

An exploratory study aimed to determine the efficacy of an assessment battery designed to examine oral English language acquisition in refugee and migrant children.

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ATTESTATION OF AUTHORSHIP

“I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of the university or other institution of higher learning”

Anita Linda Jibodh Hurburun

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ABSTRACT

The process of migration has resulted in population growth and contributed to the transformation of New Zealand. Migrant and refugee children face many adjustment factors and their ease in resettling in New Zealand is largely dependent on their ability to learn English. Migration stress, change, trauma and loss may result in psychological difficulties which in turn may affect their resettling and learning.

The Ministry of Education and other professionals work together to enhance the quality of their service provision to facilitate easier adjustment, resettlement and effective learning for these children. An adequate assessment battery for speech language therapists to assess migrant and refugee children, is presently lacking in New Zealand. Therapists currently use various assessments, with the assistance of interpreters. The New Zealand Speech Therapists' Association (NZSTA), in accordance with speech therapists in Group Special Education (GSE), strongly supports the need for research with these groups and the development of an appropriate assessment battery.

This exploratory study aimed to determine an assessment battery for use in examining English language acquisition in refugee and migrant children and to highlight the benefit of using measurement tools that determine incremental change over time in contrast to the use of monolingual psychometric tests. The study explored a selected assessment battery and gathered data in five main focus areas, namely: cognition, language, trauma, classroom behaviour, developmental and birth information. Eligible children were those who did not have physiologically - impaired cognitive abilities. Eight cases, four refugee and four migrant students, were selected by convenience sampling. All participants were children selected from primary school 1 (three refugees and three migrants) and primary school 2 (one refugee and one migrant) primary schools, aged approximately (5-8 years). Participants included four male and four females, refugee and migrant children, and those with both high and low English ability.

Based on the study's results, recommendations were made to refine the test battery, which included test modification. For example, the use of the trauma measurement tool only if there is prior evidence of trauma, the inclusion of a larger test population who have a common primary language to allow for cost effective interpreter use and to also allow for generalisations to be made, the inclusion of an assessment of the children's primary language in order to determine the relationship, development and acquisition of the child's second language with reference to his/her development and skills in his native language.

All of the refugee children and 3 migrant children displayed slower processing time during the administration of the tests. Migrant parents were quicker in test completion as compared to refugee parents. They displayed differences in family size, contact with extended family, socio-economic status and educational level. Migrant children produced sentences that included correct word order and sequence whilst refugee children produced sentences that lacked adequate word order or lacked articles and determiners.

The study found the proposed test battery was an effective choice for use in the assessment of both migrant and refugee children, as the battery allows for dynamic assessment of children from diverse groups and this proved to be an unbiased means of assessing their English language and cognitive skills. Recommendations are made for future, more-extensive research. These findings provide information about appropriate and reliable language acquisition tests that measure incremental change with time. This study will contribute to a developing knowledge base for speech-language therapists who work with migrant or refugee children. Effective assessment on which to base tailored language programmes will assist them to optimise their experience in New Zealand schools and enhance their English language skills.

Chapter 1 : Introduction

“Ki mai koe ki a au, he aha te mea nui tenei ao: he tangate, he tangate, he tangate”

“If you should ask me, what is the greatest thing in the world, the answer would be: it is people, it is people, it is people” (Tamaki Maori Village)

New Zealand has welcomed people from across the globe and this process has resulted in a multicultural and multi-linguistic country (Bain, 2006; Mein Smith, 2005; Mishra, 2005; Phillips, 2005; Rapaport, 1999). Michael King (2003), a famous author on New Zealand's history in his final book entitled *The Penguin History of New Zealand* stated that the ethnic mix of the population in New Zealand by the mid-twentieth century had changed with significant increases in the Asian, Pacific Island. Middle Eastern and African communities have also increased as New Zealand accepted refugees from these countries. The largest group in 2001 was the 4.7 per cent of immigrants from Asia which was an increase from 0.7 per cent of Asian immigrants in 1896 (King, 2003). The acceptance of people of different nationalities into the country has made New Zealand a colourful country enmeshed in new cultures, languages, and socio-economic status (Rapaport, 1999).

New Zealand has not only welcomed migrants, but it has also become the home of many refugees from across the globe (Beaglehole, 2005; Crepeau, 2006; Department of Labour, 2004). Henry Ford (2005) concurs that the *“coming together is a beginning. Keeping together is progress. Working together is success”*. Similarly the acceptance of these foreigners had been the beginning of a new nation of people in New Zealand. The resettlement of these population groups into the country is most certainly progress, and working together for the betterment of the people of the nation is success.

Globalisation has fostered these migrations and ethnic change and whilst this has the advantage of creating a richer and more diverse country, it concurrently creates a degree of challenges for professionals particularly speech-language therapists who work with children from non-English speaking backgrounds

1.1 Background and relevance for this study

New Zealand accepts refugees from war-torn countries. It is one of 10 countries regularly accepting refugees identified by the United Nations High Commission for refugees (UNHCR). “A refugee is any person who, owing to a well- founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his/her nationality and is unable, or, owing to such fear, is unwilling, to avail himself/herself of the protection of that country” (Kizito, 2001).

The Honourable Paul Swain, Minister of Immigration, contends that New Zealand is a nation of migrants where approximately 20% of New Zealand's current citizens and residents have been born in another country. People come to live in New Zealand for various reasons with some arriving because of their skills which contribute to the labour market, some come to join families who are already here and yet others come as part of New Zealand's international humanitarian obligation and responsibilities (Badkar, 2005; Department of Labour, 2004)

The increased migration is reflected in school enrolments. Based on New Zealand Immigration Services (NZIS) statistics, the number of refugee children 5-11 years in recent years was 117 (2000-1), 96 (2001-2) and 82 (2002-3). Data from the 2001 census also shows that 15% of all New Zealand children under the age of 15 years speak more than one language (Department of Statistics, 2002). The actual school enrolments for migrants in 2007 were 2800. This is projected to increase to 3000 by the year 2009 (Ministry of Education, 2007).

One measure of these children's overall success in settling in their new environment is the extent to which they are able to learn English as a second language. Schools play a very important role in the adaptation, adjustment and resettlement of both migrants and refugees in New Zealand (Hamilton, Anderson, Frater-Mathieson, Loewen & Moore, 2001). However, these authors contend that the loss, change and trauma experienced by both refugee and migrant children may have varied psychological effects which may in turn affect their learning ability, most importantly their English language acquisition. Both groups struggle as they make this transition (Adkins & Birman, 1999). Subsequently these students benefit from schools and teachers who emphasise positive aspects of the diversity of languages and cultures in their classrooms (Lu, 2006).

Migration results in varied caseloads of children for speech-language therapists to work with (Crago & Westernoff, 1997) and presents numerous challenges for speech-language therapists in assessing and working with children from linguistically and culturally diverse backgrounds (Battle, 2002; Brice, 2002; Lynch & Hanson, 1998). Therapists are faced with a language barrier (inability to communicate in the language spoken by the child), the difficulty of working with interpreters, and the dilemma of finding appropriate assessment tools, to use, when faced with assessing children from non-English speaking backgrounds (Core, 2006; Delagado-Gaitan, 1992).

The method of working with diverse population groups appears to be the same across the globe (New Zealand Speech Therapy Association; Australian Speech Therapy Association; American Speech Therapy Association; Canadian Association of Speech Language Pathologists and Audiologists; Crago & Westernoff, 1997; Roseberry-McKibbin & Eicholtz, 1994).

Despite the fact that across the globe, children from non-English backgrounds are assessed by the use of various assessment tools with the assistance of interpreters (ASHA, 1998; Core, 2006; Delagado-Gaitan, 1992), there nevertheless appears to be a lack, particularly in New Zealand, of an appropriate assessment battery devoid of cultural or language bias to use with children from non-English speaking backgrounds. There is also a lack of bilingual speech-language therapists, and appears to be an inappropriate use of existing standardised tools of assessment when working with children from diverse backgrounds. This is coupled with insufficient training for speech-language therapists who work with the migrant and refugee population groups in New Zealand. (Crago and Westernoff, 1997; Guilory, 2000; Roseberry-McKibbin and Eicholtz, 1994; Stow & Dodd, 2003; Young and Westernoff, 1999).

These presenting factors and discussion with relevant personnel in the field of Speech language therapy in New Zealand (Dr. Purdy-Auckland, University, personal communication, March, 2006, Moran and Mc Auliffe- Canterbury University personal communication, March, 2006, Paulin- Auckland District Health Board, personal communication, April, 2006, Cope- Massey University personal communication, March, 2006, Kedge- GSE personal communication, April, 2006, Davies- Ministry of Education personal communication, March, 2007, Ward- president of New Zealand Speech

Therapists Association, personal communication, May, 2006), serve to highlight, the need for and relevance of this study. There is a crucial need for the development of an assessment framework as well as further research evidence to develop a professional knowledge base for speech-language therapists working with refugee and migrant children in New Zealand. In particular an efficient and reliable battery should be used when determining their language skills and learning ability.

This exploratory study will contribute to existing research for speech-language therapists as well as form a basis for future more extensive research. It will serve to highlight the difficulties associated with using standardised tests with monolingual norms on children from non-English speaking backgrounds (Paradis, 2005) and encourage the use of dynamic assessment and the use of tests that allow for incremental growth of skills over time, allowing the student to be measured against his own scores rather than a standardised monolingual population (Paradis, 2005).

1.2 The rationale for the selected battery

An essential criterion for the battery choice is that it allows for incremental progress to be determined with repeated testing (Carrow-Woolfolk, 1999; Roid & Miller, 1997). Another important dimension of the battery is that it allows for a descriptive analysis of the participants performance and that the study makes clear the inaccuracies of assessing the participants from diverse backgrounds using standardised tests (Paradis, 2005).

The ability to accurately assess children from non-English speaking backgrounds effectively will also prevent misdiagnosis of language impairment in these children (Paradis, 2005). A further essential feature of the battery is that it provides a baseline measure of classroom behaviour, effects of trauma, cognitive skills as well as oral English language skills.

Research supports the fact that trauma experienced by refugee and migrant children during the migration process or family separations as a result of migration, can represent psychological barriers that affect learning and memory (Kaslow, Magnavita, Patterson & Massey, 2002; Pearson, 2001; Salend & Salinas, 2003). The migration process provides varying degrees of trauma which can have a long term effect on the child's behaviour in the classroom (Bulcha, 1988).

Cognitive theorists postulate that the attainment of non-linguistic cognitive structures leads to the development of language (Otero, 1994). Piaget was the first proponent of the view that cognitive and linguistic development shared a relationship and he argued that cognitive development precedes language development (Kitson & Merry, 1997).

Piaget further reported that children all over the world develop cognition according to the same cognitive stages, with some time variation across individuals (Piaget, 1971). Collins (1982) states that regardless of language use across the globe, cognitive development as a substratum is the same the world over. Hence this study views the inclusion of a non-verbal test, free of linguistic and cultural bias, as an integral testing component to determine cognitive status in the participants (Roid & Miller, 1997). A speech-language therapist need not be proficient in the child's native language in order to determine his/her level of cognitive development when using a non-verbal test like the Leiter R International scale (Roid & Miller, 1997). Adequate cognitive skills are the basis for language learning to occur (Nelson, 1973).

According to Hamilton et al. (2001), cognition addresses intellectual functions such as reasoning, problem solving and knowledge whilst language plays an important role in resettlement, adjustment and acceptance of another country. Wolfgang (1986) also contends that cognition lays the foundation for first-language acquisition which transfers when learning a second language. As is evident, research in the literature addresses the link between cognitive development and language development (Hamilton, Anderson, Frater-Mathieson, Loewen and Moore, 2001; Piaget, 1971; Suarez-Orozco, Suarez-Orozco and Qin-Hilliard, 2005; Tassoni, 2005). This study will incorporate tests to assess both cognitive and language skills based on the associative link as outlined in the literature.

The New Zealand government, Ministry of Education and schools recognise and acknowledge the spectrum of difficulties faced by refugee and migrant children (Hamilton, Anderson, Frater-Mathieson, Loewen & Moore (2001), and, as such continually strive to establish appropriate services and policies to facilitate their adaptation and learning in this country (Ministry of Education, 2003), whilst speech-language therapists endeavour to provide an equitable service to children from diverse

backgrounds (Stow & Dodd,2003).

1.3 Structure of the Thesis

The thesis comprises eleven chapters:

The preceding component has covered the introduction, relevance for the proposed study and the rationale for the test battery choice. The subsequent chapters encompass the **literature review** and outline the foundation for the study. It is important at this juncture to explain the relevance for the inclusion of each of these chapters with respect to this study:

- **Chapter two** includes an outline of the increased migration of both refugees and migrants to New Zealand, which is indicative in school census figures as well as school enrolments. It also provides details of the New Zealand migrant and refugee settlement policy. In view of the diversification of the population, this chapter is relevant as it also provides an overview of the difficulties faced by speech-language therapists, in working with interpreters, in assessing and working with children from diverse backgrounds.
- **Chapter three** details the relevance for the inclusion of the 5 components of the assessment battery namely: trauma measure, classroom behaviour measure, cognitive measure, oral English language measure and structured developmental history. The chapter is perceived as very relevant, as documented evidence supports the presence of trauma issues and impaired classroom behaviour in both migrant and refugee children. Research also supports the close association between cognitive development and language development and this is seen as relevant to reflect in this study. As with all interviews, an adequate and detailed case history is vital to an effective assessment and management and hence its inclusion.
- **Chapter four** considers in detail the definitions of both language and cognition and their associative link with respect to the theories of both first and second language acquisition. This chapter is included as it is seen as a basis for the study and moreover as a substratum that both language and cognition play a very important role in learning English as a second language and as such are relevant

and that cognisance thereof needs to be taken in the development of the test battery, with the inclusion of a cognitive and language measure. A discussion of the theories is perceived as pertinent, as the theories are generally considered as the roots of an idea that give rise to and enhance the branches of an argument.

- **Chapter five** reviews the characteristics of both first and second language acquisition as well as factors that affect this acquisition. It also considers the critical period hypothesis and determines as to whether this has any bearing on second language acquisition. This chapter is considered an important component to this study as the core element of the study is to look at English language acquisition (a second language acquisition for refugee and migrant children) hence; having an awareness of the characteristics and features thereof would help enhance ones knowledge on the topic.
- **Chapters six to eleven** present:- a synopsis of the presenting argument and rationale for this study as well as questions that this exploratory study will answer, the aims and methodology; procedures for data collection; analysis and results; discussion; limitations and recommendations, and conclusion.
-
- **Pertinent terminology used in the study:-**

Refugee: a person who flees for refuge or safety, esp. to a foreign country in this case New Zealand, as in time of political upheaval, war, etc.

Migrant: A person that migrates in this case from another country to New Zealand.

NESB (Non English speaking background): a person who speaks other languages and not English.

Foreign student: a student who is studying in a country external to their own country or nation.

Foreign language: a language that is derived or pertaining to another country.

L1: A person's primary and or first language

L2: A secondary language learnt.

Native language: language acquired since birth, native to ones own country.

Diverse population: varied, comprised of a range of people from a range of places.

ESOL: English for speakers of other languages.

Bilingual Education: learning two languages.

Chapter summary

This chapter outlined the diversity of the New Zealand population due to the process of migration, immigration and due to the country's humanitarian obligation. It describes the changes in the population and subsequent school enrolments and outlines the background, need and relevance of this study particularly for the Speech Therapy profession in New Zealand, where there is a lack of national research. The chapter highlights the fact that speech-language therapists across the globe have varied caseloads, for which they have similar challenges when assessing and working with children from diverse backgrounds. There is a brief discussion on the rationale for the choice of the proposed test battery to use when assessing refugee and migrant children. The chapter concludes by providing an outline of the chapters included in this paper and the rationale for their relevance with respect to the study as well as explanations of relevant terminology used in the study.

Chapter 2 : Background

“Continuity gives us roots; change gives us branches, letting us stretch and grow and reach new heights”. Pauline R Kezer.

As a result of migration New Zealand’s population has increased, and become culturally and linguistically diverse (New Zealand Statistics, 2000; Barnard and Glynn, 2003) which is also reflected in school enrolments (Ministry of Education, 2007).

A number of countries have developed immersion schools to cope with the linguistic complexities as a result of migration. Australia’s population has also increased due to migration and immigration, and as such has subsequently developed numerous immersion schools (German, French, Indonesian, Hebrew, Chinese, Japanese, Vietnamese, Auslan, Greek, Slavic, Macedonian, Italian, Aboriginal and other) (De Courcy, 2002).

In New Zealand, May (2005) concludes that there has been some work done with respect to English as a second language education in New Zealand, however it is argued that more work needs to be done if the successes of bilingual education/immersion education in Aotearoa/New Zealand are to be consolidated and extended.

Globalisation has resulted in an increased population mix the world over (Borjas, 2000; Kovisto, 2002; Mc Donald and Khoo, 2003; Singh, 2002). A multicultural society is an interesting one that has more to offer the world but also presents challenges particularly for professionals and speech-language therapists who have to work with children from diverse backgrounds, cultures and languages (Bain, 2006; Belich, 2007; Mishra, 2005; Stow and Dodd, 2003). As New Zealand has opened its doors to both refugees and migrants into the country (Beaglehole, 2005; Crepeau, 2006; Department of Labour, 2004; King 2003) the challenges of assessing these children using appropriate measurement tools in order to provide timely service provision has become an issue that requires further research (Paradis, 2005).

2.1 Refugees and Migrants in New Zealand

According to the Refugee Migrant Service in New Zealand (RMS), New Zealand commenced the acceptance of refugee resettlement in November 1944 when the American vessel General Randall arrived from war-torn Europe. From then on there has been a history of goodwill towards refugee survivors beginning a new life in Aotearoa/New Zealand. The RMS accepts a quota of 750 refugees annually and helps these new arrivals resettle. Since their opening in 1976, they have helped 40 000 refugees to make a new life in New Zealand. Currently the New Zealand quota for United National High Commission for Refugees (UNHCR) mandated refugees is set at 750 per year arriving five times per year in groups of 150 (Hamilton, et al. 2001).

In contrast, migrants choose to leave their homeland and settle in a country of their choice, mostly emigrating with their families, and aware that they can return to their country for visits or return permanently if they cannot settle (Poole, 1999). For migrants learning a second language is due to a choice they have purposefully made. Unlike migrants, refugees have been forced to flee their country and may have experienced or witnessed emotional, physical, mental or psychological trauma (Coelho, 1946). Both refugees and migrants struggle as they adjust and resettle in New Zealand and experience similar difficulties with their acquisition of English as a second language (Adkins & Birman, 1999).

2.2 The New Zealand Migrant and Refugee Settlement Strategy

According to the Minister of Immigration, the government facilitates the settlement process through the establishment of a New Zealand Settlement strategy. The strategy's six goals for the refugees, migrants and their families as stipulated by the New Zealand Department of Labour (Oct, 2004, p.4) are

“Obtain employment appropriate to their qualifications and skills.

Become confident using English in a New Zealand setting or able to access appropriate language support.

Access appropriate information and responsive services that are available to the wider community (for example, housing, education and services for family).

Form supportive social networks and establish a sustainable community identity.

Feel safe expressing their ethnic identity, and be accepted by, and become part of

the wider host community.

Participate in civic, community and social activities.”

The government started working on the first three strategies in 2004 and the Ministry of Education received additional funding to provide language support programmes for 28,000 migrants and refugee children (Spoonley & Pearson, 2004).

2.3 New Zealand languages and bilingual learning

English is the primary language of instruction in New Zealand, with some Te reo Maori and other languages, for example Chinese languages, Hindi and Samoan (The Human Rights Commission, 2007; Moriarty (2007). New Zealand has supported the learning of English as a second language by the introduction of some Maori and Samoan immersion schools (Ministry of Education), however the learning of the other languages of the people of New Zealand have not been addressed as yet despite the increasing diversity of the population (May, 2005). According to the census figures for 2001 approximately 80% of the population in New Zealand spoke English (Barnard & Glynn, 2003). These authors further contend that English is the language of business, communication, law and daily life in New Zealand.

Unlike Australia and Canada, New Zealand does not have a national policy on languages (Barnard & Glynn, 2003; Franken & McCormish, 2003; May, 2007) however, it is an international human right to have the ability to learn and use ones own language (Human Rights Commission, 2007). New Zealand does however follow the New Zealand Curriculum Framework, which provides guidelines for teaching and learning in New Zealand schools. Research evidence supports the fact that in order for children from non-English speaking backgrounds be able to adequately learn English they should be encouraged to maintain their native language, in conjunction with or alongside learning English (the second language) (Cummins, 1994; Kontos and Wilcox-Herzog, 1997; May, 2007). May (2007) further argues that the least effective means of learning English is when English replaces the native language as is most common in schools in New Zealand May(2003) contends that in New Zealand appears to be working from the assumption that the best way to learn English is through English when the research dictates that the best way to learn English as a second language is exactly the opposite: acquire literacy in the first or stronger language and then transfer these skills to English. This author argues that a radical review of teaching English literacy to

second language speakers is required if New Zealand is to avoid the long-term socio-economic costs of poor achievement

There are numerous instructional programmes that may be used with children from non-English speaking backgrounds (NESB) (Barnard and Glynn, 2003; Hamilton et al., 2001; Ministry of Education, 2006). According to research conducted by the Ministry of Education (2006), most schools in New Zealand do not follow any of the methods in a pure form. Most of their "instructional systems" are eclectic, using elements of a communicative approach and an oral English language approach.

To reiterate, the least effective approach for a NESB student is to be cut off from formal educational development in his/her native language in order to give him/her maximum exposure to the second language (May, 2007; Ministry of Education, 2004). Two way bilingual education (also known as dual-language education or DLE) is provided in a number of Canadian and United States schools (Baker, 2001; Christian, 1994; Horvath, 1980). Two way bilingual education involves students from two different language backgrounds working together in the same class and developing both languages with content and literacy instruction in both languages (Baker, 2001; Christian, 1994; Horvath, 1980).

2.4 How do New Zealand schools teach students from non-English speaking backgrounds?

No single instructional model works favourably in all situations; the instruction model must be chosen to reflect the school's educational goals for the students, based on a particular theory or combination of theories, of second- language acquisition (Ministry of Education, 2006).

According to the New Zealand Curriculum Framework (p.10): *"Because English is the language of most New Zealanders and the major language of national and international communication, all students will need to develop the ability and confidence to communicate competently in English ..."*

To review some of these issues, a group of teachers on an MA course at the University of Waikato in 1998, conducted a survey on the provision of ESOL (English to speakers of other languages) support in Hamilton schools. This study of non-English speaking

students, (Barnard, 1998), showed that schools need to employ teachers who are either from NESB communities or at the very least are culturally and linguistically sensitive to them.

All schools in the survey provided withdrawal lessons, which are termed English to Speakers of other Languages (ESOL). All schools except three reported that they also provided in class support to NESB (non- English speaking background) students. Teacher aides provided in-class support, whereas ESOL qualified teachers tended to spend their time teaching English in withdrawal lessons termed as mainstream support. NESB students deemed to have 'minimal English', received on average just over three hours a week of withdrawal ESOL tuition (Barnard, 1998).

A noteworthy finding of the Hamilton study was that a very limited amount of focussed ESOL tuition was provided in the withdrawal classes. The author further contends that while three hours per week may help NESB students acquire basic communication skills, current research clearly indicates that it is inadequate to promote the cognitive and academic skills in English necessary for students to operate in curriculum areas (Barnard, 1998). This author questions as to whether the current practice is a matter of immersion or submersion and he questions as to whether the NESB students are swimming or drowning?

The survey also indicated that mainstream teachers in Hamilton had little knowledge of how to deal with the English language problems of their NESB students and they tended to leave this to the domain of the ESOL teacher. However since then teachers are taking advantage of professional development courses to enable them to teach more effectively in order to cater for the needs of the NESB students (Barnard, 1998).

Franken & Mc Cormish (2003) acknowledge that in New Zealand non-English speaking background students are funded by the government for support in respect of the following circumstances, that is, where they acquire a second language alongside maintaining and developing their primary language, they acquire a second language with a gradual loss of their primary language, they develop only a second language and their primary language remains static. English in the New Zealand national curriculum framework has identified several recommendations pertaining to NESB students (Franken & McCormish, 2003)

- Students should understand and respect all the cultures that make up New Zealand as a country.
- NESB students add to the cultural and linguistic resources in classrooms.
- The classroom should incorporate the first language of students in class programmes
- Students should initially learn their primary language and then switch between primary and second language
- NESB students should endeavour to work towards the same goals as native English peers.
- NESB students will often work at different levels from the native English peers
- NESB students should be given time to complete tasks, as well as varied learning opportunities.
- Some NESB students may need time for immersion in an intensive English language class.

Bilingual education has commenced in several countries and in New Zealand with Kohanga Reo and Kura Kaupapa Maori (Franken & McCormish, 2003). However, in New Zealand, similar to Britain, the primary language tends to be developed in the family and home rather than in the schools. This is despite the English National Curriculum, recommending that the primary language be incorporated in the student's day at school (Franken & Mc Cormish, 2003; Ministry of Education, 2006).

Generally at schools in New Zealand, the student is fully immersed in the English mainstream medium education, or the student is partly withdrawn in order to facilitate this transition to complete English immersion (Franken & McCormish, 2003). In contrast to this approach some educationalists strongly believe in bilingual education, where students in a mother-tongue bilingual education, learn English more rapidly and do better academically than students in English only programmes (May, 2007; Skutnabb-Kangas, 2006).

Franken and Mc Cormish (2003), conducted research on improving English language outcomes for immigrant students in New Zealand. They described programmes that primary schools in New Zealand have in place to support students from NESB. These are summarised as follows (Franken and Mc Cormish, 2003):

Organisational arrangement: It would appear from their study and on the small number of schools included, that support for NESB students is dependent very much on the school's policy and what is deemed necessary. This has ranged from 60% of the schools favouring withdrawing the students for periods of the day, whilst 27% supported students in class. Only one school operated a bilingual unit.

Time allocated to ESOL withdrawal sessions: The withdrawal session times were widely variable in primary schools. These ranged from 15 minutes to 2 hours in any one session.

Types of approaches and programmes: These authors described varied programme types and approaches that were used in the range of schools they interviewed.

Bilingual programmes

These programmes usually do not occur in most schools in New Zealand. The authors found only one school that followed the principles of bilingual education, where teacher aides or teachers explained the nature of the instruction or lesson in the students' L1 (first language).

Oral language approaches

This approach is usually used with young students. It is predominately used to increase the students' vocabulary and it is generally linked to a school theme.

Experience based programmes

Similar to the oral language approach experienced based programmes are used with lower primary schools. Students are provided with the experience to explore language which forms the basis of curriculum learning. They may operate as a withdrawal class or in class. Students get to integrate and talk about their school experiences e.g. a trip they may have all experienced.

Reading Resource- based programmes

Reading Resource based programmes have been used for higher primary school students. There was a wide range of reading resources in schools in the study. Some

schools, particularly where a large number of Pacific students were enrolled, had appropriate L1 reading resources. Students were allowed to take the readers home.

Franken & Mc Comish (2003) also found a general lack of teacher directed reading comprehension to determine students' comprehension of the shared reading text. They did not find reading being used as a meaningful context for productive language. However, conclude that reading is a critical tool- source of language input for NESB students. Other schools reported buddy reading schemes, parents as reading tutors and the Reading Recovery scheme.

Curriculum referenced schemes:

Students who are from the same linguistic backgrounds may receive in- class support from teacher aides who are bilingual and who are then able to enhance components of the curriculum to the students in smaller groups

Franken & Mc Cormish (2003) highlight that students' needs are being met differently across New Zealand. The schools offer varied programmes and they also have variability based on the number of NESB students that they have, the availability of bilingual staff, the funding allocated to NESB students, the schools' personal policy for handling NESB students, as well as the fact that varied decile schools offer varied approaches, programmes and supports (Barnard, 1998; May, 2007).

2.5 Speech Language Therapists work with Refugees and Migrants: their dilemma

In New Zealand, speech-language therapists work in a variety of settings: special needs schools, in the mainstream in special units, Group Special Education, hospitals and in private practice (Hicks, 1996). Irrespective of their place of employment, speech-language therapists face a dilemma when working with both refugee and migrant children (Bain, 2006; Belich, 2007; Mishra, 2005; Stow & Dodd, 2003). Both nationally and internationally speech-language therapists are faced with similar challenges when working with children from diverse populations. Apart from not having an appropriate battery of tests to use when assessing such children, speech-language therapists are most likely unable to communicate in the students' language which consequently impacts on the assessment process (Paradis, 2005; Stow & Dodd, 2003).

Speech-language therapists are not adequately trained to work with diverse populations and/or there are insufficient bilingual speech-language therapists available. In addition, existing assessment tools may be used inappropriately and the use of standardised tests with children from non-English speaking backgrounds generally creates culturally and linguistically biased results (Crago & Westernoff, 1997; Guillory, 2000; Paradis, 2005; Roseberry- McKibbin & Eicholtz, 1994; Stow and Dodd, 2003; Young & Westernoff, 1999).

In a survey in the United Kingdom, 43% of the 4182 speech-language therapists had bilingual children on their caseloads. Similarly a survey in the United States of America conducted by ASHA (1995) indicated that 35% of the speech-language therapists had children with a foreign language on their caseload whilst only 10% of the therapists spoke a foreign language and 75% of the therapists were assisted by a bilingual speech-language therapist, interpreter or parent (ASHA, 1995). Furthermore, a survey in California revealed that 94% of speech-language therapists had children with limited English proficiency on their caseload and 82% reported using an interpreter to assist (Roseberry-Mckibbin & Eicholtz, 1994). Canadian speech therapists are also faced with similar difficulties with having to deal with two official languages (French and English), as well as a growing number of other languages and cultures as well as significant populations of Aboriginal people who speak native languages (Crago & Westernoff, 1997).

In addition, in a study conducted by Kritikos (2000) speech-language therapists in five states in the United States of America were interviewed and these findings, highlighted the dilemma and inadequacies experienced by speech-language therapists when conducting an assessment with bicultural/bilingual individuals. Nearly 40% of the respondents reported that they would be very conservative in recommending therapy for bilingual students due to their lack of knowledge of children's second language.

There is a vast amount of research in America by speech-language therapists with respect to children from non-English- speaking backgrounds (American Speech Hearing Association-ASHA, 1998) and as such, speech-language therapists who work with children with developing or limited English proficiency or bilingual children in America, are compelled to follow the mandated guidelines set forth by ASHA when

working with these children. The speech-language therapists in America tend to work with ESL (English second language) instructors in their assessment and intervention (ASHA, 1998). The ESL instructors are professionals with appropriate training and experience in second-language acquisition, theory, and comparative linguistics, ESL methodologies and assessment (ASHA, 1998).

The Speech Pathology Association of Australia (SPAA) recommends that speech therapists aim to arrange intervention in the languages used by the child in his/her daily repertoire as well as in the child's home language. The SPAA views bilingualism positively. The Australian association also believes that if a speech-language therapist encourages a child to give up his/her first language in favour of using only the Australian English, this could result in emotional trauma.

A considerable amount of research in the field of assessment is required. Discussions with therapists working in New Zealand both in education and health have highlighted their use of various assessments with the assistance of an interpreter or teacher aides who speak the language of the child being tested. In addition to the assessment challenges faced by speech-language therapists in New Zealand, coupled with the growing ethnic diversity of the country's population, resulting in varied diverse caseloads. Therapists are also faced with working in schools that adopt eclectic approaches when resettling and educating children from diverse populations, resulting in a potpourri of service delivery and practice outcomes (Barnard, 1998; May, 2007). Amidst the background of the already outlined challenges, speech-language therapists in New Zealand, lack a knowledge base of relevant national research, pertaining to working with refugee and migrant children, conducted by local speech-language therapists (as confirmed by discussion with varied speech language therapists : Dr. Purdy-Auckland University, Moran & Mc Auliffe - Canterbury University, Paulin-Auckland District Health Board, Cope- Massey University, Kedge- Group Special Education, Davies- Ministry of Education; Ward- President of the New Zealand Speech Language Therapy Association). This serves to highlight the timely need for this study.

2.6 Assessing and working with children from non-English speaking backgrounds
Cheng (2006) describes speech-language therapists as “inquisitive diagnosticians”, who unravel the mystery of assessing children from diverse populations by using a range of

diagnostic tools to decode the meaning of verbal, non-verbal and socio-cultural messages, of children from non-English speaking backgrounds. This writer further describes the tools that are needed as including culturally fair assessments, dynamic assessments, ethnographic studies as well as a modification of standard testing procedures. Crowley (2007) supports Cheng (2006), by stating that speech-language therapists need to develop more cultural sensitivity when working with diverse population groups. Mc Laughlin, Blanchard & Osanai, (1995) propose that assessment must be viewed as a continual process that goes hand in hand with instruction.

Speech-language therapists across the globe need to make rigorous changes to their methods of assessing non-English speaking children (Johnston, 2007; Paradis, 2005) that may include not using standardised tests on non-native students (Mc Laughlin, Blanchard & Osanai, 1995). Paradis (2005) emphatically argues that non-native students need to be tested against themselves or other non-native students as opposed to the traditional task of comparing them to monolinguals. In a study conducted in Canada, children learning English as an additional language were misdiagnosed as having a speech and language impairment when they were tested using standardised norms for monolinguals. One-word vocabulary tests are often used to determine the students' ability to name target words as an indication of their skills in English vocabulary (Brownell, 2000).

Current articulation tests are inappropriate as they may contain culturally inappropriate picture cues, and phonological structures in the English language which may not be comparable to those in other foreign languages. Goldstein & Fabiano (2007) postulate that knowing a phonological system in bilingual students own language helps therapists distinguish a phonological difference from a disorder. The type and frequency of phonological patterns vary across languages e.g. English allows three member clusters whilst Spanish allows only two member clusters. Hence, because of this difference, cluster reduction is a phonological pattern that, at a given chronological age, would be developmental in English and "delayed" in Spanish. Thus, using an English articulation test on a foreign child is likely to show a phonological delay /disorder in the English language, but may not necessarily indicate a sound delay in the child's native language (Holm & Dodd, 1999).

Despite this difficulty, therapists in New Zealand, still tend to assess migrant and refugee children using standardised English assessment tools, mainly because the students are immersed in English medium classrooms, with only some schools providing for additional ESOL classes and limited withdrawal instruction periods for the students in their native language (Barnard, 1998; May, 2007). Therapists and educators should rather opt for the use of performance profiles or performance assessments, which allow for student development, growth and progress over time (Peterson & Neill, 1999; Wangsatorntanakhun, 1997; Weaver, 1996; Zimmermann, 1993)

2.7 Speech-language therapists use interpreters to facilitate their assessment with students from diverse backgrounds

When faced with assessment tools that are inappropriate, culturally and linguistically biased and when the speech–language therapist cannot communicate in the students language, therapists rely to a large extent on interpreters to assist them during the assessment and this may or may not allow them to obtain a global view of the students’ English language skills (ASHA, 1998; Core, 2006; Delagado-Gaitan, 1992).

The value and importance of the use of people who can relay ideas, thoughts and intents against the cultural and linguistic barriers is vital, especially when working with the refugee and migrant population (Roseberry-Mckibbin & Eicholtz, 1994). The primary role of interpreters is to be a conduit of written and oral communication between the child/family and the English- speaking personnel. As interpreters play a vital role in the translation of information between languages, they need to be adequately trained in becoming competent in the act of translation. Fradd & Wilken (1990) define an interpreter as a person who translates orally, and a translator as a person produces a written piece of information from one language to another. The skills required by both are the same; however the difference between the two is that the interpreter needs to develop skills to perform a meaningful live performance, whilst the translator produces precise written documents. The interpreters are a very vital link in the assessment process as they are the link between two cultures.

There are several skills required for an adequate relationship with the interpreter. These include availability when needed, maintenance of client confidentiality, they are punctual, first hand experience with the client’s culture, thereby allowing the client to

feel safe and comfortable with them (Rhodes, Ochoa & Ortiz, 2005). There needs to be sufficient preparatory work between the interpreter and researcher and/ or other professionals so that everyone is aware of working appropriately in cross- cultural assessments. This is supported by research conducted by Farooq & Fear (2003), who state that, for both the interpreter and clinician to work effectively in a collaborative manner, they both need to be reciprocally aware of the style and expectation of each other however, one needs to be mindful of the fact that the use of an interpreter usually lengthens the assessment time.

The clinician may have little knowledge pertaining to child-rearing practices and non-verbal communication of the target population hence it is likely the interpreters can provide valuable information in these areas (Fradd & Wilken, 1990). Despite research highlighting the important role that interpreters can play in the assessment of foreign students (ASHA, 1998; Core, 2006; Delagado-Gaitan, 1992; Roseberry-Mckibbin and Eicholtz, 1994; Winter, 1999) one needs to be mindful of pitfalls in interpreter use. It is important to be aware of confidentiality issues especially if the interpreter is from the same community as the client, the transfer of accurate information between clinician interpreter and client, interpreters taking over the session and asking questions they deem pertinent, interpreters adding information, subtracting information or changing the essence of the message (Farooq & Fear, 2003; Lim, 2006;).

Chapter summary

This chapter served to describe the varied caseloads of speech-language therapists due to migration and immigration and humanitarian intake into the country. A discussion followed outlining the challenges faced by therapists who have to assess and work with children from diverse backgrounds coupled with the varied eclectic approaches, that are used in New Zealand when teaching non-native children and the lack of a national language policy A salient feature in the discussion was the evidence on the inappropriate use of standardised tests when assessing non-English speaking children and rigorous changes speech-language therapists need to make in order to provide and equitable assessment and service delivery to these children. The strengths and pitfalls in using interpreters to facilitate an assessment were outlined.

Chapter 3 : The significance and rationale for the proposed test battery

‘ I believe that the testing of students’ achievements in order to see if he meets some criterion held by the teacher, is contrary to the implications of therapy for significant learning” Carl Rogers

There is extensive documented research pertaining to precautions and considerations to be adhered to when assessing children from diverse backgrounds (Barnard & Glynn, 2003; Blanchard & Osanai, 1995; Dunn & Adkins, 2003; Hamilton et al., 2001; McLaughlin,; Johnston, 2007; Ministry of Education, 2007; Paradis, 2005; Rhodes & Hector, 2005; Stow & Dodd, 2003). These essentially include: being culturally and linguistically sensitive, carrying out assessment in ones native language, not using standardised monolingual norms on non native students, including social and cognitive aspects of development, as well as using dynamic assessments and performance measurements which can be determined over time.

In light of the documented research, this exploratory study proposed the use of a battery of tests which included 5 main components, namely: trauma, classroom behaviour, cognitive skills, oral language skills and background information. These tests were: the Trauma Symptom Checklist for Young Children, Behaviour Assessment System for Children, Leiter-R International Scale, Comprehensive Assessment of Spoken Language and Structured Development History.

In order to understand the rationale for the battery choice one needs to have clear understanding of the importance of each of the selected tests in respect to the test population (both migrant and refugee children).

3.1 Why is a trauma measure included in the test battery?

The Leadership Council on Child Abuse and Interpersonal Violence (2005) acknowledges that as recently as the 1980s, many professionals believed that the structure of the human brain was genetically determined at birth. However emerging

research shows evidence of altered brain functioning on account of early abuse and neglect. Teicher (2000) states that the brain is shaped by early life experiences. This author contends that maltreatment is like a chisel and it alters the brain shape so that it may deal with the hardships faced by the individual which may result in long lasting wounds (Teicher, 2000). Trauma experienced during the migration process or family separations as a result of migration can be psychological barriers that affect learning in both refugee and migrant children (Salend & Salinas, 2003). Similarly, Pearson (2001) contends that internationally adopted children are often delayed in their first language, have had little or no exposure to English upon arrival, have had little or no schooling, and have often experienced trauma, neglect, poor nutrition, lack of health care, and few positive emotional bonding opportunities

In addition childhood traumatic experiences may cause delays or deficits in a child's ability to achieve age appropriate behavioural, cognitive and emotional regulation (Perry, 1995). Child maltreatment experiences such as neglect, physical abuse, sexual abuse and witnessing domestic and community violence, are thought to be the most common causes of interpersonal traumas and post-traumatic stress disorder in children (De Bellis, 1997). Furthermore, Ahearn & Athey, (1991) report that significant delays in the academic and cognitive functioning of Central American children occurred, as a result of exposure to war and related trauma. However in contrast, Hamilton et.al. (2001) argue that sufficient adjustments after traumatic experiences are mostly dependent upon cognitive competence, self-esteem, coping strategies and social, parental, community and school support. These authors further state that homesickness, depressive and somatic symptoms as a result of relocation, are most frequent among migrant and refugee children.

A longitudinal study by Hamilton et al. (2001), of resettled refugee children, hypothesised that a child's age at the time of the traumatic events, influences differences in symptomatic outcomes related to trauma. Children who experienced the disruption of early attachment relationships were more susceptible to developing oppositional traits at school than students who had approximately eight years of normal life prior to experiences of trauma, loss and exile (Ahearn & Athey, 1991). Children, who were intensely traumatised for prolonged periods of time as in the case of refugees, can display the effects of this over the life time with variable intrusive symptoms often manifesting at particular developmental stages or significant events in an individual's

life. Research conducted by Thomas and Lau (2002) demonstrated that refugee children and adolescents are vulnerable to the effects of pre-migration, with trauma being a prominent factor. Difficulties at school and in language acquisition have been shown to be associated with poor adaptation and resettling (Hamilton, Anderson, Frater-Mathieson, Loewen & Moore, 2001). In contrast, academic achievement, English language acquisition and good peer relations are associated with good psychological outcomes and effective resettling (Thomas and Lau, 2002). Among other symptoms, post-traumatic stress disorder involves anxiety, over-alertness, sleeplessness, chronic fatigue syndrome, motor difficulties, failing short term memory, amnesia, nightmare, sleep-paralysis, flashbacks of the traumatic event as well as depression are characteristic symptoms found in refugee and migrant children (Rothe et al., 2002).

The documented evidence of the effect that trauma has on migration, resettlement and learning in refugee and migrant children highlight the importance of an inclusion of a trauma measure in the current study (Ahearn & Athey, 1991; De Bellis, 1997; Hamilton et al., 2001; Rothe et al., 2002; Salend & Salinas, 2003).

3.2 Why is a classroom behaviour measure included in the battery?

Hamilton et al., (2002) describe migration as stressful and challenging, with these stresses displayed in atypical classroom behaviours. The majority of refugee children arriving in New Zealand may have never had the experience of being in a classroom (Szente, Hoot & Taylor, 2006; Vang, 2005) and hence may not know how to behave and what is expected of them in this context. The classroom can be a daunting life experience for these children as they are faced with a huge academic and cultural learning curve and as such may shut down and become quiet or may act up and behave differently in the classroom (Garry, 2005; Vang, 2005). Similarly, Dunn & Adkins (2003) agree that refugee students are likely to have emotional, linguistic, cultural and academic difficulties and may feel socially isolated due to being different from their other classmates.

Migrant students on the other hand, may have attended a formal educational setting prior to entry into the country and hence may have similar classroom expectations and experiences as in their country of birth, and as such, may experience an easier settling in with less unusual behaviour (Woolfgang, 1977). Migrant students may also have had

some exposure to the English language in their country of birth. It is likely that this will facilitate an easier adjustment and resettlement as the children are able to make social contacts with other peers more easily, especially as they may be able to communicate in English. However if they spoke a language other than English in their homeland, they too, like the refugee children would have feelings of extreme loneliness (Dunn & Adkins, 2003; Vang, 2005; Woolfgang, 1977). A study conducted by Rambaut (2000) showed that extreme feelings of isolation and loneliness in migrant students leads to feelings of low self esteem and poor school performance results (Kirova, 2001)

Both refugee and migrant students may also experience behaviours in the classroom different from their own culture, country and family and may find the learning of the new culture and classroom routine quite stressful (Fong, 2004; Vang, 2005). It is to a certain degree an easier transition across countries for migrant students as their families usually decide and prepare for this relocation over time, and are usually engaging in the move because they believe that it will be for the betterment of the family. The hope for a better lifestyle, job prospects and/ or education is contemplated with this move (Hamilton et al., 2001)). Although the migration is planned, it will no doubt still be stressful and traumatising for the students who have to part with extended family, friends and their country but as it is a somewhat more pleasant move. Hence, as compared to refugee students, migrant students tend to adjust more quickly in the classroom and may display minimal overt disordered classroom behaviour (Coelho, 1946).

Refugee students may not feel safe being away from their family and in a school environment that is often a strange and new experience for them. They may feel frustrated where the medium of communication is mostly in English with perhaps limited instruction in their own language (Hamilton et al., 2001)). These children have often come from war torn countries and may have seen their families killed. Apart from the stress of having to deal with past fears and pain they are faced with a new fear, the fear of classroom adjustment, routines, peer friendships and student teacher relationships. This is supported by similar findings by Vershok (2004, 2005) who contends that refugee children have fled from a dangerous country to some thing unknown.

A compassionate and understanding teacher who is able to make these children feel safe and comfortable will enhance their resettlement, adjustment in the country and classroom. Dunn & Adkins (2003) contend that students need to see the classroom as a safe environment where they can be comfortable enough to tell their stories. They believe that the teacher needs to be an ally to the students as they adjust to the new culture. The teacher and the classroom can foster similarities and differences amongst students and this can serve as the building blocks to allow children of different cultures adjust and relate to others in the world. An innovative teacher is able to help them adjust to the cultural and linguistic changes that they face. Teachers who capitalise on students' experiences by discussing the travels of migrants, their culture and their country of origin allow for self worth and self respect in both refugee and migrant students. (Gonzales, 1991; Studstill, 1985). Research has shown that students do well in the classroom when they are included in co-operative learning and when they believe that the other students are understanding and support their achievements (Johnson, Johnson and Maruyama, 1983).

In light of the documented evidence, it is clear that the effect of either planned migration or forced migration, coupled with subsequent cultural and linguistic differences, can in fact stress migrant and refugee children to the degree that they may have temporary or long term classroom behavioural disorders (Coelho, 1946; Hamilton et al., 2002; Vang, 2005; Vershok, 2004, 2005). These may present as post traumatic stress disorder (PTSD), lack of motivation, aggression, attention difficulties, amnesia, anxiety and restlessness which most likely will have an effect on their learning (Rothe et al., 2002). This highlights the importance for the inclusion of a measure of classroom behaviour in the proposed battery in this study.

3.3 Why is a cognitive measure included in the test battery?

A characteristic difficulty that speech therapists face is the inability to ascertain the students' linguistic skills in their primary language as compared to their English language skills when working with students from diverse backgrounds. (Paradis, 2005). However, research dictates that children who have the linguistic skills and proficiency in their own language are able to transfer this same cognitive skills and language processes to facilitate in their learning of a second language (Woolfgang, 1986). A recommendation of the use of non- verbal tests to assess cognitive skills when validated

and standardised measures in the student's native language are not available is postulated by Lopez (2002).

Research evidence highlights the link between cognitive and linguistic development (Hamilton, Anderson, Frater-Mathieson, Loewen & Moore, 2001; Piaget, 1971; Suarez-Orozco, Suarez-Orozco & Qin-Hilliard, 2005; Tassoni, 2005). Children across the world, regardless of what their native language is, tend to develop cognitively along the same stages and processes, but perhaps at varying rates of development (Collins, 1982; Piaget, 1971). Nelson (1973) similar to Piaget postulates that adequate cognitive development is necessary for language development to occur. In contrast, Chomsky argues that semantic development is determined by universal linguistic principles that are independent of non linguistic cognitive developmental patterns (Gopnik, Choi & Baumberger (1996). A further hypothesis is that cognitive development allows linguistic development to occur (Gopnik & Choi, 1990). Semantic development is influenced by linguistic development across languages. Still further, Gopnik Choi & Baumberger (1996) postulate that linguistic differences across languages influence both semantic and cognitive development where an active interaction and a two way relationship exist between both cognitive and linguistic development. However contrary to the postulation that cognitive development precedes language development, Whorf cited in Gopnik & Choi (1990) reports that language development precedes cognitive development

In light of the research evidence it is debatable as to whether cognitive development drives language development or vice versa. However despite the opposing evidence, one cannot negate the fact that there is sufficient research evidence to support the fact that there is a definite link between cognitive development and language development (Hamilton, Anderson, Frater-Mathieson, Loewen & Moore; Gopnik Choi & Baumberger, 1996, 1990; Piaget, 1971, 2001; Suarez-Orozco, Suarez-Orozco & Qin-Hilliard, 2005; Tassoni, 2005). As a result, the current exploratory study found it imperative to include as part of the test battery a non- verbal test, free of linguistic and cultural bias, as an integral testing component to determine cognitive status in the participants (Roid & Miller, 1997).

3.4 Why is an oral language measure included in the test battery?

It is not ideal to test non-native students using monolingual standardised norms (Paradis, 2005). Speech-language therapists who are not bilingual increasingly find that they have to rely on the use of interpreters when conducting an assessment with a student from a non-English speaking background and this arrangement carries with it a range of difficulties as previously discussed (Farooq & Fear, 2003; Johnston, 2007; Lim, 2006). There are no available tests that are tested and normed on all the diverse population groups in the world. McLaughlin, Blanchard & Osanai (1995), argue that whilst society places a high value on test outcomes, this is a mere illusion of objectivity when inappropriately used on children from diverse backgrounds. Given the current weaknesses of the use of standardised monolingual normed tests with diverse background children, alternative assessment methods should be adhered to, to allow for an unbiased assessment of these children. Educators in Canada have started to forgo traditional achievement tests in favour of student performance comparisons (Johnston, 2007), for example educators no longer measure what the child has already learnt but focus on what the child can learn in the present time as well as what supports need to be in place to ensure that learning continues (Pena, 2000). This is termed “dynamic assessment”, which measures change of learnt skills over time. Dynamic assessment is based on the principal of “test, intervene and retest” approach (Johnston, 2007). This writer believes that dynamic assessment methods are preferred to standardised tests. However Haywood & Lidz (2006), argue that dynamic assessments are very valuable and as such should be included as part of the assessment repertoire and should be used along side standardised testing repertoire, developmental history and data gathering from teachers and parents. They further postulate that the uses of dynamic assessment methods are useful when: scores on standardised, normative tests are low, when there are marked cultural differences between those being tested and the dominant culture. This is the case with immigrants and refugees when there are language differences and there is that is a difference between the maternal language and that of school.

As outlined previously, there is a definite relationship between language development and cognitive development as postulated by various theorists (Hamilton, Anderson, Frater-Mathieson, Loewen & Moore; Gopnik Choi & Baumberger, 1996, 1990; Piaget, 1971, 2001; Suarez-Orozco, Suarez-Orozco & Qin-Hilliard, 2005; Tassoni, 2005). New Zealand does not have a language policy but a curriculum framework that guides teaching and learning (Barnard & Glynn, 2003). According to research conducted by the

Ministry of Education (2004), most schools in New Zealand use an eclectic instructional system, using elements of a communicative approach and an oral language approach when teaching children from non-English backgrounds. Students in New Zealand schools are also immersed in English medium classes (Barnard, 1998; May, 2007).

Based on these findings, it is imperative to include an oral English language measure that would provide both standardised age scores in accordance with a descriptive analysis. This will serve two purposes firstly it will show the biasness and inaccuracies between the results obtained on the standardised score versus the descriptive results, and secondly, it will also allow for students to be analysed according to their linguistic strengths at the time of the test. This will allow for (although not included as part of this study), for dynamic assessment methods that is “test, intervene and retest”

It was also seen as essential that the selected oral English language test is designed to be used on students for whom English was a second language with a specific purpose of determining a baseline level of English language skills in order so that appropriate intervention may proceed, followed by a retest in time. It was also essential that the battery allowed for incremental progress to be noted over time.

3.5 Why is a background and developmental history measure included in the test battery?

Adequate birth and developmental history are essential to an assessment of a student and a good history is relevant to making informed judgements (Reynolds & Kamphaus, 2004). These authors acknowledge that the fixation in development and the deterioration in functioning are important when dealing with new students at school and a measure that is able to detect this, and provide a thorough process in history gathering is of paramount importance to the assessment of the student. The measure needs to provide a thorough review of social, psychological, developmental, educational and medical information about the participant. Similarly, Strauss (2006) contends that a detailed case history is vitally important as it allows the clinician a preview of the client’s life prior to the assessment. Higgs & Jones (2000) add that a good case history taking is central to effective diagnosis and clinical management of the client while Fazel & Stein (2003) believe, that a good case history provides first hand information on the child’s development, cultural beliefs and parent’s aspirations.

Despite the importance of a detailed case history taking, it may present difficulties when conducting a parent interview using an interpreter (Farooq & Fear, 2003; Johnston, 2007; Lim, 2006). However strong evidence serves to highlight the need for an inclusion in the test battery (Higgs & Jones, 2000; Reynolds & Kamphaus, 2004; Strauss, 2006)

Chapter summary

This chapter revisited in more detail the rationale for the test battery choice and the importance of the inclusion of that test as part of the battery. The chapter highlighted the inclusion of tests in 5 main components namely: trauma, classroom behaviour, cognition, oral language and case history taking.

Chapter 4 : Cognition, Language and the theories

“Thought is the blossom, language the bud and action the fruit behind it”-Ralph Waldo Emerson

An important component of this exploratory study was the inclusion of both a cognitive and an English language test as part of the core battery. It is therefore crucial to have an understanding of these concepts and the underlying theories.

4.1 What is cognition?

Cognition is defined as the process of knowing and includes factors such as awareness, perception, reasoning and judgement. Some authors contend that cognition is necessary for language development to occur (Nelson, 1973) whilst some concur that cognition precedes language development (Piaget, 1971) and yet even others contend that cognition and language serve a two way interlinking relationship (Gopnik Choi & Baumberger, 1996).

4.2 What is language?

Lock and Fisher (1984) define language as a complex set of rules learnt by people and is specific to the human species for the purpose of communication. Children from across the world, from varied environments and cultures learn language and the skills of communicating. Pinker reports that children across the world learn their first language successfully and in a matter of a few years without formal instruction (Gleitman, Liberman & Osherson (1984).

4.3 Is there a link between language and cognition?

Clark (2004), reports that children set up conceptual representations and then add linguistic representations for talking about the experience. Piaget (1971) was the first proponent of the link between language and cognition and he contended that cognition was the driving force of language. However in contrast to Piaget, Vygotsky (1988) theorised that language and thought develop independently and begin to merge at about

two years of age. A review of the theories of first and second language acquisition may help explain this link further.

4.4 Theories of first language acquisition

Behaviour Theory

Behaviour theorists postulate that children learn to speak by imitation. Parents reinforce and correct their speech and children say what they hear. This in turn is then corrected by the parents. The parents often give the child what they can hear and understand what the child is asking for. In this way the child is encouraged to ask for the item again, whilst utterances the parents do not understand are ignored and hence forgotten by the child. Skinner was a strong proponent of behaviour theory (Kearsley, 1994). He believed that children learnt due to stimuli presented to them and were hence controlled to behave and learn based on stimulus and reward. However, the linguist theories have rejected Skinner's postulation as children do not merely imitate but actively learn the linguistic rules of language.

Cognitive Theory

Cognitive theorists claim that children can only use linguistic structures when they fully understand the concepts surrounding them, i.e. a child cannot use the comparison of size if the child does not fully understand the concept of size. Piaget was a strong proponent of this theory that is based on the premise that language development is related to cognitive development; hence the development of the child's thinking determines when he can speak and what he can say. Oakley (2004) contends that Piaget believed that the child begins to talk when she/ he is ready and not with adult intervention and when the child is exposed to social interaction in the environment. Piaget's theory of language acquisition comprised of 4 stages of cognitive development, namely: *Sensori- motor stage* (0-2 years) with an emphasis on understanding the environment, *Pre- operational stage* (2-7 years) with an emphasis on understanding symbols, *Concrete operational stage* (7-11years) with an emphasis on mental tasks and language use, *Formal operational stage* (11years on) with an emphasis on dealing with abstraction.

Discourse Theory

Nakatani, Hirschberg & Grosz (1995) comment that discourse theorists hypothesise that interaction with other speakers is a vital factor in learning language (syntactic structures develop from conversations). Language acquisition occurs when the learner learns how and when to use language in the various settings and when they are competent in grammar (pragmatics, morphology, syntax and phonology). This competency is based on social acts of communication, rather than from an internal ability in the child.

Vygotskys Theory

Vygotsky (1978) postulates that social interaction allows for all cognitive processes including those that arise from language to develop. According to Schutz (2004), Vygotsky (1988) describes a zone of proximal development that is the difference between what the child is able to achieve on his own versus what he can achieve with the help of others. The actual developmental level refers to the functions that the child can perform on his own without anyone's help and the zone of proximal level is where the child needs help to accomplish the functions. Vygotsky (1988) coined two terms "interaction" and "egocentricity" and stated that children are found to engage in less speech (less egocentric speech) when they are alone, but when they are with other children they engage in more interaction (more egocentric speech). This author believes that children need to be exposed to social environments and social interaction to be able to develop their own resources, and that this theoretical premise is relevant for both first and second language acquisition.

Innateness Theory

Chomsky (1965) was a strong proponent of the innateness theory and believed that children had an inborn capacity for language acquisition. He named this the LAD (Language acquisition device) and he reported that the human brain has evolved to the extent that it is neutrally wired to receive and interpret linguistic information from what the child hears. This is a natural process for the child and not something that is taught. He termed this innate knowledge of language as "universal grammars".

In Summary

It is clear that no one theory can adequately explain language acquisition; however a combined view of all theories can help provide some clarification of this complex

process.

4.5 Theories of Second language acquisition

Krashen's (1987, 1988; Nolan, 2001) theory of second language acquisition has had a considerable significance since the early 1980's as supported by Schutz (2007). Krashen's theory of second language acquisition consists of five main hypotheses: The Acquisition-Learning hypothesis, The Monitor hypothesis, The Natural Order hypothesis, The Input hypothesis, and the Affective Filter hypothesis.

The *Acquisition-Learning* distinction is the most important of all the hypotheses in Krashen's theory and the most widely known amongst researchers (Schutz, 2007, Nolan, 2001). According to Krashen there are two interlinking systems of second language performance: "the acquired system and the "learned system" The 'acquired system' is the result of a subconscious process that is not too dissimilar to the process children undergo when they acquire their first language. The acquired system however requires meaningful interaction in the target language by natural communication, where speakers focus mainly on the communication act. The 'learned system' develops as a result of formal education which then is a conscious process, and results in conscious knowledge regarding the language learnt.

The *Monitor* hypothesis explains the link between acquisition and learning and how learning affects acquisition. According to Krashen (1987) the acquisition system is the utterance initiator, while the learning system performs the role of the 'monitor' or the 'editor'. The 'monitor' acts in a planning, editing and correcting function when three specific conditions are met: the learner has sufficient time, the learner thinks about form, and the learner knows the rule

The *Natural Order* hypothesis is based on research findings which suggest that the acquisition of grammatical structures follows a predictable order. The second language acquisition order is different from the first language order and that second language learning adults and children show the similar order

The *Input* hypothesis is Krashen's attempt to explain how the learner acquires a second language. This hypothesis is only concerned with 'acquisition', not 'learning' where the learner improves and progresses along the natural order' when he/she receives second

language 'input' that is one step beyond his/her current stage of linguistic competence

The Affective Filter hypothesis enhances Krashen's view that a number of 'affective variables' play a facilitative role in second- language acquisition. These variables include: motivation, self-confidence and anxiety. Krashen claims that learners with high motivation, self-confidence, a good self-image, and a low level of anxiety are better equipped for success in second language acquisition whilst low motivation, low self-esteem, and anxiety can jointly to 'raise' the affective filter and form a 'mental block' that prevents comprehensible input from being used for acquisition, i.e. when the filter is 'up' it impedes language acquisition (Schutz, 2007).

According to Vygotsky (1978) who is a proponent of both first and second language acquisition, with his zone of proximal development, all fundamental cognitive activities take shape in a matrix of social history and form the products of socio-historical development (Luria, 1976). Vygotsky believes that cognitive skills and thinking patterns are not due to innate factors, but are due to the activities practised in the social institutions of the culture in which the individual grows up (Schutz, 2004). In this process of cognitive development, language is a crucial tool for determining how the child will learn how to think because advanced modes of thought are sent to the child by means of words (Thomas, 1993). An essential component in Vygotsky's "Zone of proximal development" for both L1 and L2 acquisition is the difference between the child's capacity to solve problems on his own, and his capacity to solve them with assistance from others. This theory as discussed previously supports both first and second language theory acquisition.

According to Schutz (2004), despite the fact that Vygotsky and Krashen come from entirely different backgrounds, the application of their theories to second- language teaching produces similarities. Krashen's input hypothesis resembles Vygotsky's concept of zone of proximal development. According to the input hypothesis language, acquisition takes place when humans interact in the foreign language and receive language 'input' that is one step beyond his/her current stage of linguistic competence. Krashen's acquisition learning hypothesis also seems to have been influenced by Vygotsky. Although Vygotsky speaks of internalisation of language while Krashen uses the term language acquisition, both are based on a common assumption: social

interaction with other people.

Chapter Summary

This chapter focussed on the definition of cognition and language and attempted to explain the link between these two concepts by a discussion of the theories that underpin the acquisition of ones primary language namely: behaviour theory, cognitive theory, discourse theory, innateness theory, Vygotsky's theory. It also highlighted the fact that Vygotsky's theory can be applied to both first and second language acquisition. The chapter also included a discussion surrounding second language acquisition theories and a strong proponent in this regard was Krashen's theory. An essential finding was that both Vygotsky and Krashen based language acquisition on a common assumption that is the social interaction with other people. An overview of cognition and language as well as the theories that give rise to primary and second language acquisition is central to this exploratory study which focuses on English language acquisition skills in refugee and migrant children for whom English is their second language.

Chapter 5 : A discussion of first and second language acquisition and factors that affect this process.

“A different language is a different vision of life” -Federico Fellini

5.1 Characteristics of first and second language acquisition

Children acquire first language based on universal innate principals whereas they acquire second language based on cognitive mechanisms, which allow them to problem solve and cope with the material that they have to learn. A fundamental difference between the two would be that one is via acquisition and one is via active learning (Krashen, 1987; Nolan, 2001). In both L1 (first language) and L2 (second language) acquisition children use the same learning process. L1 develops and is driven by the child's needs to acquire the linguistic skills to communicate to fulfil his wants. L1 is unique as it cannot be repeated later in life whilst L2 is a learning process mainly of the classroom. It is not something the child actively chooses believing that it will fulfil his need, rather it has to be learnt in order to integrate with the environment (Mayberry, 2003; Tucker, 2003). Accordingly Richard-Amato (1996) confirms that, both L1 (first language) and L2 (second language) develop from past conceptual knowledge, and follow the same predictable stages of acquisition. He further adds that speech presented to children, in motherese (which is an adults imitation of the speech of a young child and child-directed speech), and in the case of foreigners, foreign talk, are also similar in that they are shorter sentences, high frequency vocabulary, talk about the “here and now” items and frequent use of gesture. This author believes that the difference is that the second language is usually learnt when the child is older, is more developed cognitively, can transfer strategies and linguistic knowledge from his first language to assist second language learning, is more exposed to the world and different cultures, and is able to learn and apply rules which can affect his acquisition of the English language.

Whilst McLaughlin, Blanchard & Osanai, (1995) espouse that children may switch between the first language and second language use when outside the home and may use L1 more when at home, Tabors (1997) maintains that a language must be used for it to remain actively developing and not lost and that learning a second language must be

very motivating for the child to want to learn it. When the first language continues to be encouraged, introducing a second language between the ages of 5 and 11 years allows for full cognitive growth in the first language, which in turn supports full cognitive growth in the second language (Collier 1995)

Thomas (1992) reports that during the school years native speakers develop their first language at an ever increasing rate, and describe the language proficiency level for non-native speakers as compared to native speakers during this time as aiming for a “moving target”. Moreover in studies conducted by Collier (1995), in the US, she found that non native speakers, who have had no previous schooling in their own country, took 7-10 years to reach age and grade level norms as compared to their native English- speaking peers. This author also discovered that if immigrant students had some schooling in their first language (2-3 years) before they were introduced to the second language in the foreign country (US), they then, took between 5-7 years to reach the same age or grade level as the native English-speaking peers. She further reports that this pattern of second language acquisition is similar regardless of the country of origin, the home language spoken, or socio-economic status of the students. This contention is also supported by (McLaughlin, Blanchard & Osanai, 1995), who report that children all over the world follow the same consistent pattern of language development but just at different rates.

Wong-Fillamore (1976) found that children may choose to remain at a particular stage of second language acquisition longer than others. One child in this study used every opportunity to talk and practice speaking in her second language whilst the other children in the study preferred seeking out and talking to other children only in their first language, hence their second language made little progress. This clearly indicates the variability in the rate /stage of development in second language acquisition.

Many studies report a vital association between cognitive development in the first language and the marked effect that this has on second language development and acquisition. (Bialystok, 1991; Collier, 1987; Collier, 1995; Garcia, 1994; Genesee, 1987). If a student attends a bilingual programme, he/she scores very well in the performance in his/her first language whilst his/her second language benefits as well. Students acquire proficiency in their second language at a faster rate (usually 4-7 years) if exposed to both languages, rather than an English only medium at school. This

finding is also supported by similar studies conducted in Canada by Genesee (1987). When schools encourage communication in only the second language and expect students and parents to communicate in only the second language at home, the school is restricting second- language acquisition and the parent and the student performs below their cognitive level.

The central point in this argument to better understand the relationship between L1 and L2 is the encouragement of “continual cognitive development” (Collier, 1995; Genesee, 1987). Ongoing assessments of cognitive and academic skills are very important, and uninterrupted cognitive, academic and linguistic development should be paramount at all times. These three components are of equal importance in the early schooling of students and should be neither neglected nor over emphasised (Collier 1995).

Language maintenance in ones native language has been researched extensively and it is widely documented in the literature that frequent use of a minority language is necessary for its survival at the individual, family and community levels (Collier 1995; Tabors, 1997; Thomas, 1992). Language maintenance is relevant not only to the survival of minority languages, but also facilitates the psychological adjustments of immigrants and their families. Language is a representation of one’s country and one’s native tongue, and is often viewed as a symbol of cultural pride, as a means of maintaining continued contact with the country of birth and with oneself, and as a means of enhancing family cohesion (Bemak, Chi-Ying Chung & Pedersen, 2002).

Cummins (1981) acknowledges that the English language acquisition is unique for each child; however for English as a second- language acquisition there are two types of language that need to be acquired. He described these as basic interpersonal communication skills (BICS) and cognitive academic language processing (CALP). This research is based on the Think Tank model. The Balance Effect theory contends that a limited linguistic capacity is shared between the two languages. This theory proposes that when skills are enhanced in one language, this results in a reduction in the proficiency of the other language. This author rejects the Balance Effect Theory in preference of the Think Tank Model, which postulates that first- and second- language academic skills are interrelated, arising from a common underlying proficiency which enables the transfer of cognitive, or literacy related skills across languages. This rejects

the Balance effect. Cummins further states that conceptual knowledge acquired in one language helps to make information in the other language meaningful and relevant. This represents a distinction between additive bilingualism in which the first language continues to be developed and the first culture to be valued while the second language is added; and subtractive bilingualism in which the second language is added at the expense of the first language and culture. He concludes that students working in an additive bilingual environment are more successful than students whose first language and culture is devalued by their schools and by the community/country. Bilingual children often find it easier to talk about a specific idea/ topic in one language than the other. They also go through periods where they use one language more than the other and may also prefer one language to the other if that language is spoken more frequently in their home or school (Wong-Fillamore, 1976). Bilingual children are more flexible as they already have two ways of viewing and constructing the world (Maceri, 2004). Fishman (1971, in *Many Voices* 2000), argues that most bilingual speakers use their languages for different purposes and functions, hence, the person may use one language at home and in the community and a different one at work/school. By learning two languages the bilingual child is able to gain and experience cultures of both languages. The bilingual person is allowed to maintain his own cultural and ethnic customs, whilst concurrently learning through language the cultural values of the second group. (Tauevihi (1999) in *Many Voices*, 2000). This author believes that maintaining a mother tongue of a child from a minority group has many advantages. She acknowledges that for the child, these include a safe sense of their own cultural identity and access to his ethnic group's cultural values, beliefs and traditions.

Children acquire language by interacting within their environment and with their caregivers and parents. Most children acquire appropriate language skills by assimilation; however, adults can foster language development by providing children with a language-rich environment. Extensive research demonstrates that children who experience more verbal communication and a responsive teacher display higher levels of language development (Stickney, 2003). Those teachers who are sensitive to children's needs and who encourage continued development of their L1 whilst developing their L2 appear to be nurturing more optimal cognitive, language, and socio-emotional development (Kontos & Wilcox-Herzog, 1997).

5.2 Factors affecting second language acquisition

Language acquisition is dependent on many variables. According to Oxford (1992), the speed of language acquisition is dependent on various factors, each of which has implications for the learner. The following factors have been shown to influence adjustment and second language development viz.: the age of the child on arrival, the literacy in the home (including reading and writing), whether the child received schooling in his first language, the child's motivation, anxiety levels, co-operative versus competitive attitude, the learning style, whether the child experienced trauma before or since his arrival, the child's self esteem and the child's gender, the reasons for the migration and , family factors. It is likely that one or more of these factors may influence the child's settlement, academic enhancement and English language acquisition, this is further complicated when a child is acquiring a second language after immigrating to another country, with both external and internal factors affecting successful second language acquisition.

Kibb et al. (2001) postulated that there is a critical period in a human's development in which second- language learning may occur, to the extent that the person will be able to speak the additional language at the level of a native speaker. After the onset of puberty the critical period has passed, and it becomes almost impossible to learn language to a high degree of proficiency (Kibb et al, 2001). Newport (1991, p112) defines “critical period” as “ any phenomenon in which there is a maturational change in the ability to learn, with a peak in learning at some maturationally definable period and a decline in the ability to learn given the same experiential exposure, outside of this period”.

According to Kibb et al. (2001) the following factors support the critical period hypothesis:

- a) Loss of neural plasticity in the brain with age.
- b) Loss of access to the language- learning faculty.
- c) A "use it then lose it" philosophy and a "use it or lose it" philosophy
- d) The idea that learning inhibits learning.

This researcher also outlined the following as factors against the critical period hypothesis:

- a) Krashen's Theories of Language Acquisition provide alternate hypotheses to explain second- language acquisition.

- b) Statements supporting critical period hypothesis misinterpret the facts and in turn, ignore the findings that older learners acquire a second- language more quickly and efficiently.
- e) The idea that neurological differences in children and adults are misattributed to differences in second language acquisition and proficiency. Although it is understood that these differences exist, there is not substantial proof that they cause differences in second language acquisition.
- d) Undeserved emphasis on unsuccessful adult second language learners, and too little emphasis on older learners who achieve native level proficiency in a second language.
- e) Problems in second language testing.
- f) The role of the learning environment.
- g) The role of learner motivation.

Further research is warranted to support the critical period hypothesis (Kibb et al. 2001).

5.3 Language, cognition and its effect on first and second language acquisition

According to Greenspan & Greenspan (1985), early cognitive development emerges simultaneously with the growing capacity to explore the environment, make sense of the world, and discover a sense of one's self in the world. These authors further contend that language and cognitive skills are interrelated and result in babbling, first words and gestural communication through looking and pointing while interacting with caregivers. Cognitive theory confirms this link between language learning and cognition (Piaget, 1971). It is also clear that both cognitive development and academic development in the first language have positive effects on second- language learning (Bialystok, 1991; Collier, 1989). Skills learned in the first language transfer to the second- language hence it is essential to provide a supportive school environment that allows the academic and cognitive skills in the first language to continue to develop.

According to Collier (1995), to assure cognitive and academic success in a second- language a student's first language system, oral and written, must be developed to a high cognitive level at least through the elementary-school years. Academic skills, literacy development, concept formation, subject knowledge, and learning strategies developed in the first language have all been found to transfer to the second language. As students expand their vocabulary and their oral and written communication skills in the second

language, they can increasingly demonstrate their knowledge base developed in the first language. Furthermore, some studies indicate that if students do not reach a specific threshold in their first language, including literacy, they may experience cognitive difficulties in the second language (Collier, 1987, 1995; Cummins, 1981, 1991).

The key to understanding the role of the first language in the academic development of the second- language is to understand the function of uninterrupted cognitive development (Collier, 1987). When students switch to second language use at school and teachers encourage parents to speak in the second language at home, both students and parents are functioning at a level cognitively far below their age. Whereas, when parents and children speak the language that they know best, they are working at their actual level of cognitive maturity. Cognitive development occurs at home even with non-formally-schooled parents through, asking questions, solving problems together, building or fixing something, cooking together, and talking about life experiences (Collier, 1995).

Chapter summary

This chapter provided a synopsis of the characteristics of both first and second language acquisition. It also included a discussion on the factors that affect second language acquisition. The chapter concluded by a brief consideration of language and cognition and its effect on first and second language acquisition.

Chapter 6 : Exploratory study

“Discovery consists of seeing what everyone has seen and thinking what nobody has thought” Albert Szent Gyorgyi.

This study is an exploratory study. Stebbins, (2001) defines *exploratory study* as a type of research that is conducted because a problem has not been clearly defined. This writer concurs that exploratory research helps to determine the best research design, data collection method and selection of subjects. Whilst the results of exploratory research are not usually useful for decision-making by themselves, it can provide significant insight into a given situation (Collman, 2001). Exploratory research is not typically generalisable to the population at large (Stebbins, 2001)

This exploratory study aimed to determine an assessment battery for use in examining language acquisition in refugee and migrant children and to highlight the benefit of using measurement tools that determine incremental change over time in contrast to the use of standardised psychometric tests.

It may be important at this point to reiterate and summarise key points for the need for this study

- The Ministry of Education and other professionals continue to work together to better the quality of their service provision to facilitate an easier adjustment resettlement and effective learning in both refugee and migrant children.
- Research on refugees and migrants conducted by speech language therapists (SLT) is presently lacking in New Zealand.
- Therapists employ varied assessment tools with the assistance of interpreters.
- There is increasing concerns with respect to equitable assessment and service provision to children from non-English speaking backgrounds both nationally and internationally.
- The New Zealand Speech Therapists Association (NZSTA) in accordance with speech therapists in Group Special Education (GSE), as well as the SLT universities in New Zealand strongly supports the need for more research by speech language therapists with this population group in order to contribute to the knowledge of speech language therapists who work with diverse population

groups from NESB and to lay the foundation for more extensive research by speech language therapists in the field.

This study will answer the following questions:

- Is the proposed battery efficient?
- Does the proposed battery support dynamic assessment and does it allow for incremental progress to be ascertained with continued use?
- Is the dynamic assessment preferred to standardised tests with monolingual norms?

The study explored a selected assessment battery and gathered data in five main focus areas, namely: cognition, language, trauma, classroom behaviour, developmental and birth information. Figure 1 presents a graphic representation of the 5 tests in the 5 main areas considered in this study.

THE PROPOSED TEST BATTERY

Aims to assess and collect data in 5 main areas:

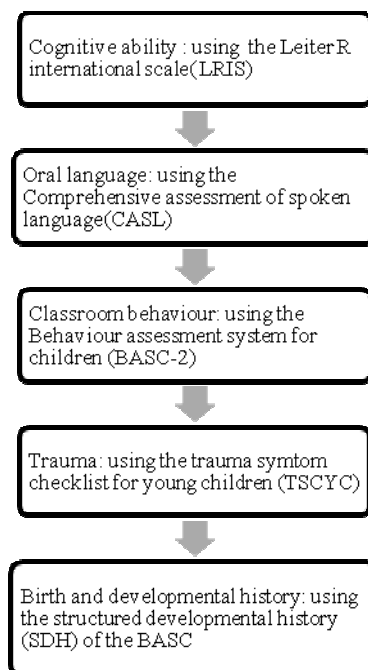


Figure 1: Representation of the 5 areas of data collection and tests used to collect this information.

6.1 AN OVERVIEW OF THE BATTERY OF TESTS

1. Leiter R International Scale

This test was developed by Roid & Miller in 1997. It is a non-verbal measure of intelligence. It is designed to be used with people who are cognitively delayed, autistic, non-English speaking, hearing impaired and speech impaired. It may be used with students 2 years to 20 years. Neither the child nor the examiner needs to talk, read or write. The test is able to measure small improvements over time and fluid intelligence, which is the truest measure of the person's innate ability. The score is not influenced by the child's social, educational or family experience. Leiter-R correlates .85 with WISC-III full IQ scale and .85 with the original Leiter scale. Studies using the Leiter-R with varied population groups indicate that this scale is exceptionally fair, regardless of the child's cultural, ethnic, or socio-economic background (Roid & Miller, 1997). The Leiter R International scale has been found to be effective in use with varied difficult to test population groups autistic children: (Roid & Miller, 1997); downs syndrome children: (Glenn & Cunningham), 2005; fragile X children: (Hooper et al. 2000).

2. Comprehensive Assessment of Spoken Language(CASL)

This test was developed by Elizabeth-Carrow Woolfolk in 1999. It is an in-depth research based and theory-driven oral language test, designed to be used with 3-21 year olds. It measures language comprehension, expression, and retrieval in 4 main language areas lexical/semantic, syntactic, supralinguistic and pragmatics. It measures language growth over time. It has good test and retest reliability. It requires a verbal or non verbal response. It does not require reading or writing. This test provides a rich source of qualitative information. It may be used with bilingual students as well as with students who are acquiring English as a second language, using the descriptive analysis sheets. This would allow for a baseline measure of the child's receptive and expressive skills as well as progress over time (Elizabeth-Carrow Woolfolk ,1999). According to Swiney (2005), the CASL test is becoming the test of choice when used in determining oral language skills in both children and adults and has been effectively used in recent research studies (Fujiki et al., 2004; Lewis et al. 2006; Schoenbrodt, Carran & Preis, 2007).

3. Behaviour Assessment System for Children (BASC)

This test was developed by Reynolds & Kamphaus in 2004 and is a test used to evaluate behaviour and self perceptions in the 2-25 year olds. It has five components that may be used together or individually. For the purposes of this study, only the teacher rating scale was utilised as this is found the most relevant component, as the study focuses on the child's ability to learn a language in the classroom. This test is multidimensional in that it measures numerous aspects of behaviour and personality, including both positive and negative behaviours. It was originally designed to assess the range of emotional and behavioural disorders that children present with in order to design effective treatment plans. The test shows internal reliability and rest and retest reliability (Reynolds & Kamphaus, 2004). Jung & Stinnett (2005) found that using BASC to assess social, emotional, behavioural and school adjustment functioning amongst Korean, Korean American and Caucasian American students, to be an effective and sensitive tool.

4. Trauma Symptom Checklist for Young Children (TSCYC)

This test was developed by Briere in 2001 and is a 90- item caretaker response test to measure post-traumatic symptomatology and other trauma- related symptoms in respect of traumatic events and experiences in children aged 3-12 years. It shows good validity and reliability (Briere, 2001). Briere et al. (2001) conducted a study in the United States to determine the effectiveness of the use of the TSCYC. The results indicated that TSCYC appears to have reasonable psychometric characteristics and correlates with various types of trauma exposure.

5. Structured Developmental History (SDH)

This test is part of the BASC-2 and is a comprehensive history and background survey. This is usually administered to the parent or caregiver. For the purposes of this study only the Structured Developmental History forms from the Behaviour Assessment system for children were utilised as this is the most relevant as it obtains a detailed medical, birth, linguistic, and developmental case history.(Reynolds & Kamphaus, 2004). Gladman & Lancaster (2005) describe the BASC-2 including the structured developmental history as a test of choice for clinical and research studies. The BASC-2 and structured developmental history is described as a comprehensive and psychometrically sound assessment tool (Gladman & Lancaster 2005).

6.2 AIMS OF THE STUDY

The aims of this evaluative study are to:

- Carry out a full literature review.
- Identify purchase and prepare the battery of test materials.
- Test measurement tools that were selected.
- Identify difficulties with the recruitment process, testing protocol and test battery.
- Test the efficiency of the scales.
- Provide recommendations and or modifications on the proposed test battery.
- Determine limitations of the study
- To determine recommendations for future studies.

6.3 METHODOLOGY

This study utilised mixed methods methodology (both *qualitative*- information gathered in non numeric form and *quantitative*- information gathered in numeric form). Qualitative research answers the why and how questions whilst quantitative research answers the what, where and when of decision making (Strauss & Corbin, 1990; Thomas, 2003).

Quantitative research are designs that are either descriptive, where subjects are usually measured once or experimental where subjects are measured before and after treatment. (Hopkins, 1988). In this exploratory study participants were measured once as an important goal of this study was to determine the feasibility of the proposed test battery for speech-language therapists to use when assessing refugee and migrant primary school children. This study included a few cases that are “case series” (descriptive studies of a few cases are called case series, Hopkins, 1988). According to Stewart (2004), studies where investigators aim to investigate or test a research interest and which is not intended to directly investigate or test the research hypotheses of interest are termed “exploratory study”, as in the case of the current study. Such studies are useful for testing the feasibility of investigating research questions and generating new hypotheses. In exploratory studies, the sample size is irrelevant and a few cases even one subject may be all that is required to provide a sufficient number and quality of new ideas that can be pursued as testable hypotheses in future studies (Stewart, 2004).

The sample size in this small exploratory study is limited to 8 participants (4 refugees and 4 migrants, comprising two males and two females in each group) and two schools (one with a decile 1 rating and one with a decile 9 rating). The following two decile ratings allow for an observation of service provision based on the two extremes of the one to ten New Zealand decile ranges. A school's decile indicates the extent to which the school draws its students from low socio-economic communities (Ministry of Education, 2006). Decile 1 schools have the highest proportion of these students. In allocating deciles the catchment area of the school is determined, and socio-economic factors of families with school-age children within this area are looked at. Low decile incorporates deciles 1-3, while high decile incorporates deciles 8-10 (Ministry of Education, 2006).

6.3.1 Participants, Sample Size, Recruitment

Four refugee and four migrant participants, comprising of two males and two females in each group, were recruited for this exploratory study. Participants were selected by convenience sampling (that is the selection of participants from the population based on easy availability and or accessibility). All participants were children from Hay Park and Owairoa primary schools, aged approximately (5-8 years). Participants selected included male and female refugee and migrant children with both high and low English ability. Children who had physiologically impaired cognitive abilities were excluded from the exploratory study. Relevant medical, birth and educational information were obtained from school files. Parental consent for their child's participation was obtained with the help of an interpreter where necessary. Support was sought from the school principals. Information was gathered from the class teacher about each individual child.

6.4 Profile of selected schools

6.4.1 Primary School 1

This school is a state funded co-educational school supporting students of the Mount Roskill area in Auckland, New Zealand. It caters for students from year one to year six. The school has a large number of students from NESB. The school is a decile one

school. The ethnic composition of the school includes: Maori(10%), NZ European (2%), Samoan(25%), Tongan(21%), Indian(12%), Middle Eastern(12%), Cook Island Maori(7%), Niuean(4%), Chinese(4%), Fijian(1%), and other(2%). The school has started a learning support programme in 2007. This aims to improve the achievement of children in smaller groups. The learning support programme encourages students to discuss, read, write and listen to relevant interesting topics. It is envisaged that this program will be of benefit to students from NESB.

6.4.2 Primary School 2

This school is located in the Howick area in Auckland in New Zealand. This school caters for students from year one to year six. This school is a decile nine school. The ethnic composition of the school includes: NZ European (67%), Maori (7%), Pacific Island (1%), Korean (4%), and other (21%). The school has a transition unit programme. Students attend this unit initially where they have total immersion in an English rich environment. English is taught by qualified New Zealand born ESOL trained teachers, who work with students in small groups where they attempt to bring the students in a withdrawal class, closer to the English proficiency of their mainstream peers. It is envisaged that this transition unit would benefit students with English as a second language, as it is aimed at affording the student a level of competency in both oral and written English as well as in gaining skills in listening and oral language to help with their integration into the mainstream.

6.5 MEASUREMENT TOOLS

Child Assessment Tools:

These included:

- Leiter R International Scale
- Comprehensive Assessment of Spoken Language

Teacher measurement tool:

- Behaviour Assessment System for Children

Parent measurement tools:

- Structured Developmental History from the Behaviour Assessment System for Children.
- Trauma Symptom Checklist for Young Children was completed with the parent.

Chapter 7 : Procedure

“No man was ever so completely skilled in the conduct of life, as not to receive new information from age and experience” Terence Quote.

7.1 Pre-data collection

The study commenced following approval from the Auckland University of Technology Ethics Committee (AUTEC) on 14 February 2005. The outline of the study, tests to be used in the study, participant, parent and teacher information sheets as well as participant, parent, teacher and interpreter consent forms were approved by the Auckland University of Technology Ethics Committee (AUTEC) prior to the commencement of the study.

Once ethics approval was obtained, a visit was made to two schools identified by convenience sampling. Meetings were arranged with the deputy principals of both primary schools in order to discuss the rationale for this study. The research aims, procedure and process with respect to informed consent, contact and tests for participants, parents and teachers were outlined. The study was then presented by the deputy principal to the respective school principals and school boards. On the approval of the school principals and school board, the respective deputy principals assisted in the distribution of invites to parents of the students to participate in the study.

Interested parents were invited to a meeting with the researcher. An interpreter was present to assist with interpretation for the benefit of the parents. This was a meeting wherein the researcher outlined the research purpose and process to the parents and teachers. It served as an opportunity for parents to ask questions of the researcher if they were unclear of the process. Informed consent was obtained from parents/participants and teachers and necessary documentation was completed.

The researcher discussed with the teachers possible assessment days and times and a tentative timetable was drawn up. As the researcher only required up to 10 participants, once she had recruited 8 participants who met her recruitment criteria, she deemed this sample number adequate for the purposes of this study and commenced with data

collection.

7.2 Data Collection

7.2.1 Initial meeting with the interpreters

The interpreters were invited to a meeting with the researcher in order to outline the study, his/her role in the study and the reciprocal relationship of the researcher and the interpreter in effectively obtaining the required data. Interpreter consent to participate in the study was subsequently completed.

7.2.2 Parent measurement Tools

Once the participants were recruited and informed parental consent obtained, the parents completed the consent to participate in the study. Parents were given an allocated appointment to meet the researcher with or without an interpreter, in a room made available at the school, in order to conduct the parent interview. The parent was allowed to bring along a support person if they felt it necessary. The researcher explained the relevance of the information needed in the Structured Developmental Case History questionnaire and Trauma Symptom checklist for Young children, with the assistance of interpreters where required. The researcher answered any questions/queries that parents may have had. The Structured Developmental Case History questionnaire and Trauma Symptom checklist for Young children, were completed with the assistance of interpreters where required. On completion of the parent interview which lasted up to a maximum time of one hour 40 minutes, the researcher reiterated to the parents, the assessment tests and procedure that was to follow for their child. Once the researcher was confident that the parent has no further questions and that he/she was satisfied with the interview process as well as the assessment protocol for his/her child, the parent was thanked and invited for a cup of tea before leaving the school.

7.2.3 Child Assessment

At the commencement of the assessment of the children, a time-table was drawn up in consultation with the deputy principal and teachers in both schools. Participants were allocated a testing slot, so as to allow for adequate time testing, but not to the detriment of the participants inclusion in the school and class daily programmes. A comfortable

classroom that was relatively free of distraction with reduced noise levels was allocated in both schools for the testing to take place. Participants' were invited so that they could be individually assessed. Prior to this invitation the participants were informed by his/her parent and teacher about the assessment process. The deputy principal in the school introduced each participant to the researcher. All participants were tested in his/her school. Participants were made comfortable and were quite excited to be allowed time out of the classroom to participate in testing. Participants were allowed to carry a snack and or drink with them should they wish to have this. Once the participant arrived at the testing classroom, he/she was welcomed and made comfortable by allowing him/her to choose a game, toy or book to play with. Once rapport was attained which generally occurred within the first five minutes, the researcher outlined the testing protocol and participant requirement for both tests to the participant. Prior to the testing participants' were given the option of visiting the toilet or the option to request a toilet or relaxation break during the testing. Participants were given specific instructions for each subcomponent of the test prior to the testing. The participants were asked to paraphrase what was required of them. This was to ensure that the participant clearly understood the test instruction. Participants were administered both the Leiter R International Performance scale and the Comprehensive Assessment of Spoken Language. This was conducted non-verbally and in English respectively.

7.2.4 Teacher Measurement Tools

Once the participants were recruited and informed parental consent obtained, the researcher met with class teachers to discuss what was required of them in the completion of the teacher rating scales of the Behaviour Assessment System for children. These forms were given to the teachers with a request that it be completed during the week. The researcher collected completed forms daily at the end of her testing day from the teachers as they completed them.

Chapter summary

The chapter outlined the pre-data collection procedure, which included ethics approval, contact with the selected schools and the discussion of the study process with relevant school personnel. It also highlighted the process of inviting parents to participate in the study. It also outlined the data collection process with particular reference to working with interpreter, parent, and teacher and child interviews. It concluded by outlining the measurement tools used during these interviews.

Chapter 8 : Study analysis and results

“No matter how far a person can go the horizon is still way beyond you” Zora Neale Hurston

8.1 ANALYSIS

The study analysis included the following processes namely:

- Scoring and analysing the test data.
- A descriptive discussion pertaining to differences obtained with the participants’ performance on the battery of tests.
- An analysis and review of the modifications necessary for continued assessment with these children.

8.2 RESULTS

8.2.1 Child Demographics

Participants	Country of origin	Number of years in NZ	Migrant or Refugee	Previous schooling	Language spoken at home	Age	School Decile
1.	India	7 months	Migrant	Yes in English	Mostly Hindi	7.5	1
2.	Afghanistan	17 months	Refugee	No	Pashto	7.9	1
3.	Afghanistan	17 months	Refugee	No	Pashto	6.9	1
4.	Afghanistan	17 months	Refugee	No	Pashto	7.4	1
5.	India	2 years	Migrant	Yes in English	Hindi	6.5	1
6.	India	3 years	Migrant	Yes in English	Hindi	7.4	9
7.	China	5 years	Migrant	Yes in English	Cantonese	7.1	9
8.	Sudan	5 months	Refugee	No	Sudanese	7.1	1

Table 1: Participant tally

Table 1 provides a tally of the eight participants in the study which included two refugee males and females, and, two migrant males and females. They were all aged between 6

to 8 years. Their length of stay in New Zealand at the time of testing ranged from 7 months to 5 years. Their countries of origin included India, China, Afghanistan and Sudan. All 4 migrant children had previous schooling in English, in their country of birth whilst all the refugee children had no formal schooling at all. All of the participants spoke their primary language at home and were immersed in English at school. Participant's home languages included Hindi, Cantonese, Sudanese and Pashto. Two migrants attended a decile 9 school whilst two migrants and all refugees attended a decile1 school.

8.2.2 Parent Demographics

Participants	Country of origin	Number of years in NZ	Migrant or Refugee	Previous schooling	Language spoken at home	Father of participant	Mother of participant
1	India	7 months	Migrant	Yes in English	Mostly Hindi	Electronics Technician	Shop assistant
2	Afghanistan	17 months	Refugee	No	Pashto	Student	Housewife
3	Afghanistan	17 months	Refugee	No	Pashto	Student	Housewife
4	Afghanistan	17 months	Refugee	No	Pashto	Student	Housewife
5	India	2 years	Migrant	Yes in English	Hindi	Accountant	House wife
6	India	3 years	Migrant	Yes in English	Hindi	Sales and Marketing	Housewife
7	China	5 years	Migrant	Yes in English	Cantonese	Cleaner/self employed	Housewife
8	Sudan	5 Months	Refugee	No	Sudanese	Unemployed	Housewife

Table 2: Tally of parents of participants

Table 2 presents a tally of all the parents of the participants. Migrants and refugees were originally from India, Sudan, China and Afghanistan. The length of time that they had spent in New Zealand ranged from 5 months to 5 years. All four-refugee parents did not attend formal schooling previously. They were in a war zone and as such were constantly on the run and moving between refugee camps to another. All 4 migrant parents had previous schooling in English. Both refugee and migrant parents spoke, their native languages at home and with their children. These included Hindi, Sudanese, Pashto, and Cantonese. The occupations of migrant fathers included an accountant, cleaner in self- employment, sales and marketing and an electronics technician whilst the occupations of refugee fathers included students of English with one who was

unemployed and other who were dependant on friends and relatives. The occupations of migrant mothers included a shop assistant, or housewife, whilst all refugee mothers were not in paid employment.

8.2.3 Measurement Tools

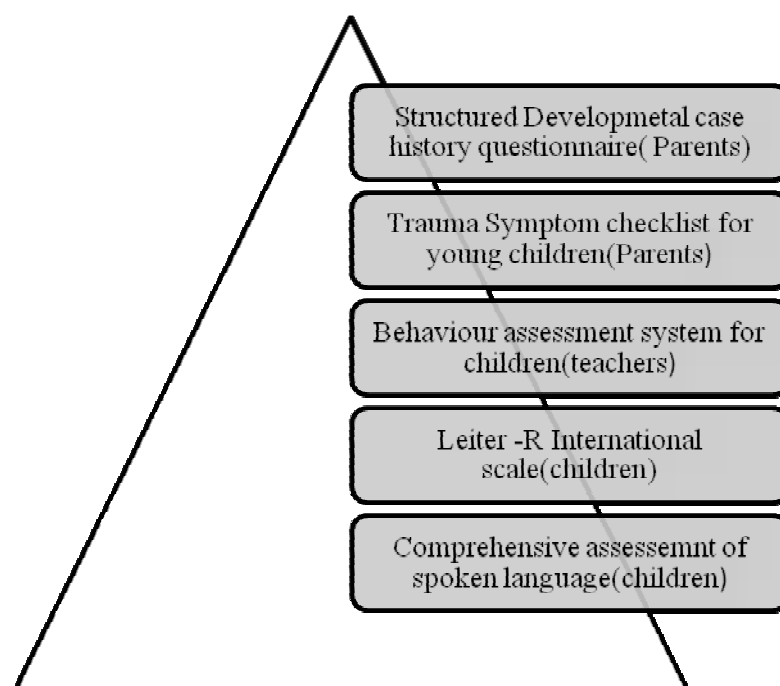


Figure 2: Measurement tools

Figure 3 is a graphic representation of the measurement tools for assessment and data gathering in the five main focus areas namely: developmental and background information using the Structured Developmental Questionnaire, Trauma, using the Trauma Symptom Checklist for Young Children, Classroom behaviour, using the Behaviour assessment system, Cognitive development, using the Leiter-R International Scale, and Spoken language, using the Comprehensive Assessment of Spoken Language.

8.2.4 Time management of the tests with the children

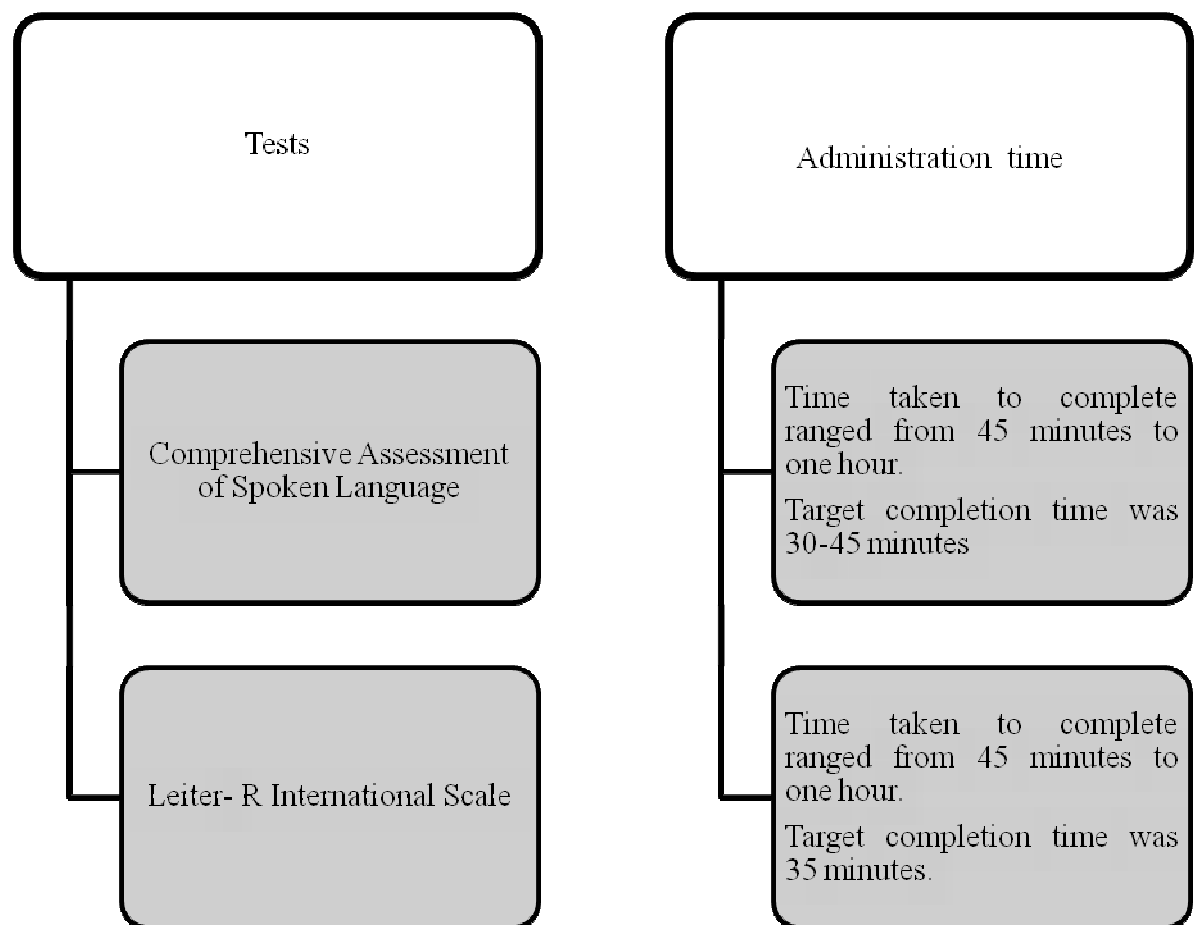


Figure 3: Tests and time taken to complete

Possible reasons for a longer administration time during the testing of the participants from observation include:

Figure 3 represents the tests administered to the participants as well as the length of time that was taken to complete the testing. The children's processing of the information or their lack of understanding, warranted a quieter period of “thinking” in the participants, where participants’ looked about the room and slower processing, producing frequent interjections ”em, ah, em” before responding. This was indicated in the response pattern of all refugee and 2 migrant children. The children displayed signs of fatigue and became restless and fidgety which was indicated in the response pattern of 3 migrant and 3 refugee children. Several children needed more rest periods between the subcomponents of the test battery. This was indicated in the response pattern of 2 migrant and 3 refugee children. A number of children also lacked concentration and

became distractable by touching test books or looking for something to play with or looking outside the window, as was indicated in the response pattern of 3 migrant and 2 refugee children.

8.2.5 Time management of the tests with the parent measures

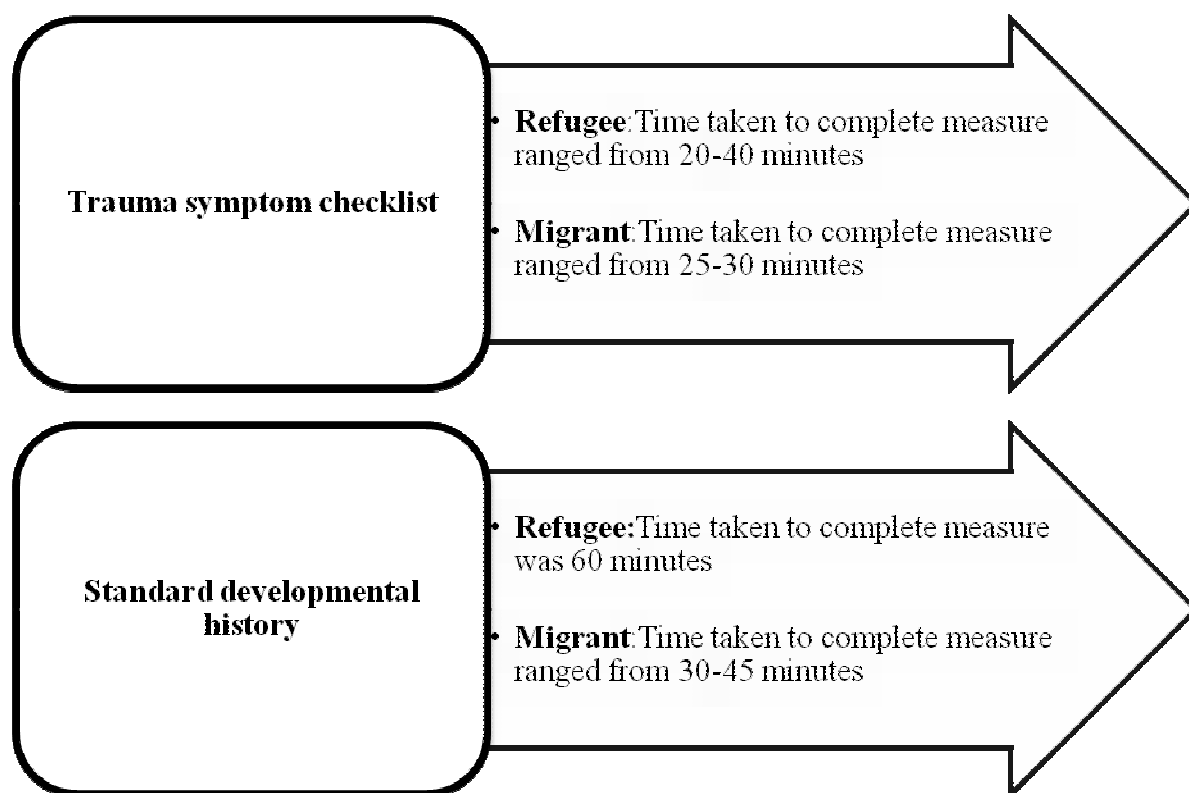


Figure 4: Parent measures and time taken to complete

Figure 4 is a graphic representation of the parent measures and the administration time taken to complete. The target completion time to complete the Trauma Symptom Checklist for Young children was 15-20 minutes. The migrant parents completed the checklist in 25-30 minutes and the refugee parents completed it in 20-40 minutes. This completion time was close to the target time. The Standard Developmental History form, does not have a target completion time, but had been estimated to complete in an hour, in order to allow for interpreter translation time. Migrant parents completed this form within 30-45 minutes whilst refugee parents completed the forms taking up to an hour. All refugee parents required interpreter assistance for the form completion. One refugee parent had good conversational English language ability and three were more reliant on interpreter assistance. One migrant parent required interpreter assistance. Three migrant parents had good expressive English as well as good reading and comprehension of English. Refugee parents were generally unable to recall specific

birth and other details and often reported that they were always moving from place to place or refugee camp to another and this facilitated in disjointed recall of information. Migrant parents generally completed all forms in full remembering specific birth and other developmental detail. The parental interviews lasted up to an hour with the completion of the Trauma Symptom Checklist for Young Children (TSCYC) and The Structured Developmental Case History (SDH). Both forms were long and tedious but were important in obtaining relevant information pertaining to developmental, birth and linguistic information as well as trauma related symptomatology in the participants. Migrant parents appeared more comfortable and at ease when interviewed whilst refugee parents despite being friendly and at ease appeared to respond with a degree of caution. Parents who communicated with the assistance of interpreters understood the instructions and felt at ease. The SDH was effective in obtaining a comprehensive case history.

8.2.6 Structured Developmental History (SDH) - Parent Interviews

The SDH included case history information gathering in the following categories:

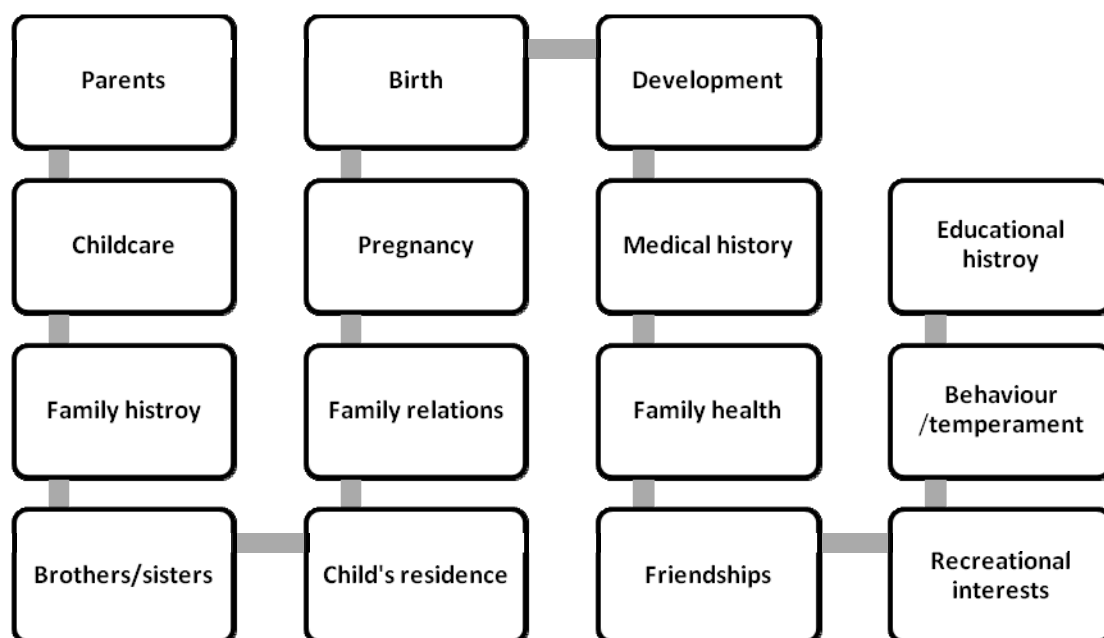


Figure 5: Outlining the categories of the SDH case history

Figure 5 represents the assessment categories of the structured developmental case history measure. Overall the migrant parents were able to recall more information in all the designated categories as compared to refugee parents:

Parents

The study included two migrant mothers who were employed and two migrant mothers who were housewives whilst all migrant fathers were employed in a professional capacity. All the refugee mothers were housewives and all the fathers were unemployed or were students studying English. All the migrant parents had completed tertiary education and were in stable employment whilst refugee parents had not been to a formal school and were currently either unemployed or studying.

Childcare

One migrant mother made use of an afterschool care (Chipmunks). All other migrant mothers and all refugee mothers looked after their own children or children were cared

for by extended family.

Family History

All participants were reported to be close to both their parents. No participants experienced parental separation, divorces or parental death.

Brothers/sisters

All migrant participants had one to two other siblings whilst all refugee participants had between three to five siblings.

Child's residence

Seven participants lived in a house and one migrant participant lived in a unit. Seven participants resided at their residence for a period of a year with one migrant participant having resided at their residence for a period of two years.

Family relations

All migrant participants enjoyed movies, meals, trips, conversations, visits with relatives, going to the temple or church, games, sport and television with their family. All refugee participants tended to be mostly involved in the family meals, movies, television and sports.

The father and one refugee mother was the disciplinarian for all refugee participants. Two migrant mothers and two migrant fathers were the main disciplinarian for migrant participants. Discipline techniques across all participants included time out, punishment, scolding, and an explanation and reasoning.

Most of the migrant parents with the exception of one tended to have higher aspirations for their children (wanting them to be engineers, doctors and pilots) whilst refugee parents and one migrant parent indicated that they wanted them to grow up into healthy happy adults, with a good education with no particular emphasis on a career choice for their child.

Pregnancy

Three migrant parents and one refugee parent reported planned pregnancies. Three

refugees and one migrant parent reported unplanned pregnancies. All refugee mothers and three migrant mothers reported an uneventful pregnancy. One migrant mother reported excessive vomiting and the need for medication for her high blood pressure.

Birth

The age of the parents at the birth of the participants ranged for migrant mothers between 29 years to 38 years and migrant fathers between 31 years to 38 years and between 20 years to 38 years for refugee mothers and between 30 years to 38 years for refugee fathers. All migrant participants were born in the hospital whilst all refugee participants were born either at home or in their village. There was no reported birth trauma or complications in any of the participants.

Development

All participants were breastfed. Migrant parents were able to provide specific information pertaining to their child's birth, milestones, early education and development, whilst refugee parents had difficulty in providing comprehensive information in this regard. All participants had acquired age appropriate motor and speech milestones, with minimal variations of each other.

Migrant parents were able to provide specific information pertaining to their child's birth, milestones, early education and development, whilst refugee parents had difficulty in providing comprehensive information in this regard. Apart from two migrant and one refugee participants having temper tantrums, excessive crying and being fussy eaters, the other participants presented with no developmental difficulties.

Medical history

Two migrant and one refugee participant presented with coughs and colds in winter and being on a puffer to assist with asthma. One migrant parent reported that their child had a hernia surgery. One refugee participant was reported to have had minor eye surgery and one had a kidney operation. All participants were reported to have normal speech development, language development, hearing and vision. All migrant participants regularly visited an identified family doctor, whilst refugee participants attended the local primary health care provider "The Doctors", when needed.

Family Health

All participants' reported medical difficulties of family members as diabetes, high blood pressure and asthma. One migrant participant reported Parkinson's disease in the grandfather. One migrant parent reported to have had a family history of cancer and kidney problems.

Friendships

Two migrant parents reported that their child preferred playing with younger children. One migrant mother reported that her son had difficulty relating to girls. One migrant mother and three refugee mothers reported that their child was shy but did enjoy playing with friends.

Recreational /Interests

All refugee participants enjoyed playing outside, i.e. play initiated and developed by the children. They enjoyed jumping, skipping and ball games. All migrant participants enjoyed cricket, soccer, video games and computer games.

Behaviour/temperament

Three migrant parents and two refugee parents reported that their child had fears (of the dark). Three migrant parents and 2 refugee parents reported that their child was shy and could hide their feelings as a result however essentially it would appear that all participants were able to settle down , were happy most of the time , were affectionate and enjoyed playing with other children.

Educational history

All migrant children attended early childhood centres and kindergarten previously. All refugees did not have previous schooling. All the participants spoke to their children in their primary language at home, despite some having adequate English language skills. All the migrant parents indicated that their child had telephonic contact with their family overseas; none of the refugee children had this ability. They had lost contact with their family. Some mentioned not knowing where their families were and whether they were still alive.

Summary

The migrants and refugees demonstrated differences in family size, contact with extended family, socio-economic status and educational level. The SDH provided a thorough review of social, psychological, developmental, educational and medical information about the participant. A good history is critical to making informed judgements. Fixation in development and deterioration in functioning are important when dealing with new students at school and the SDH is able to detect these issues and provide a thorough process in history gathering (Reynolds and Kamphaus, 2004). This test provides in-depth information to speech language therapists and other professionals in their assessment of refugee and migrant students. Parents reported feeling comfortable and at ease during the interview. Parents who communicated with the assistance of interpreters reported ease of this communicative relationship and the researcher was able to obtain all the necessary information required with minimal difficulty, especially when the parent understood that the information presented via the interpreter would not be to the academic detriment of their child in any way.

8.2.7 The Trauma Symptom Checklist for Young Children-Parent Interviews

This test assessed the following components:

The response Level(RL)
Atypical response (ATR)
Anxiety(ANX)
Depression(DEP)
Anger/Depression (ANG)
Post traumatic Stress-Intrusion(PTS-I)
Post traumatic Stress- Avoidance (PTS-AV)
Post traumatic Stress- Arousal(PTS-AR)
Post traumatic Stress- Total(PTS-TOT)
Dissociation(DIS)
Sexual concerns(SC)

Figure 6: Outlining the areas assessed with the TSCYC

Figure 6 presents an outline of areas assessed using the Trauma Symptom Checklist for Young Children .The TSCYC is appropriate for use with English speaking as well as

parents with low literacy levels (Briere, 2005). It is an in-depth test. The TSCYC is a 90-item, 4 point-scale checklist where 1 indicates no symptoms, 2 indicates that the symptom is sometimes prevalent, 3 indicates that the symptom is prevalent often and 4 indicates that the symptom is prevalent very often. The individual scores can be found in appendix A. TSCYC *T* scores are used to interpret the child's level of symptomatology. These scores are standardised transformations of the scale raw scores, derived to have a mean of 50 and a standard deviation of 10. *T* scores hence provide information about the individual's scores relative to those scores of children in the standardisation sample. *T* scores of 70 would indicate that the respondents score is two standard deviations from the sample mean. For all the clinical scales except the PTS-TOT, scores less than or equal to 64 are considered normal, *T* scores between 65 and 69 are deemed potentially problematic and *T* scores greater than or equal to 70 are interpreted as clinically significant.

Response Level (RL)

This scale reflects the extent to which the caretaker denies behaviours, thoughts or feelings in his or her child that most caretakers would report to some degree (Briere, 2005). Respondents with high scores on this scale deny many or most of these normal responses and are thus likely to be defensive or avoidant about their child or for some reason are unwilling to endorse commonly endorsed items. Scores of 65-69 suggest significant parental underscorement but not to the level that renders the test invalid and scores of 70 and over were indicative of avoidance and defensiveness and may be interpreted as clinically significant. All participants had *T* scores over 70. All migrants had scores over 90 indicative of some avoidance and or defensiveness and all refugees had scores that ranged between 70 and 80 also indicative of some avoidance and or defensiveness. Scores under 69 considered to be under endorsed; were not evident in this study. It appeared that both migrant as well as refugee parents displayed clinically significant degrees of avoidance and defensiveness however this was more prevalent in migrant rather than refugee parents' responses.

Atypical response (ATR)

Some caretakers indiscriminately endorse unusual symptomatology in their child, regardless of the child's true symptomatic state. The ATR scale evaluates this phenomenon (Briere, 2005). All participants scored approximately 48, which was below

the standardised sample score of 90, indicating that no parent over reported on their child as being especially distressed or dysfunctional.

Anxiety (ANX)

This scale evaluates the level of fear and worry observed in the child. T scores of 70 or higher indicate the presence of an anxiety disorder. Scores of 65-69 indicate a subclinical but potentially problematic, level of fearfulness. Essentially both migrant and refugee participants scored in the range of 45 to 68 indicating no anxiety disorders in any of the participants, however two refugees scored 68 and 67, indicating a problematic level of fearfulness.

Depression (DEP)

This scale taps feeling, cognitive behaviour and verbalisations associated with sadness, unhappiness, or depression observed in the child. T scores of equal to or greater than 70 indicate a depressive episode, grief associated with a loss or trauma. T scores of 65-69 indicate some level of depressive symptomatology. All participants scored between 42-50 indicating no clinically significant depression.

Anger/ Aggression (ANG)

This scale indicates the extent of anger and or aggressive behaviour observed in the child. Children with T scores higher than 70 are found to be irritable, hostile or aggressive. Score of between 65- 69 indicate some level of anger and aggression. All participants scored between 42- 53 indicating no clinically significant anger or aggression.

Post traumatic Stress-Intrusion (PTS-I)

The PTS-I scale evaluates the extent of the child's intrusive reliving of post-traumatic memories. An elevated PTS-I score suggests that the child's current thoughts and behaviour are significantly affected by the intrusion of trauma related memories. T scores greater than 70 indicate clinically significant post-traumatic stress. Scores of 65-69 indicate some level of posttraumatic stress. One migrant participant scored 67 indicating some level of post-traumatic stress whilst all the other migrants and refugee participants scored between 42- 48 indicating no clinically significant post-traumatic stress intrusion.

Posttraumatic Stress- Avoidance (PTS-AV)

The PST-AV scale evaluates the extent of post-traumatic avoidance observed in the child. Elevated scores suggest that the child is using cognitive, behavioural and or emotional avoidance strategies in an attempt to avoid post-traumatic distress. Scores of 70 and over depict children with oppositional behaviour or non- responsive children. Scores of 65-69 indicate some level of avoidance that may or may not be clinically significant. Apart from one refugee and one migrant who scored 65 (indicating some level of avoidance depicted by unwillingness to talk about trauma, avoidance of people, places or situations reminiscent of the trauma and reduced or absent emotional response to the events), all the other participants scored between 40-57 indicating no clinically significant avoidance stress.

Post-traumatic Stress-Arousal (PTS-AR)

Scores reflect the extent of the sympathetic nervous system that is “fight or flight” hyper-arousal, that the child is observed to experience (Briere, 2005). Children with elevated scores of 70 or more are often hyperactive, easily startled and tense. Scores of 65-69 indicate some level of hyper-arousal. One migrant participant scored 65 indicating some hyper-arousal and anxiety. whilst all the other participants scored between 39-54 indicating no clinically significant hyper-arousal.

Post-traumatic Stress- Total (PTS-TOT)

This is a sum total of PTS-AV, PTS-AR and PTS-I and reflects the total amount of posttraumatic experience, avoidance and hyper-arousal symptoms seen in the child. This can be used as an overall measure of posttraumatic stress. A PTS-TOT of 70 suggests severe post-traumatic stress disturbance, while T scores of 65-69 is often associated with at least one elevated PTSD symptom cluster and thus suggests mild to moderate posttraumatic stress. All participants scored between 40-64 indicating no clinically significant PTSD.

Dissociation (DIS)

This scale taps detachment internal absorption, fantasy and daydreaming. Children with scores over 70 are often in a daze, spaced out and interpersonally non- responsive. They are inattentive and absent minded (Briere, 2005). All participants scored between 40-57

indicating no clinically significant dissociation symptomatology.

Sexual Concerns (SC)

The SC scale evaluates the amount of sexual distress observed in the child. All participants obtained scores between 43-53, indicating once again no clinically significant sexual concerns.

Summary

The Trauma Symptom Checklist for Young Children did not yield clinically significant information in this exploratory investigation pertaining to past and current trauma. Across the scales particularly for the Anxiety, Post-traumatic stress intrusion, Post traumatic stress avoidance and Post traumatic stress arousal, the results present one or two participants as having obtained elevated scores. These were however not the same participant in each instance but across all eight participants. There was not a significant difference between the results in both the refugee and migrant children. It was found that they generally scored 1 and occasionally 2. Most of the obtained scores with a 2 pertained to listening and attention skills, distraction and behavioural issues common to most children of this age group. One refugee participant, displayed trauma symptoms with a score of 2 for being upset if she recalled past sad events. All of the migrant and one refugee participants displayed concentration, attention and distractibility difficulties. It is possible that parents were not willing to admit to past trauma in the selected groups. This tool did not yield any clinically significant trauma symptomatology however it did indicate possible concentration difficulties, which could impact on classroom learning.

8.2.8 THE CASL TEST - Children Interviews

Components tested in the CASL test included the following:

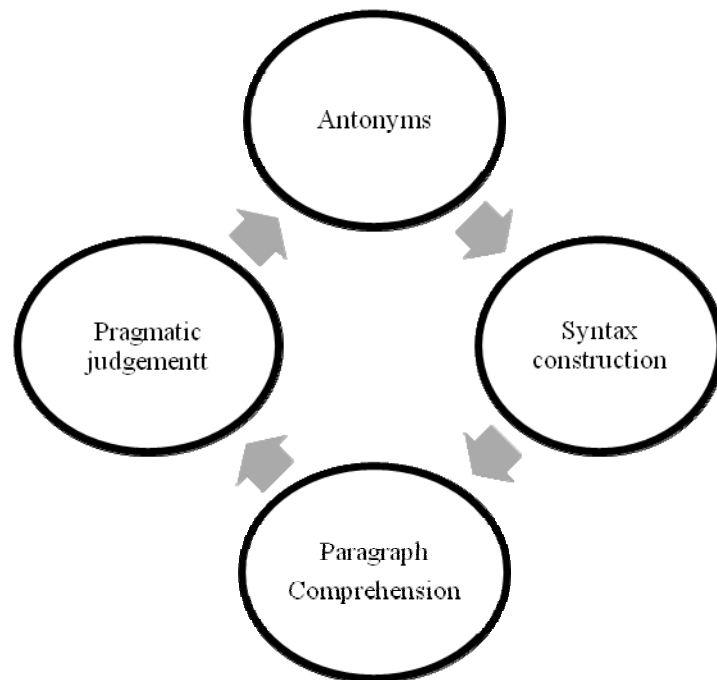


Figure 7: Outlining components tested using the CASL test

Figure 7 presents an outline of components tested during the Comprehensive Assessment of Spoken Language. The four tests conducted for the target test population were: antonyms, syntax construction, sentence comprehension and pragmatic judgement.

Antonyms: This test measures an aspect of word knowledge, the ability to identify words that are opposite in meaning and an aspect of language expression, the ability to retrieve, generate and produce a single word when its opposite is given as a stimulus (Carrow-Woolfolk, 1999).

Syntax construction: The syntax construction test is designed to assess the ability of the examinee to generate sentences using a variety of morphosyntactic rules. Syntax construction emphasises the use of the rules to formulate and express sentences (Carrow-Woolfolk, 1999).

Paragraph comprehension: The paragraph comprehension of syntax test measures the

comprehension of syntax by means of series of spoken narratives. Each narrative begins with the sentence that has a designated level of syntactic difficulty. Each subsequent sentence in the narrative adds to the syntactic complexity of the previous sentence.

Pragmatic judgement: This test is designed to measure the knowledge and use of pragmatic rules of language by having a respondent judge the appropriateness of language use in specific environmental situations or actually use language appropriate to given environmental conditions. Pragmatic competency in language production is assessed by asking the examinee to express a specific communicative intent, to recognise appropriate topics for conversation, to select relevant information for directions or requests, to initiate turn taking etc (Carrow-Woolfolk, 1999).

On all these tests a correct response received 1 point and an incorrect response received 0. All of these tests have a basal and ceiling rule. The basal rule is a score of 1 on three consecutive items and the ceiling rule is a score of 0 on five consecutive items. Raw scores are calculated and converted into standard scores, confidence intervals, percentiles, stanines and test age equivalents. For the purposes of this study test age equivalents as well as descriptive analysis was used in the scoring of the data. An age equivalent should not be interpreted as a functional or chronological age equivalent only as a test age equivalent. This is the age at which the raw score is average. The CASL test can be a rather long drawn out procedure, if, when attempting to obtain a ceiling, the participant obtains 4 incorrect responses but gets the 5th correct. The test procedure stipulates that the test continue, until a new ceiling that is 5 incorrect responses are reached. This frequently occurred across the test, more so for migrant children than refugee children.

Antonyms:

Refugee children performed with average age equivalents in their scores ranging from delays of 3 years 5 months to 4 years 7 months whilst migrant children had average age equivalents in their scores ranging from delays of 1 year 7 months to 3 years 7 months. No participant performed at their chronological age level for their understanding and use of antonyms. These age delays allow for a baseline level of their ability. When analysing participants using the descriptive analysis, despite the delay in their understanding of antonyms, all 3 migrants presented with expressive language that

included nouns, verbs, adjectives, adverbs and prepositions. One migrant lacked the use of adverbs. One refugee child presented with expressive language that included nouns, verbs, adjectives, adverbs and prepositions. One refugee child lacked the use of adjectives, adverbs and prepositions. One refugee child lacked the use of adjectives and adverbs and one refugee lacked the use of adverbs and prepositions. All participants presented with adequate knowledge and use of nouns and verbs.

Syntax construction:

Refugee children's obtained test age equivalent scores, presented with delays ranging from 4 years 1 month to 4 years 7 months against their chronological age, whilst migrant children had age equivalent scores with delays ranging from 2 months to 4 years 3 months. These age delays allow for a baseline level of their ability and a descriptive analysis of their syntax structure allows for growth over time with repeated testing after facilitation of the problematic areas. Participant's scores indicate varied delays in syntax construction when compared with the norms for their age however a description of their sentence structures indicates that all participants had a good baseline linguistic skill level and this may be useful with repeated testing over time, see Appendix B.

Refugee children

Refugee one:

This participant presented with infinitives, participial phrase, subject present tense verb, plural subject present tense verb, negation, first person question. Complex sentences, past tense verb using auxiliary indicating probability and prepositional phrase was absent in his utterances.

Refugee two:

This participant presented with subject present tense verb, prepositional phrase, adverbial phrase, first person question, prepositional phrase indicating position, present tense verbs. Past tense verbs were absent so was plural subject, negation and complex sentences.

Refugee three:

This participant presented with infinitives, participial, phrase, subject present tense verb,

however past tense verb, complex sentences, adverbial phrases and constructing a sentence using 3 selected words were absent in his utterances.

Refugee four:

This participant presented with infinitives, subject present tense verb, plural subject present tense and negation in her utterances. Complex sentences, adverbial and prepositional phrases were absent. Past tense or sentences that required the participant to use three selected words in a combined sentence was absent.

Migrant children:

Migrant one:

This participant presented with prepositional phrase, present tense verb, plural present tense verb, subject singular present tense verb, infinitive, past tense verb, adverbial phrase, negation, first person question, complex sentences, past tense verb using auxiliary indicating probability ,sentence structure incorporating 3 specific words, compound adjective. Many and varied complex sentences were absent.

Migrant two:

This participant presented with prepositional phrase, present tense verb, plural present tense verb, subject singular present tense verb, infinitive, past tense verb, adverbial phrase, negation, first person question, complex sentences, past tense verb using auxiliary indicating probability ,sentence structure incorporating 3 specific words, compound adjective. Many and varied complex sentences were absent.

Migrant three:

This participant presented with prepositional phrase indicating direction , participial phrase, subject present tense verb, past tense verb, plural present tense verb, subject singular present tense verb, infinitive, past tense verb, adverbial phrase, negation and first person question, complex sentences .Adjective placement, sentences incorporating 3 specific words, complex sentences and logical sequence sentences were lacking.

Migrant four:

This participant presented with prepositional phrase using underneath or beneath, present tense verb, plural present tense verb, however negation, adverbial and

prepositional clause were absent.

Paragraph comprehension:

All 4 refugee children presented age equivalent scores with delays ranging from 2 years 8 months to 4 years 4 months with respect to comprehending passages whilst 2 migrant children presented with age equivalent scores with delays of 1 year 4 months and 3 years. Two migrant children presented above their chronological age level by 1 year 3 months and 2 years with respect to comprehension of passages. Both migrant and refugee children showed better skills at comprehension than expression, with migrants being the superior in their receptive skill levels.

Pragmatic judgement:

Refugee children presented with age equivalent scores with delays of 2 years.4 months to 5 years 1 month with respect to pragmatic judgement. Migrant children performed better than refugees and presented with scores with an age equivalent scores with delays ranging from 2 months to 9 months.

Summary

A descriptive analysis allows for one to determine the participants cognitive, linguistic and behavioural strengths and weaknesses and allows for growth measurements and change to occur over time rather than the use of standardised measurements which usually tend to highlight their delays against a normal English speaking population. The mean length of utterance is the mean number of morphemes produced per sentence and is used especially as a measure of child language development (Bishop and Adams, 1990). The mean lengths of utterances for refugees were 3, 4, 5 and 6. The mean lengths of utterances for migrants were 3, 7, 7, and 7. If one were to use the mean length of utterance norms of Renfrew (1997), one would confer that all the participants were delayed. She postulates that children of 5 years would have a mean length of utterance of 8 and children of 8 years would have a mean length of utterance of 13. This further serves to highlight the difficulties of strictly adhering to standardised norms.

In this exploratory study however, migrants tended to produce sentences that included the correct word order and sequence e.g. “Jenny and Mark are walking together to school” whilst refugees produced sentences that indicated that they understood the

question but the sentence lacked adequate word order or lacked articles or determiners e.g. “The boy is reading, the boy is banana eating”, “All sit in the chair and looking TV”, “Girl outside go” Both groups were able to communicate their ideas verbally to the listener but with increasing difficulty for some refugees, particularly when they were wanting to talk about a topic but were not necessarily sure which English word to use or when their English language vocabulary lacked the identified word e.g. when a refugee student was eating his sandwich and wanted to comment about what he was eating he responded by” miss this nice, um um this is er er nice, er I like.,it sweet..., you want some miss?, er this isthis thing, what call this miss? Oh! ya chocolate, I like chocolate miss. This student was eating and really enjoying a nutella sandwich, and really wanted to comment on his filling which he thoroughly enjoyed. He knew the word chocolate but not “nutella” and was searching for the correct word to use.

8.2.9 The Leiter R International Scale-Children Interviews

Components tested in the Leiter R International scale included the following:

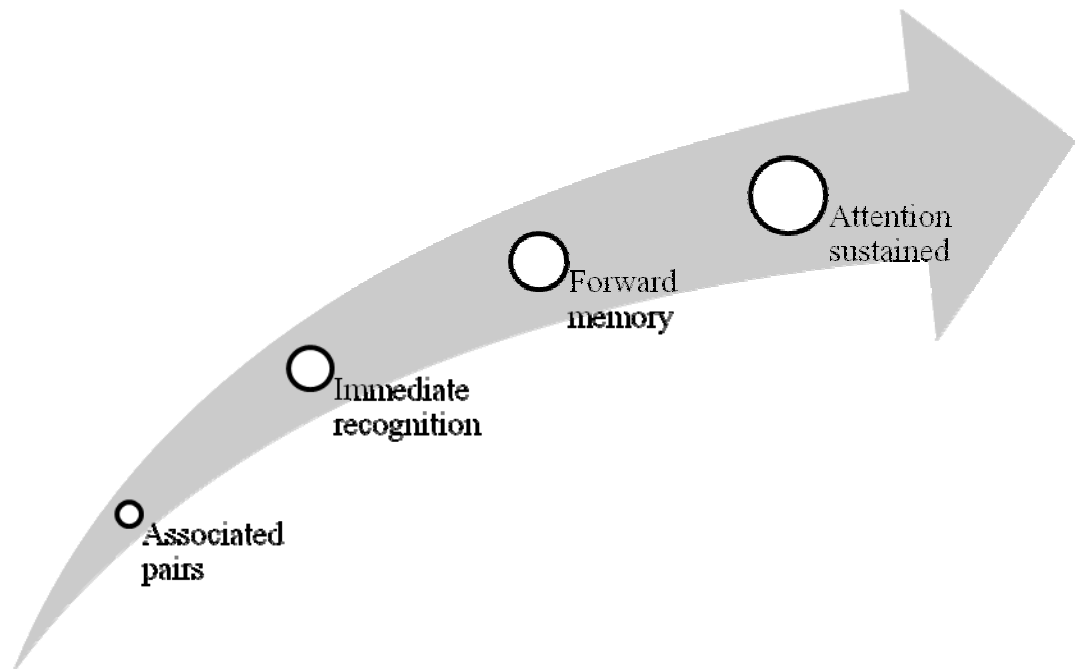


Figure 8: Outlining all the components tested using Leiter R

Figure 8 presents a graphic outline of the components considered during the Leiter R International Scale. The attention memory (AM) battery was utilised in this study. The AM battery is used for a comprehensive diagnostic assessment of attention and memory difficulties as well as for an evaluation of cognitive process deficits in learning disabilities or attention deficit disorders (Gale and Roid, 1997).

When there is a mismatch between a student's general cognitive ability and academic achievement as in the case of students with English as a second language, the Leiter R is found useful in providing an estimate of the student's non verbal intellectual ability. It is useful in defining the individual's strengths and weaknesses (Gale and Roid, 1997). The Leiter R also allows for identification of cognitive delays, measurement of small increments of improvement in cognitive ability and provides for a reliable and valid scale of intelligence regardless of language or motor ability. The most significant component of this test has been the ability to determine growth scores of participants. These score indicate the student's skill level at the time of testing and allows for small increment changes over time.

If the test is repeated participants may be able to see their personal growth over time as they are compared against their own score rather than being to standardised norms.(Gale and Roid, 1997). The complete test time with the children in this study was estimated at 1 hour 45 minutes. If the participant failed, the test time was reduced however if the participant achieved success the test time was extended. All the participants appeared to enjoy the Leiter R International Scale as it is a non-verbal, interesting and colourful test.

Due to the lack of linguistic demands all the participants tended to enjoy the test procedure and would often comment that they enjoyed the "not talking game". The Leiter R scale was found to be effective in its administration, test time, procedure, recording and interpretation of the results. The subtests of the Leiter R include: associated pairs, immediate recognition, forward memory and attention sustained.

Associated pairs: This subtest is a paired associates learning task. It taps short term memory with a brief distraction (Roid and Miller, 1997)

Immediate recognition: This subtest evaluates the ability to form a rapid visual image and then recognise its elements within a brief short term delay. This task measures recognition rather than recall because the visual objects are provided on the response card rather than produced as free recall (Roid and Miller, 1997)

Forward memory: This subtest measures sequential memory span and requires attention and an organised processing style. Since subsequent items utilize the same or similar pictures as were used previously the new item does include competing stimuli (interference) from previous items. Thus in addition to remembering the sequence of the stimuli the child must also inhibit the previous sequential information which may be stored (Roid and Miller, 1997)

Attention sustained: This subtest consists of a cancellation task which measures visual prolonged attention, requiring good visual scanning and motoric inhibition on a rapid repetitive motor task (crossing out stimuli). Although a motor response is required the motor demands are limited (Roid and Miller, 1997)

Memory screener is obtained with a combination of associated processing and forward memory ,recognition memory is a the result of immediate recognition, associative memory is the result of associative pairs, memory span is the result of forward memory and attention is the result of attention sustained.

For most of the subtests, all responses on items prior to a child's start point are credited and then all correct responses are added to calculate the subtest raw score. Each subtest has a stop rule e.g. stop after 5 cumulative errors. Each correct item receives a 1 credit point and incorrect responses receive no credit point. The scoring rules differ for the some subtests of the attention and memory battery in the case of this study with particular reference to forward memory and attention sustained. For the forward memory subtest the child is required to complete a specific sequence of responses to receive a credit for an item. On completion of the test the number of items correct is calculated and this becomes the raw score for that respective subtest. The attention sustained (AS) subtest has a slightly more involved scoring rules, in that the raw score is equal to the total number of targets correctly marked, minus the total number of errors the child has on the AS booklet. The raw score for each of the Leiter-R subtests is typically the sum of the correct responses, which were converted to scaled scores with a mean of 10 and a standard deviation of 3. Scaled scores ranged from 1 to 19. Scaled scores were then converted into composite scores (using Appendix E1 of the test manual). Composite scores were then converted into confidence intervals (using Appendix E3 of the test manual). Using tables in Appendix N of the test manual, raw scores and composites were converted into Growth scale scores. Growth values range from 400 to 550 for the AM battery and provide an index to the rate at which the child is growing. The profile of growth composite scores also provides an age equivalents should that be required, although this not recommended, e.g. AM growth composites of 440 is equivalent to 2 years of age whilst an AM growth composite of 510 is equivalent to 20 years of age.

Migrant children

Migrant one: Obtained a composite score range of 55 to 93(with respect to memory screen, associative memory ,memory span, attention ,memory process and recognition memory) indicating at the lower end a mild delay and at the upper end an average cognitive ability. However when the growth score measurement scale is applied the

participant obtains a range of 462-492. The participants age equivalent growth score is 490. This participant was age appropriate for memory screen but appeared to present with a delay of 2-3 years with respect to associated memory, memory span, memory processing and memory recognition. When the subtests that comprised these larger areas were analysed individually namely: associated pairs, immediate recognition and forward memory, it was quite interesting as the participant then performed age appropriately and 5 months above his age level (obtaining a growth score range of 482-492).

Migrant two: Obtained a composite score range of 40 to 71(with respect to memory screen, associative memory, memory span, attention, memory process and recognition memory) indicating at the lower end a moderate delay and at the upper end low cognitive ability. However when the growth score measurement scale is applied the participant obtains a range of 445-494. The participant's age equivalent growth score is 484. This participant appeared to present with a delay of 1-4 years with respect to memory screen, associated memory, memory span, and memory processing and memory recognition. When the subtests that comprised these larger areas were analysed individually namely: associated pairs, immediate recognition and forward memory, it was quite interesting as the participant then performed at 1-2 years above his age for associated pairs and immediate recognition but 2.5 years below his age level for forward memory (obtaining a growth score range of 462-494).

Migrant three: Obtained a composite score range of 46 to 93(with respect to memory screen, associative memory, memory span, attention, memory process and recognition memory) indicating at the lower end a moderate delay and at the upper end above average cognitive ability. However when the growth score measurement scale is applied the participant obtains a range of 476-494. The participant's age equivalent growth score is 490 This participant presented with an age appropriate score for memory screen but appeared to present with a delay of 2-4 years with respect to associated memory, memory span, memory processing and memory recognition. When the subtests that comprised these larger areas were analysed individually namely: associated pairs, immediate recognition and forward memory, the participant then performed at 8 months above his age for associated pairs and immediate recognition but 1.4 years below his age level for forward memory (obtaining a growth score range of 458- 494).

Migrant four: Obtained a composite score range of 46 to 81 (with respect to memory screen, associative memory, memory span, attention, memory process and recognition memory) indicating at the lower end a moderate delay and at the upper end below average cognitive ability. However when the growth score measurement scale is applied the participant obtains a range of 458-486. The participant's age equivalent growth score is 489. This participant appeared to present with a delay of 1-4 years with respect to memory screen, associated memory, memory span, memory processing and memory recognition. When the subtests that comprised these larger areas were analysed individually namely: associated pairs, immediate recognition and forward memory, the participant then performed at his age level for immediate recognition and forward memory, but at a years delay for associated memory (obtaining a growth score range of 478-486).

Refugee children

Refugee one: Obtained a composite score range of 59 to 109 (with respect to memory screen, associative memory, memory span, attention, memory process and recognition memory) indicating at the lower end a mild delay and at the upper end an average cognitive ability. However when the growth score measurement scale is applied the participant obtains a range of 465-502. The participant's age equivalent growth score is 492. This participant presented with an age appropriate score for memory screen and appeared to present with a delay of 3-4 years with respect to associated memory, memory span, memory processing and memory recognition. When the subtests that comprised these larger areas were analysed individually namely: associated pairs, immediate recognition and forward memory, it was quite interesting as the participant then performed at 1-2 years above his age for associated pairs , immediate recognition and forward memory (obtaining a growth score range of 494-502).

Refugee two: Obtained a composite score range of 48 to 78 (with respect to memory screen, associative memory, memory span, attention, memory process and recognition memory) indicating at the lower end a moderate delay and at the upper end low cognitive ability. However when the growth score measurement scale is applied the participant obtains a range of 455-496. The participant's age equivalent growth score is 488. This participant appeared to present with a delay of 2-4 years with respect to memory screen, associated memory, memory span, memory processing and memory

recognition. When the subtests that comprised these larger areas were analysed individually namely: associated pairs, immediate recognition and forward memory, the participant then performed age appropriately for forward memory, 2 years above her age level for immediate recognition and 3 years below her age level for associated pairs. 1-2 (obtaining a growth score range of 464-494).

Refugee three: Obtained a composite score range of 46 to 75(with respect to memory screen, associative memory, memory span, attention, memory process and recognition memory) indicating at the lower end a moderate delay and at the upper end a mild delay in cognitive ability. However when the growth score measurement scale is applied the participant obtains a range of 458-494. The participant's age equivalent growth score is 490. This participant presented with age appropriate memory screen and appeared to present with a delay of 2-4 years with respect to associated memory, memory span, memory processing and memory recognition. When the subtests that comprised these larger areas were analysed individually namely: associated pairs, immediate recognition and forward memory, it was quite interesting as the participant then performed at 1.8 above his age for associated pairs and immediate recognition but 1.4 years below his age level for forward memory (obtaining a growth score range of 484-494).

Refugee Four: Obtained a composite score range of 44 to 75(with respect to memory screen, associative memory, memory span, attention, memory process and recognition memory) indicating at the lower end a moderate delay and at the upper end low cognitive ability. However when the growth score measurement scale is applied the participant obtains a range of 459-496. The participant's age equivalent growth score is 489. This participant appeared to present with a delay of 2-3 years with respect to memory screen, associated memory, memory span, memory processing and memory recognition. When the subtests that comprised these larger areas were analysed individually namely: associated pairs, immediate recognition and forward memory, the participant then performed at 1 year above her age for immediate recognition and age appropriately for forward memory but at 1.3 year delay for associated pairs (obtaining a growth score range of 464-496).

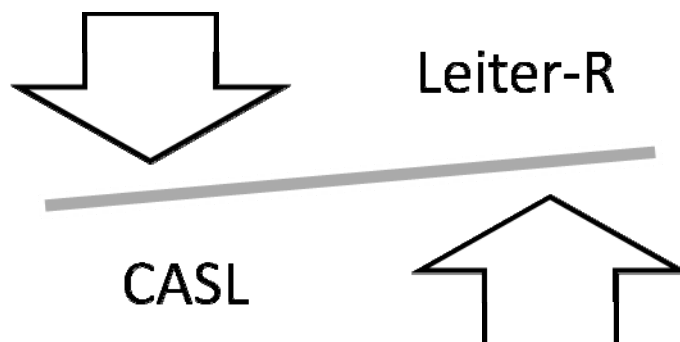
Summary

Composite scores do not indicate intelligence but rather provide an indication of performance on attention and memory tasks. The composite scores of migrant children indicate a mild delay or average cognitive ability, whilst the composite scores for refugees indicated a moderate delay or low cognitive ability. Growth scores allowed for an effective determination of specific areas needing attention. Both refugee and migrant children appeared to present with a 1-4 year age delay with respect to their associated memory, memory span, attention, memory process and recognition memory.

When individual subscales were analysed for all participants, they all tended to display better growth scores and pertinent areas of difficulty were isolated. One refugee and one migrant child had improved in all their growth scores for associated memory, forward memory and immediate recognition. Three out of eight participants obtained lower growth scores for forward memory whilst five out of eight obtained higher scores and three out of eight participants obtained lower growth scores for associated memory whilst five out of eight obtained higher scores. All participants did better on their growth scores for immediate recognition.

The Leiter-R is a useful measure to determine baseline cognitive skills. It also provides components of difficulty that require remediation. Growth scale scores are an effective tool in place of a normative scale as is evidenced in this study with respect to the difference in the participant's performance on composite scores versus growth scores. All the participants performed with better cognitive skills when their scores were interpreted using growth scores.

8.2.9.1 The Link between Leiter R and CASL Test



On comparing the scores of all participants for both the Leiter R and the CASL scale antonyms, it is evident that there is a similar delay on standardised scores for both tests.

When comparing the delay in the Leiter R test with the syntax construction test, refugees presented with a slightly elevated delay for the CASL syntax construction test whilst migrants presented with similar age delays for both the tests. When comparing the growth scores of the Leiter R test with the scores obtained by all participants on the CASL test, it is evident that all participants have appropriate cognitive skills or better cognitive skills, than their obtained standardised CASL scores. This would serve as a good predictability measure that should their cognitive skills continue to develop, that their language skills will also develop in English which is their second language. Hence both the CASL and the Leiter R tests are deemed useful core tests which complement each other and also allow for growth measurement change over time.

8.2.10 Behaviour Assessment System for Children-Teacher interviews

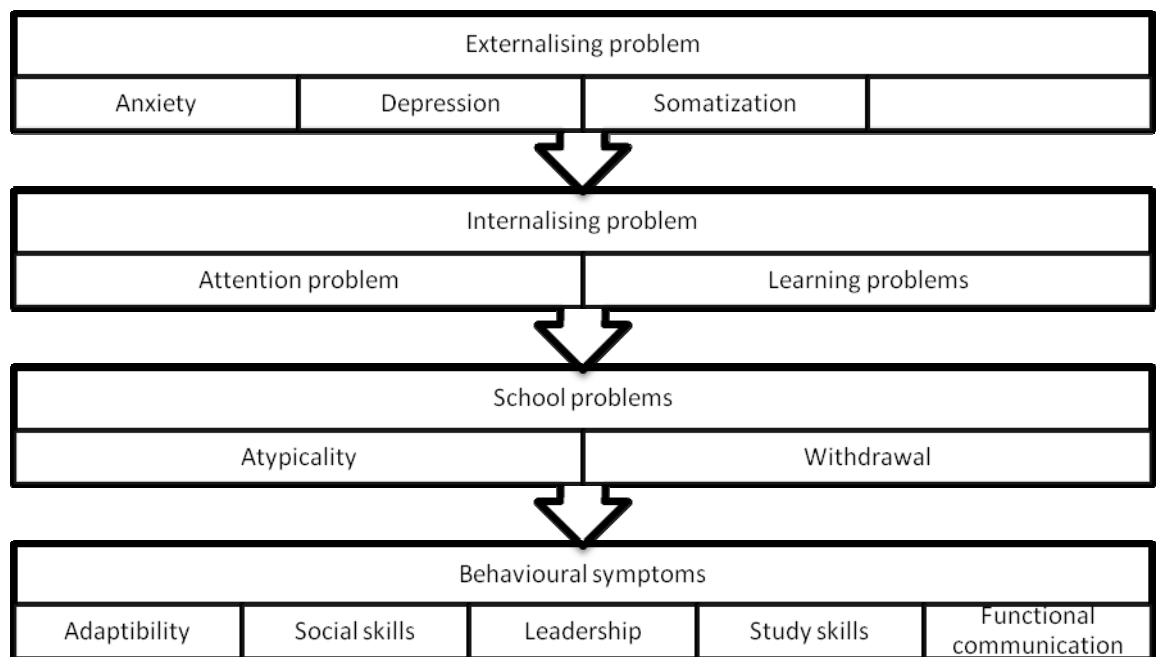


Figure 9 Outlining the components assessed using the BASC-2

Figure 9 presents the components assessed during the BASC-2 which included the following main areas with sub-components in each namely *externalising problems* which includes anxiety, depression, somatisation, *internalization problems* which includes attention problems, learning problems, *school problems* which includes atypicality and withdrawal, *behavioural symptoms* which includes adaptability, social skills, leadership, study skills, functional communication.

- Anxiety – indicates the tendency to be nervous, worried or fearful about real or imagined problems.
- Depression- includes feelings of unhappiness, sadness and stress that may result in an inability to carry out everyday activities.
- Somatisation- indicates the tendency to be overly sensitive to and complain about relatively minor physical problems and discomforts.
- Attention problems- indicate the tendency to be easily distracted and be only able to concentrate momentarily.
- Atypicality- indicates the tendency to behave in ways that are

considered “odd”.

- Withdrawal-indicates the tendency to evade others to avoid social contact.
- Adaptability- indicates the ability to adapt readily to changes in the environment.
- Social skills- indicate the skills necessary for interacting successfully with peers and adults in home, school and community settings.
- Leadership- indicates the skills associated with accomplishing academic, social, or community goals, including the ability to work with others.
- Functional communication- indicates the ability to express ideas, and communicate in a way others can easily understand.
- Study skills- indicate the skills that are conducive to strong academic performance, including organisational skills and good study habits (Reynolds and Kamphaus, 2004).

T-scores were calculated. These scores indicate the distance of scores from the norm-group mean. They are standard scores with a mean of 50 and a standard deviation of 10. Scores of 70 and above are clinically significant and very high in the adaptive scale, whilst scores of 60 to 69 are clinically at risk and high on the adaptive scale. Scores of 41 to 59 are considered average on both clinical and adaptive scales. Scores of 31 to 40 are considered low and at risk on the adaptive scale. Scores of 30 and above are considered very low and clinically significant on the adaptive scales (see Appendix C for individual scores).

Hyperactivity: All migrant children scored between 40- 59 indicating a low/average, indicating typical levels of activity displayed by the average child of this age. Two refugee children scored between 41-49 indicating a low/average, indicating typical levels of activity displayed by the average child of this age. Two refugee children scored 62 indicating problematic levels of activity where the child may rush through things or bother other children.

Aggression: All migrant children scored between 43- 50 indicating a low/average,

indicating typical levels of aggression as displayed by the average child of this age. Two refugee children scored between 46-49 indicating a low/average, indicating typical levels of aggression displayed by the average child of this age. Two refugee children scored 70 indicating problematic levels of aggression where the child may hit or threaten other children.

Conduct problems: All migrant children scored between 41-53 indicating a low/average, indicating typical levels of conduct problems as displayed by the average child of this age. Two refugee children scored between 41-42 indicating a low/average, indicating typical levels of conduct problems as displayed by the average child of this age. Two refugee children scored 66 indicating problematic levels of conduct problems where the child may engage in cheating at school or truancy.

Anxiety: All migrant children scored between 39- 50 indicating a low/average, indicating typical levels of anxiety as displayed by the average child of this age. All refugee children scored between 38-42 indicating low/average typical levels of anxiety as displayed by the average child of this age.

Depression: All migrant children scored between 42- 53 indicating a low/average, indicating typical levels of depression as displayed by the average child of this age. Three refugee children scored between 48-50 indicating a low/average, indicating typical levels of depression displayed by the average child of this age. One refugee child scored 70 indicating problematic levels of depression where the child may display sadness or be overwhelmed.

Somatisation: All migrant children scored between 42- 50 indicating a low/average, indicating typical levels of somatisation as displayed by the average child of this age. Three refugee children scored between 42-43 indicating a low/average, indicating typical levels of somatisation displayed by the average child of this age. One refugee child scored 63 indicating problematic levels of somatisation where the child may complain of headaches or general pain.

Attention problems: All migrant children scored between 38-54 indicating a low/average, indicating typical levels of attention problems as displayed by the average

child of this age. Three refugee children scored between 45-56 indicating a low/average, indicating typical levels of attention problems displayed by the average child of this age. One refugee child scored 64 indicating problematic levels of attention problems where the child may give up easily or be easily distracted.

Learning problems: All migrant children scored between 42- 50 indicating a low/average, indicating typical levels of learning problems as displayed by the average child of this age. Two refugee children scored 54 indicating a low/average, indicating typical levels of learning problems displayed by the average child of this age. Two refugee children scored between 64-74 indicating problematic levels of learning problems where the child may have difficulty with reading, maths and organisational skills.

Atypicality: 3 migrant children scored between 43- 49 indicating a low/average, indicating typical levels of atypicality as displayed by the average child of this age, whilst one migrant child scored 79 indicating a high score indicative of problematic levels of atypicality where the child may be easily side tracked or display repetitive thoughts. Two refugee children scored between 40-44 indicating a low/average, indicating typical levels of atypicality displayed by the average child of this age. Two refugee children scored 63 indicating a high score indicative of problematic levels of atypicality where the child may be easily side tracked or display repetitive thoughts.

Withdrawal: 3 migrant children scored between 38-54 indicating a low/average, indicating typical levels of withdrawal as displayed by the average child of this age whilst one migrant scored a high score of 64 indicating problematic levels of withdrawal where the child may engage in shyness or avoidance. Three refugee children scored between 33-53 indicating a low/average, indicating typical levels of withdrawal displayed by the average child of this age. One refugee child scored 71 indicating problematic levels of withdrawal where the child may engage in shyness or avoidance.

Adaptability: All migrant children scored between 45 -53 indicating an average/high, indicating typical levels of adaptability as displayed by the average child of this age. All refugee children scored between 40 -42 indicating an average/high, indicating typical levels of adaptability as displayed by the average child of this age.

Social skills: All migrant children scored between 42 -54 indicating an average/high, indicating typical levels of social skills as displayed by the average child of this age. All refugee children scored between 33 -36 indicating an average/high, indicating typical levels of social skills as displayed by the average child of this age.

Leadership: All migrant children scored between 45 -61 indicating an average/high, indicating typical levels of leadership as displayed by the average child of this age. All refugee children scored between 31 -36 indicating a low score, indicating below average levels of leadership where the child may display indecisiveness and problems working under pressure.

Study skills: All migrant children scored between 44-57 indicating an average/high score, indicating typical levels of social skills as displayed by the average child of this age. All refugee children scored between 33 -36 indicating a low score, indicating below average levels of study skills that may include incomplete homework and poor study habits.

Functional communication: 3 migrant children scored between 46-60 indicating an average/high score, indicating typical levels of functional communication as displayed by the average child of this age whilst one migrant scored 36 indicating below average levels of communication skills that may include unclear communication and inappropriate responses to questions. All refugee children scored between 24 -34 indicating below average levels of communication skills that may include unclear communication and inappropriate responses to questions.

Summary

Migrant children generally appeared to have settled in the classroom routines with minimal difficulties. Refugee children in this exploratory study settled in the classroom but may have the tendency to display difficulties with leadership, study skills and functional communication. They also appear to have more aggression and conduct problems however refugee children were also found to have age appropriate adaptability and social skills. This indicates that they have the ability and skills to adapt and adjust positively in a classroom environment to encourage learning and peer socialisation to

occur. It was also found that the elevated scores were not always attained by the same participant, rather these were scattered across the participants apart for one refugee who appeared to attain 5 elevated scores in the following subsections: aggression, conduct problems, depression, somatisation and attention problems. The same refugee had also attained elevated scores on the Trauma symptom checklist for young children.

Chapter 9 : Discussion and recommendation

“I find that a great part of the information I have was acquired by looking up something and finding something else along the way” Franklin P. Jones.

Introduction

New Zealand has welcomed both refugees and migrants from across the globe. This has allowed for a mix of cultures and languages. Cultural and linguistic diversification does however bring with it a range of difficulties particularly for professionals working with foreign population groups. An adequate assessment battery for speech-language therapists to assess migrant and refugee children is presently lacking in New Zealand hence Speech-language therapists use varied assessments with the assistance of interpreters. The New Zealand Speech Therapists Association in accordance with speech therapists in Group Special Education strongly supported the need for research with these groups and the development of an appropriate assessment battery. This exploratory study aimed to determine an assessment battery for use in examining English language acquisition in refugee and migrant children and to highlight the benefit of using measurement tools that determine incremental change over time in contrast to the use of standardised psychometric tests. The study explored a selected assessment battery and gathered data in five main focus areas, namely: cognition, English language, trauma, classroom behaviour, developmental and birth information.

9.1 Main findings

Effective assessment on which to base English language stimulation programmes is vital to resettlement, optimising the linguistic acquisition and academic success in refugee and migrant children. This exploratory study found the proposed test battery was an effective choice for use in the assessment of both migrant and refugee children, as the battery allows for dynamic assessment of children from diverse groups, that is, the test may be repeated over time and the student may be tested against their own skill level to note small incremental change and growth and development over time for both linguistic as well as cognitive development. The battery also proved to be an unbiased means of assessing students' English language and cognitive skills as the selected tests including the Leiter R and the CASL test, are reported to assess cognition and English

language skills in an unbiased manner and are especially designed for students for whom English is not their first language. The study heightens the reader's attention to the fact that both refugees and migrants presented with considerable delays of a few years when tested against an English speaking population. This exploratory study also discovered that if therapists looked beyond the test age equivalents of the participants particularly for the Leiter-R (cognitive test) and CASL (Oral English language test), and adopted the descriptive analysis and growth measurement profiles instead, they would obtain information of the cognitive and linguistic capabilities of the participants. The descriptive analysis provides clinically useful assessment data that provides a basis for intervention. The growth measurements provide a different picture of the child; presumably with repeated measurements the accuracy of these growth assessments will become more apparent which will be a goal for future studies.

A very important finding also was the fact that all participants presented with age appropriate or above age cognitive skills when using the growth score profile, despite their delays on test age equivalents on the English language test. The central point in this argument to better understand the relationship between L1 and L2 is the encouragement of "continual cognitive development" (Collier, 1995; Genesee, 1987). Ongoing assessments of cognitive and academic skills are very important, and uninterrupted cognitive, academic and linguistic development should be paramount at all times. These three components are of equal importance in the early schooling of students and should be neither neglected nor over emphasised (Collier 1995).

The migrants had received formal schooling in English prior to entry into New Zealand whilst the refugees did not. The scores obtained by both groups on the tests used are in accordance with what the researcher had anticipated. The participants were not expected to perform at age and grade levels as their English speaking peers. This is an occurrence which develops with time. As Collier (1995) contends that if immigrant students had some schooling in their first language (2-3 years) before they were introduced to the second language in the foreign country, they then, took between 5-7 years to reach the same age or grade level as the native English-speaking peers. In this exploratory study, the author was fully aware of the fact that rather than determine participants English language skills against the ability of their New Zealand English speaking peers, the study instead aimed at determining an effective and battery of tests that would provide a fair assessment of the need and areas that warranted intervention, so that speech-

language therapists may be better able to provide an equitable and efficient service to children from non English speaking backgrounds.

The Behaviour assessment system for children was found to be a rather useful tool and quite sensitive in determining adverse classroom behaviour. Being able to provide professionals working with the students early and accurate information pertaining to their classroom behaviour will allow for quicker and effective intervention. The BASC-2 test would serve as an effective measure to assess behaviour at entry into the classroom to determine specific areas of difficulty that need to be worked on and to repeat the measure over time to determine change and adjustment.

This is of benefit to the student, teacher as well as the students' social and classroom relationships. Migrant children generally appeared to have settled in the classroom routines with minimal difficulties. Refugee children in this exploratory study settled in the classroom but may have the tendency to display difficulties with leadership, study skills and functional communication. They also appear to have more aggression and conduct problems however refugee children were also found to have age appropriate adaptability and social skills. This indicates that they have the ability and skills to adapt and adjust positively in a classroom environment to encourage learning and peer socialisation to occur if problems are identified early and remediation and supports provided.

Whilst the Trauma Symptom Checklist for Young Children was found to be an effective tool, it was found that either participants preferred not to talk about past trauma or had not experienced trauma in the small sample tested in this study. Regardless of the case in this instance it was not found to reflect significant experienced trauma in the participants apart from one refugee student who indicated being fearful when not with her family. This same student also displayed odd classroom behaviour culminating in fear, aggression, learning problems and depression. This was a useful tool as paired with the BASC-2, would allow individuals working with this student to identify problem areas and provide her with the necessary supports so that these fears and behaviours may not hinder her academic progress, resettlement and English language acquisition. Generally this tool did not yield any clinically significant trauma symptomatology however it did indicate possible concentration difficulties, which could impact on classroom learning and hence may still retain value in its inclusion in the battery when

obvious past trauma is known from background history.

The standard developmental history was a detailed yet effective tool in obtaining a detailed case history .It is a useful tool for its inclusion in the test battery.

9.2 Specific issues

Recruitment

There was an initial difficulty with confirming the choice of school and in obtaining support from the school principals for the conduction of the study in the school setting. Refugee parents were more difficult to recruit possibly due to a lack of understanding, lack of trust or fear. Refugee parents viewed participation as a means of possibly showing up inadequacies/failures in their children. Migrant parents were very keen on participating in the study as they felt that their child would benefit from participation. Migrant parents viewed participation as a means to develop their child's skills. Parents were keener to participate once they fully understood the nature and purpose of the study. The recruitment process was enhanced with the assistance of the deputy principals.

New Zealand accepts 750 quota refugees per annum. If this study were to be replicated on a larger scale refugee participants would be difficult to recruit as there is a limited number of refugee children, which is dependent on the annual quotas (and for which the nationalities may vary a lot from year to year). Refugee families also appear to be wary of participating in research, and the present method of recruitment through schools may not be optimal for this population. Therefore for any future research in this area there is a need to research the feasibility of other recruitment methods for this population, or to accept a long recruitment period to achieve the optimal number of participants, or to consider focusing on migrants only.

It will also be important to determine in a larger study the use of the proposed test battery by recruiting migrant participants from varied countries, varied degree of English language use prior to entry into the country, and varied English language use in the home environment. This is important because ones primary/native language lays the foundation for language development to occur and all other languages acquired thereafter are based on this initial language acquisition and on the ongoing maintenance

of the primary language whilst acquiring a second language. It will also serve to determine whether varied English language usage in the home environment had any effect of its acquisition. It is postulated that poor English language modelling by parents is contra-indicated as compared to excellent native language modelling by the same parents. It will continue to be important to recruit participants from schools with varied decile ratings. A school's decile indicates the average socio-economic status of families with school-age children living in the catchment area of school. School deciles range from 1 (lowest) to 10(highest). Recruitment for this study was by convenience sampling. The two schools selected were chosen as it was predetermined that the identified schools had participants who would meet the recruitment requirements.

Interpreters

Professional bilingual assessments by therapists are ideal however not often available. Fradd et al. (1990) contends that although language differences among students in U.S. schools have always presented communication difficulties, the problem has become more widespread with the rapid increase of limited English language proficiency students during the last decade. Similarly in the past decade, New Zealand has seen a rapid population growth and change through immigration. The effects of migration and of growth within the existing population are likely to be felt in New Zealand schools in the near future. Data from the 2001 census shows that 15% of children under the age of 15 years speak more than one language (Department of Statistics, 2002). According to Fradd et al. (1990) the value and importance of persons who can communicate ideas and intents across languages and cultures has long been recognized. An interpreter/translator provides an important service and serves as a bridge between two cultures. They are vital to conducting fair and accurate evaluations of English language learners and in working collaboratively with parents with no or limited English language proficiency. In this exploratory study interpreters served specifically to assist parents' understanding in the questionnaire completion.

There were no major problems with working with interpreters in this study apart from the difficulty of trying to co-ordinate suitable times for parent interviews paired with interpreter and researcher availability. The researcher took care to advise and educate interpreters of the nature of the study and the important role that they played in facilitating the researcher. This is supported by research conducted by Farooq and Fear (2003) who state for both the interpreter and clinician to work effectively in a

collaborative manner, they both need to be aware of the style of the other and what each expects of the other. The continued use of different interpreters, from varied languages is expensive. The use of interpreters is expensive, and managing multiple language groups in a large study adds to this expense, on top of the coordination issues of interpreters as well as interviewers, therefore there is a need to either minimise the number of language groups covered, or have enough funds available to cover coordination and interpreter costs.

Assessment: standardised test or not?

Research dictates that the assessment of culturally and linguistically diverse students is still problematic across the globe (Mc Laughlin, Blanchard and Osanai, 1995). Mc Laughlin et al. (1995), contend that the goal of assessment is to assess the child's languages without imposing standardisation on their performance but rather allowing children to demonstrate what they can in their own unique ways. They further contend that reporting must include narrative writing, language sampling and observations of language development. Although professionals rely on test scores for measuring progress standardised test scores are ill suited to students from non English speaking backgrounds.

Johnston (2007) reports that tests yield stable scores over time and hence are insensitive to change and hence are unsuitable in determining progress over time. Research conducted at the Ministry of Education (New Zealand, 2004) indicates that it is important to realize, that "standardized diagnostic tests are generally insensitive to the subtleties of ongoing functional communication" (Swanson & Watson, 1989, p. 155). Therefore, in addition to or in place of standardized tests, a typical speech/language evaluation should include obtaining a language sample that seeks to capture how the student performs in an actual communication situation. According to Losardo et al. (2001), "Alternative" is a broad term that refers to various assessment approaches that offer alternatives to using norm-referenced tests for measuring children's developmental abilities and progress. Alternative assessment procedures can easily be integrated into and across everyday activities, draw from observations and interactions with children and families.

While traditional standardized tests certainly have their place as diagnostic tools,

professionals need to be careful about how standardized tests are interpreted and used. Paradis (1995) from the University of Alberta argues that the method of testing children from NESB must change. She reports that the use of English standardized tests with non-native English-speakers is not a good practice. She argues that one cannot uncritically use tests developed for native speakers with children who have been exposed to English for just one year. She further adds that the practice of using standardised English tests on non native English speakers usually results in many inappropriate referrals to the speech language therapists as these children perform very low and present as linguistically impaired, which is not correct.

Paradis (1995) suggests that instead of comparing the children from NESB with their monolingual English peers, they should rather be compared to other children who are learning English as a second language. Caesar and Kohler (2007), conducted research to determine the practices used by speech language therapists when assessing bilingual students. They found that speech language therapists used formal standardised tests more frequently than informal methods. The authors contend that this study emphasises the need for training academic programmes to disseminate information pertaining to alternate methods of testing bilingual children.

In this exploratory study despite the fact that standardised scores comparing participants to English language peers is deemed less effective in children from NESB, this has nevertheless been included in this study to lend for comparison of a NESB student tested in English (L2) as well as comparing their achieved scores as a growth measurement of their own ability rather than against the norms. The results are quite interesting as it serves to confirm that all the participants had some skills in their L2 and as they all had adequate cognitive skills it can be predicted that should their cognitive skills continue to be stimulated that their L2 would also be acquired accordingly over time. Growth scores which allow for small incremental progress over repeated test times depict these children in a more positive manner rather than clustering them all into either slow learners or more severely as linguistically impaired. The researcher strongly supports “dynamic assessment” that is measuring what the child can do at this point in time and continuing to determine what supports are necessary to ensure learning occurs and then measuring change of knowledge over time (Pena, 2000, Hand, 2006).

Test battery: is the proposed battery a viable option?

The selected battery for this exploratory study was deemed appropriate. The Standard Development History was found to be in-depth and provided the researcher with sufficient information pertaining to the participant. This is a relevant test to include in further extensive studies.

Based on this exploratory study the TSCYC is a useful tool and may be used to complement other tests however, due to the limited benefit in this research it is recommended that the TSCYC be included in a larger study only if the researcher is aware that the participants have had definite PTSD symptoms as may be obtained from parents, case history, class teachers or medical professionals or in conjunction with screening questions to limit the impact on the participants. In this instance the tool may be able to yield further supportive data to confirm symptoms. It may also be useful to be used as a baseline measure of the child's adjustment in the country and to be repeated at definite points in their academic year to compare differences which may then indicate increasing stresses or further resettling and hence an increase, reduction or change in the presented original symptoms. It is useful as the parent reports on the behaviour hence it may be used with young children who may otherwise be unwilling to disclose symptoms. The scale does have the disadvantage in that the obtained information is second hand, reported on by the parent/caregiver and hence not observed in the child. Parents may be biased and report more or less symptoms than may be presented by the child in reality (Briere and Elliot, 1997). The TSCYC may be included as an additional tool rather than part of the core test battery.

The Leiter-R is a useful measure to determine baseline cognitive skills as well as areas of difficulty for remediation. This tests growth scale scores are an effective tool in place of a normative scale as is evidenced in this study with respect to the difference in the participant's performance on composite scores versus growth scores. It also supports the theory that adequate cognitive development leads to appropriate skills necessary for language development to occur. All the participants performed with better cognitive skills when their scores were interpreted using growth scores. This test was enjoyable and participants felt comfortable as they did not have to talk, read or write. This is a very useful test to include as a core foundation tool of cognitive skills.

The CASL test presented with varying difficulties for all the participants as can be expected with this test assessing their English language skills (L2). All migrants had previous exposure to English in their native country and all refugees had no previous English exposure. The use of norms based on English speaking children further served to highlight the difficulties and or delays in all the participants, however this test specifically allows for descriptive interpretation for students from NESB, hence this allowed for a determination of a baseline level of English language skills/ability for each participant which then indicated that they all had some exposure to the English language since their arrival to New Zealand. The descriptive analysis and growth scores allow for subtle changes to be identified in students across the year. It serves to highlight progress that the student makes measured against their own scores over time.

Link between Leiter R scale and CASL

On comparing the scores of all participants for both the Leiter R and the CASL scale antonyms, it is evident that there is a similar delay on standardised scores for both tests. When comparing the delay in the Leiter R test with the syntax construction test, refugees presented with a slightly elevated delay for the CASL syntax construction test whilst migrants presented with similar age delays for both the tests. When comparing the growth scores of the Leiter R test with the scores obtained by all participants on the CASL test, it is evident that all participants have appropriate cognitive skills or better cognitive skills, than their obtained standardised CASL scores. This would serve as a good predictability measure that should their cognitive skills continue to develop, that their language skills will also develop in English which is their second language. Hence both the CASL and the Leiter R tests are deemed useful core tests to be included in an extensive study.

The BASC-2 test would serve as an effective measure to assess behaviour at entry into the classroom to determine specific areas of difficulty that need to be worked on and to repeat the measure over time to determine change and adjustment. This measure yields information about the student that would be useful to all professionals working with the student. This is a useful measure to continue to include in future studies. Once again it allows for behavioural change and adjustment over time, hence would serve as a useful tool to monitor resettlement, adjustment and behaviour change.

Sample size

The sample for the current study was eight. For the purposes of this exploratory study and mainly for testing the feasibility of the test battery this small number was deemed adequate after consultation with a statistician. The current sample allowed for the testing of the battery with ease of participant access. A full study to investigation associations and longitudinal trends would require a much larger sample size

Testing and Test points

In the current study the test administration took up to 1 hour 45 minutes. This was tiring for the participants but was a preferred option as suggested by the participating schools. Principals and teachers preferred students to be tested once rather than twice over two days. A recommendation for an extensive study could be for participants to be administered the tests with a rest period of several hours between each administration but the test battery could still be completed in a days testing. This is suggested so as not to grossly affect the school program but to also prevent participant fatigue, which could be contraindicated. As the current study was merely a test of battery feasibility the testing occurred once. It would however be interesting if the test points could be at the start of the academic year and a repeat a year later to determine change within the individual's initial and later scores.

Language acquisition and the L1 / L2 balance

According to Professor Stephen May (August 2007), educational research over the last 40 years strongly supports that the most effective means by which second language speakers can learn English with academic success is when they are allowed to *maintain* their L1 currently, whilst learning English. Conversely, the *least* effective means of learning English, and of achieving academic success, is when English replaces the L1, as is still common in most NZ schools today, apart from Maori-medium education. Students in New Zealand schools are generally involved in a “pull out” or “withdrawal” approach to teaching English.

May (2007) reports that this is an approach that continues to dominate the NZ schools, despite its well attested limitations as identified in the wider literature. He also acknowledges that a more recent move to promoting a more integrated classroom based approach to teaching and learning is using bilingual assistants in the classroom. May (2007) contends that bilingual/immersion builds on the first language skills which in

turn ensures students learn academic English more effectively. A very effective example of a successful programme is the Two -Way Bilingual Education which originated in USA. In the USA programme students received 50% instruction in English and 50% in Spanish (Collier, 1997). Similar to New Zealand, most bilingual children in Canada, USA and Western Europe are sequential bilinguals in that are they speak their L1 at home and their L2 in school and the community (Paradis, 2006). Many studies have found that cognitive and academic development in the first language has an extremely important and positive effect on second language schooling (e.g. Bialystock 1991; Collier, 1989, 1992b; Garcia, 1994; Genesee, 1987, 1994; Thomas & Collier, 1995).

Academic skills, literacy development, concept formation subject knowledge, and learning strategies developed in the first language will all transfer to the second language. As students expand their vocabulary and their oral and written communication skills in the second language, they can increasingly demonstrate their knowledge base developed in the first language. Several studies have documented the transfer of literacy skills from a first to a second language. These studies are important in that they suggest a mechanism explaining the positive effects of time spent on first-language literacy for second-language literacy. One study in the Netherlands (cited in Snow, undated), found that word recognition and reading comprehension levels in the language in which literacy instruction had occurred correlated with the same measures in the other language for Turkish-Dutch bilinguals (Verhoeven & Gillijns, 1994). Studies that show high inter-language correlations on literacy and literacy-related language tasks were reviewed by Cummins (1979). Cummins carried out research demonstrating transfer even for such orthographically and typologically distant language pairs as English and Japanese and English and Vietnamese (Cummins, 1984). Researchers have consistently found stronger relationships between literacy tasks than between oral-language tasks across the bilingual person's two languages (e.g., Lanauze & Snow, 1989), again suggesting that time invested in developing first-language literacy works to the advantage of second language literacy achievement. Furthermore, some studies indicate that if students do not reach a certain threshold in their first language, including literacy, they may experience cognitive difficulties in the second language (Collier, 1987; Collier & Thomas, 1989; Cummins, 1981, 1991; Thomas & Collier, 1995).

The key to understanding the role of the first language in the academic development of

the second language is to understand the function of uninterrupted cognitive development. When students switch to second language use at school and teachers encourage parents to speak in the second language at home, both students and parents are functioning at a level cognitively far below their age. Whereas, when parents and children speak the language that they know best, they are working at their actual level of cognitive maturity. Cognitive development can occur at home even with non-formally-schooled parents through, for example, asking questions, solving problems together, building or fixing something, cooking together, and talking about life experiences.

In this exploratory study all the participants spoke their native language at home and in their social community and were spoken to only in English at school. The researcher acknowledges the positive effect maintaining L1 has whilst learning L2, however in this exploratory study, the aim was to assess participants as closely as possible to the way they are currently being assessed in New Zealand by speech language therapists. Thus participants were only assessed in their L2. This exploratory study was presented at the Biennial Speech Language Therapy Conference in Christchurch in April 2006, and based on the discussion by speech therapists both locally and internationally, it is recommended that any further research in the area should include some measure of the participant's primary language skills. Assessment in the child's native language is very important, however in view of the lack of available tests in the child's native language and in view of the fact that the researcher's primary language is English, conducting the assessment in the child's language and or using tests in the child's language was not feasible. The researcher nevertheless acknowledges the need for a baseline level of performance in the child's native language.

Chapter 10 : Limitations and recommendations for future research

“Creativity is allowing yourself to make mistakes. Art is knowing which ones to keep
“Scott Adams

Limitations

The lack of a baseline assessment in the participant’s primary language means that the level of linguistic skills in the participant’s first language could not be compared with second language acquisition of English. The absence of repeated measurements has resulted in the inability to determine the presence of any incremental change/progress over time. The shortfall of not having conducted a spontaneous speech sample of naturally occurring speech i.e. speech that the participant is capable of producing independently be this in English or the native language does not allow for speech sample comparisons between the participants native language and English language skills.

This study included a small sample this means that the results are not generalizable. Whilst the study took cognisance of including both a high and low decile school, only two schools were included and thus were not representative enough of all the deciles. The country of origin and languages spoken varied a lot between migrant and refugee participants meaning that comparisons between the groups are confounded by cultural and linguistic structural differences.

It may have been appropriate to have conducted parent interviews with open ended questions when exploring trauma rather than the use of a scale which could have been affected by the parents’ biased response levels.

The Leiter R data are quite complex and difficult to follow hence a summary table indicating each participants response with respect to composite scores, growth score, age equivalent growth scores and individual subtests would have allowed for effective reading and understanding.

Recommendations for future research

Chinese comprise the majority of the migrant population (NZ Statistics, 1997) and it is likely that these participants would be the easiest to recruit. However since there is a large Chinese population there are potentially accessible support networks in place for these migrant families. The most challenging problems with refugee recruitment include the (variety of spoken language, country of origin, and recruitment issues based on the limited intake), however whilst this group has potentially the most problems and therefore the most to gain, they would also be more difficult to recruit. The New Zealand Speech Therapists Association (NZSTA) in accordance with speech therapists in Group Special Education (GSE) strongly supports the need for more research by speech language therapists with this Chinese population group e.g. "An investigation of the development of English language acquisition in Chinese primary school children from non- English speaking backgrounds". This would increase the awareness and knowledge of speech language therapists who work with diverse population groups from NESB.

It is recommended that a larger study should be limited to a single migrant group. This will also allow for the cost effective use of interpreters in the study. According to Fradd et al. (1990) the value and importance of the services of persons who can communicate ideas and intents across languages and cultures has long been recognized. An interpreter/translator serves as a bridge between two cultures. They are important to conducting fair and accurate evaluations of English language learners and in working collaboratively with parents with no or limited English language proficiency.

The Children's Communicative Checklist-2 which identifies pragmatic impairment in children with communication problems is recommended to be completed by both parents (for primary language skills and by teachers for English language skills). This would allow for comparisons of both the participants primary and second language communicative skills. It may also be valuable for parents to complete a questionnaire pertaining to home language use and an indication of English language use and proficiency for the child as this would serve as an important factor to consider in determining English language acquisition. In an extensive study, the use

of a combination of standardised tests as well as spontaneous speech sample to assess and examine factors that influence the acquisition of English is preferred. It is recommended that participants be tested at baseline as was the case in this exploratory study, but that they also be tested further at 1 and or 2 year intervals to allow for the determination of incremental progress and change over time.

A review of the associative link between the work of speech language therapists and ESOL providers in schools would be beneficial in a future study as this co-operative service delivery would have an impact on the English language acquisition in both migrant and refugee children.

Chapter 11 : Conclusion

“The purpose of learning is growth, and our minds, unlike our bodies, can continue growing as we continue to live “Mortimer Adler

New Zealand has become a multi-cultural country from the initial Maori settlement, with the arrival of the British settlers, and later the arrival of Pacific Island, Asian and other migrants. A country is successful if it respects and gives value to other languages and cultures. The Honourable Governor General of New Zealand’s Catholic church Anand Satyanand (2006) likens the countries multicultural endeavours by quoting a Maori proverb” **E Koekoe te tui, e ketekete te Kaka e kuku te kereru. The tui sings, the kaka chatters, the pigeon coos.”** The Governor General interprets this to mean that “people can live together harmoniously whilst celebrating their differences”. New Zealanders today recognise that migrants and refugees need to retain their own culture languages and customs but are definitely part of the country.

Speech language therapists in New Zealand continue to acquire an interesting caseload of clients to work with as a direct result to migration and immigration. They will continue to face challenges as they unravel the linguistic diversity enigma but will no doubt benefit from continued research in the area of assessment and management of children from NESB. Speech language therapists will also benefit if they receive adequate support and academic training at the speech language therapy training universities on working with interpreters and on working with children from non-English speaking backgrounds. This contention is supported by Caeser and Kohler (2007)

There is a crucial need for the development of an assessment framework as well as further research evidence to develop a professional baseline for speech therapists working with refugee and migrant children, with particular reference to their English language skills and learning ability. The Ministry of Education and other professionals continue to work jointly to increase the quality of their service provision to facilitate an easier adjustment, resettlement and effective learning for migrant children. Research on migrants conducted by speech language therapists is presently lacking in New Zealand. Resources and instructional methods currently being used by schools in New Zealand

when working with children from NESB are varied and eclectic in nature. An overview of current practices when dealing and working with this population would be valuable.

It is felt important that a review of current practices well as views on service delivery by speech language therapists, teachers and principals be considered. The pivotal point in this study is to better understand the relationship between L1 and L2 through the encouragement of “continual cognitive development” Ongoing assessments of cognitive and academic skills are very important. Uninterrupted cognitive, academic and linguistic development should be paramount at all times. All three are of equal importance in the early schooling of students and should be neither neglected nor over emphasised. (Collier 1995).

In conclusion, the identified test battery encompassing the Leiter R, Standard Developmental History, Comprehensive Assessment of Spoken Language, Trauma Symptom Checklist for Young Children and the Behaviour Assessment System for Children was found to be a feasible battery for speech language therapists to use when initially assessing English language skills in children from NESB in order to obtain sufficient baseline information as well as a means of determining small incremental growth/change with progress over time. This study supports dynamic assessment i.e. measuring what the child can learn in the present and measuring knowledge change over time and what support is required to ensure that learning occurs, rather than measuring what the child has already learned (Pena, 2000).

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APPENDIX