Case 31: "My heart feels good".

The emotion 'worried' was a main theme of the FRIENDS program as it aimed to teach the children bodily sensations and thoughts which can reflect and indicate feeling 'worried'. The children were asked whether they could identify feeling worried at pre intervention. Seven (46.7%) of the intervention group and nine (52.9%) of the control group reported that they were able to identify feeling worried with three (20%) in the intervention group and one (5.9%) of the control group reporting that 'sometimes' they could tell that they felt worried. Whereas, five (33.3%) in the intervention group and six (35.3%) in the control group reported that they could not tell when they felt worried. The children's comments at pre intervention generally reflected that they could not explain how they recognised they were worried, and/or were unable to recognise the sensations or thoughts which indicated that they were feeling worried. This was reflected in both groups at pre-intervention, such comments made by the children generally indicated that they '*didn't know*' how they recognised that they felt worried. Other comments made were:

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Intervention Group:

Case 8: "When everyone is gone and I'm left there"

Case 9: "Feel worried"

Case 12: "Feel it inside"

Case 14: "Feel a bit weird".

Control Group:

Case 27: "If I say something that worries me"

Case 28: "Just know"

Case 20 : "Shake a little"

Case 22: "I thought there was a monster in my closet"

At post intervention, nine (60%) of the intervention group and 10 (58.8%) of the control group reported that they could identify when they felt worried. Again, of interest are the comments reported by the children as their comments reflect the difference between the intervention and control group at post intervention. The intervention group generally identified with sensations and/or thoughts as an indicator to feeling 'worried', as can be seen by the comments below which generally used multiple indicators:

Case 1: "My face goes down, lips open. I hide in the bedroom, my heart beats fast"

Case 2: "Shaky, feel it in my tummy – butterflies in it"

Case 8: "I get bad thoughts"

Case 9: "My heart beating fast, mind has lots of thoughts"

Case 3, "Get stressed, shaky, don't feel that well and I think of bad stuff happening"

In comparison, the control group's comments generally reflected that they 'don't know' and/or they identified with a situation for feeling worried, this is reflected in the following comments:

Case 18: "When I'm by myself in the garage, waiting for mum"

Case 16: "Doing spelling"

Case 29: "When people are getting hurt"

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The intervention group's development of 'emotion' language (Gallagher, 1999), and recognition of emotions, sensations and thoughts accompanying them, is further highlighted when the children were asked if they could identify whether somebody else was feeling any of the five emotions. At pre intervention, 11 (73.3%) of the intervention group and 13 (76.5%) of the control group reported that they could identify when somebody was feeling sad. Comments made by the children were:

Intervention Group:

Case 12: 'When I can see tears'

Case 7: 'They walk away from you.'

Control Group:

Case 28: "They might be crying"

Case 26: "Sad face"

At post intervention, 14 (93.3%) of the intervention group, compared to 13 (76.5%) of the control group reported that they could identify when somebody was feeling sad. However comments generally made by the control group were simplistic which is reflected in the following comments:

Case 22: 'crying'

Case 24: 'sad inside'

Case 25: 'sad face'.

In contrast, the comments generally made by the intervention group reflect an enhancement of 'emotion' language as can be seen in the following comments:

Case 7: "They don't look happy; they'd be walking away from you."

Case 3: "They have a mouth (that) goes down and crying"

Case 4: "When face goes upside down and when they cry"

Case 5: "Crying, stops talking"

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This is further demonstrated with the emotion 'worried'. At pre intervention, six (40%) of the intervention group and eight (47.1%) of the control group reported that they were able to identify when somebody was feeling worried.

Some of the comments made were:

Intervention Group:

Case 7: "They tell you, they'd be telling somebody else"

Case 14: "By pushing them and saying 'I'm not your friend'. If you get lost someone will worry".

Control Group:

Case 20: "Worried face."

Case 16: "When they are worried, they have to ask a teacher what they are worried of."

In comparison at post intervention, 11 (73.3%) of the intervention group compared to seven (47.1%) of the control group reported that they were able to identify if somebody was feeling worried. Comments made by the intervention group again reflect that they are able to recognise some of the signs displayed by people when they feel worried, as can be seen by the following comments:

Case 1: "Face – goes straight (demonstrate), they could cry."

Case 11: "They start shaking."

Case 9: "They frown, shoulders go up."

In contrast, the control group's comments reflect that they are uncertain and/or they identify with a situation which can cause someone to worry, as can be seen by the following comments:

Case 25: "They might be worried from thunder"

Case 26: "Because their worried face – I know it but sometimes I forget it"

Case 29: "When in corner, feet up".

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TABLE 7

Children's ratings identifying whether they are able to identify with their own feelings and other people's feelings pre and post intervention

	Pre						Post																	
	Intervention (N = 15)			Control (N = 17)			Intervention (N = 15)			Control (N = 17)														
	Yes	No	Some-times	Yes	No	Some-times	Yes	No	Some-times	Yes	No	Some-times												
Can you tell when you feel:	Tally (%)	Tally (%)	Tally (%)	Tally (%)	Tally (%)	Tally (%)	Tally (%)	Tally (%)	Tally (%)	Tally (%)	Tally (%)	Tally (%)												
Happy?	14	93	1	6.7	15	88	2	12	12	80	3	20	12	71	2	12	3	18						
Sad?	10	67	2	13	3	20	10	59	7	41	3	20	12	80	3	20	11	65	4	24	2	12		
Angry?	12	80	2	13	1	6.7	11	65	6	35	3	20	1	73	3	20	1	6.7	11	65	4	24	2	12
Worried?	7	47	5	33	3	20	9	53	6	35	1	5.9	9	60	5	33	1	6.7	10	59	6	35	1	5.8
Afraid?	7	47	6	40	2	13	10	59	6	35	1	5.9	9	60	5	33	1	6.7	6	35	10	59	1	5.8
Can you tell when somebody else feels:	Tally (%)	Tally (%)	Tally (%)	Tally (%)	Tally (%)	Tally (%)	Tally (%)	Tally (%)	Tally (%)	Tally (%)	Tally (%)	Tally (%)	Tally (%)	Tally (%)	Tally (%)	Tally (%)	Tally (%)	Tally (%)	Tally (%)	Tally (%)	Tally (%)	Tally (%)	Tally (%)	
Happy?	11	73	4	27	11	65	5	29	1	5.9	14	93	1	6.7	15	88	2	12	13	77	4	24	14	82
Sad?	11	73	4	27	13	77	4	24	1	6.7	14	93	1	6.7	13	77	4	24	14	93	1	6.7	7	47
Angry?	12	80	1	6.7	2	13	12	71	4	29	14	93	1	6.7	14	82	3	18	11	65	4	24	10	59
Worried?	6	40	7	47	2	13	8	47	9	47	1	5.9	11	73	4	27	7	41	7	47	7	41	2	12
Afraid?	10	67	2	33	9	53	8	47	8	47	1	5.9	10	67	4	27	1	6.7	8	47	6	35	3	18

Post FRIENDS program assessment:

At post intervention, the intervention group was assessed on their acquired FRIENDS knowledge, which consisted of eight questions which directly related to the main themes from the FRIENDS program. The post assessment results indicated that all the children remembered most of the major themes from the FRIENDS program. Table 8 illustrates the results from the assessment. In general, the FRIENDS plan was remembered by 14-15 of the children. All the children were able to identify why we use relaxation with comments such as:

“Helps us to calm down” and “Calms our body”

Twelve children were able to identify ways which they could tell when they felt worried, with the following responses:

“Heart beats fast, my face goes down, chest feels heavy and I feel bad” and “Bodily signs, sad face and I shake”

All 15 children were able to identify what helpful and unhelpful thoughts were, as can be seen by the following responses:

Helpful thoughts:

“Feel good about yourself” and “Makes us feel happy, strong, excited”

Unhelpful thoughts:

“Feel bad about self” and “Red thoughts, bad thoughts, makes you feel sad”

The FRIENDS program explored five problem solving plans/strategies. At post assessment, all 15 children identified the Coping Step Plan, 8 children

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also identified the 6 Block Problem Solving Plan and one child identified support teams as problem solving plans/strategies taught in the FRIENDS program.

Table 8

Number of children with correct responses from the intervention group at post program assessment of their acquired knowledge from the FRIENDS program.

	Intervention Group - Post N = 15 Correct response
What do the following letters stand for?	
F	15
R	14
I	15
E	14
N	15
D	15
S	15
Why do we use relaxation?	15
When should we reward ourselves?	14
Can you name an activity that makes you feel good?	15
How can you tell when you are feeling worried?	12
What are helpful thoughts?	15
What are unhelpful thoughts?	15
What are some plans that we can explore when we are problem solving?	15
Plans chn identified:	
Coping Step Plan	15
6 Block Problem Solving Plan	8
Support Teams	1

DISCUSSION

FRIENDS 2005 Study:

The specific aims of this study were to examine the effects of the intervention on children's self reported levels of anxiety, depression and self concept in comparison to a control group. In addition, parent report and a teacher report measure of behaviour were also considered. These traditional standardised outcome measures showed no significant difference between the groups in contrast to previous research (Barrett & Turner, 2001; Dadds, 1997; Lowry-Webster et al, 2001; Lowry-Webster et al, 2003). Even when evaluating the effectiveness of the program for children initially in the clinical range of symptomatology of anxiety, depression and self-concept, no significant effect of the program was apparent. Furthermore, analysis of the parent report for pro-social behaviours as well as internalising and externalising symptoms did not show a change in the mean scores for the intervention group when compared to the control group. Post hoc analysis revealed that the parent rated anxiety symptoms for both groups were within the normal range for a non-clinical population when compared to previous research (Nauta et al, 2003), at pre and post intervention.

Despite these seemingly disappointing results, program specific descriptive and non-traditional measures indicate that differential and positive changes were attained for the intervention group. Specifically anxiety management plan and skills were gained from the program (as reported by the Acquired

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Friends Knowledge Measure); positive feedback from the parents and children were given about the study (as reported by the Parent Feedback measure); and there was considerable development of 'emotion' language (as reported by the Child knowledge & Behaviour Assessment measure). Each of these will now be discussed in turn.

The intervention participants were assessed on their acquired knowledge of the major learning skills and strategies from the FRIENDS program at post intervention. All children displayed a firm knowledge of the FRIENDS plan and the accompanying strategies taught throughout the program. They displayed an increased use and more complex appreciation of emotion language when identifying sensations and feelings associated with feeling worried, and they were able to identify what are helpful and unhelpful thoughts.

Parents with children in the intervention group reported that at post-intervention they were more able than before to encourage their child to recognise, talk and manage their feelings. In addition, they reported that their child's problems had improved since their child participated in the program. This positive feedback was further highlighted in the parent's positive comments reflecting the changes made within their family and child's life. Many of the parents reported that they were able to support and help their child do the home activities from the FRIENDS program, however, for some,

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difficulties arose with after-school activities (i.e. sports, therapy lessons) which left little time to spend on the extra school activity.

Of particular interest was the notable development of emotion language (Dale, 1996; Gallagher, 1999) amongst children in the intervention group compared to the control group. The intervention group at post intervention demonstrated an increased ability to identify their emotion and other people's emotions, and developed a broader array of emotion language (sensations and feelings) to describe how they *noticed* when they felt a particular emotion and how they *recognised* when somebody else was feeling a particular emotion. The majority of the control group participants, at post-intervention continued to describe a situation or an event to explain how they noticed when they felt these emotions. Using a wide array of emotion language has been previously reported as a precursor for children to discriminate among feelings and their intensity and therefore regulate their responses accordingly in themselves. They are more likely to identify other people's emotions, become more socially competent and thus likely to increase social interaction (Bietchman et al, 1986a 1986b; Bietchman et al, 2001; Dale, 1996; Gallagher, 1999; Hubbard, 2001). This development of emotional language may be the precursor for language impaired children to further develop emotion recognition and social skills. Further research would be beneficial in this area to determine the long term effects of emotion language acquisition.

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In contrast to previous research (Barrett & Turner, 2001; Dadds, 1997; Lowry-Webster et al, 2001; Lowry-Webster et al, 2003), the results from the traditional methods did not demonstrate a significant difference between the groups. Even when evaluating the effectiveness of the program for children in the clinical range of symptomatology of anxiety, depression and self-concept, no significant effect of the program was apparent. These results are disappointing however exploration of why this study had a poor outcome with traditional methods of enquiry is warranted.

The data set consisted of a control group of 17 participants and an intervention group of 15 participants. This group of 32 was relatively small compared to previous studies (Barrett & Turner, 2001; Dadds, 1997; Lowry-Webster et al, 2001; Lowry-Webster et al, 2003). The small number of participants may not have been able to effectively demonstrate a statistical shift over time using traditional methods.

Second, the participants had speech and language difficulties which may have affected their understanding and answers on the traditional standardized questionnaires (CDI, SCAS, Piers-Harris). This problem was anticipated and a concerted effort was made to ensure that the participants were supported when completing the questionnaires. Even though the questionnaires were read to each of the participants it is difficult to determine whether they fully comprehended the statements/questions asked of them.

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Given this, these traditional standardised questionnaires may have been too complex for children with speech and language difficulties to understand.

Third, the semantic content of the FRIENDS program was designed for higher primary school. Even though this was addressed by modifying the program for Year 2/3 level the content may have been too hard for the children with speech and language difficulties. A program aimed at 5/6 year old⁴ may have shown different results.

Methodological Considerations – Mixed Method, Action Research:

In light of the Mixed Method, Action Research approach, if we were to separate the results to interpret the effectiveness of the program for this specific population using only traditional standardised measures of one data set, we would be left with the interpretation that the FRIENDS program was unsuccessful with this population. However, when we take two data sets we are presented with a different picture. Exploration of a complex data set using a variety of methods during various points in the evaluation process provided an array of complementary information which formed the building blocks for more comprehensively assessing children with speech/language impairment. So we see the value of an action research mixed method formative and summative evaluation approach which provides us with a comprehensive evaluation strategy to examine the data set from utilising several methods. In

⁴ At the time of the study, the Fun Friends program aimed at 4,5 & 6 year old was not published.

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this case, the results explored via non-traditional methods indicates that the FRIENDS program is worthy of follow up.

Parent Involvement:

One of the difficulties running the anxiety intervention program for the children with language impairment was the small number of parents who participated in the parent sessions. The parent sessions aimed to teach parents about the FRIENDS program; provide them with background information about anxiety and depression; inform them about the strategies and skills the children were developing through their participation in the program; introduce parents to child management skills and strategies to aid them as they support their child utilise these skills during day to day life. Previous research (Barrett et al, 1996, Barrett, 1999) found that in order for anxiety intervention/prevention programs to be efficacious for children, the program focus needed to be expanded to include parents. The inclusion of parent participation for children with language impairment was considered essential as the children would benefit from having the FRIENDS strategies consolidated and supported at home (Bett, 2002).

Anecdotal information gained from the school indicated that as the children become older, parent involvement starts to diminish to the point whereby after school reading activities are often forgotten and there is little parent participation at school. The school also reported that for many of these

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parents, the anticipation and trepidation of their child leaving the security of the language development centre to attend mainstream education, has been fraught with concern. Many of the parents have to deal with finding a school suitable for their child, which includes meetings, screening and for some, wait listing.

Interestingly, previous research (Irwin et al, 2002) found that having children with expressive language deficits can be particularly taxing on the parent-child relationship. In addition, because of these language deficits the family tends to be involved with additional therapy, (ie speech and occupational therapy) outside of school. Therefore the addition of another intervention program which involves the parents may be seen, by the parents, as too taxing rather than complementary to other activities.

Even though positive feedback was obtained from the parents at post intervention, not all parents returned the questionnaires. Furthermore some of the parents expressed that they were not interested in dealing with anxiety issues as they were busy. As one parent wrote "... I am overwhelmed by other things that need my attention...". Considering this, no formal measures regarding demographics, socioeconomic characteristics and background information were undertaken with the parents, this added information may benefit in developing a parent component of the program which encourages parent participation. This additional information may have been beneficial with

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gaining a better understanding of the parent population to support them with parent participation.

Evaluation and further exploration of parents of children with language difficulties would be beneficial to facilitate the development of a comprehensive supportive anxiety intervention/prevention training program specifically for parents of children with language difficulties. The FRIENDS program was modified to suit language impaired children, however there was no modifications made to accommodate the special needs of parents children with language impairment in this study.

Conclusion:

This study was effective in showing the benefits of interventions for children with specific language difficulties being assessed using an action research mixed method evaluation approach to gain a comprehensive assessment of the effectiveness of the program. Positive changes were gained by the intervention group as they developed an increased awareness of their own and other people's emotions and most importantly they developed a wider array of 'emotion language' when compared to the control group at post intervention. In addition, the intervention group attained understanding of the FRIENDS plan and skills at post intervention. This learning did not lead to any changes on standard measures of anxiety, depression or self concept within

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the time frame of the program. The study highlighted the need to explore more effective ways to increase parent participation at the parent session for the parents of language impaired children. However, long term benefits of this program remain to be demonstrated, before any conclusive conclusions can be made.

This study highlighted the importance of providing anxiety intervention/prevention program for children with language impairments, as they are an at risk group. Even though the program is still in its infancy, it is a step towards developing a comprehensive anxiety/intervention program for children with language impairment. The next phase of this research involved follow-up of these children after one year (after transition to mainstream school) and also another implementation of the modified program drawing on lessons learnt in this study, to increase parent involvement.

Reflection:

When I reflect on the implementation of the FRIENDS program I have thought about the small number of parents who participated in the parent session and the small number of parents who actively supported their child with home activities and participation in the FRIENDS program. Through my own personal and clinical experience I think about the parents that have entered this LDC path and what their experience of it is.

For many of the LDC parents, gaining entry into the LDC is like winning the lottery. Out of around 100 applicants per LDC in the Perth metropolitan area, only 20 are accepted. The unsuccessful applicants may try again the following year, and others struggle with mainstream schooling and have as many speech therapy lessons as they can afford or fit into a busy schedule. For some, the offer of a placement at the LDC is too hard to bear and decline the offer, trying desperately to get rid of the speech and language diagnosis.

For many of the LDC children, they enter the LDC at the Kindy and pre-primary level. The parents are keen and the aim of attending the LDC program is to get an intensive language program so they can improve and hopefully exit minus the speech and language disorder diagnosis. On entry into the LDC program, the parents make a commitment to support their child's participation in the program by attending their rostered parent help day and

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attend parent/teacher meetings. The parent participation and support is very good for the first couple of years, however as the children continue in the program through Year 2 and Year 3, the school notices how many of the parents, are not as keen to participate. They are very eager for their child to leave the program and wait eagerly for their assessment results to indicate that their child has rid of their diagnosis and can exit the LDC and enter mainstream education leaving, that part of their life behind them. Unfortunately for a number of the LDC children, they continue through to Year 3 only exiting the LDC because that is as far as the program's funding allows, and they enter into mainstream education with their Speech and Language disorder diagnosis intact despite remediation. Considering this, my thoughts were that the parents would welcome additional strategies to assist them help their child through challenging periods in their life, understanding that, speech and language diagnosis can also affect social and emotional wellbeing. Unfortunately I was wrong. From discussions with parents, their understanding of the speech and language diagnosis only affects speech and some social struggles. Most of these families did not want to consider the emotional consequences of anxiety and/or depression and could not understand why teach these strategies. Their focus was to help their child with their receptive and expressive language so they could enter into mainstream society. For a number of these parents, they did not want to consider the possible effects the Speech & language diagnosis could have on their child's social and emotional wellbeing in later primary and the possible

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outcomes for some of these children as they enter into adolescence. On discussion with the school we pondered whether we need to get to these parents earlier, when they are keen and possibly more receptive to a broader understanding of the long term consequences of a speech and language diagnosis, especially when it affects the semantic and pragmatic aspects of language functioning.

CHAPTER FOUR

FRIENDS 2006 Study

INTRODUCTION

The aim of the FRIENDS 2006 Study was to implement the adapted FRIENDS anxiety intervention/prevention program, from the FRIENDS 2005 Study, with a new group of children in Year 3 who were attending a Language Development Centre (LDC) for their language impairment and were preparing to exit into mainstream education at the end of Year 3.

At the end of the FRIENDS 2005 Study, after evaluation of the study and feedback to the LDC, the school reported that they were concerned with the number of children identified with anxiety and depression symptoms in the clinical range. Many of these children were to transition into mainstream education with their language impairment diagnosis intact, despite remediation. After feedback to the school, the school supported the replication of the FRIENDS study for the children in Year 3 for 2006 with the long term intention to incorporate the FRIENDS program into its Year 3 curriculum in an ongoing basis.

One of the main aims of implementing the FRIENDS program for a new cohort of children was an opportunity to adapt the parents' component of the program to increase parental participation. Previous research (Barrett et al, 1996; Barrett, 1999; Mendlowitz, 1996; Rapee, Kennedy, Ingram, Edwards &

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Sweeney, 2005) found that in order for anxiety intervention/prevention programs to be efficacious for children, the program focus needed to be expanded to include parents. The inclusion of parent participation for children with language impairment was considered essential as the children would benefit from having the FRIENDS strategies consolidated and supported at home (Bett, 2002).

Bett's (2002) pilot program was developed to integrate social skills development with anxiety management for pre-school children with speech/language impairment (N=5, CA: 4 to 5 years). An important part of the program included the mothers, as clinical reports indicate "mothers of children with speech/language difficulties try to protect their children from social embarrassment by helping them avoid social situations or answering/interpreting for them in social contexts" (Bett, 2001 p.8). Both Bett (2002) and Dadd's (2000) research indicates that for younger children, working with the parents is the best approach, as it aims to increase parental sensitivity, develop positive parenting skills and enhance attachment security (Bett, 2001; Dadds et al., 2000). The mothers in Bett's (2002) study were therefore integrated into the program to develop their parenting skills, engage with their child during the activities of managing fear and anxiety, and to learn strategies to further support their child's social development and anxiety management skills at home and in social situations. Sessions consisted of combined parent/child session, a children's session and concurrent parent's

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session. The findings of Bett's (2002) study indicated that there was an improved use of target skills for social interaction, at the three month follow up. In addition, parental reports indicated that the children were better able to regulate their emotions and manage their feelings in more age appropriate ways.

Studies conducted by Rapee et al (2005) and Mendlowitz (1996) found that children who received anxiety intervention with parental involvement in a separate, but concurrently run treatment group were apparently able to facilitate the children's learning of these strategies. The findings reported a significantly greater decrease in anxiety diagnoses for the children whose parents participated in concurrent anxiety intervention groups compared to children whose parents received no intervention. Therefore indicating that parental involvement in a parallel treatment group enhanced the effectiveness of the intervention.

The Bronfenbrenner Ecological Model (1979, 2004) of child development theorises that the development of the child takes place through processes between a child and persons within its immediate environment. The child is the centre of the model, with the child's family as the most important setting. This is because this is where the child spends most of their time and because the home environment has the most emotional influence on the child. The education environment also plays an important and influential role

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(Bronfenbrenner, 1979; 2004). Developing a secure, respectful and reciprocal partnership with the parents and teachers assists children to make progress in relation to the learning outcomes (The Early Years Learning Framework for Australia, 2009). Therefore, this study aimed to provide opportunities for the parents to brainstorm approaches to increase parental participation in the FRIENDS program.

Aims:

The FRIENDS 2006 study aimed to integrate the altered FREINDS anxiety intervention/prevention program into the 2006 LDC Year 3 syllabus to provide the children with strategies that they could apply to daily living, which could protect them against stress and change. As with the FRIENDS 2005 study, the group format was adopted to utilise peer and parental support. The FRIENDS 2006 study aims were:

1. To teach strategies to build emotional resilience, develop important coping and problem solving skills, which can aid children in their social interaction and enhance development of social skills.
2. To provide the parents with information and knowledge of these strategies so they could support and encourage their child during the transition to the new school and ongoing (challenging) life experiences.
3. To assess the effectiveness of the intervention program within the Language Development Centre during follow up by assessing self-

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esteem, anxiety and depression as well as learning of the core principles of FRIENDS.

4. To compare the findings with children with language impairment from two of the LDC's satellite Year 3 classes who did not participate in the FRIENDS for Life program.
5. To provide additional FRIENDS training to a LDC teacher on the modifications of the FRIENDS for Life program to meet the specific needs of the LDC children.
6. To alter the parental component of the FRIENDS program, to increase and/or enhance parental participation/support in the FRIENDS program.

Changes made to the study included implementing the altered FRIENDS for Life program developed from the 2005 study; increasing the number of parent information sessions to increase the parent involvement/support; providing an additional teacher to co-facilitate the FRIENDS for Life program as part of her training as a FRIENDS for Life facilitator. The benefit of the additional teacher was two-fold; first the additional assistance enabled the large group to be split up into smaller groups to meet the specific needs of the language impairment for the individual. Second, the LDC aimed to incorporate the FRIENDS for Life program directly into their curriculum for all their Year 3 children as part of their Health program and required the teacher to be adept with the modifications made to the program to meet the specific needs of the children

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in the LDC. Further accreditation training was provided by the Pathways Health and Research Centre.

Methodology Considerations

As with the FRIENDS 2005 study, this study continued with an exploratory nature as methodological options needed to be carefully considered to meet the specific needs of the LDC children. The action research mixed method evaluation approach (Tashakkori & Teddlie, 2003) was repeated to evaluate the effectiveness of the program for the 2006 FRIENDS program. This style of research enabled the continuous systematic collection of information and enabled changes/modifications to the program during various points (i.e. additional information letters to the parents; repeating parts of the FRIENDS program when children were deemed to be struggling with specific concepts). This is the circular form of enquiry/assessment (Figure 3, Pg. 25) enabling formative and summative evaluations on the planning and implementation of the program (Smith, 1996, 2001), Figure 5, Pg 92 illustrates the action research cycle of assessment which enabled the modifications and development of an anxiety intervention program specifically for children with speech/language impairment for the FRIENDS 2005 study, which could then be replicated for the FRIENDS 2006 study.

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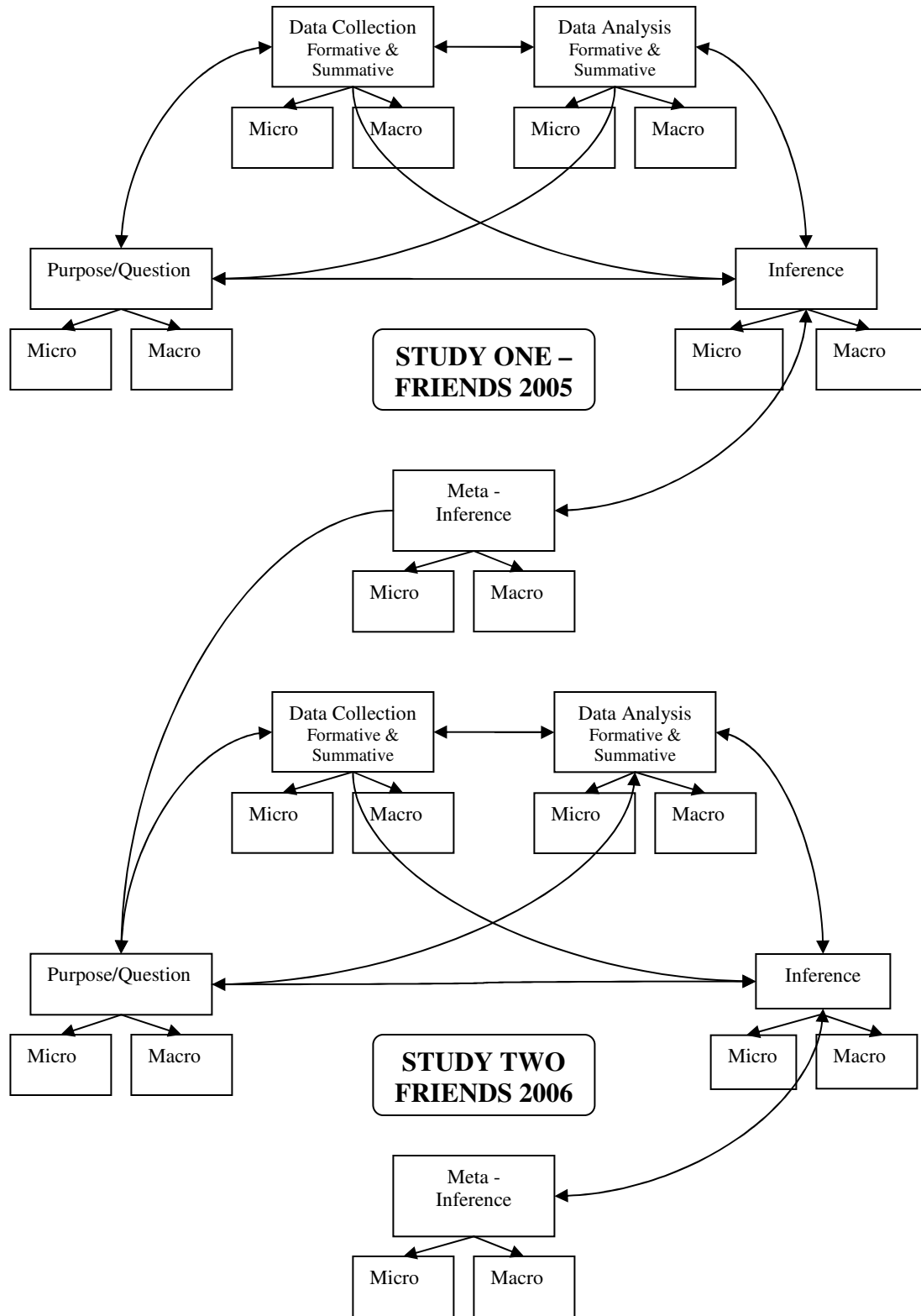


Figure 5: An iterative cycle of the mixed method research style for FRIENDS 2005 Study1 & Friends 2006 Study 2 , enabling monitoring outcomes from a micro as well as macro level.

FRIENDS 2006 Study

METHOD

Participants

Thirty three children, aged between 7 and 9 years, participated in the FRIENDS 2006 study (10 females, 23 males). They were recruited from a year three Language Development Centre (LDC) and two year three classes from its satellite schools in the local school district within the Perth metropolitan area. Nineteen children (7 females, 13 males) and their parents from the LDC made up the intervention group (after drop out and refusal n = 1). The remaining 13 children (3 females, 10 males) and their parents, from the two satellite LDC classes, were allocated as the control group (after refusal and dropout, n=1).

As with the FRIENDS 2005 study (see Chapter 3 Pg 48), all the children were enrolled at the LDC and had a clinical diagnosis of speech and/or language disorder/difficulties and were of average to above average intelligence with sound adaptive behaviours as determined via cognitive psychometric measures.

The speech/language disorders in this sample varied as with the sample in the FRIENDS 2005 study and included children diagnosed with language delay, semantic and comprehension difficulties, receptive and expressive

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language disorder, phonological (processing) difficulties, dyspraxia, metalinguistic delay and syntactic difficulties (See Glossary p.154). Consent rate of families for participation was 91.4%. Parents of the intervention group were also invited to participate in three parent information sessions throughout the intervention. The parents of the control group were offered a parent information session at the end of the project, to learn about anxiety, depression and a range of management strategies (Appendix 0).

Measures

All children, parents and teachers completed a battery of self-report and informant-rater questionnaires at multiple points in time (Table 1 -refer to the methodology section of the FRIENDS 2005 study for a detailed outline of the measures Pg 35-41). These were the same battery of questionnaires as used with the FRIENDS 2005 study. One additional questionnaire was incorporated to provide an opportunity to analyse whether demographic background influenced outcomes.

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	Pre-Intervention	Session 1	Session 2	Session 3	Session 4	Session 5	Session 6	Session 7	Session 8	Session 9	Session 10	Post-Intervention	Booster session 1	Booster session 2
CDI	√											√		
SCARS-Child	√											√		
SCARS-Parent	√											√		
Piers-Harris	√											√		
SDQ-Parent	√											√		
SDQ-Teacher	√											√		
Child Knowledge & Behaviour Assessment	√											√		
Parent Knowledge & Behaviour Assessment	√											√		
Acquire FRIENDS Knowledge Measure							√					√		
Demographic Information	√													
Student Feedback												√		
Parent Feedback												√		
Observation - Group discussion		√	√	√	√	√	√	√	√	√	√		√	√
-Student work		√	√	√	√	√	√	√	√	√	√		√	√
- Discussion														
with co-facilitator		√	√	√	√	√	√	√	√	√	√		√	√
Home Activities			√	√	√	√	√	√	√	√	√		√	√
Major Learning Objectives		√	√	√	√	√	√	√	√	√	√		√	√

Figure 6. Outline of administration of measures for intervention group at pre and post intervention.

Demographic Background

A questionnaire was specifically devised for the FRIENDS 2006 study to gather demographic information about each of the participants and education and occupation of the participants' parents.

Demographic Information

The Demographic Information questionnaire consisted of six questions which related to 'the number of children in the family', 'the number of children in the family with special learning needs', the number of children with health needs', the 'age and gender of the children in the family', the mother's name, age range, highest level of education completed and occupation' and 'the father's name, age range, highest level of education completed and occupation' (questionnaire can be found in Appendix P).

Procedure

The 2006 FRIENDS study followed a similar procedure, as the 2005 FRIENDS study with pre-intervention assessment, implementation of the FRIENDS for Life program, FRIENDS for parents and comparison group and post-intervention assessment (refer to Procedure section for FRIENDS 2005 study). The modifications to the FRIENDS 2006 study included:

1. An additional information meeting with the parents to brainstorm ways to encourage increased parental support for the FRIENDS program.

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2. Incorporating the modifications made to the FRIENDS program from the 2005 study.
3. The addition of an additional teacher to implement FRIENDS for Life program with the intention of the teacher to be trained in the implementation of the modified FRIENDS for Life program.

Pre-intervention assessment

As with the FRIENDS 2005 study, the pre-intervention measures were completed by all participating children. This took place during normal class time. All questionnaires were implemented by the researcher and read aloud to the children to control for reading and comprehension difficulties (items/words were explained if required), and were administered individually to each child. One to one administration provided the opportunity to develop rapport, provide a rationale for the questionnaire session and answer any queries or questions. At the end of the session a token such as a sticker and non-food item treat from a treat box was provided to the child for their participation in the questionnaire session.

The pre-intervention measures for the parents were sent home from school in the communication folder via the child participants and were sent back to the school after completion. The teachers completed pre-intervention measures during specifically allocated d.o.t.t. (duties other than teaching) time (Refer to Appendix F for an example of the recruitment letters).

Intervention Group (FRIENDS)

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On completion of the pre-intervention screening, the FRIENDS program (Barrett, 2004) commenced at the school during the normal allocation of Health/Personal Development lessons. The program was administered by me with assistance from the class room teacher. In addition, another teacher from the school was allocated time to participate in the implementation of the program as part of her FRIENDS training. This onsite training would in future enable the program to be incorporated into the school curriculum for all Year three children in the LDC. The additional support made possible for the group to break into smaller groups to facilitate a more comprehensive and supportive learning environment for each child, thus taking into consideration any learning difficulties the children may have experienced.

In most instances, the program followed the protocols outline in the FRIENDS manual (Lowry-Webster et al, 2001; Lowry-Webster et al, 2003). The modifications made to the FRIENDS program during the 2005 study. Were also incorporated to the implication of the FRIENDS 2006 study.

The modifications made to the FRIENDS program in response to formative evaluation findings are outlined in the 2005 FRIENDS study procedure section. These modifications created a more accessible and age appropriate program for children in the LDC (adaptation from Year 5 to Year 2 – 3 level) specifically to accommodate for reading and writing difficulties.

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The modifications were maintained from the FRIENDS 2005 Study (pg: 42-43).

The FRIENDS program was implemented over a period of thirteen weeks to accommodate for school holidays. On completion of the 10 sessions, the two FRIENDS program booster sessions followed after one month and three months and continued with the same format as the previous sessions. Post assessments were conducted two weeks after the completion of the initial 10 FRIENDS session.

FRIENDS for Parents

As with the FRIENDS 2005 study, the parents were offered three parent sessions which were conducted by the researcher and supported by the teacher training for the FRIENDS program. The initial session (information session) provided the parents with background information and a rationale about the study and FRIENDS program.

The modification incorporated into the information session structure included an opportunity for the parents to brainstorm ideas to increase parent participation and support of the FRIENDS program. Parent support of the FRIENDS program is likely to result in the parents assisting the children in three ways:

1. Assisting the children with their home activities,

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2. Attending the FRIENDS parent session to learn about the FRIENDS program,
3. The parents encourage the children to use the strategies taught in the FRIENDS program at home.

Parent's suggestions from the brainstorm included:

- The parents encouraging each other to attend the program,
- Providing the initial parent session prior to beginning the FRIENDS program with the children, so the parent's could develop more clarity and support for home activities with a broader sense of the goals of the FRIENDS program.
- Offering morning and afternoon time slot.
- Additionally, some parents suggested a night session, however the school did not support this idea because of difficulty of managing security at night.

FRIENDS parent sessions:

As part of the FRIENDS program, two structured FRIENDS parent workshop sessions are offered for parents interested in their child's involvement in the FRIENDS program. These sessions were conducted at separate times to the child program. Parents were offered a number of session choices (morning/afternoon sessions). A survey was conducted and the most suggested time slot was chosen. As suggested by the parents, session one of the FRIENDS parent session was conducted on two occasions (morning and afternoon session). The first session was offered

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the week prior to beginning the FRIENDS session with the children. The second repeat parent session was offered between session 3 and 4 of the children's FRIENDS program to fit in with parent availability. The last session was conducted at the conclusion of the children's FRIENDS program. Parents who were unable to attend any session were offered the opportunity to have an individual information session; this was taken up by one parent for the initial information session and was conducted (by request) in the parent's home to facilitate child minding. Parent attendance at the information session and FRIENDS parent workshops is displayed in Table 9.

Table 9 Parent attendance at workshops for FRIENDS 2006 Study

Session	Intervention Group n = 19
Information Session	9
Information Session (individual)	1
Parent Session 1	10
Parent Session 1 - Repeat	4
Parent Session 2	7
Parent Session 2 - Repeat	0

The parent sessions followed the same format as the FRIENDS 2005 Study. Session 1 and 2 provided the parents with comprehensive information about what the children were learning in the FRIENDS program, and information about anxiety and depression. Additionally, session 2 of the FRIENDS parent session introduced parents to child management skills (planned ignoring, reinforcement skills, giving and backing up clear instructions) and information about rewards, encouraging desirable behaviours, modelling

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appropriate behaviour, recognising potentially difficult situations, family partnerships, and how to use these skills to manage their child's anxiety and their own anxiety. (Refer to Appendix H for intervention group questionnaire, parent session and FRIENDS information letters). The parents who attended the parent sessions received a FRIENDS folder which included:

Summarised information about anxiety and depression,

FRIENDS plan and strategies,

Child management skills

Effective rewards

How to encourage desirable behaviour

The importance of modelling appropriate behaviour

Outline of potential challenging situations

Available resources and services

At week one and week five, the parents received a letter, to explain that the program had commenced and instructions regarding the homework activities (Appendix I). In response to a number of parents commenting about the difficulty their child experienced from doing the home activities on their own, a third letter was sent to the parents, after session 4, to explain the support the children required for the home activities and to encourage parent participation with the home activities (Appendix Q).

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On completion of the FRIENDS program, the parents received their child's workbook, which included the modified activity and home work sheets, together with a covering letter outlining the FRIENDS program, the symbolism drawn from the word FRIENDS and the importance of reinforcing the program to develop consolidation of the core concepts of the program (Appendix J). This was presented to the parents via the children's end of term four portfolio (this is a folio presentation of the child's classroom work for the semester).

Comparison Group

Parents and children of the comparison group were from the Year 3 satellite classes of the Language Development Centre. They were informed that they would be followed up at regular intervals to learn more about the adjustment of children as they move through the Language Development Centre and into mainstream education, specifically to assess self-esteem and any signs of anxiety and depression. They were informed that they would be offered an information session at the end of the assessment period (term 4) to provide them with an opportunity to learn more about adjustment in children and strategies for coping with challenging situations. In addition, parents were asked to complete all assessment measures at the beginning of term 2 and again at the end of term 3 (*Parents: SCAS-parent form; SDQ and Parent Knowledge & Behaviour Assessment. Child: CDI, SCAS-child form, Piers-Harris, Child Knowledge & Behaviour Assessment*).

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The parents were informed that if their child met the diagnosis for any psychological disorder, after the second assessment period, or if the parent requested treatment then they would be referred for individual treatment and excluded from any other follow-up assessment. (Refer to Appendix K for an example of the control group Questionnaire letters).

Of the Thirteen participants in the comparison group, four parents attended the initial Information Session, specifically designed for the comparison group outlining the questionnaires, pre and post assessment, and the final information session which would provide information about emotional resilience, relaxation strategies and an overview of the data collected. However, none of the parents attended the information session offered at the end of Term 4, therefore an information package was sent home, it included (Appendix 0):

- Enhancing Emotional Resilience – information sheet
- Relaxation for Children – strategies
- Relaxation Games – Script

Teachers

As with the FRIENDS 2005 Study, individual meetings were organised for each of the teachers involved in the program. The intention of the meeting was to explain the background and rationale of the study, clarify the emotional and behavioural risk associated with language impairment,

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provide information about the FRIENDS program and to provide the credentials regarding the researcher/facilitator.

An additional teacher participated in the facilitation of the FRIENDS program to the children and the parents. The main aim was to provide an opportunity for the teacher to be trained in delivering the FRIENDS program to the children in the LDC and develop an understanding of the adaptations made to the program to meet the needs of the children with speech and language difficulties. At the end of the program, the teacher attended the FRIENDS for Life accreditation course.

Post Program

An ethical condition of the study was to contact parents whose children rated in the clinical range for symptoms of anxiety and depression. The purpose of the individual meetings was to provide an opportunity to discuss the results of the assessment and to gain permission from the parent to pass this information onto the LDC to assist in planning for the child's emotional and educational transition into mainstream education. During the FRIENDS 2005 study, an opportunity was provided to meet with the teachers who conduct the meetings with the children's new mainstream teachers. This provided the teachers with background information about the study and the FRIENDS plan/strategies. As the school and the teachers were familiar with the FRIENDS program/study this meeting was not repeated during the FRIENDS 2006 study, however I was available if there

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were any queries or concerns. The teachers involved in the transition meetings were provided with FRIENDS information sheets and available services and resources to the mainstream teachers. This information was provided so that the child's new teacher could monitor the child's transition taking into account that transition can be difficult for most children and that it can be more difficult for children with language impairment.

Attrition

As with the FRIENDS 2005 study, not all participants attended all the FRIENDS sessions, therefore they were not all exposed to the entire program. However, as the participants had specific language problems, each session began with a detailed review of the previous session, thus allowing the participants who missed a previous session to be exposed to the session's major learning themes which were, in effect, further consolidated in the subsequent session. No specific measures were made of group session attendance, therefore attrition was defined as any child who withdrew from the program and/or left the school. The rate of attrition was low, with only one child withdrawing due to illness, over the six month period. Furthermore, all children who returned the signed consent forms participated in the program, even if their parents did not return completed questionnaires, pre and post intervention.

RESULTS – FRIENDS 2006 Study

Overview of Results Section:

The results section for the 2006 FRIENDS study is divided into two parts. In the first section, a formative analysis which examines the acceptability of the FRIENDS Program, as rated by the parents and children participants. This is followed by a review of the summative data which first examines the pre and post intervention child and parent interview responses. Second, the effects of the intervention on the responses to self-report measures are examined. Third, the children's emotion identification rating and the post FRIENDS program assessment results will be reviewed.

Formative Analysis

FRIENDS Program Acceptability Measures and Feelings Identification Pre and Post Intervention.

The revised FRIENDS program delivered in 2006 received positive feedback from parents and children. Table 10-12 presents ratings of the acceptability of the program. Of the 19 parent participants, 15 returned the questionnaire and only 14 of these completed the questionnaire. Of these, all responded that the FRIENDS skills were 'somewhat useful', 'useful', 'very useful' and 'extremely useful' for enhancing their child's coping skills, managing their child's big feelings and protecting their child against stress and change. Nine parents strongly supported the implementation of programs such as FRIENDS, into the curriculum. In comparison with their

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pre treatment responses, all 14 parents responded positively about their newly enhanced skills, reporting being able to encourage their child to recognise, talk and manage their feelings. Parent's comments which reflect this are as follows:

Case 34: "We found the red thoughts/green thoughts very useful... He's much more considerate of our feelings, and hopefully his own – thanks!"

Case 51: "As a parent, I found it extremely useful to learn about coping skills! To implement and use for the future."

Case 39: "Julie now identifies that her anxiety is far greater than her confidence and then sets about to address her anxiety doing things to reduce it, i.e. 'self talk'."*

Parents were asked whether they were able to help and support their child do the home activities. All 14 parents who completed the questionnaire reported 'yes', although two parents commented on the level of difficulty of some tasks:

Case 35: "found some of them a bit beyond her scope/abilities"

Case 48: "However she found some tasks difficult."

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Table 10

		Acceptability of the FRIENDS Program as Rated by Parents from the Intervention Group 2006						
N = 15		No response	Not Useful	Somewhat Useful	Useful	Very Useful	Extremely Useful	Could Not Attend
1	How useful did you find the parent sessions?	1		3	6	4		3
20	How useful do you find the FRIENDS skills for enhancing your child's coping skills?	1		2	8	3	1	
3	How useful do you think the FRIENDS skills will be in managing							
	a) Your child's big feelings	1		2	8	3	1	
	b) Difficult situations	1	1	1	8	3	1	
	c) Your child's transition into mainstream education	2		2	6	4	1	
4	How useful do you think the FRIENDS skills are with:							
	a) Helping your child build emotional resilience?	1		4	6	2	1	
	b) Protecting your child against stress and change?	1		4	6	3	1	
	c) Developing important coping and problem solving skills your child can apply to daily living?	1		2	6	4	2	
			Not a lot	Kind of	A little	Somewhat	A Lot	Could Not Attend
5	How important is it for schools to implement programs such as FRIENDS into the curriculum?	1		1	2	1	9	
6	How much did you learn about enhancing your child's coping skills	1		2	3	6	3	
7	How much do you think your child learnt about coping?	1		1	6	5	3	
8	How often does your child use the skills taught?	1	1	3	7	3		
N = 15			No more		Somewhat more		Much more	Could Not attend
9	In comparison with before attending the program, how well do you think you are able to:							
	a) Encourage your child to recognise his/her feelings	1		2	5	2	5	
	b) Encourage your child to talk about his/her feelings	1		2	6	3	3	
	c) Encourage your child to manage his/her feelings?	1		3	5	1	5	
N = 11		Yes	No	Yes & No	Did not respond			
10	Were you able to help and support your child do the home activities?	14			1			

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Table 11 summarises the parent’s evaluation of the severity of their child’s problems since coming to the service of the FRIENDS program. Fifteen parents returned the questionnaire with only 13 parents completing the questions on the back of the form. Of these, seven reported that their child’s problems were ‘a bit better’ and ‘much better’. Seven reported that coming to the service of the FRIENDS program has been helpful with providing information or making the problems more bearable. In general the FRIENDS program was well received and supported by the parents as reflected in the following quotes,

Case 50: “He is now practicing what he learned from FRIENDS”

Case 51: “...I am able to encourage my child to talk about green and red thoughts.”

However it is important to note that one parent found the program to have a negative feel to it as indicated by the following comment:

Case 49: “I find a lot of the program quite negative – it focuses on a lot of negative things that Bill would not ever normally think about.”*

Table 11

SDQ- Parent form Impact Rating for Intervention Group 2006 at Post Assessment

(N = 15)	Much worse	A Bit worse	About the Same	A Bit Better	Much Better	No Response
Since coming to the service, how are your child’s problems:		1	4	6	2	2
		Not at all	A little	A medium amount	A great deal	No Response
Has coming to the service been helpful in other ways, e.g. providing information or making the problems more bearable?		1	5	7		2

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The FRIENDS program received positive evaluations from the children, as depicted in Table 12. Of the 19 participants, 15 rated that they enjoyed the FRIENDS program 'a lot'. Ten participants reported that they had learnt 'a lot' about feelings and 11 indicated that they learnt 'a lot' with how to cope with feeling worried or nervous. Twelve participants reported that they use the ideas taught in the FRIENDS program 'a lot'.

Children were asked to rate the usefulness of each of the anxiety management tools taught in the FRIENDS program. Eighteen children indicated that they found the relaxation exercise and helping others to feel good 'very useful' and 'extremely useful'. For changing unhelpful thoughts into helpful thoughts, 14 children rated that skill as 'extremely useful'. Recognising feelings in others was rated 'useful', 'very useful' and 'extremely useful' by 17 participants, where as recognising feelings in self was rated 'useful', 'very useful' and 'extremely useful' by 14 participants.

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TABLE 12

Acceptability of the FRIENDS Program as Rated By Child Participants					
(N = 19)	Not a lot	kind of	A Little	Some	A lot
How much did you enjoy the FRIENDS program?	-	-	2	2	15
How much did you learn about feelings?	1	1	1	6	10
How much did you learn about how to cope with feeling worried or nervous?	4	2	1	1	11
How often do you use the ideas taught in the FRIENDS program?	2	1	3	1	12

(N = 19)	Not useful	Somewhat Useful	Useful	Very Useful	Extremely Useful
How useful did you find the:					
a) Relaxation exercise	1	-	-	2	16
b) Helping others to feel good?	1	-	-	2	16
c) 6 Block problem solving plan?	1	-	3	1	13
d) Thinking helpful thoughts?	-	1	2	3	13
e) Changing unhelpful thoughts into helpful thoughts	1	2	1	1	14
f) Coping Step plan?	1	1	2	2	13
g) Recognising feelings in self?	5	-	2	3	9
h) Recognising feelings in others?	1	1	2	3	12

Section 2: Summative Analysis:

Pre-Post Child and Parental Reports

Prior to statistical analyses, the data were screened for the presence of outliers and violations of the assumptions of univariate measure analysis of covariance (ANCOVA). Results of evaluation of the assumptions of normality of sampling distributions, linearity, homogeneity of variance, homogeneity of regression, and reliability of covariates were satisfactory for most measures.

Effects of Intervention on the Self-report Measures:

The mean and standard deviations for the child self-report measures at pre and post-intervention are presented in Table 13. To examine the immediate effect of treatment on the self-report measures and to control for pre-intervention differences on three of the dependent variable, a 2 (condition: intervention vs control) x 2 (time: pre-treatment vs post-treatment) univariate measure analysis of covariance (ANCOVA) was used. The three covariates used in this analysis were the pre-treatment CDEI, SCAS-child rated and Piers-Harris measures. The results were analysed for universal effects for all children. From pre- to post-intervention for scores for all children on the SCAS, CDI and Piers-Harris the univariate measure ANCOVA shows that there was a significant difference in change of mean score over time on pre- and post-assessment for Piers-Harris ($F(1,27)=172.5, p<.05$), SCAS ($F(1,27)=18.32, p<.05$), although not for CDI ($F(1,27)=2.5, ns$). However the effect for group was nonsignificant for Piers-Harris ($F(1,27)=.06, ns$), SCAS ($F(1,27)=1.02, ns$) and CDI ($F(1,27)=1.98, ns$).

TABLE 13

Mean scores for child self-report measures for intervention and control group at pre and post assessment

Variables	Group			
	Pre		Post	
	Intervention (N = 19)	Control (N = 11)	Intervention (N = 19)	Control (N = 11)
	Mean ±SD	Mean ±SD	Mean ±SD	Mean ±SD
CDI	10.05/7.43	5.91/7.8	8.89/8.39	8.09/1.87
SCAS	30.68/15.73	24.55/15.85	29.84/15.44	22.55/15.49
Piers Harris	56.95/9.35	61.18/9.34	57.74/10.14	61.55/8.37

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As reported in the FRIENDS 2005 study, most children were in the normal range on these measures prior to beginning assessment. Children with clinical ratings for anxiety, depression and self-concept were subsequently extracted from the universal group and considered as a small number of case studies. Eyeballing the data for this small clinical sample indicated that the children in both the intervention and control groups moved in different direction, some improved, some got worse and some stayed the same. There was no trend across cases. For interested readers the data is presented in Appendix R.

Table 14 presents the mean and standard deviation for the teacher and parent self-report measures at pre and post intervention. To examine the immediate effect of treatment on the parent-report measures and to control for pre-intervention differences on two of the dependent variable, a 2 (condition: intervention vs control) x 2 (time: pre-treatment vs post-treatment) univariate measure analysis of covariance (ANCOVA) was used. The three covariates used in this analysis were the pre-treatment SCAS-parent rated (SCAS-P) and SDQ-parent rated (SDQ-P) measures.

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Table 14

Mean Scores for Parent and Teacher Measures for Intervention and Control Group at Pre and Post Assessment

Variables	Groups			
	Pre		Post	
	Intervention (N = 19)	Control (N = 11)	Intervention (N = 19)	Control (N = 11)
SDQ Teacher rated	Mean \pm SD 11.58/7.71	Mean \pm SD 7.09/4.25	Mean \pm SD 11.16/8.54	Mean \pm SD 8.64/2.98
SCAS Parent rated	(N = 16) 15.25/9.53	(N = 10) 14.30/9.37	(N = 14) 14.36/7.45	(N = 8) 17.63/13.98
SDQ Parent rated	13.06/5.47	12.60/7.17	11.13/3.83	12.56/8.7

The results were analysed for universal effects for all children. In terms of the SDQ-P and SCAS-P for all children at pre- and post-intervention, the univariate measure ANCOVA was nonsignificant over time at pre- and post-intervention for SDQ-P ($F(1,20)=1.69,ns$) and SCAS-P ($F(1,18)=1.35,ns$). The effect for group was nonsignificant for SDQ-P ($F(1,20)=3.07,ns$) and SCAS-P ($F(1,18)=0.82,ns$).

As reported in the FRIENDS 2005 study, the teacher's measures for all children gained from the SDQ-teacher rated, was not analysed in this study. The decision to not include the data was based on clinical observation which suggested that the teachers involved in the study had extreme stylistic and interpretive differences which influenced and affected the way they viewed the children on this measure. As this study had a small

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sample, these different styles became very pronounced in the results of the SDQ- teacher rater for both groups.

Feelings Identification pre and post intervention

Table 15 (Pg 122) presents the intervention and control groups responses to whether children are able to identify with their own feelings and other people's feelings, and how they could tell when they felt these feelings or noticed when somebody else felt these feelings at pre and post intervention. As with FRIENDS 2005, five developmentally relevant feelings were examined; these were happy, sad, angry, worried and afraid. In order to develop an overall perception of emotions/feelings the children were asked whether they could identify '*whether they felt these feelings*' and whether they could identify '*when someone else felt these feelings*'. The children were also provided with an opportunity to elaborate on their responses by giving examples i.e.: *How can you tell when you feel happy, what happens to your body / thought. How can you tell when somebody else feels happy?*

The development of emotion language is important for children with language impairment. Developing a broad array of words to describe their emotions increases their ability to recognise emotions in themselves and others and aids their social competence. They are also then better able to regulate the intensity of their own emotions and discriminate among feelings of variable intensity (Gallagher, 1999 & Dale, 1996). An analysis of the responses from the children in the FRIENDS 2006 study illustrates that the

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children in the intervention group display an increased use of emotion language after intervention.

The emotion, 'happy' was generally recognised by the intervention and all of the control group at pre intervention, with a small drop in the number of children in the control group who could recognise having this feeling at post intervention and all intervention participants reported that they were able to recognise having this feeling. In general the intervention and control participants at pre-intervention recognised when they were happy by the activity they were doing or indicated that they 'didn't know':

Intervention Group

Case 13: "Because when I play with my friends"

Case 14: "When it's my birthday"

Case 9: "When I am playing"

Control Group

Case 26: "Cause I watch good movies"

Case 32: "Don't know"

Case 31: "When it's my birthday"

At post intervention, all of the intervention group reported that they were able to recognise feeling happy by generally identifying with sensations and an increased use of emotion language, rather than by an activity alone.

Moreover, some refer to multiple indicators:

Case 10: "I notice that my body is calm down and feeling happy."

Case 9: "My heart pumps fast in a nice way and my body gets happy and I then smile to myself"

Case 1: "You start to feel happy and have green thoughts"

Case 14: "I feel light in my body"

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Of the 8 (of 11) control group participants who reported that they were able to detect when they were happy, comments still, generally reflect an activity or situation rather than recognising a body sensation or thought to indicate that they are happy:

Case 29: "By going to Royal Show"

Case 30: "When I do things fun then I feel happy"

Case 21: "Play with my friends"

Two children in the control group reflected that they were able to recognise a sensation or thought as an indicator to feeling happy:

Case 24: "Because feel it in my head"

Case 22: "Because I'm having a good time in my heart"

The emotion 'worried' was a main theme of the FRIENDS program as it aimed to teach the children bodily sensations and thoughts which can reflect and indicate anxiety. At pre intervention, the children were asked whether they could identify feeling worried. Nine (47.3%) of the intervention group and six (54.5%) of the control group reported that they were able to identify feeling worried. Comments at pre intervention generally reflected that children could not explain how they recognised they were worried, and/or were unable to recognise the sensations or thought which indicated that they were feeling worried:

Intervention group:

Case 9: "When I watch Arnold Swartz"

Case 7: "I'm just going to go and do it"

Case 16: "When I get scared, I'll just hide in my blanket."

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Control Group:

Case 58: "I worry that someone is going to eat me"

Case 56 & 54: "Don't know"

After the FRIENDS 2006 program, 16 (84.2%) of the intervention group were able to identify when they felt worried, with only six (54.5%) of the control group being able to recognise when they felt worried. Again, the change in the emotion language used at post intervention reflects the difference between the intervention and control group. The intervention group generally identified sensations and/or thoughts as an indicator to feeling 'worried', and some identified multiple indicators:

Intervention group

Case 16: "in my heart – in my tummy, I have butterflies"

Case 15: "I get a head ache, sore throat, red cheeks and butterflies in stomach and I need to go to the toilet"

Case 19: "In my tummy, sometimes I get a stomach ache"

Case 20: "I feel it in my heart, it pumps fast"

Case 5: "When I get red thoughts"

Case 1: "I get sweaty hands and feels like water dripping down"

In comparison, the control group's comments generally reflect that they 'don't know' and/or they identified a situation as being associated with worry:

Control group:

Case 21: "Play games"

Case 28: "When someone's not in the house at night time"

The intervention group's increased use of 'emotion' language (Gallagher, 1999), and recognition of emotions, sensations and thoughts accompanying

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them is further highlighted when the children were asked if they could identify whether somebody else was feeling any of the five emotions. At pre intervention, 14 (74.7%) of the intervention group and 7 (63.6%) of the control group reported that they could identify when somebody was feeling sad. Comments made by the children were:

Intervention group:

Case 2: "Because they're walking away from other people"

Case 12: "Because they're crying"

Case 15: "If they like get a little sad, like if they get runded over"

Control group:

Case 26: "I can see them crying"

Case 29: "They don't smile"

At post intervention, all 19 of the intervention group, compared to 8 (72.7%) of the control group reported that they were able to identify when somebody else was feeling sad. However the most notable difference was reflected in their comments with the intervention group indicating an enhancement of emotion language to express how they noticed someone feeling sad. Moreover they often encapsulate multiple indicators in one statement:

Intervention group:

Case 20: "Their mouths are different, its like upside down and they have tears coming down."

Case 9: "Their mouth is pointing down, not up. They could be walking slowly"

Case 10: "They would be crying and sitting, with a sad face with their eyes down"

Case 8: "Cause they don't put a smile on their face and I see tears coming down their eyes and they're sitting down lonely"

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In contrast, the control group comments were generally considered more general:

Control group:

Case 30: "You help them to stop crying"

Case 21: "People be mean"

Case 32: "Because they cry"

This emotion enlightenment is further demonstrated with responses about the emotion 'angry'. At pre intervention, 14 (73.7%) of the intervention group and seven (63.6%) of the control group reported that they were able to identify when somebody was feeling angry. Some of the comments made were:

Intervention Group:

Case 12: "When they're mean to you"

Case 2: "Their face is red"

Case 3: "Frown"

Control Group:

Case 26: "I would say don't you do that"

Case 27: "They have angry face"

In comparison, at post intervention all 19 (100%) of the intervention group compared to seven (63.6%) of the control group reported that they were able to identify if somebody was feeling angry. Comments made by the intervention group again reflect that they are able to recognise multiple signs displayed by people when they feel worried, with comments such as:

Intervention group:

Case 8: "Because I see their eyebrows looking very down and their eyes are low and they sound mad and they're fighting"

Case 4: "They have red cheeks and their heart beats fast"

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Case 3: "They have an angry face (demonstrated), and say 'red' words and have 'red' thoughts"

Case 5: "They have 'red' thoughts, 'cause they are hitting people"

Case 18: "They frown, their face turns red, they screw their face. They clutch their fists"

In contrast, the comments made by the control group reflect that they are uncertain and/or identify with a situation which can cause someone to be angry, the follow comments reflect this:

Control Group:

Case 21: "Teasing"

Case 25: "I look at the face and they're really angry"

Case 22: "They yell at people"

Demographic Information:

The information obtained from the demographic information questionnaire was not analysed in this study. The decision to not include the information was based on the low number of demographic questionnaires returned. I speculated that the questionnaire asked for information about the parents, which they deemed unnecessary.

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TABLE 15 (2006)

Children's ratings identifying whether they are able to identify with their own feelings and other people's feelings pre and post intervention in Percentages.

	Pre												Post											
	Intervention (N = 19)						Control (N = 11)						Intervention (N = 19)						Control (N = 11)					
	Yes	No	Some-times	Yes	No	Some-times	Yes	No	Some-times	Yes	No	Some-times	Yes	No	Some-times	Yes	No	Some-times	Yes	No	Some-times			
Can you tell when you feel:	Tally	(%)	Tally	(%)	Tally	(%)	Tally	(%)	Tally	(%)	Tally	(%)	Tally	(%)	Tally	(%)	Tally	(%)	Tally	(%)	Tally	(%)		
Happy?	16	84.2	3	16.8			11	100					19	100					8	72.7	3	27.2		
Sad?	11	57.9	8	42.1			3	27.3	8	72.7			17	89.4	1	5.2	1	5.2	5	45.4	6	54.5		
Angry?	12	63.2	7	36.8			8	72.7	3	27.2			17	89.4	2	10.5			7	63.6	4	36.4		
Worried?	9	47.3	8	42.1	2	10.5	6	54.5	5	45.4			16	84.2	3	15.8			6	54.5	5	45.4		
Afraid?	10	52.6	8	42.1	1	5.3	4	36.3	7	43.6			15	78.9	4	21.1			3	27.2	7	63.6	1	9.1
Can you tell when somebody else feels:																								
Happy?	13	68.4	6	32.6			6	54.5	5	45.4			18	94.7	1	5.2			9	81.8	2	18.2		
Sad?	14	73.7	5	26.3			7	63.6	4	36.4			19	100					8	72.7	3	27.3		
Angry?	9	47.3	9	47.3	1	5.3	7	63.6	4	36.4			19	100					7	63.6	4	36.4		
Worried?	8	42.1	11	57.9			7	63.6	4	36.4			15	78.9	4	21.1			3	27.2	8	72.7		
Afraid?	11	57.9	7	36.8			5	45.4	5	45.4	1	9.1	12	63.2	6	31.6	1	5.2	4	36.4	7	63.6		

DISCUSSION

FRIENDS 2006 Study:

The specific aims of the FRIENDS 2006 study were to examine the effects of the adapted intervention FRIENDS program on children's self reported levels of anxiety, depression and self concept in comparison to a control group. In addition, parent report and a teacher report measures of behaviour were also considered. Given the speech/language difficulties of the children, these traditional standardised outcome measures showed no significant difference between the groups in contrast to previous research (Barrett & Turner, 2001; Dadds, 1997; Lowry-Webster et al, 2001; Lowry-Webster et al, 2003) and was repeated in the FRIENDS 2005 study described here. Even when evaluating the effectiveness of the program for children initially in the clinical range of symptoms of anxiety, depression and self-concept, no significant effect of the program was apparent. Analysis of the parent report for pro-social behaviours as well as internalising and externalising symptoms did not show a change in the mean scores for the intervention group when compared to the control group. Second, the study aimed to alter the parental component of the FRIENDS program, to increase and/or enhance parental participation/support in the FRIENDS program. Despite the focus of increasing parental involvement and participation in the program, over the course of the intervention parental involvement in the parent sessions decreased.

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Despite these seemingly disappointing results, non-traditional and program specific descriptive measures indicate that differential and positive changes were attained for the intervention group at post assessment. Specifically, anxiety management plan and skills were gained from the program (as reported by the Acquired Friends Knowledge Measure); positive feedback from the parents and children were given about the study (as reported by the Parent Feedback measure); and there was considerable development of 'emotion' language (as reported by the Child knowledge & Behaviour Assessment measure). Each of these positive changes will now be discussed in turn.

FRIENDS Knowledge:

The intervention participants were assessed on their acquired knowledge of the major learning skills and strategies from the FRIENDS program at post intervention. All children displayed a firm knowledge of the FRIENDS plan and the accompanying strategies taught throughout the program. They displayed an increased use, and more complex appreciation of, emotion language when identifying sensations and feelings associated with feeling worried, and they were able to identify '*helpful*' and '*unhelpful thoughts*'. As with the findings of the FRIENDS 2005 study, parents with children in the intervention group reported that at post-intervention they were more able than before to encourage their child to recognise, talk and manage their feelings. In addition, they reported that their child's (emotional) problems 'had improved' since their child participated in the program. This positive

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feedback was further highlighted in the parent's positive comments reflecting the changes made within their family and child's life. An exemplary comment is:

"As a parent, I found it extremely useful to learn about coping skills!

To implement and use for the future." Case 51

However, some parents' comments reflected a negative experience with the implementation of the FRIENDS program, this will be explored further in the parent participation section.

Emotion Language:

There was a notable development of emotion language (Dale, 1996; Gallagher, 1999) amongst the children in the intervention group compared to the control group. The development of emotion language (Dale, 1996; Gallagher, 1999) was also the findings of the FRIENDS 2005 study. The intervention group, at post intervention demonstrated an increased ability to identify their emotions and those of other people, and developed a broader array of emotion language (sensations and feelings) to describe how they *noticed* when they felt a particular emotion and how they *recognised* when somebody else was feeling a particular emotion. The majority of the control group participants at post-intervention continued to describe a situation or an event to explain how they noticed when they felt these emotions. Using a wide array of emotion language has been previously reported as a precursor for children to discriminate among feelings and their intensity and therefore being enabled to regulate their responses accordingly. They are

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more likely to identify other people's emotions, become more socially competent and thus likely to increase social interaction (Bietchman et al, 1986a 1986b; Bietchman et al, 2001; Dale, 1996; Gallagher, 1999; Hubbard, 2001). Further research would be beneficial in this area to determine the long term effects of emotion language acquisition.

Parent Participation:

The parent sessions aimed to teach parents about the FRIENDS program; provide them with background information about anxiety and depression; inform them about the strategies and skills the children were developing through their participation in the program; introduce parents to child management skills and strategies to aid them as they support their child to utilise these skills during day to day life. The inclusion of parent participation for children with language impairment was considered essential as the children would benefit from having the FRIENDS strategies consolidated and supported at home (Bett, 2002). Studies conducted by Rapee et al (2005) and Mendlowitz (1996) found that children who received anxiety intervention with parental involvement in a separate, but concurrently run treatment group were able to facilitate the children's learning of these strategies. The findings reported a significantly greater decrease in anxiety diagnoses for the children whose parents participated in concurrent anxiety intervention groups compared to children whose parents received no intervention.

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One of the difficulties running the anxiety intervention program for the children with language impairment was the small number of parents who participated in the parent sessions. As the study evaluated the intervention program through an action research approach, some of the possible reasons for the low parent participation were evaluated.

First, it was noted that some parents were concerned with the perceived high academic level and perceived negative emotional tone of the program and as such were not assisting their children with the home activities.

Main concerns raised by the parents was the level of difficulty of the FRIENDS program which is set from Year 5 level and modified during the initial FRIENDS 2005 study, to a Year 3 level. At face value, some parents of the intervention group reported that they found some of the components, concepts and activities of the program above their children's academic and emotional level.

"I found some of them (home activities) a bit behind her scope/abilities." Case 35

"I feel the 'FRIENDS' program would greatly benefit older children in mainstream. Case 42.

During the implementation of the program these concerns were addressed through an additional letter sent home by week five of the program to encourage parental support and assistance, re-iterating the aim of the program and the benefit of parental involvement/assistance. Most of the

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parents reported that they were able to support and help their child do the home activities from the FRIENDS program. However, some parents found the program to have a negative tone which was reflected in their comments:

“Since the program started he has been sleeping in my bed, so I don’t think it helped him deal with fear, it only introduced him to it and many other situations of fear. I feel that protecting my child is better than exposing them to harm.”

Case 44

and

“I find a lot of the program quite negative – it focuses on a lot of negative things that Bill would not ever normally think about.”* Case 49

Unfortunately, the second parent session of the FRIENDS program only half of the original fourteen parents attended and none of the remaining parents attended the repeated FRIENDS parent session. Due to time restraints, there was no follow-up with the parents who did not attend. On reflection, this step would have been useful to broaden our understanding of the parent’s first hand experience of the program and possibly of their experience of their child’s speech and language diagnosis. This would have followed the principles of the Ecology of Child Development which acknowledges that the family is the closest, most intense and influential part of the Child Ecological system (Bronfenbrenner, 1979, 2004). The parent’s thoughts and beliefs influence the child’s learning and hence, without their

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support in the program, the child's developments of the new skills are compromised (Bronfenbrenner, 1979, 2004). In essence, the parents were only involved at an 'information' level and were not in partnership with the implementation of the program (The Early Years Learning Framework for Australia, 2009).

During the final FRIENDS parent session, one parent reported that her original intention of attending the final parent session was to raise her concerns about the implementation of the FRIENDS program. She did not see the relevance of the program and how she felt that the program addressed areas which were not relevant for the children at the LDC. Although by the end of the session, the parent reported that she had changed her mind as the areas addressed during the final parent session clarified the importance of the FRIENDS program and highlighted the possible challenges for the children with speech and language difficulties. Considering this feedback, it may be beneficial for each of the Parent FRIENDS sessions to be offered before beginning the program with the children and offering the option of phone contact if the parents have any queries or concerns during the course of the program.

It is through the parents comments we become aware of the some of the parents' experience of the FRIENDS program and possibly their own anxieties. Previous research (Irwin et al, 2002) found that having children with expressive language deficits can be particularly taxing on the parent-

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child relationship. This was noted with the FRIENDS 2005 study and was addressed by involving the parents during the initial information session to jointly develop ways to increase parental support and involvement with the FRIENDS program for the 2006 study. However, the ideas developed during the initial meeting to increase parental support did not increase parental participation, such as:

- parents encourage each other to attend,
- providing parent friendly times
- providing the initial parent session prior to the beginning of the children's component of the FRIENDS program, so the parent's could develop more clarity of the program and the benefits of their involvement

This was consistent with the reduced number of attendance at the final FRIENDS parent session and fewer returned questionnaires from parents at the end of the post assessment.

This warrants further exploration as the parent's grief, worries and concerns about their child's difficulties can impact on their parent/child relationship (Bett, 2002). As parents are the people who make decisions about their child's life (Bett, 2002, Early Years Framework-Australian Government, 2009), their own concerns need to be addressed and explored further in order to provide effective intervention for their children which can be supported within the home environment (Bronfenbrenner, 1979, 2004). An option to support the parents, may be through the school providing

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information workshops yearly to assist the parents in broadening their understanding of the complexities of the speech and language diagnosis, so they are more informed and as such more able to participate in the decision making of appropriate intervention programs.

Teacher Training:

One of the aims of the study was the intention to train an LDC teacher on the modifications of the FRIENDS program to meet the specific needs of the LDC children. The training consisted of the LDC teacher supporting the facilitator in the group sessions, setting up and having meetings with the facilitator about the program. Once the program was completed the LDC teacher attended the intensive full-day workshop provided by the FRIENDS for Life program. Topics in the training included

- Challenges of implementing the program to children in a group environment.
- Ethical issues,
- Anxiety disorders and their risk factors,
- Principles of prevention
- Step by step guide through the FRIENDS program

At the end of the workshop, the teacher received a copy of the FRIENDS for Life Children Group Leader Manual.

The teacher training of the FRIENDS for Life program was an important step for the LDC, as they made a commitment to continue to implement the

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program each year to Year 3 LDC children as part of their preparation into mainstream education. This enabled the LDC to provide an overarching specific learning environment which addressed speech/language, behaviour/socialisation and addressing anxiety issues.

Conclusion:

As with the FRIENDS 2005 study, this study was effective in showing the benefits of interventions for children with specific language difficulties being assessed using an action research mixed method evaluation approach to gain a comprehensive assessment of the effectiveness of the program. Exploration of non-traditional methods indicated positive changes were gained by the intervention group as they developed an increased awareness of their own and other people's emotions and most importantly they developed a wider array of emotion language when compared to the control group at post intervention. In addition, the intervention group attained understanding of the FRIENDS plan and skills at post intervention.

As with the FRIENDS 2005 study, results from traditional measures (CDI, SCAS, Piers-Harris) did not demonstrate a significant difference between the intervention and control groups. Even when evaluating the effectiveness of the program for the children in the clinical range of symptomatology of anxiety, depression and self-concept, no significant effect of the program was apparent. As explored previously with the FRIENDS 2005 study, the data set was comparatively small when compared to previous research

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(Barrett & Turner, 2001; Dadds, 1997; Lowry-Webster et al, 2001; Lowry-Webster et al, 2003) which may have affected the statistical power to effectively demonstrate subtle changes. Second, the standardised traditional questionnaire may have been too complex for the young children with speech and language difficulties to understand.

The study highlighted the need to further explore more effective ways to increase parent participation and acceptance of the intervention program at the parent sessions for the parents of language impaired children. Working more closely with the parents to develop a better understanding of their journey with a child with SLD within a secure, respectful partnership (The Early Years Learning Framework for Australia, 2009) would strengthen the ability to implement the FRIENDS program in partnership with parents.

This study highlighted the importance of providing anxiety intervention/prevention program for children with language impairments, as they are an at risk group. Even though the program is still in its infancy, it is a step towards developing a comprehensive anxiety/intervention program for children with language impairment. The next phase of this research involved follow-up of the children from the FRIENDS 2005 study after one year (after transition to mainstream school).

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Reflection:

On reflection, the parents in the FRIENDS 2006 group were initially eager to participate and willing to come up with ways to encourage parents to join in and support the FRIENDS program. However, what became evident was a number of these parents became distressed and almost resentful toward the content as the program progressed. The teaching of feelings to their children became very challenging for some of these parents, who expressed that these were things their children didn't need to know about. The parents continued to allow their children to participate, however their support and participation with homework activities and participation in the parent sessions dwindled. These were parents with children who were already presenting with some challenging behaviours in the classroom and would have potentially benefited most from these strategies. However, the parents were involved at an 'information' level only and not in a comprehensive partnership with the implementation of the program. For many people, thinking about emotional life is a bit of a shock, and particularly the emotional life of children. The behaviour of the parents reflects a lack of containment which was attempted, but not comprehensive. Further exploration of the parents of children with SLD by developing a more comprehensive partnership approach is worthy of further exploration.

CHAPTER FIVE

FRIENDS – Follow-up 2005 Study

PREFACE

The Follow-up 2005 Study was not completed following a poor response rate from families in the 2005 study. Even though this was a disappointing outcome, review and reflection of the attempted study provided an opportunity to think about the 'fit' of the intervention with these families, which may enhance the way intervention is offered in the future.

INTRODUCTION

The intention of Study Three was to re-assess the children who participated in the FRIENDS 2005 study to evaluate the outcomes at one year follow-up, to assess whether the intervention gains were maintained over a period of 12 months and whether the skills were carried into mainstream education (Lowry-Webster et al, 2003).

A one year follow-up was considered to be beneficial as the children from the LDC had gone through a major transition of exiting the small classes of the LDC and entering into mainstream education. For most of the children their language impairment diagnosis was intact despite remediation. In addition to moving into mainstream education, the children entered different mainstream schools from their LDC peers, in different suburbs, some government based, some community based and some private/independent schools. The majority of the LDC children separated from friends they had

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known since they entered the LDC in Kindergarten/Pre-primary. Considering the major transition for these children, it would be worthwhile exploring the impact it might have on the children and whether their newly developed FRIENDS skills were maintained and utilised in these new environment.

METHOD

Participants

The FRIENDS 2005 study consisted of thirty two children (9 females, 23 males) who were enrolled in a Language Development Centre (LDC) in Year 3 prior to exiting into mainstream education. During the intended one year follow-up the children were aged between 8 and 10 years and were enrolled in mainstream schools across the Perth metropolitan area. During the FRIENDS 2005 study, 15 children (4 females, 11 males) and their parents from the LDC made up the intervention group (after drop out and refusal, n=2). The remaining 17 children (5 females, 12 males) and their parents, from the two satellite LDC classes, were allocated as the control group (after refusal and dropout, n=1). All the children originally enrolled at the LDC had a diagnosis of speech and/or language disorder/difficulties and were of average to above average intelligence with sound adaptive behaviours at enrolment. The speech/language disorder in this sample varied and included language delayed, semantic and comprehension difficulties, receptive and expressive language disorder, phonological (processing) difficulties, dyspraxia, metalinguistic delay and syntactic

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difficulties. Consent rate for families approached for participation in the follow-up assessment was 12.5%.

Measures

The aim of the follow-up study was for all children and parents to complete the same battery of self-report⁵ and informant-rater questionnaires as with the post assessment of the FRIENDS 2005 Study (Refer to the methodology section of the FRIENDS 2005 study for a detailed outline of the measures- Pg 35-41). There way also the inclusion of an additional questionnaire regarding transition information (Appendix O-1) Exploration of qualitative and quantitative measures afforded the comprehensive insight into changes occurring in the child participants.

Procedure

The follow-up study was initially attempted 12 months after the 2005 FRIENDS for Life program, and again at 17 months. Participants were recruited through letters on both occasions (Attachment S) On the first contact attempt 6 of 32 responded, 4 consented to participate in the follow-up study, a further 2 indicated that they did not wish to participate. Due to the low response and consent rate at 12 months, it was decided to attempt another recruitment of participants for the follow-up study at 17 months after the long Australian Christmas/summer holiday period. This resulted in one additional consenting family, taking the total consent to five families. Some

⁵ The questionnaires were not technically self-report as all the self-report questionnaires were read to the children.

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phone contact was attempted to recruit additional families, however this was unsuccessful. Table 16 outlines the response and consent rate for both the Intervention and Control group.

TABLE 16 Response & consent rate for Follow-up 2005 FRIENDS study

Follow-up Study	Intervention Group		Control Group	
1 st Attempt to recruit	4 Reply	3 Consent	2 Reply	1 Consent
2 nd Attempt to recruit	2 Reply	2 Consent	3 Reply	3 Consent

As the consent rate was too small to use for statistical purposes, it was decided to discontinue with the follow-up study as only two of the consenting families were from the intervention group. A letter was sent informing the consenting participants that the follow-up study for the FRIENDS for Life program would not continue (Attachment T).

DISCUSSION

It is difficult to know what attributed to the low response to the follow-up study, however some speculation is warranted. First, during the initial recruitment for the FRIENDS 2005 study the families were not informed of a possible follow-up after one year post transition and therefore did not originally consent to a follow-up study during the initial recruitment for the FRIENDS 2005 study. In addition, the families did not receive any additional reminders or follow-up phone calls due to time restraints. This lack of follow-up in the recruitment drive negatively affects the response rate, as response rate improves when participants receive an incentive and/or intensive follow-up (i.e.; phone calls, emails) (Tambor, Chase, Faden, Geller, Hofman & Holtzman, 1993).

Second, the majority of the children and the families had dispersed over the metropolitan area for their mainstream education and were informed of the follow-up study via letters. Some phone calls were attempted however, this was unsuccessful in every instance. As the LDC was no longer involved, the families did not receive reminders from the teachers to complete the consent forms. In addition, the contact details for the families were not updated, therefore it is possible not all recruitment letters reached all the original 2005 study participants.

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Third, throughout the original study attendance rate for the parents was low. Of the thirty two children who participated in the FRIENDS 2005 Study, ten attended in the Initial information meeting, three attended Parent Session 1. Three attended Parent Session 2, fourteen parents participated in the pre-assessment and fifteen in the post-assessment. Comments noted from one of the parents reflect the overwhelming difficulty of attending one of the FRIENDS meeting –*“John* has no problems with transition. He has had a successful orientation day at his new school* and I foresee no major problems on that score. If there was a problem I would be interested in a discussion with you but as there is not and I am overwhelmed by other things that need my attention before we go away, I would rather you give my time to someone more in need. Thanks very much.”* Other comments reflected their busy schedules – *“Too long for working parents”*. By the end of the FRIENDS 2005 study it was apparent that the study was not successful in developing a secure, reciprocal partnership with all the parents of the child participants, which negatively affected their engagement with the program (Bronfenbrenner, 1979, 2004; The Early Years Learning Framework-Australian Government, 2009). In order for the families to re-commit to a follow-up program they needed an incentive (i.e: feeling a commitment to the original program, or have a sense of being actively involved in the in the planning and implementation of an intervention program) (Tambor et al, 1993). The low attendance of parents during the 2005 study indicated that they had no incentive to complete a battery of

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questionnaires, especially as they had previously stated that they were 'busy' and 'overwhelmed' by other commitments.

The low parent attendance during the 2005 FRIENDS program and the low consent rate for the follow-up study, highlights the importance of developing a partnership between the school, facilitators and parents. Incorporating and nurturing these partnerships are the foundation for future research for these families.

REFLECTION:

On reflection, the timeframe of the follow-up study coincided with the implementation of the FRIENDS 2006 study, this became a busy time and impacted on my availability. If funding were available, then it would have been beneficial to do the follow-up study with the FRIENDS 2006 families as there were attempts to develop a relationship with the parents during this study. There is still a lot to learn from these families and further research is required if we are to develop an intervention/prevention program which meets the needs of children with SLD.

Through my clinical work since implementing the FRIENDS programs, I have become aware of a number of the children who were participants in the FRIENDS program and are now requiring significant clinical intervention for anxiety, depression and behavioural problems. Many of these children are from families where the parents did not engage and support for home activities was not achieved during the FRIENDS program. These observations further highlight the fundamental importance of developing an over-arching intervention/prevention program for this at risk group.

CHAPTER SIX

DISCUSSION

The intention of this paper was firstly, to examine the interrelationship between language impairment, emotional/behavioural problems and social development; and secondly, to evaluate the utility of incorporating an anxiety intervention/prevention program in the context of a Language Development Centre (LDC) curriculum as children prepare to exit the LDC and enter into mainstream education at the end of Year 3. An action research mixed method evaluation, participant-researcher approach was used to allow exploration of the program in a detailed way.

The research presented in this paper examined studies which explored the potentially serious life consequences for children with language impairment and the need for the implementation of early intervention/prevention programs to combat anxiety issues, social withdrawal and social isolation. Therefore it was proposed that language intervention programs should include strategies to reduce anxiety levels, teach anxiety management skills (Beitchman et al, 1999, 2002; Gallegher, 1999), develop social communication skills (Brinton, et al, 1997; Brinton & Fujiki, 1999; Fujiki et al, 1999) and teach social and emotional language (Gallagher, 1999).

A LDC was targeted for this study as it provides an intensive language program for children with language disorders from pre-school to Year 3. The LDC curriculum integrates strategies to develop and enhance social skills,

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social interaction and behaviour management. However, they do not implement strategies to directly reduce anxiety levels or build emotional resilience.

The education policy within Western Australia dictates that the children are required to exit LDC's at the end of Year 3 and enter into mainstream education. Some of these children make this transition with their Speech and Language Impairment (SLI) intact. Over the years, the LDC had become concerned that these transition children display an observable increase in their level of anxiety behaviour through signs of agitation and restlessness. These behaviours have also been observed, by the school and in the parent's concerns and worries about this transition. The school became increasingly aware that this transition for the children appeared to be a high risk time for developing chronic anxiety symptoms and associated social complications.

Given the potential increased stressors for the LDC children and the relationship between language impairment and social, emotional, and behavioural problems presented in the literature (Beitchman & Young, 1997; Benasich, Curtiss & Talla, 1993; Cohen et al, 1993; Gallagher, 1999; Beitchman et al, 1996a, 1996b, 2001; Manassis & Hood, 1998), this study aimed to implement an anxiety intervention program for all LDC children preparing to transition into mainstream education regardless of their risk status.

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The FRIENDS for Life (Barrett, 2003) universal anxiety intervention program chosen for this study has been previously found to successfully teach prevention and management strategies to children regardless of their risk status. (e.g. Barrett & Turner, 2001; Lowry-Webster et al, 2001; Barrett et al, 2001; Lowry-Webster et al, 2003; Short et al, 2001). In the 2005 and 2006 FRIENDS Studies formative evaluations enabled modifications to be made to the program as the program progressed to make it more accessible for children with specific language difficulties. On reflection, the modifications made were principally adapting the program from a Year 5 level to Year 2-3 level, specifically to accommodate for reading and writing difficulties⁶.

The FRIENDS program was chosen as it is an universal anxiety intervention/prevention program and it also incorporates separate parent sessions (Barret et al 1996). Previous research (Bett, 2002; Dadds et al, 2000; Rapee et al, 2005; Mendolowitz, 1996) found that children who received anxiety intervention with parental involvement in a separate concurrently run treatment group were able to facilitate the children's learning of these strategies.

The FRIENDS 2005 study and the FRIENDS 2006 study aimed to integrate the FRIENDS for Life program into the Language Development Centre (LDC) syllabus for the children in Year 3 in the intensive language program

⁶ There is now a new published version which targets the younger audience – 4, 5 & 6 year old (Fun Friends).

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who were preparing to exit the LDC and enter into mainstream education at the end of Year three. Both the 2005 and 2006 FRIENDS study assessed the children at pre and post implementation of the FRIENDS for Life program. In addition, both studies compared the findings with language impaired children from two of the LDC's satellite Year 3 classes who did not participate in the FRIENDS for Life program. Consent rate for FRIENDS 2005 study was 91.7% and FRIENDS 2006 study was 91.4%.

The specific aims of both studies were to examine the effects of the intervention on children's self reported levels of anxiety, depression and self concept in comparison to control groups. In both studies, using traditional standardised outcome measures showed no significant differences between the groups. Even when evaluating the effectiveness of the program for children initially in the clinical range of symptomatology for anxiety, depression and self-concept, no significant effect of the program was apparent. These traditional standardised outcome measures showed no significant difference between the groups in contrast to previous research (Barrett & Turner, 2001; Dadds, 1997; Lowry-Webster et al, 2001; Lowry Webster et al, 2003). These results seem disappointing, however the program specific descriptive and non-traditional measures indicated that differential and positive changes were attained for the intervention group in both the FRIENDS 2005 and FRIENDS 2006 studies. Specifically, anxiety management plans and skills were gained from the program (as reported by the Friends Acquired Knowledge Measure); positive feedback from the

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parents and children were given about the study (as reported by the Parent Feedback measure); and there was considerable development of emotionally rich communication (as reported by the Child Knowledge & Behaviour Assessment measure). The intervention groups at post intervention demonstrated an increased ability to identify their emotion and other people's emotions, and developed a wider array of emotion vocabulary.

The seemingly disappointing results from the traditional measures were explored in both the FRIENDS 2005 and FRIENDS 2006 studies. Several possible reasons for the poor outcome with traditional methods were considered. First the small number data sets for both studies were considerably small compared the previous research (Barrett & Turner, 2001; Dadds, 19997; Lowry-Webster et al, 2001; Lowry-Webster et al, 2003) which may not comprehensively show a positive shift over time. Second, the concepts and level of comprehension required to complete the traditional standardised questionnaires may have been too difficult for the SLI children to understand. The participants were between 7 to 8 years old with significant speech and language difficulties and for some, this also included challenges with understanding the complexity of the English language. The questionnaires were developed for a comprehension level of 8 years and above and may not have been suitable for the SLI participants.

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Third, perhaps while the areas addressed in the traditional measures (CDI, Piers-Harris, Spence Anxiety Scale, Strength & Difficulties Questionnaire) had not changed immediately after the completion of the FRIENDS program for both the 2005 and 2006 studies, they may have provided supportive data after follow-up for the 2005 after transition. Results from other follow-up studies (Lowery-Webster et al, 2001 & Lowery-Webster et al, 2003) indicated a prevention effect, whereby 58% of a monitoring group progressed to a diagnosable disorder at 6 months follow-up in comparison to only 16% of the intervention group. Therefore, it would be beneficial for a future follow-up study to be conducted before any overarching conclusion about traditional standardised measure is made for children with SLI.

The development of emotion language (Dale, 1996; Gallagher, 1999) was of particular interest in both the FRIENDS 2005 and 2006 study. Both studies found the intervention group at post intervention demonstrated an increased ability to identify their emotion and other people's emotions, and developed a broader array of emotion language (sensations and feelings) to describe how they *noticed* when they felt a particular emotion and how they *recognised* when somebody else was feeling a particular emotion. Previous research (Beitchman et al, 1986a 1986b; Bietchman et al, 2001; Dale, 1996; Gallagher, 1999; Hubbard, 2001) reported that using a wide array of emotion language is a precursor for children to discriminate among feelings and their intensity and therefore regulate their responses accordingly in themselves. They are then more likely to identify other people's emotions,

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become more socially competent and thus likely to increase social interaction. The benefits of emotion language were further highlighted with the parent's reports of the positive benefits of the FRIENDS program at post intervention. They reported they were more able than before to encourage their child to recognise, talk and manage their feelings. In addition, they reported that their child's problems had improved since their child participated in the program. Positive feedback also reported that positive changes were made within their family and child's life. This supports Gallagher (1999) & Hubbard's (2001) research which theorise that children who can identify with their own emotions are more able to identify other people's emotions and therefore become more socially competent. Further research would be beneficial to determine the long term effects of emotion language acquisition and how this benefits the SLI children.

Many parents were able to support and help their child do the FRIENDS home activities. Previous research (Barrett et al, 1996; Barrett, 1999; Mendolowitz, 1996; Rapee et al, 2005) found that in order for anxiety intervention/prevention programs to be efficacious for children the program focus needed to be expanded to include parents. However for some parents, difficulties arose with after-school activities (ie. Sports, therapy lessons) which left little time to spend on the extra school activity. Some parents reported that the topic of the FRIENDS program was unnecessary for children of this age group.

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Parental involvement proved to be the most challenging aspect in the delivering the program. Parent attendance rates were low and maintaining parental support for home activities was challenging for some families. There was insufficient power to analyse differential intervention effects for parent session attendees and non-attendees. However post hoc observation indicated that parents who did not continue to attend the parent sessions did not continue to provide support to their child with FRIENDS home activities. For some of these families, the challenge was the topic of the program with the exploration with positive and negative thoughts (Red & Green thoughts). For other families, the home activities presented were considered too hard for their child to complete.

In an attempt to improve parental involvement with the program, the FRIENDS 2006 study aimed to increase parent attendance in sessions and support with home activities. Strategies utilised involved:

- Providing an extra session before recruitment. The aim was to provide background information about the program, the reasoning behind providing an anxiety intervention/prevention program to the LDC Year 3 children and brain storm ways to encourage parental participation and support.
- More flexibility of the Parent workshops times were offered.
- Support letters were sent home during week 5 of the program to re-iterate the ethos of the program and to assist the parents to support the home activities.

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However, even with the extra steps to increase parental attendance and support, the parent participation numbers decreased.

Future research in this area may benefit from the new published version of the FRIENDS program which targets the younger audience (4, 5 & 6 year olds) – *Fun FRIENDS* (Barrett, 2007). The program incorporates the FRIENDS skills through fun easy games and activities, using puppets, stories, group interaction and parent involvement. As the SLI children experience language difficulties, writing, spelling and expressing their thoughts can be challenging. This younger FRIENDS version may alleviate the difficulties some of the parents reported during the FRIENDS 2005 and 2006 study. Therefore creating a much easier version of the program which the LDC children could independently participate in, aimed at their literacy level may reduce some of the stress associated with the FRIENDS program.

In an attempt to review the long term effects of the FRIENDS program for the LDC children, a follow-up study was organised. The participants of the FRIENDS 2005 study were approached via letters a year post program. However after two attempts to recruit participants, the follow-up study folded due to the small recruitment number. This was a disappointing outcome, however some speculation was explored for the poor recruitment rate. First, parents were not informed of the follow-up study during the recruitment process for the original FRIENDS 2005 study. Second, the families were not part of the LDC as they had dispersed throughout the Perth metropolitan

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area into mainstream schools. Third, there was no formal follow-up (i.e: phone calls, follow-up letters) after the recruitment letters were sent due to time restraints. Fourth, parent participation was low for the FRIENDS 2005 study, therefore parents may not have felt connected with the program and therefore did not have an incentive to participate in a follow-up study especially since they had left the LDC.

Since conducting the FRIENDS 2005 and 2006 study, the LDC has maintained the program and incorporated it into their core curriculum for the Year 3 LDC children as part of their preparation to exit the LDC and enter mainstream education. This provides the opportunity to conduct further studies to explore the long term effects of the FRIENDS program for the LDC children entering into mainstream education. This is a great outcome as the LDC has recognised the importance of providing skills to assist the children with transition and strategies to manage anxiety. Second, this provides the opportunity for further exploration of ways to increase parent participation in the FRIENDS program. As the LDC children have language challenges, they would benefit from their parent's learning the FRIENDS skills so they are able support their children and incorporate these skills in their family/home life. (Rapee et al 2005 & Mendlowitz 1996). Future research would also benefit from incorporating 12 month follow up to explore the effectiveness of this program for SLI children after their transition into mainstream education. Second, implementing the younger

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version 'Fun Friends' may overcome some of the issues and concerns identified by the parents.

If we were to separate the results to interpret the effectiveness of the program for this specific population, using only traditional standardised measures of one data set, we would be left with the interpretation that the FRIENDS program was unsuccessful with this population. However, when we take two data sets we are presented with a different picture. The mixed method, action research approach enabled the use of traditional standardised measures along with non-traditional measures (purposely developed for this study), which provided an array of information. This research suggests that the use of non traditional measures to assess the specific learning goals could be used by practitioners wanting to test the effectiveness of pilot projects such as this, where the specific population and small numbers may make traditional measures not detailed enough. Secondly, it seemed that through these non traditional measures clear gains were attained in the acquisition of emotional language, understanding of their own and other's emotions. Further research may reveal the long term consequences of the development of this life skill however Brinton and Fujiki's (Brinton & Fujiki, 2006, Brinton et al 2004; Hart et al 2004) observational studies of children suggest it is important in social acceptance. Finally, this research highlights the challenges of involving parents in treatment. For some parents, this study enabled them to have a better emotional understanding of their children. However for others, the

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idea of emotional difficulties turned them away. If, as previous research (Barrett et al, 1996, Barrett, 1999; Mendolowitz, 1996; Rapee et al 2005) has suggested, parental involvement is preferred; the question is, *how can treatment programs engage parents of school age children better?* One method is the Bronfenbrenner Ecological model (1979, 2004). This involves, developing a secure, respectful and reciprocal partnership with the parents, to assist their children to make progress in relation to the learning outcomes (The Early Years Learning Framework for Australia, 2009). This possibly leads to the idea that planning the implementation of the FRIENDS programs needs to begin with the parents, when the children first enter into the LDC as the first step in engaging the parents. Through this relationship, parents benefit when they develop an understanding of the advantages of the program. This can be done by incorporating an Information session to present the program materials to highlight that early intervention programs, which teach good coping skills, *prevent* anxiety (Barrett, 2007). Providing the parents with information about anxiety can assist the parents with developing an awareness of the need for preventative anxiety programs. Presenting the material in a positive and supportive manner, and encouraging the families to contribute and assist with the program. Most importantly, parents engage with the program when they have the opportunity to develop a respectful and reciprocal relationship with the program facilitator (Barrett, 2007). This can be through face to face/phone contact, and have the means to contact the facilitator throughout the program implementation (email, contact details). This relationship

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connection can assist with retaining the families for long term follow-up. The FRIENDS creators are in the process of developing an on line game which can help both in the maintenance of the program, but also to keep a link to the program. This will assist with homework activities and bringing the skills developed from the program into the home.

Incorporating an effective anxiety intervention/prevention program for children with speech and language difficulties is still in its infancy. However, these results from the FRIENDS 2005 and 2006 studies are encouraging. Further studies are warranted to explore the long term benefits of the FRIENDS program for children with Speech and Language impairment and exploring methods to increase parent participation and support for families with children with Speech and Language impairment.

GLOSSARY

Language Development Centre (LDC):

The LDC is a school for children from Kindergarten to Year 3 who have a severe language disability/delay. It provides specialized language and academic intervention on an individual and small group basis. The school caters up to 200 students who have been identified as having at least average intelligence but whose academic and social performance is seriously limited by disordered speech and language development.

The duration of attendance depends on each individual child, the progress made and the appropriateness of placement. Every student is reviewed on a continuing basis and students may remain at the Language Development Centre from one to five years.

Satellite Classes:

In order to accommodate all students and to reduce traveling time – when possible six off-site classes are established at local schools in the School district. These classes are integrated very effectively into the school environment.

Articulation:

Articulation difficulties pertain to sound distortions (ie lisps, th/f errors and r/w substitution), which can result from isolated sound difficulties and structural problems, such as cleft palate.

Phonological:

Phonological difficulties relate to leaving off sounds in words and mixing sounds such as 't' for 'd', and 'k' for 'g'.

Dyspraxia,:

Dyspraxia difficulties with planning, co-ordination and control of breathing and muscular movements. Messages are sent correctly via the brain, however the problem is co-ordination of the muscles to produce the sounds (Leitão, 2001).

Receptive language:

Receptive language is the understanding of and 'decoding' the meaning of language. The understanding of language is a complex skill and requires the attending and understanding of individual words and phrases which enables the ability to following a story and conversation. It is the ability to follow linguistic concepts and to have an understanding of grammar and vocabulary. In addition, it refers to the social aspects of comprehension which include the ability to infer, predict and reason, and includes the understanding of abstract concepts and social inferences (Leitão, 2001).

Expressive language:

Expressive Language refers to the way in which ideas and thoughts are formed into words and sentences, and conform to the grammatical,

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semantic and pragmatic rules of language. An understanding of language Content, Form and Use are important components of expressive language. Content pertains to the meaning of language whereby comparing, contrasting, classifying and categorising are important components. The area of Form pertains to the structural aspects of language, the use of grammar and word structure. This refers to the way sentences are constructed, the appropriate use of words, plurals, verb tense or prepositions. The Use of language encompasses the social aspect; it is the ability to appropriately express, question and clarify (Leitão, 2001).

Semantic-pragmatic difficulties/disorder:

Semantic-pragmatic difficulties/disorder involves difficulty with the meaning and the use of language. **Semantic** pertains to the meaning of words and phrases; it is how we organise our knowledge of the world and our vocabulary. **Pragmatic** pertains to the social aspects of language, relating to the way we know what to say, and when and how to say it to others. Children with semantic-pragmatic disorder may have difficulty using language in a social context, ie taking turns, interrupting, keeping the conversation going and learning the rules of language (Leitão, 2001).

Hyperlexia:

A precocious ability to read words, far above what would be expected at the child's chronological age and/or an intense fascination with letters and/or numbers. Characteristics can include: difficulty in understanding verbal

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language, and difficulty in socializing and interacting with other people. They can also exhibit the following characteristics: A need to keep routines, sensory sensitivity, self-stimulatory behaviour, strong visual and/or auditory memory, self stimulatory, difficulty answering “w” questions and think in concrete and literal terms.

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