Exploring the Insiders’ Experience of Language Assessment of Bilingual Samoan-English Speakers with Aphasia:

“It’s hard”

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Abstract

Background: The Samoan population is a growing population and one with an estimated high incidence of aphasia. Language assessment with bilingual individuals is said to be a challenging area of Speech-Language Therapy practice. Language assessment of bilingual Samoan-English speakers with aphasia is a field with limited research, and the specific experience of the individuals involved is an important factor to consider in improving SLT practice with this population.

Aims: The current thesis aimed to explore the experience of language assessment of bilingual Samoan-English speakers with aphasia as perceived by those involved in the assessment process.

Method: Two qualitative studies were utilised to address the aims, the first was a single case study observing the process of language assessment of a bilingual Samoan-English speaker with aphasia and follow-up interviews with other participants involved. The second study was a focus group with Speech-Language Therapists who had experience with language assessment of bilingual Samoan-English speakers with aphasia.

Outcome and results: The results of the case study revealed eight themes: language assessment of bilingual Samoan-English speakers with aphasia is a hard process for the individuals involved; language assessment of bilingual Samoan-English speakers with aphasia is a team process; differences in understanding of communication impairments and the assessment process; time; preparation; appropriateness of assessment tasks, resources, and processes; uncertainty; and flexibility. The results of the focus group indicated eight categories: Speech-Language Therapists' background, using interpreters, family involvement, Samoan language and culture, getting an initial impression of and building

rapport with the individual with aphasia, assessment tasks and resources, determining which language(s) to assess and logistics of assessment.

Conclusion: Language assessment of bilingual Samoan-English speakers with aphasia is a challenging area of Speech-Language Therapy practice. Challenges are multifaceted and although some challenges may be present in all language assessment with individuals with aphasia, they are further exacerbated by the addition of multiple languages, people, and culture. Helpful strategies identified in this study may aid in improving the overall experience.

Chapter 1

Introduction

1.1 Overview

The bilingual Samoan-English speaking population is one of the growing Pacific demographic groups within New Zealand (Statistics New Zealand and Ministry of Pacific Island Affairs, 2010). Stroke, a common cause of the acquired language disorder of aphasia, occurs at significantly higher levels in the Pacific population (Blakely, Mhurchu, Wall, Rodgers, Jiang, & Wilton, 2007). It is therefore becoming increasingly important for Speech-Language Therapists to have a better understanding of aphasia in this bilingual population, including developing more knowledge about language assessment. This thesis contributes to the literature in the area by exploring the insiders' perspective on language assessment of bilingual Samoan-English speakers with aphasia.

1.2 Aphasia and language assessment

Aphasia, which is most commonly caused by stroke, is "an acquired communication disorder…characterized by an impairment of language modalities" (Chapey, 2008, p. 3). Bilingual aphasia involves aphasia in an individual who is bilingual or has "... a range of levels of knowledge of a second language" (Roberts & Kiran, 2007, p. 110).

1.3 Assessment

Assessment is defined as "…the process of collecting and interpreting relevant data for clinical decision making…[and] includes a series of problem solving activities to assist in making decisions that will result in effective management and intervention for clients with communication disorders" (Paul & Cascella, 2007, p. 40). Assessment can be carried out for a number of reasons including screening, determining the diagnosis, determining eligibility,

establishing a baseline, developing intervention, and tracking progress, with the purpose of the assessment defining the tools that are used (Paul & Cascella, 2007). Patterson and Chapey (2007) go on to further define language assessment in people with aphasia as "…an organized, goal-directed evaluation of the interrelated, integrated components of communication: cognitive, linguistic and pragmatic" (Patterson & Chapey, 2007, p. 66). They report that the purposes for assessment, specifically with assessment of communicative ability, are to describe the strengths and weaknesses of language behaviour, identify problems, and determine intervention goals (Patterson & Chapey, 2007). Obtaining relevant information with assessment requires careful planning (Paul & Cascella, 2007) and the use of valid and reliable tools is recommended (Roberts, 2008).

Language assessment can potentially be a more complex process in bilingual aphasia than monolingual aphasia due to possible cultural differences, uncertainties regarding clinical presentation of individuals with bilingual aphasia, and premorbid cognitive or linguistic variables (Ansaldo, Marcotte, Scherer, & Raboyeau, 2008; Lorenzen & Murray, 2008). Further to this, Lorenzen and Murray (2008) report that when planning assessment for bilingual individuals, specific linguistic and/or cultural aspects affecting the assessment should be considered (Lorenzen & Murray, 2008).

To date, limited research has explored the process of assessment in speakers with bilingual aphasia. Early research into bilingual aphasia consisted largely of case reports describing the presentation and recovery patterns of individuals with bilingual aphasia (Roberts, 1998). More recently, researchers have begun to investigate treatment of language impairment in people with bilingual aphasia (Boles, 2000; Kohnert, 2004); however, further research is needed to inform and improve the assessment of aphasia in bilingual speakers. Furthermore, the characteristics of language may vary with culture and

therefore could have an impact on presentation of the aphasia (Ansaldo et al., 2008). As such, bilingual aphasia research needs to be targeted at particular language groups of interest. The bilingual Samoan-English speaking population is a growing demographic within New Zealand (Statistics New Zealand and Ministry of Pacific Island Affairs, 2010) and to date there is very limited research to guide Speech-Language Therapists in relation to aphasia assessment and management with this specific population.

1.4 Samoan population

1.4.1 Samoan demographics and health needs

In 2006, in New Zealand, the Pacific population made up 6.9% of the total population, growing from just 2,200 people in 1945 to around 266,000 in 2006. Half of this population was made up of people of Samoan ethnicity, numbering 131,000 people in 2006, with a growth of 98% over the previous 20 years (Statistics New Zealand and Ministry of Pacific Island Affairs, 2010). Moreover, a high proportion of the Samoan population reside in the Manukau region, where the present research study was conducted, with one in three of the Samoan population residing in the region and 64% of the Samoan population reporting the ability to speak the Samoan language (Anae, 2010).

Improving service delivery to Pacific people, and therefore the Samoan population, is included within the Ministry of Health's New Zealand Health Strategy, a national document outlining the health strategies being focussed on over specific time periods. One of the strategy's priority aims is to address the decline in the health status of Pacific people, reduce health inequalities, and work towards ensuring accessible and appropriate services for this group (Ministry of Health, 2000). That specific aim was created in an attempt to address the disparities in health status between the Maori and Pacifica populations as compared to the rest of New Zealand's ethnic populations. A further document was

released by the New Zealand Government in 2010, the 'Ala Mo'ui', which replaced all the previous documents pertaining to the health of Pacific people and "sets out the priority outcomes and actions for the next five years that will contribute to achieving the Government's overarching goal that all New Zealanders, including Pacific people, lead longer, healthier and more independent lives." (Minister of Health & Minister of Pacific Island Affairs, 2010, p. 2). This document illustrates the need for using holistic measures with Pacific people and highlights that improving health outcomes requires action from all health care sectors (Minister of Health and Minister of Pacific Island Affairs, 2010). The New Zealand Disability Strategy, another national health strategy that supplements the overarching health care strategy, also has specific objectives directed at participation of disabled Pacific peoples, aiming to increase access and quality of services for Pacific people (Ministry of Health, 2001), which undoubtedly includes provision of services within stroke assessment and rehabilitation (Ministry of Health, 2000).

1.4.2 Number of Samoan individuals who have aphasia in New Zealand

Stroke is the most common cause of aphasia with around one third of stroke survivors suffering from some form of aphasia (Aphasia Association of New Zealand, 2010). There are estimated to be over 16,000 people with aphasia in New Zealand, and with an average of 20 new stroke victims each day (Aphasia Association of New Zealand, 2010), the number of people with aphasia will continue to rise. Stroke is a common cause of adult disability and occurs at significantly higher levels in the Pacific population, with a stroke mortality rate more than double that of Europeans and an onset of stroke occurrence at a younger age, around ten to 15 years younger on average (Carter et al., 2006; Blakely, et al., 2007). Stroke at a young age creates an additional burden on family and support systems, and Auckland Regional Community Stroke study (ARCOS) data shows that while stroke

events within European populations are decreasing, incidence within Pacific populations is increasing (Carter, et al., 2006). Pacific people are also likely to present with more severe strokes than other New Zealand people including European, Maori, and Asian populations (Stroke Foundation of New Zealand, 2010).

With a high population of Samoan people within New Zealand and high prevalence of aphasia within the New Zealand population, it could be hypothesised that there are likely to be a significant number of Samoan people with aphasia. Due to the considerable hypothesised number of bilingual Samoan-English speaking individuals with aphasia in New Zealand, it is increasingly important to have a better understanding about bilingual aphasia in this population, including improved information about language assessment.

1.5 Speech-Language Therapists are required to provide culturally and linguistically appropriate services

1.5.1 Culturally appropriate services

Elements of culture and cultural understanding are important factors to consider when providing an appropriate Speech-Language Therapy service (Roberts, 2008; Westby, 2009). In New Zealand, the professional role of a Speech-Language Therapist requires appropriate consideration of the culture of their clients. The Competency Assessment in Speech Pathology (COMPASS® Speech Pathology Association of Australia, 2006), an assessment tool used in New Zealand to evaluate Speech-Language Therapy students, outlines generic competencies which need to be developed to an entry level to become a qualified clinician. These include elements of collaborative and holistic viewpoints in relation to clinical reasoning, using communication skills to facilitate effective practice (within cultural and situational components of communication), and demonstration of ethical behaviour, all of which reflect cultural competence. Specific competencies include items

relating to establishing significant others within a clients' life, deciding on the most appropriate intervention, and facilitating rapport and participation within therapy (Speech Pathology Association of Australia, 2006). Establishing significant others within a client's life and building rapport would be an important factor to consider when working with a bilingual Samoan-English speaker with aphasia given the importance of family in the Samoan culture (Anae, 2010). Deciding on the appropriate intervention and facilitating rapport would also require consideration of the individual's culture.

Professional bodies in other countries also require Speech-Language Therapists to provide culturally appropriate services. For example, the Royal College of Speech and Language Therapists (RCSLT) which is the professional body for Speech-Language Therapists in the United Kingdom and Ireland, also outlines in their core clinical guidelines that assessment with bilingual individuals should involve all of the person's known languages and address the person's abilities with a holistic view (Royal College of Speech & Language Therapists, 2005). The American Speech and Hearing Association (ASHA) has similar requirements and recommends that Speech-Language Therapists working in a multi-linguistic or multicultural situation be prepared to provide services to diverse clients (American Speech-Language-Hearing Association, 2004). It is also suggested that clinicians learn enough about the background of a client, including their culture, before administering assessment to establish what aspects of assessment may be difficult (Roberts, 2008). The views of these various professional bodies illustrate the widespread acknowledgement of culturally appropriate service provision across the Speech-Language Therapy profession.

Cultural competence, which has already been described as part of the assessment process (Roberts 2008), is also required to provide appropriate intervention for culturally and linguistically diverse populations (Westby, 2009). Cheng, Battle, Murdoch and Martin

(2001) indicate four critical elements for educating and training Speech-Language Therapy students: having a culturally competent faculty that confronts their own values and beliefs, creating a positive environment for discussing diversity issues, having a diverse student body, and providing a multicultural academic curriculum (Cheng et al., 2001). More specifically, the elements of adaptation to service delivery and provision of multicultural clinical education are essential to have more knowledge about and in turn improve service delivery for Speech-Language Therapy as a whole. Research in this area could provide knowledge and education for an adapted and enhanced service.

When working with individuals from the Samoan culture in particular, there are a number of important themes to consider, the main ones being family (aiga), collective society, and spirituality. Family within the Samoan culture refers to service to family, with respect and love being crucial for relationships (Anae, 2010). Roles within the family are dictated by the culture and the family can refer to extended members or even sharing within the whole community (Sobralske, 2006). This leads to the focus on a collective society within Samoan culture, rather than on an individualist society (Anae, 2010), with issues discussed collectively and no concept of the individual when talking about the self. Finally, spirituality is an important theme within the Samoan culture, with an emphasis on knowing that the whole self cannot be divided and that it consists of physical, mental, and spiritual aspects (Tamasese, Peteru, Waldergrave & Bush, 2005). Health is thought of as a spiritual balance with nature, with forgiveness creating balance, and illness viewed as an imbalance (Sobralske, 2006). In providing health care to Samoan people, these themes should all be respected and acknowledged as important and therefore it will be crucial for Speech-Language Therapists to have knowledge of these aspects of culture when trying to deliver culturally appropriate services.

1.5.2 Linguistically appropriate services

Along with culturally appropriate service, there is also a need for linguistically appropriate services. Within the Samoan culture the idea exists that language is important and intertwined with the fundamental values of family and society (Anae, 2010). As with culturally appropriate services, a linguistically appropriate service is a requirement of several Speech-Language Therapy professional associations. The RCSLT includes the recommendation that assessment with bilingual individuals should be matched to the linguistic background of the person (Royal College of Speech & Language Therapists, 2005). ASHA recommends that Speech-Language Therapists be able to identify an appropriate service provider in the absence of a bilingual clinician (American Speech-Language-Hearing Association, 2004). Again, the position of these professional bodies gives an indication of the international acknowledgement of the importance of providing linguistically appropriate care.

1.5.3 Importance of culturally and linguistically appropriate Speech-Language Therapy services for individuals with bilingual aphasia

Even though several challenges exist in relation to assessment of bilingual aphasia, Speech-Language Therapists have a professional obligation to understand aphasia in bilingual individuals and to develop appropriate treatments (Roberts & Kiran, 2007). As Roberts and Kiran (2007, p. 111) state, "We are slowly adding to our knowledge [in bilingual aphasia]...but need a great deal more information about valid assessment, optimal treatment methods, and determining prognosis." Yet, currently in New Zealand, there are only a small number of Speech-Language Therapists who identify themselves as being of Pacific Island ethnicity, which demonstrates that there are only a few bilingual Samoan-English speaking clinicians available in New Zealand.

Research by Kritikos (2003) acknowledges that it is hard to have Speech-Language Therapists from all language backgrounds and cultures and in fact that even when the Speech-Language Therapist is bilingual, this can affect decision making during the assessment process due to the Speech-Language Therapists own beliefs about language difficulty. In Kritikos' study (2003), he asked Speech-Language Therapists to respond to a questionnaire investigating their beliefs about role of Speech-Language Therapy input with bilingual individuals. The results outlined that there may be problems faced by Speech-Language Therapists when working with bilingual clients, including lack of access to bilingual clinicians, lack of knowledge, and difficulty distinguishing language differences from disorders (Kritikos, 2003).

1.5.4 Speech-Language Therapy assessment and bilingual aphasia

As stated previously, assessment of bilingual individuals with aphasia may present significant challenges for Speech-Language Therapists. There are a number of issues that make assessment of bilingual aphasia difficult, namely, cultural factors, speaker's levels of bilingualism, use of interpreters, use of tests in various languages, availability of published tests in various languages, types of impairment in bilingual aphasia, and types of recovery patterns shown by individuals with bilingual aphasia (Roberts, 2008; Ansaldo et al., 2008; Lorenzen & Murray, 2008).

In relation to the first of these factors, culture, Roberts (2008) suggests that the client's perception of the appropriateness of the clinician, their understanding of why the assessment is taking place, and how the therapist presents the tasks to the client, are all issues that may affect the assessment process with individuals with bilingual aphasia. Although Westby (2009) highlights the key need to consider the impact of culture when

working with individuals from different cultural backgrounds, there is little existing research that directly explores the role of culture in working with individuals with bilingual aphasia.

The level of bilingualism of the person with bilingual aphasia must also be taken into consideration, more specifically their premorbid level of language ability. The variations in a bilingual speaker's proficiency can be influenced by a number of factors including social circumstances, language history, communication needs, motivation, and language preference. Understanding premorbid language proficiency of a bilingual speaker is crucial for determining whether disordered communication patterns are indicative of premorbid abilities or poststroke language impairment (Kohnert, 2007; Lorenzen & Murray, 2008).

Another factor to consider is the higher likelihood that interpreters may be involved in the assessment process for bilingual people with aphasia. Roger and Code (2011) explored issues relating to validity of assessments involving use of interpreters. They videoed three aphasia assessments of separate individuals who spoke a language different to the Speech-Language Therapist (Cantonese, Vietnamese and Tagalog), in which the Western Aphasia Battery (WAB) was administered with a translator and the sessions were then transcribed and analysed by a bilingual Speech-Language Therapist for each language. Their findings indicated that content validity of the assessment was in fact threatened due to the involvement of interpreters during the assessment process. Some factors that may have affected the validity of the assessment included differing probability and frequency of words across languages, loss of syntax in the translated language, inconsistency in repetition, incorrect reporting back of information, interpreter expansion of what the client had said, and the actual form of the question being modified (Roger & Code, 2011). Kambanaros and van Steenbrugge (2004) found similar difficulties in their case study involving interpreter mediated assessment of a bilingual participant with aphasia.

Translations from the interpreter revealed errors in phonological domains which would normally indicate a language breakdown; however, phonological errors were not correctly identified and therefore could lead to an incorrect diagnosis (Kambanaros & van Steenbrugge, 2004). These studies highlight the complications of using interpreters in the assessment of bilingual patients, however, it is not always possible to have a bilingual Speech-Language Therapist for all languages spoken by patients with aphasia and therefore recommendations including prebriefing with the interpreter, being aware of the interpreters' limits and providing them with training or information (Roger & Code, 2011; Kambanaros and van Steenbrugge, 2004) should be utilized as often as possible when assessing aphasia in bilingual individuals.

In order to obtain a complete picture of the language ability of the person with bilingual aphasia, it is important that the patient is assessed in all languages spoken premorbidly (Royal College of Speech & Language Therapists, 2005; Paradis, 2004); hence the importance of considering the role of the interpreter during language assessment of individuals with bilingual aphasia. However, for many languages other than English, no reliable standardized aphasia assessments exist. Basic principles of validity, reliability, and adequacy of norms are important for all Speech-Language Therapy assessment; however, clinicians tend to develop their own translations of assessment for individuals with bilingual aphasia and then use these to compare aphasia in different languages (Roberts, 2008). There is also a lack of language assessments available for bilingual aphasia itself. The Bilingual Aphasia Test (BAT), an aphasia assessment designed by Paradis and associates (Paradis & Libben, 1987) which is adapted rather than directly translated into different languages to assess bilingual or multilingual individuals with aphasia (Fabbro, 2001), has been made available in many languages. Most recently it has been adapted into Cook Island

Maori (Miller Amberber, 2011), yet there is no version currently available for the Samoan language. This leads to a reliance on adaptation of available assessments to suit the needs of the clinician. As translation of standardized tests is not the most appropriate option, assessment needs to be adapted to suit the patient and situation (Paradis, 2004).

1.6 Current research involving health-related issues in the Samoan population

There is limited research focusing on bilingual Samoan individuals with aphasia in the field of Speech-Language Therapy. Although there have been investigations that have focused on the communication of typically developing Samoan children (Ballard & Farao, 2008; Westerveld, 2013; Hess, Woll & Boles, 2010), there is limited research investigating adult communication disorders in Samoan individuals. A recent systematic review found that there were no studies that focused on the assessment of bilingual aphasia in the Samoan population (Stenning, Howe, & Siyambalapitiya, 2012).

One study that was conducted in a related area investigated the familiarity of Samoan people with stroke, traumatic brain injury (TBI), and Speech-Language Therapy services in American Samoa (Isaki & Ainu'u, 2010). Thirty-two participants of various ages completed a questionnaire investigating these aspects, with the results indicating that 75% of participants were unfamiliar with stroke and TBI and 81% had never heard about Speech-Language Therapy. When asked further about rehabilitation services, 47% reported not knowing what care would be needed following stroke or TBI, and none of the participants suggested seeking Speech-Language Therapy services when asked what they would do if a family member had communication difficulties (Isaki & Ainu'u, 2010). This shows a lack of knowledge and understanding, within the Samoan population, about stroke and stroke rehabilitation services, including Speech-Language Therapy services.

Given the limited research focusing on the Samoan population in Speech-Language Therapy, it is important to consider health research from outside of the field in order to better understand the challenges involved with health care provision for this population. For example, Tamasese et al., (2005) investigated the effectiveness of psychiatric services for Samoan people. The researchers found the main strength in provision of mental health services to be that there was some recognition of western medicine by the Samoan population, while weaknesses of service providers included not taking Samoan beliefs into account, language barriers, and being unfamiliar with cultural issues. The findings of this study highlight that culturally appropriate health care with Samoan individuals should include recognition of key cultural factors, providing services specifically tailored to the Samoan population, utilising community support services to assist the family, employing Samoan 'healers,' and providing medical scholarships to encourarge Samoan individuals to study health related fields (Tamasese et al., 2005). In another study, Norris, Fa'alua, Va'ai, Churchward, and Arroll (2009) conducted a survey to investigate how Samoan people in Samoa and New Zealand make sense of illness and make choices when exposed to both non-western and western health approaches. All respondents had some understanding of both illness paradigms and most indicated beliefs in Samoan treatment. Samoan people in New Zealand indicated they would visit a range of health practices as compared to Samoan people in Samoa who would only access the "westernized" treatment that was most available to them. Family involvement and the distinction between Samoan and Palagi (Western) illnesses were points that were identified as especially important within the findings of the study (Norris et al., 2009).

1.7 Qualitative research methods in bilingual aphasia research

The use of qualitative research methods in the aphasia field has increased over recent years (Simmons-Mackie & Lynch, 2013). Qualitative methods, such as case studies and focus groups, provide valuable insight (Simmons-Mackie & Lynch, 2013) in exploratory investigation. Exploring the experience of living with aphasia has been studied with monolingual speakers (Howe, Worrall, and Hickson, 2008; Brown, Worrall, Davidson, and Howe, 2010), and recently with some culturally and linguistically diverse populations (Armstrong, Hersh, Hayward, Fraser & Brown, 2012; Legg & Penn, 2013; McLellan, McCann, Worrall & Harwood, 2013). These studies all used a qualitative approach. To date, studies investigating language assessment of bilingual or multilingual individuals with aphasia, have mainly focused on quantitative measures of language presentation, or comparison of language presentation within each language (Kambanaros & Grohmann, 2011; Koumanidi Knoph, 2011; Kiran & Iakupovo, 2011). The present research was designed using a qualitative approach to exploring bilingual aphasia, allowing more in-depth examination of the experience of the key parties involved, including particular influence of linguistic and cultural factors on the assessment process.

1.8 Current study aims

As this literature review indicates, there is a need for more research exploring the experience of language assessment of bilingual aphasia from an insider's perspective. In the context of New Zealand, there is a particular need for understanding more about language assessment in the bilingual Samoan-English speaking population. To date, there have been no studies examining the experience of language assessment in bilingual Samoan-English speaking adults with aphasia. By looking into specific populations and the issues that are seen within these groups, Speech-Language Therapists can aim to ensure that their input is

as effective as possible. As previously outlined, the assessment of individuals with bilingual aphasia is a complex and multifaceted process with many different variables to consider. Further research into the experience of bilingual aphasia may help to determine the importance of some of the factors discussed. The current study aimed to explore the experience of language assessment of bilingual Samoan-English speakers with aphasia, as perceived by those involved in the assessment process. It is anticipated that this research will add to the knowledge base in the area for Speech-Language Therapists working with this population, in an effort to improve our ability to provide culturally and linguistically appropriate practice.

Chapter 2

Outpatient language assessment of a bilingual Samoan-English speaker with aphasia: A single case study

2.1 Introduction

2.1.1 Overview

As discussed in chapter one, case studies, or case reports, are a commonly used research method in investigating bilingual aphasia. These case studies often focus on language assessment of individuals with bilingual aphasia at the impairment level, exploring how assessment results inform understanding of language presentation, or investigating the use of a particular assessment with a single case. For example, Kambanaros and Grohmann (2011) assessed the linguistic abilities of a female Greek-English bilingual speaking individual after stroke using the BAT, while Koumanidi Knoph (2011) collected language data from a Farsi-Norwegian bilingual speaker with aphasia. In another investigation, Kiran and Iakupovo (2011) used the BAT to assess two participants who were Russian-English bilingual speakers, then continued with a treatment program with one participant, and examined the relationship between language proficiency, language impairment, and rehabilitation. In 2012, McCann, Lee, Purdy, and Paulin conducted research with a Mandarin-New Zealand English bilingual speaker with aphasia using the BAT. While these case studies provide insight into individual cases that can guide clinical intervention and future research, they have focused primarily on the collection of clinical data. Furthermore, they did not include qualitative methods, an approach which may have provided a better understanding of the

participants' experiences of the overall processes involved in language assessment with bilingual individuals.

The qualitative data collection methods of in-depth interviewing and participant observation have been used in a number of previous aphasia studies focusing on monolingual speakers (Simmons-Mackie & Lynch, 2013); however, the use of these techniques with participants with aphasia who are bilingual or from different cultures is a relatively new approach in the field of aphasia research. Qualitative studies that have focused on aspects of culture in people with aphasia include investigations by Armstrong et al., (2012) and Legg and Penn (2013). Armstrong and colleagues (2012) conducted semi-structured interviews with three male Indigenous Australian participants and their family members to explore their experiences of aphasia as the result of stroke. The researchers found that the participants spoke minimally about aphasia during the interviews. The investigators suggested that one reason for this finding may have been because disabilities are constructed differently within the Aboriginal culture (Armstrong et al., 2012). In another qualitative study, Legg and Penn (2013) investigated the understanding of stroke and aphasia in a South African township from the perspective of those living with aphasia, their family members, and healthcare workers. Participant observation was used to collect data during the everyday activities of five adults with aphasia, while qualitative interviews were conducted with the individuals with aphasia, their family members, and the healthcare workers. The study found that although stroke was widely recognized, it was generally thought of as a health concern amongst the elderly. Furthermore, the participants were generally not familiar with the communication disorder of aphasia. They attributed aphasia to a variety of causes including reprisal by ancestors, witchcraft and sorcery, and social causes such as stressful living conditions (Legg & Penn, 2013). Although qualitative research

has not been specifically conducted in relation to bilingual Samoan-English speakers' experiences of Speech-Language Therapy and aphasia, previous commentaries and studies have revealed that individuals from Samoan backgrounds may have views about healthcare in general that differ from service providers' views and that family and spirituality are often particularly important within this culture (Anae, 2010; Norris, et al., 2011; Sobralske, 2005).

One recent qualitative research study conducted within the New Zealand context focused on Maori experiences of aphasia (McLellan et al., 2003). The participants in this investigation identified a range of both positive and negative experiences in relation to aphasia (McLellan et al., 2013). Although the findings from studies by McLellan et al. (2013), Legg and Penn (2012), and Armstrong et al. (2012) are limited somewhat to the specific cultures they investigated, they provide valuable insight for Speech-Language Therapy practice as societies becomes more culturally diverse on an international level.

Research focusing on cultural issues in relation to Speech-Language Therapy can not only inform clinical practice for Speech-Language Therapists working with individuals from the specific culture, but many of the principles may also be able to be applied to working with individuals from other cultural and linguistic backgrounds. The Samoan population is one group that has not been widely investigated in aphasia research. Research is clearly needed in this area.

Thus far, previous qualitative studies have investigated aphasia experience in general (Brown et al., 2010), as well as the experience of aphasia in individuals from a few specific cultures (Legg & Penn, 2013; McLellan et al., 2013). The present case study aimed to use a qualitative approach to investigate a specific process in Speech-Language Therapy, outpatient language assessment, in addition to focusing on a bilingual Samoan-English speaker with aphasia in an attempt to address the gap in the current literature.

2.1.2 Aim

The current study aimed to explore the experience of an outpatient language assessment involving a bilingual Samoan-English speaker with aphasia, from the perspective of the participants in the process. The specific research aims were : 1) To explore the experience of an outpatient language assessment from the perspective of the bilingual Samoan-English speaker with aphasia; 2) To explore the experience of an outpatient language assessment of a bilingual Samoan-English speaker with aphasia from the perspective of a family member; 3) To explore the experience of an outpatient language assessment of a bilingual Samoan-English speaker with aphasia from the perspective of a Speech-Language Therapist; and 4) To explore the experience of an outpatient language assessment with of a bilingual Samoan-English speaker with aphasia from the perspective of an interpreter.

2.2 Method

2.2.1 Research design

A qualitative research design within a constructivist paradigm was selected to address the research aim. This approach focuses on "understanding the complex world of lived experience from the point of view of those who live it" (Schwandt, 1994, p. 118). This overall approach was chosen for the study because there is limited research in this particular area. Because it was an exploratory investigation of an undescribed area of experience, it fits well with a qualitative research design (Kearney, 2001). In addition, a qualitative approach was suitable for this study because the focus of the research was a complex phenomenon (outpatient communication assessment) and the aim was to understand the complexity of the process, rather than the effect of individual factors

(Creswell, 2007). Another part of the aim was to gain an insiders' perspective of the assessment process which also fits within a qualitative approach (Sorin-Peters, 2004).

The specific qualitative research design chosen to address the study aim was a single case study (Creswell, 2007). A case study is "an in-depth exploration from multiple perspectives of the complexity and uniqueness of a particular…system in a 'real life' context" (Thomas, 2011, p. 10). This approach has been recommended for aphasia research that focuses on a bounded system (Sorin-Peters, 2004) and allows for the development of a deep understanding of a specific topic that can be used to inform professional practice (Thomas, 2011). This research approach was appropriate for addressing the present research aim because the aim was to gain an in-depth understanding of the complex phenomenon of language assessment of bilingual Samoan-English speakers with aphasia. This approach was also appropriate because the aim of the study was to explore the experience from multiple perspectives and the specific communication assessment process involves a bounded system. Case study research also enabled the research to be conducted within the naturalistic setting in which outpatient assessment occurs.

The specific type of case study chosen for this investigation was an instrumental case study. An instrumental case study involves selecting and focusing on a specific bounded case in-depth in order to highlight general issues about the phenomenon of interest (Creswell, 2007; Stake, 2005). This type of case study is used to "focus on a specific issue rather than on the case itself. The case then becomes a vehicle to better understand the issue." (Creswell, 2007, p. 245). The specific bounded case chosen for this study was a community Speech-Language Therapist's language assessment of a bilingual Samoan-English speaker with aphasia. The case was bounded temporally (i.e., included only the time required for the Speech-Language Therapist to complete the initial face-to-face communication assessment)

and spatially (i.e., included only the activities that occurred during the communication assessment in the home of the individual with aphasia).

2.2.2 Participants

2.2.2.1 Sampling

Sampling in qualitative research usually involves purposefully selecting a case for study because it is information-rich (Patton, 2002). The specific type of purposeful sampling used in this investigation was criterion sampling, or choosing a case which met a specific criterion that was deemed to be important for the study (Liamputtong, 2009). For this investigation, the specific sampling criterion for the case was that the communication assessment was the initial outpatient assessment to be conducted with the individual with aphasia.

2.2.2.2 Participants' eligibility criteria

Four different types of participants were recruited for this study: a bilingual Samoan-English speaking individual with aphasia, his/her family member(s), his/her outpatient/community Speech-Language Therapist, and any interpreter(s) involved in the communication assessment. The inclusion criteria for the participant with aphasia (PwA) was that he/she was 18 years of age or older, had aphasia caused by a stroke as diagnosed by a qualified Speech-Language Therapist, self-reported being bilingual in Samoan and English prior to the stroke, and was receiving services from an outpatient or community Speech-Language Therapist. Exclusion criteria for the PwA was the presence of significant concomitant health issues that might make it difficult for the individual to participate in a semi-structured interview and/or the presence of a significant concomitant communication disorder, as identified by the researcher, who was a qualified Speech-Language Therapist.

Inclusion criteria for the family member participant (FM) was that he/she was a relative of the person with aphasia, was 18 years or older, and that he/she planned to be present during all or part of the language assessment of the PwA. The inclusion criteria for the Speech-Language Therapy participant (SLT) in the study was that he/she was a qualified Speech-Language Therapist who was working directly with the PwA in an outpatient or community setting; and that he/she planned to conduct a language assessment of the PwA. The inclusion criteria for the interpreter participants in the study were that they were employed by the health service to be involved in interpreting the communication assessment of the PwA and that they planned to be present during all or part of the language assessment of the PwA.

2.2.2.3 Participant recruitment

Recruitment occurred within the local district health board. Outpatient healthcare professionals were asked to identify potential participants with aphasia and to approach them for permission to pass on their contact details to the researcher if they were interested in participating in the study. The researcher then met with these potential participants to explain the study. An aphasia friendly research information sheet and consent form was provided in both English and Samoan to the adult bilingual Samoan-English speaker with aphasia. The researcher followed recommended practices for obtaining informed consent from individuals with aphasia, for example, explaining the written information using short sentences and verifying responses using alternative modes of communication (Kagan & Kimelman, 1995). The PwA declined the opportunity to have a bilingual Samoan-English interpreter present during the initial research consent process. Once written consent had been obtained from the PwA, information sheets and consent forms were distributed to a FM, an SLT, and two interpreters who met the selection criteria.

The information sheet and consent form for the FM of the PwA was provided in Samoan and a Samoan-English interpreter was present when the researcher explained the study and obtained the family member's consent to participate in the research. Consent was obtained from all participants prior to the commencement of data collection.

2.2.2.4 Participant description

Five participants took part in this study: one PwA, one FM, one SLT who worked in the community setting, and two interpreters. One interpreter was present at the first language assessment session and consented to be involved in a semi-structured interview and the participant observation session, as well as to be videotaped during the language assessment. The second interpreter was present at the second language assessment session and consented only to be involved in the participant observation phase of the study and to be videotaped during the language assessment.

The demographic details for the five participants are described below:

PwA: The PwA was a 39 year old female who identified as being Samoan. She lived in her own home with her parents and two of her six children. She spoke Samoan and English and had obtained a polytechnic degree in New Zealand. She reported that she was separated and unemployed at the time of the study and that she had been unemployed prior to her stroke. She was five months poststroke at the time of the first assessment session and was reported to have an impaired gait pattern, right sided weakness particularly in the upper limb, and some residual mild cognitive changes. The PwA was receiving one hour of paid help per day. In information provided about her language history, she indicated that prior to the stroke she preferred to communicate in Samoan. She rated her prestroke understanding, speaking, reading, and writing abilities in English as four out of a possible seven (where one indicated she could not understand/speak/read/write and seven

indicated that she could understand/speak/read/write like a native speaker). Prestroke she used both Samoan and English daily in all activities. She also reported that she had exposure to all modalities of both languages daily prestroke. Following the stroke, she indicated that her languages were affected differently and that most areas had become worse in both English and Samoan (see Table 2.2 for language proficiency ratings from PwA). Poststroke she reported using mostly Samoan, with English only being used at professional appointments.

Table 2.2

PwA's Self Rating of Language Abilities.

	Samoan		**English**	
Communication modality	**Pre-stroke**	**Post-stroke**	**Pre-stroke**	**Post-stroke**
Understanding	7	7	4	3
Speaking	7	3	4	2
Reading	7	3	4	2
Writing	7	4	4	2

Note. A rating of 1 indicated the PwA could not understand/speak/read/write. A rating of 7 indicated the PwA could understand/speak/read/write like a native speaker.

FM: The FM was a 66 year old female who was the mother of the PwA and who lived with the PwA. She spoke only Samoan and was married. She began but did not complete high school and was unemployed at the time of the interview. She rated her overall health as 'okay' and indicated that she assisted the PwA from morning until 8:00 p.m. every day. The FM was present for the first language assessment session only.

SLT: The SLT was a 29 year old female. She was employed full time and had five to ten years of experience as a Speech-Language Therapist. She reported that she could speak two languages, one language other than English (note: specific language not provided in order to conceal the identity of the SLT), which was her first language, and English, which was her second language.

First interpreter: The first interpreter was a 56 year old female. She was employed full time as an interpreter and had over ten years of experience in this role. She reported that she could speak English, Samoan, and one other language which she identified as her primary language (note: specific language not provided in order to conceal the identity of the interpreter). She reported that she was fluent in all three languages and that she had interpreted for individuals with aphasia previously.

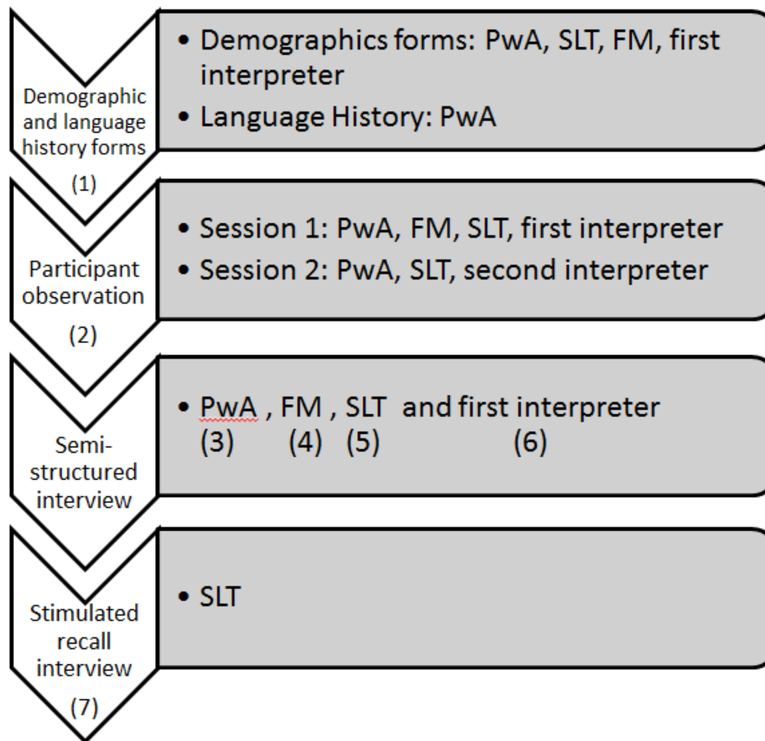
Second interpreter: The second interpreter was a female. Additional demographic information was unavailable.

2.2.3 Procedure

2.2.3.1 Data collection

Data collection involved seven phases: 1) Collection of demographic and language history information, 2) Participant observation of the two communication assessment sessions, 3) Semi-structured interview with the PwA, 4) Semi-structured qualitative interview with the FM, 5) Semi-structured interview with the SLT, 6) Semi-structured qualitative interview with the first interpreter participant, 7) Stimulated recall interview with the SLT. Figure 1 provides an overview of each phase including the specific participant(s) and method(s) involved.

Figure 1: Overview of data collection phases.



Phase 1. Collection of demographic and language history information

The demographic forms were completed directly before the semi-structured qualitative interviews. The first interpreter filled in the written demographic information form on her own. The second interpreter did not complete a demographic information form. The researcher completed the demographic information form verbally with the PwA using supported communication techniques (Kagan, 2007) and the interpreter where required. The researcher also completed the demographic information form verbally with the FM using the interpreter to translate the questions. A language history form developed specifically for this study and based on recommendations and examples in the literature (Dunn & Fox Tree, 2009; Lim et al., 2008; Marian, Blumenfeld & Kaushanskaya, 2007;

Munoz, Marquardt & Copeland, 1999; Shi, 2011) was completed verbally by the researcher with PwA using supported communication techniques (Kagan, 2007) and the interpreter where required (see Appendix A – language history form).

Phase 2. Participant observation (PO)

The researcher used participant observation (Creswell, 2003) to observe the two language assessment sessions in the home of the PwA. Participant observation allows for the researcher to attempt to observe a naturalistic event through the eyes of the participant(s) being studied (Angrosino, 2005). The use of this data collection method in the current study allowed for observations of the participant interactions during the naturalistic activity of the language assessment in the community setting. During the PO sessions, the investigator recorded field notes about the activities observed (Creswell, 2007). The field notes took the form of descriptions of the observed behaviours (Spradley, 1980) using an observation form as recommended by Creswell (2007). Immediately following the PO sessions and during a review of the videotapes of the two communication sessions, the researcher expanded the shortened field notes into sentences and filled in incomplete details. The researcher also recorded initial reflections about the PO sessions in a research journal. The researcher took on a peripheral membership role during the observation, in order to observe and interact closely enough with the participants to establish identity within the group, without participating in the activities (Adler & Adler, 1998). A similar level of observation is described by Angrosino (2005) as reactive observation, with the participants being aware of the researcher observing, but only interacting with the investigator specifically in relation to the research. The researcher sat to the side of the research participants in the same room during the communication assessment sessions, but did not communicate with the participants during these sessions except in relation to the

research activities (e.g., setting up the videorecording equipment at the beginning of the session).

The first PO session lasted 40 minutes and involved the PwA, the SLT, and the first interpreter. The second PO session also lasted 40 minutes and involved the PwA, the SLT, and the second interpreter. The sessions were videotaped for use in the stimulated recall interview, for review by the investigator to fill in incomplete details noted during the PO sessions, and for a future study that will involve analysing the participants' communication during the assessment.

Phase 3. Semi-structured qualitative interview with the PwA

The investigator conducted a semi-structured qualitative interview with the PwA in her home six days after the final language assessment session in order to explore the participant's perceptions of the assessment process. A semi-structured qualitative interview is an interview that is organised around a set of open, verbal questions that encourages in-depth responses by the participants in relation to the research topic (DiCicco-Bloom & Crabtree 2006). The researcher followed a topic guide that included the following topics: experiences of the sessions with the Speech-Language Therapist (e.g., "Tell me about your time with the Speech-Language Therapist", "Tell me about what you had to do"), and perceptions of the sessions (e.g., "How were the activities?" "How did they make you feel?" "What went well?" What didn't go well?"). A Samoan-English interpreter was present and provided interpretation during the interview for the PwA as required. Communication techniques based on supported conversation for adults with aphasia were used to facilitate the communication of the PwA (Kagan, 2007) during the interview. The interview session was audiotaped and lasted 41 minutes.

Phase 4. Semi-structured qualitative interview with the FM

The investigator conducted a semi-structured qualitative interview with the FM in the PwA's home six days after the final communication assessment session. A Samoan-English interpreter was present and provided interpretation during the interview for the FM as required. The researcher followed a topic guide that included the following topics: experiences of the session with the Speech-Language Therapist, perceptions of the session, perceptions of how well they thought the PwA participated in the session and what may have affected this participation, and how the activities fit with Samoan culture. The interview session was audiotaped and lasted 25 minutes.

Phase 5. Semi-structured qualitative interview with the SLT (SLT I)

The investigator conducted a semi-structured qualitative interview with the SLT in a private meeting room in the participant's workplace nine days after the final language assessment session. The researcher conducted a semi-structured qualitative interview to explore the participant's perceptions of the experience of the communication assessment. The researcher followed a topic guide that included the following topics: experiences of the assessment sessions, perceptions of the assessment sessions, perceptions of how well they thought the PwA participated in the sessions and what may have affected this participation, tasks chosen for the assessment and reasons for choosing the tasks. The interview session was audiotaped and lasted 47 minutes.

Phase 6. Semi-structured qualitative interview with the first interpreter

The investigator conducted a semi-structured qualitative interview with the interpreter who was involved in the first communication assessment session in the interpreter's car outside of the home of the PwA six days after the final language assessment session. The researcher followed a topic guide that included the following

topics: experiences of interpreting the session, perceptions of the session, perceptions of how well they thought the PwA participated in the session and what may have affected this participation, and how the activities fit with Samoan culture. The interview session was audiotaped. The interview lasted nine minutes, as the interpreter indicated that she only had a short time to participate in the interview. This interview took place immediately after the interpreter had been involved in interpreting the semi-structured qualitative interview with the PwA and the semi-structured qualitative interview with the FM.

Phase 7. Stimulated recall interview with the SLT (SLT SR)

In the final phase of this study, the researcher conducted a stimulated recall interview with the SLT. A stimulated recall interview involves a process where the participant is provided with the prompt of a videotape of the event to elicit thoughts and feelings about the event (Lyle, 2003). The SLT was directed to watch the two videotapes of the communication assessment and to pause the videotape at any point where she noted a point of interest that she wanted to comment on. At each of these points, the researcher asked follow-up questions in order to explore the participant's thoughts and feelings about the language assessment. The topic guide for the researcher included the following questions to elicit further information: "Tell me more about this point in the session," "How did this make you feel?" and "How do you think the patient felt during this part?" The interview was conducted in a private meeting room at the SLT's workplace approximately three months after the language assessment had been completed. The interview was audiotaped and lasted 135 minutes.

2.2.3.2 Data analysis

The audiotapes of the stimulated recall interview with the SLT, the audiotapes of the semi-structured qualitative interviews with the SLT and the interpreter, and the English

component of the audiotapes of the semi-structured interviews with the PwA and FM were transcribed verbatim by a research assistant based on the conventions of Poland (1995). One hundred per cent of the transcripts were checked for transcription accuracy by the researcher. The expanded handwritten field notes and reflection notes from the PO sessions were also typed in order to be included in the data analysis process.

Transcripts from the four semi-structured interviews and the stimulated recall interview, and the field notes from the participant observation sessions were analysed using qualitative content analysis to identify themes (Graneheim & Lundman, 2004). The analysis occurred over multiple stages. The first stage involved the researcher becoming immersed in the data by reviewing the audiorecordings of the interviews, the videorecordings of the language assessment, and reading and rereading the interview transcripts several times. The next step involved dividing the data into two content areas: 1) the insiders' experience of the language assessment content area, involving data that related to the research focus of exploring the experience of the language assessment (Interpreter: "And we do, we do, well in my own experience speech is one of the hardest") and 2) the other content area, or content that was outside of the aim of the current study (Interpreter: "I don't do laws and all that"). Data in the other content area was not included in the analysis process.

Data in the experience of language assessment content area was then divided into meaning units. A meaning unit was defined as "words, sentences, or paragraphs containing aspects related to each other through their content and context" (Graneheim &Lundman, 2004, p. 106) (e.g., "And we do, we do, well in my own experience speech is one of the hardest"). The meaning units were then shortened into condensed meaning units that still retained their meaning (e.g., "well in my own experience speech is one of the hardest"). Similar meaning units were grouped together and assigned a code (e.g., "Speech-Language Therapy

is one of the hardest things to interpret”). Similar codes were grouped into higher level categories (e.g., “Difficult for the interpreter to interpret Speech-Language Therapy language assessment sessions involving Samoan-English speakers with aphasia”). Finally, themes were derived by identifying the “meaningful essence” (Morse, 2008) that ran through a number of categories in the data (e.g., “Samoan-English language assessment is a hard process for the individuals involved”).

2.2.4 Rigour and reflexivity

A number of strategies were used to improve the rigour of the study. First, the credibility or the adequacy with which the findings represent the multiple realities of the participants (Mertens & McLaughlan, 2004) of the study was enhanced by using three different methods of triangulation (Curtin & Fossey, 2007). The first type of triangulation involved methods triangulation or using two or more data collection methods (e.g., participant observation, semi-structured qualitative interviews, and a stimulated recall interview). The second type of triangulation used in the study was data triangulation or using two or more sources for the data. In this study, the perspectives of four different participants were used as data sources. Finally, research triangulation or involving two or more researchers during data analysis was used in the study, with the researcher and the two research supervisors involved in reviewing the findings at each step of the data analysis process.

Transferability of the study has been addressed by ensuring that detailed descriptions of the case and the participants in the case have been provided. In addition, several direct quotations from the participants have been provided in the results section. These methods ensure readers can determine how well the findings of the study apply to their own context (Mertens & McLaughlan, 2004).

In order to enhance the dependability of the study (Mertens & McLaughlan, 2004), an audit trail including a detailed journal was kept throughout the research process. This journal included details about interactions and reactions to events and important aspects relating to research method and analysis decisions (Koch, 2006).

Reflexivity is another important component of qualitative research and refers to the researcher acknowledging that their experiences and beliefs may influence the research process (Liamputtong, 2009). In this study, the primary researcher was a qualified Speech-Language Therapist who had experience with language assessment of bilingual Samoan-English speakers with aphasia in a health setting. The researcher used the reflexive journal and peer debriefing in order to attempt to acknowledge how these experiences may have influenced the research process.

2.2.5 Ethical considerations

Prior to applying for ethical approval for this study, cultural advice was sought from the team leader of the Cultural Support department at the local district health board. Ethical approval for the investigation was obtained from the University of Canterbury Human Ethics Committee, the local district health board ethics committee, and the regional ethics committee.

2.3 Results

2.3.1 Context of the case

The case involved two Speech-Language Therapy assessment sessions conducted in the lounge of the home of the PwA, a standalone house. The doors and some of the windows of the house were open on both occasions, as it was sunny and hot outside. There was some background noise from neighbours throughout the sessions. The sessions took place in a city in New Zealand. The PwA had been referred from the inpatient rehabilitation

unit to the community-based rehabilitation team within the same district health board. The first session occurred in the afternoon at 2:30 p.m. and lasted 40 minutes, while the second session occurred seven days later in the morning at 10:00 a.m. and lasted 40 minutes.

During the first session, the PwA, her FM (her mother), the community SLT, and the first interpreter were seated in a circle on lounge chairs in the lounge. There was a table set up between the SLT and the PwA. The SLT had some materials including line pictures, paper with single words written on it and blank paper and pen, and the Comprehensive Aphasia Test (CAT) with her. The interpreter did not bring have any materials with her. The PwA walked with supervision from the SLT to the lounge chair. The FM had just completed her personal grooming and joined the group when the interpreter introduced the SLT and researcher. During the first session there was a neighbour who approached the house, and talked briefly to the FM in Samoan, then left.

In the second session, the PwA, the SLT, and a different interpreter were seated in a circle on lounge chairs in the lounge. In this session, the interpreter sat directly beside the SLT as instructed by the SLT before beginning the session. The mother of the PwA was in an adjacent room of the house (the kitchen), cleaning and doing dishes and did not participate directly in any of the second assessment session. The SLT had similar materials to the ones she had in the first session. The interpreter had a pen and blank paper with her.

2.3.2 Themes

Data analysis revealed eight overlapping themes that described the experience of communication assessment of bilingual Samoan-English speakers with aphasia. These themes were: 1) Samoan-English language assessment is a hard process for the individuals involved; 2) Samoan-English language assessment as a team process; 3) differences in

understanding of communication impairments and the assessment process; 4) time; 5) preparation; 6) appropriateness of assessment tasks, resources, and processes; 7) uncertainty; and 8) flexibility (see Table 2.3). A description of each theme and examples of the evidence for each theme is provided in the following sections.

<u>1. Samoan-English language assessment is a hard process for the individuals involved</u>

The theme of Samoan-English language assessment as a hard process for the individuals involved was an overarching theme throughout the data. All the participants referred to the language assessment as being “hard” in some way for themselves and/or for the other people involved in the process.

The PwA reported that the assessment was hard and sometimes “stressful” (e.g., *“…I try but it was very hard”* (PwA)). She also reported that because the activities were hard, they made her “sad.” Even though she reported that the overall assessment process was hard, the PwA indicated that she preferred the parts of the assessment that were in Samoan and that she found some of the activities were easier when presented in Samoan, especially the reading and speaking tasks.

The interpreter, who was involved in the initial language assessment session, also reported that the assessment was hard and indicated that Speech-Language Therapy sessions were one of the hardest situations for her interpret:

“…well in my own experience speech is one of the hardest” (interpreter).

The interpreter also perceived that the assessment session was difficult for the PwA:

“It was hard for her to say what is it or what or what or where” (interpreter).

Table 2.3
Themes from Case Study

Theme	Examples of quotations
Samoan-English language assessment is a hard process for the individuals involved	"…I try but it was very hard" (PwA) "well in my own experience speech is one of the hardest [to interpret]" (interpreter)
Samoan-English language assessment as a team process	"they're having their own conversation [interpreter & FM] and …she [PwA] couldn't answer my questions so I don't know if it was too complex for her in English but she [Interpreter] should've been…listening" (SLT SR)
Differences in understanding of communication impairments and the assessment process	"sometime Nana …said maybe that she [PwA] has sins, that's why she can't talk like that" (interpreter's translation of FM's comments in Samoan)
Time	"it's lengthy" (SLT I) "you can only see them like once a week…you have to go back there who knows how many times to just complete the assessment" (SLT I)
Preparation	"it [Samoan materials] wasn't prepared…prior to the session so I just had to…respond with the help of the interpreter" (SLT SR)
Appropriateness of assessment tasks, resources, and processes	"it's not going to be a real representation of their…language skills because of the cultural inappropriateness of some of the tasks" (SLT I)
Uncertainty	I'm not sure if she's [PwA] not able to answer my questions because she's getting distracted [by FM and Interpreter talking] or she doesn't understand in Samoan…" (SLT SR)
Flexibility	"in terms of …planning for assessment …it's harder to be flexible when you're working with interpreters" (SLT SR)

Note: Interviews that data were collected from are indicated by a bracketed abbreviation.

The SLT perceived that multiple aspects of the assessment sessions were challenging for her. She reported that it was hard to know what the PwA comprehended and it was more difficult when the PwA was distracted. The SLT also perceived that aspects of the translation and interpretation process were challenging. She indicated that having to have tasks translated into Samoan made the assessment harder and it was hard to be flexible with activities and to change the complexity of tasks when working with the interpreter.

The logistics of the session also presented as a difficulty for the SLT. She perceived that it was harder when she was unable to brief one of the interpreters about the session. An additional factor that made the process harder for the SLT included having to manage the involvement of the FM in the session:

> *"the mum was helping out…giving her prompts during the actual assessment was not…good coz… won't be able to…gauge if she actually… understood…the task because there was a prompt"* (SLT I).

The SLT perceived it was difficult for the PwA:

> *"she was trying…to communicate …it's just that it's really hard for her to talk back to me in English…she seemed to be understanding what I was asking"* (SLT I).

The FM also reported that it was hard to understand the communication difficulties that the PwA presented with. She indicated that it was especially difficult to understand why in some situations the PwA could express herself more easily than in others.

2: Samoan-English language assessment as a team process

The theme of Samoan-English language assessment as a team process refers to the assessment as a group process that involved at least three or more people (four individuals during the first session and three individuals during the second session) working together to complete the assessment. All the members of the group had their own individual roles as

part of the assessment team. Sometimes the group functioned well together, while at other times the group did not work well.

Factors that contributed to the team working well together included the interpreter having an understanding of what the SLT wanted from the assessment and automatically providing translations when needed:

> *"she [interpreter] automatically tells me or translated back in English you don't have to …get the answer from her …that's the most efficient way of doing of working with interpreters especially if someone doesn't really speak …a lot of English it flows smoothly even if there is …a middle person"* (SLT SR).

The SLT perceived that this occurred when she was able to brief the interpreter ahead of time about the assessment session:

> *"I told her (interpreter) that we're going to assess … sentence level …auditory and reading and she would have to …translate them …both orally and …written form…and she was prepared for that"* (SLT I).

The team process also required that the SLT rely on and trust the interpreter's perceptions of the PwA's responses in order to determine if the PwA was presenting with any language difficulties:

> *"Relying on what the interpreter…thinks…or…she thinks…there's no problem with…the language…or no errors…no false starts"* (SLT I).

The FM also had a role within the team. The SLT reported that it was helpful to work with the family members in general as part of the team in the group process because they provided useful information about their relatives with aphasia:

> *"those particular information you do get from family that …clients don't volunteer...it's really good to know"* (SLT I).

She also perceived that when the interpreter included the FM in the conversation about the assessment, it worked well and made it a more positive experience for the FM. In addition, the FM indicated that she supported the SLT's involvement with the PwA (*"…she's never against whatever you guys helping with (P name)"* (interpreter's translation of FM's comments)) and that she would do her part to help the PwA to speak more.

Other factors seemed to make the team work less effectively. For example, the SLT reported that when there was a lack of a briefing session with one of the interpreters prior to the session, it impacted on how well the team worked during the assessment:

> *"I would normally ask the interpreter to look [for]…errors and …from reading her [PwA] referral I would be expecting some errors obviously …but I didn't have the chance to tell …this interpreter and I've never worked with her [I] before so yea that's not good"* (SLT SR).

During observation of the assessment sessions and from discussion with the SLT, there were multiple instances during one of the assessment sessions when the FM and interpreter were talking with each other, rather than focusing on the assessment. The SLT noted that this may have affected the PwA's ability to respond to the questions during the assessment and that the interpreter should have been paying attention to the assessment process throughout the session:

> *"they're [interpreter and FM] having their own conversation and …she [PwA] couldn't answer my questions so I don't know if it was too complex for her in English but she [Interpreter] should've been…listening"* (SLT SR).

The team also did not function as well during the assessment when the FM was unclear about the purpose of the assessment and was giving the PwA prompts to help her respond to questions:

"the mum was helping out…giving her prompts during the actual assessment was not…good coz … won't be able to…gauge if she actually… understood…the task because there was a prompt" (SLT I).

The SLT reported that the positioning of the interpreter during one of the sessions may have also impacted on the team dynamic during the assessment:

"I just noticed the positioning of the people who are going to be involved is important …look at the interpreter now she looks …like she is in an awkward position …it doesn't really affect the clients um like responses or verbal output that much but …doesn't look …comfortable for the interpreter" (SLT SR).

In addition, the SLT perceived that the team did not function as well together when the PwA had to wait for Samoan assessment stimuli to be prepared by the interpreter and the SLT:

"she's [PwA] bored as well she's like god this is taking so long …coz I'm watching and I'm like …everything is just so slow …I'm trying to imagine how she actually feels like coz she's not involved in all that's happening" (SLT SR).

Building relationships between the participants was also identified as an important aspect that contributed to the individuals working well as a team during the assessment. For example the SLT stated, *"rapport is very important for not just…Samoans but all the Pacific…people"* (SLT I) and she later reported, *"I'm pretty lenient when it comes to first …visits 'cause rapport is the primary reason for me going in for the first time to establish good rapport"* (SLT SR). The SLT also perceived that building trust and rapport with the PwA helped the PwA to become more relaxed during the assessment: *"I think she [PwA] looks more…relaxed now …I don't know why could be because she's familiar with me and with*

what's happening…but she looks more relaxed" (SLT SR). In addition, the SLT perceived that it was important to build the relationship between the FM and her:

> *"in my practice…working in the community I use them [family] a lot…and I…think it's just normal for us to empower the family coz…nothing's going to happen with rehab if they don't actually get involved"* (SLT I).

<u>3: Different levels of understanding of communication impairments and the assessment process</u>

The process of language assessment for the bilingual Samoan-English speaker with aphasia also involved the theme of differences in understanding between the individuals involved. This theme included differences in understanding in relation to the PwA's communication impairment. For example, the FM reported that she did not understand why the PwA was unable to talk:

> *"She doesn't understand why … (name of participant) not opening her speech, she want to"* (interpreter's translation of FM's comments in Samoan).

Furthermore, she reported that she believed that the PwA's communication difficulties may have resulted from the PwA having "sins":

> *"sometime Nana …said maybe that she has sins, that's why she can't talk like that"* (interpreter's translation of FM's comments in Samoan).

This theme also included differences in understanding of the assessment process itself. For example, the interpreter reported that people from Pacific cultures did not want to participate in Speech-Language Therapy session because they did not understand what the sessions were for:

> *"I've found some of my people…say oh, they're coming again, what for, what they want"* (interpreter).

The PwA had a different understanding of the process of assessment, perceiving that it helped her:

> *"she said it helped"* (interpreter's translation of PwA's comments in Samoan).

The FM also reported that she believed the assessment session helped the PwA:

> *"she was quite happy with that day (day of assessment session) to help wake up (P name) mind and…to help her"* (interpreter's translation of FM's comments in Samoan).

The differences in understanding also involved differences related to role expectations. For example, the interpreter who attended the first session was observed by the researcher to have an unclear understanding about when she would be required to interpret information during the session:

> The SLT was asking the PwA about her main priorities for communication and said, *"Is it the main thing?...Anything else?"* and the PwA replied speaking in Samoan. During this time the interpreter and FM were having their own conversation. The SLT then said, *"Hang on"* and looked over at the FM and interpreter talking to each other. Once she was able to get their attention, she needed to repeat to the interpreter *"Yeah I think she was trying to say something. Anything else?"* at which point the interpreter asked the PwA the SLT's question in Samoan (PO).

The SLT reported that when she was able to brief the interpreters ahead of time, that it helped to minimize these differences in understanding by ensuring everyone knew what was required during the session. She added that when this briefing was missed, there was no chance to discuss what errors the interpreter should look for:

> *"I would normally ask the interpreter to look [for]…errors and …from reading her [PwA] referral I would be expecting some errors obviously …but I didn't have the*

chance to tell …this interpreter and I've never worked with her [I] before so yea that's not good" (SLT SR).

4: Time

Time was another important theme in the study. As the SLT reported, "time wise it's (assessment of the bilingual Samoan-English speaker with aphasia) lengthy" (SLT I). The SLT was surprised by how little was accomplished in the time spent in the assessment session:

"it's really hard everything's just so slow I think half of it is …I don't wanna say waste of time but it's that's how I feel" (SLT SR).

Furthermore, the SLT stated:

"you can only see them like once a week…you have to go back there who knows how many times to just complete the assessment" (SLT I).

Extra time was required for many aspects of the process. For example, extra time was required for translation:

"the mum doesn't really speak English, so…the assessment with the client was…twice the time" (SLT I).

Extra time was also required for the interpreter to help the SLT to prepare some Samoan materials:

"preparing the [Samoan] stimuli on the spot takes up a lot of time as well" (SLT SR).

The SLT perceived that she had only a short amount of time to brief the first interpreter, therefore, the discussion and preparation within the session took a longer amount of time. The researcher observed this during the participant observation:

The SLT starts ripping up pieces of paper for the interpreter and says *"So I'll give you that …so if you can just write um the Samoan translation for these words"* which

takes a long time to instruct and then the interpreter needs to translate. This takes over two minutes of preparation from the interpreter before the task begins. (PO)

The SLT perceived that time was affected by how well the interpreter was briefed before the session, and with the second interpreter, briefing time may have had a positive influence on the time taken:

"I think at this point [during second assessment session] we actually did a briefing as well of what were about to do…I think it will be better in um the session the session time will be faster I hope" (SLT SR).

The SLT was also concerned that the PwA may have been bored when she had to wait for the interpreter to translate some written stimuli:

"yea she's [PwA] probably bored now yea wondering what's happening but then …I think I did tell her what's going to happen … but then the waiting time … if her attention is limited…yea you've lost it" (discussing how preparing tasks on the spot affects PwA) (SLT SR).

5: Preparation

The theme of preparation overlapped with the theme of time and referred to the importance of preparation for the language assessment of the bilingual Samoan-English speaker with aphasia. Preparation included the interpreter being prepared ahead of time by the SLT about what she was expected to do in the session:

"I told her [interpreter] that we're going to assess … sentence level …auditory and reading and she would have to …translate them …both orally and …written form…and she was prepared for that" (SLT I).

Preparation also included the need to prepare Samoan materials. The SLT reported that it would have helped if the materials could have been prepared ahead of time:

"trying to think of any other ways that would've been more efficient and I think good use of all our times both um the client my time and the interpreters' time but the only thing I could think of would be…to have …a prepared one with a prepared …set of tests in Samoan so three tests …to make sure that it's accurate and it's appropriate for the …population" (SLT SR).

During the assessment, because the SLT did not have Samoan materials prepared ahead of time she had to prepare materials with the interpreter during the assessment which took extra time:

"preparing the stimuli on the spot takes up a lot of time as well" (SLT SR).

However the SLT reported that it was not always possible to have tasks prepared before the session. The SLT also reported that preparing the positioning of people was also important for the assessment:

"I just noticed the positioning of the people who are going to be involved is important …look at the interpreter now she looks …like she is in an awkward position …it doesn't really affect the clients um like responses or verbal output that much but …doesn't look …comfortable for the interpreter" (SLT SR).

<u>6: Appropriateness of assessment tasks, resources and processes</u>

Another theme that was revealed in the investigation was the appropriateness of the tasks, resources, and processes. The SLT perceived that the tasks may not have been culturally or linguistically appropriate and that this would affect the PwA's performance on the language assessment:

"it's not going to be a real representation of their…language skills because of the cultural inappropriateness of some of the tasks" (SLT I).

The interpreter also reported that some of the tasks used in the assessments were inappropriate:

"...Not only is Samoan even other Pacifica people …it's like pictures that sometime they might feel offended like, I'm not a little child" (interpreter).

The FM reported that the use of more natural tasks would have been more appropriate and would have motivated the PwA more during the assessment:

"And she sings and read the bible right to the end of the song…when they have their prayer" (discussing motivation) (interpreter's translation of FM's comments in Samoan).

The interpreter also reported that she thought that more natural activities would have been more appropriate for the assessment:

"because some old people they really look forward to, oh we're going to get together today and have a talk…getting to a community or getting to your whanau or get to church" (interpreter).

The SLT reported that the assessment process would be easier if appropriate assessment tasks were available:

"if you have…set tasks… cultural appropriateness of the items is not going to be an issue 'cause…someone has already thought about it and …pretested materials… no matter where in Samoa they were born they will identify and be familiar with the items…that'll be really …good" (SLT I).

The SLT stated that she made modifications when evaluating the PwA's performance on the assessment because the tasks were not appropriate:

"But I know it's not … culturally appropriate …so I just didn't count, I didn't count those" (SLT I).

The SLT also indicated uncertainty about the linguistic and cultural appropriateness of some tasks that were presented to the PwA during the assessment:

she's [PwA] got the concept of …a goat but …if they're aware in Samoan that the…term for that …animal is a goat I have no idea I don't know if it's …linguistically and culturally appropriate" (SLT SR).

7: Uncertainty

Another theme that featured in the findings involved uncertainty. Uncertainty included the SLT being uncertain about the appropriateness of the tasks used during the assessment sessions and about the PwA's comprehension abilities, as well as a general uncertainty with the interpreting process. For example, the SLT was sometimes uncertain about the accuracy of the interpreter's translation:

"I honestly had no idea when they're [PwA and interpreter] talking to each other if…the translation is actually accurate" (SLT I).

Furthermore, the SLT was uncertain about the impact of nonlinguistic factors such as distractions on the language performance of the PwA:

"I'm not sure if she's [PwA] not able to answer my questions because she's getting distracted [by FM and I talking] or she doesn't understand in Samoan but I would normally ask the interpreter to translate it into their own language if she doesn't respond to me" (SLT SR).

The SLT also expressed uncertainty about the PwA's comprehension abilities and how they were affected by external factors such as the FM prompting the PwA during the assessment tasks and the presentation of some stimuli twice, once in Samoan and once in English:

"when we were doing …reading comprehension at sentence level… there was an English sentence in front of her…plus the items and I was asking the interpreter …which sentence is this …in Samoan and, so that would give (name of participant) some time to …look at the English word and who knows what she actually comprehended was to the English sentence or was it purely the Samoan sentence, so …I won't have any ideas …" (SLT I).

<u>8: Flexibility</u>

The theme of flexibility involved the individuals in the assessment often needing to be flexible. For example, the SLT had to be flexible in relation to modifying assessment tasks during the assessment. She and the PwA also had to be flexible in dealing with two different interpreters as identified in this observation of the second session:

> At the beginning of the second assessment session, there was a different interpreter. With the interpreter changing there appeared to be no consistency and no knowledge of the patient therefore the SLT needed to re-brief the second interpreter (PO).

The interpreters also had to be flexible in relation to adapting to what the SLT asked them to do during the session. The SLT reported that it was also hard to be flexible when working with interpreters:

> *"in terms of …planning for assessment …it's harder to be flexible when you're working with interpreters"* (SLT SR).

2.4 Discussion

2.4.1 Overview

This investigation explored the experience of an outpatient language assessment involving a bilingual Samoan-English speaker with aphasia, from the perspective of the

participants in the process. This study, in contrast to most previous investigations in the area of bilingual aphasia, used qualitative methods to provide an in-depth understanding of language assessment in a bilingual speaker with aphasia, included a focus on both the linguistic and cultural aspects of the process, and focused on an individual who was a Samoan-English bilingual speaker. In addition, unlike most other qualitative investigations involving individuals with aphasia, the study concentrated specifically on the Speech-Language Therapy process of language assessment.

Overall, the investigation provided insight into the complexity of the process of language assessment involving a bilingual Samoan-English speaker with aphasia. This complexity was reflected within the eight themes that emerged from the data: 1) Samoan-English language assessment is a hard process for the individuals involved; 2) Samoan-English language assessment as a team process; 3) differences in understanding of communication impairments and the assessment process; 4) time; 5) preparation; 6) appropriateness of assessment tasks, resources, and processes; 7) uncertainty; and 8) flexibility. Each of these themes is discussed below in relation to relevant existing literature.

2.4.2 Themes

The results from the case study revealed that outpatient language assessment of bilingual Samoan-English speakers with aphasia was a hard process for the individuals involved. All the participants referred to the process as being hard in some way for themselves and/or for the others involved in the assessment. Working with interpreters has been previously reported as challenging (Kambanaros & van Steenbrugge, 2004; Roger & Code, 2011), however, unlike the previous research, the current study found that the assessment process was challenging for both the Speech-Language Therapist and the interpreter, in addition to the other participants involved in the process. It could be assumed that because challenges

are multifaceted they may affect everybody involved in the language assessment process. The theme of the language assessment of a Samoan-English speaker with aphasia being hard for all the individuals involved was an overarching one that encompassed many aspects of the other themes revealed in the case study.

Language assessment of bilingual Samoan-English speakers with aphasia as a team process was another theme identified in the study. The investigation highlighted that, unlike a typical one-to-one monolingual language assessment, the assessment process in this study involved the co-ordination of a group of at least three or more people. All the members of the group had their own individual roles as part of the assessment team. Sometimes the team worked well together, while at other times the group did not function well. Factors that seemed to cause the team to function less effectively included the interpreter having separate, unrelated conversations with the family member and poor positioning of the various individuals involved. Factors that contributed to the team working well together included the interpreter having an understanding of what the SLT wanted from the assessment and automatically providing translations when needed. In addition, the development of positive relationships between each of the individuals within the team was also identified as an important factor that influenced how well the team members worked together. Developing rapport with the interpreter helped the SLT and interpreter to work better together, while the development of rapport and trust between the SLT and the PwA was something the SLT thought was important to help the PwA to become more relaxed. ASHA recommends developing appropriate relationships with interpreters for language assessment in their clinical guidelines for providing culturally and linguistically appropriate care (American Speech-Language-Hearing Association, 2004). Studies conducted with monolingual speakers with aphasia have previously indicated that people with aphasia want

"positive relationships and interactions with their speech therapists and other health service providers" (Worrall et al., 2011 , p. 314). It has also been previously noted that there are barriers relating to other people that hinder participation of people with aphasia, including other people's actions, knowledge and roles and that groups were perceived as a barrier to participation (Howe, Worrall & Hickson, 2008). The group situation that occurred in this study may have been more difficult for the person with aphasia to participate in and may have impacted on the assessment.

The process of language assessment with the PwA also involved the theme of differences in understanding between the individuals involved. This theme included differences in understanding of the assessment process itself, with the first interpreter reporting that she believed people from Pacific cultural backgrounds sometimes did not want to participate in Speech-Language Therapy because they did not understand the purpose of the sessions. This theme also included differences in understanding in relation to the individual with aphasia's communication impairment. For example, in the current study the family member indicated that she believed that her family members' communication difficulties may have resulted from her having "sins." Capstick, Norris, Sopoaga and Tobata (2009) outline that in the Samoan culture, sickness is thought to be spiritual therefore this could be why family members suggested that the PwA's communication difficulties were the result of sinning. This finding was also found in Legg and Penn's study (2013), based in South Africa, where participants had physical interpretations of stroke as well as supernatural explanations (Legg & Penn, 2013). Isaki and Ainu'u (2010), provide insight regarding the level of understanding the Samoan people have about stroke and Speech-language Therapy in their study involving a questionnaire with Samoan people in American Samoa. Seventy five percent of participants were unfamiliar with stroke (familiarity relied on a family

member having had a stroke or TBI) and 81% had never heard about Speech-Language Therapy. This is significantly lower than the study by McCann, Tunnicliffe, and Anderson, (2012) which revealed that awareness of stroke in the general public of New Zealand was 99%. This lack of understanding of stroke and Speech-language Therapy within the Samoan population may be a factor in the different levels of understanding identified between the various individuals taking part in the assessment process and difference in understanding (especially the understanding the PwA and FM have) may come from cultural characteristics.

Another key theme that emerged from the study was the appropriateness of the tasks, resources, and processes. It was perceived that tasks may not have been culturally or linguistically appropriate and that different tasks may have been better. The SLT perceived that tasks may not have been culturally or linguistically appropriate which may have affected how the PwA performed during the assessment. The SLT described occurrences within the assessment where she was unsure of the PwA's performance and was concerned that she could have overestimated or underestimated performance on formal assessment because the stimuli were not culturally and/or linguistically appropriate. Another point brought up by the SLT was that having the stimuli presented twice (either seeing the English word before the Samoan word was put on top of it, or hearing a word verbally from the SLT and then again translated by the interpreter) would provide an opportunity for the PwA to have access to the stimulus multiple times, again presenting an opportunity for overestimation or underestimation of performance. However, there is an absence of appropriately translated material already available. The most commonly known adaptation of a formal assessment is the Bilingual Aphasia Test (BAT) which is available in many languages, however, it has yet to be translated into Samoan. A recent adaptation of the BAT

into the Rarotongan language (Cook Island Maori) involved a complex consultation and adaptation process (Miller Amberber, 2011). Therefore it could be assumed that adaptation of BAT to Samoan may require a similar prolonged process.

Time, another key theme revealed by the study, overlapped with the theme of preparation. Time was acknowledged to play a significant role in the assessment process, with extra time being required for many aspects of the process including preparing the materials, preparing the environment, preparing the interpreter, and the interpreter having to translate stimuli and directions. The SLT expressed surprise at how little was accomplished over the course of the assessment session and reported concern that the PwA may have been bored at times, particularly when she had to wait for written stimuli to be translated by the interpreter. It was clear that having appropriate materials prepared and translated ahead of time would have reduced the time required for the assessment. However, the SLT indicated that it was not always possible to accomplish this, as there was often limited access to interpreters to aid in preparing and adapting appropriate materials ahead of time. Although the importance of time and preparation in the language assessment of an individual with bilingual aphasia has been alluded to within clinical guidelines for working with interpreters (Royal College of Speech & Language Therapists, 2005), this is one of the first research studies to highlight the importance of these factors within this process.

The investigation has also contributed to the literature by revealing two other unique themes, uncertainty and flexibility, that have not been reported previously in the research in this area. The theme of uncertainty included the SLT reporting or demonstrating uncertainty about various aspects of the assessment process including: results from the language assessment, patient's comprehension abilities, accuracy of the interpreter's

translation, impact of possible distracting factors, appropriateness of assessment tasks and impact of prompting or additional presentation of stimuli. The theme of flexibility referred to the individuals involved in the assessment needing to be flexible during the assessment process. For example, the SLT had to be flexible in relation to modifying assessment tasks and dealing with different interpreters. The PwA had to be flexible in relation to working with two different interpreters in the two sessions. The interpreters had to be flexible in relation to adapting to what the SLT asked them to do during the session. In contrast, the SLT also reported that it was difficult to be flexible when working with interpreters.

2.4.3 Clinical implications

This study highlights a number of clinical implications for Speech-Language Therapists, one of these being the importance of culturally appropriate assessments and materials. An important recommendation arising from the present study is for researchers to create an aphasia assessment in the Samoan language, or to adapt the BAT into the Samoan language. Cultural characteristics must also be taken into account in terms of planning for the assessment process and assessment tasks. The FM and the interpreter indicated that different tasks would have been more appropriate, for example cooking or attending church, and similarly the literature available regarding Samoan culture (Anae, 2010; Tamasese et al., 2005; Sobralske, 2006) suggests that Western approaches may not always be as suitable for this population. The activities suggested are more naturalistic which may be more appropriate for all participants irrespective of cultural background. Yet it appears highlighted that in this Samoan population, natural and meaningful activities may be the best approach for assessment. This study also suggests recommendations for Speech-Language Therapists working with interpreters; these recommendations include ensuring that there is enough time allotted for presession briefing which should not be

underestimated in their value for improving the interaction for all participants involved. It is also important to acknowledge that overall the process is hard and requires extra time, as well as added preparation. Speech-Language Therapists should be aware that the process may also include a level of uncertainty and flexibility is required for interactions with the team members involved. And finally, it needs to be appreciated that language assessment of bilingual Samoan-English speakers with aphasia is a team process. Everyone has their own roles, and everyone in the team, especially the Speech-Language Therapist, needs to be aware of their own and others' roles. Speech-Language Therapists should take some responsibility to brief team members ahead of time about their role, or ensure there is understanding of what each role entails, including the family member and interpreter, so there is less uncertainty during the session.

2.4.4 Limitations

A limitation of this study is that it was a single case study involving only one case. Further research involving multiple case studies or case studies in other settings such as inpatient acute or rehabilitation would provide further insight into this area. Another limitation of the study was the limited involvement of the interpreters in the investigation. The first interpreter initially consented to participate in the interview; however, she was only able to complete a very short interview. The second interpreter consented to participate in the participant observation session but did not consent to participate in a semi-structured interview. In future studies, it is recommended that a particular focus be on recruiting more interpreters or obtaining a more in-depth understanding of their perspective of the interpreting process during language assessments. Secondly, because of the limited number of interpreters available, the interpreter participant was the same interpreter who was employed to translate for the semi-structured interviews with the PwA

and the FM. The presence of the interpreter participant at the interview may have had an effect on the information that the PwA and FM shared about the assessment process and the interpreter participant's role in the assessment process.

2.5 Conclusion

In conclusion, the findings of this study suggest that, process of language assessment of bilingual Samoan-English speakers with aphasia is hard. The perceptions of those involved in the process provide valuable insight into the experience of language assessment of bilingual Samoan-English speakers with aphasia as well as useful clinical implications. The next chapter describes a study that builds on the current findings of the investigation, focusing specifically on Speech-Language Therapists' perceptions of the process of language assessment of Samoan-English bilingual speakers with aphasia in relation to challenges and strategies.

Chapter 3

Speech-Language Therapists' perceptions of challenges of and strategies for language assessment of bilingual Samoan-English speakers with aphasia: A focus group with Speech-Language Therapists.

3.1 Introduction

3.1.1 Overview

In this second study, a focus group was used to seek the perspectives of Speech-Language Therapists in regards to conducting language assessment with bilingual Samoan-English speakers with aphasia. The data collection method of focus groups, although widely used in qualitative research, has been utilised in only a few studies exploring Speech-Language Therapy perspectives about aphasia management. For example, Turner and Whitworth (2006) used focus groups and questionnaires to investigate the views and experiences of Speech-Language Therapists when deciding on candidacy for conversation partner training. In another study, Law et al., (2010) used focus groups with aphasia practitioners (including Speech-Language Therapists) as one component of a study that investigated the direction of the development of services for people with aphasia in Scotland. Both of these studies provided valuable insights that can be used to inform Speech-Language Therapy practice.

Although there is limited research involving focus groups to obtain Speech-Language Therapists' perspectives regarding management of culturally and linguistically diverse client

groups, there has been some research in this area in Occupational Therapy. In 2007, Nelson and Allison included focus groups with key stakeholders, including Occupational Therapists as part of their study that aimed to critique Occupational Therapy practice with a specific focus on Indigenous Australian children. The study revealed the following five themes: 1. The need to develop effective relationships, 2. The need to develop particular personal qualities, 3. The need to understand the background of both the client and the therapist, 4. The need to both gain and give knowledge, and 5. The need to address logistical issues of service delivery (Nelson & Allison, 2007). These themes highlighted important issues for Occupational Therapists working with an indigenous population and provided valuable insights for clinical practice.

It is suggested that when conducting focus groups with culturally diverse groups, that individuals from the community of interest be included (Huer & Saenz, 2003). Therefore, in the present study, participants who had experience working with bilingual Samoan-English speakers with aphasia were recruited for the investigation.

In the studies discussed, focus groups have proved to be a useful method for exploring the perspectives of health professionals in relation to aspects of their clinical practice. More specifically they appear to be useful in highlighting perspectives of Speech-Language Therapists in some areas of aphasia management. The focus group was therefore an appropriate qualitative research method for identifying the perspectives of Speech-Language Therapists in relation to language assessment of bilingual Samoan-English speakers with aphasia.

3.1.2 Aim

The aim of this study was to explore Speech-Language Therapists' perceptions of challenges of and strategies for language assessment of bilingual Samoan-English speakers with aphasia.

3.2 Method

3.2.1 Research design

A qualitative approach based on a constructivist paradigm (Guba & Lincoln, 1994) was used for this study. The specific qualitative research strategy chosen for the investigation was qualitative description. This research strategy involves identifying the nature and attributes of a phenomenon and is useful for describing what exists in practice and discovering new information or classifying information for use in specific disciplines (Minichiello, Sullivan, Greenwood, & Axford, 2004) such as Speech-Language Therapy. It was therefore deemed to be an appropriate research strategy for addressing the research aim. The specific data collection method used for this phase of the research was a focus group. A focus group is a qualitative method that involves a group of people, usually with similar backgrounds, meeting to discuss a particular issue, with the help of a moderator, to explore their knowledge, experiences, perceptions, and interpretations of the topic (Liamputtong, 2009). Focus groups generate data utilizing communication and interaction within the group to help the participants to clarify and explore their perceptions of the specific issue (Liamputtong, 2009). A focus group was deemed to be the most appropriate data collection method for this study because the investigation aimed to involve a group of Speech-Language Therapists with the shared background of experience working with bilingual Samoan-English speakers with aphasia to generate in-depth data regarding challenges of and strategies for clinical practice in this area.

3.2.2 Participants

3.2.2.1 Sampling

Maximum variation sampling, a form of purposeful sampling that involves gathering a sample that is as diverse as possible (Minichiello et al., 2004), was used in the study with variation sought for years of Speech-Language Therapy service.

3.2.2.2 Participant eligibility criteria

Participants were required to meet the following criteria to participate in the study: qualified Speech-Language Therapist who was working/had worked as a Speech-Language Therapist in a health care setting, and self-report of previous experience assessing bilingual Samoan-English speakers with aphasia. Participants were excluded if they lived outside of the greater Auckland metropolitan region.

3.2.2.3 Participant recruitment

Potential participants were recruited through Speech-Language Therapy special interest groups, and a recruitment notice was distributed through the national body for Speech-Language Therapists' monthly email to members of the association. The recruitment notice briefly described the study and invited individuals to contact the researcher if he/she was interested in participating in the study. Eight individuals indicated that they were interested in participating in the study. Two of these potential participants were excluded because they lived outside the Auckland metropolitan region. Two more potential participants were unable to participate in the focus group at the designated time and place. The remaining four participants participated in the study. Written informed consent was obtained from all participants prior to commencing the study.

3.2.2.4 Participant description

Four female participants, aged from 24 to 34 years, participated in the study. The participants ranged in Speech-Language Therapy experience from less than one year to more than ten years. They worked within three different service areas of Speech-Language Therapy in healthcare (acute care, inpatient rehabilitation, and community), and reported a varied range of frequency of current experience with language assessment of bilingual Samoan-English speakers with aphasia from monthly to less than once per year. See Table 3.2 for a summary of the participants' demographic information.

3.2.3 Procedure

3.2.3.1 Data collection

Data was collected during one focus group interview that was facilitated by the researcher. After explaining the purpose of the focus group, the facilitator led the group with an open discussion that followed a topic guide that included the following topics: experiences with assessing bilingual Samoan-English speaking clients with aphasia, challenges of assessing Samoan-English speaking clients with aphasia, and strategies that help when assessing Samoan-English speaking clients with aphasia. The focus group session lasted approximately 80 minutes and was videotaped and audiotaped for later transcription as recommended by Liamputtong (2009).

3.2.3.2 Data analysis

The videotape of the focus group session was transcribed verbatim by a research assistant based on the conventions of Poland (1995). The researcher reviewed 100% of the transcript to ensure it had been transcribed accurately. The transcript from the focus group was

Table 3.2

Participant Demographic Information

Variable	***N***
Ethnicity	
- New Zealand European	3
- Other	1
Employment status	
- Full time	3
- Part time	1
Area of practice	
- Acute care	1
- Inpatient rehabilitation	2
- Community	1
Years as a qualified Speech-Language Therapist	
- < 1 year	1
- 1-2 years	1
- 2-5 years	1
- > 10 years	1
Bilingual/Monolingual	
- Monolingual (English)	3
- Bilingual	1
Frequency of working with individuals with bilingual aphasia	1
- 1-2 times per year	1
- Every 2-3 months	2
- Every week	
Frequency of assessing Samoan-English speaking individuals	
- Less than 1 per year	1
- 1-2 per year	1
- Every 2-3 months	1
- Every month	1

analysed using qualitative content analysis to identify categories (Graneheim & Lundman, 2004). The analysis took place over a number of stages. The first stage involved the researcher making reflective notes in a research journal immediately after the focus group. Following this stage, the researcher reviewed the video and the transcript several times to

become immersed in the data (Graneheim & Lundman, 2004). The data was then divided into two content areas: 1. content that addressed the research aim (e.g., *"Um, I always find it difficult with any sort of bilingual patient or monolingual in a different language because, so much of our assessment is based on, not vibes but you know like you just get an overall impression from being able to communicate with someone, um, so it's always quite difficult to get the overall picture and especially when they're so impaired with cognition and receptive abilities it's difficult to know what prompts you know the interpreters giving or"*) and 2. Other content area or content that was outside of the research aim (e.g., *"yeah good, I think it's still, you know even though we've talked about it, still there's still lots of things to think about"*). The data in the other content area was not used in the subsequent analysis. The researcher then divided the data into meaning units (e.g., *"and especially when they're so impaired with cognition and receptive abilities it's difficult to know what prompts you know the interpreters giving"*)which were condensed or shortened while preserving their meaning (e.g., *"it's difficult to know what prompts…the interpreter's giving"*). Similar meaning units were grouped together into codes (e.g., "Challenge for Speech-Language Therapist– difficult to know what prompting the interpreter is giving and how it is helping the client"). Similar codes were then grouped together into sub-categories related to the research aim (sub-categories related to challenges experienced when conducting language assessments with bilingual Samoan-English speakers with aphasia and sub-categories related to strategies that helped the process when conducting language assessments with bilingual Samoan-English speakers with aphasia (e.g., "Challenges involving the use of interpreters" or "Strategies for working with interpreters")). Sub-categories that addressed the same overall aspect of the assessment process were then grouped together into a higher level category (e.g., subcategories of "Challenges involving the use of interpreters"

and “Strategies for working with interpreters” grouped together into the higher level category of “Using interpreters”).

3.2.4 Rigour and reflexivity

Rigour of the study was maintained using the following methods: member checking, peer debriefing and a journal kept for audit trail purposes. Member checking was conducted with the participants to increase the credibility of the findings. It involved sending an outline of the preliminary study results to the participants and inviting them to contact the researcher if they had any comments about the preliminary results (Koch, 2006). One participant contacted the researcher about the preliminary results and indicated that she had no further comments about the findings. Peer debriefing (Lincoln & Guba, 1985) was incorporated through multiple discussions with the researcher and the two research supervisors regarding the research process and the data analysis. In order to enhance the dependability of the study (Mertens & McLaughlan, 2004), an audit trail including a detailed journal was kept. This journal included details about interactions and reactions to events and important aspects relating to research method and analysis decisions (Koch, 2006).

Transferability of the study was addressed by including a number of direct quotations from the focus group within the results. This strategy ensures that readers can determine how well the findings of the study apply to their own contexts (Mertens & McLaughlan, 2004).

Reflexivity is important to address in qualitative research with the researcher’s experiences and background potentially having an impact on the research process and the results derived from the investigation (Malterud, 2001). In the present study, the primary researcher had previous experiences assessing bilingual Samoan-English speakers with aphasia and knew the Speech-Language Therapists participating in the research. The

researcher attempted to deal with these biases by acknowledging these factors within a research journal and during peer debriefing sessions with the investigator's research supervisors.

3.2.5 Ethical considerations

Ethical approval was obtained from the University of Canterbury Human Ethics Committee.

3.3 Results

Data analysis revealed eight categories that outlined the Speech-Language Therapists' experience of communication assessment of bilingual Samoan-English speakers with aphasia. These categories were: 1) Speech-Language Therapists' background; 2) using interpreters; 3) family involvement; 4) Samoan language and culture; 5) getting an initial impression of and building rapport with the individual with aphasia; 6) assessment tasks and resources; 7) determining which language(s) to assess; and 8) logistics of assessment (see Table 3.3 for results summary). All of these categories included challenges associated with communication assessment of bilingual Samoan-English speakers with aphasia. Five of these categories included strategies that may be helpful for Speech-Language Therapists working with this population (1) Speech-Language Therapists' background; 2) using interpreters; 3) family involvement; 6) assessment tasks and resources; and 7) determining which language(s) to assess). A description of each category including the specific challenges and strategies identified is provided in the following sections.

Table 3.3

Categories from Focus Group

Category	Challenge	Strategy
Speech-Language Therapists' background	"added a challenge being new to aphasia and then having someone who was Samoan speaking on top of that"	"being Samoan…is an advantage…with these people"
Using interpreters	"relying on interpreters is a really big challenge"	"one interpreter…she's amazing, she'll even comment on sounds…she knows what we want"
Family involvement	"…I walk into a patient's room and… there's about twelve family members …can be quite intimidating"	"sometimes find it really useful…family members who…talk to you about everything they've noticed, which is great"
Samoan language and culture	"looking at assessing someone in Samoan…we actually need to learn all about Samoan language to be able to …assess and provide appropriate therapy"	
Getting an initial impression and building rapport	"get a feeling of the patient initially …I found that …difficult…when it's a second language…"	
Assessment tasks and resources	"tricky…not having the same assessments…like culturally appropriate assessments"	"there's often a family photo…I don't think this is just Samoan families, but are always happy to talk about their family"
Determining which language to assess	"it's hard establishing what's their main language"	"having that conversation with them and picking out what is important to them…what language is important to them"
Logistics of assessment	"feel like they do less in the session…because…the time it takes"	

1. <u>Speech-Language Therapists' background</u>

Challenges

Participants reported that the background of the Speech-Language Therapist in terms of experience, both in years of working and exposure to the population, impacted on their practice with this caseload. Participants expressed that it is difficult to assess bilingual Samoan-English speaking individuals when the Speech-Language Therapist has no Samoan background and/or experiences and that being a newly graduated Speech-Language Therapist can further exacerbate the difficulty:

> *"as a new grad it was my first experience in any assessment with a bilingual person… Samoan in particular…which added a challenge being new to aphasia and then having someone who was Samoan speaking on top of that."*

Strategies

In contrast, it was identified that it is an advantage to have training, experience and relevant background in Samoan culture and assessment:

> *"being Samoan…is an advantage…with these people."*

2. <u>Using interpreters</u>

Challenges

The use of interpreters is a key aspect in the assessment of bilingual Samoan-English speakers with aphasia and was discussed mainly in regards to the challenges with using interpreters during assessment. Challenges included relying on interpreters, the influence of interpretation on the assessment information and the difficulty with getting enough information (especially more informal or written information). Speech-Language Therapists

discussed that they did not always feel confident in the assessment if it was conducted with an interpreter:

> *"no matter how good the interpreters seem…I always…take that assessment with a slight pinch of salt…you're not quite confident…what you've got down is actually how they're performing…what was interpreted to them or what was interpreted back…was actually what was happening."*

Interpreters were said to influence the information obtained from the person with aphasia because they may be giving extra prompting:

> *"it's difficult to know what prompts…the interpreter's giving"*

Participants reported that there may be a level of uncertainty for the Speech-Language Therapist about the information obtained and that there may be inconsistency between interpreters:

> *"the variety of interpreters…some …are very good and some not."*

The process of interpreting was discussed as an added challenge as the linguistic features of the language may become different when interpreted, for example the length of words or commands may change. Participants felt they had to listen to what the interpreter said and see if it sounded a similar length to what they have said. Participants also discussed the influence of the interpreter on the logistics of the assessment, these being the timing and frequency of assessment and intervention:

> *"I wonder if they…get…less frequent service…having to book an interpreter…not being able to be so flexible…the challenge is that you end up only seeing them…a couple of times a week."*

Strategies

Using the same interpreter for multiple sessions and becoming familiar with them, as well as asking them to be open about errors were acknowledged as strategies to use within sessions with the interpreter. It was also acknowledged that when interpreters are open about incorrect responses, the Speech-Language Therapist can learn from the experience. Using the same interpreter across sessions, so they can be trained, was also raised as a strategy that may assist in the process:

> *"getting to know one interpreter… and training them up in terms of how you want the sessions to be conducted, rather than having lots of different ones and having that barrier"*

3. <u>Family involvement</u>

Challenges

The involvement of family when assessing bilingual Samoan-English speakers with aphasia was reported to add an extra element to the assessment process, one which needs to be managed by the Speech-Language Therapist. Participants reported that family involvement can be challenging and intimidating due to their differing perceptions and desire to be involved with assessment, as well as being able to provide management strategies to the family for the communication difficulty.

Participants felt that the families' perceptions of the communication impairment may differ to that of the Speech-Language Therapists and that, at times, the family may feel that there is no communication difficulty, which can then be challenging for the Speech-Language Therapist:

“then I’ve had families who are like no there’s…absolutely nothing wrong with their language…and this patient’s unable to follow my modeling …quite severe presenting… and the family’s like…everything is fine.”

It was also discussed that it is difficult for the Speech-Language Therapist to provide management strategies to family if they speak a different language to the one that the individual with aphasia has preserved. Participants discussed the idea of a bilingual Samoan-English speaker with aphasia no longer being able to communicate effectively in English, when their children only speak English and this is the usual common language. This then becomes challenging for the Speech-Language Therapist to provide management strategies for effective communication due to differences in the languages spoken between the person with aphasia and their family:

“the person has a stroke and they…revert to Samoan but the children don’t speak Samoan…that’s really tricky to deal with.”

Participants discussed experiences where family provide an extra challenge when they want to be involved in the assessment, or when there are large numbers of people in the room which can be intimidating, and also that some families do not like the Speech-Language Therapist to use an interpreter:

“they’re[family]…often wanting to help because they see that the language is a difficulty…you’ve got an interpreter who perhaps is not familiar to the family and they’re thinking…we speak Samoan, you’ve brought another Samoan speaker… you have people saying…no at home we say it like this.”

Strategies

In terms of using family to aid the assessment process, participants reported that it is helpful to build rapport with family who can assist in providing further information about

the bilingual Samoan-English speaker with aphasia and how they are communicating. Some families also provide observations about the person's communication abilities that are valuable to the Speech-Language Therapist:

"if you can build rapport with the family and the patient…have a relationship where they're more comfortable…talking about the language…you might not get… specific assessment…any easier but… if they're …comfortable telling you what they've noticed…that gives you a lot of information."

4. <u>Samoan language and culture</u>

Challenges

The Samoan language and culture play a large role within the assessment process as described by participants. The perception of sickness and family roles and the expectations from Speech-Language Therapist and the health service need to be taken into consideration as they were described as another challenge, along with the language itself providing additional challenges. Participants discussed how the perception of sickness and the family role in looking after someone who is sick is different in Samoan culture:

"I…get the feeling…when there's something happen to a family member, it's happened…they're …accepting of that and they've just had to continue with that family member."

Participants reported that no matter what culture someone is from, there will be different expectations from health services, but in terms of providing Speech-Language Therapy input, the bilingual Samoan-English speaker with aphasia may not understand what the service is or how it may be helpful. However the participants indicated that Samoan

clients may have a lack of understanding of Speech-Language Therapy services and a different understanding of health care in general:

> *"[I] get a feeling that I'm the health professional and they're happy for me to do what I'm doing but…they don't…question it…don't perhaps see how it is useful…if culturally it's not as important to them."*

The Samoan language itself may also affect the assessment process with participants outlining that there are challenges providing therapy, due to linguistic differences between Samoan and English. For example, one participant said there were *"more challenges…in providing therapy…because of the whole structure of the language."*

Participants also reported that it was important for the Speech-Language Therapist to learn about the Samoan culture in order to be able to conduct the assessment:

> *"looking at assessing someone in Samoan…we actually need to learn all about Samoan language to be able to …assess and provide appropriate therapy."*

It was also reported that determining aspects of the persons' own individual characteristics or personality traits was important:

> *"everybody is different…even if they are of certain cultures…you've got your own individual culture as well."*

5. <u>Getting an initial impression of and building rapport with the individual with aphasia</u>

Challenges

The idea of getting an 'initial impression' of the bilingual Samoan-English speaker with aphasia was reported by the participants throughout the focus group. Getting the initial or informal impression and building rapport with the bilingual Samoan-English

speaker with aphasia were perceived to be added challenges during the assessment process.

Participants reported that, with bilingual patients, it was more difficult to get an initial informal impression of the individual's communication at the beginning of the assessment, or before completing formal assessment, because communication is also occurring in a different language:

> *"I always find it difficult…with any…bilingual patient or monolingual in a different language because so much…assessment is based on…overall impression…being able to communicate with someone…it's always quite difficult to get the overall picture."*

It was also reported that it may be more difficult to build rapport at the beginning of the assessment session because of the language differences:

> *"before you do an assessment…you don't just go in and assess, you usually go in and have a…chat before and …build some rapport…small talk…that's something that I feel…go out the door."*

6. Assessment tasks and resources

Challenges

Generally, it was reported that obtaining information and using formal assessment tasks was difficult when working with bilingual Samoan-English speakers with aphasia. Participants indicated that using formal assessments may be difficult as they may not be culturally appropriate as they may need to be modified to use them effectively with the bilingual Samoan-English speaker with aphasia. When the tasks are modified this then effects the standardization:

"I definitely use the tasks from the WAB…yes no questions…following directions…but I do try and make those alterations so it's not… standardized…its structured and formal."

In addition, it was difficult to assess written modalities and to obtain information about the bilingual Samoan-English speaker with aphasia's activities and participation.

Strategies

Modifying assessment tasks to make them more appropriate was identified as a helpful strategy when assessing bilingual Samoan-English speakers with aphasia:

"Occasionally I will change…like…is your last name Smith, they use a Samoan last name...and…repetition …use the word pen coz it's short in English is the word pen short in Samoan…a short simple well known word."

Participants outlined that a mixture of formal and informal assessment may be used to obtain information, for example informal conversation may give an indication of what level to begin at, formal assessment may provide structure to the assessment process, and some formal assessment tasks such as aspects of the CAT, the WAB, and the Aphasia Screening Test may be used with bilingual Samoan-English speakers with aphasia if appropriate:

"informal screening…just having a conversation to know where…do I…start…assessment…what level…are they…at."

Having the individual with aphasia talk about family or photos was also reported to be helpful for eliciting a language sample during the assessment:

"there's often a family photo…I don't think this is just Samoan families, but are always happy to talk about their family."

Participants also highlighted that research for the development of standardized formal assessments in Samoan was needed.

7. Determining which language to assess

Challenges

Participants also reported that it was difficult to know which languages were preserved or impaired in the bilingual Samoan-English speaker with aphasia for assessment and to determine which one was more important to the person. Participants also stated that deciding on the person's main language was sometimes challenging:

"it's hard establishing what's their main language."

One participant reported an experience where the bilingual Samoan-English speaker with aphasia was using neologisms but because the Speech-Language Therapist did not speak Samoan, it appeared that they were speaking fluently. It was only when the interpreter reported that the individual was not speaking Samoan that the Speech-Language Therapist could determine that the impairment and that the Samoan language was not preserved.

Strategies

Participants reported that trying to assess the language important to the person needed to be considered wen planning which language to assess:

"having that conversation with them and picking out what is important to them…what language is important to them."

Furthermore another participant stated:

"if they're living at home with their daughter and her children and they only speak English…I'd wanna assess their English."

However, participants reported that it may be useful to attempt assessment in English and then repeat it in Samoan with the use of an interpreter, or to assess the most intact language abilities in both languages:

"if I tried in English and they're unable to do it…ask them again in Samoan…sort of do…both languages in one session."

8. Logistics of assessment

Challenges

The final category revealed in the study involved the general logistics of assessment. Overall, it was perceived that, when working with bilingual Samoan-English speakers with aphasia, it was difficult to provide Speech-Language Therapy services and that the environment and time taken for assessment and providing a Speech-Language Therapy service could be challenging. Participants reported that there were multiple difficulties with providing appropriate Speech-Language Therapy services for this population. For example participants reported that the individuals may end up having less frequent service, the tasks available for assessment may be less varied, there may be a different extent and quality of client education at the end of the assessment, and it may be more difficult to get enough information from the assessment in order to plan appropriate therapy:

"I wonder if they…get…less frequent service…having to book an interpreter…not being able to be so flexible…the challenge is that you end up only seeing them…a couple of times a week."

Other logistical challenges identified were that it was difficult to obtain a good environment for assessment and the extra time was required for both planning and implementing the Speech-Language Therapy service. The home environment was reported to provide a different picture to the hospital environment and the extra time required to

prepare resources and organise assessments with an interpreter was identified as potentially leading to less being achieved within the assessment session:

"feel like they do less in the session…because…the time it takes."

3.4 Discussion

3.4.1 Overview

The aim of the focus group was to explore Speech-Language Therapists' perceptions of challenges of and strategies for language assessment of bilingual Samoan-English speakers with aphasia. The results from the focus group provide valuable insight from the Speech-Language Therapists' experiences. The categories outlined demonstrate that there are multiple challenges involved in the assessment process but also that Speech-Language Therapists use strategies that may facilitate the assessment process when some of these challenges arise.

3.4.2 Challenges

There was an overall sense throughout the results that the general process of language assessment with bilingual Samoan-English speakers with aphasia has many challenges, with all categories identified including examples of challenges for Speech-Language Therapists. Previous reviews relating to the management of bilingual aphasia suggest that challenges with assessing bilingual aphasia include levels of bilingualism, use of interpreters, use and availability of tests in various languages, and types of impairment and recovery in bilingual aphasia (Roberts, 2008; Ansaldo et al., 2008; Lorenzen & Murray, 2008). This links closely with categories identified in the focus group, in particular the categories of using interpreters, Samoan language and culture, assessment tasks and resources, and determining which language to assess. A number of the challenges identified in this study could be challenges that any Speech-Language Therapist carrying out

assessment with a person with bilingual aphasia would encounter. It appears that Samoan culture and language may affect a number of aspects involved in conducting the assessment. For example it may be important for the Speech-Language Therapist to attempt to understand the language and culture of the person prior to conducting the assessment and this may take time. This is an important factor to acknowledge as people from the Samoan population often have views of language and culture that are different from the western viewpoint (Anae, 2010; Capstick et al., 2009). Understanding the Samoan culture to provide an appropriate service is required to be able to follow both the direction of health care in NZ (Ministry of Health, 2000), as well as to align with the expectations of international Speech-Language Therapy governing bodies (American Speech-Language-Hearing Association, 2004; Royal College of Speech & Language Therapists, 2005). In the absense of cultural and linguistic knowledge, an interpreter becomes a vital part of the assessment process; however, the use of an interpreter may lead to further challenges, as identified by the focus group participants. The Speech-Language Therapist has to rely a lot on the interpreter during the assessment and the interpreter can influence the information gathered within the assessment, a finding previously described by Roger and Code (2011) and Kambanaros and van Steenbrugge (2004). This study further supports the idea that interpreters may provide more or less information than is required or initially delivered by the Speech-Language Therapist. It is difficult to determine why this may occur, although the cause may be multifactorial, and that reasons for the tasks changing may include the actual process of translation and a reduced understanding of the assessment process on the part of the interpreter.

It was highlighted in the study that standardized formal assessments in Samoan are needed. The Bilingual Aphasia Test (BAT) is available in many languages, and more recently

has been adapted into the Rarotongan language (Cook Island Maori) (Miller Amberber, 2011), however translation into Samoan, has yet to be undertaken. At this stage Speech-Language Therapists appear to be modifying existing tools, (e.g., the participants in this study discussed using items from the Western Aphasia Battery, but not in a standardized manner); however this provides another challenge as it is suggested that equivalent tasks be used in each language being assessed and that assessment stimuli should be appropriate for the cultural background (Ansaldo et al., 2008).

It is also interesting that choosing which language to assess was discussed at length by the focus group participants, considering the recommendation from governing bodies and in the literature (Royal College of Speech & Language Therapists, 2005; Paradis, 2004) that it is important to assess all languages that were spoken by the person premorbidly. One reason for this finding may be related to logistical constraints. General logistics of the assessment make up a large portion of the challenges identified, and appear to overlap with other categories. These logistical challenges included the time taken for planning and implementation of services, the frequency of the service, the variety of tasks available, the extent and quality of client education, and difficulty obtaining enough information from the assessment to plan appropriate therapy.

A unique finding in the study was that it was perceived to be more difficult to build rapport and to obtain an initial impression of the bilingual Samoan-English speaker with aphasia at the beginning of the assessment. This is similar to findings by Nelson and Allison (2007) who described the importance of developing effective relationships with culturally diverse populations for Occupational Therapists.

3.4.3 Strategies

Even with the challenges identified by this study, there were also a number of strategies identified that made language assessment with bilingual Samoan-English speakers with aphasia more successful. An increased understanding and experience with the population was suggested as helpful for Speech-Language Therapists. As mentioned previously, it should be expected that Speech-Language Therapists learn about the culture and language features for linguistically and culturally appropriate practice. Speech-Language Therapists have a professional obligation to understand aphasia in bilingual individuals (Roberts & Kiran, 2007), but it is acknowledged that having an availability of Speech-Language Therapists from all languages and cultures is difficult to achieve (Kritikos, 2003). In ideal circumstances, a Speech-Language Therapist with a Samoan background would conduct the assessment, but at the least an understanding of the Samoan culture by the Speech-Language Therapist should be encouraged., This fits with the recommendation of Cheng et al. (2001) regarding providing Speech-Language Therapy education that includes a focus on cultural competence and that includes a diverse student body .

The involvement of family is another area where there are strategies that increase the success of the assessment process. Speech-Language Therapists discussed building rapport with family who can provide extra information about the bilingual Samoan-English speaker with aphasia and how they are communicating, something that may appear obvious but may be lost in the complexity of carrying out the assessment. Family roles in the Samoan culture are known to be of high importance and language is important and intertwined with the fundamental values of family (Anae, 2010; Sobralske, 2006). It is therefore understandable that family may want to be involved in the assessment process,

and consequently it is up to the Speech-Language Therapist to use the family in an appropriate way in order to be a helpful adjunct to their assessment.

Along with the management of family within sessions, interpreters can be used effectively to increase the success of an assessment. Training interpreters so they are familiar with language assessment and the bilingual Samoan-English speaker with aphasia could potentially be achieved in detailed and effective pre and post briefing, something already recommended by previous studies (Roger & Code, 2011; Kambanaros & van Steenbrugge, 2004). This study also points out the strategy of using the same interpreter for the people with aphasia so that familiarity and understanding of Speech-Language Therapy assessments is developed. This finding links with recommendations from ASHA in regards to developing appropriate relationships with interpreters when providing culturally or linguistcally diverse services (American Speech-Language-Hearing Association, 2004).

3.4.4 Clinical implications

The findings from this study provide important insights from a Speech-Language Therapy perspective and support a number of recommendations that could be made for Speech-Language Therapists working with bilingual Samoan-English speakers with aphasia. In regards to areas where both challenges and strategies were identified, the following clinical implications can be drawn. Firstly, it should be acknowledged that conducting a language assessment with bilingual Samoan-English speakers with aphasia may be challenging. Speech-Language Therapists should be encouraged to develop an increased understanding and experience of the Samoan-English speaking population. This could be achieved through the development of specific training or competency programs.

Secondly, when using interpreters, it is important to include prebriefing and postbriefing sessions (Roger & Code, 2011; Kambanaros & van Steenbrugge, 2004). Another

recommendation from this study is to consider using trained or familiar interpreters, as they may have more of an understanding of the Speech-Language Therapy assessment process. Furthermore, when involving family in sessions, sometimes as well as interpreters, the Speech-Language Therapist should consider that it may be more difficult because of the number of people involved or the way in which the family understands the communication difficulties and assessment process. It is important to build rapport with the family so that they can assist in the assessment process by providing information that may not be easily accessible through formal assessment

In regards to assessment tasks and resources, it should be acknowledged that ready-made culturally appropriate resources are not yet available for the bilingual Samoan-English speaking population. In their place, Speech-Language Therapists can use more naturalistic and client specific resources (e.g., family photos). It is recommended that further resources and formal assessments are developed for use with this population.

Finally, when deciding which language to assess it can be recommended that the bilingual Samoan-English speaker with aphasia be assessed in the language that is most important to them, if it is not possible to assess the individual in both languages, as is recommended professional bodies. Speech-Language Therapists should also be aware that there may be situations in which families are left without a common language because the language preserved is not the main language used by the family.

As limited research thus far has investigated the assessment process in bilingual aphasia, these clinical implications provide some practical approaches and strategies that clinicians may use as a starting point for attempting to enhance services for this population.

3.4.5 Limitations

A limitation of this study was the limited number of participants who participated in the focus group. However, there was a limited pool of Speech-Language Therapists who could have been recruited for this study (as an inclusion criteria involved experience working with bilingual Samoan-English speakers with aphasia). A future study could focus on assessment of Pacific Island clients in general or investigate general experiences of bilingual aphasia. Another limitation of the study was that the primary researcher knew all the participants. This may have affected how the participants responded during the focus group interview.

3.5 Conclusions

In conclusion, Speech-Language Therapists perceive that the process of language assessment with bilingual Samoan-English speakers with aphasia has many challenges relating to the background of the Speech-Language Therapist, the use of interpreters, the involvement of family, impacts of Samoan language and culture, difficulties getting an initial impression and building rapport with the individual with aphasia, assessment tasks and resources, determining which language(s) to assess, and the general logistics of assessment. However, Speech-Language Therapists have also reported a number of helpful strategies that could assist in the assessment process such as increasing the Speech-Language Therapists' background knowledge of the language and culture, using interpreters and family more effectively in order to improve the assessment process, and using more appropriate resources. These findings perceptions provide some valuable insights into the experience of language assessment of bilingual Samoan-English speakers with aphasia. The wider findings of this study in conjunction with the case study will be discussed in following chapter.

Chapter 4

Conclusions

4.1 Summary of thesis aims and results

The overall aim of this research was to explore the experience of language assessment of bilingual Samoan-English speakers with aphasia as perceived by those involved in the assessment process. This topic was investigated using qualitative research methods in two studies, a case study involving an outpatient language assessment of a bilingual Samoan-English speaker with aphasia, and a focus group conducted with Speech-Language Therapists with experience conducting language assessments with bilingual Samoan-English speakers with aphasia. The results from the case study revealed eight themes: 1) Samoan-English language assessment is a hard process for the individuals involved; 2) Samoan-English language assessment as a team process; 3) differences in understanding of communication impairments and the assessment process; 4) time; 5) preparation; 6) appropriateness of assessment tasks, resources, and processes; 7) uncertainty; and 8) flexibility. These findings show the complexity of the assessment process in this population and that there are multiple factors that need to be considered in understanding language assessment of bilingual Samoan-English speakers with aphasia. The results from the focus group revealed eight categories, which were: 1) Speech-Language Therapists' background; 2) using interpreters; 3) family involvement; 4) Samoan language and culture; 5) getting an initial impression of and building rapport with the individual with aphasia; 6) assessment tasks and resources; 7) determining which language(s) to assess; and 8) logistics of assessment. The categories outlined demonstrate that there are multiple

challenges involved in the assessment process but also that Speech-Language Therapists use strategies that may facilitate the assessment process when some of these challenges arise. The overall results from both studies reported in this thesis outline findings that enhance our understanding of the process of assessment in bilingual Samoan-English speakers with aphasia and that may be used as a basis for attempting to improve clinical practice with this population.

4.2 Common research findings across both studies

It is clear that within the results of the two studies, there are parallel findings. The main overarching finding that was apparent from the results of both studies was that the process is hard, not just hard for the Speech-Language Therapist, but also for the bilingual Samoan-English speaker with aphasia, the interpreter, and any family members involved. The difficulty of the process underpins all the themes from the case study and categories from the focus group and the idea of the process being hard is multifaceted.

The second theme of the case study, 'Samoan-English language assessment as a team process', highlighted the idea of the assessment process being more than just an interaction between only the therapist and the client. Issues associated with working with the bilingual Samoan-English speaker with aphasia, the interpreter and the family member were discussed and identified as an obvious challenge. These challenges paralleled those outlined in the focus group categories of 'using interpreters' and 'family involvement'. Building familiarity and understanding with the interpreter and family member was also highlighted in both studies as a strategy to aid the assessment process. This idea of familiarity also links with categories of the 'Speech-Language Therapists' background' and 'getting an initial impression of and building rapport with the individual with aphasia' from the focus group study.

Another common finding across the results of both studies was that of the link between themes from the case study of ‘time’ and ‘preparation’, and the challenges within the category from the focus group, ‘logistics of assessment’. These findings suggest that language assessment of bilingual Samoan-English speakers with aphasia often takes a lot of extra time and preparation which may be challenging for the Speech-Language Therapist to deal with.

The cultural and linguistic appropriateness of the assessment process was also raised extensively in both research studies. One of the themes from the case study ‘appropriateness of assessment tasks, resources, and processes’ highlighted that tasks used with the bilingual Samoan-English speaker with aphasia for language assessment were perceived as inappropriate,, which corresponds with challenges identified in the focus group in relation to ‘assessment tasks and resources’. Also highlighted in the focus group were ideas of challenges with ‘Samoan language and culture’ and ‘determining the language to assess’, both of which relate to the appropriateness of the assessment process.

4.3 Clinical implications

A number of clinical implications can be drawn from the findings of the studies presented in this thesis. The most significant of these findings are that the process of assessment in this population seems to be inherently difficult for many of the parties involved, due to the added difficulties introduced by additional language and cultural factors. Being aware that the process may present particular challenges may help clinicians to provide better education to the other parties involved and may also reassure clinicians when they are finding clinical reasoning processes to be more complex than usual. Also the findings from this thesis highlight the importance of working closely with other team members during the assessment process. In particular it may be useful to provide

appropriate education and training to interpreters and also to attempt to establish good rapport and relationships with the family members of the person with aphasia. Finally it is also important for clinicians to be aware of the challenges relating to additional time required to prepare and/or source appropriate resources for the assessment process. The thesis findings highlighted the need to allow for additional time in the management of this caseload, as well as the need to develop more culturally appropriate resources

4.4 Future directions

Although this study looked specifically at the experience of language assessment of bilingual Samoan-English speaking individuals with aphasia and therefore cannot be completely generalised into the wider language assessment practice for speakers with aphasia, it provides an important initial insight into an area and population that are continually increasing. The exploration achieved in this research may also provide a base for further research in the area of experience of language assessment of bilingual Samoan-English speakers with aphasia, which will assist in achieving the national health aims and improve the Speech-Language Therapy practice for this population. This research supports the use of more qualitative methods in studying language assessment of bilingual speakers with aphasia in relation to both linguistic and cultural factors. It is recommended that the qualitative methods used in the present study, such as the case study, be replicated within other settings (e.g., inpatient care or chronic care) or with clients from other languages and cultures in order to provide further insights into this area.

4.5 Overall conclusions

In conclusion, this thesis has explored the insiders' experience of language assessment of bilingual Samoan-English speakers with aphasia. The process of language assessment with bilingual Samoan-English speakers with aphasia is hard for everyone

involved, and the challenges are multifaceted. The assessment process requires a team effort, and team members have different understandings of the roles and difficulties involved. There are elements of flexibility and uncertainty when assessing bilingual Samoan-English speakers with aphasia and the process can take extra time because of the preparation needed for effective language assessment. Speech-Language Therapists should be aware of the challenges involved and strategies available to them when working with bilingual Samoan-English speakers with aphasia, in regards to their own background, the involvement of interpreters and family, Samoan language and culture, building rapport with the individual with aphasia, assessment tasks and resources, determining which language(s) to assess and the logistics of assessment. This thesis adds to the knowledge base for Speech-Language Therapists working with bilingual and culturally diverse populations, and more specifically explores and provides insight into the area of language assessment of bilingual Samoan-English speakers with aphasia, an area that has not been investigated previously.

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Appendix A - Language history form

Language History

Name: ____ Date: ___ /___ /___

Demographic Information

1. Gender: Male / Female 2. Date of birth: ___ /___ /___

3. Nationality: ___________________________ 4. Ethnicity: ________________________

5. Country of Birth: _______________________ 6. Years living in NZ: ________________

7. Years living in other countries: ____

8. Occupation and Work History: ____

____

9. Languages Known: ____

10. How many years of formal education do________/you have? __________________

11. Highest level of qualification:

Did not attend high school High school Tertiary Other

12. Spouse's work history (if applicable): ____

____

13. Spouse's highest level of education:

Did not attend high school High school Tertiary Other

14. What language was spoken at school? ____

15. What language was spoken at ____________/your spouse's school? ________________

*Notes:*____

____

____

____

Pre-stroke Language Background

1. Acquisition

a. Years of exposure to the following languages:

i. English: ____________ Samoan: ____________

ii. At what age did _____________/you first begin learning English? ___________

iii. At what age did _____________/you first begin learning Samoan? ___________

iv. At what age did _____________/you first begin learning (other language)?: _____

b. Type of exposure

How did _____________/you learn English?	*How did _____________/you Learn Samoan?*
- Formal instruction - Language tapes/self instruction - Interaction with family - Interaction with friends - Reading - Watching TV - Listening to the radio - Other	- Formal instruction - Language tapes/self instruction - Interaction with family - Interaction with friends - Reading - Watching TV - Listening to the radio - Other

Where did _____________/you first encounter English?	*Where did _____________/you first encounter Samoan?*
- Home - School - On TV - With friends - Other	- Home - School - On TV - With friends - Other

c. As a child, what language: (L1 = Samoan, L2 = English)

Did _____________/you speak most at home?	
Did _____________/you hear most at home?	

Was spoken most by family?	
Was spoken most by friends?	

2. Language Use, Dominance and Preference

a. How often did ________ /you use the following languages?

Samoan	
Speaking	Daily / 2-3 times per week / Weekly / Monthly / Less than monthly
Hearing/Listening	Daily / 2-3 times per week / Weekly / Monthly / Less than monthly
Reading	Daily / 2-3 times per week / Weekly / Monthly / Less than monthly
Writing	Daily / 2-3 times per week / Weekly / Monthly / Less than monthly

English	
Speaking	Daily / 2-3 times per week / Weekly / Monthly / Less than monthly
Hearing/Listening	Daily / 2-3 times per week / Weekly / Monthly / Less than monthly
Reading	Daily / 2-3 times per week / Weekly / Monthly / Less than monthly
Writing	Daily / 2-3 times per week / Weekly / Monthly / Less than monthly

b. Which Language did ________ /you use in the following environments?

With family:	
- Spouse	Samoan / English / Both / Other
- Children	Samoan / English / Both / Other
- Parents/Grandparents	Samoan / English / Both / Other
With friends	Samoan / English / Both / Other
At work	Samoan / English / Both / Other
In the community:	
- At church	Samoan / English / Both / Other
- While out shopping	Samoan / English / Both / Other
- At community events	Samoan / English / Both / Other
At professional appointments	Samoan / English / Both / Other
When thinking silently	Samoan / English / Both / Other
When doing maths	Samoan / English / Both / Other

Dreaming	Samoan / English / Both / Other

c. Which language did ______________/you *prefer* to speak in the following situations

With family	Samoan / English / Both / Other
With friends	Samoan / English / Both / Other
At work	Samoan / English / Both / Other
In the community	Samoan / English / Both / Other

d. Which language would ______________/you understand, speak, read and write best?

Rank as 1, 2 (and 3) with 1 being the best

Language	Understand	Speak	Read	Write
Samoan				
English				
Other (specify):				

e. Proficiency rating scales – as compared to a native speaker

i. How well did ____________/you **understand** Samoan/English?

Samoan

Could not understand ... Like a native Speaker

1 2 3 4 5 6 7

English

Could not understand ... Like a native Speaker

1 2 3 4 5 6 7

ii. How well did ____________/you **speak** Samoan/English?

Samoan

Could not speak ... Like a native Speaker

1 2 3 4 5 6 7

English

Could not Speak						Like a native Speaker
1	2	3	4	5	6	7

iii. How well did ____________/you **read** in Samoan/English?

Samoan

Could not read						Like a native Speaker
1	2	3	4	5	6	7

English

Could not read						Like a native Speaker
1	2	3	4	5	6	7

iv. How well did ____________/you **write** in Samoan/English?

Samoan

Could not write						Like a native Speaker
1	2	3	4	5	6	7

English

Could not write write						Can write fluently
1	2	3	4	5	6	7

3. Other Variables

a. When __________/you spoke Samoan, do you think you spoke it with an accent? YES/NO

if yes, please rate the strength of the accent

No accent						Native accent
1	2	3	4	5	6	7

b. When ____________/you spoke English, do you think you spoke it with an accent? YES/NO

if yes, please rate the strength of the accent

No accent Native accent

1 2 3 4 5 6 7

c. Did _____________/you ever use more than one language in one conversation? YES / NO

if yes, what languages would these be? _______________________________________

d. When _____________/you were speaking, did you ever mix words or sentences from the different languages you know? YES / NO

e. Before the stroke did _____________/you feel like you were becoming less fluent in one of your languages? YES / NO

If so, what language? ______________ And at what age? __________

Notes: ____

____

____

____

Based on:

Paradis & Libben (1987)

Lim et al., (2008)

Munoz et al., (1999)

Dunn & Fox Tree (2009)

Marian et al., (2007)

Shi (2011)