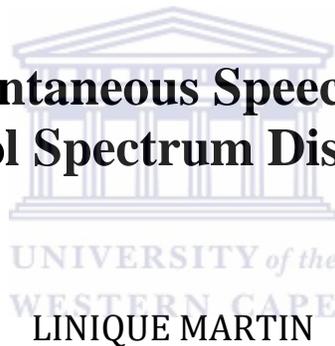




University of the Western Cape

Department of Linguistics

**Analysing the Spontaneous Speech of Children with
Foetal Alcohol Spectrum Disorder (FASD)**



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A full thesis submitted in fulfillment of the requirement for the degree of Magister Atrium
in the Department of Linguistics, University of Western Cape.

Supervisor: PROF. BASSEY E. ANTIA

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Keywords

Foetal Alcohol Spectrum Disorder

Spontaneous speech measures

Language impairments

Standardised language test

Afr-DELV

Syntax domain

Pragmatics domain

Semantic domain

Phonological domain

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Turn taking and overlapping

Silences and Gaps

Repairs

Topic management

Storytelling

The mean length of utterance (MLU),

Index of Productive Syntax (IPSyn)

Number of different word roots (NDWR)



Abstract

Analysing the Spontaneous Speech of Children with Foetal Alcohol Spectrum Disorder (FASD)

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MA thesis, Department of Linguistics, University of the Western Cape

Foetal Alcohol Spectrum Disorder (FASD) is a global problem that affects various communities. FASD denotes a pattern of abnormalities intermittently seen in children born to women who consume huge quantities of alcohol during pregnancy (Church & Kaltenbach, 1997). Church and Kaltenbach (1997) suggest that FAS may be one of the primary causes of hearing, speech and other language problems in children. The two main approaches used to determine the effects of FASD on language are standardised language test (using a statistical approach to test some or all four domains of language, namely, phonology, syntax, morphology and semantics) applied to close-ended questionnaire answers and, to some extent, narrative analysis (in the course of which researchers use wordless picture books to analyse narratives in order to determine the social-communicative characteristics of individuals with FASD). Although the use of standardized measures of language might be helpful to determine problematic areas in relation to the different language domains (Wyper & Rasmussen, 2011), they do not show the difficulty with social-communicative functions which these children might be facing (Coggins, Friet, & Morgan, 1998). On the other hand, while narrative analysis addresses an important level of language (discourse level), it does not foreground the inherently interactive nature of language use and the problems that may be associated with communicative interactions. These shortcomings, in turn, suggest possible limitations in the interventions intended to address the language needs of children with FASD. There is, therefore, a need for complementary approaches that offer a more rounded picture of language impairment in children with FASD. In this study, three approaches are used in identifying features of the speech of children with FASD against the backdrop of comparisons with features in the speech of normally developing children. Firstly, conversational analysis (applied to spontaneous, open-ended speech) is introduced as a means to determine the more social-interactive aspects of speech impairment in children with FASD. Secondly, measures of linguistic aspects of speech (the mean length of utterance, Index of Productive Syntax and the number of different word roots) designed specifically for spontaneous speech are employed (they are applied to the same spontaneous data as the conversational analysis data). Thirdly, the more traditional standardized language test measures applied to non-spontaneous speech are used (covering the four domains of syntax, phonology, semantics, and pragmatics). The study's objectives are to (1) compare patterns in the interactive speech of FASD children and normally developing children; (2) explore the relationship between FASD children and normally developing children in relation to both spontaneous speech measures and standardized measures of language; and (3) compare the impact of the primary caregiver's level of education on testing through spontaneous measures versus standardised measures. Using data from 14 children in the Bellville suburb of Cape Town, South Africa, the study finds that, on the conversational analysis measures, children with FASD, in contrast to normally developing children, tend to obey fewer rules of turn-taking, to overlap less, to engage less in self-repair and to struggle with management and maintenance of topics. The study also finds that children whose scores on the standardized language tests (with non-spontaneous data) suggest they have no language difficulty, especially in terms of phonology, obtained scores in measures of spontaneous speech that indicated

language difficulty. The study also found that the socio-economic status of caregivers was a credible explanation for certain features in the speech of children with FASD is very similar to features in the speech of normally developing children. This finding highlights the role of family setting in mitigating the effects of FASD.



Declaration

I declare that *Analysing the Spontaneous Speech of Children with Foetal Alcohol Spectrum Disorder (FASD)* is my own work and that it has not been submitted as a report for any degree or examination in any other university, and that all the sources I have used or quoted have been indicated and acknowledged by complete references.

Linique Martin

December 2016

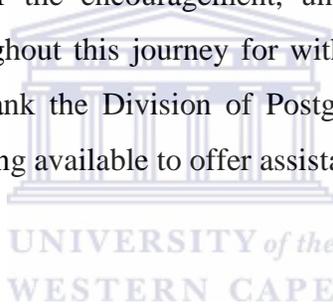
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First and foremost, I thank God Almighty for his mercy and blessings throughout this journey. I dedicate this thesis to my loving and supporting husband that has been there for me throughout my whole academic career, ready with support and encouragement. Thank you for the sacrifices you have made to ensure that I reach the end of this journey. I will never be able to repay you for everything you do for me, so I pray this thank you suffice. I thank my extended family for their patience and understanding.

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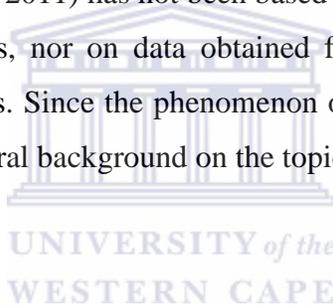
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Chapter 1:

1 Introduction

1.1 Background

This study examines speech impairment in children diagnosed with FASD, in order to understand the manifestations of impairment in social interaction and so as to assess the adequacy of standardised test measures versus spontaneous speech measures in social interaction in accounting for such speech impairments. Much of the work documenting such effects of FAS on children as impairment in naming ability, word comprehension, articulation, voice function, and fluency (Wyper & Rasmussen, 2011) has not been based on children with FASD engaging in interpersonal or social interactions, nor on data obtained from spontaneous speech measures obtained in such social interactions. Since the phenomenon of interest in this study is related to the consumption of alcohol, a general background on the topic of alcohol is in order.



The use of alcohol contributes significantly to the worldwide burden of disease (Marais, Jordaan, Olivier, & Viljoen, 2012). Despite the fact that concerns have surrounded the consumption of alcohol during pregnancy since the biblical era, academic and research interest on the effects of alcohol on the developing embryo is fairly recent (O'Leary, 2002). The adverse effects of maternal drinking on the unborn child may include a spectrum of disorders normally referred to as Foetal Alcohol Spectrum Disorders (FASD) (Marais, Jordaan, Olivier, & Viljoen, 2012). Foetal Alcohol Syndrome (FAS) is the most severe category of FASD and it denotes a pattern of abnormalities intermittently seen in children born to women who consume huge quantities of alcohol during pregnancy (Church & Kaltenbach, 1997). It is evident that there is a substantial increase in the frequency of Foetal Alcohol Syndrome (FAS) in children whose mothers are of low socio-economic status (Bingol, et al., 1987).

There is a deep-rooted culture of heavy drinking within South Africa. It is estimated that South Africans ingest in excess of 5 billion litres of alcohol yearly (Seggie, 2012). This total would be higher if sorghum beer were included, but as it is, this figure amounts to 9-10 litres of pure alcohol per person annually (Seggie, 2012). In 2011, the World Health Organisation (WHO) released a report stating that this is amongst the highest per capita consumption rates in the world, and it rises continuously (Seggie, 2012).

Within South Africa, the Western Cape is notorious for the high levels of consumption of alcohol (Seggie, 2012). The widespread abuse of alcohol within this province is a continuing legacy of a widely predominant “Dop System” or tot system (Prince, 2004). This system institutionalised alcohol consumption as a condition of service for mostly black and coloured families residing in farming communities (Jacobs & Jacobs, 2013). The “Dop System” was once widely used and it involved the payment of the labour force with alcohol rather than cash (Prince, 2004). Thus, the farmer could get rid of the low-quality wine that had very little economic value. This resulted in farm workers becoming addicted to alcohol and incapable of leaving the farms or looking for other forms of employment (Jacobs & Jacobs, 2013). Not surprisingly, this practice increased alcohol dependency among coloured and black communities. After 300 years of implementation and in spite of its having recently been made illegal, the Dop system is still practiced as it has become ritualised (Jacobs & Jacobs, 2013). In the Western Cape Province, the high prevalence rate of Foetal Alcohol Syndrome Disorder (FASD) is perhaps an indication that the dop system remains, affecting mothers and children (Jacobs & Jacobs, 2013). Between five percent and ten percent of children enrolling in school for the first time, have FASD in the Northern Cape and Western Cape provinces (London, 2015). When considering the Gauteng Province, only 2.5 percent of children enrolling in school for the first time, have FASD. With this in mind, it is evident that in the provinces (Western and Northern Province) where the Dop system was widely practiced, the rate of children with FASD is double to provinces (Gauteng) where this system was not implemented (Prince, 2004). In addition, due to the dop system, “generations of predominantly Coloured farm workers have become enmeshed in cycles of poverty and heavy alcohol use” (Rendall-Mkosi, London, Adnams, Morojele, McLoughlin, & Goldstone, 2008, p. 25).

The dangerous use of alcohol produces a huge emotional, economic and social cost to the South African economy (Fieldgate, Jeffrey, Madinane, Ebrahim, Soobyah, & Jordan, 2013). In addition, it has a severe effect on public health as it is considered as one of the key risk factors for poor health within South Africa (Fieldgate, et al, 2013). Because alcohol is the most frequently used drug within South Africa, it is one of South Africa's foremost health risks. Alcohol abuse causes considerable mortality and morbidity (Fieldgate, et al, 2013). As a matter of fact, it results in about 4-6 percent of the total deaths each year; in addition, it is implicated in more than 60 main types of injuries and diseases. The major diseases that are linked to alcohol are: gastrointestinal diseases (such as pancreatitis and liver cirrhosis), neuropsychiatric diseases, intentional injuries (through suicide and violence), cancer, cardiovascular diseases, diabetes mellitus, unintentional injuries (such as drowning and road traffic accidents), foetal alcohol syndrome and pre-term complications (Fieldgate, et al, 2013). Furthermore, there is evidence that points to a causal relationship between infectious diseases and alcohol. A strong correlation exists between sexually transmitted diseases, HIV infection and alcohol consumption (Fieldgate, et al, 2013). In addition to that, alcohol consumption damages the immune system, which consequently enables infections by pathogens, which causes tuberculosis and pneumonia (Fieldgate, et al, 2013).



Besides the various acute and chronic health effects, alcohol abuse is also linked to such inappropriate phenomena as absenteeism within the workplace; violence; child abuse and neglect; and numerous other impacts (Fieldgate, et al, 2013). Alcohol abuse causes destruction far beyond the psychological and physical health of the drinker. What is more, alcohol abuse is detrimental to the health and well-being of others (Fieldgate, et al, 2013). For example, injuries and diseases have social implications which include psychological and financial burdens on families, negative effects on production, and medical costs, which are borne by governments (Fieldgate, et al, 2013).

Ever since Jones and Smith first defined FAS in 1973, there has been significant interest in the subject-matter. The diagnosis of FAS is grounded on a set of criteria consisting of abnormalities

in three key classifications, namely, characteristic facial features, growth retardation, and central nervous system anomalies – the latter includes intellectual barriers (O’Leary, 2002). The intellectual barriers related to FAS are permanent. In addition, Church and Kaltenbach (1997) suggest that FAS may be one of the primary causes of hearing, speech and language problems in children. FAS is now considered as the leading, preventable cause of non-genetic intellectual handicap.

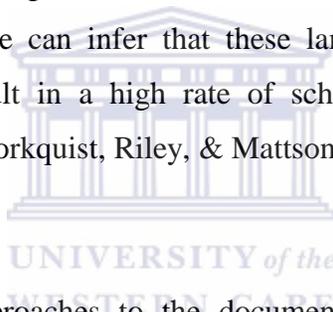
Even though the findings of language impairments in persons with FAS are diverse, research suggests that there are significant language and speech delays in this population group (Wyper & Rasmussen, 2011). Particularly, children with FAS could display impairments in areas such as naming ability, word comprehension, word articulation and both expressive and receptive language skills (Mattson & Riley, 1998). Furthermore, language comprehension, inappropriate pragmatic use of language, deficits in verbal comprehension and spoken language, poor linguistic understanding, delayed speech development, as well as delayed language acquisition, articulation disorders, voice dysfunction, and fluency and rate problems have all been documented in children with FAS (Wyper & Rasmussen, 2011).

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Language impairments in individuals suffering from FASD have been associated with learning difficulties, school drop-out rates, behavioural problems, difficulties initiating and maintaining conversations, following social norms and handling peer interactions, information reasoning and social reasoning (Wyper & Rasmussen, 2011). In addition, McGee, Bjorkquist, Riley, and Mattson, (2009) state that language impairments have an influence on behavioural adjustments and social communication, and these might result in social rejection and difficulties later in life. What is more important is the fact that the use and the development of social communication are disrupted by FASD (Coggins, Friet, & Morgan, 1998). The social-communicative functions of language permit individuals to initiate and develop social relationships, assert preference, desires, and needs; to exchange information and cope with changing environmental demands (Coggins, Friet, & Morgan, 1998). Concisely, social communication allows individuals to influence the day-to-day occasions within their lives (Coggins, Friet, & Morgan, 1998).

Consequently, discrepancies in social communication threaten personal, school and home interactions, and might be a key factor in the dysfunctional and maladaptive behaviours accompanying FASD (Coggins, Friet, & Morgan, 1998).

With this in mind, it is evident that in the case of FASD, the transition between primary and secondary school is of utmost importance. According to Blackburn, Carpenter and Egerton (2009), this transition between primary and secondary schools has to be managed carefully. In relation to adolescents, concerns around sexual behaviour and friendships, emotions, achievement and independence compound their primary deficiencies (Blackburn, Carpenter, & Egerton, 2009). The lack of appropriate interventions and supports could cause the child to develop severe cognitive, psychological and behavioural secondary disabilities (Blackburn, Carpenter, & Egerton, 2009). One can infer that these language impairments in individuals suffering from FASD might result in a high rate of school dropouts, social rejection and difficulties later in life (McGee, Bjorkquist, Riley, & Mattson, 2009).



There have been two major approaches to the documentation of the effects of language impairment in children with FASD. A review of the relevant research suggests that a great deal of emphasis has been placed on the development of standardized measures of language. For example, in 2011, a study on language impairments in children with FASD was conducted by Wyper and Rasmussen in Canada. All the participants within their study were tested on two measures of language ability; the Test of Language Development – Third Edition (TOLD-3) and the Comprehensive Receptive and Expressive Vocabulary Test – Second Edition (CREVT-2) (Wyper & Rasmussen, 2011). The TOLD-3 have two different versions (Intermediate and primary), aimed at distinctive younger and older age ranges of children. Therefore, the four subtests of the primary version (TOLD-P) were completed by children aged 5 to 8 years, while the four subtests of the intermediate version (TOLD-I) were completed by children aged 9 to 13 years (Wyper & Rasmussen, 2011). The diagnostic tool being used within South Africa is standardised tests. A multi-disciplinary team of qualified specialists make use of the Institute of Medicines Model (IOM) in order to make a diagnosis (FARR, 2014). The IOM includes three

assessments: 1. A Clinical assessment which involves a medical doctor that is trained in the diagnosis of FASD, examining the individual with the help of special tests used to assess whether the individual has FASD or not (FARR, 2014). 2. A Neurodevelopmental assessment, where a qualified psychometrist makes use of particular tests in order to make a psychological diagnosis. Within these psychological tests, the standardized language test is administered which is used to determine the language impairments an individual might be facing. 3. An intensive interview with the mother where the mother is asked about the time, amount and type of alcohol the mother consumed during her pregnancy (FARR, 2014).

A second approach involves the use of narrative analysis. In 1998, Coggins, Friet, and Morgan piloted research which analysed narrative discourse with the aid of wordless picture books, *"Frog Where are you?"* (Mayer, 1969 in Coggins, Friet, and Morgan, 1998). The children were instructed to look through the picture book in order to become familiar with the story line. They were then asked to engage in the best storytelling possible, making use of the picture book as a prompt (Thorne, Coggins, Olson, & Astley, 2007). Narratives are a crucial form of extended discourse which provides individuals with a way to verbally summarise experiences (Thorne, Coggins, Olson, & Astley, 2007). It is a vital source of knowledge concerning perspective talking, inference, and social cognition. (Thorne, Coggins, Olson, & Astley, 2007).

1.2 Statement of the problem

With the reported prevalence rate ranging from 29 to 290 per 1000, South Africa has the highest measured FAS(D) prevalence rate in the world within some high-risk communities (Olivier, Curfs, & Viljoen, 2016). Despite this disturbing fact, South Africa has no integrated national strategy or policy in place to deal with FAS(D) (Marais, Jordaan, Olivier, & Viljoen, 2012). According to London (2015), the South African government's efforts to attend to this high FASD rate, have been insufficient. In relation to other populations, for instance, native communities of Australasia and North America, conventionally regarded as high risk, the local FASD statistics in South Africa are up to 100 times higher (London, 2015). Through the

involvement and work of the Foundation for Alcohol Related Research (FARR), there have been significant accomplishments in identifying, preventing and assessing the prevalence of FASD (Marais, Jordaan, Olivier, & Viljoen, 2012). Yet, the extent to which language is impaired within this population group has not been given sufficient research attention within the South African context.

As mentioned earlier, research about FASD and language centres around the use of standardised measures of language and narrative analysis. Although the use of standardised measures of language might be helpful to determine problematic areas with relation to the different language domains (Wyper & Rasmussen, 2011), it does not show the difficulty with social-communicative functions which these children might be facing (Coggins, Friet, & Morgan, 1998). In addition, the findings of language impairments in persons with FAS with the use of standardised measures of language are diverse (Wyper & Rasmussen, 2011). Some findings show that “school-age children with FAS are often perceived to have strong verbal abilities, particularly in the expressive language domain” (Coggins, Friet, & Morgan, 1998, p. 223). Thus, language content (world knowledge and word knowledge) and language form (phonology, syntax, and morphology) have been described as being within the normal range for performance when standardised measures of language are utilised (Coggins, Friet, & Morgan, 1998). Results like these could be seen as misleading, as they tend to suggest that FAS children fall under the average range for performance, even though many of the language impairments that such children face are not taken into account. Thus, one could deduce that standardised measures of language provide an incomplete picture of the problem at hand. The standardised measures might be the first choice for diagnosis as they are not time consuming; however, the incomplete picture they yield could mislead interventions that could be implemented to offer assistance to FASD children and their families.

When testing an individual’s ability to use social-communicative functions of language, researchers would normally make use of narrative analysis (Thorne, Coggins, Olson, & Astley, 2007; Coggins, Friet, & Morgan, 1998). With the use of narrative analysis, individuals normally

speak alone; thus one cannot investigate the way in which the child would interact within a social setting. Although narratives are important in everyday interactions (such as telling a story to a friend), it is not the only social interaction that one is faced with on a daily basis (Coggins, Friet, & Morgan, 1998). In analysing narratives, one cannot derive information concerning turn-taking, overlaps, repair and the effect of intertextuality on previous utterances in communication by FASD individuals. Using spontaneous speech to analyse the language impairments that FASD individuals are faced with, might complete the picture. Wyper and Rasmussen (2011) suggest that when FASD children are examined in the naturalistic environment rather than in structured, controlled environment, they might exhibit many more limitations in terms of their abilities to partake in day-to-day social interactions.

The researcher's previous study was based on mapping the language difficulties of children with FASD in a community in the Western Cape using a standardised language test. The school where all the FASD participants were recruited requested the results of the study in order to see where the language issues or impairments were and how children could be assisted with these language issues. The researcher realised that not all communication problems that individuals with FASD are faced with, can be documented with the use of standardised language tests. This could lead to some children being excluded from intervention plans. Thus, the rationale behind this study was to provide a more comprehensive picture of the language issues or communication problems which in turn, might assist schools to provide children with a more comprehensive intervention plan.

1.3 Aims and Objectives

The main aim of this study is to understand the aspects of language impairment in the spontaneous speech of FASD children in social interaction. Secondly, the aim is to examine the adequacy of, and influences on, measures of spontaneous speech in social interaction as a means of accounting for impairment.

The specific objectives:

- 1.3.1 To compare the structural patterns in the spontaneous speech of FASD children in social interaction with those of normally developing children.
- 1.3.2 To explore the relationship between the FASD children and the normally developing children in relation to both spontaneous speech measures and standardised measures of language. To compare the information yielded by spontaneous speech measures versus standardised tests regarding the speech of both FASD and normally developing children.
- 1.3.4 To compare the impact of the primary caregiver's level of education on testing through spontaneous measures versus standardised measures.

1.4 Research Questions

- 1.4.1 What are the effects of FASD on the structural patterns of the speech of children with FASD spontaneous speech?
- 1.4.2 Is there a correlation between FASD and normally developing children in relation to both spontaneous speech measures and standardised measures of language?
- 1.4.3. Is there a correlation between primary caregiver's education level and FASD/normally developing children's performance on both standardised measures and spontaneous speech measures?

1.5 Possible limitations

There are two possible limitations to this study:

- 1.5.1. Reference will be made (chapter 3, subsection 3.1) to the alcohol abuse in the research site which was at the time the reason for the study. This reason became a challenge on its own as the parents of the FASD participants might be regular alcohol users. With this in

mind, the researcher expected some problems with getting all the participants at the venue where data collection should be taking place. This led to all the interviews not taking place on the same day, which led to problems with transcriptions.

1.5.2. Measures of spontaneous speech were an issue as the researcher might was not able to make use of the SALT-based Program to calculate or run tests due to the fact that all the participants' first language is Afrikaans, more specifically, the Kaaps dialect of Afrikaans, and the interviews were conducted in their first language. The researcher decided that this will be done as most of the participants cannot speak English and conducting the interview in Kaaps would enable the participants to be more at ease. As the SALT-based Program could not be used, all the calculations and tests had to be done manually. Although the researcher employed research assistants to assist with this, with the attendant impact on reliability (associated with human error).

1.5.3 Due to constraints of time, the researcher decided to make use of the data of the standardised language tests collected in the researcher's previous study, where all the children participated in. This might be seen as a limitation, as there is a two year gap between the two sets of data sampling (i.e. standardised language test data and spontaneous speech data).

This account of possible limitations, then, sensitised the researcher to the need for caution in the course of analysing and interpreting the data.

1.6 Chapter Outline

Chapter one outlines the general introduction of the research. This includes a general background to the study and the significance of the study, statement of research problem, aim and objectives, the hypotheses as well as the possible limitations of the study.

Chapter two focuses on what the literature says in relation to FASD by firstly looking at the history of FASD and secondly, focusing on FASD research in South Africa. The third section will explore what the literature states in relation to language impairments and FASD and the

measures used to come to these conclusions. This will be followed by a review of the literature on Conversation Analysis (CA) as it provides the analytical or theoretical frameworks for the proposed study.

Chapter three concentrates on the research methodology which will include the research site, participants, collection of the data, Standardised Language Test Measure, Spontaneous Language Samples, and Measures of spontaneous speech, CA and ethics. With the purpose of addressing the research questions outlined above, this study made use of a mixed methods design (Grotjahn, 1987). The first part of the study made use an exploratory-interpretive paradigm (Grotjahn, 1987) which involved a conversational analysis (CA) of the spontaneous speech data which was collected. The second part of the study used an exploratory-quantitative-statistical paradigm (Grotjahn, 1987) in order to examine the main differences between the standardised measures of language and measures of spontaneous speech in FASD children.

Chapter four contains a conversational analytic account of the speech by FASD and normally developing children. The aim of this chapter is to answer the first research question, what are the effects of FASD on the structural patterns of social interactions in spontaneous speech? The researcher will be attempting to identify any conversational analytic features that appear to be associated with or prominent in the spontaneous speech of children with FASD, but relatively less prominent in the speech of children without FASD, and vice versa.

Chapter five will explore the relationship between spontaneous speech measures and standardised measures of language in children with FASD. This chapter will focus on answering the second research question, which is whether there is a correlation between FASD and normally developing children in relation to both spontaneous speech measures and standardised measures of language. This section will focus on the quantitative results. This will be followed by a section dedicated to answer the last research question, which is, whether there is a

correlation between primary caregiver's education level and FASD/normally developing children's performance on both standardised measures and spontaneous speech measures?

Chapter 6 will be a concluding chapter, focusing on bringing all results together. Firstly, it will look at the statement of the problem and whether the research questions were answered. Secondly, a comprehensive look at both the results of standardised measures of language and spontaneous speech measures will follow. Lastly, the researcher will address implications of the study and suggestions for further work.



Chapter 2:

2 Literature Review and theoretical framework

2.1 Introduction

This chapter will focus on what the literature says in relation to FASD by firstly looking at the history of FASD and secondly, focusing on FASD research in South Africa. The third section will explore what the literature states in relation to language impairments and FASD and the measures used to come to these conclusions. This will be followed by a review of the literature on Conversation Analysis (CA) as it provides the analytical or theoretical frameworks for the proposed study.

2.2 History of FASD



Concern surrounding the consequence of alcohol consumption during pregnancy is not a new phenomenon (O’Leary, 2002). The link between prenatal maternal alcohol ingestion and the subsequent complications faced by children has apparently been known all through history (Blaschke, Maltaverne, & Struck, 2009). Throughout the ages, portrayals demonstrating the concern that alcohol consumption might have dangerous effects on a developing foetus have appeared in oral traditions, in written form, and in the art form (Blaschke, Maltaverne, & Struck, 2009). Quotes from ancient sources such as Aristotle, the Greek philosopher and within the Old Testament of the Bible, reference this phenomenon (Blaschke, Maltaverne, & Struck, 2009). In the Bible, this is reflected in the passage: “Behold thou shalt conceive and bear a son: now drink no wine or strong drinks” (Judges 13:7). In England (1720-1750), during the “Gin Epidemic”, when low-priced gin was widely available and popular, there was an increase in the number of children who were physically malformed and retarded (Ackerman, 1999). This led to the warning and reprimanding of prenatal alcohol exposure. A gin tax was proposed by the College of Physicians to discourage heavy alcohol intake (Ackerman, 1999).

Dr William Sullivan, a prison physician, published a study on 120 female alcoholics in 1899 (Ackerman, 1999). Sullivan compared children of alcoholic mothers to the non-drinking relatives of the mother and discovered that the children from the alcoholic mothers were twice as probable to pass away in their first two years or have stillborn babies (Ackerman, 1999; O’Leary, 2002). He considered the reason to be a mixture of the poor social situation and the poisonous effects of alcohol. Sullivan also observed that the probability of a normal child was improved when the mother was unable to access alcohol for the period of their pregnancy due to incarceration (O’Leary, 2002). Regardless of the historical evidence for this phenomenon, it was not until in contemporary times that attention was given to the connection between child development and maternal drinking by the medical profession (Blaschke, Maltaverne, & Struck, 2009).

Even though in 1957, Jacqueline Rouquette wrote a medical thesis describing 100 children who were born to alcoholic fathers and mothers with malformations resembling what is now recognised as features of FAS, the combined physical features of babies born to mothers who consumed alcohol for the duration of their pregnancy were first acknowledged in France by Lemoine et al in 1968 (Blackburn, Carpenter, & Egerton, 2009). They described the pattern of physical deformities in eight children born to alcoholic mothers (O’Leary, 2002). Five years later, in 1973, the consequences of heavy drinking during pregnancy on the foetus were independently described again by three paediatric dysmorphologists at Harborview Hospital in Seattle, Washington, namely, Ulleland, Smith, and Jones (Blackburn, et al, 2009; O’Leary, 2002; Blaschke, et al, 2009). They were the first to refer to the abnormal characteristics as Foetal Alcohol Syndrome (O’Leary, 2002). They identified taxonomy of four related features:

- I. Definite maternal alcohol intake.
- II. Central nervous system dysfunction which might be a substantial problem for a child and consist of problems with distractibility and concentrations. Difficulties with executive function, together with learning difficulties (Blackburn, Carpenter, & Egerton, 2009).
- III. Physical abnormalities. The best recognised of these traits is the physical cluster of facial characteristics common to these individuals.

IV. Prenatal and postnatal growth deficiency. The children were light in weight, short in length with a smaller than normal head circumference. In addition, they did not draw level with healthy children as they developed (Blackburn, Carpenter, & Egerton, 2009).

Interest in the effect of maternal alcohol intake on the developing foetus has increased substantially since the description of FAS four decades ago (O’Leary, 2002). Since then, researchers have been trying to understanding the psychological and biological consequences of prenatal alcohol exposure (Blaschke, Maltaverne, & Struck, 2009). Through their work, we now better understand the effects of alcohol on developing foetuses (Blackburn, Carpenter, & Egerton, 2009). Research shows that even though several of the abnormal facial features common in patients with FASD diminish over time, the “central nervous system dysfunction including the long-term intellectual and behaviour problems and psychological and social maladjustment remain through life” (O’Leary, 2002, p. 5).

Since 1973, experts have employed several different labels to explain the effects that prenatal alcohol intake has on a foetus (Blaschke, Maltaverne, & Struck, 2009). In more recent years, the term, Foetal Alcohol Spectrum Disorders (FASD), has been developed and is used to classify the whole spectrum of diagnoses brought about by prenatal alcohol exposure (Blackburn, et al, 2009; Blaschke, et al, 2009). It is a spectrum of behavioural, cognitive and neurological deficits which interfere with learning, socialisation, and growth (Blaschke, Maltaverne, & Struck, 2009). The strength of this term is evident in the fact that it provides a clear understanding that there is a variety of disabilities instead of an all or nothing contradiction (Blackburn, Carpenter, & Egerton, 2009).

2.3 FASD research in South Africa

The earliest mention of particular cases of infants with FAS in South Africa was made by Palmer (1978), and Beyers and Moosa (1978) (cited in Marais, Jordaan, Olivier, & Viljoen, 2012). In 1985, Palmer described the frequency of FAS as one out of 281 live births after a 12-month survey of live births in a Cape Town hospital (Marais, Jordaan, Olivier, & Viljoen, 2012).

The relative successes in the field of evaluating prevalence, prevention and identifying of FASD in South Africa are due to the involvement of the FARR (Foundation for Alcohol Related Research). This non-profit organisation was established in 1997 and it is responsible for the evaluation of FAS/FASD in communities in three provinces in the country (Marais, Jordaan, Olivier, & Viljoen, 2012). A basic audit of examinations at genetic clinics resulted in the need for research in the field. This investigation was embarked on by the University of Stellenbosch, the University of Cape Town, the Western Cape Province and the Department of Health (Marais, Jordaan, Olivier, & Viljoen, 2012). It was discovered that one in ten children referred to the genetic clinics had the stigmata of FAS to the full. Regarding FASD, the organisation has since employed every available platform to advise the general health, educational, social and public planners, other professionals and they provide funding to research groups and organisations (Marais, Jordaan, Olivier, & Viljoen, 2012). Their most significant research has materialised in various publications revealing and highlighting the extremely high prevalence rate of FASD in high-risk communities within South Africa.

Besides the FARR's involvement in the prevalence research in particular high-risk communities, they are also involved in other noteworthy research findings. In 2001, Adnams, Kodituwakku, Hay, Molteno, Viljoen and May assessed motor and cognitive development in FASD children within high-risk South African communities. The assessment of cognitive motor development was done with the employment of the Griffiths Mental Development Scales (Adnams, Kodituwakku, Hay, Molteno, Viljoen, & May, 2001). They confirmed impairments in numerous neurological domains consisting of hearing and speech, practical reasoning, hand and eye

coordination, and performance in FASD children (Adnams, Kodituwakku, Hay, Molteno, Viljoen, & May, 2001). Remarkably, they discovered that locomotor subscales were fairly unaffected (Adnams, Kodituwakku, Hay, Molteno, Viljoen, & May, 2001).

In relation to genetic predisposition, Viljoen, Carr, Foroud, Brooke, Ramsay, and Li (2001) found that families, where polymorphisms (difference in DNA sequence) of the ADH2*2 molecule were significantly less common in FASD, affected coloured individuals more than the control group in the Western Cape. What this means is that the affected FASD mothers and their children are more vulnerable as their metabolic rate in relation to alcohol is slower than those with high ADH2*2 molecules (control group). This leads to much higher alcohol concentrations in their blood in relation to the control group (Viljoen, Carr, Foroud, Brooke, Ramsay, & Li, 2001). This is the first reported study to assist in the appreciation of vulnerability to FASD among various populations (Viljoen, Carr, Foroud, Brooke, Ramsay, & Li, 2001).

Besides the vulnerability to FASD, it is just as important to understand the maternal risk factors which are associated with conceiving an FASD child. In 2010, Morojele, London, Olorunju, Matjila, Davids and Rendall-Mkosi studied the predictors of risk of alcohol-exposed pregnancies among women in a rural and urban area in South Africa. Risk factors involve poor socio-economic circumstances, low religiosity, maternal depression, single parenthood, limited education, cigarette smoking, and binge drinking of alcohol while pregnant (Marais, Jordaan, Olivier, & Viljoen, 2012). In the study, they also found that the age of onset of alcohol consumption, physical characteristics (BMI, height, weight) and the family members' and partner's alcohol intake should be added to the list of risk factors (Morojele, London, Olorunju, Matjila, Davids, & Rendall-Mkosi, 2010).

In 2007, Adnams et al conducted a pilot study which examined the efficacy of a classroom literacy and language intervention in FASD children in the Western Cape Province (Adnams, et al., 2007). When this article was published, according to the author's knowledge, this was the

first report of a logical classroom resultant cognitive response and intervention in children suffering from FASD (Adnams, et al., 2007). Even though noteworthy broad language impairments have been recorded in both adults and children suffering from FASD and although Adnams et al conducted a study on classroom literacy and language intervention in FASD children, there is a lack of information on the consequences of prenatal alcohol exposure on particular linguistic processes within South Africa. In addition, Adnams et al's research does not focus on the distinctive language and speech characteristics of children with FASD.

2.4 FASD and Language Impairments

Even though the proof of language impairments within persons with FASD is variegated, Mattson and Riley (cited in Wyper & Rasmussen, 2011) point out that, generally, the literature proposes that there are noteworthy language and speech delay within the FASD population. In particular, individuals with FASD might display deficiencies in areas such as naming ability, in both expressive and receptive language skills, word comprehension and word articulation (Wyper & Rasmussen, 2011). According to Wyper and Rasmussen, (2011, p. 365) "some studies also suggest that children with FASD display a greater deficit on language-based measures of intelligence (Verbal IQ) than on visual or hands-on measures of intelligence (Performance IQ)." Furthermore, inappropriate use of pragmatic language, impairments in spoken language and verbal comprehension, poor linguistic understanding, voice dysfunction, delayed language acquisition, along with articulation disorders, speech rate and fluency problems and delayed speech development have all been seen in individuals with prenatal alcohol exposure (Coggins, Timler, & Olswang, 2007; Iosub, Fuchs, Bingol, & Gromisch, 1994; Wyper & Rasmussen, 2011). All the participants within their study were tested on two measures of language ability; the Test of Language development – Third Edition (TOLD-3) and the Comprehensive Receptive and Expressive Vocabulary Test – Second Edition (CREVT-2) (Wyper & Rasmussen, 2011). The TOLD-3 have two different versions (Intermediate and primary), aimed at distinctive younger and older age ranges of children. Therefore, the four subtests of the primary version (TOLD-P) were completed by children aged 5 to 8 years, while the four subtests of the

intermediate version (TOLD-I) were completed by children aged 9 to 13 years (Wyper & Rasmussen, 2011).

In 1968, Lemoine, Harousseau, Borteyru, and Menuet described language and speech deficiencies in individuals born to chronic alcoholics (Becker, Warr-Leeper, & Leeper, 1990). Later, in 1981, Hamilton established that individuals with FAS were considerably more probable than the control group to communicate by means of unfitting responses in the course of conversation (Coggins, Timler, & Olswang, 2007). More clearly, individuals with FAS were less likely to expand or elaborate on the comments made by other participants within a conversation. Hamilton found that the FAS participants in his study could not produce syntactically complex grammatical structures as a control group (Coggins, Timler, & Olswang, 2007). In addition, individuals with FAS struggle to understand the pragmatic intent of statements, and presented impairments in short-term memory for particular sentences and syllables (Coggins, Timler, & Olswang, 2007). Similarly, Becker, Warr-Leeper, & Leeper, (1990) in their study of eight American Indian children suffering from FAS, established that children with FASD suffer from impairments in semantic, articulation and grammatical ability, along with poor memory abilities. With semantic impairments, they mention poor comprehensions of verbal commands and single words and with grammatical or syntactic abilities. Becker et al (1990), state that FAS children produce few grammatically correct sentences. In relation to poor memory abilities, they stated that FAS children have a poor ability in the collection of linguistic elements within their short-term memory (Becker, Warr-Leeper, & Leeper, 1990; Wyper & Rasmussen, 2011). The language behaviour of children with FASD was gathered with the use of standardized, norm-referenced tests with the goal to establish how well the FASD children produce and/or comprehend language structures in a standardized context (Becker, Warr-Leeper, & Leeper, 1990).

In 1998, Coggins, Friet, and Morgan piloted research which analysed narrative discourse with the aid of wordless picture books. They conducted a comparative study with 14 children (12 normally developing children and two adolescents with FAS) (Coggins, Friet, & Morgan, 1998).

The children were instructed to look through the picture book in order to become familiar with the story line. They were then asked to engage in the best story telling possible, making use of the picture book as a prompt (Thorne, Coggins, Olson, & Astley, 2007). They concluded that the two adolescents' repertoires of narrative skills were seriously compromised. This discovery led them to deliberate that both the adolescents lacked social-communicative functions which are vital for social acceptance as well as academic success (Coggins, Friet, & Morgan, 1998).

According to Wyper and Rasmussen (2011), there are numerous possible justifications for these differing findings. Firstly, studies which find substantial results on the effects of prenatal alcohol exposure on language difficulties might be explained by the use of tests that depend on phonological working memory, while studies which report no significant correlation might be explained by the use of less complex language tests and low levels of maternal alcohol consumption (Wyper & Rasmussen, 2011). Heavy exposure to alcohol in the last trimester of pregnancy is linked with higher risk of language delay, thus the pattern and timing of alcohol consumption might also play a part in the extent of impairment (Wyper & Rasmussen, 2011). Furthermore, Abkarian (1992) proposes that even with individuals with prenatal alcohol exposure who have no obvious or documented problem with employing verbal language, there might frequently be difficulties with social communication and comprehension abilities. It has also been proposed that the content of utterances made by FAS children is often off-topic and irrelevant, although it might appear that they have acceptable social-communicative skills (Abkarian, 1992). Wyper and Rasmussen (2011) suggest that when FASD children are examined in the naturalistic environment rather than in structured, controlled environment, they might exhibit many more limitations.

2.5 Conversation analysis

Given the claimed limitations of standardised tests and narrative tasks, as well as the decision to explore spontaneous speech as an alternative measure, an analytical approach informed by

conversation analysis would seem appropriate. In this section, therefore, the researcher presents conversation analysis.

2.5.1 What is Conversation Analysis?

Conversation analysis (CA) was developed from the work of Harvey Sacks, in conjunction with Gail Jefferson and Emanuel Schegloff (Kitzinger, 2000). Language is examined as a social action within this academic study, and talk-in-interaction is taken to be ordered and systematically organised (Wooffitt, 2005). CA investigates ordinary talk as the medium for interpersonal social actions, thus expressions are studied as activities individuals do to each other (Wooffitt, 2005). Furthermore, it studies the highly patterned nature of these utterances in interaction, hence seeking to detect and analyse the properties of repeated sequences of interaction. Thus, one could say that CA focuses on the start of overlap in turn-taking organisation, the syntax of sentences in progress, self-correction within the organisation of repair within a conversation, preference structures, turn allocation techniques and the projectability of turn-constructive units (Kitzinger, 2000).

Similar to other discourse analytical approaches, CA focuses comprehensively on issues of context and meaning in interactions (Heritage, 2005). Nonetheless, CA is unique in developing this focus by connecting both context and meaning to the notion of sequence. According to Heritage, (2005, 105), “CA embodies a theory that argues that previous actions are a primary aspect of the context of an action, that the meaning of an action is heavily shaped by the sequence of previous actions from which it emerges, and that social context itself is a dynamically created thing that is expressed in and through the sequential organisation of interaction”. There is a fundamental theory that underlies this approach about the way in which individuals orient to interaction (Heritage, 2005). Three interrelated claims are involved within this theory:

- I. When individuals construct their talk, they usually address themselves to prior talk and, normally, the immediately prior talk (Schegloff, 1984). Within this direct and simple sense, individual talk is shaped by context (Heritage, 2005).
- II. When the current action is taking place, individuals routinely project and necessitate that some next action should be done by another individual (Schegloff, 1984). Consequently, they produce or maintain a context within which the next individual should talk (Heritage, 2005).
- III. By means of producing their next actions, individuals demonstrate an understanding of a previous action and do so at an assortment of levels (Heritage, 2005). These understandings are implicitly confirmed or might become the objects of repair in a continuing sequence (Schegloff, 1984). As a result of this process, understandings become mutual because they are created through a consecutive architecture of inter-subjectivity (Heritage, 2005).



CA sets off from the view that all three of the above-mentioned features are the consequence of a common set of socially structured and shared processes (Heritage, 2005). One could then conclude that CA analyses are simultaneously analyses of action and context management, and inter-subjectivity, since all three features are instantaneously, but not always intentionally, the objects of the individual's actions (Heritage, 2005).

In recent times, CA has been adopted successfully for the research of conversations concerning individuals with language impairments (Samuelsson, 2009). In 2001, Corrin, Tarplee, and Wells applied a CA perspective to the study of developing syntax. They found that CA was suitable as it demonstrated the combined modelling of the development and the conversations of a child's syntax (Corrin, Tarplee, & Wells, 2001). Furthermore, their study showed the importance of prosodic resources. Wells and Corrin (2003) used CA to investigate the way in which children make use of prosodic cues in day-to-day conversation. With the use of a case study involving one child and mother, they pointed out that CA offers the probability to permit functional classifications from the evident behaviour of individuals within an interaction (Wells & Corrin,

2003). Using CA, Radford and Tarplee (2000) analysed the speech of a 10-year-old child who was described as struggling with pragmatic problems. Their study showed that the child was capable of managing conversational topics, yet had problems in working together with his conversational partners (Radford & Tarplee, 2000).

Although CA has not been applied to the spontaneous speech of FASD individuals, research shows that this approach would be helpful to determine the impact of FASD on the structural patterns of social interaction of children with FASD. A CA analysis of the spontaneous speech of FASD children will aid this study to derive information concerning turn-taking, overlaps, repair and the effect of intertextuality on previous utterances in communication which cannot be done with the use of standardised measures of language and narrative analysis (Condouris, Meyer, & Tager-Flusberg, 2003).



2.5.2 Aspects of CA

CA has many aspects that researchers use when examining interactions. For the purpose of this analysis, only five will be used and discussed. The five aspects that will be discussed are 1. Turn taking and overlapping, 2. Silences and Gaps, 3. Repairs, 4. Topic management, 5. Storytelling.

2.5.2.1 Turn Taking and Overlapping

A turn can be defined as the conversational addition by one speaker which is followed either by the addition (turn) of the following speaker or by a silence (Whitworth, 2003). A collection of rules exist for the way turns are taken by speakers, for example; saying the following speaker's name, pausing and maintaining eye contact, asking a question, remaining silent and asking a question (Whitworth, 2003). According to Wooffitt (2005), a turn is built from a turn construction unit (TCU). These are clausal units, syntactically bounded lexical units, sentential units or phrasal units (Wooffitt, 2005). One could say that they are the building blocks used to

construct turns. Turns can be built from grammatically complete sentences as well as from non-lexical utterances, single clauses, single phrases and single words (Wooffitt, 2005). Whitworth (2003) states that minimal turns, for instance, “yeah”, “mm”, “aha”, play a significant role in how a conversation continues and what speaker takes the next turn.

There are two groups in which the turn allocation procedures for conversation are dispersed with (Wooffitt, 2005). The first group involves the current speaker selecting the next speaker and the second group takes place when self-selection occurs by the next speaker (Wooffitt, 2005). The procedure allocation has three rules speakers obey. According to Wooffitt (2005, p.27), the first rule states that “if the current speaker has identified, or selected, a particular next speaker, then that speaker should take a turn at that place”. The second rule maintains that in the event where no selection was made, any speaker may self-select at that time. Once self-selection takes place, the first speaker has the right to that turn (Wooffitt, 2005). The third rule states that at the end of each turn, rules one or two come into play again (Wooffitt, 2005).

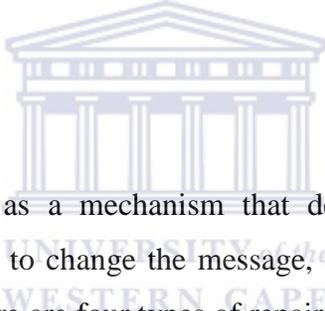
Within everyday conversation, overlapping talk takes place, which can be defined as the occasions when more than one individual is speaking at the same time (Wooffitt, 2005). Overlapping may take place when an individual can anticipate when a turn-transfer may be attempted; thus the individual is able to start their turn prior to the end of the current TCU (Wooffitt, 2005). In addition, overlapping might also occur when the next speakers start his or her turn at the relevant place but the current speaker adds more information which is not significant to the turn. This information might be in the form of word repetitions, politeness items or tag questions such as “didn’t we”, “isn’t it” and so forth (Wooffitt, 2005).

2.5.2.2 *Silences and Gaps*

According to Sacks et al. (1974), there are three different kinds of acoustic silences within conversations: gaps, lapses, and pauses. This taxonomy was centred around what followed and

what preceded the silence within the conversation, as well as on the perceived length of the given silence (Sacks, Schegloff, & Jefferson, 1974). Gaps denote shorter silences which occur between turn-transfer, while lapses denote extended or longer silences that occur between turn-transfer. On the other hand, pauses denote silences that occur within turns (Sacks, Schegloff, & Jefferson, 1974). According to Whitworth (2003), in many languages, long silences are not accepted. Thus, there is normally minimal overlap and no gap or only a small gap between turns (Whitworth, 2003). Lapses after turns where the next speaker has been selected will normally be perceived by other participants as the lack of talk by the particular participant. The absence of talk might lead to a negative inference being drawn about the selected participant since they are not taking a turn assigned to him or her (Wooffitt, 2005). Thus, conversation norms encourage selected speakers to take up their turn at the earliest point (Wooffitt, 2005).

2.5.2.3 *Repairs*



Whitworth (2003) defines repair as a mechanism that deals with trouble sources such as dysfluencies, mishearings, wanting to change the message, misunderstandings, and false starts. According to Matthews (1997), there are four types of repair. These are: self-repair, other-repair, self-initiated and other-initiated (Matthews, 1997). These four types of repair make up four varieties of repair sequences. The first repair sequence is self-initiated self-repair which involves the initiating and carrying out of the repair by the speaker of the trouble source (Hutchby & Wooffitt, 2008). Other-initiated self-repair is the second repair sequence. In this case, the repair is initiated by the recipient yet carried out by the speaker (Hutchby & Wooffitt, 2008). The third repair sequence is self-initiated other-repair which involves the speaker of the trouble source attempting to get the recipient to repair the trouble source, for example, when the speaker cannot remember a name (Hutchby & Wooffitt, 2008). Other-initiated other-repair is the last repair sequence. In this event, both the initiating and carrying out of the repair is done by the recipient of the trouble source. This is conventionally called correction (Hutchby & Wooffitt, 2008).

2.5.2.4 *Topic Management*

According to Whitworth (2003), topic denotes what is spoken about and how this is spoken about across different turns. A topic tends to relate to that which was said previously and a gap between turns is normally an indication that it is the end of a topic (Whitworth, 2003). Due to this, one can deduce that background information about a topic is important in everyday conversation in order to maintain the conversation flow. Intertextuality can be used to describe this background information. The notion of intertextuality was first defined as “the ways in which texts and ways of talking refer to and build on other texts and discourses” (Kristeva, 1986, quoted by Johnstone 2008:164). It also refers to knowledge used in communication that already exists that is normally culturally specific (Matthews , 2009).

In order to maintain a conversation flow, participants have certain expectations when interpreting implied and literal meanings within a conversation. Grice’s Maxims in conjunction with the Cooperative Principle can be used to explain these expectations (Bowe & Martin, 2007). The principle of Cooperation works on the notion that conversations are planned and orderly, and those individuals take part in a conversation with the goal to make sense of and to each other. Therefore, it is evident that there is an agreement between participants in a communicative event to co-operate or work together in order to make meaning together (Bowe & Martin, 2007). Participants make the assumption that every utterance is meaningful within the context of the communicative event. Thus, whatever seems abnormal, or not instantly clear, causes participants to make inferences (Bowe & Martin, 2007).

Four principles or maxims were developed by Grice, termed Grice’s maxims, to describe this cooperation. Grice’s maxims consist of four secondary principles, namely; quantity, quality, relevance and manner (Bowe & Martin, 2007). According to the Maxim of Quantity, participants should make their contribution as informative as required with the current purpose of the exchange in mind (Bowe & Martin, 2007). The Maxim of Quality denotes that participants should not say what they believe to be untrue and avoid stating something which they do not

have adequate knowledge or evidence of. According to the Maxim of Relevance, participants should adhere to the point and make statements that are relevant to the context (Bowe & Martin, 2007). Lastly, the Maxim of Manner denotes that the participants should be brief, clear and avoid ambiguity. These maxims might be weighted differently within different cultures (Bowe & Martin, 2007).

At any given time the four Maxims can be violated. If a maxim is violated by a participant, the other participants will presume that that participant does so with reason and then an inference will be made (Bowe & Martin, 2007). The violation is interpreted by recipients with the use of conversational implicatures (Bowe & Martin, 2007). Conversational implicatures denote an interpretive method which functions to comprehend what is taking place (Bowe & Martin, 2007).

2.5.2.5 Story Telling



Pedagogical and psychological literature suggests that an exceptionally significant development arena for children is storytelling (Cassell & Kimiko, 2001). Various writers believe that people's lives are made meaningful and experienced and their identities created through the use of storytelling. "Through life stories, individuals and groups make sense of themselves; they tell what they are or what they wish to be, as they tell so they come, they are their stories" (Cortazzi, 2001, p. 388). Conversation analysis is interested in how stories are told, thus, how stories are managed and how stories get embedded, turn-by-turn, within interactions (Stokoe & Edwards, 2006). Stories can be treated as a unit of conversation which has recognisable format and sequence, therefore, it has a beginning, a body, and it has an end which can be seen as a collaborative endeavour that takes place between the listener and the storyteller (Parylo, 2011). Second stories that are usually related to the first story are also an interesting aspect of storytelling as it demonstrates how the initial story was heard and interpreted by the listener (Parylo, 2011).

2.6 Summary

This chapter focused on what the literature says in relation to FASD by firstly looking at the history of FASD. Even though in 1957, Jacqueline Rouquette wrote a medical thesis describing 100 children who were born to alcoholic fathers and mothers with malformations resembling what is now recognised as features of FAS, the combined physical features of babies born to mothers who consumed alcohol for the duration of their pregnancy were first acknowledged in France by Lemoine et al in 1968 (Blackburn, Carpenter, & Egerton, 2009). They described the pattern of physical deformities in eight children born to alcoholic mothers (O’Leary, 2002). Five years later, in 1973, the consequences of heavy drinking during pregnancy on the foetus were independently described again by three paediatric dysmorphologists at Harborview Hospital in Seattle, Washington, namely, Ulleland, Smith, and Jones (Blackburn, et al, 2009; O’Leary, 2002; Blaschke, et al, 2009).



Secondly, it focused on FASD research in South Africa. The earliest mention of particular cases of infants with FAS in South Africa was made by Palmer (1978), and Beyers and Moosa (1978) (cited in Marais, Jordaan, Olivier, & Viljoen, 2012). In 1985, Palmer described the frequency of FAS as one out of 281 live births after a 12-month survey of live births in a Cape Town hospital (Marais, Jordaan, Olivier, & Viljoen, 2012). The relative successes in the field of evaluating prevalence, prevention and identifying of FASD in South Africa are due to the involvement of the FARR (Foundation for Alcohol Related Research). This non-profit organisation was established in 1997 and it is responsible for the evaluation of FAS/FASD in communities in three provinces in the country (Marais, Jordaan, Olivier, & Viljoen, 2012). In 2007, Adnams et al conducted a pilot study which examined the efficacy of a classroom literacy and language intervention in FASD children in the Western Cape Province (Adnams, et al., 2007). Even though noteworthy broad language impairments have been recorded in both adults and children suffering from FASD and although Adnams et al conducted a study on classroom literacy and language intervention in FASD children, there is a lack of information on the consequences of prenatal alcohol exposure on particular linguistic processes within South Africa. In addition,

Adnams et al's research does not focus on the distinctive language and speech characteristics of children with FASD.

The third section explored what the literature states in relation to language impairments and FASD and the measures used to come to these conclusions. Even though the proof of language impairments within persons with FASD is variegated, Mattson and Riley (cited in Wyper & Rasmussen, 2011) point out that, generally, the literature proposes that there are noteworthy language and speech delay within the FASD population. In particular, individuals with FASD might display deficiencies in areas such as naming ability, in both expressive and receptive language skills, word comprehension and word articulation (Wyper & Rasmussen, 2011).

As mentioned earlier, research about FASD and language centres around the use of standardised measures of language and narrative analysis. Although the use of standardised measures of language might be helpful to determine problematic areas with relation to the different language domains (Wyper & Rasmussen, 2011), it does not show the difficulty with social-communicative functions which these children might be facing (Coggins, Friet, & Morgan, 1998). In addition, the findings of language impairments in persons with FAS with the use of standardised measures of language are diverse (Wyper & Rasmussen, 2011). Some findings show that "school-age children with FAS are often perceived to have strong verbal abilities, particularly in the expressive language domain" (Coggins, Friet, & Morgan, 1998, p. 223). Thus, language content (world knowledge and word knowledge) and language form (phonology, syntax, and morphology) have been described as being within the normal range for performance when standardised measures of language are utilised (Coggins, Friet, & Morgan, 1998). Results like these could be seen as misleading, as they tend to suggest that FAS children fall under the average range for performance, even though many of the language impairments that such children face are not taken into account. Thus, one could deduce that standardised measures of language provide an incomplete picture of the problem at hand. The standardised measures might be the first choice for diagnosis as they are not time consuming; however, the incomplete picture

they yield could mislead interventions that could be implemented to offer assistance to FASD children and their families.

When testing an individual's ability to use social-communicative functions of language, researchers would normally make use of narrative analysis (Thorne, Coggins, Olson, & Astley, 2007; Coggins, Friet, & Morgan, 1998). With the use of narrative analysis, individuals normally speak alone; thus one cannot investigate the way in which the child would interact within a social setting. Although narratives are important in everyday interactions (such as telling a story to a friend), it is not the only social interaction that one is faced with on a daily basis (Coggins, Friet, & Morgan, 1998). In analysing narratives, one cannot derive information concerning turn-taking, overlaps, repair and the effect of intertextuality on previous utterances in communication by FASD individuals. Using spontaneous speech to analyse the language impairments that FASD individuals are faced with, might complete the picture. Wyper and Rasmussen (2011) suggest that when FASD children are examined in the naturalistic environment rather than in structured, controlled environment, they might exhibit many more limitations.



This was followed by a review of the literature on Conversation Analysis (CA) as it provides the analytical or theoretical frameworks for the proposed study. Given the claimed limitations of standardised tests and narrative tasks, as well as the decision to explore spontaneous speech as an alternative measure, an analytical approach informed by conversation analysis would seem appropriate. It is evident that CA can be used to examine turn-taking, overlaps, repairs and the effects of intertextuality, which as mentioned earlier, cannot be done with analysing narratives. CA can also be used to identify problems with topic management and storytelling. The use of CA, collectively with the measures of spontaneous speech and the standardised language test measures, would provide a more complete picture of the language impairments that FASD individuals are faced with.

Chapter 3:

3 Methodology

3.1 General position

With the purpose of addressing the research questions outlined in chapter one, the researcher decided to make use of a comparative case study. According to Goodrick, (2014), a case study entails a comprehensive examination, frequently carried out over time, of a particular case, in this case, of FASD participants. A comparative case study deals with two or more cases in a manner that creates more generalizable information about causal questions (Goodrick, 2014). Both qualitative and quantitative data are often incorporated in comparative case studies, which in this study, is the case (Goodrick, 2014). The first part of the study made use an exploratory-interpretive paradigm (Grotjahn, 1987) which involved a conversational analysis (CA) of the spontaneous speech data which were collected. The second part of the study used an exploratory-quantitative-statistical paradigm (Grotjahn, 1987) in order to examine the main differences between the standardised measures of language and measures of spontaneous speech in FASD children. The following sub-sections consist of a description of the research site and why it was chosen, participants and how they were selected, a description of the instruments and procedures that were utilised to produce and score the data, and an account of the statistical and analytic procedures that was used to analyse the data.

3.2 Research site

For the purpose of this study, the researcher made use of children residing in Bellville-South. Bellville-South is a township of Cape Town, South Africa. It is a predominantly historically disadvantaged coloured community. 'Coloured' indicates individuals in South Africa originating from the intermarriage of European whites and Asians (primarily Malaysians) and African populations (particularly the Khoi and San) (Viljoen, et al., 2005). As a result of apartheid

injustices (predominantly), poverty rates remain high and drug and alcohol abuse are the order of the day. The population of Bellville-South is approximately 29 301.8 (Kleinsmith, 2013). Within this community, there are only four legal alcohol outlets and approximately 30 illegal alcohol outlets (Kleinsmith, 2013). 70 percent of the population uses alcohol and about 50 percent of those who consume alcohol, consume it on a daily basis. As the researcher wanted to focus on the FASD community and taking the above mentioned into account, Bellville-South seems to be the appropriate research location. The data collection took place at the Bellville-South youth and women centre. This was done as the researcher wanted a controlled environment and the youth and women centre is considered child-friendly. The youth and women centre is a facility used by community developers to assist impoverished youth and women with helpful tools and skills in order to better their living conditions. Permission to use the centre was obtained from the City of Cape Town.

3.3 Participants



There are 14 children who participated in this research study: 7 with FASD and 7 normally developing control children. The seven children with FAS had previously been medically diagnosed with an alcohol-related disorder falling under the umbrella term FASD, and they had also participated in a previous (honours) study by the researcher. Within the honours study, the consent forms given to parents included a section where they were asked whether they would agree to avail their children to be participants in any further research done by the researcher, which all of them agreed to. Thus, parents were approached again at their respective homes for permission. A sample of the information sheet is annexed hereto marked “Appendix 1”, as well as a sample of the consent form, marked “Appendix 2”. All the children were given a date and time to be at the data collecting site when parents signed the consent forms. The researcher tried to schedule all the interviews on one day, yet some challenges occurred as researcher expected (chapter 1, subsection 1.5). After some trial and error, the researcher realised that the best time to schedule interviews was in the middle of the month when SASSA (South African Social Security Agency) grants are not issued. SASSA is a government agency that provides underprivileged individuals with various social grants (SASSA, 2011). In addition, the researcher decided to

collect the parents and children before scheduled interview to ensure that the children will be present. The children with FASD attend Kasselsvlei Primary School, a social school which makes provision for children with social problems and learning conditions. This school has on roll all children suffering from FASD, but it also admits normally developing children. With respect to the normally developing children, three of them attend Winsley Primary School and four attend Kasselsvlei Primary School. All children used within this study reside in Bellville-South. The age group ranged from 6-10 years of age when the standardized language test was administered. All 7 FASD participants are males, while 5 of the normally developing participants are female and two males. Within this age group and the geographic area, the researcher could only find males with FASD. The decision was made to incorporate females as normally developing participants in the study as to ensure that sampling is as wide spread as possible.

3.4 Data Collection and Processing

3.4.1 Spontaneous Language Samples

As mentioned in chapter one and two, a major goal of the current study is to attempt to go beyond the documented shortcomings of standardised language tests and single-person narrative by assessing impairments in FASD children on the basis of spontaneous speech in social interactions. In this section, therefore, the manner in which spontaneous speech samples were both collected and analysed is described. The spontaneous data collected will be used for both qualitative and quantitative analysis.

The spontaneous language samples were collected from the children while they were interacting with the interviewer at the Bellville-South youth and women centre. In order to avoid the shortcomings of narrative analysis and standardised measures of language mentioned earlier, each data collection session included two children. Thus, there will be a total of seven sessions. Five of the interviews consisted of one normally developing child and one FASD child. These interviews were of ten minute duration. Two of the interviews served as control interviews; thus

one interview consisted of two normally developing children and the other, of two FASD children. For all the interviews, the researcher tried to make sure that the pairing of participants was done according to age. Thus, participants within a given interview were either the same age or a year apart with one exception of interview six (appendix 7), where there is a two year gap between participants.

At these interview sessions, the researcher elicited talk, using open ended questions, around three themes, and gave the participants the chance to talk as much as possible without being interrupted. For the first theme, each child was provided with a toy in order to elicit talk about something visible and physical in the room. The researcher informed them that there are toys in front of them and asked them to please talk about the toys with each other or with her. With the second topic, the researcher asked the participants whether they like sports and what sports they are involved in at school. The third theme was introduced by asking the participants what movies they like and what was the last movie or TV program they watched. The purpose of the last two topics was to prompt them to talk about something that was not in the room, something they could not see or feel at that particular point in time. Each interview was video and audio recorded, and subsequently transcribed. For the analysis of all the measures of spontaneous speech, the researcher employed an undergraduate student as a research assistant to assist with capturing of the analysis. This data will be used for both the conversational analysis and the measures of spontaneous speech.

3.4.1.1 Conversational Analysis

For the conversational analysis, the audio and video recordings were transcribed by using the system of transcribing developed by Gail Jefferson (Wooffitt, 2005). The audio and video recordings provide the researcher with direct access to the details of social action and they make it possible to examine the data time and time again (Wooffitt, 2005). This transcription system offers a detailed characterisation of the chaos of everyday interaction. The transcripts attempt to capture not only what is said but also try to capture the way it is said. Therefore, it is mainly

suitable for capturing features of speech production and the chronological positioning of utterances practical to each other; i.e., relationship between utterances (Wooffitt, 2005).

The first and second objective of this study will be addressed with the use of CA. The first objective is to compare the patterns in the spontaneous speech of FASD children and normally developing children. The second objective is to determine the impact of FASD on the structural patterns of social interaction in children with FASD. This will be discussed in detail in the next section. The five aspects of Conversation Analysis will be used to analyse the data. The two control interviews were analysed in detail using these five aspects, decided on by the researcher as time and space constraints will be a challenge. With the discussion of these analyses, the other five interviews were included.

3.4.1.2 Measures of Spontaneous Speech

Measures of spontaneous speech were employed in order to quantify the spontaneous speech data. Three measures were used in this research, namely, the mean length of utterance (MLU), Index of Productive Syntax (IPSyn) and number of different word roots (NDWR) (Condouris, Meyer, & Tager-Flusberg, 2003). These three tests were used because of their sensitivity in representing developmental variations in children's language abilities (Condouris, Meyer, & Tager-Flusberg, 2003).

The MLU is utilized as an index of children's grammatical complexity as it measures the length of utterances (Brown, 1973). This test has been used as a diagnostic measure in order to distinguish between language-impaired populations and normally developing children (Condouris, Meyer, & Tager-Flusberg, 2003). In a normally developing child, MLU correlates significantly with age up to about MLU 2.5-3.0 (Condouris, Meyer, & Tager-Flusberg, 2003). With a MLU score higher than 3.0, the association between MLU and age is less dependable,

nevertheless, it remains a “valid predictor of syntactic diversity and complexity up to about MLU 4.0” (Condouris, Meyer, & Tager-Flusberg, 2003, p. 5).

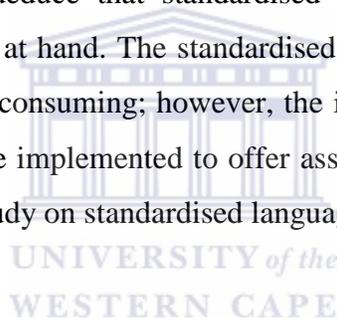
The Index of Productive Syntax (IPSyn) offers an alternative index of morphological and syntactic development (Condouris, Meyer, & Tager-Flusberg, 2003). It assesses the child’s developing use of detailed syntactic and morphological structures (Scarborough, 1990). The index consists of four subscales: Verb Phrase, Noun Phrase, Sentence Structures and Questions and negations (Condouris, Meyer, & Tager-Flusberg, 2003). There is a total of 60 items on the IPSyn, with each worth a maximum of two points. Thus, the total IPSyn score is 120 (Condouris, Meyer, & Tager-Flusberg, 2003).

The NDWR measures lexical diversity. This test has demonstrated the diagnostic and developmental validity (Condouris, Meyer, & Tager-Flusberg, 2003). The calculation of the NDWR is based on the number of diverse word roots or bare stems found within a language sample of a fixed length (Condouris, Meyer, & Tager-Flusberg, 2003).

The researcher attempted to control the extent of human error by employing two research assistants to assist and double check all data. The first research assistant (assistant one) is a Capetonian, fluent in Kaaps. Thus, the researcher and assistant one were responsible for the transcription and translation of all 7 interviews. Both the audio and video recordings were used for one comprehensive transcription of each interview. The second research assistant (assistant two) is a final year undergraduate, fluent in Kaaps and standard Afrikaans. Her responsibility was to assist with capturing of the analysis. The researcher and assistant one were both responsible to recheck each other’s data analysis. Thus, assistant two was responsible for the analysis of the IPSyn while the researcher conducted the analysis for the MLU and the NDWR. The researcher double-checked the results for the IPSyn while assistant two double checked the results for the MLU and the NDWR results.

3.4.2 Standardised Language Test

It may be recalled that an important aspect of the study (as seen in the second and third objectives) involves assessing the adequacy of standardised test measures versus spontaneous speech measures in accounting for the characteristics of speech in children with and without FASD. Due to constraints of time, the researcher has decided to make use of the data of the standardised language tests collected in the researcher's previous study, where all the children participated in. The aim of the previous study was to map the language difficulties of children with FASD in a community in the Western Cape using a standardised language test. From that study, the researcher realised that not all communication problems that individuals with FASD are faced with, can be documented with the use of a standardised test. As mentioned in chapter one, subsection 1.1, one could deduce that standardised measures of language provide an incomplete picture of the problem at hand. The standardised measures might be the first choice for diagnosis as they are not time consuming; however, the incomplete picture they yield could mislead interventions that could be implemented to offer assistance to FASD children and their families. Details of the previous study on standardised language measures are provided below.



That study focused on four domains of language, namely: syntax, pragmatics, semantics, and phonology, in order to establish what domains of language are most significantly affected in children with FASD. The standardised test administered to each participant individually was the Diagnostic Evaluation of Language Variation (DELV). The DELV is a test which has eleven subtests structured into four domains: syntax, pragmatics, semantics and phonology (Southwood, 2011). The items of the original American English DELV are grounded on extensive research on those language skills which distinguish between language impaired children and normally developing children, without distinguishing between normally developing child speakers of diverse dialects of English (Southwood, 2011). The DELV offers a rich assessment of the weaknesses and strengths of a child's language skills, without prejudice towards speakers of any non-standard dialect.

3.4.2.1 *The Afr-DELV*

The researcher decided to use the Afrikaans version of the DELV as this test has been shown to be able to differentiate between language disorder and language difference (Southwood, 2011). This test should theoretically be able to distinguish between language disorder, language delay and simple language variances in child speakers (Southwood, 2011). The DELV offers a rich evaluation of the weaknesses and strengths of a child's language aptitudes, without prejudice towards speakers of a non-standard dialect (De Villiers, et al, 2004; Seymour, et al, 2005a). Southwood and Van Dulm were responsible for the adaptations and translations of the DELV in Afrikaans (Southwood & Van Dulm, 2009). After the American version of the DELV was translated and adapted, the first Afrikaans version was administered to typically developing children who speak the standard variety of Afrikaans (Southwood, 2011). The problem items that were identified were then replaced with more appropriate ones. Speech-language therapists were consulted who are mother tongue speakers of Kaaps to make sure that the Afr-DELV are appropriate to administer to children who speak this non-standard dialect (Southwood, 2011). Thus, this test provided the researcher with the ability to ascertain what domain of language is most significantly affected in FASD children without prejudice towards the child's dialect as all participants within the study speak Kaaps.

Like the initial version of the DELV, the Afr-DELV evaluates syntax (correct usage of articles, understanding of wh-questions and passive constructions), pragmatics (linking events together within a narrative and comprehending the mental state of characters within a narrative, asking applicable questions, and communicative role-taking), semantics (producing preposition contrasts and verb contrasts, knowledge of quantifiers, and fast mapping of new and real words), and phonology (production of consonant clusters within word-initial as well as word-medial position) (Southwood, 2011). Each participant had to complete all the tasks for all four domains. The entire test was administered to each participant, irrespective of the participant's gender or age.

The test was administered by the researcher at the Bellville-South police station's Trauma Room as the researcher is a trauma counsellor at the institution mentioned above. This was done as the researcher wanted a controlled environment for each test and the Trauma Room is considered child friendly. Permission to use the Trauma Room was provided by the Station Commander and the Trauma Room Coordinator. The test was sent to Stellenbosch University's General Linguistics department where it was scored by someone with prior knowledge and experience with the test scoring.

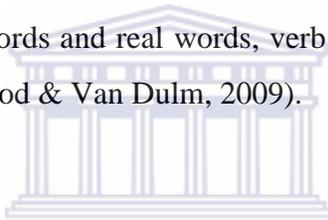
The test was administered to each participant individually. The DELV is an all-conclusive test which has eleven subtests structured into four domains: syntax, pragmatics, semantics and phonology (Southwood, 2011). The items of the original American English DELV are grounded on extensive research on those language skills which distinguish between language impaired children and typically developing children, without distinguishing between typically developing child speakers of diverse dialects of English (Southwood, 2011). The DELV offers a rich assessment of the weaknesses and strengths of a child's language skills, without prejudice towards speakers of any non-standard dialect.

In relation to the syntax domain, the DELV concentrates on essential grammar features that are used for the construction of a comprehensive understanding of language (Southwood, 2011). The features of syntactic knowledge evaluated in the syntax domain of the DELV have been shown by empirical research to be both central and universal to normal language development (Seymour et al, 2005a). There are four areas of syntactic knowledge which are firstly, knowledge of movement rules and rules to movement in wh-questions and secondly the reference to wh-words (Southwood & Van Dulm, 2009, p. 8). The third area of syntactic knowledge is the interpretation of passive sentences, and fourthly, the appropriate use of articles (Southwood & Van Dulm, 2009, p. 8). With this in mind, the DELV is able to conduct a dialect-neutral assessment of children's syntactic skills using these four areas of syntactic knowledge.

The aspects of pragmatics focus on the relationship between the principles governing language usage and linguistic knowledge (Prutting & Kirchner, 1987). Pragmatic proficiency involves the ability to manage conversation, for instance, to present topics and initiate interactions, to expand on and maintain topics, to take turns, to identify and repair conversational breakdowns and so forth (Southwood & Van Dulm, 2009). The assessment in the DELV is also concerned with features which are culture-neutral and dialect-neutral. Thus, it looks at asking the accurate question, connecting events together in a story, understanding the mental state of all the characters in a story and communicative role-taking (Southwood, 2011). Across dialects and languages, there is a mutual developmental order in story telling towards cohesion (unity of links between words in spoken discourse) and coherence (consistency and logical order) (Southwood & Van Dulm, 2009). In addition, development in performance on question asking tasks is strongly age-related, with no substantial difference between speakers of different dialects (De Villiers P. , 2004). Therefore, the DELV utilize narratives (expressed with the assistance of pictures) and question asking when evaluating pragmatic skills (Southwood, 2011). A subtest on communicative role-taking is also included. This is assessed by asking the participant what a character would ask or say in a particular situation. (Southwood, 2011). By presenting the participant with a picture with a blank part and then requesting the participant to ask the right question in order to see the blank filled in, is used to determine the participant's capability to ask the correct question (Southwood, 2011).

Semantics involves the understanding and expression of meaning, the storage of newly learnt words and concerning word learning, so that effective recovery can be accomplished (Southwood & Van Dulm, 2009). The tokens and varieties of a child's vocabulary and the rate at which these are attained hinge on which words are commonly used in the child's environment. This differs across various cultures, communities and households (Southwood & Van Dulm, 2009). Consequently, the DELV avoids calculating a child's vocabulary as most other instruments evaluating semantics does (Seymour et al, 2005a). In evaluating semantic skills, the use of verbs is frequently more dialectically or culturally unbiased than the use of nouns, since verbs do not need explicit cultural experiences in order for researchers to interpret them (Southwood & Van Dulm, 2009). In contrast, terms for objects may differ between cultural

and/or dialect groups and consequently testing familiarity of nouns might cause prejudice against children of certain, particularly non-mainstream, dialect or cultural groups (Southwood & Van Dulm, 2009). Additionally, experiential results have specified that there is no substantial difference in the performance of diverse dialect groups on a task relating to the learning of new verbs (Southwood & Van Dulm, 2009). Thus, taking the above mentioned into account, the DELV uses verbs instead of nouns during evaluation in the semantics domain, examining the procedure by which a child learns a new word from the context. Lastly, knowledge of the scope of quantifiers is tested (Southwood & Van Dulm, 2009). A child's affective understanding of the scope of quantifiers is not affected by dialect status due to the fact that the scope which every particular quantifier has in a sentence requires to be learnt independently. Research shows that this skill might be influenced by language disorder (Seymour, et al., 2005a). Taking the above mentioned into account, it is understandable that the semantic domain of the DELV evaluates fast mapping of new (nonsense) words and real words, verb contrasts, knowledge of quantifiers and preposition contrasts (Southwood & Van Dulm, 2009).

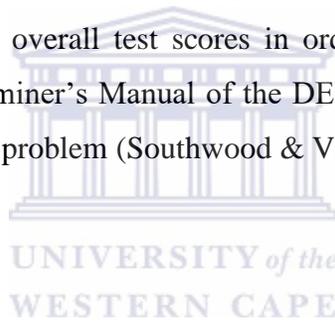


In relation to phonology evaluation, the initial DELV avoids aspects of phonology which vary between the dialects of American English (Seymour, et al., 2005a). Because the pronunciation of vowels differs significantly between dialects, only consonants are tested. Furthermore, only consonant clusters are evaluated that are in the initial and medial position. Final position consonant clusters are not evaluated within the DELV, due to the fact that reduction of word-final consonant cluster takes place under certain conditions in African American English (Southwood, 2011). For the phonological domain of the Afr-DELV, a similar approach was taken: solely clusters were tested, and word-final clusters in addition to word-internal [r] clusters were avoided, due to the fact that both are frequently reduced by speakers of Kaaps (Southwood, 2011).

To summarise, like the initial version of the DELV, the Afr-DELV evaluates syntax (correct usage of articles, understanding of wh-questions and passive constructions), pragmatics (linking events together within a narrative and comprehending the mental state of characters within a

narrative, asking applicable questions, and communicative role-taking), semantics (producing preposition contrasts and verb contrasts, knowledge of quantifiers, and fast mapping of new and real words), and phonology (production of consonant clusters within word-initial as well as word-medial position) (Southwood, 2011). Each participant had to complete all the tasks for all four domains. The entire test was administered to each participant, irrespective of the participant's gender or age.

For each of the domains, the raw scores were firstly converted into scaled scores, then into percentile ranks (i.e. 27). Following the instructions within the Examiner's Manual of the DELV, the sum of the scaled scores was then converted into composite scaled scores and their concomitant percentile ranks (Seymour, et al., 2005a). For this study, the researcher will look at all the language domains and the overall test scores in order to determine whether language impairments are present. The Examiner's Manual of the DELV specifies that percentiles below 16 are taken to indicate a language problem (Southwood & Van Dulm, 2009).



3.5 Ethics

Participants' identities were protected throughout and all results are treated as confidential. Permission to use the children again within this study was obtained from parents as the data collection did not take place during school hours, thus not disrupting normal school procedures. Each parent was visited prior to the collection of data to explain the reason for the research and the procedures of the data collection. Ethical rights of the parents and children were discussed with each parent and all parents were provided with a consent form to give permission for their children to take part in this research study. Each parent was provided with a copy of the consent form. The parents were also informed that this research does not offer any intervention plan or support. They were also informed that the participation of their children was voluntary, that their identity would be withheld and that they could withdraw their children from the study at any time. It was also explained to them that if they did decide to withdraw their children, any data collected as a result of their participation would be destroyed.



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Chapter 4:

4 Structural Patterns in Spontaneous Speech: A Conversational Analytic account of speech by FASD and normally developing children.

4.1 Introduction

The aim of this chapter is to answer the first research question on the effects of FASD on the structural patterns of social interactions in spontaneous speech. As mentioned earlier, because of time and space constraints, this study analyses only the two control interviews – an analysis that runs into 50-odd pages. It would be recalled from chapter 3 on methodology that whereas 5 of the interviews involved sessions in which children with and without FASD interacted, there were two of the interviews that were considered as control. The latter interviews involved in one case, 2 children with FASD and, in the other children without FASD. In analysing these interviews to address the first objective of this study, the researcher will be attempting to identify any conversational analytic features that appear to be associated with or prominent in the spontaneous speech of children with FASD, but that are relatively less prominent in the speech of children without FASD, and vice versa.

Conversational analysis (CA) provides an in-depth view on structural patterns of social interactions as it looks at various rules that one should obey and patterns that are common in social interactions. For ethical reasons, each child was provided with a pseudonym. An in-depth analysis of each child's utterances is to follow, according to the five aspects discussed in chapter two. Each aspect will be discussed separately, focusing firstly on the two control interviews. This will be followed by a discussion of the other five interviews in order to identify patterns that are evident throughout all the interviews.

4.2 Turn taking and Overlapping

As discussed previously, allocation procedures have three rules participants have to obey. In presenting the results below, each child is given a pseudonym. N.F. is an 11 year old boy and H.B. is a 10 year old girl, while T.M. and J.P. are both participants are 10 year old boys. For this purpose of this study, the researcher decided only to focus on rule one and rule two as rule three states that at the end of each turn, rules one or two come into play again. Table 4.1 below presents the findings for all four children within the control interviews in relation to the two allocation rules:

Rules of turn taking	Normally developing children		FASD children	
	N.F. (total no of turns = 44)	H.B. (total no of turns = 35)	T.M. (total no of turns = 47)	J.P. (total no of turns = 49)
Rule one	31	26	11	10
Rule two	4	4	2	1
Total:	35	30	13	11

Figure 4-1 Adherence to two turn-taking allocation rules

The first rule of the allocation procedures states that when the current participant has selected or identified the next participant, then the selected participant should take the next turn in conversation (Wooffitt, 2005). According to Wooffitt (2005), if the first rule is applicable, the selected participant not only has the right to begin speaking but is compelled to do so. Table 4.1 immediately makes it clear that normally developing children obey rule one in 70-75% of their turns, while the FASD children only obeyed rule one in 20-23% of their turns. When looking at the rules for allocation procedures, the first rule was obeyed by the normally developing children in most of their turns, while some of the FASD children showed some difficulty with this rule. In some cases, when a turn was allocated to them, the FASD children would not take the turn which led to lapses or long pauses. This would lead the researcher (who will from henceforth be referred to as L.M.) to take the turn back and either attempt to prompt the participant by

rephrasing the question or asking another question or by allocating the turn to the other participant. On the other hand, the normally developing children obeyed this rule. This is evident in all the turns where N.F. (interview 1, appendix 4) is selected as the next speaker. He takes the next turn. Between turn 19 and turn 20 as well as between turn 21 and turn 22, N.F. is selected and he takes the turns immediately. See the relevant excerpt below.

17. L.M.: hou jy van dices? ...(1sec)... Hou jy van games wat daar ‘n dice in is? ...(1sec)... soos slangtjies ((H.B. nods her head)) wat het nog - wat het nog dice in? ...(3sec)... [*do you like dices? ... (1sec)... do you like games that uses a dice? ... (1sec)... like snakes ((H.B. nods her head)) what also - what also has dice in? ... (3sec)...*]

18. H.B.: ()=

19. L.M.: harder praat skatjie mmh↑ ...(2sec)... ((H.B. shakes her head no)) weet jy nie? ((H.B. shakes her head no)) praat gou vir my ((facing N.F.)) = [*speak louder dearie mmh↑ ... (2sec)... ((H.B. shakes her head no)) don't you know? ((H.B. shakes her head no)) talk to me quickly ((facing N.F.))=*]

20. N.F.: die's ‘n vuurwapen hy's swat ((playing with the gun in his hands)) ...(1sec)... en hie voo isit orange en as jy die ste- die sneller trek dan ko hie ‘n bullet uit ((pointing at the barrel of the gun))= [*this is a firearm it's black ((playing with the gun in his hands)) ... (1sec)... and here in front, it is orange and if you pull the tri- the trigger than a bullet comes out ((pointing at the barrel of the gun))=*]

21. L.M.: is it? ...(2sec)... hou jy van met ‘n gun speel? ((N.F. shakes his head no)) = *is it? ... (2sec)... do you like playing with a gun? ((N.F. shake his head no))=*]

22. N.F.: nie met regte gun nie met ‘n speel (goed [*not with real gun with a (toy)=*]

23. L.M.: speel) gun ooh↑= toy) gun ooh↑=]

Obeying rule 1 is also evident between turn 39 and turn 40 as well as between turn 89 and turn 90. Turn 89 can be classified as a minimal turn, which, according to Whitworth (2003), plays a significant role in how a conversation continues.

Let us now turn to H.B.'s (interview 1, appendix 4) contributions to the conversation. In terms of turn-taking, it is evident that she obeys the rules of allocation procedures in most of her turns. For example, in turns 4, 6, 8, 10, 12, 14, and 16, the first rule is obeyed as H.B. takes the turn allocated to her. For example, in turn 3 L.M. asked H.B. to talk about the toy she holds in her hand, after a one-second gap, H.B. obeys rule one by stating that the toy is blue yellow. In turn 17, H.B. does not reply to the question posed to her by L.M. but after the question was rephrased, H.B. obeys rule one not by verbal language but by body language. After this, L.M. shifts the conversation back to N.F. There are also a few situations where H.B. does not obey rule one. For instance, in turn 87, L.M. leaves the floor open to H.B., by summarising all the points discussed about netball. However, H.B. does not take the turn allocated to her which results in a six second lapse. At this point, N.F. sees that H.B. is not taking the turn, which causes him to take the turn. This is also evident in the turn transfer between turn 141 and turn 142. In turn 141, L.M. repeats what H.B. said in a question form in order to prompt her to take the next turn, yet H.B. does not respond. This results in N.F. yet again taking the turn when he sees she is not taking the turn allocated to her. In the turn transfer between turn 115 and turn 116, L.M. talks to N.F., allocating the turn to him. He only makes use of body language as a response. After a two second gap, H.B. takes the turn as she sees this as an opportunity to shift the conversation back to the movie she was discussing.

Let us turn to the FASD children. When looking at T.M.'s (interview 2, appendix 5) part of the interview, he obeys the first rule of the allocation procedure in turn 8, 10, 14, 54, 93,104, and 122, T.M. In other cases, considerable effort is required to get T.M. to take his turn. In turn 57, L.M. asked T.M. to speak a little louder and after a five-second lapse, T.M. answers a question posed to him in the previous turn. Although there is a five-second lapse, T.M. still takes the turn allocated to him. In turn 59, L.M. makes use of a minimal turn in order to indicate to T.M. that he should take the next turn, which he immediately does. This is also evident between turn 128 and turn 133. Below is an excerpt of turn 128 to 133:

128. T.M.: jy moet always ini skool wies ...(1sec)... ja ...(1sec)...jy moet nie onbeskof- jy moet nie rowe games speeie = *[you have to go to school always ...(1sec)... yes ...(1sec)... you should not be rude- you should not play rough games=]*
129. L.M.: hum?=
 130. T.M.: moet nie rowe games speeie= *[don't play rough games=]*
131. L.M.: om nie rof te speel nie?= *[not to play rough=]*
132. T.M.: hmm=
 133. L.M.: jy moet vir hom virtel ((L.M. pointing to J.P.)) virtel vir hom hoe hy moet sy broer maak ...(10sec)... gesels met mekaar kom gesels ...(3sec)...*[you have to tell him ((L.M. pointing at J.P.)) tell him what he's supposed to teach is brother ...(10sec)... talk to each other come chat ...(3sec)...]*

In turn 128, T.M. talks about what he learned from his brothers. L.M. makes use of a minimal turn to prompt T.M. to take the next turn, which he does. Yet, he only repeats the last statement he made in turn 128. L.M. makes use of the tactic of repeating what was said before in a question form to indicate to the T.M. he should take the next turn. To this, T.M. makes use of a minimal turn to, one could say, give the turn back to L.M. Between turn 179 and turn 184, the same phenomenon is evident. L.M. makes use of minimal turns three times between these turns.

When considering J.P.'s turns (interview 2, appendix 5), he obeys the first rule of the allocation procedures in some of his turns, for example, in turn 12, 18, 84, 90, 140, 154 and turn 186, this can be observed. In all the turns mentioned here, except turn 12, J.P. took the turn immediately. Between turn 11 and turn 12, a two-second gap is evident. Yet, there are instances where J.P. does not obey this rule. In turn 7, L.M. tries to prompt J.P. to take the next turn by asking him various questions concerning the toy he chose. J.P. only makes use of body language (nodding his head), as an answer. The last question L.M. asked J.P. is followed by a 15-second lapse, after which L.M. moves the conversation to T.M., asking him whether he would like to talk first. The same can be observed in turn 13. Again L.M. tries to prompt J.P. to take the next turn and again,

J.P. only makes use of body language to answer the question posed to him. Once more, the last question posed to J.P. is followed by a 22-second lapse, after which L.M. again, moves the conversation to T.M. In turn 53, the same phenomenon can be seen. After a few prompting questions, J.P. only makes use of body language to answer these questions, a nine-second lapse is evident. After this lapse, L.M. once again moves the conversation to T.M. In turn 93 both rule one and rule two of the allocation procedures are evident. So, the picture that emerges is one of reluctance to take turns. Of course, the use of body language is a legitimate mode of communication, but it needs to be seen here in conjunction with the time lapses. In other words, even the use of body language is delayed and still indicates reluctance to take turns.

In relation to the second rule for allocation procedures, the normally developing children were more prone to make use of this rule. Thus, when the researcher did not allocate the next turn to a particular participant, the normally developing children would likely take the next turn. This is evident in five of the interviews where normally developing children were participants. In interview 3 (appendix 6), between the turn-transfer of turn 53 and 54, this rule can be observed as seen in the excerpt below.

53. L.M.: kyk hulle, kyk julle sports op die TV? Wat kyk julle op die TV? =[do you watch, do you watch sport on TV? What do you watch on TV?]

54. T.O.: cricket=

Similarly, in turn 53, L.M. asked both participants whether they watch sports on television, not allocating the next turn to anyone in particular. T.O. (normally developing participant) immediately took the next turn by stating that he watches cricket. In interview 4 (appendix 7), there are two instances where this rule can be observed, between the turn-transfer 1 and 2; and turn 49 and 50. In both cases, the normally developing participant (R.G.) is responsible for obeying this rule. In interview 6 (appendix 9), Z.F. (normally developing participant) obeys this rule between the turn-transfer of turn 102 and 103. In the last interview (appendix 10), there is one instance where the second rule is obeyed. This takes place between the turn-transfer of turn 53 and 54 when A.T. (normally developing participant) takes the turn not allocated to anyone.

When considering the FASD participants, in all six interviews where a FASD child was a participant, there are only three instances where the second rule was obeyed, with much more cases where it was not obeyed. Two of the instances are found in interview 2 (appendix 5) which was discussed previously. The third instance is evident in interview 5 (appendix 8), between the turn-transfer of turn 41 and 42. Below is an excerpt of turn 41 and 42:

41. L.M.: praat vir my oor sport wat se sport doen julle by die skool?=*[tell me about sport what sport do you do at school?]=*

42. J.A.: doenie sport by die skool nie ((J.A. shakes his head no and smiles))=*[don't do sport at school ((J.A. shakes his head no and smiles))=]*

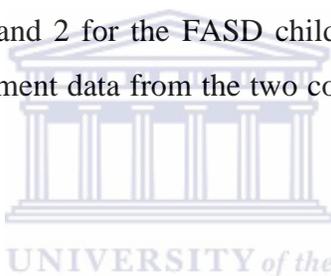
In turn 41, L.M. did not allocate the next turn to a particular participant when she asked them what sports they are involved in at school. J.A. (FASD participant) immediately took the next turn by stating that he does not participate in sport at school. With the exception of these three cases, the fact that the FASD participants did not take a turn when it was not specifically allocated to them, is noteworthy. One could infer that they show some difficulty with raising their opinion on their own.

Let us now focus on overlapping. As discussed earlier, overlapping speech takes place in everyday conversation. Wooffitt (2005) defines overlapping as the occasions when more than one individual is speaking at the same time. As discussed in chapter 2, there are two reasons why overlapping might take place. Firstly, it may occur when an individual can anticipate when a turn-transfer may be attempted; thus the individual is able to start their turn prior to the end of the current TCU (Wooffitt, 2005). Secondly, overlapping might take place when the next speaker starts his or her turn at the relevant place, but the current speaker adds more information which is not significant to the turn. This information might be in the form of word repetitions, politeness items or tag questions (Wooffitt, 2005). Table 4.2 presents the findings for all four children within the control interviews in relation to the two reasons for overlapping:

Reasons for overlapping	Normally developing children		FASD children	
	N.F.	H.B.	T.M.	J.P.
Reason one – anticipation of overlapping	1	2	2	0
Reason two – more information added	2	0	0	0
Total:	3	2	2	0

Figure 4-2 Reason for overlapping

Table 4.2 shows that for both groups of children there is a very small number of overlaps (5 for the normally developing children and 2 for the FASD children). As with other conversational analytic categories, we will supplement data from the two control interviews with data from the five interviews.



Although the numbers are really very small, it is evident that the normally developing participants were more inclined to engage in overlap speech than the FASD participants. What is interesting, is the fact that only one participant made use of the second reason. This takes place between the turn-transfers of turn 70 and 71 and between turn 106 and 107 (interview 1, appendix 4). Below is an excerpt from the interview segment on the movie topic:

106. H.B.: Dora Dora en en ...(1sec)... ek ken hom nie hy's 'n apie ('n apie [*Dora Dora and and ... (1sec)... I don't know him he's an ape (an ape)*]

107. N.F.: Boots)

In this case, the information that H.B. adds is in the form of word repetition as she repeats the phrase "'n apie". N.F. provides the name of the ape she is referring to when she states that she does not know his name.

There are only two instances within H.B.'s turn where overlapping took place. This can be found between the turn-transfer of turn 79 and turn 80 (interview 1, appendix 4). Below is an excerpt of turn 79 and turn 80 on the sports topic:

79. L.M.: ha↑ ..(1sec)... e:n jy mag die (ball mag nie [*ha↑ ..(1sec)...and you may not (the ball may not)*]

80. H.B.: en ha) stan twee mense ini middle= [*and there) are two people in the middle=*]

In turn 79, L.M. is describing what she knows about netball. Yet, before she completed her sentence, H.B. started with her turn, adding what she knows about netball. One could say that overlapping took place here because H.B. anticipated when a turn-transfer may be attempted which leads to H.B. starting her turn before the end of L.M.'s turn. The second incident of overlapping could be found between the turn-transfer of turn 136 and turn 137. In this instance, N.F. repeats the phrase: "toe spin it [then it twirled]" three times. Before he finished the last phrase, H.B. started her turn. Due to the fact that N.F. repeated the above-mentioned phrase three times, one could deduce that H.B. anticipated that N.F. lost his train of thought, thus she stepped in and completed his sentence. On the other hand, one could say that this overlapping occurred because H.B. started her turn at the relevant place but N.F. added more information which is not significant to the turn. In this case, the information is in the form of word repetition.

There are two instances where overlapping takes place in T.M.'s turns (interview 2, appendix 5). The first could be observed between the turn-transfer of turn 137 and turn 138. In turn 135, L.M. asked T.M. a question, which he actually misunderstands as he does not answer the question posed to him. To this, L.M. starts her turn by guiding him to the correct answer. Halfway through her turn, one could say, T.M. picks up on the correct answer and completes L.M.'s sentence. Thus, one could deduce that T.M. anticipated what L.M. wanted to say and took his turn before she was done with her turn by completing her sentence. The second overlapping takes place between the turn-transfer of turn 171 and turn 172. Below is an excerpt of turn 171 and turn 172:

171. L.M.: virtel vir van Dragon Ball Z. ek kyk nie Dragon Ball Z nie so (weet nie wa- [*tell me about Dragon Ball Z. I don't watch Dragon Ball Z so (don't know wha-)*]

172. T.M.: ek het) lang laa::s dit nog gekyk ...(1sec).. [*I have) not watched it in a while ... (1sec)...*]

In turn 171, L.M. changes the topic to Dragon Ball Z. She asked them to tell her about Dragon Ball Z since she does not watch it. Before she could finish her turn, T.M. starts with his turn by stating he has not watched Dragon Ball Z in a while. One could say that this overlapping takes place because T.M. could anticipate when a turn-transfer may be attempted, thus he starts his turn prior to the end of the current turn.

The idea that the normally developing participants were more inclined to make use of overlapping could also be said about interview 3 (appendix 6). The only overlapping evident could be observed between the turn-transfer of turn 79 and 80. In turn 78, J.J. (FASD participant) stated that The Incredibles is a game. L.M. then corrected him gently by stating that is a movie as well. While asking J.J. whether he has not watched the movie, T.O. (normally developing participant) interjected by saying “fighting” which one could assume he tries to explain what the movie is about but when he realised that L.M. was not done with her turn, he did not continue with his explanation. When looking at the other four interviews, this pattern could not be identified. In interview 4, 5, and 7, no overlapping by the participants could be observed.

In interview 6 (appendix 9), though, two instances of overlapping could be identified, in both cases; the FASD participant is responsible for the overlapping. The first instance, takes place between the turn-transfer of turn 46 and 47. In turn 43, L.M. steers the conversation to condom guns, which was introduced by J.A. (FASD participant) in interview 5 (appendix 8). It is simply a toy gun made of a condom and a toilet roll core. Z.F. (normally developing participant) took the next turn stating that the children in one of the roads near her house make it. When L.M. asked her how it is made, Z.F. first shook her head and then stated that she does not know. In turn 47, after realising that Z.F. does not know the answer, E.O. (FASD participant) takes the next turn before Z.F. completed her turn. The second instance takes place between the turn-transfer of turn 52 and 53. The topic at this point of the conversation still involves the condom gun. In turn 51, E.O. states that “hulle skiet somtyds groot mense ook [*they sometimes shoot*

adults as well]” which one could presume he is referring to other children within the neighbourhood. After this, L.M. made use of a minimal turn and when E.O. only made use of body language (nodding his head), L.M. took back the turn. She started to ask whether they are actually just naughty when E.O. overlapped her speech. One could presume that he thought that L.M. was done with the turn. In this turn, it comes across as if there were no interruptions from his previous turn as it seems as if he is just continuing the story he stated in turn 51.

Let us now summarise the picture emerging from turn-taking and overlapping. Throughout all seven interviews, the normally developing participants have more turns including much longer turns than the FASD participants. In addition, the normally developing participants interact much more frequently with much less prompting from the researcher. When looking at the first rule for allocation procedures, the FASD participants exhibited more difficulty with this rule than the normally developing participants. As mentioned earlier, in some cases, when a turn was allocated to them, they would not take the turn which led to lapses or long pauses. This would lead L.M. to take the turn back, and either attempt to prompt the participant by either rephrasing the question, or asking another question or by allocating the turn to the other participant. The fact that L.M. had to rephrase a question could indicate that the FASD participants struggled to understand the pragmatic and syntactic intent of statements, which correlates with the findings of Coggins, Timler and Olswang (2007). In relation to the second rule for allocation procedures, the FASD participants were less likely to take the turn if not allocated to them specifically. This is evident in Coggins, Timler and Olswang’s (2007) findings as well, as they state that FASD participants are less likely to expand or elaborate on the comments made by other participants within a conversation. Data on overlapping, although rather small, suggest that normally developing children were more likely to overlap (because they anticipate when a turn-transfer will be attempted) than the FASD children.

4.3 Silences and Gaps

As discussed earlier, there are three different kinds of acoustic silences within conversations: pauses, gaps, and lapses (Sacks, Schegloff, & Jefferson, 1974). Pauses denote silences that occur within turns (Sacks, Schegloff, & Jefferson, 1974). Gaps denote shorter silences which occur between turn-transfer (Sacks, Schegloff, & Jefferson, 1974). Lapses, on the other hand, denote extended or longer silences that occur between turn-transfer (Sacks, Schegloff, & Jefferson, 1974). Table 4.3 presents the findings for all four children within the control interviews in relation to the three acoustic silences:

Acoustic Silences	Normally developing children		FASD children	
	N.F.	H.B.	T.M.	J.P.
Pauses	21	30	14	0
Gaps	10	8	9	17
Lapses	3	2	8	10
Total:	35	40	31	27

Figure 4-3 Number of acoustic silences

When considering pauses in the control interviews, one can deduce that the normally developing participants make use of pauses within their turns much more than the FASD participants. This might be due to the fact that the normally developing participants have much longer turns than the FASD participants which lead them to take a breath and quickly get their thoughts in order. This is evident in a number of N.F.'s turns (interview 1, appendix 4). Turn 20, turn 120 and turn 138 each have only one pause of one second long. In turn 144, N.F. explains a plot of a movie, thus it is a long turn. There are four one second pauses evident in this turn. One can deduce that N.F. uses these pauses to gather his thoughts. When looking at H.B.'s turns (interview 1, appendix 4), in relation to pauses, it is evident that she had the most pauses. Turn 8, 12 and turn 106 each have only one pause of one second long. Turn 6 and turn 102 each have two pauses, while turn 100 and turn 116 each have 3 pauses. In turn 116, there is a three-second pause before she makes use of code-switching. Code-switching can be defined as any switch among different languages in the course of a conversation, be it at the level of words, a block of speech or sentences (Baker & Jones, 1998). This pause could be seen as significant as it might seem as though she needed to think before switching to English in addition to the fact that the English

phrase used was not grammatically correct. Turn 64 has four pauses, while turn 66 has ten pauses. One could deduce that the high number of pauses in turn 66 is due to the fact that this was a lengthy turn as H.B. is engaged in storytelling.

When considering the two FASD participants, as evident in the table above, only one made use of pauses. In turns 10, 60 and 82 two pauses are evident, each of which is two seconds long (interview 2, appendix5). There is one pause of two seconds long in turn 14, while in turn 128 two pauses of one second long are evident. In turn 8 and turn 184, three pauses are present; both turns have two one second pauses and one two second pauses. Turn 184 is the longest turn as T.M. was engaged in storytelling. There are no pauses in J.P.'s turns. This could be due to the fact that all J.P.'s turns are very short. He only makes use of one word or one phrase answer throughout the whole interview. Pauses are important in everyday conversation in order for the speaker to gather their thoughts and take a breath between sentences. The fact that the FASD participants do not make use of pauses as much as normally developing participants could indicate a problem with topic maintenance.



Let us now turn to gaps. In relation to gaps, when looking at the control interviews, one might infer that both groups make use of gaps regularly within their turns. According to Whitworth (2003), small gaps between turns might be considered as a regular occurrence within conversation. When looking at N.F.'s turns (interview 1, appendix 4), between the turn-transfers of turn 1 and 2, and turn 145 and 146, one-second gaps can be observed. Two-second gaps are evident between the turn-transfers of turn 25 and 26, turn 43 and 44, turn 45 and 46, and turn 47 and 48. The gap between the turn-transfer 141 and turn 142 is noteworthy. Below is an excerpt of turn 140 to turn 142:

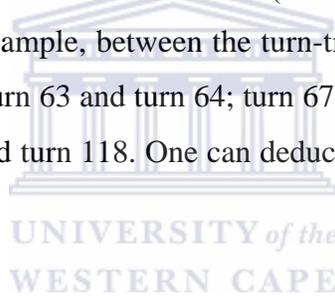
140. H.B.: ek het net halfte gekyk= [*I only watched the half of it=*]

141. L.M.: net die helfte gekyk? ...(1sec)... [*only watched half? ...(1sec)...*]

142. N.F.: nou wat ((N.F. clears his throat)) en die skole toe score dai team wie twie toe score dai team wee twie goals ...(1sec)... hie die wat wat da by die la- die laste

tyd is ...(1sec)... die tyd naby om is toe skop die toe speeie toe speel die swat team tien die team met die met die swat speel hulle begin hulle vuil speel maak hulle almal beseer= [now that ((N.F. clears his throat)) and the schools then the other team scored who two then the other team scored two goals ...(1sec)... here the that that there at the la- the last time ...(1sec)... the time came nearer then kicked the then play than the black team played against the team with the with the black they started to play dirty they hurt everyone=]

In line 141, L.M. repeats what H.B. said in a question form in order to prompt her to take the next turn; yet when N.F. realised that H.B. is not going to take the turn allocated to her, he takes the turn and continues telling his story. This supports Whitworth's (2003) notion that in conversation only a small gap between turns or no gaps at all is allowed. This allows normal flow of conversation. Throughout most of H.B.'s turns (interview 1, appendix 4), there are one-to-two second gaps evident, for example, between the turn-transfer of turn 3 and turn 4; turn 9 and turn 10; turn 59 and turn 60; turn 63 and turn 64; turn 67 and turn 68; turn 101 and turn 102; turn 115 and turn 116; turn 117 and turn 118. One can deduce that H.B. makes use of these gaps in order to position her thoughts.



When considering the FASD participants' turns, T.M. (interview 2, appendix 5) made use of gaps between the turn-transfer of turn 7 and 8, turn and 16, turn 123 and 124 and turn 165 and 166, which were one-second gaps. While between the turn-transfers of turn 14 and 15, turn 85 and 86, turn 127 and 128, turn 145 and 146 and turn 173 and 174, two-second gaps are evident. When looking at J.P.'s turns (interview 2, appendix 5) there are quite a number of turn-transfers where gaps are present. In turn 31 and 32, turn 36 and 37, turn 43 and 44, turn 111 and 112, turn 119 and 120 and between turn 153 and turn 156, one-second gap can be observed. In addition, two second gaps are evident between the turn-transfers of turn 1 and 2; turn 11 and 12; turn 23 and 24; turn 35 and 36; turn 41 and 42; turn 45 and 46; turn 95 and 96; turn 113 and 114; turn 158 and 159 and between turn 187 and 188. The fact that there are so many gaps before J.P. takes a turn, one could deduce that he has to think before answering the questions posed to him.

Let us now turn to lapses. There are only three lapses evident in N.F.'s turns (interview 1, appendix 4). The first is evident between the turn-transfer 29 and turn 30. As discussed earlier, in turn, 29, L.M. asks N.F. a question which he replies to by giggling. L.M. makes use of a minimal turn or a filler word to indicate to N.F. that it is his turn to speak. N.F. takes the turn (turn 30) after a six second lapse. He makes use of the filler phrase "en uhm" followed by a three-second silence, after which he still does not answer the question at hand. One can deduce that the lapse and pause take place because he did not understand the question.

The second lapse is evident in the turn-transfer 87 and turn 88. In line 87, L.M. is talking to H.B. about the rules of netball. At the end of the turn, H.B. just nods her head but does not take the turn. This results in a six second lapse. Again, N.F. realised that H.B. is not going to take the turn allocated to her, so he takes the turn and shifts the topic back to soccer which he has knowledge of. The last lapse takes place between the turn-transfer 151 and turn 152. Below is an excerpt of turn 150 to turn 153:

150. N.F.: dis regte mense. En opie laste ...(1sec)... en toe draai die draai die hele stuk om ((N.F. illustrates with hand gestures)) die mense wat die kar het dai vrou gestamp wat die kar die vrou stamp toe skiet die kar soma nou inie lig in op toe kan die vrou soma nou nie dood nie. Die stuk het ampe soe om gedraai = *[it is real people. And on the last ...(1sec)... and then the whole move turns turns around ((N.F. illustrates with hand gestures)) the people that the car it hit a woman when the car hit the woman, the car shot in the air suddenly then the woman did not die. The movie turned around like that=]*
151. L.M.: oh↑ok ...(3sec)...
152. N.F.: dais dais ek het net tot daar gekyk dis al ...(5sec)... *[that's that's I only watched until there that is it ...(5sec)...]*
153. L.M.: dankie julle twee. Enige iets wat julle nog wil sê? ((both shake their heads no)) dankie julle twee ek waarduer dit. *[thank you. Anything else you want to talk to me about? ((both shake their heads no)) thank you very much, I appreciate it.]*

In turn 150, N.F. provides more information and context about the movie he talked about earlier on in the interview. In turn 151, L.M. makes use of a minimal turn which can be seen as a prompt to get N.F. to continue. After this minimal turn, a three-second lapse is evident after which N.F. states that he only watched the movie until there. The five-second lapse that takes place between the turn-transfer 152 and turn 153 can be interpreted as L.M. leaving the conversation platform open, in case someone would like to add something. This can be deduced from the fact that in turn 153, L.M. concludes the interview.

Within H.B.'s turns (interview 1, appendix 4), there were only two lapses evident. The first lapse is evident between the turn-transfer of turn 17 and turn 18. Below is an excerpt from turn 17 to turn 19:

17. L.M.: hou jy van dices? ...(1sec)... Hou jy van games wat daar 'n dice in is?
 ...(1sec)... soos slangtjies ((H.B. nods her head)) wat het nog - wat het nog dice
 in? ...(3sec)... [*do you like dices? ... (1sec) ... do you like games that use a dice?*
 ... (1sec) ... *like snakes* ((H.B. nods her head)) *what also - what also has dice in?*
 ... (3sec) ...]

18. H.B.: ()=

19. L.M.: harder praat skatjie mmh↑ ...(2sec)... ((H.B. shakes her head no)) weet jy nie?
 ((H.B. shakes her head no)) praat gou vir my ((facing N.F.)) = [*speak louder*
 dearie mmh↑ ... (2sec) ... ((H.B. shakes her head no)) *don't you know?* ((H.B.
 shakes her head no)) *talk to me quickly* ((facing N.F.))=]

In turn 17, L.M. makes use of a question to prompt H.B. to take the next turn. After the question, there is a three-second lapse. Unfortunately, in turn, 18, H.B.'s speech is inaudible. In turn 19, L.M. prompts her to speak louder after which H.B. makes use of body language by shaking her head to indicate “no”. Thus, with this in mind, one can deduce that because H.B. did not know the answer to the question the lapse took place. The last lapse is evident in the turn-transfer between turn 87 and turn 88. As discussed earlier, there is a six second lapse evident between

this turn-transfer as H.B. does not take the turn allocated to her by L.M. This leads to N.F. taking the turn after the lapse as he realised that H.B. is not going to take the turn.

Let us now look at the FASD participants' turns in terms of lapses. There are eight instances where lapses take place in T.M.'s turns (interview 2, appendix 5). There is a three-second lapse evident between turn 133 and turn 134. Between the turn-transfer of turn 13 and 14; turn 16 and 17; turn 149 and 150; turn 169 and turn 170 and 171, four-second lapses can be observed. While between the turn-transfer 57 and turn 58, a five-second lapse is evident. Turn 10 has the longest lapse of 10 seconds. In this turn, T.M. continues a story from a previous turn. When looking at J.P.'s turns (interview 2, appendix 5) in relation to lapses, he has the highest number of lapses throughout both interviews. In addition to having the most lapses, these lapses are longer than any other participant's lapses, with the longest lapse at 22 seconds. Three-second lapses are evident between the turn-transfer of turn 3 and 4; turn 50 and 51; turn 143 and 144 and turn 93. In turn 93, as discussed earlier, L.M. makes use of the first rule of the allocation procedures by allocating the next turn to J.P., which after a three-second lapse he does not take. He only takes the next turn when L.M. repeated the name of the movie being discussed at that time. Between the turn-transfer of turn 49 and 50; and turn 100 and 101, a five-second lapse can be observed. In turn 53, a nine-second lapse is evident, while between the turn-transfer of turn 190 and turn 191; as well as in turn 7, a 15-second lapse can be observed. Lastly, the longest lapse of 22 seconds is evident in turn 13. As discussed earlier in this chapter, in this turn L.M. tries to prompt J.P. to take the next turn by asking him a question, which J.P. only answers with the aid of body language. The last question posed to J.P. in this turn, is followed by the 22-second lapse, after which L.M. moves the conversation to T.M.

In interview 3 (appendix 6), J.J. (FASD participant) there are seven instances where lapses take place in J.J.'s turns. Between the turn-transfer of turn 31 and 32, a three-second lapse can be observed. There is a four-second lapse evident between the turn-transfer of turn 27 and turn 28. Between the turn-transfers of turn 25 and 26; turn 107 and 108 and turn 114, five-second lapses can be observed. Between the turn-transfer of turn 32 and 33, the longest lapse of 6 seconds in

J.J.'s turns, is found. In relation to gaps, there are only two instances in J.J.'s turns where gaps occurred; between the turn-transfers of turn 3 and 4; and turn 21 and 22, both two-second gaps.

Considering all seven interviews, within the FASD participants' turns, many more lapses are present than the normally developing participants. In addition, their lapses are much longer than the normally developing participants. Although the participants within the control interviews made regular use of gaps overall, this is not the case in the five other interviews. In all five interviews, the FASD participants made more use of gaps than the normally developing participants. This might be that they had to think much more about what they wanted to say than the normally developing participants. This confirms Wyper and Rasmussen's (2011) findings that FASD individuals display problems with rate and fluency of speech. In relation to pauses, as with the control interviews, in the five other interviews, the normally developing participants used many pauses within their turns in relation to the FASD participants. As discussed earlier, this might be due to the fact that the normally developing participants have much longer turns than the FASD participants, which lead them to take a breath and quickly get their thoughts in order.



4.4 Repairs

As discussed in chapter 2, Whitworth (2003) defines repair as a mechanism that deals with trouble sources such as dysfluencies, mishearings, wanting to change the message, misunderstandings, mispronunciations and false starts. According to Matthews (1997), there are four types of repair which make up four varieties of repair sequences. Table 4.4 presents the findings for all four children within the control interviews in relation to the four varieties of repair sequences:

Repair sequences	Normally developing children		FASD children	
	N.F.	H.B.	T.M.	J.P.
1. Self-initiated self-repair	11	3	6	2
2. Other-initiated self-repair	0	0	0	0
3. Self-initiated other-repair	0	0	0	0
4. Other-initiated other-repair	1	0	0	1
Total:	12	3	6	3

Figure 4-4 number of repairs in relation to the four repair sequences

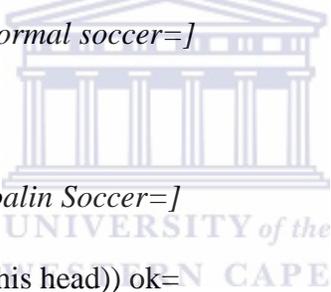
Although it is not very clear from the table that within the control interviews that the normally developing participants make more use of repairs than FASD, evidence from the other 5 interviews as reviewed subsequently lend credence to this conclusion. Only two of the four repair sequences are evident in N.F.'s contributions to the interview (interview 1, appendix 4). The first repair sequence is self-initiated self-repair and the second is other-initiated other-repair. Self-initiated self-repair involves the initiating and carrying out of the repair by the speaker of the trouble source (Hutchby & Wooffitt, 2008). In turn 20, this is evident when N.F. says: “die ste [*the trigger*]” and then immediately self-repairs and says: “die sneller [*the trigger*]”. The trouble source evident here is a false start due to an initial mispronunciation of the word. This is also evident in turn 40 when N.F. states “gistet” and then immediately self-repairs by stating “gister [*yesterday*]”. Here again, the trouble source is mispronunciation. In turn 42, self-initiated self-repair is also evident. Below is an excerpt of turn 42:

42. N.F.: ons skool het ienlik in Durb- Durbanville het eintlik gewen= [*your school actually in Durb- Durbanville actually won=*]

In this turn, N.F. starts the sentence, but halfway through the word “Durbanville”, he decides to change the message. Thus, two types of trouble sources are at play here, a false start as well as a

change of message. In turn 48, the same repair sequence as well as the same trouble sources as in turn 42, are evident. N.F. also starts the sentence but halfway through the word “Woensdag [*Wednesday*]”, he decides to change the message, hence, a false start, as well as a change in the message, are evident here.

In the case of other-initiated other-repair, both the initiating and carrying out of the repair is done by the recipient of the trouble source. This is conventionally called correction (Hutchby & Wooffitt, 2008). This type of repair sequence is evident from turn 124 to turn 127. Below is an excerpt from turn 124 to turn 127:

124. N.F.: ek ek die laste stik wat ek gekyk het is Shaolin Socca is va socca ma is nie die gewone socca nie= [*I I the last movie that I watched is Shaolin Soccer it is about soccer but it is not normal soccer=*]
125. L.M.: stolen Soccer?=
126. N.F.: Shaolin Socca= [*Shoalin Soccer=*]
127. L.M.: Shaolin ((N.F. nods his head)) ok=

In turn 124, N.F. talks about the last movie he watched. He provides the name of the movie with a small description of what it is about. L.M. mishears the name of the movie and in turn 125, repeats it the way she hears it. N.F. initiates and carries out the repair in turn 126. In turn 127, L.M. repeats the repair which is then corroborated by N.F. via a nod. What is important to note here, is the fact that N.F. is the one making the repair.

When considering H.B.’s turns in relation to repairs, only three are evident (interview 1, appendix 4). For example, in turn 66 when H.B. states: “toe ta- toe [then th- then]”. One could say that the repair sequence, self-initiated self-repair, is at play here. The trouble source at work here would be a false start. In turn 60, an error occurs but no repair takes place. H.B. states: “ot netbal gespeel (saam met chomies [ot played netball (with friends)]”. Here H.B. mispronounces the word “ons [we]” but does not correct or repair her mistake. The fact that there are one-to-two

second gaps throughout most of H.B.'s turns could be used to explain the absence of repairs. One could infer that because H.B. positions her thoughts within the gaps, fewer repairs would be necessary. In summary, with respect to repairs, we see that it occurs in the spontaneous speech of both normally developing children, more so in N.F. than in H.B.

When considering T.M.'s turns there are six instances where he made use of repairs (interview 2, appendix 5). In turn 8 and turn 14, the issue here is one of dysfluency. In both instances, T.M. has a problem with pronouncing the word "haloep [run]". In turn 8, he begins the word by only stating the first syllable of the word "ha" then starts the word over and completes the word. In turn 14, however, he also starts the word by only stating the first syllable, yet when he restarts the word, he leaves out the last consonant by only saying "haloe". Only after this, does he completely state the full word. In both instances, T.M. immediately self-repairs. The trouble source of wanting to change the message is evident in turn 60 and turn 104. In turn 60, T.M. is engaged in telling a story about a soccer game he was involved in where he hurt his leg. After a two second pause, he continues his story, yet halfway through the sentence and halfway through a word, he changes his message. In turn 104, T.M. is engaged in telling the other participants about a movie he watched. Almost at the end of this turn, he decides to change his message midsentence. In turn 182, two repairs are evident. Below is an excerpt of turn 182:

182. T.M.: da ry- da gat na ma- gat hy na Batman se secret spot toe = [*then dri- then to- he goes to Batman's secret spot=*]

The first repair could be seen as a false start as it takes place at the second word of this turn. The second repair takes place a few words after the first. This repair's trouble source could be seen as the participant wanting to change the message. In turn 184, three repairs are evident. The first repair is quite interesting. Although this could be seen as a repair as T.M. stops in the middle of a word, then continues, when he continues he repeats the two words before the one he stopped in the middle of. Thus, he actually does not repair anything. One could say that this is a form of dysfluencies. Both the second and third repair, the trouble source of wanting to change the message is evident.

In the case of J.P. (interview 2, appendix 5), only three repairs take place. In turn 2, J.P. mispronounces the word “Sponge Bob” as “s::bob”, thus the trouble source of mispronunciation is evident. Yet he does not repair his mispronunciation. In turn 3, L.M. repairs this trouble source by stating the full name of the character or toy he chose. Only after L.M. repairs his mispronunciation, does J.P. pronounce the word correct (turn 6). In this case, the repair sequence of other-initiated other-repair is evident. In this event, both the initiating and carrying out of the repair is done by the recipient of the trouble source. This is conventionally called correction (Hutchby & Wooffitt, 2008). In both turn 18 and turn 110, the trouble source of mispronunciation can also be observed. In turn 18 he leaves out the last consonant sound of the word “touch”. He immediately corrects his mispronunciation by repeating the word with the last consonant sound. This phenomenon is also present in turn 110 when he mispronounces the word “elf [eleven]” by leaving out the last consonant sound. Again, he immediately corrects his mispronunciation by repeating the word with the last consonant sound present.

There are a small number of instances where T.O. (normally developing participant) made use of false starts in interview 3 (appendix 6). In turn 74 and 105 he starts a sentence, but changes it just after the subject. There are two false starts evident in turn 126, both used to change the sentence. T.O. does not make use of repairs. This might be because most of his turns are quite short and where long turns are evident, he makes use of pauses and gaps to gather his thoughts before speaking. In J.J.’s case (FASD participant), there are three instances where false starts are evident. These are found in turn 28, turn 99 and turn 128, with all of them being used to change the message he tried to convey. There is one instance where a repair is evident. In turn 56, J.J. mispronounces the word “rugby”, which is corrected by L.M. in turn 57 and turn 61. Thus, other-initiated, other-repair is taking place. Yet, J.J. still mispronounces the word in turn 60.

When considering interview 4 (appendix 7), there are four false starts evident in R.G.’s (normally developing participant) turns. Both turn 34 and turn 46 have one false start each, while turn 44 have two false starts, all with the intention to change the message. In turn 46, the trouble source, dysfluency, is evident. In this case, the self-initiated, self-repair sequence can be

observed. When looking at A.S.'s (FASD participant) turns, there are no repairs and no false starts. This could be due to the fact that all A.S.'s turns are one-word answers, short phrases or short clauses. In addition, there are a number of lapses and gaps within his turns. With this in mind, one could infer that he made use of the lapses and gaps to think about his answers in order to not make mistakes.

In interview 5 (appendix 8), O.K. (normally developing participant) only made use of false starts. There are four instances where false starts occurred. In turn 64, turn 74, turn 76 and turn 104 these false starts are evident, all with the intention to change the message. The trouble source, dysfluency is evident in turn 56. Here again, the self-initiated, self-repair sequence can be observed. When considering J.A.'s (FASD participant) turns, there are four false starts evident. These false starts are evident in turn 84, turn 100, turn 121 and turn 135, all with the intention to change the message. In turn 115, he also mispronounces the word "rugby", yet no repair is done. The trouble source, dysfluency is also evident in turn 127, where self-initiated, self-repair is evident. Although J.A. has the most lapses and gaps in his turn, he still engaged in one self-repair sequence and false starts. This might be due to the fact that some of his turns are longer than his FASD counterparts.

Looking at interview 6 (appendix 9), there are five instances where false starts take place within Z.F.'s (normally developing participant) turns. In turn 30, turn 79, turn 89, turn 95 and turn 103, these false starts are present, all with the intention to change the message. There is no repair sequence evident within Z.F.'s turns. In many of her long turns (for example turn 83 and turn 95), Z.F. makes use of minimal utterances (for example, uhm) between her sentences, which might be the reason for the lack of repair sequences within her turns. When looking at E.O.'s (FASD participant) turns, there is only one instance where a false start is evident, which could be found in turn 71. The reason for this false start was to change his message. In turn 22, E.O. also mispronounces the word "rugby". Other-initiated, other-repair sequence takes place as L.M. provides E.O. with the correct pronunciation, yet he still does not pronounce the word correctly. In turn 101, E.O. mispronounces the word "kan [*can*]", yet no repair is done. E.O. has the second

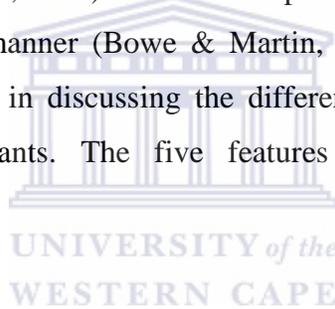
highest number of lapses, with the third highest number of gaps, which could be used to explain the low number of repairs within his turns. What comes across as interesting is the fact that where he mispronounces words, he does not engage in the repair.

When considering interview 7 (appendix 10), there are only two false starts within A.T.'s (normally developing participant) turns. Both are done with the intention to change the message and can be found in turn 75 and 102. There are no repair sequences evident within A.T.'s turns. Yet, in many of her turns (for example turn 28, turn 68 and turn 70), she makes use of minimal utterances (for example, uhm) before her turn or between sentences, which might be the reason for the lack of repair sequences within her turns. When looking at L.K.'s (FASD participant) turns, only two false starts are evident. In turn 112 and turn 116, these false starts are evident, both done with the intention to change the message. In turn 26, L.K. utters the word "koegoepoek", which one can assume is not an English word or an Afrikaans word. No repair is done for this word. One might assume that this is a word fabricated by L.K.

To summarise this account of repairs, when looking at all the interviews, it is evident that the normally developing participants do make use of repairs more than the FASD participants. There are a few normally developing participants who do not make use of repair sequences, yet they all make use of minimal words (for example uhm) in order to collect their thoughts. In addition, the only other-initiated other-repair sequence found in all the interviews is evident in the turns of the FASD participants. In addition, there are a few instances where the FASD participants made use of fabricated words. Furthermore, false starts are equally present throughout all the interviews. This correlates with the findings of Becker et al (1990), as they established that children with FASD suffer from impairments in semantics and articulation.

4.5 Topic Management

As discussed earlier on, topic management denotes what is spoken about and how this is spoken about across different turns (Whitworth, 2003). A topic tends to relate to that which was said previously and a gap between turns is normally an indication that it is the end of a topic (Whitworth, 2003). There were three topics introduced in this interview, namely; toys, sport, and their favourite movie. As discussed in the previous chapter, background information about a topic is important in everyday conversation in order to maintain the conversation flow. Intertextuality can be used to describe this background information. In order to maintain conversational flow, participants have certain expectations when interpreting implied and literal meanings. Grice's Maxims in conjunction with the Cooperative Principle can be used to explain these expectations (Bowe & Martin, 2007). Grice developed four principles or maxims, namely; quantity, quality, relevance and manner (Bowe & Martin, 2007). With this all in mind, four features or contrasts can be used in discussing the differences between normally developing participants and FASD participants. The five features or contrasts will be addressed subsequently.



Firstly, it is evident that the normally developing participants do not have serious problems with topic management, yet the FASD participants struggled with topic management. The second observation about topic management is that where normally developing participants have some problems with topic management, they ultimately found their way back. This was hardly the case with the FASD participants, as their answers were short. These two observations will be discussed collectively by firstly looking at the control groups and then focusing on the other five interviews.

In his management of topics, N.F. (interview 1, appendix 4) appears to be concerned about coherence and unwelcoming of digressions or topic changes when he still has something to say about a current topic. Even when he does not officially have the floor, he would jump in to assist the speaker, so the topic is maintained for as long as possible until there is nothing more to be

said, or he changes the perspective to one of interest to him. This is evident from turn 20 to turn 30, when N.F. manages the topic of toys. Within this topic, the above mentioned can be observed. He starts this topic by explaining the physical aspects of the toy he chose, which was a gun. In turn 21 L.M. uses a minimal turn to prompt N.F. to continue with his explanation. This minimal turn is followed by a two-second pause after which L.M. takes back the turn by asking whether N.F. likes to play with guns. By doing this, L.M. changes the topic slightly but it still relates to the toy N.F. chose. In turn 22, N.F. immediately takes on this new topic after which L.M. makes use of a minimal turn again. Here N.F. steers the conversation to the dangers of a real gun. Since there is no gap, pause or lapse present from turn 22 to turn 24, it is evident that the same topic is being discussed. In turn 25, L.M. asks a question which inevitably changes the topic to movies. In turn 28, we see that with respect to the topic of gun, N.F. rejects L.N.'s bid to steer the discussion to movies as he apparently still had something to say about guns. In spite of his pauses, N.F. is clearly keen on maintaining the coherence of the conversation for as long as his knowledge of the subject would allow. It is evident that N.F.'s topic management allows for coherence (which may also be considered as upholding the maxim of relevance) and for register-appropriate formulations (which make for upholding Gricean maxim of manner). Grice's maxims will be discussed later on in this section.



Let us now turn to topic management in H.B.'s contributions to the conversation (interview 1, appendix 4). It is evident that although within some instances H.B. would struggle with coherence and staying on topic, she normally comes back to the original topic. With this, one can still follow her conversation without feeling lost or confused. She starts the first topic in turn 4 by describing the physical aspects of the toy she chose, which in her case was a dice like toy. From turn 12 on until turn 16, H.B. manages the topic as all her contributions can be seen as coherent. It is evident that normal conversation flow is taking place between turn 13 and turn 17 as there is a constant exchange of information with no gaps or lapses between these turns. In turn 16, H.B. goes off topic. Below is an excerpt from turn 14 to turn 17:

14. H.B.: die's kwaad en die's smile= [*this is angry and this is smile*=]

15. L.M.: jy moet 'n biekie harder praat skatjie= [*you have to talk a bit louder dearie*=]

16. H.B.: hy skrik ook vir dai wat hy doen= [*he also has a fright for what he's doing*=]
17. L.M.: hou jy van dices? ...(1sec)... Hou jy van games wat daar 'n dice in is? ...(1sec)... soos slangtjies ((H.B. nods her head)) wat het nog - wat het nog dice in? ...(3sec)... [*do you like dices? ...(1sec)... do you like games that use a dice? ...(1sec)... like snakes ((H.B. nods her head)) what also - what also has dice in? ...(3sec)...*]

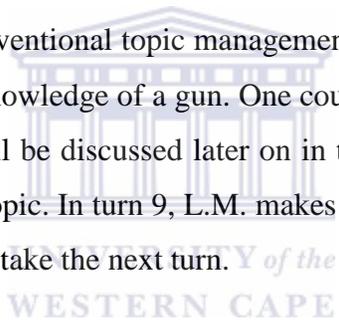
In turn 14, H.B. names the different facial expressions on the dice, after which L.M. asked her to speak slightly louder. This leads to H.B. making a statement in turn 16 that is not related to the topic at hand. At the end of turn 17, there is a three-second lapse, and as mentioned earlier, unfortunately, H.B.'s speech is inaudible. In turn 19, L.M. prompts her to speak louder after which H.B. makes use of body language by shaking her head no. When asked whether she knows the answer, H.B. makes use of body language once again through shaking her head no.

T.M. (FASD participant, interview 2, appendix 5) struggled much more than H.B. with managing the topics. T.M. could not maintain the topics provided and made use of intertextuality to mask this lack of maintenance. From turn 8 to turn 16, T.M. manages the topic of toys. Below is an excerpt of turn 8:

8. T.M.: die gun is 'n blou gun en hulle skiet meka kelboys ...(1sec)... dan ry hulle me die pe:de ...(1sec)... Da skiet skiet hulle meka me guns en ...(2sec)... ha-haloep hulle= [*the gun is a blue gun and they shoot each other Cowboys(1sec)... then they galloping on the horses ...(1sec)... then they shoot shoot each other with guns and ...(2sec)... ha- they run*=]

T.M. starts this turn with a short description of the toy he chose, which was a blue gun. Just after he stated that the gun is a blue gun, he makes use of the conjunction “en[and]” which one would assume, should be followed by another description of the toy. Yet, the second clause in this sentence is not completely related to the first clause. Within the second clause, T.M. talks about how “they shoot each other” followed by the proper noun, Cowboys. Thus, he slightly changes the topic mid-sentence. His use of the pronoun “they” is quite interesting. Conventionally, the

pronoun “they” is used to refer to things or people that have been identified or mentioned already. Yet, T.M. makes use of this pronoun although this is his first turn thus, he could not be referring to something or someone he talked about earlier. Secondly, within the previous turns, there is nothing or no one mentioned by the other participants, which he could be referring to. He does make use of the proper noun, Cowboys. The presence of this proper noun could be seen in two different ways. Firstly, one could say that the Cowboys are the people he is referring to when he used the pronoun. With this possibility in mind, one could believe that he realised that he used the pronoun wrong and he added the proper noun to provide the other participants with the relevant information to understand his turn. The second possibility could be that he uses the proper noun as a scenario and not related to the pronoun. When considering the natural flow of conversation and the conventional way of topic management, one could say that T.M.’s way of changing topics mid-sentence is unconventional. With further consideration, if one would say that he lacks the knowledge of conventional topic management and changing of topics, he makes up this lack with his intertextual knowledge of a gun. One could see that he knows what guns are used for. This intertextual skill will be discussed later on in this chapter. The rest of turn 8 and turn 10, T.M. continues with this topic. In turn 9, L.M. makes use of a minimal turn (asking T.M. to speak louder) to prompt T.M. to take the next turn.

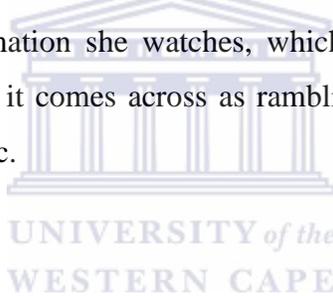


When looking at J.P.’s turns (FASD participant, interview 2, appendix 5), most of his turns are closed, and thus one could deduce that he does not get actively involved in the conversation. He only provides the researcher with answers to the questions posed to him by the use of body language or one-word answers. There are some cases where phrases and short clauses can be observed, yet one could still deduce that J.P. is not actively involved in the conversation, as these phrases and short clauses are also closed. This could be observed within the topic of movies. L.M. introduced the topic in turn 85 when she asked T.M. what movies he liked. Thus, the next few turns revolved around L.M. and T.M. In turn 89, L.M. shifted the conversation to J.P. to include him in the conversation. From turn 90 to turn 102, the conversation took place mainly between J.P. and L.M. with the exception of turn 91 and 92 where L.M. attempted to get both participants active within the conversation. Throughout these turns, one-word responses can be observed, with the exception of turn 90, 94, 96 and turn 98. In turn 90, J.P. states the name of the

movie he watched, “Fast and the Furious six”, however looking at it linguistically, it consists of a noun phrase with two adjectival phrases and a conjunction, where, in turn 94, a noun phrase (movie) and a prepositional phrase (*va die kare [about the cars]*) can be observed. Turn 96 only consists of the prepositional phrase, “*van de Rock [about the Rock]*”. The only complete sentence found within these turns is found in turn 98. The sentence consists of a subject (de rock), object (*die mense [the people]*) and verb (*see [hurts]*). Although Afrikaans tends to have the subject, verb, object sequence that is found in English, the subject, object, verb sequence is also common. In turn 103, L.M. shifts the conversation back to T.M., thus, over the next few turns, the conversation was predominantly between T.M. and L.M. L.M. shifts the conversation back to J.P. in turn 185 with the intention of including him in the conversation. Here again, all J.P.’s answers are one-word responses to questions asked by L.M. After a few more attempts from L.M. to get J.P. to engage in conversation, with no success, L.M. ended the interview.

Let us now focus on the other five interviews. In interview 3 (appendix 6), J.J. (FASD participant) manages and maintains the topic of the toy cars with ease. When considering the sports topic, some problems appeared. In turn 27, L.M. asked J.J. to elaborate about a soccer game he was involved in. In response to this, he talks about how other children hurt him every time they play, yet does not discuss the game itself. He moves from sport to school in turn 32. In turn 35, L.M. brings him back to the topic of sport. L.M. had two specific questions about soccer in order to keep in on the topic. When asked what television program he watches in the afternoon, J.J. states 7de Laan. In turn 97, he is actively involved in a recount of the last episode he watched. One could say that he does maintain the topic as he is actively involved, yet his recount does not correlate with the events he is recounting. When looking at T.O.’s turns (normally developing participant) in interview 3 (appendix 6), he was not really active in the conversation about the toys in the beginning of the interview. Yet, between turn 103 and 106, he talks about the physical attributes of the toy cars. One could infer that he is actively involved here and maintains the topic. In relation to the movie topic, T.O. maintains and manages the topic quite well. He provides long, information filled turns about the movie *The Incredibles*. In terms of intertextuality, it is evident that T.O. has background information concerning cars.

When looking at A.S.'s turns in interview 4 (appendix 7), in both topics of toys and sports, his answers are very short and closed answers as he only answers the questions posed to him. One could infer that he is not actively involved in the conversation in both cases. When considering the movie topic, the only movie that A.S. introduces is SpongeBob in turn 56, yet he does not maintain the topic. L.M. tries to prompt A.S. to actively engage in the conversation by providing different movies or cartoons for him to talk about. The first animation that L.M. introduced is Dragon Ball Z. In turn 60 he actually tries to maintain the topic as he provides more information. The second participant in interview 4 (appendix 7), R.G., maintains the topic surrounding toys quite well, as she does not only answer the question but provides more information. In the second topic, sports, R.G. introduces the sports that she is involved in, which is netball, in turn 32. In turn 34 and 40, she provides more information about netball, thus maintains the topic. In turn 52, R.G. introduces the animation she watches, which is Dora the Explorer. When she engages in storytelling in turn 54, it comes across as rambling as there are no pauses between sentences, yet she sticks to the topic.



In interview 5 (appendix 8), J.A. (FASD participant), maintains the topic of toys in turn 2, 4, and 6. In turn 10, he goes off topic as he was asked about the features of the car toys, yet he talks about dicing cars. One could infer that he engages in storytelling not completely relevant to the topic. In this turn, he also uses the pronoun, "hulle [they]" with no reference to who he is referring to. He is not actively involved in the conversation in turns 24, 26 and turn 30, as he only answers the questions posed to him in short and closed responses. In turn 115, he introduces rugby as a topic, yet in turn 117 he goes off topic and introduces the new topic, condom guns. When considering the topic of movies, he introduces the movie he watched, The Fast and the Furious, in turn 82. In turn 84, he maintains the topic; yet, some problems with storytelling skills are seen here. This will be discussed later on. As mentioned earlier, J.A. introduces the topic, condom guns in turn 117. In turns 119, 121, 123, 125, 129 and turn 131, he maintains the topic as he provides sufficient information. The second participant in interview 5 (appendix 8), O.K. (normally developing participant), maintains the topic of toys as she actively engages in

conversation. Looking at the topic of sports, O.K. explains in detail why she is not involved in sports at school at the moment, in turn 56. After her explanation, she changes the topic to dance. Yet, she does not maintain the topic of dance as her turns are short and closed. In turn 72, O.K. introduces the animation she watched, Dora the Explorer. She actively maintains the topic in turns 74, 76, 78, and turn 80, as she provides sufficient information about the animation and actively engage in storytelling in this turns.

When looking at E.O. (FASD participant) in interview 6 (appendix 9), he does not maintain the topic in turns 2, 4, and 5. This is due to the fact that he only provides one word or short clause answers to the questions asked. In turn 13, L.M. introduces rugby as part of the sports topic. In turn 20, E.O. states that he watches soccer on television and when asked whether this is the only sport he watched, he makes use of body language to answer, by nodding his head yes. L.M. then asked him to elaborate on the last game he watched, to which he replied rugby. One could infer that he contradicts himself here as he does not understand the question. With the intention to prompt E.O. to engage more, L.M. introduces condom guns as a topic. In turn 49, E.O. engages in explaining how to make a condom gun. Yet, it comes across as if he does not have the words to explain what must be done, so he makes use of hand gestures. His hand gestures are also not comprehensible. In addition, there are no breaks between sentences within this turn, which might come across as rambling. In turn 51, E.O. makes use of the pronoun “hulle [*they*]” as well, with no reference to who he is referring to. Moreover, in turn 55, he leaves out all the pronouns. With this in mind, one could infer that he does not know how to use pronouns in sentence structure. In addition, in turn 49, 61, 63, and 71, E.O. makes use of the word “dingese” to replace words he does not know. In these turns, the word “dingese” appears six times. L.M. tries again to prompt E.O. to be more actively involved in the conversation by providing various variation of the topic.

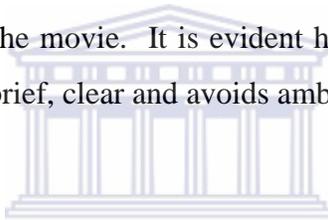
The second participant in interview 6 (appendix 9), Z.F. (normally developing participant), is not active in the conversation when looking at the first topic. With the topic of sports, she becomes quite active in the conversation. One could infer that this could be due to the fact that she is slightly shy, yet as the conversation flows, she becomes more active. In turn 28, she introduces

running as her sport of choice. She actively maintains the conversation here as she provides more information regarding her involvement in the sport. Additionally, she is also quite active in the conversation with regards to the movie topic. In turn 77, she introduces her favourite television program. Between the turn 79 and turn 85, she explains what the program is about. Her contribution here is quite informative and the conversation flows effortlessly. With this in mind, one could deduce that she manages and maintains the topic.

In view of interview 7 (appendix 10), one can assume that L.K. (FASD participant), does not maintain the topic of discussion in turns 12, 14, 16 and 18. This is evident as he only provides short and closed answers to questions asked in these turns. Looking at the sports topic, L.K. again does not maintain the topic. This could be inferred as he states that he is not involved in sport and does not provide L.M. with any input on the topic. L.M. brings in the condom gun topic again with the intention to get L.K. more active in the conversation. In turn 34, 36, 38, 40, 42, 44, and 46, engages in explaining how to make a condom gun. Here again, it comes across as if he does not have the words to explain what must be done, so he makes use of hand gestures as well. All these turns are incomplete sentences, which could be seen as a lack of semantic meaning as there is no relationship between the words, phrases or clauses produced. When looking at A.T. (normally developing participant) turns in interview 7 (appendix 10), one could infer that she maintains the first topic as her contribution is informative. In turn 28, she adds her thought about the toy provided for L.K. by discussing the physical attributes of the car toy. In terms of the sports topic, she introduces tennis in turn 54 and maintains the topic as her contribution is informative and there is a flow of conversation. In turns 64, 66, and 68, she discusses tennis and netball together. Yet, one could still infer that she maintains the topic as there is a flow of conversation and her contribution is informative.

The third observation evident is centered on intertextuality. The FASD participants make use intertextuality to mask their lack of the knowledge of conventional topic management and changing of topics. The normally developing participants, on the other hand, make use of intertextuality to maintain the topics. Here again, we will first focus on the control groups, then

look at the other five interviews in relation to intertextuality. It is evident that N.F. (interview 1, appendix 4) tends to build his conversational contributions on previously encountered discourses, which also help him to use register-appropriate formulation. N.F.'s use of intertextuality is especially obvious in turn 24 where he builds on his understanding of guns, how they work and what they can do to comment. This is all background information he had obtained from watching movies. In turn 26, he actually states that he saw how dangerous guns can be in movies. Similarly, in talking about chess in turn 44, N.F. makes use of previously acquired chess-specific terms, such as “queen”, “knight”, “check” and “checkmate”. In talking about soccer, he uses terms and phrases such as “scored two goals” (turn 52 and 54), “defender” (turn 69), “goalie” (turn 74), “played mid centre” and “off-center” (turn 88), “teamwork” (turn 96). In turn 107 and 120, N.F. draws on his knowledge of the cartoon Dora the Explorer in order to add information to the conversation. One can deduce that he uses his knowledge of soccer in order to understand and explain what is happening in the movie. It is evident here that N.F. upholds the maxim of manner as his contribution here is brief, clear and avoids ambiguity.



H.B. (interview 1, appendix 4) makes use of intertextuality or culturally specific knowledge in turn 76 and turn 80, the culturally specific knowledge of netball is visible when H.B. make use of term “shooter” (turn 76) and when she describes the phenomenon in netball where two people play in the middle of the field. H.B. makes use of intertextuality in turn 100 when she explains what “jealousy” films are about. Below is an excerpt of turn 100:

100. H.B.: jaloers films is ...(1sec)... uhm die meisie wat kwaad raak ...(1sec)... wat ampe soes Happy Dancers wat kwaad raak vi mekaa ...(1sec)... en en soms films is nou wee wat netbal speel en dan stoot hulle meka= [*jealous films is ...(1sec)... uhm the girl gets angry ...(1sec)... almost like Happy Dancers that gets angry at each other ...(1sec)... and and some films is about playing netball and then they push each other=*]

The first incident where intertextuality takes place is when she refers to the movie “Happy Dancers” to explain what “jealousy” films entail. One could say that she uses Happy Dancers as a reference point, as an example. The second incident where intertextuality occurs is when H.B.

refers to netball. As netball was discussed earlier in the interview, one could infer that she builds on this knowledge and depends on the knowledge she knows the other participants should have about netball. In turn 135 and turn 137, H.B. adds what she knows about the topic discussed at that time, which was the soccer movie N.F. was describing. It could be deduced that due to the fact that H.B. had some knowledge about soccer and had watched the movie before, she could add more information to the conversation.

Let us now focus on the FASD participants. Throughout T.M.'s turns (interview 2, appendix 5), his ability to make use of this intertextual knowledge is striking. When looking at T.M.'s turns from turn 8 to turn 16, his ability to make use of intertextual knowledge in order to communicate is apparent. As discussed previously, it might be apparent he makes use of this knowledge to disguise his lack of the knowledge of conventional topic management and changing of topics. T.M. builds his understanding of guns, how they work and what they are used for, on background information he obtained from watching movies. In turn 16, he actually states that he has seen it on the TV a lot after L.M. asked him where he learned what a spinning barrel is. Culturally specific knowledge used by T.M. is evident in turn 58. Within this turn, T.M. explains what happened in the last soccer game he was involved in. He makes use of words such as “skop [kick]” and “tackle” which are terms used within the soccer community. In turn 104, T.M. discussed what takes place within the movie “Fast and the Furious”. Here the culturally specific knowledge of car racing can be seen when he makes use of terms such “drift”, “garage” “Tokyo Drift”, “wiele [wheels]”, and he makes use of the name of one of the characters, “O’Brian”.

When considering intertextuality and culturally specific knowledge in relation to J.P.'s turns (interview 2, appendix 5), only four instances could be identified. The first took place in turn 2 and turn 6. As mentioned earlier, the toy that J.P. chose was a figurine of Sponge Bob Square Pants. Although he could not utter the full name of the cartoon character, he had an idea of what the name was. After L.M. provided J.P. with the correct name of the character in turn 3, J.P. repeated the name in turn 5. With this in mind, one could infer that J.P. does have previous knowledge of the toy he chose. The second instance is evident in turn 12. In turn 11, L.M. asked

J.P. whether he played with guns and after he nodded his head yes, she asked him what games he normally engages in when playing with a gun. In turn 12 his reply to this was, “skiet [*shoot*]”. Thus, one could gather that he does possess some sort of intertextual information regarding guns as he knows that it is used to shoot.

The third intertextual knowledge that can be identified is culturally specific knowledge regarding school. In Afrikaans, when referring to a teacher, gender roles play an important role, thus there is no gender neutral term for a teacher, although the male “onderwyser” is increasingly being used to refer to both genders. Yet this phenomenon is still found. When referring to a female teacher, an Afrikaans-speaking individual would still refer to the teacher as either an “onderwyseres” or a “juffrou” and a male teacher would still be referred to as either an “onderwyser” or a “Meneer”. This phenomenon is evident in J.P.’s turns when, in turn 31, L.M. asked J.P. who his female teacher is; he corrected her by stating that his teacher is a male teacher. Thus, one could infer that he does have the culturally specific knowledge regarding teachers and the gender specific terms used to refer to them. The culturally specific knowledge about school is evident in J.P.’s turns when he makes use of terms such as, “skryf [*write*]” (turn 36), “vas [*cursive*]” (turn 40) and “wiskunde [*mathematics*]” (turn 42). Below is an excerpt of turn 41 and 42:

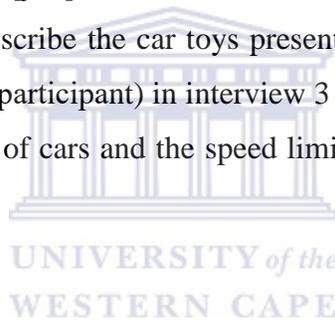
41. L.M.: so vir wa- skryf julle vas? ((J.P. nods his head)) doen julle somme ((J.P. nods his head)) wat se somme doen julle? ...(2sec)... [*so for wha- do you use cursive handwriting? ((J.P. nods his head)) do you do sums? ((J.P. nods his head)) what sums do you do? ...(2sec)...]*

42. J.P.: wiskunde= [*mathematics*=]

The use of the term “wiskunde [*mathematics*]” in turn 42 is interesting. In turn 41, L.M. asked J.P. whether they do sums at school to which J.P. nodded his head yes. When L.M. asked J.P. what sums they do, J.P.’s answered: “wiskunde [*mathematics*]”. Although this is not an appropriate answer to the question posed, one could still say that J.P. does know that sums and mathematics are related. Whether he knows that sums are a part of mathematics or believe that

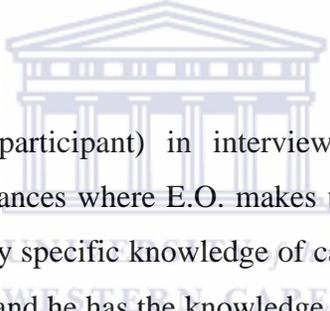
mathematics are part of sums, is questionable. The fact that mathematics is his answer to the question, could be seen as J.P. believing that mathematics are part of sums.

In interview 3 (appendix 6), J.J. (FASD participant) there are a few instances where J.J. makes use of background information. In turn 99, he refers to “die Son” newspaper, which is a newspaper found commonly within the Coloured communities. When he sees any newspaper, he automatically believes it is “Die Son” newspaper. In addition, within this turn, he also states that the news was aired after 7de Laan. Thus, one could deduce that he is aware of the sequence of the television programs. In turn 101, he recounts the news bulletin where he talks about the police. One could say that he has culturally specific knowledge about the police system as he makes use of words such as, “tronk [*jail*]”. In turn 109, J.J. makes use of intertextual knowledge obtained in a movie in order to describe the car toys present in the interview. When looking at T.O.’s turns (normally developing participant) in interview 3 (appendix 6), the culturally specific information about different makes of cars and the speed limitations of various cars is evident in turns 18, 20 and 107.



When looking at A.S.’s turns in interview 4 (appendix 7), in relation to intertextuality, one gets the idea that A.S. makes use of information obtained in the interview due to the fact that where R.G. (normally developing participant) speaks first about a topic, A.S. tends to copy what she said. For example, in turn 2, R.G. states that she will buy herself the doll that was provided, then in turn 4, when asked about the toy car, S.A. states that he will also buy the car. He does show intertextual knowledge about Dragon Ball Z and Wrestling. In turn 60, he talks about what happens in Dragon Ball Z, while in turn 62 and 64, he names famous Wrestling stars. R.G. (interview 4, appendix 7) displays cultural-specific knowledge about netball as she makes use of terms such as “ball”, “pass” and “shoot” which can be found in turn 34. She also displays cultural-specific knowledge about sport in school as she names a few different sports found in her school in turn 44.

In interview 5 (appendix 8), J.A. (FASD participant), J.A. has quite a number of culturally specific knowledge about cars. In turn 2 and 8, he talks about the different speed limits of the car toys provided, while in turn 10 and 84, he uses culturally specific words about car racing, such as “dice” and “spin”. One could infer that he has background knowledge about different makes of cars in turn 26 and 28. In addition, he has culturally specific knowledge about European soccer and soccer in general, which is evident in turns 50, 52, and turn 54. In turns 90, 92, 94, 98, and 100, J.A. shows culturally specific knowledge about Dragon Ball Z, as he provides the names of various characters in the animation. When looking at the second participant in interview 5 (appendix 8), O.K. (normally developing participant), one could infer that she has culturally specific knowledge about different genres of dance as she mentions a few different genres in turn 58 and 60. Gender specific intertextual knowledge is evident in turn 12 as O.K. states that is it good for girls to play with dolls.



When looking at E.O. (FASD participant) in interview 6 (appendix 9), in relation to intertextuality, there are a few instances where E.O. makes use of intertextual knowledge. One could infer that he has the culturally specific knowledge of cars when he speaks about the speed limitations of various cars (turn 7) and he has the knowledge of car racing as he uses words such as “dice” (turn 63). In addition, it could be said that he has background knowledge about rugby as he talks about the score system use in the sport. When considering intertextuality in Z.F.’s (normally developing participant; interview 6 appendix 9) turns, there is evidence of intertextual knowledge in Z.F.’s turns. One could infer that she has culturally specific knowledge about running as a sport as she mentions different kinds of athletic running. In addition, she has intertextual knowledge about movies as she mentions a few different movie genres.

In view of interview 7 (appendix 10), L.K. (FASD participant), in terms of intertextuality, one could infer that L.K. has intertextual knowledge about wrestling as he mentions the name of his favourite wrestler, John Cena. When looking at A.T. (normally developing participant) turns in interview 7 (appendix 10), in relation to intertextuality, there are various instances where A.T. makes use of intertextual knowledge. In turn 28, she uses her knowledge of cars to describe the

physical attributes of the toy cars. She makes use of culturally specific knowledge about tennis in turn 56 when she uses words such as “tennis racket”. In addition, she draws on her culturally specific knowledge regarding the church in turn 80 when she uses terms such as “worship team” and “spiritual dancing”.

The last observation is centered on Grice’s maxims. The normally developing participants of the control interviews both uphold and flout the maxims. In the case of the FASD participants, most of them flouted the maxim of quantity as their contribution was not as informative. Another phenomenon that is evident in a number of FASD participants’ turns are the incorrect use of pronouns. This will be illustrated hereafter.

In most but by no means all of N.F.’s turns (interview 1, appendix 4), he upholds all four of Grice’s maxims. At any given time the four maxims can be violated. If a maxim is violated by a participant, the other participants will presume that that participant does so with reason and then an inference will be made (Bowe & Martin, 2007). In turn 44, N.F. flouts the maxim of manner as he is vague with his description of chess when he uses words such as “the other things”. In turn 46, N.F. states that he has not played soccer in a while, yet he states in turn 52, that he played soccer the previous Monday. One can deduce that he is flouting the maxim of quality as he contradicts himself, thus making his first statement that he has not played soccer in a while, untrue. In turn 88, N.F. takes the turn after a six second lapse. By taking this turn, N.F. flouts the maxims of relevance and manner. He flouts the maxim of relevance because his statement is not completely relevant to the previous turn. In the previous turn, L.M. talked about netball which is followed by N.F.’s turn where he talks about, one might assume, soccer. Although both these topics are sport codes, it is still two different sports. Secondly, N.F. flouts the maxim of manner as he is not clear about what sport he is talking about. Here the other participants have to infer that he is talking about soccer.

In a few of H.B.'s turns (interview 1, appendix 4), she upholds all four maxims. As previously discussed, the four Maxim can be violated at any given time. Turn 56, an example of H.B. upholding Grice's Maxims could be found. Below is an excerpt of turn 55 and turn 56:

55. L.M.: kan jy soccer speel? ((L.M. facing H.B.)) ((H.B. shakes her head no)) hoekom kan jy hoekom wil jy nie soccer speel nie?=*[can you play soccer? ((L.M. facing H.B.)) ((H.B. shakes her head no)) why can't you why do you not want to play soccer?]=*

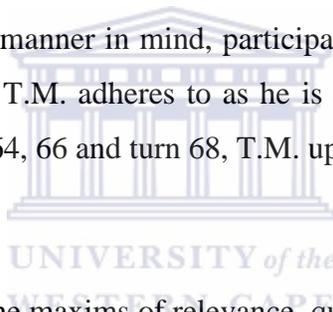
56. H.B.: eksie 'n boy nie ((playing with toy in her hands))=*[I'm not a boy ((playing with the toy in her hands))=]*

One can infer that H.B. does not float the maxim of quantity in this turn as her contribution to the conversation is as informative as necessary with the current objective of the exchange in mind (Bowe & Martin, 2007). This is clear as H.B. merely answers the question posed to her. Furthermore, the maxim of quality is also not floated as one can deduce that she believes that what she stated to be true. When considering the Maxim of Relevance, it is evident that H.B. does not float this Maxim as her answer is to the point and is relevant to the context. According to the last Maxim, Maxim of manner, participants should be brief, clear and avoid ambiguity, (Bowe & Martin, 2007), which in this case, H.B. adheres to as she is clear in her answer, she is brief and she avoids ambiguity.

If a maxim is violated by a participant, the other participants will assume that that participant does so with reason and then an inference will be made (Bowe & Martin, 2007). In turn 66, H.B. violates the Maxims of quantity, relevance and manner yet one could deduce that she upholds the Maxim of quality. The Maxim of quantity is flouted as H.B.'s response is not as informative as possible. She drifts off topic as she started with describing a netball game she partook in and moves to a specific incident that happened at school. At the end of this turn, she does come back to the original topic discussed. Yet, one can deduce that due to the fact that she does not remain on the topic she, inevitably, is not as informative as expected. With this in mind, it is evident that she flouts the maxim of relevance as her contribution is not relevant to the topic at hand. Lastly, she flouts the maxim of manner as her turn is not brief, clear, nor free from ambiguity. Yet, one

could deduce that she upholds the Maxim of quality as what she contributes seems to be the truth according to her.

Let us now look at the FASD participants within the control group. Throughout T.M.'s turns (interview 2, appendix 5), there are a number of times where T.M. upholds all four maxims. In turn 16, one could reason that T.M. does not flout the maxim of quantity as his contribution to the conversation is as informative as required with the current objective of the exchange in mind (Bowe & Martin, 2007). This is evident as T.M. simply answers the question posed to her. Additionally, T.M. does not flout the maxim of quality as one could infer that he believes that what he stated to be true. When considering the maxim of relevance, it is clear that T.M. does not flout this maxim as his answer is relevant to the context and to the point. According to Bowe and Martin (2007), with the maxim of manner in mind, participants should be brief, clear and avoid ambiguity, which in this instance, T.M. adheres to as he is clear in his answer, he is brief and avoids ambiguity. In turns 54, 62, 64, 66 and turn 68, T.M. upholds all of the four maxims.



In turn 8 and turn 10, T.M. flouts the maxims of relevance, quantity, and manner, yet upholds the maxim of quality. As discussed earlier, in turn 8, T.M. changes the topic mid-sentence as his second clause is not completely related to the first clause. With this in mind, one could argue that he flouts the maxim of relevance as his contribution is not completely relevant to the topic at hand. Due to the fact that he flouts the maxim of relevance, one could infer that he flouts the maxim of quantity as his contribution is not as informative as possible. In addition, he flouts the maxim of manner as his turns are not brief, clear, nor free from ambiguity. Here again, his use of the pronoun "hulle [*they*]" could add to the fuzziness of his message. However, one could infer that he does uphold the maxim of quality as what he contributes seems to be the truth according to him.

When considering J.P.'s turns in relation to Grice's Maxim (interview 2, appendix 5), he does not uphold all four maxims most of the time as he only answer's the questions posed to him. One

could say that with his short turns and long lapses, he flouts the maxim of quantity. The maxim of quantity stipulates that participants should make their contribution as informative as required with the current purpose of the exchange in mind (Bowe & Martin, 2007). One could infer that since J.P. was aware that the purpose of the conversation was to be actively involved in the conversation and talk as much as possible, he flouts the maxim of quantity as his contribution was not as informative as required by the current purpose of the exchange.

Let us now focus on the other five interviews. In interview 3 (appendix 6), J.J. (FASD participant) does uphold all four maxims most of the time. Yet, in turn 97, he flouts the maxim of quality as his recount of the events is not truthful. In turn 28, J.J. flouts the maxim of relevance, manner and the maxim of quantity. As J.J. was supposed to provide a description of a soccer game he was involved in, one could argue that he flouts the maxim of relevance as his contribution is not completely relevant to the topic at hand. Due to the fact that he flouts the maxim of relevance, one could infer that he flouts the maxim of quantity as his contribution is not as informative as possible. He makes use of the pronoun “hulle [*they*]”, which is quite interesting. As mentioned earlier, conventionally, the pronoun “they” is used to refer to things or people that have been identified or mentioned already. Yet, J.J. makes use of this pronoun with no reference to anyone. Thus, one could infer that his use of this pronoun could add to the unclarity of his message. When looking at T.O.’s turns (normally developing participant) in interview 3 (appendix 6), he flouts the maxim of quantity in most of his turns as these turns are all short and closed answers to questions posed to him. Yet, in turn 103 and turn 105, he upholds all four maxims. In these two turns, his contribution is as informative as possible (quantity); the truth (quality); relevant to the topic (relevance); and brief, clear and avoid ambiguity (manner).

When looking at A.S.’s turns in interview 4 (appendix 7) he flouts the maxim of quantity in almost all his turns, as all his turns are short and closed. When considering the second participant in interview 4 (appendix 7), R.G, one could say that she upholds all four maxims in most of her turns. In these turns, her contribution is as informative as possible (quantity); the truth (quality);

relevant to the topic (relevance); and brief and clear (manner). Yet, in turn 46, she flouts the maxim of relevance as her contribution is not completely relevant to the topic.

In interview 5 (appendix 8), J.A. (FASD participant), upholds all four maxims in turn 2. Yet, in almost all other turns, he flouts the maxim of quantity as his turns are only closed and short answers to questions posed to him. His contribution in turn 10 might be seen as flouting the maxim of relevance, as his contribution is not completely relevant to the topic. In turn 96, J.A. flouts all the maxims as he states: “Kamehamehas”, which one could infer is not an Afrikaans word or an English word. Due to the fact that one might assume that this is a fabricated word, this turn is not as informative as possible (quantity); not the truth (quality); not relevant to the topic (relevance); and not brief, clear, nor free from ambiguity (manner). The second participant in interview 5 (appendix 8), O.K. (normally developing participant), upholds all four maxims. In this turn, O.K.’s contribution is as informative as possible (quantity); the truth (quality); relevant to the topic (relevance); and brief, clear and free from ambiguity (manner). There is an equal amount of instances where O.K. either upholds all four maxims or flouts quantity. The flouting of the maxim quantity is due to the fact that some of her turns are short and closed, thus, are not as informative as possible.

When looking at E.O. (FASD participant) in interview 6 (appendix 9), he flouts the maxim of quantity in turn 2, 4 and 6, as his contribution is not as informative as possible. In addition, in turn 49, 61, 63, and 71, when E.O. makes use of the word “dingese” to replace words he does not know, or that he has temporarily forgotten, or that he consciously does not know, he flouts the maxim of manner and quantity. He flouts the maxim of manner as his contribution is not clear and free from ambiguity. Furthermore, he flouts the maxim of quantity, as his contribution is not as informative as possible. In turn 21 and 22, he flouts the maxim of quality as he contradicts himself, thus one could infer that this cannot be seen as the truth. When considering the second participant in interview 6 (appendix 9), Z.F. (normally developing participant), one could infer that she upholds all four maxims in most of her turns. For example, in turn 10, most of her turns

are as informative as possible (quantity); the truth (quality); relevant to the topic at hand (relevance); and clear, brief and free from ambiguity (manner).

In interview 7 (appendix 10), L.K. (FASD participant) flouts various maxims in almost all his turns. He flouts the maxim of quantity as most of his turns are short and closed, thus his contribution is not as informative as possible. In addition, in turn 14, 16 and 24, he uses the pronouns “hy [*he*]” and “hom [*him*]” incorrectly. One could infer that he refers to the car when he uses these pronouns in the above-mentioned turns. In addition, he gives the cars human characteristics. This is a good example of personification taking place. This incorrect use of pronouns can be seen as not being clear, thus flouting maxim of manner. In turn 26, L.K. flouts all four maxims when he states: “koegoepoek”, which one could infer is neither an Afrikaans word nor an English word. Due to the fact that one might assume that this is a fabricated word, this turn is not as informative as possible (quantity); not the truth (quality); not relevant to the topic (relevance); and not brief, clear, nor free from ambiguity (manner). When looking at A.T. (normally developing participant) turns in interview 7 (appendix 10), there are various instances where A.T. makes use of intertextual knowledge. In turn 28, she uses her knowledge of cars to describe the physical attributes of the toy cars. She makes use of culturally specific knowledge about tennis in turn 56 when she uses words such as “tennis racket”. In addition, she draws on her culturally specific knowledge regarding the church in turn 80 when she uses terms such as “worship team” and “spiritual dancing”. When considering Grice’s maxims, one could infer that A.T. upholds all four maxims in most of her turns as it is normally as informative as possible (quantity); the truth (quality); relevant to the topic at hand (relevance); and clear, brief and free from ambiguity (manner). However, in turn 56, one could infer that she flouts the maxim of manner as she states: “ander mense [*other people*]”, with no reference to who she is referring to. This could be seen as unclear and not free from ambiguity.

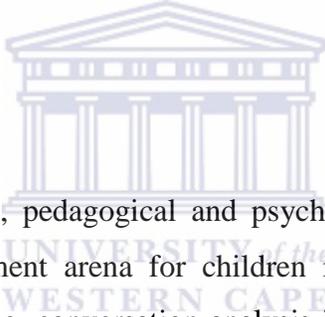
When considering all seven interviews, most of the normally developing participants did not show serious problems with topic management and maintenance. When a normally developing participant would struggle to stay on topic, they would normally find their way back to the

original topic discussed. In addition, when they were inactive on some topics, they would get involved in the conversation later in the interview, especially with the last two topics. When looking at the FASD participants, the majority of them struggled with the management and maintenance of the topics. The majority of their turns were closed and short, which could be interpreted as them not being actively involved in the conversation. Body language used as answers is seen all the participants' turns; however, it is more prominent in the FASD participants' turns. A phenomenon that is evident in all the FASD participant's turns is the use of intertextuality to mask their lack of maintenance and management of topics. This correlates with the findings of Abkarian (1992), who proposed that although it might appear that the FASD participants have acceptable social speech skills, the content of utterances made by them are often off-topic and irrelevant.

When looking at Grice's Maxims, the normally developing participants of the control interviews both uphold and flout the maxims. In the case of the FASD participants, most of them flouted the maxim of quantity as their contribution was not as informative as possible. Another phenomenon that is evident in a number of FASD participants' turns, are the incorrect use of pronouns. These participants would use the pronouns without any reference to what or whom they are referring to. One participant actually left out all the pronouns in one utterance. Thus, one could infer that they struggle with the correct use of pronouns which leads to the flouting of the maxim of manner. In addition, semantic meaning was an issue for a few of the FASD participants. There were cases where there was no semantic meaning in their turns as there was no relationship between the words, phrases, and sentences produced. They would try to explain various topics, but one could get the idea that they are only stringing random words together. Furthermore, some FASD participants made use of fabricated words, which not only flouts all four maxims; one might infer that it suggests impairments in articulation and grammatical abilities. Moreover, the FASD participants exhibit poor comprehensions of verbal commands as there were a number of cases where they did not comprehend the questions, leading to irrelevant answers, or L.M. had to simplify questions as the participants did not respond to the questions.

This correlates with the findings of Becker, Warr-Leeper, & Leeper, (1990), where they established that children with FASD suffer from impairments in semantic, articulation and grammatical ability, along with poor memory abilities. In addition, Becker et al (1990) mentions poor comprehensions of verbal commands and single words and with grammatical or syntactic abilities as typical of FASD children, which is also evident in this study. In addition, Coggins et al (2007) established that individuals with FASD were considerably more probable than the control group to communicate by means of unfitting responses in the course of conversation, which also takes place in this study. The lack of grammatically correct sentences is also a finding of Becker et al (1990), and Coggins et al (2007) states that FASD participants struggle with the production of syntactically complex grammatical structures, which correlates with the finding of this study.

4.6 Storytelling



As discussed in previous chapters, pedagogical and psychological literature suggests that an exceptionally significant development arena for children is storytelling (Cassell & Kimiko, 2001). In the context of storytelling, conversation analysis is interested in how stories are told, thus, how stories are managed and how stories get embedded, turn-by-turn, within interactions (Stokoe & Edwards, 2006). Stories can be treated as a unit of conversation which has recognisable format and sequence; therefore, it has a beginning, a body, and it has an end which can be seen as a collaborative endeavour that takes place between the listener and the storyteller (Parylo, 2011). When looking at the storytelling skills in the control interviews, it is evident that the normally developing participants did not struggle as much as the FASD participants. N.F. (normally developing participant) told all his stories in a conventional way; there were a recognisable format and sequence in his story telling. In addition, he made use of the conjunction, adverb “and then”, that is typical in storytelling. H.B. struggled slightly as she did not follow the recognisable format and sequence. This is evident as she did not have introductions or conclusions in her stories. Yet, she did make use of the conjunction, adverb “and then” throughout her storytelling. In T.M.’s (FASD participant) case, storytelling posed a problem to him. He never introduced his stories and only two stories had conclusions. Most of

his stories came across as rambling with no semantic meaning. Moreover, he struggled with the conjunction, adverb “and then” on various occasions. As mentioned earlier, J.P. (FASD participant) did not engage in storytelling at all as all his turns were one word or a few phrase responses. The researcher, on various occasions, attempted to prompt him to engage in storytelling, with no success. Thus, looking at the control group, one could say that the normally developing participants did not struggle as much as the FASD participants in relation to storytelling. This pattern can be seen throughout the other five interviews which will be identified and focused on in the next section

When looking at interview 3 (appendix 6), T.O. (normally developing participant) engages in the telling of two stories. The first story involves the plot of the animation, *The Incredibles*. He introduces the story in turn 76. He starts his story in turn 82. He does not make use of an introduction. Yet, his story does have a body and a conclusion. Additionally, he does make use of the conjunction, adverb “and then” on various occasions in his story. Considering J.J.’s turns (FASD participant), there are four stories evident. The first story revolves around soccer, which J.J. introduces in turn 26. L.M. asked him to elaborate on the last soccer game he was involved in. In turn he starts to discuss the game, yet there is no introduction to his story. One might infer that he is starting the story in the middle, almost at the end as he does not really elaborate on the game itself; instead, he talks about how other children hurt him every time they play. The second story is based on the South African series, *7de laan*. Besides the fact that his recount of the last episode he watched is not completely related, there is no introduction to his story. He does, however, conclude the story in turn 99 when he states: “en toe is 7de Laan klaar gewies [*and then 7de Laan was finished*]”.

In interview 4 (appendix 7), three stories can be identified in R.G.’s (normally developing participant) turns. In turn 32, she introduces netball as a topic and engages in the story revolving around the last netball game she was involved in. There is no tell-tale introduction to this story, yet she does make use of the conventional conjunction, adverb combination, “and then” in this story. In addition, a conclusion is evident in turn 34 as she ends with who won the game. The last

story that R.G. tells is a recount of an episode of Dora the Explorer. She introduces the animation as a topic in turn 52. The whole story is told in turn 54, where an introduction is evident. Here again, she does make use of the conjunction, adverb combination, “and then”, yet, no conclusion is evident. When looking at A.S. turns (FASD participant) in relation to storytelling, he did not engage in storytelling as all his turns were either one word or a few phrase responses. On various occasions, the researcher attempted to prompt him to engage in storytelling, with no success.

When looking at interview 5 (appendix 8), O.K. (normally developing participant), engaged in two stories. The first story revolved around a detailed description of why she is not involved in sport at the moment. There is no telltale introduction to her story and she does not make use of the conjunction, adverb combination, “and then” in this story, yet, a conclusion is present. In J.A.’s (FASD participant) turns, five stories are evident. The first story he tells involve cars which are found in turn 10. In the previous turn, L.M. asked J.A. to elaborate on the physical attributes of the toy cars. One could infer that J.A.’s response is not completely on topic, as he does not answer the question posed to him, instead he engages in telling a story about car racing. As mentioned earlier, he makes use of pronouns with no reference to who he is referring to. In addition, there is no introduction or conclusion. He makes use of very short clauses and phrases, with two pauses and two lapses separating it. One could infer that he struggles with storytelling as there is no flow to his story. This is the fourth story that he engages in. In turn 121, he provides information on how to construct a condom gun and he does make use of the conjunction, adverb combination, “and then”. Between turn 121 and 125, he is actively engaged in telling his story, yet one could infer that it comes across as rambling as all his turns have little semantic meaning. The last story J.A. engages in revolves around playing in the streets with his friends. In turn 129, he starts the story with no introduction as he begins the story with “en dan [*and then*]”. Between turn 131 and 133, the body of the story is evident. Yet again, one could deduce that his whole story comes across as rambling as all his turns have little semantic meaning. He does make use of the conjunction, adverb combination, “and then” and in turn 135, a conclusion is evident.

When considering interview 6 (appendix 9), the normally developing participant, Z.F., told two stories. She introduces her first story's topic, running, in turn 28. In turn 30, she begins telling her story, where an introduction and a body are evident, yet no conclusion. In addition, she does make use of the conjunction, adverb combination, "and then" throughout her story. Z.F.'s last story revolved around the television program she watched, which she introduces as a topic in turn 77. In turn 81 and 83, Z.F. engages actively in the recount of her story, where an introduction, body, and conclusion are evident. Furthermore, she again makes use of the conjunction, adverb combination, "and then" throughout this story. The FASD participant, E.O., engaged in three stories. In turn 49, he begins his story about how to construct a condom gun. There are no breaks between his sentences and his sentences have little semantic meaning, which one could assume, comes across as rambling. He does make use of the conjunction, adverb combination, "and then" within his story. In turn 51, he goes off topic and does not come back to the topic. This is evident throughout his stories.

In interview 7 (appendix 10), both participants only told one story each. A.T.'s (normally developing participant) story involves the movie, "Dear Letter", which she introduces as a topic in turn 70. The introduction to her story can be found in turn 72, while the body of the story is evident in turn 72, and 74. She concludes her story in turn 74, in addition, she does make use of the conjunction, adverb combination, "and then" throughout her story. L.K.'s (FASD participant) story revolved around the construction of a condom gun. L.M. introduces the condom gun as a topic in turn 33. L.K. begins his explanation in turn 34, yet no introduction is evident. In turns 36, 38, 40, 42, 44 and 46, the body of his story can be found. Yet, all these turns contain short clauses and phrases with little semantic meaning, which gives one the idea that he is rambling. In addition, there is no conclusion evident for this story.

To conclude, when looking at all seven interviews, it is evident that the normally developing participants did not struggle as much as the FASD participants in relation to storytelling. Yet, most of the participants struggled with the introduction of their stories. Besides this, the normally developing participants told their stories in a conventional way, with a recognisable format and a

sequence to their stories. In addition, all the normally developing participants and most of the FASD participants made use of the conjunction, adverb combination, “and then”, that is typical in storytelling. Two of the FASD participants did not engage in storytelling at all as all their turns were one word or a few phrase responses. The researcher, on various occasions, attempted to prompt both participants to engage in storytelling, with no success. When looking at the remaining five FASD participants’ stories, most of them make use of very short clauses and phrases, with either no breaks between sentences or a few pauses. One could infer that they struggle with storytelling as there is no flow to their stories and most of their turns come across as rambling. In addition, due to the absence of breaks between sentences in most cases, and the fact that most of their stories have little to non-semantic meaning, one could assume, their stories comes across as rambling. They attempt to engage in storytelling, yet one gets the idea that they are only stringing random words together. The problems with storytelling highlighted in this study correlate with the findings by Coggins, Friet and Morgan (1998). They concluded that the FASD children’s repertoires of narrative skills were seriously compromised. This discovery led them to deliberate that both the adolescents in their study lacked social-communicative functions which are vital for social acceptance as well as academic success (Coggins, Friet, & Morgan, 1998).



4.7 Summary

The aim of this chapter was to answer the first research question on the effects of FASD on the structural patterns of social interactions in spontaneous speech. As mentioned earlier, because of time and space constraints, this study analyses only the two control interviews – an analysis that runs into 50-odd pages. It would be recalled from chapter 3 on methodology that whereas 5 of the interviews involved sessions in which children with and without FASD interacted, there were two of the interviews that were considered as control. The latter interviews involved in one case 2 children with FASD and in the other children without FASD. In analysing these interviews to address the first objective/hypothesis of this study, the researcher attempted to identify any conversational analytic features that appear to be associated with or prominent in the

spontaneous speech of children with FASD, but that are relatively less prominent in the speech of children without FASD, and vice versa.

Conversational analysis (CA) provides an in-depth view on structural patterns of social interactions as it looks at various rules that one should obey and patterns that are common in social interactions. For ethical reasons, each child was provided with a pseudonym. An in-depth analysis of each child's utterances was done, according to the five aspects discussed in chapter two. This analysis started with interview one, with each aspect discussed separately. The same took place with interview two. With the comparison, the other five interviews were discussed as well in order to identify patterns that were evident throughout all the interviews.

The findings of the chapter on each of the conversational analytic parameters are as follows: With respect to turn-taking, we saw that the FASD participants struggled with both rules for allocation procedures while the normally developing participants had less trouble with this. Data on overlapping, although rather small, suggest that normally developing children were more likely to overlap (because they anticipate when a turn-transfer will be attempted) than the FASD children. On silences, while there more pauses in the speech of the normally developing participants used many pauses within their turns in relation to the FASD participants. These pauses were used to plan/organise their thoughts because they had much longer turns. When looking at gaps, the FASD participants made more use of gaps than the normally developing participants. This might be that they had to think much more about what they wanted to say than the normally developing participants. Within the FASD participants' turns, much more lapses are present than the normally developing participants. In addition, their lapses are much longer than the normally developing participants. With respect to repairs, when looking at all the interviews, it is evident that the normally developing participants do make use of repairs more than the FASD participants. When considering all seven interviews with regards to topic management, most of the normally developing participants did not show serious problems with topic management and maintenance. When looking at the FASD participants, the majority of them struggled with the management and maintenance of the topics. A phenomenon that evident in all

the FASD participant's turns is the use of intertextuality to mask their lack of maintenance and management of topics. When looking at all seven interviews with storytelling in mind, it is evident that the normally developing participants did not struggle as much as the FASD participants in relation to storytelling. Yet, most of the participants struggled with the introduction of their stories.



Chapter 5:

5 Comparative analysis: A Quantitative Analysis of FASD and normally developing children in relation to both spontaneous speech measures and standardised measures of language.

5.1 Introduction

Whereas in the last chapter the focus was on the sociolinguistics aspects of the speech of children (FASD and normally developing children) in social interaction, the current chapter will focus on the structural linguistic features of the speech. In the first part of the chapter, we will look at the structural features as occurring in spontaneous speech by reporting on the result of administering the measures of spontaneous speech. In the second part of the chapter, we will report on the results from administering the standardised language test which makes use of data elicited from closed questions, less naturally occurring speech. This will be followed by a section dedicated to answering the last research question, which is, whether there is a correlation between primary caregiver's education level and FASD/normally developing children's performance on both standardised measures and spontaneous speech measures.

5.2 Measures of Spontaneous speech

As mentioned in chapter 3, there are three measures of spontaneous speech used in this research, namely, the mean length of utterance (MLU), Index of Productive Syntax (IPSyn) and number of different word roots (NDWR) (Condouris, Meyer, & Tager-Flusberg, 2003). They were used because of their sensitivity in representing developmental variations in children's language abilities (Condouris, Meyer, & Tager-Flusberg, 2003). Each test will be discussed individually.

5.2.1 MLU

As seen in chapter three, the MLU is utilized as an index of children's grammatical complexity as it measures the length of utterances (Brown, 1973). This test has been used as a diagnostic measure in order to distinguish between language-impaired populations and normally developing children (Condouris, Meyer, & Tager-Flusberg, 2003). The computing of the MLU was done manually by the researcher as the software (SALT) that would normally be employed for this purpose was not appropriate given that the material was in Kaaps. Each participant's utterances were looked at individually. The researcher counted all the morphemes for each utterance, grounded on Miller and Chapman's (1981) adaptation of Brown's (1973) first version of the procedure for calculating morphemes. A free morpheme counted as one (for example, Pop=1, interview 7) and a free morpheme with a bound morpheme counted as two (for example, mense=2, interview 3). When the participant would repeat a word, only the first would be counted (for example, en=1 toe=1 toe=0, interview 1). Made up words and incomplete words were not counted (for example, sbob=0, interview 2). After this was done for each utterance, the total for each utterance was calculated (for example, 54, interview 4). The number of morphemes for all the utterances (of each participant) was calculated and divided by the number of utterances for each participant (for example, $312/25=12,48$). In a normally developing child, MLU correlates significantly with age up to about MLU 2.5-3.0 (Condouris, Meyer, & Tager-Flusberg, 2003). With a MLU score higher than 3.0, the association between MLU and age is less dependable; nevertheless, it remains to be a valid predictor of syntactic diversity and complexity up to about MLU 4.0 (Condouris, Meyer, & Tager-Flusberg, 2003). In relation to this study, the MLU correlates significantly with age as the MLU is 2.8. Thus, one could assume that the association between MLU and age is dependable for this study. In figure 5-1 below, the MLU scores of all the participants are presented.

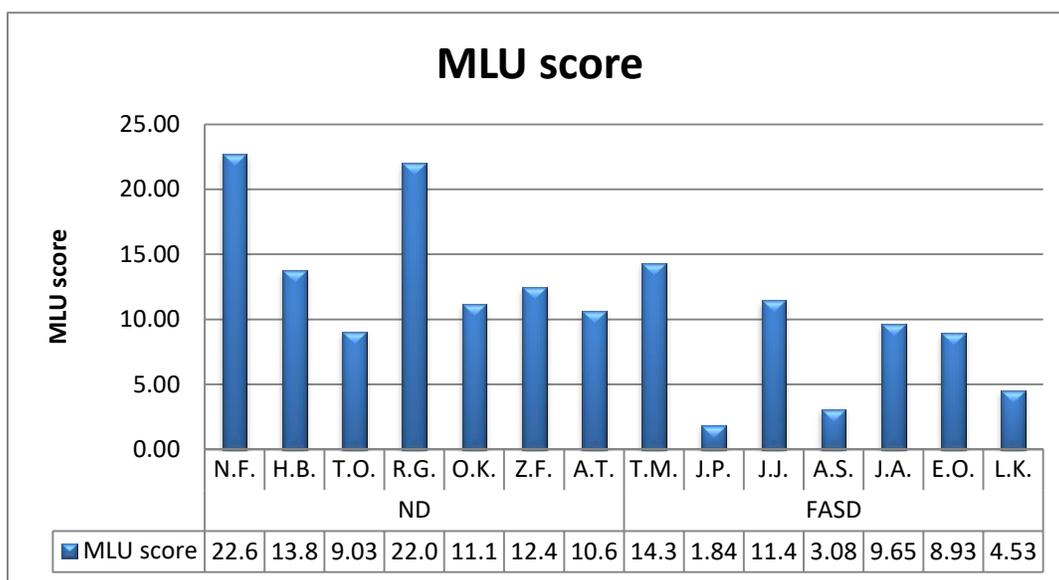


Figure 5-1: MLU scores for all the participants

Looking at the chart above, it is evident that the normally developing (ND) participants' MLU scores are higher than those of the FASD participants. The average MLU score for the normally developing participants is 14.54, while the average MLU score for the FASD participants is 7.69. Yet there are some FASD participants that scored higher than some of the normally developing participants. The Mann-Whitney U test was administered to MLU results for all participants. Theoretically, the Mann-Whitney U test evaluates the difference between two groups' distributions as well as the differences in ranks of scores between the two groups, like all non-parametric tests (Pretorius, 2007). In terms of MLU, the result of the Mann-Whitney U test shows that there is a significant difference between FASD participants and normally developing participants ($\alpha = 0.048 \therefore \alpha < 0.05$). In order to determine the relative magnitude of the difference between the two groups, the Glass rank biserial correlation coefficient has been used. For this test, the coefficient squared = $(0.63)^2 = 0.399$ in terms of percentage = 5%. Thus, one can infer that there is a small to moderate significance between FASD and the normally developing participants in relation to their MLU results. In simple terms, the normally developing participants scored higher overall than the FASD participants. In table 5.1, the rank statistics can be found.

		N	Mean Rank	Sum of Ranks
MLU score	ND	7	9.71	68.00
	FASD	7	5.29	37.00
	Total	14		

Table 5-1 Rank statistics of MLU scores

Now let us look at the results obtained from the IPSyn test.

5.2.2 IPSyn

IPSyn offers an alternative index of morphological and syntactic development (Condouris, Meyer, & Tager-Flusberg, 2003). In contrast to the MLU, “the IPSyn is a type-based measure” (Condouris, Meyer, & Tager-Flusberg, 2003, p. 6). Instead of assessing the child’s use of mandatory context, it assesses the child’s developing use of detailed syntactic and morphological structures (Scarborough, 1990). The index consists of four subscales: Verbs (17 items), Nouns (12 items), Sentence Structures (11 items), and Questions and Negations (20 items) (Condouris, Meyer, & Tager-Flusberg, 2003). There is a total of 60 items on the IPSyn, with each worth a maximum of two points. Thus, the total IPSyn score is 120 (Condouris, Meyer, & Tager-Flusberg, 2003). When only one example of a given item could be identified, a maximum credit of one point was given (Horton-Ikard, Weismer, & Edwards, 2005). As mentioned earlier, the interviews were conducted in Kaaps, and the structure of grammar for English and Kaaps or Afrikaans differs in some ways, thus when these items were identified, the Afrikaans and Kaaps grammar was taken into account. This was done to make sure that participants are not disadvantaged. This was also the reason why the translation of their utterances were not used for the analysis of the measures of spontaneous speech and the SALT-based analysis not done.

For verbs, the items looked at were verbs used (for example, moord [*murder*], interview 1), auxiliary verbs (het [*have*], interview one) and so forth. Looking at nouns, the items identified were proper nouns (karientjies [*cars*], interview 4), two-word noun phrase preceded by article or modifier (die skool [*the school*], interview 5) and so forth. For sentence structures, the items considered were intonationally marked question (En wat nou wee veder gebuer↑? [*And what else happens then↑?*], interview one) and so on. Looking at questions and negations, the items identified were subject verb sequence (die steller trek [*pulling the trigger*], interview one), conjunctions (en [*and*], interview one) and for on. Please refer to appendix 11 for a full example of an IPsyn test. The IPsyn results for all the participants are presented in figure 5-2 below.

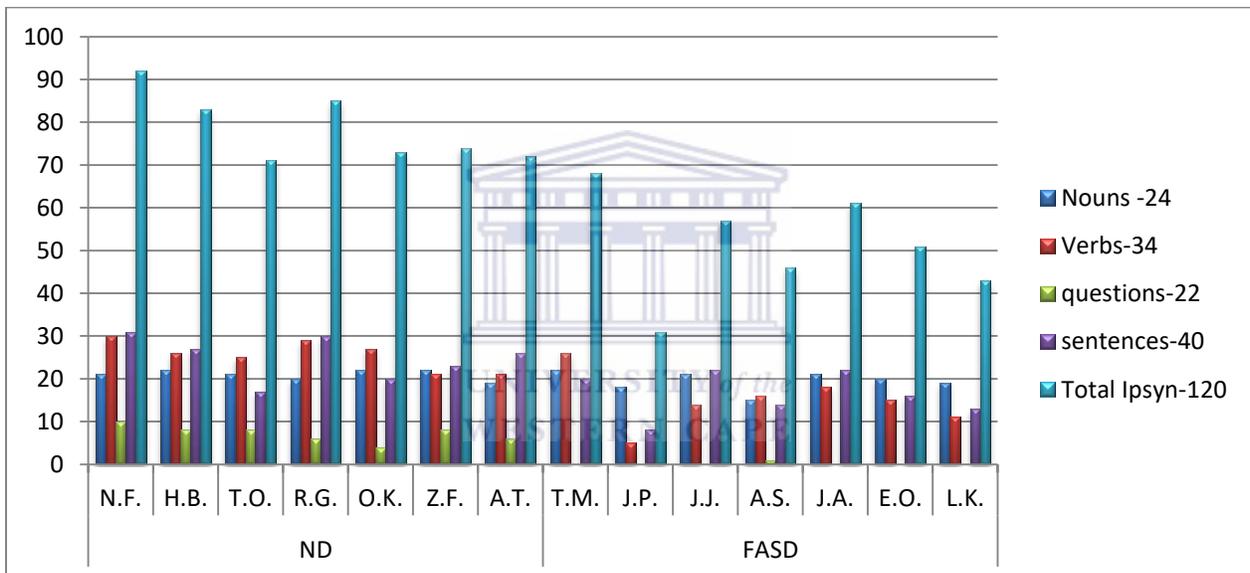


Figure 5-2: IPsyn results of normally developing and FASD participants

When looking at the normally developing participants, the highest total IPsyn score was 92 with the lowest 71 (average = 78.57∴ 65.48%). For the FASD participants, the highest total IPsyn score was 68 and the lowest 31 (average = 51∴ 42.5%). With this in mind, it is evident that the normally developing participants' total IPsyn scores were all higher than the FASD participants. IPsyn is normally used to identify the quality and size of an individual's morphosyntactic repertoire (Nieminen, 2007). When considering Nieminen (2007), one could assume that the quality and size of the normally developing participant's morphosyntactic repertoire is considerably larger than the FASD participants. In relation to the noun subscale, the highest

score for the normally developing participants was 22 and the lowest 19 (average = 21.0: 87.5%). In contrast, the highest score for the FASD participants for the noun subscale was 22 as well, but the lowest was 15 (average = 19.42: 80.95%). When looking at the average for both normally developing and FASD participants, it is evident that both sample groups fared high in relation to the noun subscale as this subscale's total points are 24. One might conclude that both sample groups do not have an obvious problem with the use of nouns. When looking at the verb subscale, the highest score for the normally developing participants was 30 and the lowest, 21 (average = 25.57), while the highest the FASD participants scored was 26 and the lowest 5 (average = 15). Looking at the average of the two sample groups, it is evident that the normally developing participants showed competency with the use of verbs compared to the FASD participants as there is a 10 point difference between their average scores for this subscale. In addition, the FASD participants' average for this subscale is 44 percent while the normally developing participants' percentage is 75.

When considering the questions and negations subscale, the highest score for the normally developing participants was 10 and the lowest score 4 (average = 7.14 : 32.46%). In contrast, six of the FASD participants scored 0 for the questions and negations subscale, and only one participant scored 1 (average = 0.14 : 0.65%). In both sample groups, questions and negations seem to be problematic as both sample groups' average is less than 50%. Yet, the normally developing participants scored much higher than the FASD participants. Thus, one could infer that the normally developing participants are more proficient compared to the FASD participants within the questions and negation subscale. Within the last subscale, sentence structures, the highest score the normally developing participants scored was 31 and the lowest was 17 (average = 24.85: 62.14%), while the highest score for the FASD participants was 22 and the lowest 8 (average = 16.42: 41.07%). When considering the average and percentage of both sample groups, one can deduce that the normally developing participants showed competency within the sentence structure subscale compared to the FASD participants.

The Mann-Whitney U test was administered individually to all four subscales and to the overall score. For the overall score, one can conclude that there is a significant difference between FASD participants and normally developing participants ($\alpha = 0.002 \therefore \alpha < 0.05$). In order to determine the relative magnitude of the difference between the two groups, the Glass rank biserial correlation coefficient has been used. For this test, the coefficient squared = $(1)^2 = 1$ in terms of percentage = 5%. Thus, one can assume that there is a strong significance between FASD and the normally developing participants in relation to their overall IPsyn results. In simple terms, the normally developing participants scored higher overall than the FASD participants.

To summarise the IPsyn results, the Mann-Whitney U test results for the noun subscale were different from the rest of the domains. It showed no significant difference between the FASD and the control group ($\alpha = 0.150 \therefore \alpha > 0.05$). In relation to the verb subscale, the Mann-Whitney U test showed that there is a significant difference between the two variables ($\alpha = 0.007 \therefore \alpha < 0.05$). The coefficient squared = $(0.857)^2 = 0.73$ in terms of percentage = 5%. Therefore, there is significant difference in the means of the two groups, with the magnitude of these differences high. When looking at the question and negation subscale, according to the Mann-Whitney U test, there is a significant difference between the control group and FASD ($\alpha = 0.001 \therefore \alpha < 0.05$). The coefficient squared is equal to $(1)^2 = 1$ in terms of percentage = 5%. Therefore, the significance is strong between the control group and FASD in relation to the question and negation subscale. The Mann-Whitney U test for sentences suggested that there is a significant difference between the two groups ($\alpha = 0.015 \therefore \alpha < 0.05$). The coefficient squared = $(0.77)^2 = 0.6$ in terms of percentage = 5%. Thus, the significance between FASD and the control group in relation to pragmatics is moderate to high. The rank statistics can be found in table 5.2 below.

	N	Mean Rank	Sum of
			of

				Ranks
Nouns24	ND	7	9.07	63.50
	FASD	7	5.93	41.50
	Total	14		
Verbs34	ND	7	10.50	73.50
	FASD	7	4.50	31.50
	Total	14		
questions22	ND	7	11.00	77.00
	FASD	7	4.00	28.00
	Total	14		
sentences40	ND	7	10.21	71.50
	FASD	7	4.79	33.50
	Total	14		
TotalIpsyn120	ND	7	11.00	77.00
	FASD	7	4.00	28.00
	Total	14		

Table 5-2 Rank statistics of IPsyn results

5.2.3 NDWR

The NDWR measures lexical diversity. This test has demonstrated diagnostic and developmental validity and temporal consistency (Condouris, Meyer, & Tager-Flusberg, 2003). The calculation of the NDWR is based on the number of diverse word roots or bare stems found within a

language sample (Condouris, Meyer, & Tager-Flusberg, 2003). Again, as SALT-based analyses could not be used to compute the NDWR, this was done manually by the researcher. Each participant’s utterances were looked at individually. The root words within each utterance were identified and counted. For example, in the utterance “ek het a poppie en ek hou vanie poppie enie poppie lyk oulik en hul ek hou van die poppie se rok en die poppie se hartjies en ek en speel ek sal speel menie poppie en ek sal vir my oek so ‘n pop koep” (interview 4, appendix 7), the following root words were identified: “poppie, hou, poppie, poppie, lyk, oulik, hou, poppie, rok, poppie, hartjies, speel, speel, poppie, pop, koep”. Each root word was awarded one point, thus this specific utterance, received 16 points. After this was done for each utterance, all the scores for each utterance were calculated together in order to get a total NDWR score. The NDWR results for all the participants are presented in figure 5-3 below.

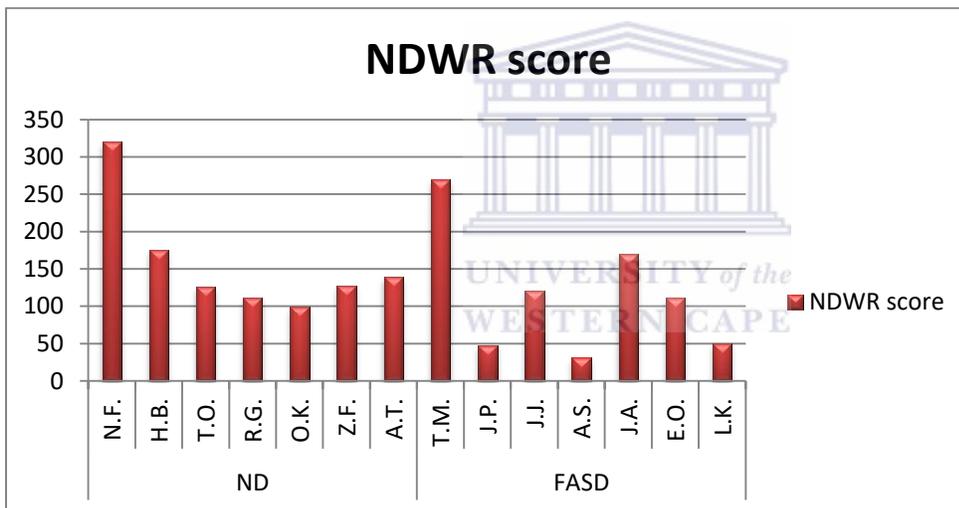


Figure 5-3: NDWR results of normally developing and FASD participants

When looking at the normally developing participants, the highest NDWR score was 320 with the lowest 99 (average = 156.71). For the FASD participants, the highest NDWR score was 270 and the lowest 31 (average = 114.43).

The Mann-Whitney U test was administered to NDWR results for all participants. As discussed earlier, the Mann-Whitney U test evaluates the difference between two groups’ distributions as

well as centered on the differences in ranks of scores between the two groups, like all non-parametric tests (Pretorius, 2007). In terms of NDWR, one can conclude that there is no significant difference between FASD participants and normally developing participants ($\alpha = 0.201 \therefore \alpha < 0.05$).

To summarise the findings from the measures of spontaneous speech, the Mann-Whitney U test suggests that while the difference was not statistically significant between the normally developing children and the FASD children on NDWR and the noun subscale of the IPsyn, it was on the following measures: 1. the MLU results where one can infer that there is a small to moderate significance between FASD and the normally developing participants in relation to their MLU results. 2. The overall IPsyn results where one can infer that there is a strong significance between FASD and the normally developing participants. 3. The verb subscale of the IPsyn, where it is evident that there is a significant difference in the means of the two sample groups, with the magnitude of these differences high. 4. The question and negation subscale of the IPsyn, where the significance is strong between the control group and FASD. 5. The sentence structure subscale of the IPsyn where there is a significant difference between the two groups in relation to pragmatics is moderate to high.

5.3 Standardised Language Test Measure

It may be recalled that an important aspect of the study (as seen in the second and third objectives) involves assessing the adequacy of standardised test measures versus spontaneous speech measures in accounting for the characteristics of speech in children with and without FASD. Due to constraints of time, the researcher has decided to make use of the data on standardised language tests collected in the researcher's previous study where all the children participated in. That study focused on four domains of language, namely: syntax, pragmatics, semantics, and phonology, in order to establish what domains of language are most significantly affected in children with FASD. The standardised test administered to each participant individually was the Diagnostic Evaluation of Language Variation (DELV). The DELV is a test

which has eleven subtests structured into four domains: syntax, pragmatics, semantics and phonology (Southwood, 2011).

For each of the four domains of syntax, pragmatics, semantics and phonology, the raw scores were firstly converted into scaled scores, then into percentile ranks (i.e. 27). Following the instructions within the Examiner’s Manual of the DELV, the sum of the scaled scores was then converted into composite scaled scores and their concomitant percentile ranks (Seymour, et al., 2005a). For this study, the researcher looked at all the language domains and the overall test scores in order to determine whether there were language impairments. The Examiner’s Manual of the DELV specifies that percentiles below 16 are taken to indicate a language problem (Southwood & Van Dulm, 2009). The DELV overall test scores for all the participants are presented in figure 5-4 below.

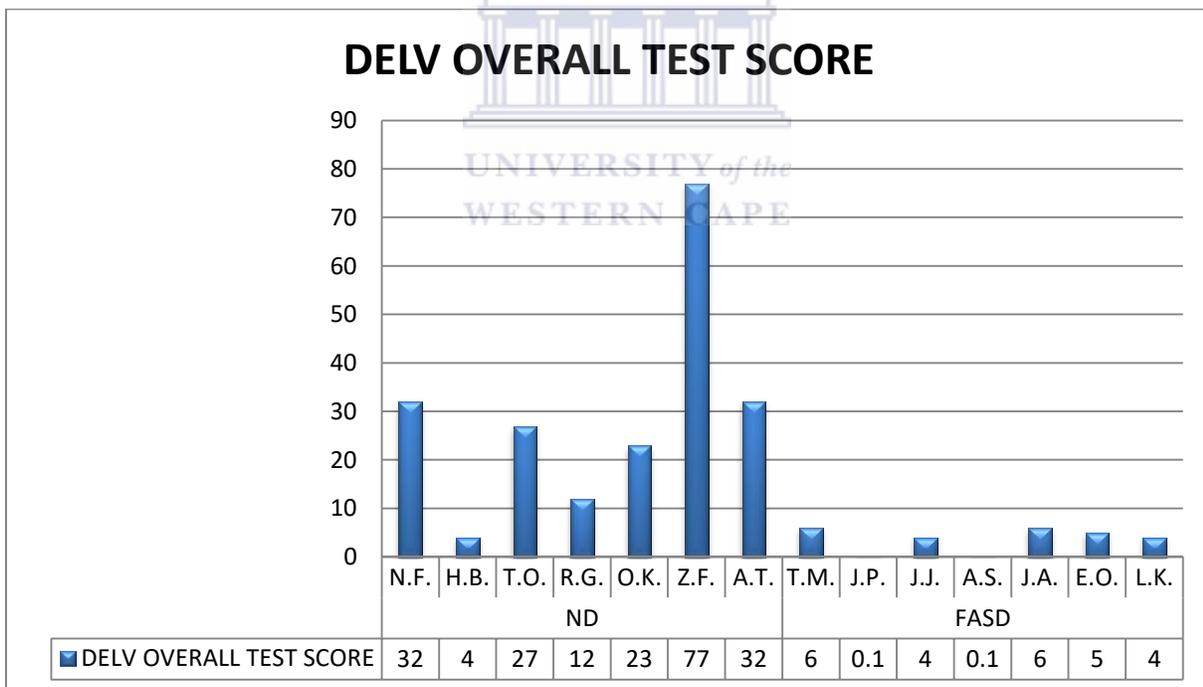


Figure 5-4 DELV overall test scores of normally developing and FASD participants

As mentioned in chapter 3, the Examiner’s Manual of the DELV specifies that percentiles below 16 are taken to indicate a language problem (Southwood & Van Dulm, 2009). Thus, this will be the point of departure for analysis. Firstly, for the overall test, all seven FASD participants

scored a percentile rank of less than 16. The highest overall percentile rank score for the FASD participants was 6 and the lowest was 0.1. Therefore, one can infer that there is a definite language problem evident amongst the sample. According to Wyper and Rasmussen, (2011), generally the literature proposes that there is noteworthy language and speech delay within the FASD population. To briefly consider the overall results of the normally developing participants, two participants also received a score of less than 16 (4 – H.B. and 12 – R.G.). This could be linked to socio-economic status in relation to their primary care-giver’s highest education level. This will be discussed in more detail later in this chapter. Now let us look at the results obtained within the phonology domain. The phonology domain test scores for all the participants are presented in figure 5-5 below.

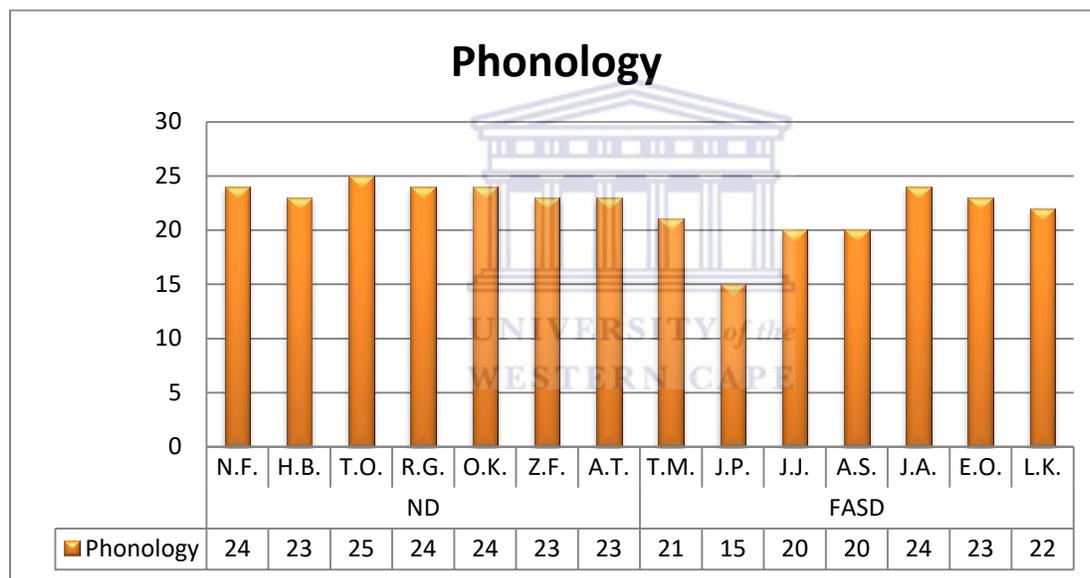
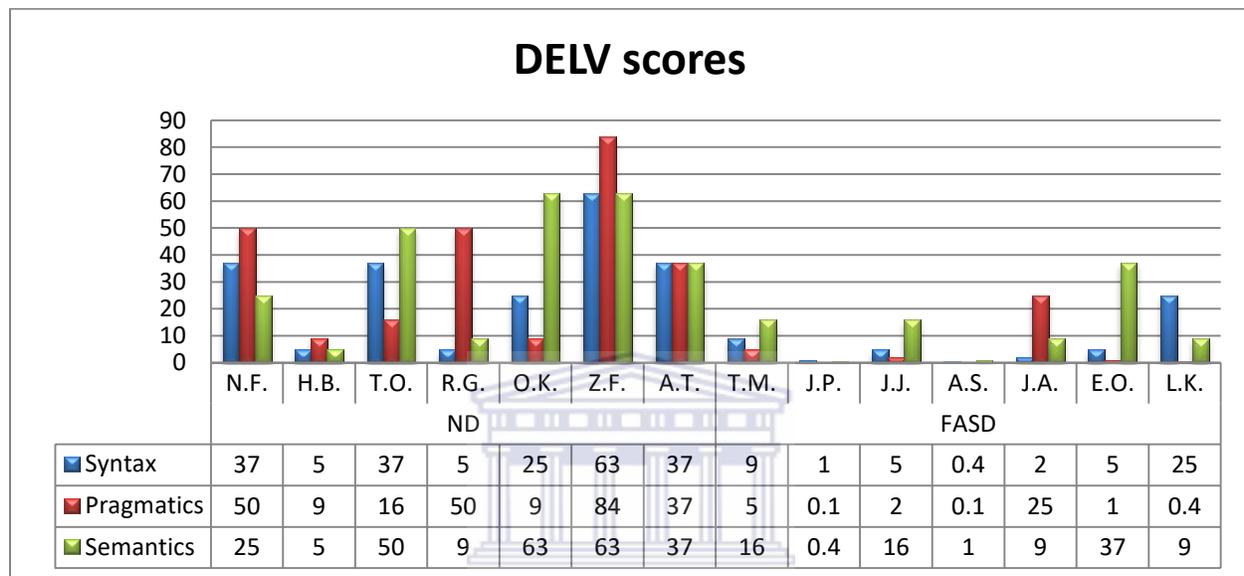


Figure 5-5 phonology test scores of normally developing and FASD participants

When looking at the phonology domain, all the participants within this study obtained above 16 except one FASD participant who received 15 in relation to their raw scores. Thus, six of the seven FASD participants received between 20 and 24 out of 25. One can infer that within this sample, there were no noticeable phonological impairments. This goes against the literature once again. According to prior research, articulation disorders have been seen in individuals with prenatal alcohol exposure (Coggins, Timler, & Olswang, 2007; Iosub, Fuchs, Bingol, & Gromisch, 1994; Wyper & Rasmussen, 2011). However, these results should be understood and

interpreted with caution as this study only looked at seven participants with FASD. If the sample participant should have been bigger, there might have been greater agreement with the literature. Now let us look at the results obtained within the syntax, pragmatics, and semantics domains. The syntax, pragmatics and semantics domains test scores for all the participants are presented in figure 5-6 below.



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Figure 5-6 test scores for syntax, pragmatics and semantics of normally developing and FASD participants

When one considers the syntax, pragmatics and semantics domains separately, the results are slightly different than the overall percentile rank. In all three domains, at least one participant scored a percentile rank above 16. In the case of syntax, the highest score is 25, while the lowest is 0.4. In the pragmatics domain, the highest percentile rank score is also 25, whereas the lowest score is 0.1 and with the semantic domain, the highest score is 37 and the lowest score correlates with syntax. Within each case, it is not the same participant who received the high or the lowest score. In all three domains, the range of the scores is quite high (the difference between the highest score and the lowest score).

5.4 Primary Caregiver’s Education level VS FASD/normally developing children’s performance.

The following section will focus on answering the last research question, which is, whether there is a correlation between primary caregiver’s education level and FASD/normally developing children’s performance on both standardised measures and spontaneous speech measures. The researcher noticed that some features in the speech of normally developing children were similar to features in the speech of children with FASD. After extensive research, the researcher decided to look at the education level of the caretakers of all participants in order to explain this phenomenon. Figure 5-8 depicts the number of years of formal education successfully completed by each participant’s primary caregiver. As mentioned earlier, the non-parametric Spearman correlation coefficient was used for analysis due to the non-normality of the distribution. The first subsection will determine whether there is a correlation between primary caregiver’s education level and FASD/normally developing children’s performance in the standardised measure. This will be followed by a subsection that will look at whether there is a correlation between primary caregiver’s education level and FASD/normally developing children’s performance in the spontaneous speech measures. In figure 5-7 below, the education level of each participant’s caregiver is depicted individually.

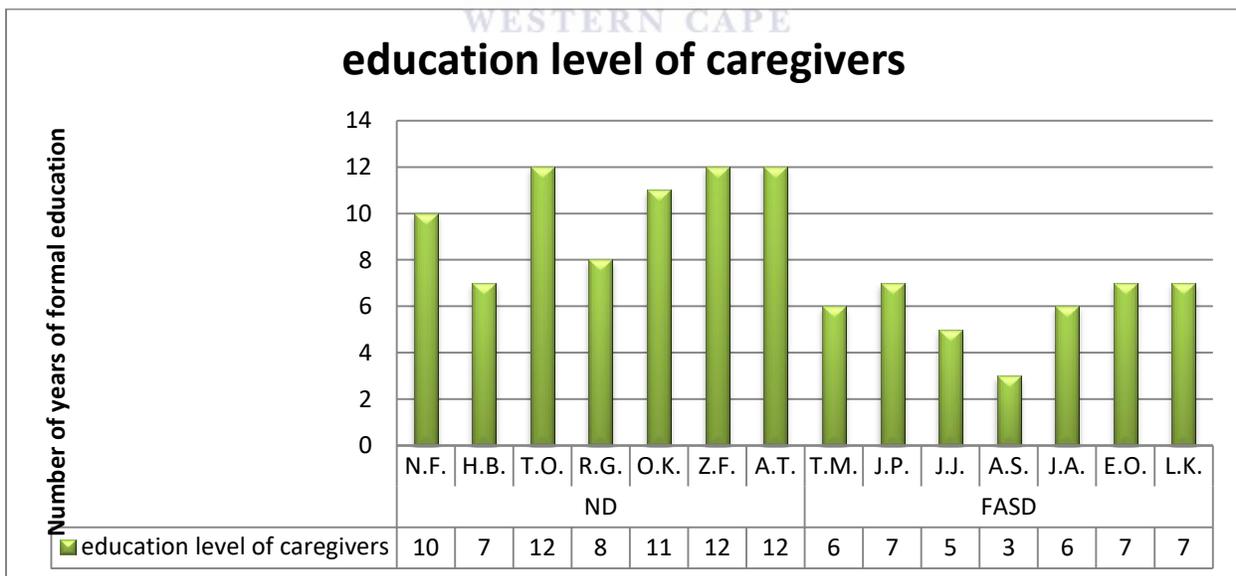
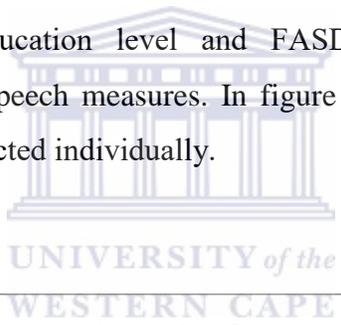


Figure 5-7: number of years of formal education successfully completed by primary caregivers.

5.4.1 Standardised Language Test Measure

After the non-parametric Spearman correlation coefficient was calculated it was found that there was a significant positive correlation between the level of education of primary caregivers and percentile rank of the overall scores and all the domains. For the overall scores, the coefficient of 0.805 can be interpreted as a positive, high correlation or marked relationship with a significant difference ($\alpha = 0.001 \therefore \alpha < 0.05$). In relation to the syntax domain, the coefficient of 0.806 can also be interpreted as a positive, high correlation or marked relationship with a significant difference ($\alpha = 0.001 \therefore \alpha < 0.05$). In the pragmatic domain, the coefficient of 0.655 can be interpreted as indicating a positive, moderate correlation or substantial relationship with a significant difference ($\alpha = 0.011 \therefore \alpha < 0.05$). Within the semantic domain, the coefficient of 0.682 can also be interpreted as indicating a positive, moderate correlation or substantial relationship with a significant difference ($\alpha = 0.007 \therefore \alpha < 0.05$). For the phonology domain, the coefficient of 0.608 can be interpreted as a positive, moderate correlation or substantial relationship with a significant difference ($\alpha = 0.021 \therefore \alpha < 0.05$).

5.4.2 Measures of Spontaneous speech

5.4.2.1 MLU

After the non-parametric Spearman correlation coefficient was calculated it was found that there was no correlation between the level of education of primary caregivers and the MLU scores. For

the MLU scores, the coefficient of 0.223 can be interpreted as a negative correlation with no significant difference ($\alpha = 0.442 \therefore \alpha > 0.05$).

5.4.2.2 *IPsyn*

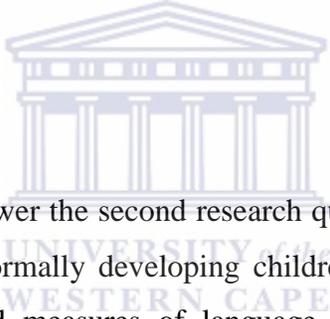
After the non-parametric Spearman correlation coefficient was calculated it was found that there was a significant positive correlation between the level of education of primary caregivers and the total IPsyn score. For the overall scores, the coefficient of 0.561 can be interpreted as a positive, high correlation or marked relationship with a significant difference ($\alpha = 0.037 \therefore \alpha < 0.05$). In relation to the noun subscale, the coefficient of 0.217 can also be interpreted as no correlation or marked relationship with no significant difference ($\alpha = 0.457 \therefore \alpha > 0.05$). In the verb subscale, the coefficient of 0.430 can be interpreted as indicating negative correlation or substantial relationship with no significant difference ($\alpha = 0.125 \therefore \alpha > 0.05$). Within the question subscale, the coefficient of 0.658 can also be interpreted as indicating a positive, moderate correlation or substantial relationship with a significant difference ($\alpha = 0.007 \therefore \alpha < 0.01$). For the sentence subscale, the coefficient of 0.189 can be interpreted as a negative correlation or substantial relationship with no significant difference ($\alpha = 0.240 \therefore \alpha > 0.05$).

5.4.2.3 *NDWR*

After the calculation of the non-parametric Spearman correlation coefficient, it was found that there was no correlation between the level of education of primary caregivers and the NDWR scores. For the MLU scores, the coefficient of 0.189 can be interpreted as a negative correlation with no significant difference ($\alpha = 0.517 \therefore \alpha > 0.05$).

With the above mentioned in mind, it is evident that the standardised language test measure, with all four domains, does show a positive correlation between primary caregiver's education level and FASD/normally developing children's performance. This is also evident in the IPsyn overall test scores and the IPsyn question subscale. This is also evident in other researchers' findings. Southwood (2011) found a positive correlation between children's language skills and socio-economic status (where the level of education of caregivers is used as a measure of socioeconomic status). In addition, as mentioned earlier, there is a substantial increase in the frequency of Foetal Alcohol Syndrome (FAS) in children whose mothers are of low socioeconomic status (Bingol, et al., 1987). Yet, in the MLU test and the NDWR test, the difference was not statistically significant. This is also evident in the IPsyn noun, verb and sentence subscales.

5.5 Summary



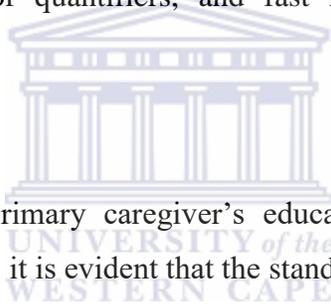
The aim of this chapter was to answer the second research question, which is whether there is a correlation between FASD and normally developing children in relation to both spontaneous speech measures and standardised measures of language. The first section focused on the quantitative results. This was followed by a section dedicated to answering the last research question, which is, whether there is a correlation between primary caregiver's education level and FASD/normally developing children's performance on both standardised measures and spontaneous speech measures?

When considering the MLU results, one can infer that there is a small to moderate significance between FASD and the normally developing participants in relation to their MLU results. In simple terms, the normally developing participants scored higher overall than the FASD participants. While looking at the total IPsyn scores, it is evident that the normally developing participants' scores were all higher than the FASD participants. IPsyn is normally used to identify the quality and size of an individual's morphosyntactic repertoire (Nieminen, 2007). When considering Nieminen (2007), one could assume that the quality and size of the normally

developing participant's morphosyntactic repertoire is sizeably better than the FASD participants. One can assume that there is a strong significance between FASD and the normally developing participants in relation to their overall IPSyn results. In simple terms, the normally developing participants scored higher overall than the FASD participants. While looking at the average for both normally developing and FASD participants in relation to the noun subscale, it is evident that both sample groups fared high as this subscale's total points are 24. One might conclude that both sample groups do not have an obvious problem with the use of nouns. The Mann-Whitney U test results for the noun subscale were different from the rest of the domains. It showed no significant difference between the FASD and the control group ($\alpha = 0.150 \therefore \alpha > 0.05$). This could be due to the fact that both sample groups fared relatively good in this subscale.

Looking at the average of the two sample groups within the verb subscale, it is evident that the normally developing participants showed competency with the use of verbs compared to the FASD participants as there is a 10 point difference between their average scores for this subscale. In addition, the FASD participants' average for this subscale is 44 percent while the normally developing participants' percentage is 75. Looking at the Mann-Whitney U test, in relation to the verb subscale, it is evident that there is a significant difference in the means of the two sample groups, with the magnitude of these differences high. In both sample groups, questions and negations seem to be problematic as both sample groups' average is less than 50%. Yet, the normally developing participants scored much higher than the FASD participants. Thus, one could infer that the normally developing participants are more proficient compared to the FASD participants within the questions and negation subscale. According to the Mann-Whitney U test, in relation to the question and negation subscale, the significance is strong between the control group and FASD. When considering the average and percentage of both sample groups within the sentence structure subscale, one can deduce that the normally developing participants showed competency compared to the FASD participants. The Mann-Whitney U test for sentences suggested that there is a significant difference between the two groups in relation to pragmatics is moderate to high.

To recap the Afr-DELV data, only one participant with FASD scored less than 16 with the remainder of the participants scoring higher than 20. Thus, the overall participants within the study do not show impairment in relation to the production of consonant clusters within word-initial as well as word-medial position. In the rest of the domains, at least one participant scored a percentile rank above 16. Yet, one can still deduce that the results agree with the literature. Therefore, the majority of the FASD children show impairments in the correct usage of articles, understanding of wh-questions and passive constructions (syntax) and also show impairments in linking events together within a narrative and comprehending the mental state of characters within a narrative, asking applicable questions and communicative role-taking (pragmatics). In addition, the FASD participants also showed deficits in the production of preposition contrasts and verb contrasts, knowledge of quantifiers, and fast mapping of new and real words (semantics).



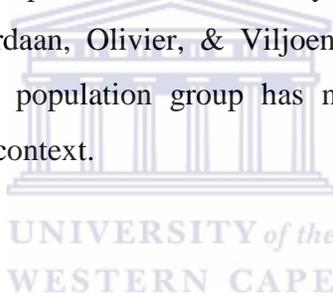
Looking at the results for the primary caregiver's education level versus FASD/normally developing children's performance, it is evident that the standardised language test measure, with all four domains, does substantiate the third research question. This is also evident in the IPSyn overall test scores and the IPSyn question subscale. This is also evident within other researchers' findings. Southwood (2011) found a positive correlation between children's language skills and socio-economic status (where the level of education of caregivers are used as a measure of socioeconomic status). In addition, as mentioned earlier, there is a substantial increase in the frequency of Foetal Alcohol Syndrome (FAS) in children whose mothers are of low socio-economic status (Bingol, et al., 1987). Yet, in the MLU test and the NDWR test, the hypothesis is rejected. This is also evident in the IPSyn noun, verb and sentence subscales.

Chapter 6:

6 Conclusion

6.1 Introduction

With the reported prevalence rate ranging from 29 to 290 per 1000, South Africa has the highest measured FAS(D) prevalence rate in the world within some high-risk communities (Olivier, Curfs, & Viljoen, 2016). According to London (2015), the South African government's efforts to attend to this high FASD rate have been insufficient. In relation to other populations, for instance, native communities of Australasia and North America, conventionally regarded as high risk, the local FASD statistics in South Africa are up to 100 times higher (London, 2015). Through the involvement and work of the Foundation for Alcohol Related Research (FARR), there have been significant accomplishments in identifying, preventing and assessing the prevalence of FASD (Marais, Jordaan, Olivier, & Viljoen, 2012). Yet, the extent to which language is impaired within this population group has not been given sufficient research attention within the South African context.



As discussed in chapter one and two, research on FASD and language centres around the use of standardised measures of language and narrative analysis. Although the use of standardised measures of language might be helpful to determine problematic areas with relation to the different language domains (Wyper & Rasmussen, 2011), it does not show the difficulty with social-communicative functions which these children might be facing (Coggins, Friet, & Morgan, 1998). Results from standardised language tests can be misleading, as they tend to suggest that FAS children fall within the average or normal range for performance, even though many of the language impairments that such children face are not taken into account. Thus, one could deduce that standardised measures of language provide an incomplete picture of the problem at hand. The incomplete picture they yield could mislead interventions that could be implemented to offer assistance to FASD children and their families. This is why this study adopted a number of approaches.

When testing an individual's ability to use social-communicative functions of language, researchers would normally make use of narrative analysis (Thorne, Coggins, Olson, & Astley, 2007; Coggins, Friet, & Morgan, 1998). With the use of narrative analysis, individuals normally speak alone; thus, one cannot investigate the way in which the child would interact within a social setting. Although narratives are important in everyday interactions (such as telling a story to a friend), it is not the only social interaction that one is faced with on a daily basis (Coggins, Friet, & Morgan, 1998). In analysing narratives, one cannot derive information concerning turn-taking, overlaps, and repair in communication by FASD individuals. Using spontaneous speech to analyse the language impairments that FASD individuals are faced with might complete the picture. Wyper and Rasmussen (2011) suggest that when FASD children are examined in the naturalistic environment rather than in structured, controlled environments, they might exhibit many more limitations.

This study made use of Conversation Analysis (CA) as it can be used to examine turn-taking, overlaps, repairs and the effects of intertextuality. The use of CA, collectively with the measures of spontaneous speech and the standardised language test measures, provided a more complete picture of the language impairments that FASD individuals are faced with.

This study applied conversational analysis in answering the first research question regarding the effects of FASD on the structural patterns of social interactions in spontaneous speech. The relevant data analysis focused on the start of overlap in turn-taking organisation, the syntax of sentences in progress, preference structures, turn allocation techniques and the projectability of turn-constructive units (Kitzinger, 2000). As mentioned above, CA was used to analyse the relative spontaneous speech as it provides an in-depth view on structural patterns of social interactions as it looks at various rules that one should obey and patterns that are common in social interactions. For this and other questions, the major findings are reviewed in the next section.

With regards to the second research question, which focused a lot more on the linguistic features of speech patterns, quantitative analysis was utilised to investigate whether there was a correlation between FASD and normally developing children in relation to both spontaneous speech measures and standardised measures of language. For the standardised measure of language which is applied to non-spontaneous speech, the Afr-DELV (Afrikaans version of the Diagnostic Evaluation of Language Variation) was used. Like the initial version of the DELV, the Afr-DELV evaluates (1) syntax (correct usage of articles, understanding of wh-questions and passive constructions), (2) pragmatics (linking events together within a narrative and comprehending the mental state of characters within a narrative, asking applicable questions, and communicative role-taking), (3) semantics (producing preposition contrasts and verb contrasts, knowledge of quantifiers, and fast mapping of new and real words), and (4) phonology (production of consonant clusters within word-initial as well as word-medial position) (Southwood, 2011). Each participant had to complete all the tasks for all four domains. The entire test was administered to each participant, irrespective of the participant's gender or age. For spontaneous speech, three measures were used, namely, the mean length of utterance (MLU), Index of Productive Syntax (IPSyn) and number of different word roots (NDWR) (Condouris, Meyer, & Tager-Flusberg, 2003). These three tests were used because of their sensitivity in representing developmental variations in children's language abilities (Condouris, Meyer, & Tager-Flusberg, 2003).

The last research question sought to investigate whether there was a correlation between a primary caregiver's education level and the performance of a child (FASD/normally developing) on both standardised measures and spontaneous speech measures. The non-parametric Spearman correlation coefficient was used for analysis due to the non-normality of the distribution. The researcher first determined whether there is a correlation between primary caregiver's education level and FASD/normally developing children's performance on the standardised measure. This was followed by a subsection that looked at whether there is a correlation between primary caregiver's education level and FASD/normally developing children's performance in the spontaneous speech measures.

6.2 Overview of findings

As mentioned throughout this study, standardised measures of language might be helpful to determine problematic areas with relation to the different language domains (Wyper & Rasmussen, 2011), but it does not show the difficulty with social-communicative functions which these children might be facing (Coggins, Friet, & Morgan, 1998). The following section will look at both the results of standardised measures of language (Afr-DELV) and spontaneous speech measures (CA, MLU, IPsyn, NDWR) collectively.

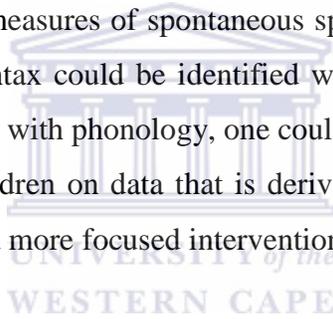
Looking at the language domain, phonology, the results obtained from the Afr-DELV suggest that only one FASD participant obtained a percentile rank less than 16; thus, one can infer that on this criterion there was no noticeable phonological impairment. Yet, when looking at the results obtained from the conversational analysis, phonological impairments were evident in especially the repair aspect and the topic management aspect. It is evident that the normally developing participants do make use of repairs more than the FASD participants. There are a few normally developing participants who do not make use of repair sequences; however, they all make use of minimal words (for example *uhm*) in order to collect their thoughts and therefore avoid the need for repair. Significantly, the only repair category called ‘other-initiated other-repair’ sequence found in all the interviews is evident in the turns of the FASD participants. In addition, there are a few instances where the FASD participants made use of fabricated words. Furthermore, false starts are equally present throughout all the interviews. Looking at the topic management aspect, more specifically, Grice’s Maxims, some FASD participants made use of fabricated words, which could be interpreted as impairments in articulation. Apart from the conversational analysis data, the results obtained from the MLU test might also be taken as evidence of phonological impairments. Although the MLU is utilized as an index of children’s grammatical complexity as it measures the length of utterances (Brown, 1973), the fact that made up words and incomplete words are not counted affects the scores. Thus, the omission of the incomplete words and made up words would inevitably lower the scores of the MLU where incomplete and made up words are present. After a Mann-Whitney U test was administered to the MLU results for both sample groups, one can conclude that there is a significant difference between the FASD participants and the normally developing participants. Thus, the FASD

participants' scores are lower than that of the normally developing participants. These results correlate with the findings of Becker et al (1990), as they established that children with FASD suffer from impairments in articulation. Thus, with the help of both the CA and MLU, issues with phonology could be identified that was not picked up with the use of standardised language tests. With this in mind, it is evident that there is a need to base interventions intended to help children on data derived from a variety of approaches.

When considering the language domain, syntax, within the results obtained from the standardised measures of language, only one FASD participant scored higher than 16. Therefore, the majority of the FASD children show impairments in the correct usage of articles, understanding of wh-questions and passive constructions. The results obtained from the spontaneous speech measures correlates with this. Looking at the findings of the CA analysis, within the turn taking and overlapping aspect and the topic management aspect, impairment in syntactic knowledge is evident. When considering turn taking and overlapping, in relation to the first rule for allocation procedures, the FASD participants exhibited more difficulty with this rule than the normally developing participants. As discussed in detail in chapter 4, in some cases, when a turn was allocated to them, they would not take the turn which led to lapses or long pauses. The fact that the researcher-interviewer had to rephrase a question could indicate that the FASD participants struggled to understand the syntactic intent of statements, which correlates with the findings of Coggins, Timler and Olswang (2007). When looking at topic management, more specifically Grice's Maxims, there were a number of times that the FASD participants produced irrelevant answers apparently because they did not comprehend the questions.

Let us now look at the results obtained from the measures of spontaneous speech in relation to syntax. In view of the IPsyn results, more specifically, the sentence structure subscale results, the highest score the normally developing participants obtained was 31 and the lowest was 17 (average = 24.85 ∴ 62.14%), while the highest score for the FASD participants was 22 and the lowest 8 (average = 16.42 ∴ 41.07%). When considering the average and percentage of both sample groups, one can deduce that the normally developing participants showed competency within the sentence structure subscale compared to the FASD participants. As mentioned earlier,

MLU is utilized as an index of children's grammatical complexity as it measures the length of utterances (Brown, 1973). After a Mann-Whitney U test was administered to the MLU results for both sample groups, there was a significant difference between the FASD participants and the normally developing participants. Thus, the FASD participants' scores are lower than those of the normally developing participants. This correlates with the findings of Becker et al (1990), as they mention poor comprehensions of verbal commands and single words and with grammatical or syntactic abilities as typical of FASD children, which is also evident in this study. In addition, Coggins et al (2007) established that individuals with FASD were considerably more probable than the control group to communicate by means of unfitting responses in the course of the conversation, which also takes place in this study. The lack of grammatically correct sentences are also a finding of Becker et al (1990) and Coggins et al (2007) states that FASD participants struggle with the production of syntactically complex grammatical structures, which correlates with the finding of this study. With the results obtained from the standardised measures of language in comparison with the measures of spontaneous speech and CA in mind, it is evident that more in-depth issues with syntax could be identified with the use of CA and measures of spontaneous speech. Here again, as with phonology, one could deduce that there is a need to base interventions intended to help children on data that is derived from a variety of approaches in order to provide the children with a more focused intervention plan.



Bearing in mind the language domain, pragmatics, the results obtained from the standardised measures of language suggests that the FASD participants do exhibit impairments linking events together within a narrative and comprehending the mental state of characters within a narrative, asking applicable questions and communicative role-taking. Again, this correlates with the findings obtained from the spontaneous speech measures. Considering the CA analysis, within the topic management aspect and the storytelling aspect, impairments related to pragmatics is evident. Within the topic management aspect, the majority of the FASD participants struggled with the maintenance of the topics. The majority of their turns were closed and short, which could be interpreted as them not being actively involved in the conversation. This correlates with the findings of the Afr-DELV which suggests that FASD participants struggle with linking events together. With respect to storytelling, two of the FASD participants did not engage in storytelling at all as all their turns were one word or a few phrase responses. The researcher, on

various occasions, attempted to prompt both participants to engage in storytelling, with no success. When looking at the remaining five FASD participants' stories, most of them make use of very short clauses and phrases, with either no breaks between sentences or a few pauses. In addition, due to the absence of breaks between sentences in most cases, and the fact that most of their stories have little to no meaning, their stories comes across as rambling. They attempt to engage in storytelling, yet one gets the idea that they are only stringing random words together. The problems with storytelling highlighted in this study correlate with the findings by Coggins, Friet and Morgan (1998). They concluded that the FASD children's repertoires of narrative skills were seriously compromised. This discovery led them to conclude that both of the adolescents in their study lacked social-communicative functions which are vital for social acceptance as well as academic success (Coggins, Friet, & Morgan, 1998).

Let us now focus on the quantitative aspect of measures of spontaneous speech in relation to pragmatics. In view of the results obtained from the IPSyn test, more specifically, the question and negation subscale, the highest score for the normally developing participants was 10 and the lowest score 4 (average = 7.14 \therefore 32.46%), whereas six of the FASD participants scored 0 for the questions and negations subscale, and only one participant scored 1 (average = 0.14 \therefore 0.65%). In both sample groups, questions and negations seem to be problematic as both sample groups' average is less than 50%. Yet, the normally developing participants scored much higher than the FASD participants. Thus, one could infer that the normally developing participants are more proficient compared to the FASD participants within the questions and negation subscale. This correlates with the findings of the Afr-DELV test, as this results show impairments in asking applicable questions. Although the results obtained from measures of spontaneous speech correlates with the Afr-DELV results, making use of both measures provides a more complete picture of the issues with pragmatics, especially with regards to storytelling.

Looking at the last language domain, semantics, the results obtained from the standardised measures of language suggest that the FASD participants showed deficits in the production of preposition contrasts and verb contrasts, knowledge of quantifiers, and fast mapping of new and real words. Looking at the findings obtained from the CA analysis, the repair aspect and the topic

management aspect, impairments concerning semantics is evident. Considering the repair aspect, the only other-initiated other-repair sequence found in all the interviews is evident in the turns of the FASD participants. In addition, there are a few instances where the FASD participants made use of fabricated words. Furthermore, false starts are equally present throughout all the interviews. This correlates with the findings of Becker et al (1990), as they established that children with FASD suffer from impairments in semantics and in articulation as mentioned earlier. When considering the topic management aspect, more specifically, Grice's Maxims, semantic meaning was an issue for a few of the FASD participants. There were cases where there was no semantic meaning in their turns as there was no relationship between the words, phrases and sentences produced. They would try to explain various topics, but one could get the idea that they are only stringing random words together. Furthermore, some FASD participants made use of fabricated words, which not only flouts all four maxims; one might infer that it suggests impairments in articulation and grammatical abilities.

Let us now look at the quantitative aspect of measures of spontaneous speech in relation to semantics. In view of the results obtained from the IPSyn test, more specifically, the verb subscale, the highest score for the normally developing participants was 30 and the lowest, 21 (average = 25.57), while the highest the FASD participants scored was 26 and the lowest 5 (average = 15). Looking at the average of the two sample groups, it is evident that the normally developing participants showed competency with the use of verbs compared to the FASD participants as there is a 10 point difference between their average scores for this subscale. In addition, the FASD participants' average for this subscale is 44 percent while the normally developing participants' percentage is 75. The results obtained from the NDWR tests might also be used to determine if a problem is evident within the semantic domain as it measures lexical diversity. This test has demonstrated the diagnostic and developmental validity and temporal consistency (Condouris, Meyer, & Tager-Flusberg, 2003). The calculation of the NDWR is based on the number of diverse word roots or bare stems found within a language sample (Condouris, Meyer, & Tager-Flusberg, 2003). When looking at the normally developing participants, the highest NDWR score was 320 with the lowest 99 (average = 156.71). For the FASD participants, the highest NDWR score was 270 and the lowest 31 (average = 114.43). With this in mind, especially the average scores, it is evident that the normally developing

participants' NDWR scores were all higher than the FASD participants. Yet, when the Mann-Whitney U test was administered to these results, there was no significant difference between the FASD participants and the normally developing participants. Although the results obtained from the Mann-Whitney U test for the NDWR scores are inconclusive, the results from the other spontaneous speech measures do correlate with the standardised measures of language.

To underscore and summarise the point about using several approaches to determine possible impairment in children with FASD, there were a number of findings obtained from the spontaneous speech measures that were not evident within the standardised measures of language. Firstly, the findings of the CA aspect related to silences and gaps were not evident within the standardised measures of language. Within the FASD participants' turns, many more lapses were present than in the normally developing participants. In addition, their lapses were much longer than the normally developing participants. Although the participants within the control interviews made regular use of gaps overall, this is not the case in the five other interviews. In all five interviews, the FASD participants made more use of gaps than the normally developing participants. This might be the case because they had to think much more about what they wanted to say than the normally developing participants. This correlates with Wyper and Rasmussen's (2011) findings that FASD individuals display problems with rate and fluency of speech. In relation to pauses, as with the control interviews, in the five other interviews, the normally developing participants used many pauses within their turns in relation to the FASD participants. As discussed earlier, this might be due to the fact that the normally developing participants have much longer turns than the FASD participants which lead them to take a breath and quickly get their thoughts in order.

A second impairment that was overlooked by the standardised measures of language is found within the turn taking and overlapping aspect of CA. In relation to the second rule for allocation procedures, the FASD participants were less likely to take the turn if not allocated to them specifically. This is evident in of Coggins, Timler and Olswang's (2007) findings as well, as they state that FASD participants are less likely to expand or elaborate on the comments made by other participants within a conversation. Within the topic management aspect, three important

issues appeared; the use of body language, intertextuality and problems with the correct use of pronouns. Body language used as answers is seen all the participants' turns; however, it is more prominent in the FASD participants' turns. A phenomenon that is evident in all the FASD participant's turns is the use of intertextuality to mask their lack of management of topics. This correlates with the findings of Abkarian (1992), who proposed that although it might appear that the FASD participants have acceptable social speech skills, the content of utterances made by them are often off-topic and irrelevant. Another phenomenon that is evident in a number of FASD participants' turns are the incorrect use of pronouns. These participants would use the pronouns without any reference to what or whom they are referring to. One participant actually left out all the pronouns in one utterance. Thus, one could infer that they struggle with the correct use of pronouns.

The last issue that one could say is overlooked within the standardised measures of language is the flow within storytelling. As mentioned earlier, two of the FASD participants did not engage in storytelling at all as all their turns were one word or a few phrase responses. The researcher, on various occasions, attempted to prompt both participants to engage in storytelling, with no success. When looking at the remaining five FASD participants' stories, most of them make use of very short clauses and phrases, with either no breaks between sentences or a few pauses. One could infer that they struggle with storytelling as there is no flow to their stories and most of their turns come across as rambling.

Although this research is focused on the language impairments faced by individuals face suffering from FASD, the researcher has identified another variable that might impact the issues in this study. This variable is socio-economic status. The researcher decided to focus on the level of education of the caregivers of the participants as a measure of this variable, as one's level of education could be linked directly to one's socio-economic status. Like Southwood (2011), the researcher found a positive correlation between children's language skills and socio-economic status (where the level of education of caregivers is used as a measure of socio-economic status). In addition, as mentioned earlier, there is a substantial increase in the frequency of Foetal Alcohol Syndrome (FAS) in children whose mothers are of low socio-economic status (Bingol,

et al., 1987). Yet, in the MLU test and the NDWR test, the difference was not statistically significant. This is also evident in the IPSyn noun, verb and sentence subscales.

6.3 Implications of the study and suggestions for further work

The rationale behind this study was to provide a more comprehensive picture of the language issues or communication problems which in turn, might assist schools to provide children with a more comprehensive intervention plan. With this in mind, there are a number of implications that can be identified. Firstly, with the school administrators, psychologists, and counsellors in mind, the results obtained from this study could help them to provide children with assistance within the areas of communication where issues were identified. In addition, this study has also identified that some children would be excluded from intervention plans based on standardised language tests alone – children whose needs can be identified with the help of measures of spontaneous speech. Secondly, looking at the exceptional work done in the field of FASD by FARR, which is mainly focused on identifying, preventing and assessing the prevalence of FASD, this study provides an aspect to FASD that does not get sufficient attention, which is intervention plans. With this, the focus could also be on assisting the individuals that were identified with FASD. Thirdly, in order for this study to have an impact on policy nationally, an integrated national strategy or policy should first be put in place to deal with the FASD phenomenon. The researcher hopes that this study has highlighted the importance of a national policy as communication is a very important aspect of human life.

Measures of spontaneous speech proved to be a slight issue as the researcher could not make use of the SALT-based Program to calculate or run tests due to the fact that all the participants' first language is Afrikaans, more specifically, the Kaaps dialect of Afrikaans, and the interviews were conducted in their first language. This decision was made as most of the participants cannot speak English and conducting the interview in Kaaps would enable the participants to be more at ease. As the SALT-based Program could not be used, all the calculations and tests were done manually.

As discussed in chapter one, in the Western Cape Province, the high prevalence rate of Foetal Alcohol Syndrome Disorder (FASD) is perhaps an indication that the dop system remains, affecting mothers and children (Jacobs & Jacobs, 2013). Between five percent and ten percent of children enrolling in school for the first time have FASD in the Northern Cape and Western Cape provinces (London, 2015). When considering the Gauteng Province, only 2.5 percent of children enrolling in school for the first time have FASD. With this in mind, it is evident that in the provinces (Western and Northern Province) where the Dop system was widely practiced, the rate of children with FASD is double to provinces (Gauteng) where this system was not implemented (Prince, 2004). In addition, due to the dop system, “generations of predominantly Coloured farm workers have become enmeshed in cycles of poverty and heavy alcohol use” (Rendall-Mkosi, London, Adnams, Morojele, McLoughlin, & Goldstone, 2008, p. 25). Looking at the language use of the two provinces mentioned above, within the Western Cape 49.7% and in the Northern Cape 53.8% of the population speaks Afrikaans as a first language (Statistics, 2011). In addition, according to Statistics South Africa (2011), 75.8% of the Coloured population speaks Afrikaans as a first language. With this in mind, one could conclude that most the individuals suffering from FASD, would be speaking Afrikaans as a first language. Thus, the researcher suggests that Afrikaans should be added to the SALT-based program which eventually will lead to a comprehensive database. The manual analysis of the data was quite time-consuming and the SALT-based program would cut the time spent on data analysis by half at least. This will not only encourage others to research FASD and language impairments in South Africa in order to add to the limited amount of publications and theories, it will also help the individuals suffering from FASD as only understanding of a phenomenon leads to prevention and action. Furthermore, throughout the research, the researcher identified a number of gender-based issues, yet due to the fact that gender was not equally represented within the sample, the decision was made to exclude it from this study. Thus, looking at FASD, language, and gender, could be an interesting idea for further research.

Reference was made (chapter 3, subsection 3.1) to the alcohol abuse in the research site which was at the time the reason for the study. This reason became a challenge on its own as the parents of the FASD participants might be regular alcohol users. With this in mind, the researcher expected some problems with getting all the participants at the venue where data collection

should be taking place. This might lead to all the interviews not taking place on the same day, which could lead to problems with transcriptions. The researcher tried to schedule all the interviews on one day; however, there were challenges as the researcher expected. After some trial and error, the researcher realised that the best time to schedule interviews was in the middle of the month when SASSA (South African Social Security Agency) grants are not issued. SASSA is a government agency that provides underprivileged individuals with various social grants (SASSA, 2011). In addition, the researcher decided to collect the parents and children before scheduled interview to ensure that the children will be present. The researcher hopes this discovery will assist future researchers.



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Appendix 1: Information Sheet

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Information sheet: Analysing the Spontaneous Speech of Children with Foetal Alcohol Spectrum Disorder (FASD).

I, Linique Hoffman, am a Masters student in the Department of Linguistics, at the University of the Western Cape, South Africa. For this degree, I am analysing the spontaneous speech of children with FASD. Your child is invited to participate in the above mentioned research study.

The study is geared towards achieving the following:

To compare patterns in spontaneous speech of FASD children and normally developing children; to determine impact on the structural patterns of social interaction of children with FASD; to explore the relationship between spontaneous speech measures and standardised measures of language in children with FASD; and to explore the diagnostic potential of features in spontaneous speech of FASD children.

The main aim of this research is to depart from the unnatural environment in which standardised measures of language and narrative analysis obtain language data from children with FASD, this study will examine relatively spontaneous speech and interactive speech of children with FASD and normally developing children.

Your child was selected as a possible participant in this study because your child is the appropriate age and because of your child's participation in the research project I conducted last year.



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If you decide to allow your child to participate, the study will take place at the Bellville-South Youth and Women Centre as it is a child friendly and controlled environment. I will only need a half an hour of your child's time. Your child will be interacting with another child, discussing various topics provided by the researcher. This interaction will be recorded using a video camera in order to analyse the body language of the two children. The video will then be transcribed and analysed in order to meet the objectives mentioned above.

There will be no risks, discomforts or inconveniences for your child. The participation of your child and the results obtained will add to the knowledge around the topic at hand. However, I cannot guarantee that your child personally will receive any benefits from this research.

Any information that is obtained in connection with this study and that can be identified with your child will remain confidential and will be disclosed only with your permission or as required by law. Subject identities will be kept confidential by transcribing the interaction and changing your child's name in the transcription. All the information will be used strictly anonymously, using a system of coding instead of real names for identification

Your child's participation is voluntary. If you decide to allow your child to participate, you and/or your child are free to withdraw your consent and discontinue participation at any time without penalty. If you do decide to withdraw your children, any data collected as a result of his/her participation, will be destroyed.

My supervisor is Professor Bassey E. Antia in the Department of Linguistics, University of the Western Cape, South Africa. He can be contacted at +27 21 959 2380 or bantia@uwc.ac.za.

My contact details are as follows: Liniqie Hoffman, Linguistics Department, UWC, phone: 073 622 3382 or 3073160@myuwc.ac.za.

This information sheet is for you to keep so that you can be aware of the purpose of the research. With your signature on the attached document, you indicate that you have read and understand the information provided above, that you willingly agree to allow your child to participate, that you and/or your child may withdraw your consent at any time and discontinue participation without penalty.

Yours truly
Liniqie Hoffman

Appendix 2: Consent Form



Consent Form

University of the Western Cape

Analysing the Spontaneous Speech of Children with Foetal Alcohol Spectrum Disorder (FASD)

Researcher:

Please initial box

1. I confirm that I have read and understand the information sheet explaining the above research project and I have had the opportunity to ask questions about the project.
2. I understand that the participation of my child is voluntary and that I am free to withdraw at any time without giving any reason and without there being any negative consequences. In addition, should I not wish to answer any particular question or questions, I am free to decline. (If I wish to withdraw I may contact the lead research at anytime)
3. I understand my responses and personal data will be kept strictly confidential. I give permission for members of the research team to have access to my anonymised responses. I understand that my name will not be linked with the research materials, and I will not be identified or identifiable in the reports or publications that result for the research.
4. As a participant of the discussion, I will not discuss or divulge information shared by others in the group or the researcher outside of this group.
5. I agree for the data collected from my child to be used in future research.
6. I agree for to take part in the above research project.

Name of Participant
(or legal representative)

Date

Signature

Name of person taking consent
(If different from lead researcher)

Date

Signature

Lead Researcher
(To be signed and dated in presence of the participant)

Date

Signature

Copies: All participants will receive a copy of the signed and dated version of the consent form and information sheet for themselves. A copy of this will be filed and kept in a secure location for research purposes only.

Researcher:

Supervisor:

HOD:

Appendix 3: Transcription conventions

- ... short pauses accompanied with the number of seconds
 - = latched utterances
 - () overlapping speech/ simultaneous speech
 - [] translation of Afrikaans speech to English
 - (5sec) The number in brackets indicates a time gap in second.
 - (.) A dot enclosed in a bracket indicates pause in the talk less than two tenths of a second.
 - (()) A description enclosed in a double bracket indicates a non-verbal activity. For example ((banging sound))
 - A dash indicates the sharp cut-off of the prior word or sound.
 - ::: Colons indicate that the speaker has stretched the preceding sound or letter. The more colons the greater the extent of the stretching.
 - () Empty parentheses/brackets indicate the presence of an unclear fragment on the tape.
 - (guess) The words within a single bracket indicate the transcriber's best guess at an unclear fragment.
 - Under Underlined fragments indicate speaker emphasis.
 - ↑↓ Pointed arrows indicate a marked falling or rising intonational shift. They are placed immediately before the onset of the shift.
 - CAPITALS** With the exception of proper nouns, capital letters indicate a section of speech noticeably louder than that surrounding it.
-

Appendix 4: Interview one

Background: Two children participated. The one boy, “N.F.” (11 years old) and the other, a girl, “H.B.” (10 years old), both is normally developing children. The children were provided with a box of toys to choose from. N.F. chose a play gun while H.B. chose a dice like toy. The toys were provided so that they could talk about something visible and physically in the room. The second topic given to them was sport followed by their favourite movies. The purpose of the last two topics was to probe them to talk about something abstract, not in the room, something they could not see or feel at that particular point in time.

1. L.M.: sê vir my ((L.M. coughs)) daarso is mos speel goed voor julle twee ne? ek will hê julle moet gesels oor dit met my ...(1sec)... of met mekaar ...(3sec)... wie gat eerste praat?(1sec)... *[tell me ((L.M. coughs)) there is toys in front of the two of you ne? I want you to talk about it with me ...(1sec)... or with each other ...(3sec)... who is going to talk first?... (1sec)]*
2. N.F.: sy ((N.F. points at H.B.))= *[she ((N.F. points at H.B.))=]*
3. L.M.: ooh is dit alweer girls first? ((N.F. nods his head)) sorry H.B. jy’s die girl ...(6sec)... ((L.M. makes use of hand gestures)) virtel vir my van dai ding in jou hand in ...(1sec)... *[ooh is it girls first again? ((N.F. nods his head)) sorry H.B. you’re the girl ...(6sec)... ((L.M. makes use of hand gestures)) tell me about the thing in your hands ...(1sec)...]*
4. H.B.: ((H.B. turns dice in her hand)) die ding is blou geel= *[((H.B. turns dice in her hand)) the thing is blue yellow=]*
5. L.M.: jy sal ‘n biekie harder moet praat my skatjie ...(2sec)... *[you have to talk a bit louder my dearie ...(2sec)...]*
6. H.B.: die ding is blou geel blou ...(1sec)... bruin en ...(2sec)... pers ...(1sec)... *[the thing is blue yellow blue ...(1sec)... brown and ...(2sec)... purple ...(1sec)...]*
7. L.M.: en wat is dit? Nog ‘n biekie harder my skatjie, jy praat baie sag= *[and what is it? A little bit more louder my dearie, you are talking very soft=]*

8. H.B.: die ding lyk ampe soes ‘n dice ...(1sec)... en ek wietie wat ‘n mens maak met die nie ...(2sec)... *[the thing almost look like a dice(1sec)... and I don't know what a person does with it(2sec)...]*
9. L.M.: miskien as jy dit gooi ...(2sec)... en hy val op a gesiggie, dai gesiggie ...(1sec)... ((pointing to the happy face on the dice)) dan moet jy happy wees ...(2sec)... dan moet jy ‘n happy gesiggie maak ...(1sec)... en dai is wat ((pointing to a facial expression on the dice)) ...(2sec)... *[maybe if you throw it ... (2sec) ... and it falls on a face, that face ... (1sec) ... ((pointing at the happy face on the dice)) then you must be happy ... (2sec) ... then you have to make a happy face ... (1sec) ... and what is this ((pointing to a facial expression on the dice)) ... (2sec) ...]*
10. H.B.: kwaad= *[angry=]*
11. L.M.: kwaad gesiggie dai ene ((pointing to a facial expression on the dice)) ...(3sec)... en dai's skrik en dai ene? = *[angry face that one ((pointing to a facial expression on the dice)) ... (3sec) ... and that's shock and that one? =]*
12. H.B.: ((H.B. turns the dice around in her hands)) smile ...(1sec)... dai's bang ...(2sec)... *[((H.B. turns the dice around in her hands)) smile ... (1sec) ... that's afraid ... (2sec) ...]*
13. L.M.: dai lyk ook soos skrik, is dai die skrik ene? ((H.B. nods her head))= *[that also looks like shock, is that the shocked one? ((H.B. nods her head))=]*
14. H.B.: die's kwaad en die's smile= *[this is angry and this is smile=]*
15. L.M.: jy moet ‘n biekie harder praat skatjie= *[you have to talk a bit louder dearie=]*
16. H.B.: hy skrik ook vir dai wat hy doen= *[he also has a fright for what he's doing=]*
17. L.M.: hou jy van dices? ...(1sec)... Hou jy van games wat daar ‘n dice in is? ...(1sec)... soos slangtjies ((H.B. nods her head)) wat het nog - wat het nog dice in? ...(3sec)... *[do you like dices? ... (1sec) ... do you like games that uses a dice? ... (1sec) ... like snakes ((H.B. nods her head)) what also - what also has dice in? ... (3sec) ...]*

18. H.B.: ()=
19. L.M.: harder praat skatjie mmh↑ ...(2sec)... ((H.B. shakes her head no)) weet jy nie? ((H.B. shakes her head no)) praat gou vir my ((facing N.F.)) = *[speak louder dearie mmh↑ ...(2sec)... ((H.B. shakes her head no)) don't you know? ((H.B. shakes her head no)) talk to me quickly ((facing N.F.))=]*
20. N.F.: die's 'n vuurwapen hy's swat ((playing with the gun in his hands)) ...(1sec)... en hie voo isit orange en as jy die ste- die sneller trek dan ko hie 'n bullet uit ((pointing at the barrel of the gun))= *[this is a firearm it's black ((playing with the gun in his hands)) ...(1sec)... and here in front it is orange and if you pull the tri- the trigger than a bullet comes out ((pointing at the barrel of the gun))=]*
21. L.M.: is it? ...(2sec)... hou jy van met 'n gun speel? ((N.F. shakes his head no)) = *is it? ...(2sec)... do you like playing with a gun? ((N.F. shake his head no))=]*
22. N.F.: nie met regte gun nie met 'n speel (goed *[not with real gun with a (toy=]*
23. L.M.: speel) gun ooh↑= *toy) gun ooh↑=]*
24. N.F.: en as dit 'n retge gun gewies het en ek trek die sneller ka jhy MOORD↑ pleeg met die ding↓= *[and if it was a real gun and I pull the trigger then you can commit MURDER↑ with this thing↓=]*
25. L.M.: ooh ↑...(2sec).. en waar het jy dai gesien? ...(2sec)... *[ooh↑ ...(2sec)... and where did you see that? ...(2sec)...]*
26. N.F.: opie stukke= *[in the movies=]*
27. L.M.: op die stukke? ((N.F. nods his head))= *[in the movies? ((N.F. nods his head))=]*
28. N.F.: die movies ((playing with the gun)) () en hie so is die uhm ...(2sec)... sit 'n mansie magasyn in= *[the movies ((playing with the gun)) () and here is the uhm ...(2sec)... one puts in the magazine =]*
29. L.M.: ohk↑ ...(4sec)... en as jy nou vir haar skiet met dit en dan? ((N.F. giggles)) mmh ...(6sec)... *[ohk↑ ...(4sec)... and if you shoot her now with it and then? ((N.F. giggles)) mmh ...(6sec)...]*

30. N.F.: en uhm ...(3sec)... dai's al wat ek wiet van die ding= [*en uhm ...(3sec)... that's all I know about this thing=*]
31. L.M.: virtel↑ vir my ...(2sec)... hou julle van sport watter sport doen julle by die skool?= [*tell↑ me ...(2sec)... do you like sport what sport do you do at school?=*]
32. N.F.: ek doen skaak en soccar = [*I do chess and soccer=*]
33. L.M.: skaak en sokker? ((N.F. nods his head)) en jy↑? ((L.M. facing H.B.))= [*chess and soccer? ((N.F. nods his head)) and you↑? ((L.M. facing H.B.))=*]
34. H.B.: netball=
35. L.M.: net netball?= [*just netball?=*]
36. H.B.: en hardloop= [*and running=*]
37. L.M.: en hardloop? ((H.B. nods her head)) lang afstand of kort afstand? Hekkies? = [*and running? ((H.B. nods her head)) long distance or short distance? Hurdlers?=*]
38. H.B.: skiptou= [*jump-rope=*]
39. L.M.: skiptou? Ok. Anyway virtel vir my, ok ons begin met jou ((facing N.F.)) virtel vir my uhm watter game het jy laste gespeel? = [*jump-rope? Ok. Anyway tell me, ok we can start with you ((facing N.F.)) tell me uhm what was the last game you played?=*]
40. N.F.: ek het gister gistet gister toe speel ek skaak=[*I played chess yesterday yesterday =*]
41. L.M.: uhm? ((N.F. nods his head)) en toe wie het gewen?= [*uhm? ((N.F. nods his head)) and then who won?=*]
42. N.F.: ons skool het ienlik in Durb- Durbanville het eintlik gewen= [*your school actually in Durb- Durbanville actually won=*]
43. L.M.: het Durb- Durbanville uintlik gewen? ((N.F. nods his head)) hoe werk skaak verduidelik vir my hoe werk skaak? ...(2sec)... [*did Durb- Durbanville actually win? ((N.F. nods his head)) how does chess work explain to me how chess work? ...(2sec)...*]

44. N.F.: skaak werk soe sema djy sema jy moe jou queen jou king protect van ...(1sec)... vanie ane goed ...(1sec)... sema jou knight sit jou king in check uhma a moet djy jou jou king bewee en as dit in check mate is das jou game (klaa [*chess works like this lets say you lets say you have to protect you queen your king against ...(1sec)... the other things ...(1sec)... lets say your knight puts your king in check uhma a you have to move your king and if it is check mate then your game is (over)*]
45. L.M.: das die) game klaar ((N.F. nods his head)) ...(2sec)... en sokker↑ ...(1sec)... wannen las het jy sokker gespeel? ...(2sec)... [*then the) game is over ((N.F. nods his head)) ..(2sec)... and soccer↑ ...(1sec)... when last did you play soccer? ...(2sec)....*]
46. N.F.: ek het lang laas socca gespeel = [*I haven't played soccer in a while=*]
47. L.M.: hoekom↑? ...(2sec)...[*why ↑? ...(2sec)...*]
48. N.F.: os sal Woen- laas Woensdag toe sal os socca gespeel het toe was die game gecancel= [*we would have played soccer Wed- last Wednesday but the game was cancelled =*]
49. L.M.: hoekom? Oor die weer? ((N.F. shakes his head no))= [*why? Because of the weather? ((N.F. shakes his head no))=*]
50. N.F.: die Menee wasie ini skoolie= [*the teacher was not in school=*]
51. L.M.: oh ok en voor dai het jy lank laas gespeel? ((someone peeked in through the door and left again))= [*oh ok and before that you haven't played in a while? ((someone peeked in through the door and left again))=*]
52. N.F.: en os os het Maandag toe speel os socca uhm pouses ...(5sec)... ((L.M. adjust recording device)) en uhm en ek het uhm twee goale gescore= [*and we we played soccer on Monday uhm break times ...(5sec)... ((L.M. adjust recording device)) and uhm and I have uhm scored two goals =*]
53. L.M.: sê weer= [*say again=*]
54. N.F.: ek het twee twee goals gescore (3sec)...[*I scored two goals ...(3sec)...*]

55. L.M.: kan jy soccer speel? ((L.M. facing H.B.)) ((H.B. shakes her head no)) hoekom kan jy hoekom wil jy nie soccer speel nie?= [*can you play soccer? ((L.M. facing H.B.)) ((H.B. shakes her head no)) why can't you why do you not want to play soccer?=[*
56. H.B.: eksie 'n boy nie ((playing with toy in her hands))= [*I'm not a boy ((playing with the toy in her hands))=]*
57. L.M.: sê weer↑= [*say again↑=]*
58. H.B.: ek isie 'n boy nie= [*I'm not a boy=]*
59. L.M.: is jy nie 'n boy nie? ((H.B. shakes her head no)) nou vertel vir N.F. van netball ... (2sec)... [*are you not a boy? ((H.B. shakes her head no)) now tell N.F. about netball ... (2sec)...]*
60. H.B.: ot netbal gespeel (saam met chomies [*ot played netball (with friends]*
61. L.M.: klein biekie harder)= [*a little bit louder)=]*
62. H.B.: ek en my chomies het netbal gespeel en= [*my friends and I played netball and=]*
63. L.M.: jy moet hard praat my skatjie ... (2sec)... [*you have to talk louder my dearie ... (2sec)...]*
64. H.B.: ek en my chomies het netbal gespeel en toe toe wen hulle vi os ... (2sec)... en ... (1sec)... toe os het pouse netbal gespeel toe wen hulle vi os ... (2sec)... en toe toe toe toe slat ek net twee in en hullet ... (1sec)... vier in geslaan= [*my friends and I played netball and then then they won ... (2sec)... and ... (1sec)... then we played netball during reses then they won... (2sec)... and then then then then I only scored two and they ... (1sec)... scored four=]*
65. L.M.: uh↓=
66. H.B.: en toe toe sê hulle toe lei die klokke toe moet os in gaan toe ga skryf os ose wêk en toe ta- toe skryf ek my wêk toe sê ek my minee: "minee ka ek gou die klas vlaat" ... (3sec)... toe sê minee ka ek gou die klas vlaat ... (1sec)... toe sê minee ja toe gat ek toilet toe toe praat ek sam my vriende ... (1sec)... toe vra my vriende minee kan ek ook klas toe gaan ... (1sec)... toe sê minee ja want toe os terug ko ... (1sec)...

toe vra minee hoeko het julle amalan tolet toe gegaan toe sê minee: “minee os het manet ga pie::↑”...(1sec)... e::n ...(1sec)... en os het vani netbal gepraat ...(1sec)... wan ...(1sec)... jeffrou Block het gesê↑ ...(1sec)... os moe Woensdag kom oefen ...(2sec)... [and then then they said then the bell rang then we had to go in then we went to write our work and then th- then I wrote my work then I told the teacher: “teacher can I leave the classroom ...(1sec)... then the teacher said yes then I went to the bathroom then then I talked to my friends ...(1sec)... then my friends asked the teacher can I also go to the class ...(1sec)... then the teacher said yes because when we came back ...(1sec)... the teacher asked why we all went to the bathroom then the teacher said: “teacher we just went to pee:::↑” ...(1sec)... a::nd ...(1sec)... and we talked about netball ...(1sec)... because ...(1sec)... Mrs. Block said we must come for practice on Wednesday ...(2sec)....]

67. L.M.: ok gaan julle Woensdag oefen? ((H.B. nods her head)) wat nou kom? ((H.B. nods her head)) watter watter posisie speel jy? ...(2sec)... centre↓? Al wat ek kan onthou is centre en dis al wat is daar nog? ...(2sec)... [ok are you going to practice on Wednesday? ((H.B. nods her head)) this coming Wednesday? ((H.B. nods her head)) what what position do you play? ...(2sec)... centre↓? The only thing I can remember is centre and that's it what else is there? ...(2sec)...]

68. H.B.: ek wieti wat is alis in (() [I don't know what else is (()]

69. N.F.: en defender) = [and defender)=]

70. L.M.: almal defend mos op op netbal baan nê↑ (hulle word op gedeel in groepe as daar 'n goalie is is daar is daar 'n goalie?↑ [everyone defends in netball isn't↑it? (they get paired in groups if there's a goalie is is there is there a goalie?↑=]

71. N.F.: en isi shoot eni eni shooter↓) ((N.F. make use of hand gestures)) [and is there shoot and the and the shooter↓) ((N.F. make use of hand gestures))]

72. L.M.: is daar 'n goalie?= [is there a goalie?]=]

73. H.B.: ek wieti= [I don't know=]

74. N.F.: by soc- by socca is daar 'n goalie=[in soc- in soccer there is a goalie=]

75. L.M.: ja socca het 'n goalie netball moet ook 'n goalie het die ene wat die: die ene wat in gooi= [*yes soccer has a goalie netball must also have a goalie the one that the: the one that shoots in=*]
76. H.B.: die shooter= [*the shooter=*]
77. L.M.: ja die shooter ...(2sec)... nou die shooter het 'n partner wat saam met hom werk ((H.B. nods her head)) ene van die ander span ((H.B. nods her head))= [*yes the shooter ...(2sec)... now the shooter has a partner that works with him ((H.B. nods her head)) one from the other team ((H.B. nods her head))=*]
78. H.B.: wat vi hom hou= [*that keeps him=*]
79. L.M.: ha↑ ..(1sec)... e:n jy mag die (ball mag nie [*ha↑ ..(1sec)...and you may not (the ball may not*]
80. H.B.: en ha) stan twee mense ini middle= [*and there) are two people in the middle=*]
81. L.M.: ja is mos die die centres ((H.B. nods her head)) ek was altyd centre wat ek was klein ...(1sec)... ek het die ball tussen my benne gevang ...(2sec)... u::h ...(4sec)... ek wil nou iets gesê het maar oh ja die ball mag mos nie die grond raak nie ((H.B. shakes her head no)) en as jy die ball het dan moet jy wat maak? ...(2sec)... [*yes it is the the centres ((H.B. nods her head)) I always played centre because I was small ...(1sec)... I caught the ball between my legs ...(2sec)... u::h ...(4sec)... I wanted to say something now oh yes the ball may not touch the ground ((H.B. shakes her head no)) and if you have the ball, what do you do? ...(2sec)...*]
82. H.B.: ane team sin ball=[*other team's ball=*]
83. L.M.: as jy die ball het wat moet jy maak? Moet jy still staa:n, moet jy rond hardloop:p= [*if you have the ball what should you do? do you have to stand sti:ll, do you ru:n around=*]
84. H.B.: rond hardloop= [*run around=*]

85. L.M.: met die ball↑? ((H.B. looks surprised)) moet jy nie still↑ staan met die ball nie?=
*[with the ball↑? ((H.B. looks surprised)) are you not supposed to stand still ↑ with
the ball?]=]*
86. H.B.: ja↑= *[yes↑=]*
87. L.M.: o:h↑ ek kan mos sê dit wat ek kan onthou moet jy still staan↑ dis al wat ek kan
onthou jy mag nie beweeg met die ball nie en dat daar 'n centre is en daars ene wat
die wat die wat die wat wat shoot, dis al wat ek kan onthou van netbal ((H.B. nods
her head)) ... (6sec)... *[o:h↑ that's what I thought that is what I remember you have
to stand↑ still that is all I can remember you may not move with the ball and that
there is a centre and there's one that the that the that that shoots, that's all that I
can remember about netball ((H.B. nods her head)) ... (6sec)....]*
88. N.F.: ek ek het uhm mid centre gespeel, en as as een skool en as hulle score dasit mos
nou off-centre = *[I I have uhm played mid centre, and if if one school and if they
score it is now off-centre=]*
89. L.M.: uhm↑=
90. N.F.: en hulle moet vi my pass in dai centre=*[and they have to pass to me in that
centre=]*
91. L.M.: moet hy virby jou gaan?=*[must he go past you?]=]*
92. N.F.: is moet vi my pass en en ek besluit of ek dai ene wil pass of vi dai ene moet pass
((N.F. using hand gestures))=*[is must pass to me and and I decide if I want to pass
to that one or to that one ((N.F. using hand gestrues))=]*
93. L.M.: kies jy net jou chomies om te pass ne? = *[do you only chose your friends to pass
to?]=]*
94. N.F.: nie ek pass vi – sema ek sien dai ene is oepe hy ka ga score dan pass eke vi hom
...(2sec)... *[no I pass to – let's say I see that one is open he can score a gaol then I
pass to him ... (2sec)....]*

95. L.M.: oh jy kyk net wies oep- nie chomie chomie nie? ((N.F. shakes his head no)) anders gaan julle die game virloor as jy chomie chomie speel= [*oh you see who's open-not friend-friend? ((N.F. shakes his head no)) otherwise you are going to lose the fame if you play friend-friend=*]
96. N.F.: want d jy moet ...(1sec)... teamwork speel met jou span om te wen= [*because you have to ...(1sec)... play teamwork with your team to win=*]
97. L.M.: ↑al die games ne? ((H.B. nods her head)) is team work ne? netbal ook ...(1sec)... is teamwork. Wat se ander, virtel vir ↓wat se films hou julle van? ...(1sec)... [*↑all the games? ((H.B. nods her head)) is teamwork? Also netball ...(1sec).... Is teamwork. What else, tell me ↓what films do you like ...(1sec)...*]
98. H.B.: ↑ek hou van popentjies en ↑jaloers en ↑jaloers films ...(1sec)...[*↑I like cartoons and ↑jealous and↑ jealous films ...(1sec)....*]
99. L.M.: jaloers films↑? Wat is jaloers↑ films? ...(1sec)... mmh virtel my van jaloers films= [*jealous films↑? What is jealous↑ films? ...(1sec)... mmh tell me about jealous films=*]
100. H.B.: jaloers films is ...(1sec)... uhm die meisie wat kwaad raak ...(1sec)... wat ampe soes Happy Dancers wat kwaad raak vi mekaa ...(1sec)... en en soms films is nou wee wat netbal speel en dan stoot hulle meka= [*jealous films is ...(1sec)... uhm the girl gets angry ...(1sec)... almost like Happy Dancers that gets angry at each other ...(1sec)... and and some films is about playing netball and then they push each other=*]
101. L.M.: mmh ...(1sec)...
102. H.B.: en as ...(1sec)... en as dit wee ...(4sec)... as hulle party hou dan dr:ink hulle oek = [*and if ...(1sec)... and again if it ...(4sec)... if they party then they also dr:ink=*]
103. L.M.: dan drink hulle? ((H.B. nods her head)) nou party jy dan drink jy ook ((H.B. nods her head)) as jy party drink jy ook? ((H.B. shakes her head no shyly)) ooh wil nou net se ((everyone laughs)) uhm wat is die laste cartoon wat jy gekyk het? Popentjie wat jy gekyk het= [*then they drink? ((H.B. nods her head)) now when you party do*]

you also drink ((H.B. nods her head)) if you party do you also drink? ((H.B. shakes her head no shyly)) ooh just wanted to say now ((everyone laughs)) uhm what cartoon did you watch last? Cartoon that you watched=]

104. H.B.: *popentjie is Dora= [cartoon is Dora=]*

105. L.M.: *wat het gebuer by Dora verduidelik vir my= [what happened in Dora explain to me=]*

106. H.B.: *Dora Dora en en ...(1sec)... ek ken hom nie hy's 'n apie ('n apie [Dora Dora and and ...(1sec)... I don't know him he's an ape (an ape)]*

107. N.F.: *boots)*

108. H.B.: *uh=*

109. L.M.: *oh jy ken ook vir Dora ((L.M. facing N.F.)) ((N.F. nods his head)) kyk jy ook Dora?= [oh you also know Dora ((L.M. facing N.F.)) ((N.F. nods his head)) do you also watch Dora?]=]*

110. N.F.: *((N.F. shakes his head no)) hu-uh=[[((N.F. shakes his head no)) no=]*

111. L.M.: *nou hoe ken jy vir Dora= [now how do you know Dora=]*

112. N.F.: *ek het net een uhm ek het al 'n paa van Dora se stukke gekyk= [I only watched one uhm I have watched a few Dora eposides=]*

113. L.M.: *jy ken al die name. sy ↑kyk dit maar jy ken die name. so jy kyk dit. kyk jy dit saam met jou sistertjie?=[you know all the names. She ↑watches it but you know the names. So you do watch it. Do you watch it with your younger sister?]=]*

114. N.F.: *as sy dit kyk dan en ek het niks om te doen nie dan (kyk ek dit maar saam [if she watches it then and I don't have anything else to do (I watch it with her]*

115. L.M.: *kyk jy maar saam) saam met Jessie? ((N.F. nods his head)) ...(2sec)... [you watch it with) with Jessie? ((N.F. nods his head)) ...(2sec)...]*

116. H.B.: *en dan dingesis Dora ...(1sec)... en as sy langsaan hom pad kom dan kom Swiper dan sê sy: ...(1sec)... “what gona what gona I gona do now” sê da sê sy:*

...(3sec)... “no Swiper no, no Swiper no” dan sê Swiper: “oh ma:::n” ((everyone laughs)) = [and then Dora ...(1sec)... and if she walks by this road then Swiper comes then she says: ...(1sec)... “what gona what gona I gona do now” say then she says: ...3sec)... “she no Swiper no, no Swiper no” then Swiper says: “oh ma:::n” ((everyone laughs))=]

117. L.M.: wat gebuer nog? Daars mos ‘n storie agter Dora. Wat maak Dora alles? ...(2sec)...
[what else happens? There a story behind Dora. What else does Dora do?... (2sec)...]

118. H.B.: Dora het ‘n sak en as hulle iets nodig het dan haal sy’t uit. Da sê sy: “backpack ...(1sec)... lets look in the bag” ...(1sec)... en da ...(2sec)... en as sy by die ane dingesis kom ...(1sec)... en ...(1sec)... vi al as sê ko ma Swiper wee dan sê sy: “what we gona do now” da sê sy: “↑no Swiper no, no Swiper no” “oh ma:::n” en dan dink hulle aan ‘n dan kom dai ane dai klein goetis en da sê hulle: ((H.B. hums the theme song)) dan gaan hulle viby= [Dora has a bag and if they need anything then she takes it out. Then she says: “backpack ...(1sec)... lets look in the bag” ...(1sec)... and then ...(2sec)... and when she comes to this other thing ...(1sec)... and ...(1sec)... especially if she says Swiper comes again then she says: “what we gona go now” then she says: “↑no Swiper no, no Swiper no” “oh ma:::n” and then they thinks about a then this other small things come and then they say: ((H.B. hums the theme song)) then they go past=]

119. L.M.: wat se klein goeters? Ken jy die klein goeters? ((facing N.F.)) ((N.F. shakes his head no)) nee jy ken↑= [what small things? Do you know this small things? ((facing N.F.)) ((N.F. shakes his head no)) no you know↑=]

120. N.F.: ek kenie hulle name nie wiet net dis ‘n slak, ‘n springgaan en ‘n ...(1sec)... en ‘n kokorot= [I don’t know their names just know it is a snail, a grasshopper and a ...(1sec)... and a cockroach=]

121. L.M.: jy kyk virskriklik baie Dora’s as jy dit alles ken ((L.M. laughs and N.F. laughs shyly)) virtel vir my van jou film= [you watch a lot of Dora if you know all that ((L.M. laughs and N.F. laughs shyly)) tell me about your film=]

122. N.F.: die film wat ek laste gekyk het is Shoalin Socca is mense ...(2sec)... *[the last film that I watched was Shoalin Soccer is people ...(2sec)...]*
123. L.M.: wat↑?= *[what↑?]=*
124. N.F.: ek ek die laste stik wat ek gekyk het is Shoalin Socca is va socca ma is nie die gewone socca nie= *[I I the last movie that I watched is Shoalin Soccer it is about soccer but it is not normal soccer=]*
125. L.M.: stolen Soccer?=
126. N.F.: Shoalin Socca= *[Shoalin Soccer=]*
127. L.M.: Shoalin ((N.F. nods his head)) ok=
128. N.F.: as as hulle skop ko daa suke vuur uit die ball uit= *[if if they kick then fire comes out of the ball=]*
129. L.M.: oo::h↑ ...(2sec)... wat het daar gebuer? Ek het dit nog nie gekyk nie. Ek ken nie= *[oo::h↑ ...(2sec)...what happened there? I have not watched it yet. I don't know=]*
130. N.F.: in die begin toe kan hulle nie uhm reg reg speeie. Hulle het aan meka veloo. Elke match wat hulle gepeel het het hulle veloo ...(1sec)... en haas en hie uhm hie in die mirrel toe begin hulle te wen ...(1sec)... toe pe- toe wat hulle nuwe tekkies kry. Dis van Chinese maa hulle ke- hulle hetie geken van van tekkiesie. wat hulle tekkies sien toe raak hulle excited. Toe hou hulle soma 'n party wan hulle het (tekkies gekry *[in the beginning they could not uhm play right. They lost all the time. Every match they played they lost ...(1sec)... and there's and here uhm here in the middle they started to win ...(1sec)... then pe- then because they got new sneakers. It was from Chinese but they ke- they did not know about about sneakers. When they saw the sneakers they got excited. Then they had a part because they (got sneakers]*
131. L.M.: tekkies gekry ((L.M. laughs))= *[got sneakers) ((L.M. laughs))=]*
132. N.F.: hie hie die next match wat hulle hulle het die eerste wedstryd gewen en toe die wedstryd toe wen hulle wee ...(1sec)... die die uhm die finale wedstryd en toe wa-

toe het hulle nie 'n keeper da nie toe kom daa 'n meisie toe sny sy vi ha 'n bles ... (1sec)... hulle hetie gewiet sy kan oek sulke goete maakie da maak sy soe ((N.F. uses hand gestures to explain)) das 'n man op hulle team hy hy die team wat hulle tien moet speel hulle het swat aan. Nou die captain van hulle team hyt- hyt lang hare. Nou hy's die stekste. Hy't die stekste punch= *[then then the next match that they they won the first game and then game then they won again ... (1sec)... the the uhm the final game and then wa- they did not have a keeper there then there was this girl she shaved her head ... (1sec)... they did not know that she could also make such thing then she does this ((N.F. uses hand gestures to explain)) there is a man on their team he he the team they are playing against are dressed in black. Now the captian of their team he he has long hair. Now he's the strongest. He has the strongest punch=]*

133. L.M.: ohok=

134. N.F.: skop hy toe hy- hyt gedink hulle gaan die match wen. Toe maak dai meisie soe 'n 'n tornado ding. Ek dink dis 'n tornado. Toe kan hulle nie score nie. En wat nou wee veder gebuer ↑? ((N.F. thinks))= *[he then kicks then he- he thought they are going to win the match. The girl made such a tornado thing. I think it is a tornado. Then they could not score. And what else happens then↑? ((N.F. thinks))=]*

135. H.B.: sy't die ball soe in die lig gegooi ((H.B. uses hand gestures showing how the ball is thrown in the air))= *[she threw the ball in the air like this ((H.B. uses hand gestures showing how the ball is thrown in the air))=]*

136. N.F.: ja toe spin it toe spin it toe spin (it *[yes then it twirled then it twirled then it twirled]*)

137. H.B.: toe) spin die hele gras deurmekaa= *[then) the whole grass twirled =]*

138. N.F.: toe spin it en toe vang die die captain va dai ding toe slat hy 'n vo- 'n bicycle ini paale en toe ... (1sec)... en na dai was it een-nul dink ek ja ... (1sec)... *[the it twirled and then the captain from the other thing then he hit a vo- a bicycle in the goal post and then (1sec)... and afte that it was one-null I think yes ... (1sec)...]*

139. L.M.: het jy ook die stik gekyk? ((Facing H.B.)) ((H.B. nods her head)) nou vertel↑ praat oor dit= *[did you also watched the movie? ((facing H.B.)) ((H.B. nods her head)) now tell↑ talk about it=]*
140. H.B.: ek het net halfte gekyk= *[I only watched the half of it=]*
141. L.M.: net die helfte gekyk? ...(1sec)... *[only watched half? ...(1sec)...]*
142. N.F.: nou wat ((N.F. clears his throat)) en die skole toe score dai team wie twee toe score dai team twee twee goals ...(1sec)... hie die wat wat da by die la- die laaste tyd is ...(1sec)... die tyd naby om is toe skop die toe speeie toe speel die swat team tien die team met die met die swat speel hulle begin hulle vuil speel maak hulle almal beseer= *[now that ((N.F. clears his throat)) and the schools then the other team scored who two then the other team scored two goals ...(1sec)... here the that that there at the la- the last time ...(1sec)... the time came nearer then kicked the then play then the black team played against the team with the with the black they started to play dirty they hurt everyone=]*
143. L.M.: uhm↑=
144. N.F.: maak hulle almal beseer toe kan hulle nie speel nie toe kom da kom da 'n ane man hyt hyt hyt die game gelos wan hyt gedink- wan hyt gewiet hulle gaan veloo. toe kom hy wat hy sien hulle ... (1sec)... hulle struggle toe kom hy toe ko help hy vi hulle. Toe score hy die la::ste goal. Ma hulle het nog once veloo wan al was dit draw Toe sê hulle dis penalties vat hulle penalties ...(1sec)... toe staan die man keeper wee. Ha a die vrou keeper het by staan ne? ((N.F. asking H.B.)) ((H.B. nods her head)) toe skop almal miss almal het al getry omie om ha te om 'n goal te skop hulle kan nog once nie score nie. toe wat is it hulle beurt↑ om nou te gat skop ...(1sec)... toe skop almal miss ...(1sec)... en toe is dit die laaste man wat nog skop en toe skop hy toe skop hy in toe wen hulle die game↓= *[they hurt everyone then they could not play then there came there came another man he he he left the game because he thought- because he knew they will lose. Then he came because he saw they ...(1sec)... they are struggling then he came then he came to help them. Then he scored the la::st goal. But they still lost because eventhough it was a draw. Then they said penalties they took penalties ...(1sec)... then the man keeper stood again.*

No the woman keeper kept on standing ne? ((N.F. asking H.B.)) ((H.B. nods her head)) then everyone missed everone tried to score a goal they still could not score. Then it was their turn[↑] to kick ... (1sec)... then everyone missed ... (1sec)... and then it was the last man that had to kick and then he kick and he scored a goal and then they won the game_↓=]

145. L.M.: is dit? ((N.F. nods his head)) ek moet dai stuk kyk ek het nog nie dai stuk gekyk nie ... (1sec)... [is it? ((N.F. nods his head)) I have to watch that movie I haven't watched that movie yet ... (1sec)...]

146. N.F.: dis ampe soe as hulle skop dis ampe soe uhm hoe kan ek nou sê ... (1sec)... as hy skop kom daa soma nou 'n dragon uit die ball uit = [it is almost like when they kick it is almost like uhm how can I say this ... (1sec)... when he kick then a dragon comes out of the ball=]

147. L.M.: oh[↑]=

148. N.F.: dan kom die gras soma uit die grond uit soe maa dis nie a popentjie nie= [then the grass comes out of the ground but it is not a cartoon=]

149. L.M.: is dit 'n: 'n regte mens ding? ((both nods their heads))= [is it a: a real people thing? ((both nods their heads))=]

150. N.F.: dis regte mense. En opie laste ... (1sec)... en toe draai die draai die hele stuk om ((N.F. illustrates with hand gestures)) die mense wat die kar het dai vrou gestamp wat die kar die vrou stamp toe skiet die kar soma nou inie lig in op toe kan die vrou soma nou nie dood nie. Die stuk het ampe soe om gedraai = [it is real people. And on the last ... (1sec)... and then the whole move turns turns around ((N.F. illustrates with hand gestures)) the people that the car it hit a woman when the car hit the woman, the car shot in the air suddenly then the woman did not die. The movie turned around like that=]

151. L.M.: oh[↑]ok ... (3sec)...

152. N.F.: dais dais ek het net tot daar gekyk dis al ... (5sec)... [that's that's I only watched until there that is it ... (5sec)...]

153. L.M.: dankie julle twee. Enige iets wat julle nog wil sê? ((both shakes their heads no))
dankie julle twee ek waarduer dit. [*thank you. Anything else you want to talk to me
about? ((both shakes their heads no)) thank you very much, I appreciate it.*]

End of interview



Appendix 5: Interview two

Background: Interview two consists of two participants who both form part of the FAS participants within this research. Both participants are 10 year old boys. The children were provided with a box of toys to choose from. T.M. chose a play gun, while J.P. chose a Sponge Bob Square Pants figurine. The toys were provided so that they could talk about something visible and physically in the room. The second topic given to them was sport followed by their favourite movies. The purpose of the last two topics was to probe them to talk about something abstract, not in the room, something they could not see or feel at that particular point in time. The interview was 20 minutes long.

1. L.M.: virduidelik vir my virtel vir my van die speel goed daar voor julle ...(2sec)...
[explain to me tell me about the toys in front of you ...(2sec)....]
2. J.P.: s::bob
3. L.M.: uhm↑ ...(3sec)... wat van Sponge Bob ...(3sec)... *[uhm↑ ...(3sec)... what about Sponge Bob ...(3sec)...]*
4. J.P.: () ...(1sec)...
5. L.M.: uhm↑ jy praat te sag skatjie jy moet harder praat= *[uhm↑ you are talking too soft dearie you have to talk a bit louder=]*
6. J.P.: Sponge Bob square pants=
7. L.M.: Sponge Sponge Bob square pants ...(1sec).... Hou jy van dit? ((J.P. nods his head))
kyk jy dit by die huis? ((J.P. nods his head)) wat gebeur daar? ...(1sec)... wie speel
almal in Sponge Bob? ...(15sec)... T.M. wil jy eerste praat? ((T.M. nods his head))
nou gesels met my van dai kant af ...(1sec)... *[Sponge Bob square pants ...(1sec)...
do you like it? ((J.P. nods his head)) do you watch it at home? ((J.P. nods his
head)) what happens there? ...(1sec).... Who all plays in Sponge Bob? ...(15sec)...
T.M. do you want to talk first? ((T.M. nods his head)) now chat to me from that side
...(1sec)...*

8. T.M.: die gun is 'n blou gun en hulle skiet meka kelboys ...(1sec)... dan ry hulle me die pe:de ...(1sec)... Da skiet skiet hulle meka me guns en ...(2sec)... ha- haloep hulle= *[the gun is a blue gun and they shoot each other Cowboys(1sec)... then they galloping on the horses ...(1sec)... then they shoot shoot each other with guns and ...(2sec)... ha- they run=]*
9. L.M.: harder skatjie= *[louder dearie=]*
10. T.M.: haloep hulle da skiet hulle ini huise en goete ruite haloep hulle::: en die mense skiet hulle meka ((T.M. playing with gun in his hand))...(2sec)... en ...(10sec)... ((T.M. looks at the gun in his hands as if he's reading something)) *[they run then they shoot in the houses and things windows they::: run and the people they shoot each other ((T.M. playing with the gun in his hand)) ...(2sec)... and(10sec).... ((T.M. looks at the gun in this hand as if he's reading something))]*
11. L.M.: en wat nog? ...(12sec)... J.P. daar voor jo ook a gun daar langs jou ((J.P. picks up the gun and looks at it)) ...(3sec)... en as julle twee nou moet speel wat gaan julle maak? ...(2sec)... met dai guns ...(8sec)... virtel vir my hoe lyk dit J.P.? ((J.P. nods his head))...(1sec)... virtel vir my praat oor hoe dit lyk ...(3sec)... hou jy van met guns speel? ((J.P. nods his head)) dan doen jy wat? ...(2sec)... *[and what else? ... (12sec)... J.P. in front of you there also a gun next to you ((J.P. picks up the gun and looks at it)) ... (3sec)... and if the two of you have to play what are you going to do? ... (2sec)... with that guns ... (8sec)... tell me how it looks J.P.? ((J.P. nods his head)) ... (1sec)... tel me talk about how it looks ... (3sec)... do you like playing with guns? ((J.P. nods his head)) what do you do? ... (2sec)...]*
12. J.P.: skie:t= *[shoo:t=]*
13. L.M.: net skiet? ((J.P. nods his head)) wie speel altyd saam met jou? ...(22sec)... T.M. begin jy ...(4sec)... *[just shoot? ((J.P. nods his head)) with who do you always play with? ... (22sec)... T.M. you start ... (4sec)...]*
14. T.M.: die ding lyk blou en het 'n spinning barrel: en 'n: cork da speel ek en my nee:fies skiet os beka da skuil agte- skuil os agte mure da j:ag os meka ini rondte da hal-haloe- haloep os omie bungalows skiet os meka: ...(2sec)... as hulle skiet da val

o::s stan os op haloep os wee speel os an ...(2sec)... *[the thing looks blue and has a spinning barrel: and a: cork then my cousins and I play shoot each other then hide behind= we hide behind walls then we chase each other around then hal- we run around the bungalows we shoot each other ...(2sec)... if they shoot then we:: fall we stand up run again we continue playing ...(2sec)...]*

15. L.M.: nou waar het jy geleer dat dai ‘n ‘n spinning barrel is? ((L.M. points at the gun))
...(1sec)... *[now where did you learn that, that is a spinning barrel? ((L.M. pointing at the gun)) ...(1sec)...]*

16. T.M.: ek het dit baie opie TV gesien ...(4sec)... *[I saw it on the TV ...(4sec)...]*

17. L.M.: sê vir my watter sport hou julle van? ...(2sec)... speel julle sport by die skool?
...(1sec)... speel jy sport by die skool? ((L.M. facing J.P.)) ((J.P. nods his head)) =
[tell me what sport do you like? ...(2sec)... do you play sports at school? ...(1sec)... do you play sports at school? ((L.M. facing J.P.)) ((J.P. nods his head))=]

18. J.P.: tou- touch = *[ta- tag=]*

19. L.M.: uhm↑=

20. J.P.: touch= *[tag=]*

21. L.M.: touch? ((J.P. nods his head)) En wat nog? ...(2sec)... *[tag? ((J.P. nods his head)) and what else? ...(2sec)...]*

22. J.P.: socca=

23. L.M.: virduidelik vir my wat se game het jy laste gespeel? Soccer game ...(3sec)... het jy ini pad gespeel? ((J.P. nods his head)) ...(1sec)... en toe? Virduidelik my wat het gebeur? ...(9sec)... T.M.↑ toe julle byte kant gesit het toe het hy gepraat met jou? ((T.M. shakes his head no)) was hy net still? ((T.M. nods his head)) hoekom is jy net still? Hou jy nie van praat nie? ((J.P. shakes his head no)) maar jy moet met my gesels... (3sec)... praat net vandag net nou net vir die tien minite wil ek hê jy moet gesels met my ...(4sec)... wat se: game het jy laste in die pad gespeel? ...(3sec)... saam met wie het jy gespeel? ...(2sec)... *[explain to me what game did you play last? Soccer game? ...(3sec)... did you play in the street? ((J.P. nods his head))*

...(1sec)... and then? Explain to me what happened? ...(9sec)... T.M.↑ when you were sitting outside did he talk to you? ((T.M. shakes his head no)) was he just quite? ((T.M. nods his head)) but you have to talk to me ...(3sec)... talk just today just now just for this ten minutes I want you to talk to me(4sec)... what was the last game you played in the street? ...(3sec)... with who did you play? ...(2sec)...]

24. J.P.: saam met chomie= [with friends=]
25. L.M.: saam met jou chomie? ((J.P. nods his head)) wie is jou chomie?= [with your friends? ((J.P. nods his head)) who is your friends? =]
26. J.P.: Renaldo=
27. L.M.: Renaldo? ((J.P. nods his head)) ...(1sec)... waar gaan Renaldo skool?= [Renaldo? ((J.P. nods his head)) ...(1sec)... what school is Renaldo in? =]
28. J.P.: Kasselsvlei=
29. L.M.: en jy? ((J.P. nods his head)) ook by Kasselsvlei ((J.P. nods his head)) is julle in een gr- is julle in een klas? = [and you? ((J.P. nods his head)) also at Kasselsvlei ((J.P. nods his head)) are you in one gr- are you in one class? =]
30. J.P.: ((J.P. shakes his head no)) nie= [((J.P. shakes his head no)) no=]
31. L.M.: wie's jou juffrou? ...(1sec)... [who's your Miss? ...(1sec)...]
32. J.P.: minee= [Sir=]
33. L.M.: wies jou Meneer?= [who's your Sir? =]
34. J.P.: Minee van Heerden= [Mr. van Heerden=]
35. L.M.: Meneer van Heerden? ((J.P. nods his head)) ((adjusting recording device)) ...(3sec)... wat doen julle in die klas in? ...(2sec)... [Mr. van Heerden? ((J.P. nods his head)) ((adjusting recording device)) ...(3sec)... what do you do in class? ...(2sec)...]
36. J.P.: skryf= [write=]

37. L.M.: wat skryf julle? ...(1sec)... *[what do you write? ...(1sec)...]*
38. J.P.: va- =
39. L.M.: hmm↑?=
40. J.P.: vas= *[cursive=]*
41. L.M.: so vir wa- skryf julle vas? ((J.P. nods his head)) doen julle somme ((J.P. nods his head)) wat se somme doen julle? ...(2sec)... *[so for wha- do you use cursive handwriting? ((J.P. nods his head)) do you do sums? ((J.P. nods his head)) what sums do you do? ...(2sec)...]*
42. J.P.: wiskunde= *[mathematics=]*
43. L.M.: wat se wiskunde? ...(3sec)... wat het julle Vrydag in die klas geleer? ...(8sec)... wat het jy pouse gedoen? ...(1sec)... *[what mathematics?... (3sec)... what did you learn in class on Friday? ...(8sec)... what did you do in break time? ...(1sec)...]*
44. J.P.: s p eel= *[p l ay=]*
45. L.M.: wat het julle gespeel? ...(2sec)... *[what did you play? ...(2sec)...]*
46. J.P.: aan-aan= *[tag-tag=]*
47. L.M.: Aan-aan? ((J.P. nods his head)) saam met wie?= *[tag-tag? ((J.P. nods his head)) with whom?=]*
48. J.P.: saam me my chomies= *[with my friends=]*
49. L.M.: wie? ...(2sec)... wie's jou chomies? ...(5sec)... *[who? ...(2sec)... who's your friends? ...(5sec)...]*
50. J.P.: Jayden ...(3sec)...
51. L.M.: wie't gewen die aan-aan? =*[who won the tag-tag?=]*
52. J.P.: Jayden=

53. L.M.: het Jayden gewen? ((J.P. nods his head)) Hoekom het jy nie gewen nie? ((J.P. shakes his head no)) wat het gebeur? ...(1sec)... is hy vinniger as jy? ((J.P. nods his head)) ...(9sec)... jou beurt ((L.M. facing T.M.)) wat se sport doen jy?=*[did Jayden win? ((J.P. nods his head)) why did you not win? ((J.P. shakes his head no)) what happened? ...(1sec)... is he faster than you? ((J.P. nods his head)) ...(9sec)... your trun ((L.M. facing T.M.)) what sport do you do?]=*
54. T.M.: socca=*[soccer=]*
55. L.M.: net soccer? ((T.M. nods his head)) ...(2sec)... virtel my van die laste game wat jy gespeel het =*[just soccer? ((T.M. nods his head)) ...(2sec)... tell me about the last game that you played=]*
56. T.M.: laste game?=*[last game?]=*
57. L.M.: uhm ...(3sec)... biekie harder praat ne↑ ...(5sec)... *[uhm ...(3sec)... a bit louder ne↑ ...(5sec)...]*
58. T.M.: ek het gehaloep en toe wil ek skop toe kom 'n laaitie vining toe tackle hy my toe val ek op die gront =*[I ran and then I wanted to kick then a boy came fast then he tackled me then I fell on the ground=]*
59. L.M.: uhm↑=
60. T.M.: toe skie ek by my bien ... (2sec)... toe tel hulle my op speel ek aan toe ha- toe speel ek aan ...(2sec)... toe kan ekie mee speeie wan my voet is see↓=*[then I hurt my leg ...(2sec)... then they picked me up I continued to play then ha- then I continued to play ...(2sec)... then I would not continue playing because my foot was sore↓=]*
61. L.M.: wanner was dai gewees?=*[when was that?]=*
62. T.M.: was Vrydag inie pad in=*[was Friday in the road=]*
63. L.M.: nou Vrydag? ((T.M. nods his head)) is jou voet nog steeds seer? ((T.M. shakes his head no)) nie meer nie? ((T.M. shakes his head no)) ...(1sec)... *[this Friday? ((T.M. nods his head)) is your foot still sore? ((T.M. shakes his head no)) not anymore? ((T.M. shakes hi head no)) ...(1sec)...]*

64. T.M.: my ma het salf op gesit= [*my mother doctored it=*]
65. L.M.: het jou ma salf op gesit? ((T.M. nods his head)) jy moet virsigtig speel ...(1sec)...
toe wie het gewen? ...(1sec)... [*did your mother doctor it? ((T.M. nods his head))*
you have to be carefull ...(1sec)... so who won? ...(1sec)...]
66. T.M.: os= [*we=*]
67. L.M.: jou span? ((T.M. nods his head)) wie is almal in jou span?= [*your team? ((T.M.*
nods his head)) who's all in your team? =]
68. T.M.: wayden, devon, Johnwill =
69. L.M.: oh Johnwill ok ((T.M. nods his head)) oo julle is mos in een pad in ((T.M. nods his
head)) ...(1sec)... [*oh Johnwill ok ((T.M. nods his head)) oo you two lives in one*
road ((T.M. nods his head)) ...(1sec)...]
70. T.M.: en Bevan ...(2sec)... [*and Bevan ...(2sec)...*]
71. L.M.: toe wen julle? ((T.M. nods his head)) ...(3sec)... en wat se sport doen jy by die
skool? = [*then you won? ((T.M. nods his head)) ...(3sec)... and what sport do you*
do at school? =]
72. T.M.: rugby=
73. L.M.: speel jy rugby by die skool? ((T.M. nods his head slightly)) wanneer begin die
rugby seisoen? ...(1sec)... [*do you play rugby at school? ((T.M. nods his head))*
when does the rugby season start ...(1sec)...]
74. T.M.: die minee het os nogie gesê nie = [*the teacher have not told us=*]
75. L.M.: is dit nie 'n winter sport nie? ...(3sec)... ek dink dis 'n winter sport. Kom mos nou
dis amper winter ...(1sec)... dit het lekker gereën gister nê↑? ((both nod their
heads)) het julle nat gereën? ((both nod their heads)) = [*is it not a winter sport?*
...(3sec)... I think it is a winter sport. Come now it is almost winter ...(1sec)... the
rain was nice yesterday nê↑? ((both nod their heads)) did you get wet? ((both nod
their heads)) =]

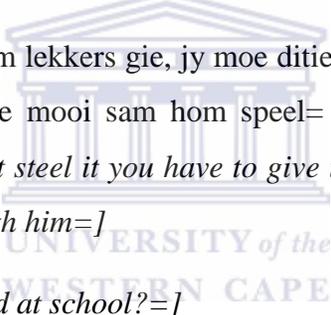
76. T.M.: ja:= [yes:=]
77. L.M.: en toe?= [and then?=]
- 78 T.M.: toe ga os byrie bib toe rien dit hard toe moet os huis toe gaan= [then we went to the library then it rained harder then we had to go home=]
79. L.M.: in die reën in?= [in the rain?=]
80. T.M.: ((T.M. nods his head)) ja:= [((T.M. nods his head)) yes:=]
81. L.M.: en toe jy by die huis kom toe maak jy wat?= [and when you got home what did you do?=]
82. T.M.: toe trek ek my uit toe hang ek my nat kleure op ...(2sec)... ga lê ek 'n biedjie= [then I changed my clothes then I hanged up my wet clothes ...(2sec)... I laid down a bit=]
83. L.M.: en jy? ((L.M. facing J.P.))= [and you? (L.M. facing J.P.)=]
84. J.P.: ((J.P. nods his head)) ek oek= [((J.P. nods his head)) me too=]
85. L.M.: het jy ook gegaan lê? ((J.P. nods his head)) he- het jy nie uit getrek nie? ((J.P. shakes his head no)) het jy met nat klere geloop lê? ((J.P. nods his head)) jy gaan siek raak jy moet uit trek die nat klere dit het baie hard gereën gister ...(2sec)... dis baie koud ...(1sec)... vandag ook nê? ((both nod their heads)) dis baie koud ...(3sec)... virtel vir↓ my T.M. watse watse movies hou jy van? ...(2sec)... [did you also go lay down? ((J.P. nods his head)) he- did you not change your clothes? ((J.P. shakes his head no)) did you go lay down with wet clothes? ((J.P. nods his head)) you are going to get sick you have to change your wet clothes it was raining very hard yesterday ...(2sec)... it was very cold ...(1sec)... today as well ne? ((both nod their heads)) it is very cold ...(3sec)... tell me T.M. what what movies do you like? ...(2sec)...]
86. T.M.: van kare movie, action, army ...(1sec)... [car movie, action army ...(1sec)...]
87. L.M.: wat se movie het jy laste gekyk? Wats jou favourite fl- stuk?= [what was the last movie that you watched? What is your favourite movie?=]

88. T.M.: Fast and Furious=
89. L.M.: uh↑...(1sec)... virtel vir my wat gebeur daar? Het jy ook vir Fast and the Furious gekyk? ((L.M. facing J.P.))= [uh↑...(1sec)... *tell me what happens there? Did you also watch Fast and the Furious? ((L.M. facing J.P.))=]*
90. J.P.: Fast and the Furious six=
91. L.M.: ses? ((J.P. nods his head)) en jy? ((L.M. facing T.M.)) ook vir ses gekyk?= [six? ((J.P. nods his head)) *and you? ((L.M. facing T.M.)) also watched six?=[*
92. T.M.: five=
93. L.M.: net vir five? ((T.M. nods his head)) het jy vir se- vyf gekyk? ((L.M. facing J.P.)) ((J.P. nods his head)) nou, julle twee moet my virtel wat het daar gebeur ...(5sec)... wie gaan begin? ...(3sec)... J.P.? hoe- hoe begin dit? ...(3sec)... Fast and the Furious five hum?=[just five? ((T.M. nods his head)) *did you watch five? ((L.M. facing J.P.)) ((J.P. nods his head)) now, you two have to tell me what happens there ...(5sec)... who's going to start? ...(3sec)... J.P.? how- how does it start? ...(3sec)... Fast and the Furious five hum?=[*
94. J.P.: movie va die kare= [movie about the cars=]
95. L.M.: uhm↑? ...(3sec)... jy moet my virtel wat gebeur. Ek het dit nog nie gekyk nie ...(2sec)... uhm↑? ...(14sec)... kan jy nie onthou nie? ((J.P. shakes his head no)) net die kare? ((J.P. nods his head)) wat het oo- alis gebeur? Nie van die- hoef nie van die begin af te wees nie. Wat kan jy onthou van die stuk? ...(2sec)... [uhm↑? ...(3sec)... *you have to tell me what happens. I have not watched it yet ...(2sec)... uhm↑? ...(14sec)... can't you remember? ((J.P. shakes his head no)) just the cars? ((J.P. nods his head)) what happened? Not from the- doesn't have to be from the beginning. What can you remember about the movie? ...(2sec)...]*
96. J.P.: van de Rock= [about the Rock=]
97. L.M.: van de Rock? ((J.P. nods his head)) speel The Rock daar in? ((J.P. nods his head)) wat maak The Rock? ...(1sec)... [about the Rock? ((J.P. nods his head)) *does the Rock play in it? ((J.P. nods his head)) what does the Rock do? ...(1sec)..]*

98. J.P.: de Rock maak die mense see= [*the Rock hurts people*=]
99. L.M.: praat harder ‘n biekie toe? Maak hy die mense seer?= [*talk a bit louder please? Does he hurt people?*=]
100. J.P.: ((J.P. nods his head)) uhmm↓ ...(5sec)...
101. L.M.: en toe? Wat het gebeur met hom? ...(2sec)... is dit al wat gebeur? Kare en The Rock wat vir mense seer maak? = [*and then? What happens to him? ...(2sec)... is that all that happens? Cars and the Rock that hurt people?*=]
102. J.P.: ((J.P. nods his head)) uhmm↓=
103. L.M.: is dit? ((L.M. facing T.M.)) mh? ((T.M. shakes his head no)) is dit nie? ((T.M. shakes his head no)) nou wat kan jy onthou? = [*is it? ((L.M. facing T.M.)) mh? ((T.M. shakes his head no)) is it not? ((T.M. shakes his head no)) now what can you remember? =*]
104. T.M.: hulle:: hulle hulle ry kare ...(1sec)... skiet hulle meka kom Haan se broe van Tokyo Drift da ko hy da in da sak hulle die garage se deure da ry hy da gat sy deur af↑ da jag sy broe hom da skiet hulle sy broe se wiele pap da drif hulle om die drai da skiet hulle sy wiele pap da rol sy kar has- toe kom O’brian om gat help toe toesit te laat toe bom sy kar op ...(1sec)... [*they they they drive cars ...(1sec)... they shoot each other Haan’s brother comes from Tokyo Drift then he comes in there then they lower the garage doors then he drives then he’s door comes off then his brother chase him then they shoot his brother’s wheels flat then they drift around the corner then they shoot his wheels flat then his car rolls has- then O’Brian came around to help then then it was too late then his car exploded ...(1sec)...*]
105. L.M.: uhm↑((T.M. nods his head)) kan jy ook dai onthou? ((L.M. faces J.P.)) Sy kar het op gebom? ((J.P. nods his head)) wat anders wat kan jy my nog virtel? ...(5sec)... het jy broers? ((J.P. nods his head)) En sisters? ((J.P. nods his head)) hoe oud is hulle?= [*uhm↑((T.M. nods his head)) can you also remember that?((L.M. faces J.P.)) He’s car exploded? ((J.P. nods his head)) what else can you tell me? ...(5sec).... Do you have brothers? ((J.P. nods his head)) and sisters? ((J.P. nods his head)) how old are they? =*]

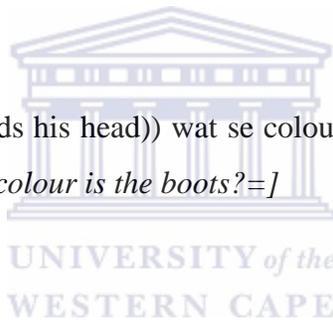
106. J.P.: ek het nie 'n suster nie= [*I don't have a sister*=]
107. L.M.: net 'n broer? ((J.P. nods his head)) een broer? ((J.P. nods his head)) jy moet praat↑...(4sec)... jy moet gesels nie jou kop skit nie ...(1sec)... wat is jou broer se naam?= [*just a brother? ((J.P. nods his head)) one brother? ((J.P. nods his head)) you have to talk↑...(4sec)... you have to chat not just nod your head ...(1sec)... what is your brother's name? =*]
108. J.P.: Jurian=
109. L.M.: Jurian? ((J.P. nods his head)) en jy's J.P.? ...(1sec)... en hy's Jurian ...(1sec)... sê ek dit reg? ((J.P. nods his head)) hoe oud is hy? ...(2sec)... [*Jurian? ((J.P. nods his head)) and you are J.P.? ...(1sec)... and he's Jurian ...(1sec)... am I pronouncing it correct? ((J.P. nods his head)) how old is he? ...(2sec)...*]
110. J.P.: 'n jaar en el- elf mande= [*a year and el- eleven months*=]
111. L.M.: is hy 'n babatjie? ((J.P. nods his head)) so jy's ou boet? ((J.P. nods his head)) wat gaan jy vir hom leer as hy groot raak? ...(1sec)... [*is he a baby? ((J.P. nods his head)) so you are the big brother? ((J.P. nods his head)) what are you going to teach him when he grows up? ...(1sec)...*]
112. J.P.: socca= [*soccer*=]
113. L.M.: net socca speel? ((J.P. nods his head)) en meisies? ((J.P. shakes his head no)) niks van meisies nie? ((J.P. shakes his head no)) niks leer van meisies nie? ((J.P. shakes his head no)) hoekom nie? ...(2sec)... [*just playing soccer? ((J.P. nods his head)) and girls? ((J.P. shakes his head no)) nothing about girls? ((J.P. shakes his head no)) why not? ...(2sec)...*]
114. J.P.: ek is skaam= [*I am shy*=]
115. L.M.: is jy skaam vir meisies? ((J.P. nods his head)) wat gaan jy hom nog leer? ...(2sec)... hoe om stout te wees?= [*are you shy in front of girls? ((J.P. nods his head)) what else are you going to teach him? ...(2sec)... how to be naughty? =*]
116. J.P.: nee ((J.P. shakes his head no)) = [*no ((J.P. shakes his head no)) =*]

117. L.M.: gaan jy hom af klou?= [*are you going to bully him? =*]
118. J.P.: ((J.P. shakes his head no)) nee= [*((J.P. shakes his head no)) no =*]
119. L.M.: rereg? ((J.P. shakes his head no)) gaan jy nie sy lekkers af vat nie? ((J.P. shakes his head no)) gaan jy hom lekkers gee? ((J.P. nods his head)) nou wat nog? Wat gaan jy hom nog gee? ...(1sec)... [*really? ((J.P. shakes his head no)) are you not going to steal his sweets? ((J.P. shakes his head no)) are you going to give him sweets? ((J.P. nods his head)) now what else? What else are you going to give him?(1sec)...*]
120. J.P.: chips=
121. L.M.: gaan jy hom chips gee? ((J.P. nods his head)) het jy 'n broer? ((L.M. facing T.M.))= [*are you going to give him chips? ((J.P. nods his head)) do you have a brother? ((L.M. facing T.M.)) =*]
122. T.M.: my a al my broers is groot ek is die kleinste = [*a- al my brothers are older than me I am the youngest =*]
123. L.M.: is jy die kleinste? ((T.M. nods his head)) so jy's die babatjie? ((T.M. nods his head)) so jy word gespoil? ((T.M. nods his head)) wat het hulle vir jou geleer? Sê vir hom wat het jou broers vir jou geleer ...(1sec)... [*are you the youngest? ((T.M. nods his head)) so you are the baby? ((T.M. nods his head)) so you get spoiled? ((T.M. nods his head)) what did they teach you? Tell him what your brothers taught you ...(1sec)...*]
124. T.M.: my miniere gelee= [*taught me manners =*]
125. L.M.: wa- wa- wat hy sy broer moet leer= [*tha- tha- that he has to teach his brother =*]
126. T.M.: my gegie vi my geld gegie= [*gave me gave me money =*]
127. L.M.: vir jou geld gegee? ((T.M. nods his head)) sien jy moet vir hom geld gee en jy moet vir hom maniere leer. wat nog? ...(2sec)... [*gave you money? ((T.M. nods his head)) see you have to give him money and you have to teach him manners. What else? ...(2sec)...*]

128. T.M.: jy moet always ini skool wies ...(1sec)... ja ...(1sec)...jy moet nie onbeskof- jy moet nie rowe games speeie = *[you have to go to school always ...(1sec)... yes ...(1sec)... you should not be rude- you should not play rough games=]*
129. L.M.: hum?=

130. T.M.: moet nie rowe games speeie= *[don't play rough games=]*
131. L.M.: om nie rof te speel nie?= *[not to play rough=]*
132. T.M.: hmm=
133. L.M.: jy moet vir hom virtel ((L.M. pointing to J.P.)) virtel vir hom hoe hy moet sy broer maak ...(10sec)... gesels met mekaar kom gesels ...(3sec)...*[you have to tell him ((L.M. pointing at J.P.)) tell him what he's supposed to teach is brother ...(10sec)... talk to each other come chat ...(3sec)...]*
134. T.M.: broer miniere leer, hom lekkers gie, jy moe ditie af vatie djy moe dit vi hom gie djy moe hom lee djy moe mooi sam hom speel= *[teach brother manners, give him sweets, you should not steel it you have to give it to him you have to teach him you have to play nicely with him=]*
135. L.M.: en op die skool?= *[and at school?=]*
136. T.M.: op dis skool moe hulle hom miniere lee hulle moe hom sê wat moet hy doen= *[at school they have to teach him manners they have to tell him what to do=]*
137. L.M.: hy moet (sy skool = *[he has to (his school=]*
138. T.M.: skool) wek doen= *[do his homework=]*
139. L.M.: en jy doen jy jou skool werk? = *[and you do you do your homework?=]*
140. J.P.: ((J.P. nods his head)) ja= *[((J.P. nods his head)) yes=]*
141. L.M.: watter graad is jy nou in?= *[in which grade are you now?=]*
142. J.P.: vie= *[four=]*

143. L.M.: graad vier? ((J.P. nods his head)) jy lyk as of jy in graad seve is ((J.P. smiles))
 ...(2sec)... wat hou jy van die skool? ...(3sec)... [*grade four? ((J.P. nods his head)) it looks like you are in grade seven ((J.P. smiles)) ... (2sec)... what do you like about school? ... (3sec)...*]
144. J.P.: lekker= [*nice=*]
145. L.M.: net lekker? ((J.P. nods his head)) wat nog? ...(2sec)... sê enige iets ...(3sec)... het jy baie vriende op die skool? ((J.P. nods his head)) wat's hulle name? ...(2sec)... ((J.P. shakes his head no)) kan jy nie onthou nie? ((J.P. shakes his head no)) en jy? ((L.M. facing T.M.))= [*just nice? ((J.P. nods his head)) what else? ... (2sec)... say anything ... (3sec)... do you have many friends in school? ((J.P. nods his head)) what are their names? ... (2sec)... ((J.P. shakes his head no)) can't you remember? ((J.P. shakes his head no)) and you ((L.M. facing T.M.))=*]
146. T.M.: ek hou van ek hou vani wek opie skool = [*I like the I like the work in school=*]
147. L.M.: a huh↑=
148. T.M.: ek hou vani wek opie skool ...(1sec)... [*I like the work in school=*]
149. L.M.: julle moet skool klaar maak ne ((both nod their heads)) ...(4sec)... [*you have to finish school ne ((both nod their heads)) ... (4sec)...*]
150. T.M.: my huiswek doe ek elke mirrag my huiswek= [*I do my homework every afternoon my homework=*]
151. L.M.: watter graad is jy nou?=[*which grade are you in now?=*]**
152. T.M.: graad vie= [*grade four=*]
153. L.M.: oek graad vier? ((T.M. nods his head)) jy lyk weer op jy graad 9 is ((everyone laughs)) ...(3sec)... vertel my van dai mantjie. Wat het hy aan?=[*also in grade four? ((T.M. nods his head)) you look like you are in grade nine ((everyone laughs)) ... (3sec)... tell me about that toy. What does he have on?=*]**
154. J.P.: broekie ...(1sec)... [*pants ... (1sec)...*]

155. L.M.: net 'n broekie? ((J.P. nods his head)) wat nog? ...(1sec)... [*just a pants?* ((J.P. nods his head)) *what else?* ...(1sec)...]
156. J.P.: en 'n spons= [*and a sponge*=]
157. L.M.: en 'n spons? ((J.P. nods his head)) wat is op sy kop? Is dit hare? ((J.P. nods his head)) dai↑? = [*and a sponge?* ((J.P. nods his head)) *what is on his head? Is it hair?* ((J.P. nods his head)) dai↑? =]
158. J.P.: ((J.P. shakes his head no)) kepie ((everyone laughs)) ...(2sec)... [((J.P. shakes his head no)) *cap* ((everyone laughs)) ...(2sec)...]
159. L.M.: en sy skoene? Virtel my van sy skoene? ...(5sec)... kyk sy skoene dan sê jy my iets van sy skoene ...(2sec)...[*and he's shoes? Tell me about his shoes?* ...(5sec)... *look at his shoes and tell me something about his shoes* ...(2sec)...]
160. J.P.: boots=
161. L.M.: is dit boots? ((J.P. nods his head)) wat se colour is die boots? = [*is it boots?* ((J.P. nods his head)) *what colour is the boots?*=]
162. J.P.: bruin= [*brown*=]
163. L.M.: het jy ook sulke boots? ((J.P. nods his head)) hoe lyk jou boots? ...(1sec)... [*do you also have the same boots?* ((J.P. nods his head)) *how does your boots look?*(1sec)...]
- 164 J.P.: blou= [*blue*=]
165. L.M.: joune blou ((J.P. nods his head)) ohk ...(5sec)... wie kan vir- wie kyk vir Dragon Ball Z? ((T.M. raises his hand)) kyk jy vir Dragon Ball Z? ((L.M. facing J.P.)) ((J.P. nods his head)) ...(2sec)... is dit lekker? ((J.P. nods his head)) wanneer laas het jy dit gelyk? ((J.P. nods his head)) lank laas? ((J.P. nods his head)) virtel vir my wat het daar gebeur ...(2sec)... sê jy ((L.M. facing T.M.)) wie's jou favourite? ...(1sec)... [*yours blue* ((J.P. nods his head)) *ohk* ...(5sec)... *who can- who watches Dragon Ball Z?* ((T.M. raises his hand)) *do you watch Dragon Ball Z?* ((L.M. facing J.P.)) ((J.P. nods his head)) ...(2sec)... *is it nice?* ((J.P. nods his head))



when last did you watch it? ((J.P. nods his head)) not in a long time? ((J.P. nods his head)) tell me what happened there? ...(2sec)... you say ((L.M. facing T.M.)) who's your favourite? ...(1sec)...]

166. T.M.: favourite=

167. L.M.: uhm ...(4sec)...

168. T.M.: die Titans= [*the Tians=*]

169. L.M.: uhm=

170. T.M.: die Titans ...(4sec)...[*the Titans ...(4sec)...*]

171. L.M.: virtel vir van Dragon Ball Z. ek kyk nie Dragon Ball Z nie so (weet nie wa- [*tell me about Dragon Ball Z. I don't watch Dragon Ball Z so (don't know wha-*

172. T.M.: ek het) lang laa::s dit nog gekyk ...(1sec).. [*I have) not watched it in a while ...(1sec)...*]

173. L.M.: is dit? Wat se cartoon kyk julle nou? ...(2sec)... [*is it? What cartoons are you watching now? ...(2sec)...*]

174. T.M.: os kyk nou meeste uhm uhm Team Titans by my neefie= [*now we mostly watch uhm uhm Team Titans at my cousins=*]

175. L.M.: Titans?=

176. T.M.: Team Titans=

177. L.M.: Team Titans? ((T.M. nods his head)) wat gaan daar aan? Wat gebeur daar?=*[Team Titans? ((T.M. nods his head)) what is going on there? What happens there?]=*

178. T.M.: hulle is – hulle beklei tien jou die evil mense = [*they are- they fight against you the evil people=*]

179. L.M.: uhm↑?=

180. T.M.: het powers super powers uhm slat Robin die een me die stok ...(2sec)... [*have powers super powers uhm Robin hit the one with a stick ...(2sec)...*]

181. L.M.: ohk en dan?= [*ohk and then? =*]
182. T.M.: da ry- da gat na ma- gat hy na Batman se secret spot toe = [*then dri- then to- he goes to Batman's secret spot =*]
183. L.M.: oh ... (1sec)...
184. T.M.: da gat hulle da gat fight hulle da vat hulle Batman se kar da is Batman nie da nie da ry hulle ga fight hulle tien dai man da wil Ro- da wil Robin nie hê hy moe- hulle moe aan Batman se goete na aan- Batman se goete vatie van Batman ga vi Robin dood maak da fight hulle met sy goet dan gooi hulle sy goete da tel Robin net op op om heel tyd da gooi hulle alis ini kar in ... (1sec)... da gooi hy die special ding van van Batman da maak dit soe liggies ini ini lig in ... (1sec)... da haal hy al die goete van die mense af da vang die mense nou wee vi hom mense ... (2sec)... ha ha uhm na dan use hy die goete al die goete ini kar in da maak hy dai mense dood= [*then they go then they fight then they take Batman's car then Batman is not there then they drive they go fight against another man then Ro- wants then Robin does not want him- them to touch Batman's things because Batman will kill Robin then they fight with Batman's things then they throw he's things then Robin picks it up up the whole time then they throw everything in the car ... (1sec).. then he throws Batman's special thing then it makes like lights in the air ... (1sec)... then he takes all the things from the people then the people catch him people ... (2sec)... ha ha uhm then he uses the things all the thing in the car then he kills the people =*]
185. L.M.: ohk↑ het jy ook dai stuk gekyk ((L.M. facing J.P.))= [*ohk↑ did you also watch that cartoon? ((L.M. facing J.P.)) =*]
186. J.P.: ((J.P. shakes his head no)) niee = [((J.P. shakes his head no)) no =]
187. L.M.: wats die wats die laste cartoon wat jy gekyk het? ... (3sec)... uhm? Kyk jy cartoons? ((J.P. shakes his head no)) popentjies ((J.P. nods his head)) net popentjies? ((J.P. nods his head)) wats die laste popentjie wat jy gekyk het? ... (2sec)... [*what was the last cartoon you watched? ... (3sec)... uhm? Do you watch cartoons? ((J.P. shakes his head no)) animations? ((J.P. nods his head)) just*]

*animations? ((J.P. nods his head)) what was the last animation that you watched?
...(2sec)...]*

188. J.P.: Smurf=

189. L.M.: Smurf? ((J.P. nods his head)) wat het daar gebeur? ...(5sec)... uhm↑? Wat het daar gebeur? ...(1sec)... kan jy onthou? ...(1sec)... [*smurf? ((J.P. nods his head)) what happens there? ...(5sec)... uhm↑? What happened there? ...(1sec)... can you remember? ...(1sec)...]*

190. J.P.: ((J.P. shakes his head no)) niee(15sec)... [((J.P. shakes his head no)) no ...(15sec)...]

191. L.M.: ohk dis fine. baie dankie vir hulle geselskap. Eneige iets wat julle vir my nog wil sê? ((both shake their heads no)) niks nie? ((both shake their heads no)) baie baie dankie julle twee [*ohk it's fine. Thank you every much for the chat. Anything else you want to tell me? ((both shake their heads no)) nothing? ((both shake their heads no)) thank you very very much both of you]*

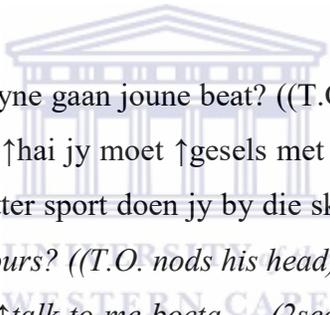
End of interview

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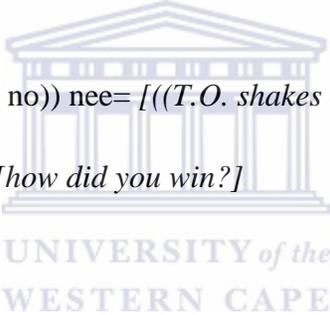
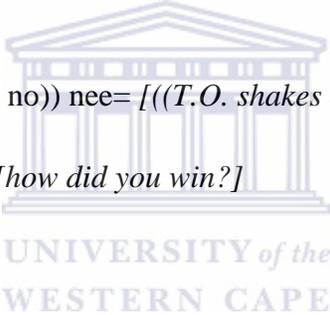
Appednix 6: Interview three

Background: Two boys participated, both 9 years old. The one boy “J.J.” suffers from FAS and the other boy, “T.O.”, is a normally developing child. They were both given cars to talk about. The toys were provided so that they could talk about something visible and physically in the room. The second topic given to them was sport followed by their favourite movies. The purpose of the last two topics was to probe them to talk about something abstract, not in the room, something they could not see or feel at that particular point in time.

1. L.M.: J.J. praat gou vir my. Gesels gou met my van daai kartjie ... (3sec)... kom gou virtel vir my van daai kartjie ... (2sec)... gee vir hom a ander gee vir hom die orange kar ((moving of the car)) wat sien jy in die orange kar? ((chair moving backwards)) [*J.J. quickly talk for me. Talk with me about that car ... (3sec)... come now tell me about that car ... (2sec)... give him another give him the orange car ((moving of the car)) what do you see in the orange car? ((Chair moving backwards))*]
2. J.J.: die venstes lyk mooi= [*the windows look pretty*]
3. L.M.: mmh ...(2sec)...
4. J.J.: en die wiele lyk mooi= [*and the wheels look pretty*]
5. L.M.: lyk die wiele mooi? ((JJ nodes his head))= [*does the wheels look nice ((JJ nodes his head))=*]
6. J.J.: en die agte kante = [*and the back sides*]
7. L.M.: agter kante ook mooi?= [*back sides also pretty*]
8. J.J.: enie bonnet = [*and the bonnet*]
9. L.M.: mmh=
10. J.J.: enie dak= [*and the roof*]
11. L.M.: nou virtel vir TO van daai kar van jou is jou kar vinniger as syne? Wat hy het daar= [*now tel To about your car is your car faster than his? That he has there*]

12. J.J.: jou kar is vinniger as sy kar= [*your car is faster than his car*]
13. L.M.: T.O., hoe voel jy? Is sy, is jou kar vinniger= [*T.O., how do you feel? Is his, is your car faster*]
14. T.O.: Nee auntie L.M.= [*No auntie L.M.=*]
15. L.M.: uhm?=

16. T.O.: nee= [*no*]
17. L.M.: wat is die kar?= [*what is the car?*]
18. T.O.: A Mustang=
19. L.M.: watter een is vinniger?= [*which one is faster?*]
20. T.O.: syne= [*his one*]
21. L.M.: is syne vinniger? So syne gaan joune beat? ((T.O. nods his head)) uhm ... (2sec)...
 jy het die vinnige kar ↑hai jy moet ↑gesels met my boeta ... (2sec)... virtel vir my
 hou jy van sport? Watter sport doen jy by die skool? ... (2sec)... [*is his one faster?*
So his one will beat yours? ((T.O. nods his head)) uhm ... (2sec)... you have the fast
car ↑hai you have to ↑talk to me boeta ... (2sec)...tell me do you like sport? What
sport do you practice at school? ... (2sec)...]
22. J.J.: Socca= [*soccer=*]
23. L.M.: speel jy soccer? ↑uhm ((JJ nods his head)) jy moet a biekie hard praat ne ((moving
 of equipment)) en Jy? ((Facing TO))= [*do you play soccer? ↑uhm ((JJ nods his*
head)) you have to talk a bit louder ((movine of equipment)) and you? ((facing
TO))=]
24. T.O.: rugby=
25. L.M.: speel jy rugby? What is better soccer of rugby? ... (5sec)... [*do you place rugby?*
Which one is better soccer or rugby? ... (5sec)...]
26. J.J.: socca = [*soccer=*]

27. L.M.: is soccer better? En jy voel? ((facing T.O.)) [*is soccer better? And you feel ((facing T.O.))*] ((L.M. laughing)) se vir my uhm J.J., vertel vir my van a game wat jy gespeel het by die skool. Die soccer game ... (3sec)... wat het gebeur? ...(4sec)... [*is soccer better? And you feel ((facing T.O.)) ((L.M. laughing)) tell me uhm J.J., tell me about a game you played at school. The soccer game ...(3sec)... what happened? ...(4sec)...*]
28. J.J.: amekaa as ek amekaa hulle maak my see as ek as ek wil speela maak hulle my see= [*everytime when I everytime they hurt me when I when I want to play then they hurt me*]
29. L.M.: =Is (dit? [*is (it?)*]
30. J.J.: dan val) ek die heel tyd...(3sec)... [*than I fall the whole time ...(3sec)...*]
31. L.M.: en dan? ...(3sec...) [*and then? ...(3sec)...*]
32. J.J.: dan isit na pouse da slaan die juffrou vi hulle ((L.M. takes away the toys))...(6sec)... [*then is it after break then the teacher hits them ((L.M. takes away the toys)) ... (6sec)...*]
33. L.M.: dan slaan sy vir hulle uhm?= [*then she hits them uhm?*]
34. J.J.: my juffrou slaan vi hulle= [*my teacher hits them*]
35. L.M.: is dit? ((JJ nods his head)) As hulle vir jou seer maak? ((JJ nods his head)) wat onthou jy van ander game wat jy gespeel het? Hoeveel goals was daar geskop? ...(4sec)... [*is it? ((JJ nods his head)) when the hurt you? ((JJ nods his head)) what do you remember about another game that you played? How many goals was there? ...(4sec)...*]
36. J.J.: vie goals= [*four goals=*]
37. L.M.: Vier goals? ((very slight head nod by J.J.)) ...(3sec)... en toe? ...(5sec)... [*four goals? ((very slight head nod by J.J.)) ...(3sec)... and then? ...(5sec)...*]
38. J.J.: en toe wen osie ane team wat os tien gespeelit.= [*and then we won the other team that we played agaist.*]

39. L.M.: oh het julle gewen? ((J.J. nods his head)) ↑ok. ...(3sec)... en jou laste game ((facing T.O.)) [*oh did you win? ((J.J. nods his head)) ↑ok. ...(3sec)... and your last game ((facing T.O.))*]
40. T.O.: ek wietie= [*I don't know*]
41. L.M.: wannier het jy die laste keer rugby gespeel? ((T.O. shakes his head)) Lank laas? ((T.O. nods his head)). Wat se sport het jy laste gedoen? ...(3sec)... [*when last did you play rugby? ((T.O. shakes his head)) long ago? ((T.O. nods his head)). What was the last sports you played? ... (3sec)...*]
42. T.O.: atletiek [*athletics*]
43. L.M.: atletiek? Harder ...(3sec)... atletiek ((T.O. nods his head)) en toe? Het jy eerste gekom? [*athletics? Louder ...(3sec)... athletics? ((T.O. nods his head)) and then? Did you come first?*]
44. T.O.: ((T.O. shakes his head no)) nee= [*((T.O. shakes his head no)) no*]
45. L.M.: hoe het jy gewen?= [*how did you win?*]
46. T.O.: uhm?=

47. L.M.: hoeveelste was jy?=

48. T.O.: tweede = [*second*]
49. L.M.: tweede? ((T.O. nods his head)) tweede gewen mos ((T.O. nods his head)) en toe was dit lekker om te wen?= [*second? ((T.O. nods his head)) you won second ((T.O. nods his head)) and then was it nice to win?*]
50. T.O.: =ja:: [*yes::*]
51. L.M.: virtel my wat het gebuer daai dag? ...(3sec)... [*tell me what happened that day? ... (3sec)...*]
52. T.O.: niks gebue nie ...(4sec)... [*nothing happened ... (4sec)...*]

53. L.M.: kyk hulle, kyk julle sport op die TV? Wat kyk julle op die TV? =[do you watch, do you watch sport on TV? What do you watch on TV?]
54. T.O.: cricket=
55. LH: en jy?=(facing J.J.) [and you ((facing J.J.))]
56. J.J.: rubdie= [rugby=]
57. L.M.: kyk jy rugby op die TV? ((J.J. nods his head)) Is dit lekker? ((J.J. nods his head)). Wat is die laaste game wat gekyk het? [do you watch rugby on TV? ((J.J. nods his head)) is it nice? ((J.J. nods his head)). What was the last game you watched?]
58. J.J.: rubdie= [rugby=]
59. L.M.: wate game wat se game wat se rugby game het julle gekyk?=[what game what rugby game did you watch?]
60. J.J.: super rubdie= [super rugby=]
61. L.M.: super rugby? ((J.J. slightly nods his head)) was dit lekker? ((J.J. nods his head)) en wat het gebuer? ... (4sec)... kan jy nie onthou nie? ((J.J. shakes his head no)) en jy ((facing T.O.)) wat se cricket game? =[super rugby?((J.J. slightly nods his head)) was it nice? ((J.J. nods his head)) and what happened? ... (4sec)... don't you remember? ((J.J. shakes his head no)) and you ((facing T.O.)) what cricket game?]
62. T.O.: football=
63. L.M.: ↑Football? En toe? = [↑football? And then?]
64. T.O.: toe wenie ane team auntie L.M.= [the other team won Aunt L.M.]
65. L.M.: watter teams het gespeel?=[what team played?]
66. T.O.: wietie= [don't know=]
67. L.M.: kan jy nie onthou nie? ((T.O. shakes his head no)) ... (2sec)... virtel vir my van hulle favourite movie.... (4sec)... T.O., jou favourite movie? [can you not

remember? ((T.O. shakes his head no)) ... (2sec)... tell me about your favourite movie ... (4sec)... T.O., your favourite movie?]

68. T.O.: SpongeBob

69. L.M.: SpongeBob? ((T.O. nods his head))... (2sec)... biekie harder toe [*SpongeBob? ((T.O. nods his head))... (2sec)... a bit louder please*]

70. T.O.: SPONGEBOB

71. L.M.: wannier het julle dit gekyk? [*when did you watch it?*]

72. T.O.: ((shrugs his shoulders)) ek wietie [*((shrugs his shoulders)) I do not know*]

73. L.M.: virtel vir my wat het gebuer daar by SpongeBob [*tell me what happened on SpongeBob*]

74. T.O.: ek kan nie onthou – ek wietie ... (2sec)... [*I cannot remember- I don't know ... (2sec)...*]

75. L.M.: jy hoef nie skaam te wees nie ... (4sec)... wat se movie het jy laaste gekyk ... (4sec)... [*you do not have to be shy ... (4sec)... what was the last movie you watched ... (4sec)...*]

76. T.O.: Incredibles=

77. L.M.: the incredibles? En toe wat gebuer? Uhm? [*the Incredibles? And then what happened? Uhm*]

78. J.J.: dis 'n game ((T.O. shakes his head no)) [*it is a game ((T.O. shakes his head no))*]

79. L.M.: Incredibles is a movie ook. Het jy nog nie vir (Incredibles gekyk nie? [*Incredibles is a movie as well. Have you not watched Incredibles yet?*]

80. T.O.: fighting)

81. L.M.: Dis ↑nice. Jy moet dit kyk ne. virtel vir hom van incredibles hy het dit nog nie gekyk nie.= [*It is ↑nice. You have to watch it ne. tell him about Incredibles he has not watched it yet.*]

82. T.O.: hulle het gefight tien ‘n groot robot. =*[they fought against the big robot]*
83. L.M.: En toe? Praat harder =*[and then? Speak louder]*
84. T.O.: toe komie klein laaitie. toe haloep hy vinning. haloep hy opie wate= *[then a small boy came. Then he ran very fast. He ran on the water]*
85. L.M.: mmh=
86. T.O.: toe sla:t hy die ane mense ... (7sec)... *[then he hit the people... (7sec)...]*
87. L.M.: is dit al wat gebuer het? *[is that all that happened?]*
88. T.O.: ((T.O. shakes his head no)) nee *[((T.O. shakes his head no)) no]*
89. L.M.: ↑virtel vir hom, hy het nog nie die film gekyk nie. *[↑tel him, he has not watched the film yet.]*
90. T.O.: hulle het inie volcano geval en toe fight hulle tien ‘n dik robot. Toe slat hulle die robot stukent toe val it ini volcano en toe kom dit weer op. en toe gat hy ini middle en toe slat die ding hom self.= *[they fell in the volcano and then they fought against a thick robot. Then they broke the robot by hitting it then the robot fell in the volcano and then it came up again. And then he went in the middle and then the thing hit itself.]*
91. L.M.: mmh=
92. T.O.: toe sla:t hy die ding stukken van binne= *[then he broke the thing from the inside]*
93. L.M.: hoor jy? Dis a nice game ne? A nice movie? ((T.O. nods his head slightly)) wat se movie het jy laste gekyk? ((L.M. facing J.J.)) ... (5sec)... wat is jou favourite movie of favourite ding om te kyk op die TV? ... (2sec)... kyk jy vir Dragon Ball Z? ((J.J. shakes his head slightly no)) nou wat kyk julle? Wat speel wat speel op die TV in die middae ... (1sec)... wat julle kyk? ... (3sec)... ↑JJ? Wat kyk jy op die TV in die middae?=*[do you hear? It is a nice game? A nice movie/ ((T.O. nods his head slightly)) what was the last movie you watched? ((L.M. facing J.J.)) ... (5sec)... what is your favourite movie or favourite thing to watch on TV?... (2ssec)... do you watch Dragon Ball Z? ((J.J. shakes his head slightly no))*

now what do you watch? What plays what plays on the TV in the afternoons ... (1sec)... what do you watch? ... (3sec)... ↑J.J.? What do you watch in the afternoons?]

94. J.J.: 7de Laan=

95. L.M.: 7de Laan? Nou vertel my wat het op 7de Laan gebeur [7de Laan? Now tell me what happened on 7de Laan]

((J.J. moves around uncomfortably. L.M. asked for the recording to be stopped. J.J. was reassured and made comfortable before the interview was continued.))

96. L.M.: Vertel my van 7de laan= [tell me about 7de Laan]

97. J.J.: daar () het mense gekom en toe en toe skiet hulle en toe skiet hulle een meisie in hand en toe en toe huil almal en toe en toe dink hulle sy is dood gegaan= [there () came people and then and then they shot and then they shot a girl in her hand and then and then everyone cried and then they thought she was dead]

98. L.M.: Is dit? En toe? ... (3sec)... het jy ook gedink sy's dood? Het jy ook gedink sy's dood? ((J.J. shakes his head yes)) ↑ok en toe? [is it? And then? ... (3sec)... did you also think she's dead? Did you also think she's dead/ ((J.J. shakes his head yes)) ↑ok and then?]

99. J.J.: en toe vra en toe en toe toe toe wys hulle dit in die Son en toe lie:s almal dit in die Son en toe en toe is 7de Lan klaar gewies en toe kom die nuus op= [and then ask and then and then then then they showed it in the Son and then everyone read about it in the Son and then and then 7de laan was finished and then the news started]

100. L.M.: is dit? Wat het by di nuus gebeur? ... (3sec)... [is it? What happened on the news?]

101. J.J.: ((J.J. rubs his eyes)) die polisie het gekom en () daar het a plek af gebrand en toe en toe kry hulle die die man wat die plek gebrand het en toe niem hulle hom tronk

toe= [(J.J. rubs his eyes)) the police came and () a place burned down and then and then they got the man who started the fire and then they took him to jail]

102. L.M.: is dit? ((J.J. nods his head)) ↑ok ...(3sec)... ((L.M. coughs)) vitel gou weer vir my van die kartjies maar julle moet met mekaar praat ...(2sec)... praat oor die kartjies met mekaar= [is it? ((J.J. nods his head)) ↑ok ...(3sec)... ((L.M. coughs)) quickly tell me about the cars but you have to talk to each other ...(2sec)... talk about the car with each other.]

103. T.O.: die kartjie het sike lynne en= [the car has lines and=]

104. L.M.: bietjie harder toe =[a bit louder please]

105. T.O.: die kartjie het sike lynne enie dak is so gouterig enie kartjie enie mense sterenjies amper soe en inie binne kant is daa nos bottels en dis a low rider= [the car has lines and the roof is gold-ish and the car and the people stars almost like and in the inside there is Noss bottles and it is a low rider]

106. L.M.: ↑mmh=

107. T.O.: en is gevaalik en kartjie kan so hop soes die ...(2sec)... en is gevaalike ligte ...(5sec)... [and it is awesome and car can hop like this ...(2sec)... and it was awesome lights ...(5sec)...]

108. L.M.: J.J.?=

109. J.J.: ek dink die kartjie die kartjie change () en alie en alie die transformer mantjies dood slat= [I think the car the car change () and all the and all the the transformer figurines was killed]

110. L.M.: se gou weer? [Say again?]

111. J.J.: ek dink die kartjie kan change en en alie transformer former mantjies dood slat= [I think the car can change and and hit all the transformer former figurines dead.]

112. L.M.: ↑umh? Soos Transformers? ((facing T.O.)) Is dit in transformers wat di karre in in men in mantjies virander? ↑umh? Virtel my van Transformers wie ken vir

Transformers? ((J.J. raises his hand)) het jy dit al gekyk? ((facing J.J.)) ((J.J. nods his head)) is dit nice? ((J.J. nods his head)) virtel my my van die movie= [*↑umh? Like the Transformers? ((facing T.O.)) is it in transformers where the cars change into men? ↑umh? Tell me about transformer who knows the Transformers? ((J.J. Raises his hand)) have you watched it? ((facing J.J.)) ((J.J. nods his head)) is it nice? ((J.J. nods his head)) tell me me about the movie*]

113. T.O.: ()=

114. J.J.: uhm Bumble-Bee hys ste:k en () ...*(5sec)*... Octomus en bumble bee het al 'n mantjie 'n man 'n transformer om geslaan= [*uhm Bumble-bee and the strong and () ...*(5sec)*... Octomus and Bumble bee knocked a transformer over*]

115. L.M.: uhm=

116. J.J.: en toe breek sy ligaam= [*and then his body broke*]

117. L.M.: toe breek sy ligaam? ↑ok ...*(4sec)*... [*then his body broke? ↑ok ...*(4sec)*...*]

118. J.J.: en toe kan hy nie mee in 'n kar changeie= [*and then he could not change to cars anymore*]

119. L.M.: toe kan hy nie meer in 'n kar change nie toe moet hy a mantjie bly?=*[then he could not change into a car again so he had to stay a figurine?]*

120. J.J.: uhm toe moen hulle hom wee op bou= [*uhm then they had to build him up again*].

121. L.M.: is dit? ((facing T.O.)) Wat onthou jy van Transformers? Wat onthou jy van Transformers? ((T.O. speech unclear)) harder [*is it? ((facing T.O.)) what do you remember about the Transformers? What do you remember about the Transformers? ((T.O. speech unclear)) louder*]

122. T.O.: ...*(4sec)*... Teseptekons en Bumble bee hulle en hoe fight hulle tienie tienie Teseptekons en toe slat hulle hom toes hulle op 'n ande wereld= [*...*(4sec)*...Teseptekons Bumble Bee en then they fought against Vasecticon and then they hit him and then they are on another planet*]

123. L.M.: uhm=
124. T.O.: dan kom die klein laaitjie en sy broe dan kom dai motorbike dan change dai motorbike in 'n meisie dan ry hulle in so 'n berg dan is hulle daa binne ...*(2sec)*... en agte na kom daar so a circle dan ry hulle duer dan kom hulle by 'n ane land en dan fight hulle tien tien die Teseptekons se robots= [*then there is a small boy and his brother and then there is a motorbike then the motorbike change into a girl then they drive into a mountain then they are inside ...*(2sec)*... and afterwards there is a circle then they drive through then they are on another country then they fight against the Teseptekons robots*]
125. L.M.: ↑ok=
126. T.O.: en en en as it klaar is dan gat hulle wee huis toe en na dai gat hulle rond ry 'n biekie. Dan destroy hulle die plek dan kom daa so 'n tornado en dan kom help Bumble-Bee di kin. En Dan en dan is dit die laste stikkie van di movie dan fight di Teseptekons dan slat die Transformers vir hom dood. ((L.M. asks T.O. to speak louder)) dis kla auntie [*and and and if that is done, then they go home and drive around a bit. Then they destroy the place then there is a tornado then someone comes to help. Then it is the last part of the movie then the vasecticon fights and then the transformers kill him ((L.M. asks T.O. to speak louder)) it is done aunt*]
127. L.M.: J.J. ken jy vir Transformers? ((J.J. nods his head)) ...*(3sec)*...wat onthou jy van Transformers? ...*(5sec)*... soos as dai as dai een van die Transformers was wat gebeur met hom?*(2sec)*... [*J.J. do you know Transformers? ((J.J. nods his head)) ...*(3sec)*... what do you remember from Transformers? ...*(5sec)*... like if that if that one from Transformers what what happens to him?*(2sec)*...*]
128. J.J.: Octomus het vi hom vi hom gesafe vi hom ko safe en toe hy sal dood gegaan het hy sal ini wate gegaan het da bom sy kar hulle het klomp petrol inie inie wate gegooi sal sy kar gebom het en toe en toe gie Octomus sy liewe vi die kar vi hom = [*Octomus saved him him came to safe him and then he would have died he will go into the water there his car exploded they threw a lot of petrol in the in the water would have exploded his car and then and then Octomus gave is life to the car to him=*]

129. L.M.: uh↑ ...(8sec) Eenige iets anders wat hulle oor wil gesels? ((both shake their head no)) is hulle klaar gesels? ((both nod their head)) ek will vir hulle se baie dankie dat hulle so biekie met my gesels het. [*uh↑ ...(8sec) anything else you want to talk to me about? ((both shake their head no)) are you done talking? ((both nod their heads)) I want to thank you very much for chatting with me.*]

End of interview



Appendix 7: Interview four

Background: Two children participated, both 9 years old. The one boy “A.S.” suffers from FAS and the other, a girl, “R.G.”, is a normally developing child. AS was given a car while, RG was provided with a doll. The toys were provided so that they could talk about something visible and physically in the room. The second topic given to them was sport followed by their favourite movies. The purpose of the last two topics was to probe them to talk about something abstract, not in the room, something they could not see or feel at that particular point in time.

1. L.M.: Ok elke een van hulle het speel goed voor hulle ne, A.S. daar is speel goed voor jou ... (2sec)... ek will he julle moet my virtel van die speel goed voor hulle ... (3sec)...*[ok each one of you have toys in front of you, A.S. there is toys in front of you ... (2sec).. I want you to tell me about the toys in front of you ... (3sec)...*
2. R.G.: ek het a poppie en ek hou vanie poppie enie poppie lyk oulik en hul ek hou van die poppie se rok en die poppie se hartjies en ek en speel ek sal speel menie poppie en ek sal vir my oek so ‘n pop koop ... (4sec)... *[I have a dolly and I like the dolly and the dolly looks cute and they I like the dolly’s dress and the dolly’s hair and I and play I will play with the dolly and I will also buy me such a dol ... (4sec)...*
3. L.M.: AS=?
4. A.S.: is ‘n mooi kartjie sal hom speel sal hom koop ... (3sec)... *[it is a pretty car will play will buy ... (3sec)...*
5. L.M.: en? ... (2sec)... *[and? ... (2sec)...*
6. A.S.: sal ek it ry= *[I will the try=]*
7. L.M.: hou jy van die kluere? Virtel my hoe lyk die kartjies ... (5sec)... A.S.? Virtel my van die kartjies ... (8sec)... watter kartjie hou jy die meeste van? ... (3sec)... *[do you like the colours? Tell me how does the cars look ... (5sec)...* A.S.? *Tell me about the cars ... (8sec)...* *which car do you like the most? ... (3sec)...*
8. A.S.: die rooie= *[the red one=]*

9. L.M.: die rooie? ... (6sec)... hoekom? ...(7sec)... *[the red one? ...(6sec)... why? ... (7sec)...]*
10. A.S.: ek ken nie= *[I don't know=]*
11. L.M.: net omdat? ((very slight nod from A.S.)) ... (7sec)... jy hoef nie skaam te wees nie hou jy net van die rooie? Wat van die ander een? Soos die goue eene? ... (3sec)... die eene hier agter? Wat van hom? ...(3sec)... *[just because? ((very slight nod from A.S.)) ... (7sec)... you do not have to be shy do you only like the red one? What about the other one? Like the gold one? ... (3sec)... the one here at the back? What about him? ... (3sec)...]*
12. A.S.: sal vat= *[will take=]*
13. L.M.: uhm? Hou jy van hom ook? Wat hou jy van hom?= *[uhm? Do you also like him? What do you like about him? =]*
14. A.S.: die een die een ((A.S. pointing to two different cars))= *[this one this one ((A.S. pointing to two different cars)) =]*
15. L.M.: ja hoekom hou jy van die rooie? ...(2sec)... *[yes why do you like the red one? ... (2sec)...]*
16. A.S.: wan ek will hom ry= *[because I want to drive him =]*
17. L.M.: will jy hom ry? ((slight nod from A.S.)) wantoe will jy hom ry? ...(7sec)... uhm? ...(6sec)... hou jy van sy color:: hou jy van dai swart daar bo op? ...(5sec)... uhm? ((slight nod from A.S.)) ...(2sec)... is jy 'n biekie skaam? ((slight nod from A.S.)) moet nie skaam wees nie, dis net ons hier ...(6sec)... jy hoef nie skaam te wees nie. A.S. se vir my, wat se hou jy van sport? ((A.S. shakes his head no)) hou jy nie van sport nie? Wat hou jy van? Wat doen jy as jy by die huis kom na skool?= *[do you want to drive him? ((slight nod from A.S.)) where do you want to drive him? ... (7sec)... uhm? ... (6sec)... do you like his colour:: do you like the back on top? ... (5sec)... uhm? ((slight nod from A.S.)) ... (2sec)... are you a bit shy? ((slight nod from A.S.)) do not be shy, it is just us here ... (6sec)... you do not have to be shy. AS*

tell me, do you like sport? ((A.S. shakes his head no)) do you not like sport? What do you like? What do you do when you get home after school?=[

18. A.S.: *speel= [play=]*

19. L.M.: *wat speel jy? ...(4sec)... [what do you play? ...(4sec)...]*

20. A.S.: *kariantjies= [cars=]*

21. L.M.: *net kartjies? Niks sport nie? Nie soccer nie ((A.S. shakes his head no very slightly)) en by die skool? Hardloop jy by die skool? ((slight nod from A.S.)) atlitiek? ((slight nod from A.S.)) uhm? Nou vertel vir my van die atlitiek? Hoe was dit gewees ...(2sec)... wanneer het jy gehardloop? ...(2sec)... was dit lekker?=[just cars? No sports? Not soccer? ((A.S. shakes his head no very slightly)) and at school? Do you run at school? ((Slight nod from A.S.)) athletics? ((slight nod from A.S.)) uhm? Now tell me about the athletics? How was it? ...(2sec)... het did you run? ...(2sec)... was it nice?=[*

22. A.S.: *((slight nod from A.S.)) ja= [((slight nod from A.S.)) yes=]*

23. L.M.: *wat het julle gemaak?=[what did you do?=[*

24. A.S.: *gehardloop= [ran=]*

25. L.M.: *en toe wie het gewen?=[and then who won?=[*

26. A.S.: *eke= [I did=]*

27. L.M.: *het jy gewen? ↑eerste gekom? ↑hai hier is 'n vinnige hardlooper hier by ons hoeveel kinders het saam gehardloop? Is it hoeveel kinders het saam gehardloop?=[did you win? ↑first place? ↑hai we have a fast runner where with us how many children ran with you? Is it how many children ran with you?=[*

28. A.S.: *tien= [ten=]*

29. L.M.: *tien kinders en toe vertel vir my hoe was di hardloop was jy moeg? ((A.S. shakes his head no)) moeg toe jy klaar gehadloop het, nog nie moeg nie ↑hai ... (2sec)... en toe ...(4sec)... [ten children and then tell me how was the run were you*

tired?((A.S. shakes his head no)) tired after you ran, not yet tired ↑hai ...(2sec)... and then ...(4sec)...] `11

30. A.S.: en gerus= [*and rested=*]
31. L.M.: en gerus oek? ((very slight nod from A.S.)) ... (5sec)... RG sê vir my wat se sport hou jy van? Water sport hou jy by die skool van= [*and also rested? ((very slight nod from A.S.)) ...(5sec)... RG tell me, what sport do you like? What sport do you like at school=*]
32. R.G.: netbal=
33. L.M.: is dit lekker? ((R.G. nods her head)) vertel my van netball= [*is it nice? ((R.G. nods her head)) tell me about netball=*]
34. R.G.: ek en ek os was klomp kinders os het gesleep man man a team was in groepe en toe het my vrin, haar naam is Jamie sy't die ball aan my gepass toe shoot ek in en toe het os groep gewen= [*I and I we were a lot of children we played each had a team were in groups and then my friend, her name is Jamie, she passed the ball to me then I shot it in and then our group won=*]
35. L.M.: het hulle groep gewen?= [*did you group win?=*]
36. R.G.: Ja ((R.G. nods her head))= [*yes ((R.G. nods her head))=*]
37. L.M.: was dit lekker gewees?= [*was it nice?=*]
38. R.G.: ja auntie L.M. ((R.G. nods her head))= [*yes aunt L.M. ((R.G. nods her head))=*]
39. L.M.: net sport wat net netball wat hulle speel?= [*just sport that just netball that you play?=*]
40. R.G.: nee daar is nog ane sport soes lang afstand en sprint en ver spring blokke dat ons rond is= [*no there is others sports as well like long run and sprint and long jump blocks that we is round=*]
41. L.M.: ↑ok. Wat geniet jy di meeste?= [*↑ok. What do you enjoy the most?=*]
42. R.G.: netbal ...(3sec)...

43. L.M.: virtel my nog van die sport man= *[tell me more about the sport =]*
44. R.G.: en die seuns het hulle het sprint gedoen en daa is 'n laaitie sy naam sy, hy is in os klas sy naam sy naam is Mikeal hy hy het 'n tweede gevang sy sy vrind kom van agter vir hom kom in haal hy het stokkie race oek gedoen= *[and the boys they did sprint and there was this boy his name his, he is in our class his name his name is Mikeal he he came second his his friend came from the back and over took him he also did relay=]*
45. L.M.: is dit? ((R.G. nods her head)) en toe?=*[is it? ((R.G. nods her head)) and then? =]*
46. R.G.: en toe en toe het die daa was klomp:: mense hulle het betaal om in te kom om in te kom hulle het betaal en die hoof het kartjies uit gegie en brie- brieftjies vir die kinders en hulle het goetes virkoop soes soes luxuries en drink en en en Lace chips en al die goete en die mense het vir hulle kinders geskrie:= *[and then and then there was a lot:: of people they paid to come in to come in they paid and the head master gave out tickets and letters for the children and they sold things like luxuries and drink and and and Lace chips and all that stuff and the people cheered for their children=]*
47. L.M.: uhm was dit nice gewees?=*[uhm was it nice? =]*
48. R.G.: ja ((R.G. nods her head))= *[yes ((R.G. nods her head))=]*
49. L.M.: ↑ok. Virtel vir my wat se films hou julle van? Wat kyk hulle op die TV?=*[↑ok. Tell me what films do you like? What do you watch on TV? =]*
50. R.G.: ek sal hou van poppentjies= *[I like cartoons=]*
51. L.M.: poppentjies? Watter poppentjies?=*[cartoons? What cartoons? =]*
52. R.G.: soes Dora en Barbie en Cinderalla en Mermaids= *[like Dora and Barbie and Cinderella and Mermaids=]*
53. L.M.: Virtel my van 'n film wat jy gekyk het, virtel vir hom= *[tell me about a film that you watched, tell him=]*

54. R.G.: ek het 'n film gekyk op die TV van Dora Dora leer vi vi die vi die mense as die die diere virdwaal en wantoe gaan hulle dan moet hulle sê na sy ma toe gaan en die diere dan loop al die diere saam met Dora da sing Dora vi hulle en en niem vir hulle na hulle se ouers toe waar hulle moet wies= [*I watched a film on TV about Dora Dora teaches for for the for the people if the animals get lost and were they go then they must say go to his mother and the animals then all the animals walk with Dora then Dora sings for them and and take them to their parents where they are supposed to be*]=]
55. L.M.: uhm. Dora is nice ne? ((R.G. nods her head)) virtel jy vir my wat kyk jy op die TV ((L.M. facing A.S.))= [*uhm Dora is nice yes? ((R.G. nods her head)) tell me what do you watch on TV ((L.M. facing A.S.))*]=]
56. A.S.: SpongeBob=
57. L.M.: SpongeBob? Virtel my van SpongeBob ... (3sec)... wat maak SpongeBob? ... (10sec)... wat maak SpongeBob ↑uhm?= [*SpongeBob? Tell me about SpongeBob? ... (3sec)... what does SpongeBob do? ... (10sec)... what does SpongeBob do ↑uhn?*]=]
58. A.S.: ek kan nie sê nie ((A.S. slightly shakes his head no))= [*I cannot say ((A.S. slightly shakes his head no))*]=]
59. L.M.: kan jy nie sê nie ((A.S. slightly shakes his head no)) kan jy nie onthou nie ((A.S. slightly shakes his head no)) wat se ander goed kyk jy? Dragon Ball Z? ((A.S. nods his head slightly)) wat gebeur by Dragon Ball Z? virtel vir my... (3sec).. ↑uhm? ... (2sec)... [*can you not say ((A.S. slightly shakes his head no)) can you not remember? ((A.S. slightly shakes his head no)) what other things do you watch? Dragon Ball Z? ((A.S. nods his head slightly)) what happens in Dragon Ball Z? tell me ... (3sec)... ↑uhm? ... (2sec)...*]
60. A.S.: hy slat die mense en da vlieg hy= [*he hits the people then he flies*]=]
61. L.M.: ↑uhm en dan? ... (2sec)... ek het nog nooit vir Dragon Ball Z gekyk nie so jy moet nou vir my virtel wat daar gebeur ... (5sec)... hoekom hou jy van Dragon Ball Z? ... (3sec)... want hulle fight? ((A.S. nods his head slightly)) en wrestling kyk jy

wrestling ook? ((A.S. nods his head slightly)) wat gebuer by wrestling?= [*uhm and then? ... (2sec)... I have never watched Dragon Ball Z so you have to tell me what happens there ... (5sec)... why do you like Dragon Ball Z? ... (3sec)... because they fight? ((A.S. nods his head slightly)) and wrestling do you also watch wrestling? ((A.S. nods his head slightly)) what happens with wrestling? =]*

62. A.S.: hulle fight= [*they fight =]*

63. L.M.: wie's jo wie's jo beste wrestler? ... (2sec)... [*who's your who's your best wrestler? ... (2sec)...]*

64. A.S.: John Cena=

65. L.M.: John Cena? ((A.S. nods his head slightly)) hoekom hou jy van John Cena? ... (3sec)... *uhm?* ... (4sec)... [*John Cena ((A.S. nods his head slightly)) why do you like John Cena? ... (3sec)... uhm? ... (4sec)...]*

66. A.S.: want hy will fight= [*because he wants to fight =]*

67. L.M.: fight hy nice? ... (3sec)... virtel vir haar wat hou jy van John Cena kyk vir haar ... (5sec)... will jy nie vir haar virtel nie? ((A.S. shakes his head no)) hoekom nie? ... (2sec)... is jy skaam? ((A.S. slightly shakes his head no then nods his head)) jy hoef nie skaam te wees nie A.S. *ne ek will maar net hoor hoe praat jy ... (5sec)... dis al ... (15sec)... wie het laas saam met John Cena gefight? ... (4sec)... [does he fight nice? ... (3sec)... tell her what you like about John Cena look at her ... (5sec)... don't you want to tell her? ((A.S. shakes his head no)) why not? ... (2sec)... are you shy? ((A.S. slightly shakes his head no then nods his head)) you do not need to be shy A.S. *ne I just want to hear how you talk ... (5sec)... that is all ... (15sec)... who did John Cena fight against the last time? ... (4sec)...]**

68. A.S.: Roman Range=

69. L.M.: Wie?= [*who? =]*

70. A.S.: Roman Range=

71. L.M.: Roman Range. En toe? Wie het gewen?= [*Roman Range. And then? Who won? =]*

72. A.S.: Roman Range=

73. L.M.: hoekom het Roman Range gewen? Jy hou dan van John Cena? ...(4sec)... is jy kwaad omdat Roman Range gewen het? ((A.S. slightly nods his head)) hoekom? ...(4sec)... ↑uhm? ... (7sec)... hoekom is jy kwaad omdat Roman Range gewen het? ... (8sec)... kan jy nie onthou nie? ((A.S. shakes his head no)) ... (9sec)... is dit al wat jy kyk op dit TV? ((A.S. nods his head slightly)) ↑uhm?= [why did Roman Range win? You then like John Cena? ...(4sec)... are you angry because Roman Range won? ((A.S. slightly nods his head)) why? ...(4sec)... ↑uhm? ...(7sec)... why are you angry about the fact that Roman Range won? ...(8sec)... don't you remember? ((A.S. shakes his head no)) ...(9sec)... is that all you watch on TV? ((A.S. nods his head slightly)) ↑uhm? =]

74. A.S.: ja ((A.S. nods his head slightly))= [Yes ((A.S. nods his head slightly))=]

75. L.M.: niks anders nie? ((A.S. shakes his head no))(11sec)... dankie dat hulle twee met my gesels het eenige iets wat hulle vir my nog will sê wat julle nog will praat oor? ((both shake their heads no)) baie dankie hulle tweetjies. [nothing else? ((A.S. shakes his head no)) ... (11sec)... thank you for chatting with me, anything else you want to say to me that you want to talk about? ((both shake their heads no)) thank you very much]

End of interview

Appendix 8: Interview five

Background: Two children participated. The one boy, “J.A.” (11 years old) suffers from FAS and the other, a girl, “O.K.” (10 years old), is a normally developing child. J.A. was given a car while O.K. was provided with a doll. The toys were provided so that they could talk about something visible and physically in the room. The second topic given to them was sport followed by their favourite movies. The purpose of the last two topics was to probe them to talk about something abstract, not in the room, something they could not see or feel at that particular point in time.

1. L.M.: daar is speel goed voor julle, ek will hê julle moet praat vir my oor die speel goed.
J.A. will jy begin? Jy ken mos die drill.... (6sec)... ↑J.A. vertel my van die kartjies
...(2sec)... *[there is toys in front of you, I want you to talk about the toys, J.A. do
you want to start? You know what to do(6sec)... ↑J.A. tell me about the cars
...(2sec)...]*
2. J.A.: die kartjies is baie vinnig en uhm mooi colour en ...(1sec)... baie ... (1sec)...
mooi wielle en hoog en laag ...(3sec)... en ... (2sec)... dis swat klere op en geel=
*[the cars is very fast and uhm pretty colour and ...(1sec)... very ...(1sec)... pretty
wheels and high and low ...(3sec)... and ...(2sec)... It is black colour on the
yellow=]*
3. L.M.: uhm? ... (3sec)... watter kartjie sal jy vir jou wil hê? ...(3sec)... *[uhm? ... (3sec)...
which car would you like to have? ... (3sec)...]*
4. J.A.: die een ((J.A. picks up the red car))= *[this one ((J.A. picks up the red car))=]*
5. L.M.: hoekom dai ene?= *[why that one? =]*
6. J.A.: dis my favourite colour= *[it is my favourite colour =]*
7. L.M.: jou favourite colour? ((J.A. nods his head slightly)) watter een is die vinnigste?
Weet jy?... (5sec)... *[your favourite colour? ((J.A. nods his head slightly)) which
one is the fastest? Do you know ... (5sec)...]*
8. J.A.: die ene ((J.A. turns the yellow car))= *[this one ((J.A. turns the yellow car))=]*

9. L.M.: die geeltjie? ((J.A. nods his head)) is hy vinniger? ((J.A. nods his head)) will jy nie 'n vinniger kar hê nie? ((J.A. shakes his head no)) net a mooi ene? ((J.A. nods his head)) ↑ooh ...(2sec)... ↑praat nog van die kartjies ...(5sec)... [*the yellow one? ((J.A. nods his head)) is it faster? ((J.A. nods his head)) don't you want the faster car? ((J.A. shakes his head no)) just a pretty one? ((J.A. nods his head)) ↑ooh ...(2sec)... ↑talk more about the cars ...(5sec)...]*
10. J.A.: hulle dice baie en ...(2sec)... spin baie ...(3sec).. hulle dice baie oo karre ...(2sec)... fight oo karre ...(3sec)... steel mens se karre= [*they dice a lot and ...(2sec)... spin a lot ...(3sec)... they dice a lot over cars ...(2sec)... fight over cars ...(3sec)... steal a person's cars=]*
11. L.M.: uhm...(6sec)... O.K., virtel vir ons van dai pop daar voor jou ((facing O.K.))= [*uhm ...(6sec)... O.K., tell us about that doll in front of you ((facing O.K.))=]*
12. O.K.: ek hou van die pop dis mooi kleur vol dis a pragtige pop ek hou van met poppe speel dis mooi vi meisiekinders om met poppe te speel ...(3sec)... [*I like the doll it is a pretty colourful it is a pretty doll I like playing with doll it is sweet for girls to play with dolls ...(3sec)...]*
13. L.M.: wat hou jy van di pop nog? ...(9sec)... wil jy met kartjies ook speel? ((O.K. shakes her head no)) ↑uhm? Hoekom nie? ((O.K. shakes her head no)) ...(3sec)... speel meisiekindes nie met kartjies nie?= [*what else do you like about the doll? ...(9sec)... do you want to play with cars aswell? ((O.K. shakes her head no)) ↑uhm? Why not? ((O.K. shakes her head no)) ...(3sec)... does girls not play with cars?=]*
14. O.K.: ((O.K. nods her head)) hulle kan as hulle wil= [*((O.K. nods her head)) they can if they want to=]*
15. L.M.: as hulle wil? ...(2sec).. en jy wil nie? ((O.K. shakes her head no)) wat virkies jy om mee te speel by die huis?= [*if they want to? ...(2sec)... and you don't want to? ((O.K. shakes her head no)) what do you prefer to play with at home?=]*
16. O.K.: 'n pop = [*a doll=]*

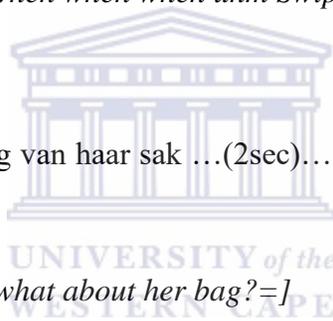
17. L.M.: ‘n pop? ((O.K. nods her head)) ... (2sec).. dan wat maak jy met die pop? Trek jy dit ander klere aan? ((O.K. nods her head)) Kom gesels met my? Wat is jou pop se naam? = [a doll? ((O.K. nods her head)) ... (2sec)... then what do you do with the doll? Do you change its clothes? ((O.K. nods her head)) come chat with me? What is your doll's name? =]
18. O.K.: ienige naam wat jy die pop wil gie= [any name you want to give the doll=]
19. L.M.: eenige naam? ((O.K. nods her head))= [any name? ((O.K. nods her head))=]
20. O.K.: wat jy die pop wil gie dan kan jy= [what you want to give the doll you can=]
21. L.M.: so het jou pop nie a naam nie? ((O.K. shakes her head no)) watter kleur is jou pop by die huis? = [so does your doll not have a name? ((O.K. shakes her head no)) what colour is your doll at home? =]
22. O.K.: wit, dis ‘n teddy bear= [white, it is a teddy bear=]
23. L.M.: is dit ‘n teddy bear? ((O.K. nods her head)) ok ... (4sec)... en jy J.A.? Wat het jy by die huis? ... (2sec)... [is it a teddy bear? ((O.K. nods her head)) ok ... (4sec)... and you JA? What do you have at home? ... (2sec)...]
24. J.A.: klomp kartjies ... (3sec)... [a lot of cars ... (3sec)...]
25. L.M.: watter een is jou favourite? = [which one is your favourite? =]
26. J.A.: die Ferrari eene= [the Ferrari one=]
27. L.M.: die Ferrari? ((J.A. nods his head)) hoekom? ... (2sec)... [the Ferrari? ((J.A. nods his head)) why? ... (2sec)...]
28. J.A.: wan ... (2sec)... dit kan al my kartjies weg ry by die huis = [because ... (2sec).. it can drive away all my cars at home =]
29. L.M.: is dit? ((J.A. nods his head)) watter kleur is hy? = [is it? ((J.A. nods his head)) what colour is it? =]
30. J.A.: rooi= [red=]

31. L.M.: is hy rooi? ((J.A. nods his head)) soos al die ander Ferraries? ((J.A. nods his head)) kry 'n mens net rooi Ferarries? ((J.A. shakes his head no))= [*is it red? ((J.A. nods his head)) does one only get red Ferrari's? ((J.A. shake his head no))=]*
32. J.A.: swat oek= [*black also=]*
33. L.M.: ↑hhm? En watter nog? ...(2sec)... [↑*hhm? And what more? ...(2sec)...]*
34. J.A.: en ...(3sec).. bruin ligte bruin = [*and ...(3sec)... brown light brown=]*
35. L.M.: hhm ...(2sec)...
36. J.A.: en ... (7sec)... [*and(7sec)....]*
37. L.M.: en geel? ((J.A. nods his head))= [*and yellow? ((J.A. nods his head))=]*
38. J.A.: ken geel oek= [*know yellow also=]*
39. L.M.: en wit? ((J.A. nods his head)) ... (2sec)... [*and white? ((J.A. nods his head)) ... (2sec)...]*
40. J.A.: en wit ... (1sec)... met swat wielle ...(7sec)... [*and white ... (1sec)... with black wheels ... (7sec)....]*
41. L.M.: praat vir my oor sport wat se sport doen julle by die skool?=*[tell me about sport what sport do you do at school?]=]*
42. J.A.: doenie sport by die skool nie ((J.A. shakes his head no and smiles))= [*don't do sport at school ((J.A. shakes his head no and smiles))=]*
43. L.M.: ↑hoekom nie? Wat se sport hou jy van?=*[↑why not? What sport do you like?]=]*
44. J.A.: socca=
45. L.M.: soccer? ((J.A. nods his head)) hoekom? ...(2sec)... [*soccer? ((J.A. nods his head)) why? ... (2sec)...]*
46. J.A.: dis baie lekker om in socca te speel= [*it is very nice to play in soccer=]*

47. L.M.: hhm ...(8sec)... wat se kyk jy sport op die TV? ((J.A. nods his head)) wat se sport?=
[hhm ...(8sec)...what do you watch sport on TV? ((J.A. nods his head)) what sport?=?]
48. J.A.: socca=
49. L.M.: ah? Nou wat se sport wat se game het jy laste gekyk? ...(2sec)...
[ah? Now what sport what was the last game you watched? ...(2sec)...]
50. J.A.: Barcelona en ...(3sec)... Real Madrid=
[Barcelona and ...(3sec)... Read Madrid=]
51. L.M.: virtel my van die game? Hoe was dit? Wie het gewen?=
[tell me about the game? How was it? Who won?=?]
52. J.A.: Barcelona het gewen ...(3sec)... en Real Madrid het het viloor teen Barcelona=
[Barcelona won ...(3sec)... and Real Madrid did did lose against Barcelona=]
53. L.M.: ↑uhm? ...(3sec)... hoeveel goals?=
[↑uhm? ...(3sec)... how many goals?=?]
54. J.A.: goals is ...(6sec)... ses=
[goals is ...(6sec)... six=]
55. L.M.: ses goals? ((J.A. nods his head)) ↑o::hk ...(3sec)... virtel jy vir my van jou ((L.M. facing O.K.))
 wat se sport hou jy van? Doen jy sport by die skool?=
[six goals? ((J.A. nods his head)) ↑o::hk ...(3sec)... tell me about your ((L.M. facing O.K.)) what sport do you like? Do you do sport at school?=?]
56. O.K.: nie uintlik nie maa die skool werk nog daar aan juffrou het nog nie vir os gevra nie van die ah hulle het os geborte papie gevra my ma het nog nie, my ma het myne gekry maa nog nie a brief uit gestuur nie maar ek doen gereeld dans=
[not really but the school is still working on it the teacher has not asked us about it ah they asked our birth certificates my mother has not, my mother did find mine but has not sent a letter out yet but I dance regularly=]
57. L.M.: dans? ((O.K. nods her head)) wat dans julle? = dance? ((O.K. nods her head)) what do you dance?=
[do you dance?=?]
58. O.K.: qwito =

59. L.M.: ↑uhm?=
 60. O.K.: spiritual dancing=
 61. L.M.: virtel my van jou dans = *[tell me about your dance=]*
 62. O.K.: is lekker= *[it's nice=]*
 63. L.M.: geniet jy dit? ((O.K. nods her head)) is julle 'n groep? ((O.K. nods her head)) virtel my van julle groep. Wie is almal in die groep in?=
[do you enjoy it? ((O.K. nods her head)) are you a group? ((O.K. nods her head)) tell me about the group. Who is in the group?]=]
 64. O.K.: is it en wiet nie hoeveel is in die groep nie dalk is ons 30 29=
[it is and don't know how many is in the group maybe we are 30 29=]
 65. L.M.: ↑uhm? Groot groep ((O.K. nods her head)) virtel my van wie wie onthou jy ini groep wat jy kan aan dink nou? Virtel my van dai persone ...(9sec)... uhm? ...(7sec)... sê gou vir my doen jy altetiek? ((O.K. shakes her head no)) doen jy nie atletiek nie? Hoekom nie? =
[↑uhm? Big group ((O.K. nods her head)) tell me who do you remember in the group that you can think about now? Tell me about that people ...(9sec)... uhm? ...(7sec).... Tell me do you do athletics? ((O.K. shakes her head no)) don't you participate in athletics? Why not?]=]
 66. O.K.: ek hou nie van hardloepie= *[I do not like running=]*
 67. L.M.: en hoog spring? ((O.K. shakes her head no)) en ver spring? ((O.K. shakes her head no)) ↑uhm? Doen jy nie atletiek nie ((O.K. shakes her head no)) en wat nog aah kyk jy sport op die TV? ((O.K. shakes her head no)) nie vir jou nie? ((O.K. shakes her head no)) wat kyk jy op die TV? Vitel vir my=
[and high jump? ((O.K. shakes her head no)) and long jump? ((O.K. shakes her head no)) ↑uhm? Don't you participate in athletics? ((O.K. shakes her head no)) and what else aah do you watch sport on the TV? ((O.K. shakes her head no)) not for you? ((O.K. shakes her head no)) what do you watch on TV? Tell me=]
 68. O.K.: popentjies= *[cartoons=]*

69. L.M.: uhm?=
 70. O.K.: my ma het vi my 'n klomp cartoons gekoep oek= [*my mother also bought me a lot of cartoons =*]
 71. L.M.: is dit? Nou virtel my van 'n cartoon. Wat se film het jy laste gekyk= [*is it? Now tell me about a cartoon. What film did you watch last=*]
 72. O.K.: vi Dora= [*for Dora=*]
 73. L.M.: vir Dora? Wat maak Dora virtel vir my ek kyk nie Dora nie jy moet vir my virdeidlik wat maak Dora= [*Dora? What does Dora do tell me I don't watch Dora you have to explain to me what Dora does=*]
 74. O.K.: hulle soek goete as as as as uhm Swiper die goete af vat dan soek hulle it= [*they look for things when when when when uhm Swiper takes the stuff they look for it=*]
 75. L.M.: uhm?=
 76. O.K.: en van die van die bag van haar sak ...(2sec)...[*and about the about the bag about her bag ...(2sec)...*]
 77. L.M.: wat van haar sak? = [*what about her bag?=*]
 78. O.K.: haa sak help haa goetes soek = [*her bag helps her look for stuff=*]
 79. L.M.: uhm=
 80. O.K.: sy dra altyd haar sak op haar= [*she always wears her bag=*]
 81. L.M.: ↑ok ...(2sec)... J.A.? Virtel my van jou film. Wat se films hou jy van?= [*↑ok ...(2sec)...J.A.? Tell me about your film. What films do you like?=*]
 82. J.A.: Fast and the Furious=
 83. L.M.: uhm? Wat gebeur daar? = [*uhm? What happens there?=*]
 84. J.A.: hulle hou hulle dice baie ...(1sec)... en spin ...(2sec)... en ...(2sec)... highjack hulle karre ...(1sec)... en maak karre reg= [*they like they dice a lot ...(1sec)... and spin ...(2sec)... and ...(2sec)... they highjack cars ...(1sec)... and fix cars=*]



85. L.M.: ↑uhm ...(4sec)... wat kan jy my nog virtel? ...(14sec)... en wat se wat kyk jy op die TV? Kyk jy Dragon Ball Z? speel dit nog? ...(2sec)...[↑uhm ...(4sec)...*what else can you tell me? ...(14sec)... and what what do you watch on TV? Do you watch Dragon Ball Z? does it still play? ...(2sec)...*]
86. J.A.: ((J.A. shakes his head no)) noggie = [((J.A. shakes his head no)) *not yet*=]
87. L.M.: maar ken jy vir Dragon Ball Z ((J.A. nods his head)) wat gebeur alis daar?=*[but do you know Dragon Ball Z ((J.A. nods his head)) what happens there?]=*
88. J.A.: hulle fight=*[they fight=]*
89. L.M.: wie fight?=*[who fights?]=*
90. J.A.: Vegeta (en vegeta en Goku [*Vegeta (and Vegeta and Goku]*
91. L.M.: ons het nog nie vir) Dragon Ball Z gekyk nie so jy moet vir ons se wat gaan daar aan ...(3sec)... [*we have not watch Dragon Ball Z so you have to tell us what happens there ...(3sec)...*]
92. J.A.: en Trillan ...(4sec)... en ... (8sec)... [*and Trillan ...(4sec)... and ...(8sec)...*]
93. L.M.: ons luister wat gebeur nog daar? ...(3sec)...[*we are listening what else happen there? ...(3sec)...*]
94. J.A.: hulle gie meka spirits Balls uit = [*they give each other spirits ball*=]
95. L.M.: uhm:=[
96. J.A.: ka-me-ha-me-ha's ...(4sec)...
97. L.M.: wies jou favourite? ...(2sec)...[*who is your favourite? ...(2sec)...*]
98. J.A.: Goku=[
99. L.M.: Goku? Hoekom? ...(2sec)... [*Goku? Why? ...(2sec)...*]
100. J.A.: Goku is die beste van hulle almal en stekste niemand kan hom defeat daar ini -ini aan meka dan raak Vegeta kwaad dan fight hulle twie = [*Goku is the best of them*

all and the strongest nobody can defeat him then Vegeta gets angry then the two of them fight=]

101. L.M.: ↑uhm? ((J.A. nods his head)) ...(7sec)... en wat nog? ...(11sec)... O.K.? ...(3sec)... wat se goed wat speel j by di huis? As jy van die skool af kom in die middag, wat doen jy by die huis?=*[↑uhm? ((J.A. nods his head)) ...(7sec)...and what else? ...(11sec)... O.K.? ...(3sec)... what stuff, what do you play with at home? if you came from school in the afternoon, what do you do at home?]=]*

102. O.K.: dan maak ek skoon=*[then I clean=]*

103. L.M.: uhm: ...(2sec)...

104. O.K.: dan was ek my hemp en sokkies uit ...(2sec)... en da da speel ek 'n tydtjie en da lê ek. Da speel ek 'n biekie skip tou en soe da kom lee ek en da speel ek met my pop.=*[then I wash my school clothes ...(2sec)... and then then I play a bit and then I lay down. Then I play with the jumping rope and so then I do homework and then I play with my doll=]*

105. L.M.: uhm ...(4sec)... wat het jy met die pop se hare gemaak nou?=*[uhm ...(4sec)... what did you do with the doll's hare now?]=]*

106. O.K.: ek het it gevleg=*[I plaited it=]*

107. L.M.: en toe?=*[and then?]*

108. O.K.: toe maak ek dit wee los=*[then I loosened it again=]*

109. L.M.: ↑hoekom? ((O.K. shrugs her shoulders as to say "I don't know")) hou jy van vleg? ((O.K. nods her head)) moet nie skaam wees nie, praat met my. Het jy eenige vriende?=*[↑ why? ((O.K. shrugs her shoulders as to say "I don't know")) do you like plaiting? ((O.K. nods her head)) don't be shy, talk to me. Do you have any friends?]=]*

((Due to O.K. becoming emotional, and some minor counselling had to take place, the next two minutes of the interview will not be transcribed))

110. L.M.: J.A.? Het jy eenige vriende? Wat is hulle name?=*[J.A.? Do you have any friends? What are their names?]=*
111. J.A.: Brayton en Kagin and Wendell en HP ...(2sec)... *[Brayton and Kagin and Wendell and HP ...(2sec)...]*
112. L.M.: hou jy van hulle?=*[do you like them?]*
113. J.A.: Keanu ((J.A. nods his head)) = *[Keanu ((J.A. nods his head)) =]*
114. L.M.: speel hulle altyd saam? ((J.A. nods his head)) wat speel hulle? = *[do you always play together? ((J.A. nods his head)) what do you play?]=*
115. J.A.: os speel in die pad in fight fight en somtyds speel os rubdie tien die middle pad=*[we play in the road fight fight and sometimes we play rugby against the middle road=]*
116. L.M.: wat speel julle?=*[what do you play?]=*
117. J.A.: rubdie ...(2sec)... en ...(3sec)... dan speel os me mekaa ... (3sec) ... da maak os touch dan speel os touch ini pad ...(2sec)... en ((J.A. coughs)) ...(5sec)... da speel ons mekaa met die condom guntjies da skiet ons mekaa = *[rugby ...(2sec)... and ...(3sec)... then we play with eachother ..(3sec)... then we make touch then we play touch in the road ...(2sec)... and ((J.A. coughs)) ...(5sec)... then we play with each other with the condom guns then we shoot each other=]*
118. L.M.: wat wat doen julle? = *[what what do you do?]*
119. J.A.: ((J.A. smiles)) met die condom guns da skiet ons mekaa. = *[((J.A. smiles)) with the condom guns then we shoot each other=]*
120. L.M.: ((L.M. laughs)) wat dis daai virduidlik vir my wat is daai, wag gou wag gou back up back up wat is daai?=*[((L.M. laughs)) what is that? Explain to me what that is, wait wait back up back up what is that?]=*
121. J.A.: is die is die vat a rolltjie en dan maak jy die condom oep = *[it is the it is the take a roll and then you open the condom=]*

122. L.M.: ↑uhm=
123. J.A.: dan slide jy dit oor die toilet rolltjie= [*then you slide it over the toilet roll=*]
124. L.M.: ↑uhm=
125. J.A.: dan sit jy 'n boltjie dan trek jy dit net so ((J.A. shows what to do)) dan skiet dit= [*then you place a small ball then you just pull it like this ((J.A. shows what to do)) then you shoot it=*]
126. L.M.: 'n condom gun? ((J.A. nods his head)) ↑hai ek ken nie die goed ni ((J.A. giggles)) ... (4sec)... waar kry julle die condoms? ... (3sec)... [*a condom gun? ((J.A. nods his head)) ↑hai I don't know these things ((J.A. giggles)) ... (4sec)... where do you get the condoms? ... (3sec)...*]
127. J.A.: hul- hulle vat dit by die library = [*the- they take it at the library=*]
128. L.M.: ↑ha::i ((L.M. laughs and J.A. giggles)) maak jy ook condom gunne? ((J.A. nods his head)) oh ↑ok: eenige iets wat jy vir my wil se besides condom gunne ((L.M. giggles)) ... (4sec)... [*↑ha::i ((L.M. laughs and J.A. giggles)) do you also make condom guns? ((J.A. nods his head)) oh ↑ok: anything else you want to tell me beside condom guns? ((L.M. giggles)) ... (4sec)...*]
129. J.A.: en da speel os baie kartjies ini pad in en da bou ons huisies = [*and then we play with cars a lot in the road then we build small houses =*]
130. L.M.: uhm=
131. J.A.: dan kom show die groot laatjies os se game op dan skop hulle os se huisie om= [*then the older boys come and interrupt us and break our small houses=*]
132. L.M.: ↑hai hulle is lelik = [*↑hai they are not nice=*]
133. J.A.: dan los os hulle dan se os os gat hulle op 'n anr tyd kry= [*then we leave them and tell them we will get them again=*]
134. L.M.: uhm=

135. J.A.: dan speel os aan dan dan bou os die huisie oo da ry os na daai dag toe bou os waantjies toe ry os met die waantjies toe bou os vir os groot huise in die pad op die sypadtjie en da park os ose waantjies daa in = *[then we continue playing then then we rebuild the houses then we drive and that day we built wagons then we drove the wagons then we build bigger houses in the road and on the pavement and then we parked our wagons in it=]*
136. L.M.: ok. ...(4sec)... ek wil vir julle altwee dankie sê dat julle met my gesels het nê. Julle was groot sport dankie J.A. dankie O.K. *[ok ...(4sec)... I want to thank the two of you for chatting with me. The two of you were great sport thank you J.A. thank you O.K.]*

End of interview



Appendix 9: Interview six

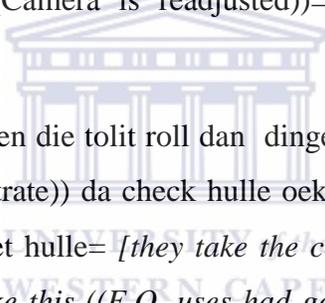
Background: Two children participated. The one boy “E.O.” (11 years old) suffers from FAS and the other, a girl, “Z.F.” (9 years old), is a normally developing child. E.O. was given a car while Z.F. was provided with a doll. The toys were provided so that they could talk about something visible and physically in the room. The second topic given to them was sport followed by their favourite movies. The purpose of the last two topics was to probe them to talk about something abstract, not in the room, something they could not see or feel at that particular point in time.

1. L.M.: ok, boys first. Vitel my van dai kartjie ...(4sec)... uhm watter kartjie hou jy van? ...(3sec)... ((E.O. points to the yellow car)) hoekom? ...(2sec)... [*ok, boys first. Tell me about that car ...(4sec)... uhm which car do you like? ...(3sec)... ((E.O. points to the yellow car)) why? ...(2sec)...*]
2. E.O.: wan lyk kwaai= [*because look amazing=*]
3. L.M.: lyk hy kwaai? ((E.O. nods his head)) wat se kluer is hy? ...(2sec)... [*does it look amazing? ((E.O. nods his head)) what colour is it? ...(2sec)...*]
4. E.O.: geel = [*yellow=*]
5. L.M.: virduidelik vir my hoe lyk die kartjie ...(6sec)... moet nie skaam wees nie, kom ...(2sec)... nou hoekom gaan hoekom hou jy van die geel kartjie? ...(4sec)... [*explain to me how the car looks ...(6sec)... don't be shy, come ...(2sec)... now why do you like the yellow car? ...(4sec)...*]
6. E.O.: wan uhm lyk mooi= [*because uhm look pretty=*]
7. L.M.: uhm? ((E.O. nods his head)) en die ander karre? Watter een is die vinnigste? ...(3sec)... die geele ((E.O. nods his head)) is jy seker? ((E.O. nods his head)) ...(2sec)... hoeveel kartjies het jy by die huis? ((E.O. shakes his head no)) het jy nie kartjies by die huis nie? ((E.O. shakes his head no)) nou met wat speel jy met?=[*((E.O. nods his head)) and the other cars? Which one is the fastest? ...(3sec)... the yellow one ((E.O. nods his head)) are you sure? ((E.O. nods his head)) ...(2sec)... how many cars do you have at home? ((E.O. shakes his head no)) don't you have cars at home? ((E.O. shakes his head no)) now what do you play with?=*]**

8. E.O.: ek speel men my vrine= [*I play with my friends*=]
9. L.M.: net met jou vriende? ((E.O. nods his head)) ↑ok ...(5sec)... Z.F. vertel my van daai pop daar by jou ...(2sec)... [*just with your friends? ((E.O. nods his head)) ↑ok ...(5sec)... Z.F. tell me about that doll you have there ...(2sec)...*]
10. Z.F.: die pop lyk mooi ...(2sec)... die pop het net net een pompom op en die ander het nie ...(1sec)... ek hou baie van die skoene= [*the doll looks pretty ...(2sec)... the doll just just just have one pompom and not the other one ...(1sec)... I really like the shoes =*]
11. L.M.: mooi skoene? ((Z.F. nods her head)) is dit al wat jy wil sê oor die pop? ((Z.F. nods her head)) julle twee is nie baie geselsig vandag met my nie. ((facing E.O.)) vertel my van van sport wat se sport hou jy van= [*pretty shoes? ((Z.F. nods her head)) is that all you want to say about the doll? ((Z.F. nods her head)) the two of you are not very chatty with me today ((Facing E.O.)) tell me about sport what sport do you like?*]
12. E.O.: uhm die= [*uhm the*=]
13. L.M.: speel jy rugby? ((E.O. nods his head)) vertel my van die laaste game wat jy gespeel het, wie het gewen?= [*do you play rugby? ((E.O. nods his head)) tell me about the last game that you played, who won?=*]**
14. E.O.: ((moves around in his chair and smiles)) os= [*((moves around in his chair and smiles)) we*=]
15. L.M.: het julle gewen? en toe? Vertel my hoe hoeveel het julle gewen wat wat was die score gewees? ...(2sec)... [*did you win? And then? Tell me how much you won what what was the last score? ...(2sec)...*]
16. E.O.: ‘n was uhm ...(3sec) was 2-5= [*a was uhm ...(3sec)... was 2-5*=]
17. L.M.: 2-5 ↑uhm ...(2sec)... vertel vir my van die game? Hoe was dit gewees? Het jy seer gekry, was dit lekker?= [*2-5 ↑uhm ...(2sec)...tell me about the game? How was it? Did you get hurt, was it nice?=*]**

18. E.O.: was lekker= [*was nice*=]
19. L.M.: uhm en dan? ...(2sec)... wat se sport hou jy van kyk? ...(2sec)... kyk jy sport op die TV? ((E.O. nods his head)) wat kyk jy? ...(3sec)... [*uhm and then?... (2sec)... what sport do you like to watch? ... (2sec)... do you watch sport on TV? ((E.O. nods his head)) what do you watch? ... (3sec)...*]
20. E.O.: ek kyk uhm socca= [*I watch uhm soccer*=]
21. L.M.: soccer en wat nog? Net soccer ((E.O. nods his head)) wat se game het jy laaste gekyk? ...(2sec)... ha?=*[soccer and what else? Just soccer ((E.O. nods his head)) what was the last game watched? ... (2sec)... ha?]*
22. E.O.: rubdie=
23. L.M.: rugby? Ok wat se game het jy gekyk? Wat se rugby game het jy gekyk? Wie het gespeel? ...(2sec)... [*rugby? Ok which game did you watch? What rugby game did you watch? Who played? ... (2sec)...*]
24. E.O.: Suid Afrika en ...(2sec).. Engeland = [*South Africa and ... (2sec)... England*=]
25. L.M.: uhm ((E.O. nods his head)) wie het gewen? ((E.O. mumbles)) biekie harder sodat die kamara jou kan hoor= [*uhm ((E.O. nods his head)) who won? ((E.O. mumble)) a little bit louder so that we can hear you on the camera*=]
26. E.O.: Afrika= [*Africa*=]
27. L.M.: Suid Afrika gewen? ((E.O. nods his head)) ↑ok hoeveel het hulle gewen? ...(12sec)... het net Suid Afrika gewen? ...(3sec)... uhm? ... (2sec)... wie het nog gespeel? ...(15sec)... kom gesels E.O. praat met my ...(6sec)... kom ons praat eers 'n biekie met Z.F. Z.F.?=*[South Africa won? ((E.O. nods his head)) ↑ok what were their winning points? ... (12sec)... was South Africa the only team that won? ... (3sec)... uhm? ... (2sec)... who else played? ... (15sec)... come chat E.O. talk to me ... (6sec)... let us talk to Z.F. for a bit. Z.F.?]*
28. Z.F.: my favourite sport is hardloop= [*my favourite sport is running*=]
29. L.M.: uhm=

30. Z.F.: die laste sport wat os teen Blue Downs gehardloep het en hulle het gewen. Os het maar net hui meeste van die kinders het eerste gekom van os= [*the last sport that we ran agains Blue Downs they won. We only did hui most of our children came first=*]
31. L.M.: uhm? ((Z.F. nods her head)) so julle het uintlik gewen? ((Z.F. nods her head)) wat se sport hou jy nog van? ...(2sec)... [*uhm? ((Z.F. nods her head)) so you actually won? ((Z.F. nods her head)) what other sport do you like? ...(2sec)...*]
32. Z.F.: meestal ...(3sec)...my regte sport is hardloop ek is nie nog much oor netball en ander goetes nie= [*mostly ...(3sec)... my real sport is running I don't really care aboute netball and other things=*]
33. L.M.: uhm hoekom nie? ((Z.F. shakes her head no))= [*uhm why not? ((Z.F. shakes her head no))=*]
34. Z.F.: my pa het my net geleer ek moet hardloep, my pa was 'n atleet= [*my father taught me I must run, my father was an athlete=*]
35. L.M.: is dit? Was jou pa 'n atleet? ((Z.F. nods her head)) ok↑ en hou jy van dit? ((Z.F. nods her head)) kan jy vining hardloop? ((Z.F. smiles and nods her head)) hoe vinning?= [*is it? Was your father an athlee? ((Z.F. nods her head)) ok↑ and do you like it? ((Z.F. nods her head)) can you run fast? ((Z.F. smiles and nods her head)) how fast?=*]
36. Z.F.: baie ((everyone laughs)) [*very ((everyone laughs))*]
37. L.M.: wen jy baie? = ((Z.F. nods her head)) [*do you win a lot?= ((Z.F. nods her head))*]
38. Z.F.: meestal by die huis= [*mostly at home=*]
39. L.M.: uhm? ((Z.F. nods her head)) wat speel jy by die huis? ((Z.F. nods her head)) ...(2sec)... wat se games speel jy by die huis?= [*uhm? ((Z.F. nods her head)) what do you play at home? ((Z.F. nods her head)) ...(2sec)... what games do you play at home?=*]

40. Z.F.: stokkie race en hardloop= [*relay and run*=]
41. L.M.: uhm?=

42. Z.F.: en dan kors en nikkies= [*and then kors and nikkies*=]
43. L.M.: ek het al gehoor van 'n 'n condom gun= [*I heard about a condom gun*=]
44. Z.F.: die kinders maak dai in ons pad in Zimmiri straat= [*the children makes it in our street in Zimmiri street*=]
45. L.M.: nou hoe maak 'n mens so 'n ding?= [*now how does one make such a thing?*=]
46. Z.F.: ((Z.F. shakes her head no)) ek (wietie [(Z.F. shakes her head no)) I (don't know])
47. E.O.: hulle vat die) condom= [*they take the) condom*=]
48. L.M.: wag wag wag ok ((Camera is readjusted))= [*wait wait wait ok ((camera is readjusted))*=]
49. E.O.: hulle vat die condom en die tolit roll dan dingese hulle die condom soe ((E.O. uses hand gestures to illustrate)) da check hulle oek die dingese opie tolit roll dan plik hulle boltjies dan skiet hulle= [*they take the condom and the toilet roll then they dingese the condom like this ((E.O. uses had gestures to illustrate)) then they also check the dingese on the toilet roll then they gather balls then they shoot*=]
50. L.M.: is dit? ((E.O. nods his head)) kan jy ook so 'n gun maak? ((E.O. nods his head)) het jy al so 'n gun gemaak? ((E.O. nods his head)) is dit fun? ((E.O. nods his head)) ... (2sec)... [*is it? ((E.O. nods his head)) can you also make such a gun? ((E.O. nods his head)) have you made one before? ((E.O. nods her head)) is it fun? ((E.O. nods his head)) ... (2sec)...*]
51. E.O.: hulle skiet somtyds groot mense ook= [*they sometimes shoot adults as well*=]
52. L.M.: is dit? ((E.O. nods his head)) (so hulle [*is it? ((E.O. nods his head)) (so they)*
53. E.O.: dan hardloop) hulle weg dan vat hulle die groot mense vir 'n joke= [*then they run) away then they make fun of the adults*=]

54. L.M.: so hulle is uintlik stoud? ((E.O. nods his head)) was jy saam met hulle stoud want jy het ook 'n condom gun gemaak?=*[so they are actually naughty? ((E.O. nods his head)) were you naughty as well since you also made a condom gun?]=*
55. E.O.: net een keer 'n condom gun gemaak toe speel net 'n game=*[only made a condom gun once and just played a game with it]=*
56. L.M.: ooh↑ nie met groot mense gespeel nie? ((E.O. shakes his head no)) virtel gou vir my ah ↓wat is jou favourite movie? =*[ooh↑ you did not play with the adults? ((E.O. shakes his head no)) tell me quickly ah↑ what is your favourite movie?]=*
57. E.O.: movie?=
58. L.M.: ah ((L.M. nods her head))=
59. E.O.: Fast and the Furious =
60. L.M.: Fast and the Furious ((E.O. nods his head)) is dit? Wat gebeur daar?=*[Fast and the Furious ((E.O. nods his head)) is it? What happens there?]=*
61. E.O.: is 'n dinges uhm 'n karre race game=*[it is a dinges uhm a car race game]=*
62. L.M.: uhm ...(3sec)...
63. E.O.: da wat dinges hulle da dice hulle opie opie dingese movie=*[there where dinges they dice they on the on the movie]=*
64. L.M.: is dit? ((E.O. nods his head)) wat se wat se goed kyk jy op die TV in die midae? ...(3sec)...*[is it? ((E.O. nods his head)) what do you watch on TV in the afternoons ...(3sec)...]*
65. E.O.: popentjie=*[cartoons=]*
66. L.M.: wat se popentjie? ...(6sec)... Dragon Ball Z? ((E.O. nods his head)) speel dit nog? ...(2sec)...*[wat cartoons? ...(6sec)... Dragon Ball Z? ((E.O. nods his head)) is it still playing ...(2sec)...]*
67. E.O.: speel nie mee nie ((E.O. shakes his head no)) =*[does not play anymore ((E.O. shakes his head no))=*

68. L.M.: nou wat speel nou? = *[now what is playing now? =]*
69. E.O.: uhm One ah One Piece=
70. L.M.: One Piece? ((E.O. nods his head)) ok↑ waar oor gaan One Piece? Ek het nog nie vir One Piece gesien nie= *[One Piece? ((E.O. nods his head)) ok↑ what is it about? I have not watched it yet =]*
71. E.O.: dis 'n popentjie hulle uhm hulle se hy's 'n bienkop dingese hulle ha soe biene uhm hyts ampe soe n power manekie ha hark ha rek sy hane soe lank = *[it is a cartoon they uhm they say he's a skeleton head dingse they ha look for bones uhm he is almost like a power figurine he stretches his hands this long =]*
72. L.M.: uhm ((E.O. nods his head)) 'n power manekie? ((E.O. nods his head)) ek het nog nie dit gesien nie ..(2sec)... en jy Z.F.? Wat kyk jy? Wat is jou favourite movie?=
[uhm ((E.O. nods his head)) a power figurine? ((E.O. nods his head)) I have not seen this...(2sec)... and you Z.F.? what do you watch? What is your favourite movie? =]
73. Z.F.: Disney Channel=
74. L.M.: Disney Channel? ((Z.F. nods her head))=
75. Z.F.: op DSTV= *[on DSTV =]*
76. L.M.: wat kyk jy? = *[what do you watch? =]*
77. Z.F.: Rocky en Sisi en Jessie, Jessie is my favourite= *[Rocky and Sisi and Jessie, Jessie is my favourite =]*
78. L.M.: uhm? ((Z.F. nods her head)) hoekom is Jessie jou favourite? = *[uhm? ((Z.F. nods her head)) why is Jessie your favourite? =]*
79. Z.F.: hulle het meer aksie in die mov- in Jessie= *[there is more action in the mov- in Jessie =]*
80. L.M.: ok↑ wat se aksie? = *[ok↑ what kind of action? =]*
81. Z.F.: dan uhm die eerste een op Halloween = *[then uhm the first one on Halloween =]*

82. L.M.: uhm=
83. Z.F.: uhm het Jessie en 'n ande vrou compete wie het die beste parties en toe wen die ander vrou vir Jessie. Toe possess uhm ander goete van Zorek die amper die wereld gedestroy maar toe is Jessie en 'n ander meisie en Zirrie en 'n Rowie uhm toe rescue hulle die wereld= [*uhm Jessie and another lady competed who had the best party and then the other lady won. Then other things possessed Zorek it almost destroyed the world but then Jessie and another girl and Zirrie and Rowie uhm rescued the world=*]
84. L.M.: ok↑ geniet jy dai stuk? ((Z.F. nods her head)) is dit kwai ((Z.F. nods her head)) wat nog? ...(3sec)... [*ok↑ do you enjoy that film? ((Z.F. nods her head)) is it amazing? ((Z.F. nods her head)) what else? ...(3sec)...*]
85. Z.F.: en Austen Moon. Hulle dans meer op dai stuk. Ek uhm is meestal oor die dans op dai stuk want ek is ook in 'n dans groep in = [*and Austen Moon. It is more a dance film. I uhm mostly like the dance films because I'm also in a dance group=*]
86. L.M.: wat se dans groep?= [*what kind of dance group?=*]
87. Z.F.: Happy dancers=
88. L.M.: ohk↑ hoeveel hoeveel is hulle in die groep? ...(3sec)... [*ohk↑ how many how many are you in the group?(3sec)....*]
89. Z.F.: s::o twee en der- neen en twintig seven en twintig kinders= [*s::o thirty twentyni- twenty seven children=*]
90. L.M.: wat wat wanneer dans hulle gewoontlik? ...(1sec)... [*what what when do you dance normally? ...(1sec)....*]
91. Z.F.: soes op ...(2sec)... ons het in die jaar in geoefen nie ...(1sec)... wan os kry nie nog baie tydtie= [*like on ...(2sec)... we have not practiced this year ...(1sec)... because we don't really have the time=*]
92. L.M.: uhm↑ ((Z.F. nods her head)) uhm↑= [*uhm↑ ((Z.F. nods her head)) uhm↑=*]
93. Z.F. yes ((Z.F. nods her head))=

94. L.M.: so het julle nog nie die jaar begin nie? ((Z.F. shakes her head no)) wat het julle ge-
wat het julle laas jaar gedoen?=*[so you have not started this year? ((Z.F. shakes her head no)) what did you- what did you do last year?]=*
95. Z.F.: os het gedans in Ravensmead in os:: ...(1sec)... os was baie biesig in Ravensmead
in os het ...(2sec)... hie ane kant by die veld(3sec)... os het daa oek gedans=
[we danced in Ravensmead we:: ...(1sec)... we were every busy in Ravensmead we did ... (2sec)... here nearby at the field ... (3sec)... we danced there as well=]
96. L.M.: ohk↑ ((Z.F. nods her head)) is dit lekker ((Z.F. nods her head)) geniet jy dans?
((Z.F. nods her head)) ek hou ook van dans soms net soms nie altyd nie ((Z.F. nods her head)) en sing?=*[ohk↑ ((Z.F. nods her head)) was it nice? ((Z.F. nods her head)) do you enjoy dancing? ((Z.F. nods her head)) I also enjoy dancing sometimes, just sometimes not always ((Z.F. nods her head)) and singing?]=*
97. Z.F.: ((shakes her head no)) nie my dingie=*[shakes her head no)) not my thing=]*
98. L.M.: ((facing E.O.)) en jy? Dans jy? ((E.O. shakes his head no)) en sing? ((E.O. shakes his head no)) nou wat doen jy? Net sokker speel? ((E.O. nods his head)) is dit al wat jy doen? ((E.O. nods his head)) jy moet praat jy moet nie net kop skit nie. ... (3sec).. uhm (2sec)... net sokker en en en en condom guns. Wat se games het julle hie byte gespeel? ... (5sec)... uhm? ... (4sec)... kan jy onthou? Wat het julle bytekant gespeel nou? ((E.O. nods his head)) wat het julle gespeel?=*[((facing E.O.)) and you? Do you dance? ((E.O. shakes his head no)) and singing? ((E.O. shakes his head no)) now what do you do? Just play soccer? ((E.O. nods his head)) is that all you do? ((E.O. nods his head)) you have to talk to me not just nod you head ... (3sec)... uhm ... (2sec)... just soccer and and and and condom guns. What games did you play outside? ... (5sec)... uhm? ... (4sec)... can you remember? What did you play outside now? ((E.O. nods his head)) what did you play?]=*
99. E.O.: niekies=
100. L.M.: Wat is niekies?=*[what is niekies?]=*
101. E.O.: dis 'n ball ne dan gooi jy dit vi ieman toe da ka iemanit skop haam semaki ieman ka haloep da moe hy die ball op tel enit gooi das hai ieman uit ... (6sec)... ha moe

ekkie ball op tel () sema da rol jy ma wee na ane ieman toe semaki ieman haloep nou viby en jy ka homie raak gooi nie hai kai kai jy ma ieman sê stay of hy se niekies da wen hy ...(4sec)... *[it is a ball ne then you throw it to somebody then someone can kick it then someone can run then he must pick up the ball and throw someone out with it ...(6sec)... then I must pick up the ball () then you roll the ball again to someone if someone runs past you and you can't hit him with the ball you must say stay or he will say niekies then he wins ...(4sec)....]*

102. L.M.: nog enige iets wat julle oor will praat met my? Z.F.? Enige iets wat jy wil sê? ↑enige iets onder die son. ...(3sec)... *[anything else that you want to talk about? Z.F.? anything you want to say ↑anything under the sun ...(3sec)...]*

103. Z.F.: ek wil my mammië het uintlik gedink ons gat uhm skryf (soos ons laas jaar gemaak het *[I want my mother thought that we are going to uhm write (like the we did last year]*

104. L.M.: soos ons laas ha a) hierdie keer is dit net die video *[like we did last no) this time it is just the video*

End of interview



Appendix 10: Interview seven

Background: Two children participated. The one a boy, “L.K.” (9 years old) suffers from FAS and the other, a girl, “A.T.” (9 years old), is a normally developing child. L.K. was given a car while A.T. was provided with a doll. The toys were provided so that they could talk about something visible and physically in the room. The second topic given to them was sport followed by their favourite movies. The purpose of the last two topics was to probe them to talk about something abstract, not in the room, something they could not see or feel at that particular point in time.

1. L.M.: virtel vir my van dai pop daar voor jou= [*tell me about that doll in front of you*=]
2. A.T.: die pop se hare is mooi ...(1sec)... en dis rooi ...(1sec)... en ek hou vani rok ...(2sec)... en die bene is lank= [*the doll's hair is beautiful ... (1sec)... and it is red ... (1sec)... and I like the red ... (2sec)... and the legs are long*=]
3. L.M.: uhm wat nog? ...(2sec)... wat speel jy mee by die huis? ...(2sec)... [*uhm what else? ... (2sec)... what do you play with at home? ... (2sec)...*]
4. A.T.: ek speel met ... (1sec)... my broer = [*I play with ... (1sec)... my brother*=]
5. L.M.: met jou broer? = [*with your brother?*=]
6. A.T.: ((A.T. nods her head)) ja= [(A.T. nods her head) yes=]
7. L.M.: nie met speel goed nie? = [*not with toys*=]
8. A.T.: ((A.T. shakes her head no)) haha= [(A.T. shakes her head no) no=]
9. L.M.: hoekom nie? = [*why not?*=]
10. A.T.: ((A.T. shakes her head no)) ek het gespeel goed nie= [(A.T. shakes her head no) I do not have toys=]
11. L.M.: ohk ↓ vandag se kinders is anderster as ons toe ons jonk was. En jy L.K.? ...(1sec)... virtel my van die kartjies hier voor jou?... (2sec)... watter een hou jy van ((L.K. looks at the cars and points to the red car)) jy moet praat ↓ [*ohk ↓ today's children is different in relation to when we were young. And you L.K.? ... (1sec)...*]

tell me about the cars in front of you? ...(2sec)... which one do you like ((L.K. looks at the cars and points to the red car)) you have to talk↓]

12. L.K.: aan die ene= [*this one*=]

13. L.M.: hoekom↑?= [*why*↓?]=]

14. L.K.: van hy ...(1sec)... wan hy lyk mooi ...(2sec)... [*because he ...(1sec)... because he looks pretty ...(2sec)...*]

15. L.M.: lyk hy mooi? ((A.T. nods his head)) wat hou jy van hom? ...(2sec)... [*does it look pretty? ((A.T. nods his head)) what do you like about it? ...(2sec)...*]

16. L.K.: hom boeste pate = [*his best parts*=]

17. L.M.: uhm↑=

18. L.K.: en wiel = [*and wheels*=]

19. L.M.: uhm↑ ...(1sec)....

20. L.K.: agtste ...(2sec)... [*back part ...(2sec)....*]

21. L.M.: ohk↑ en die ander kartjies? Watter een is die vinnigste? ...(8sec)... uhm↑ ((L.K. looking at the cars)) die goue een die geele of die rooie ...(3sec)... [*ohk ↓ and the other cars? Which one is the fastest? ...(8sec)... uhm↓ ((A.T. looking at the cars)) the gold one the yellow one or the red one ...(3sec)....*]

22. L.K.: miskien die rooie= [*maybe the red one*=]

23. L.M.: miskien die rooie? Ohk↑omdat jy van die rooie hou dis hoekom dit nou vining is huh↑? ((L.K. bites his tongue)) Ek dink die geele is vining ...(4sec)... A.T. dink ook die geele is vining ...(3sec)... wat kan jy vir A.T. vertel van die geele? ...(1sec)... hoekom is joune better as hane wat sy gekies het? Uhm? ...(5sec)... [*maybe the red one? ohk ↓ because you like the red one now you believe it is the fastest huh↓? ((L.K. bites his tongue)) I think the yellow one is faster ...(4sec)... A.T. also thinks the yellow one is faster ...(3sec)... what can you tell A.T. about the*]

*yellow one ... (1sec)... why is yours better than hers that she chose? Uhm?
... (5sec)...]*

24. L.K.: *hy lyk gevaalik= [he looks awesome =]*

25. L.M.: *lyk joune gevaalik? ((L.K. nods his head)) en wat nog? ... (3sec)... [does yours
look awesome? ((L.K. nods his head)) and what else? ... (3sec)...]*

26. L.K.: *en wiele nog eni wiele lyk oek koegoepoek gevaalik = [and wheels also and the
wheels look awesome=]*

27. L.M.: *uhm↓ ... (1sec)... hoekom hou jy van die geele? ((Facing A.T.)) ... (3sec)... [uhm↓
... (1sec)... why do you like the yellow one? ((Facing A.T.)) ... (3sec)...]*

28. A.T.: *hie voo isi swat uhm bets en die wiele lyk uhm gevaalik= [here in front is black
uhm badges and the wheels look uhm awesome=]*

29. L.M.: *uhm hou van die wiele? ((A.T. nods her head)) ohhk↑ so virtel vir my sport
... (1sec)... sê vir my L.K. wat se sport hou jy van? ... (2sec)... ((L.K. bites his
tongue)) wat se sport speel jy? ... (1sec)... sokker, rugby? ... (2sec)... [uhm do you
like the wheels? ((A.T. nods her head)) ohhk↑ so tel me about sport ... (1sec)... tell
me L.K. what sport do you like? ... (2sec)... ((L.K. bites his tongue)) what sport do
you play? ... (1sec)... soccer, rugby? ... (2sec)...]*

30. L.K.: *ek speeie sport nie= [I don't play sport=]*

31. L.M.: *hoekom nie↑? Wat doen jy wat doen jy by die huis wat speel jy by die huis?
... (1sec)... [why not↑? What do you do what do you do at home what do you play
at home? ... (1sec)...]*

32. L.K.: *kap tol= [play with a spin top=]*

33. L.M.: *kap tol? Dit al? ((L.K. nods his head)) ek het nou gehoor van condom gunne
... (1sec)... ha↑ ken jy wats 'n condom gun ((L.K. nods his head)) kan jy eene
maak? ((L.K. nods his head)) verduidelik vir my hoe maak 'n mens ene ... (2sec)...
[play with a spin top? That all? ((L.K. nods his head)) I just heard about a condom*

gun ...(1sec)... ha↑ do you know what a condom gun is ((L.K. nods his head)) can you make one? ((L.K. nods his head)) explain to me how to make one ...(2sec)...

34. L.K.: vat 'n roltjie toile roltjie = [take a roll toilet roll=]

35. L.M.: uh↑=

36. L.K.: 'n toilet 'n toilet 'n toilet roltjie ...(1sec)... en 'n condom ...(2sec)... knip djy die ...(1sec)... af = [a toilet a toilet a toilet roll ...(1sec)... and a condom ...(2sec)... you cut the ...(1sec)... off=]

37. L.M.: wys vir ons voor die kamara ek wil sien wat moet ons maak ...(1sec)... huh? ...(2sec)... ek weet nie hoe lyk dit nie, jy moet my mooi virduidlik= [show us on the camera I want to see what we should make it ...(1sec)... huh? ...(2sec)... I don't know how it looks, you must explain in detail=]

38. L.K.: roltjie= [roll]

39. L.M.: huh↑=

40. L.K.: dan knip jy die ding ((illustrating with hand gestures)) die papiertjie= [then you cut the thing ((illustrating with hand gestures)) the paper=]

41. L.M.: harder= [louder=]

42. L.K.: die papiertjie af= [the paper off=]

43. L.M.: huh?=

44. L.K.: hal djy dit uit dan trek djy dit ...(1sec)... dan sit jy dit op anie opie roltjie= [you take it out and pull it ...(1sec)... then you put it on the roll=]

45. L.M.: huh? ...(2sec).. dan hoe skiet 'n mens met hom?= [huh? ...(2sec)... then how do you shoot with it?=]

46. L.K.: dan gooi djy 'n boltjie in ...(1sec)... dan skiet djy= [then you through ball in ...(1sec)... then you shoot=]

47. L.M.: ohk↑ het jy dit al gemaak? ((L.K. nods his head)) was dit lekker om met dit te speel? ((L.K. nods his head)) waar kry julle die condoms? ...(3sec)... huh↑? ...(2sec)... by die skool? ((L.K. shakes his head no)) waar so dan? ...(1sec)... by die library? ((L.K. nods his head)) wie vat dit by die ...(1sec)... library? ...(3sec)...
[ohk↑ have you made one yet? ((L.K. nods his head)) was it nice to play with it? ((L.K. nods his head)) where do you get the condoms? ...(3sec)... huh↑? ...(2sec)... at school? ((L.K. shakes his head no)) where then? ...(1sec)... At the library? ((L.K. nods his head)) who takes it at the ...(1sec)... library?... (3sec)...]
48. L.K.: gee vi os= *[give us=]*
49. L.M.: huh↑?=
50. L.K.: gee vi os= *[give us=]*
51. L.M.: wie?= *[who?=]*
52. L.K.: hulle gie vi os= *[they give us=]*
53. L.M.: O gee die library vir julle condoms om met te speel? ((L.K. nods his head)) O↑O↓
kwai library ...(2sec)... *[O does the library give you condoms to play with? ((L.K. nods his head)) O↑O↓ nice library ...(2sec)...]*
54. A.T.: ek hou van tennis= *[I like tennis=]*
55. L.M.: uhm↑ ...(2sec)...
56. A.T.: wan ek sien mense ...(1sec)... en die mense lyk ...(1sec)... hulle vat die bat van die tennis reket en da ...(1sec)... slat hulle die balls ((A.T. make use of hand gestures)) ...(2sec)... ek wil oek eendag tennis speel ...(3sec)... ek wil soes die ander mense wies= *[because I see people ...(1sec)... and the people look ...(1sec)... they take the bat of the tennis bat and then ...(1sec)... they hit the ball ((A.T. make use of hand gestures)) ...(2sec)... I also want to play tennis one day ...(3sec)... I want to be like the other people=]*

57. L.M.: wat tennis speel. Wats dai vrou se naam? Serina Williams ((A.T. nods her head))=
[*that play tennis. What is that woman's name? Serina Williams ((A.T. nods her head))=]*
58. A.T.: ek wil soes haar wies= [*I want to be like her=]*
59. L.M.: kyk jy vir haar op die TV as sy as sy speel? ((A.T. nods her head)) wat nog wat se
sport hou jy nog van ...(1sec)... [*do you watch her on TV when she when she
plays? ((A.T. nods her head)) what else what other sport do you like?... (1sec)...*]
60. A.T.: uhm::: netball =
61. L.M.: uhm↑ speel jy netball?=
[*uhm↑ do you play netball? =]*
62. A.T.: ni:::e = [*no::: =]*
63. L.M.: hoekom↑ nie?=
why↑ not? =]
64. A.T.: wietie hoe nie maa ek hou van netball=
[*I don't know how but I like netball =]*
65. L.M.: dan moet jy mos leer ((A.T. nods her head)) = [*then you must learn ((A.T. nods her
head)) =]*
66. A.T.: ek leer, my ma vat my na 'n auntie toe da leer sy my hoe om te speel=
[*I'm learning, my mother takes me to an aunt than teaches me how to play =]*
67. L.M.: ohk↑ ...(1sec)...
68. A.T.: en som tye ...(1sec)... dan vat my ma vi my na 'n auntie toe wat wat ek kan tennis
speel. My auntie het 'n tennis uhm raket ((A.T. makes use of hand gestures)) en dan
speel ek en my vriendine daa=
[*and sometimes ...(1sec)... then my mother takes me
to an aunt that teaches me tennis. My aunt has a tennis bat ((A.T. makes use of
hand gestures)) and then my friend and I play there =]*
69. L.M.: ohk↑ geniet jy dit? ((A.T. nods her head)) virtel vir my van jou favourite film? Wat
se film hou jy van? Wat se movie hou jy van?=
[*ohk↑ do you enjoy it? ((A.T. nods
her head)) tell me about your favourite film? What films do you like? What movie
do you like? =]*

70. A.T.: uh::m dear letter ...(1sec)... op Disney Channel= [uh::m dear leter ...(1sec)... on Disney Channel=]
71. L.M.: uh↑=
72. A.T.: uh::m dit gaan oor 'n meisie, haar pa willie hê sy moen singie wan uhm it bring bad memories na haar en ha pa toe = [uh::m it is about a girl, her father does not want her to sing because uhm it brings back bad memories for her and her father=]
73. L.M.: uh=
74. A.T.: want haar ma het dood gegaan ...(1sec)... En sy sing en haa pa haal haa uit die studio uit at dans en sing ha ini ini laste part part an sit sy en dan sing sy daarso vir haar pa ...(1sec)... en dan ...(1sec)... sien haa pa hoe mooi sing sy en hoe dans sy dan sit haar pa haar weer vi haa ini studio= [because her mother died ...(1sec)... and she sings and her father takes her out of the studio then she sings and dances in the last part and she sits and then she sings for her father ...(1sec)... and then ...(1sec)... her father sees how good she sings and dance then her father puts her back in the studio=]
75. L.M.: ohk↑ hou jy van dan- kan jy sing?= [ohk↑ do you like to dan- can you sing?]=
76. A.T.: ((shakes her head no)) hu u =
77. L.M.: en dans?=[and dance?]=
78. A.T.: ja 'n klein biekie sing en klein biekie dans= [yes a little bit sing and a little bit dance=]
79. L.M.: ohk waar sing en dans jy?=[ohk where do you sing and dance?]=
80. A.T.: uh:m soe by die huis somtye in kerk sing ek oek saam in die worship team= [uh:m at home sometimes I sing in church with the worship team=]
81. L.M.: ohk↑ ...(2sec)...
82. A.T.: en 'n is leer 'n meisie my spiritual dance= [and a girls teaches me spiritual dance=]

83. L.M.: ohk↑=
84. A.T.: somtye maak ek my eie steps op en dan wys ek ha as ek die tweede kee wee gaan na ha toe= [*sometimes I create my own steps and then I show her when I see her again=*]
85. L.M.: dan sê sy wat? ((A.T. nods her head))= [*what does she say? ((A.T. nods her head))=*]
86. A.T.: da sê sy is reg maa sy gat vi my leer hoe om it in in 'n biekie mooier te maak sy wys my nuwe steps wat sy oek geleer het maak osit 'n dance number en spiritual dancing saam ...(2sec)... Sondag en toe doen os dai number= [*then she says it's right but she will show me how to make it a bit prettier she shows me new steps that she learned then we put it all together in a dance number and spiritual dance ...(2sec)... Sunday we performed it=*]
87. L.M.: ini kerk in?= [*in church?=*]
88. A.T.: ja ((A.T. nods her head))= [*yes ((A.T. nods her head))=*]
89. L.M.: het jy dit geniet? = [*did you enjoy it?=*]
90. A.T.: ja ((A.T. nods her head))= [*yes ((A.T. nods her head))=*]
91. L.M.: was jy skaam gewees?= [*were you shy?=*]
92. A.T.: ja ((A.T. nods her head))= [*yes ((A.T. nods her head))=*]
93. L.M.: klein biekie?= [*a little bit?=*]
94. A.T.: eerste keer maar die tweede keer was ekie so baie skaam (nie [*the first time but the second time I wasn't so (shy)*])
95. L.M.: jy) nou gewoont ne? = [*(you) got use to it ne?=*]
96. A.T.: ja ((A.T. nods her head)) [*yes ((A.T. nods her head))*]
97. L.M.: wie vleg jou hare soe mooi? = [*who plaits your hair so beautifully?=*]

98. A.T.: uhm 'n meisie ...(1sec)... vat uhm my hare skiet los maar sy vleg dit nie soe reg nie soe my auntie vleg dit vi my = *[uhm a girl ... (1sec)...that uhm my hair becomes loose but she does not plait it like my aunt=]*
99. L.M.: vleg jou auntie dit nou vir jou?=*[does your aunt plait it for you now?=]*
100. A.T.: ja ((A.T. nods her head)) *[yes ((A.T. nods her head))]*
101. L.M.: ohk↑=
102. A.T.: e- uhm diessie my regte hare nie op die punte nie net syt valse hare in gesit=*[e- uhm this is not my real hair at the ends she plaited in extensions=]*
103. L.M.: in gesit? ((A.T. nods her head))=*[plaited in? ((A.T. nods her head))=]*
104. A.T.: lat my hare kan groei my hare is 'n biekie kort =*[so that my hair can grow it is a bit short=]*
105. L.M.: jou hare 'n biekie langer kan raak? ((A.T. nods her head)) ...(4sec)... L.K.? Wat se wat kyk jy op die TV? ... (3sec)...*[your hair can grow a bit? ((A.T. nods her head)) ... (4sec)... L.K.? what do you watch on TV? ... (3sec)...]*
106. L.K.: uhm vi wrestling=*[uhm for wrestling=]*
107. L.M.: huh↑?=
108. L.K.: wrestling=
109. L.M.: wrestling? ((L.K. nods his head)) wat se wat wat wies jou favourite wrestler? ...(2sec)... *[wrestling? ((L.K. nods his head)) what is what what who is your favourite wrestler? ... (2sec)...]*
110. L.K.: Jo Cena=
111. L.M.: John Cena? Hoekom? ...(7sec)... A.T. was nie nou skaam om te praat nie, hoekom is jy nou skaam? Is jy is jy skaam vir haar? uhm↑? Moet nie skaam wie nie...(2sec)... virtel gou vir my hoekom hou jy van John Cena? ...(1sec)... met wie het John Cena laste gefight? ...(3sec)... kan jy onthou? ((L.K. shakes his head no)) wie het watter game het jy wat se wat se watter wrestling het jy laaste gekyk? Wie

het gefight? ...(7sec)... Hoekom hou jy van John Cena?(2sec)... [John Cena? Why? ...(7sec)... A.T. was not this shy when she spoke, why are you shy? Does she make you shy? uhm↑? Don't be shy ...(2sec)... tell me quickly why do you like John Cena ...(1sec)... against whom did John Cena fight last? ...(3sec)... can you remember?((L.K. shakes his head no)) who has which game did you what wrestling did you watch last? Who fought ...(7sec)... why do you like John Cena...(2sec)...]

112. L.K.: hou nie van wan hy:: ...(2sec)... wrestling gevaalik= [don't like because he::: ...(2sec)... wrestling awesome=]

113. L.M.: uhm↑... (2sec)... en wat nog? = [uhm↑... (2sec)...and what else? =]

114. L.K.: en hys () [and he's ()]

115. L.M.: uhm↑? will jy soes hy wees? ((L.K. nods his head)) is hy sterk? ((L.K. nods his head slightly)) hoe sterk is hy? ...(5sec)... [uhm↑? Do you want to be like him? ((L.K. nods his head)) is he strong? ((L.K. nods his head slightly)) how strong is he? ...(5sec)...]

116. L.K.: hys hys sterk...(2sec)... en hy tel mense op= [he's he's strong ...(2sec)... and he picks people up=]

117. L.M.: tel hy mense op? ((L.K. nods his head)) kan jy mense op tel? ((L.K. shakes his head no)) het jy al getry? ((L.K. shakes his head no)) = [does he pick up people? ((L.K. nods his head)) can you pick people up? ((L.K. shakes his head no)) have you tried? ((L.K. shakes his head no))=]

118. L.K.: hu u = [no=]

119. L.M.: eenige iets anders wat julle met my wil praat? ((both shake their heads no)) [anything else that you want to talk to me about? ((both shake their head no))]

End of interview

Appendix 11: Example of IPSyn

FILENAME: N.F.

NOUNS

N1 Proper Mass or Count Noun

2. vuurwapen	5. stukke
2. steller	6. movies
2. bullet	6. magasyn
3. gun	7. ding
3. speel goed	10. skool
4. gun	11. queen
4. sneller	11. king
4. ding	

SCORE: 2

N2 Pronoun, Prolocative excluding modifiers

sy	ek
hy	ek
it	ek
2. jy	ons
ek	jy
jhy	11. jy
mens	11. jou
ek	



SCORE: 2

N3 Modifier including adjectives, possessives and quantifiers

2. uit

2. swat

check

2. orange

twie

2. trek

twie x2

3. regte

20. mid

3. speel

20. off-centre

4. regte

22. ene

4. trek

23. oepe

SCORE: 2

N4 Two word NP preceded by article or modifier

2. 'n vuurwapen

6. die magasyn

2. die steller

6. 'n mens

2. 'n bullet

7. die ding

3. 'n speel goed

13. die game

4. 'n regte gun

14. die Menee

4. die sneller

14. die skool

4. die ding

18. die shoot

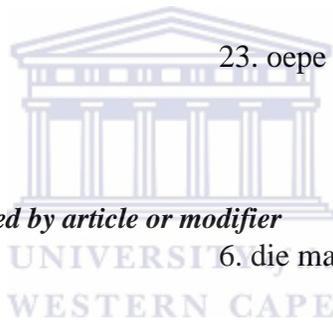
4. opie stukke

SCORE: 2

N5 Article used before a noun

2. 'n vuurwapen

2. die steller



- 2. 'n bullet
- 3. 'n speel goed
- 4. 'n regte gun
- 4. die ding
- 5. die stukke
- 6. die magasyn
- 6. 'a mens

- 7. die ding
- 13. die game
- 14. die Menee
- 14. die skool
- 18. die shoot
- 18. die shooter

SCORE: 2

N6 Two word NP(as in N4) after verb or preposition

- 2. 'n vuurwapen
- 4. die sneller
- 4. met die ding
- 6. 'n mens
- 7. die ding
- 13. die game
- 14. die skool
- 18. die shoot

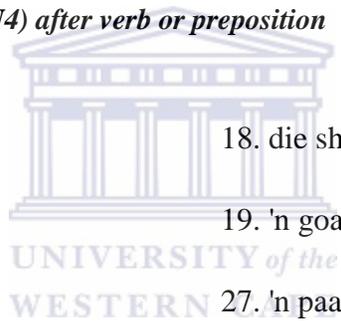
- 18. die shooter
- 19. 'n goalie
- 27. 'n paa
- 29. 'n slak
- 29. 'n springgaan
- 29. 'n kokorot
- 33. die ball

SCORE: 2

N7 Plural suffix

- 3. regte
- 4. regte

- 5. stukke
- 6. movies



goale	34. tekkies x4
15. pouses	35. goete
goals	35. hare
25. boots	38. paale
27. stukke	39. skole
29. name	

SCORE: 2

N8 Two word NP (as in N4 before verb)

2. die steller	35. die next match
2. 'n bullet	35. die eerste wedstryd
4. 'n regte gun	35. die wedstryd
14. die Menee	35. 'n keeper
29. hulle name	35. die captain
34. die mirrel	39. die skole
34. die begin	39. die laste tyd

SCORE: 2

N9 Three word NP (Det-Mod-N or Mod-Mod-N)

3. 'n speel goed	35. die sterkste punch
4. 'n regte gun	36. 'n tornado ding
35. die next match	39. die swat team
35. die eerste wedstryd	39. die swat speel
35. die finale wedstryd	

SCORE: 2

N10 Adverb modifying adjective or nominal

- | | |
|-----------|-------------|
| 2. hie | 9. gister |
| 2. hie | 10. eintlik |
| 3. nie | 10. eintlik |
| 3. nie | 12. lang |
| 3. regte | 12. laas |
| 4. regte | 13. laas |
| 9. gister | 14. Maandag |
| 9. gister | |

SCORE: 2

N11 Any other bound morpheme on N or adjective (if judged not to be stored as lexical unit)

4. gewies

SCORE: 1

N12 Others

SCORE: 0

VERBS

V1 Verb

- | | |
|---------|----------|
| 2. trek | 4. moord |
| 2. ko | 4. pleeg |
| 4. trek | |

SCORE: 2

V2 Particle or preposition

- | | |
|-----------|--------|
| 3. met x2 | 4. met |
|-----------|--------|



5. op

SCORE: 2

V3 Prepositional Phrase (Prep+NP)

3. met regte gun

4. met die ding

3. met 'n speel goed

5. opie stukke

SCORE: 2

V4 Copula linking two nominals (nominal + copula + nominal, copula)

2. is

9. het

6. is

10. het x2

7. is

SCORE: 2

V5 Catenative (pseudo-auxiliary) preceding a verb (catenative, verb)

SCORE: 2

V6 Auxiliary be, do, have in VP

9. het

10. het x2

SCORE: 2

V7 Progressive Suffix

10. gewen x2

SCORE: 2

V8 Adverb

2. uit

2. hie

2. dan

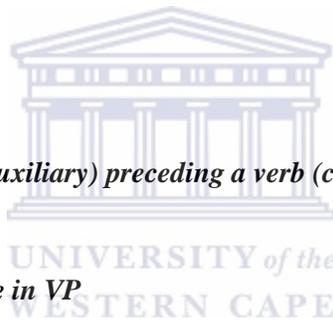
2. hie

3. nie x3

3. nie

10. eintlik

3. nie



SCORE: 2

V9 Modal preceding verb

SCORE: 0

V10 Third person singular present tense suffix

10. het

9. het

SCORE: 2

V11 Past tense modal

SCORE: 0

V12 Regular past tense suffix

4. gewies

10. gewen x2

SCORE: 2

V13 Past tense auxiliary

9) het

13) het

SCORE: 2

V14 Medial adverb

2) uit

2) dan

10) eintlik



SCORE: 2

V15 Copula, Modal or Auxiliary used for emphasis or ellipsis (uncontractible context)

2. is

6. is

SCORE: 2

V16 Past tense copula

9) het

10. het

SCORE: 2

V17 Bound morpheme on a verb or an adjective (to make an adverb)

35) stekste

5. opie stukke

SCORE: 2



QUESTIONS

Q1 Intonationally marked question

40)

36)

SCORE: 2

Q2 Routine do/go existence name question or wh-pronoun alone

SCORE: 0

Q3 Simple Negation +X) neg=no(t), can't don't X=NP,PP,VP,Adj, Adv etc

SCORE: 0

Q4 Initial Wh-pronoun followed by verb

36. En wat nou wee veder gebuer

SCORE: 1

Q5 Negative Morpheme between subject and verb

40. Ha a die vrou keeper het by staan ne?

SCORE: 1

Q6 Wh-question with inverted modal, copula or auxillary

36. En wat nou wee veder gebuer

SCORE: 1

Q7 Negation of copula, modal or auxiliary

SCORE: 0

Q8 Yes/no question with inverted modal, copula or auxiliary

SCORE: 0

Q9 Why, When, Which, Whose

36. En wat nou wee veder gebuer

SCORE: 1

Q10 Tag Question

36. En wat nou wee veder gebuer

40. Ha a die vrou keeper het by staan ne?

SCORE: 2

Q11 Other: e.g questions with negation and inverted cop/aux/modal

SCORE: 2

SENTENCES

S1 Two word combination

2) die's 'n vuurwapen hy's swat en hie voo isit orange en as jy die sne- die steller trek dan ko hie 'n bullet uit

6) die movies en hie so is die uhm sit 'n mensie magasyn in

SCORE: 2

S2 Subject verb sequence

2. die steller trek



2. die's (die is)

2. hy's (hy is)

SCORE: 2

S3 Verb object sequence

2. 's 'n vuurwapen

2. 's swat

SCORE: 2

S4 Subject Verb Object Sequence

2. die's 'n vuurwapen

2. hy's swart

SCORE: 2

S5 Conjunction (any)

2. en x2

34. dan

SCORE: 2



S6 Sentence with two VP's

2) die's 'n vuurwapen hy's swat en hie voo isit orange en as jy die sne- die steller trek dan ko hie 'n bullet uit

13) os sal Woen- laas Woensdag toe sal os socca gespeel het toe was die game gecancel

33) as as hulle skop ko daa suke vuur uit die ball uit

SCORE: 2

S7 Conjoined phrases

2) en hie voo isit orange en as jy die sne- die steller trek

3) nie met regte gun nie met 'n speel goed

SCORE: 2

S8 Infinitive without catenative, marked with to

24) want dji moet teamwork speel met jou span om te wen

28) as sy dit kyk dan en ek het niks om te doen nie dan (kyk ek dit maar saam

SCORE: 2

S9 Let/Make/Help/Watch introducer

SCORE: 0

S10 Adverbial Conjunction

2. dan ko hie 'n bullet uit

3. nie

SCORE: 2

S11 Propositional Complement

6) die movies en hie so is die uhm sit 'n mensie magasyn in

33) as as hulle skop ko daa suke vuur uit die ball uit

SCORE: 2

S12 Conjoined sentences (Except for imperatives, will usually have subj + predicate in each clause)

2) die's 'n vuurwapen hy's swat en hie voo isit orange en as jy die sne- die steller trek dan ko hie 'n bullet uit

15) en os os het Maandag toe speel os socca uhm pouses en uhm en ek het uhm twee goale gescore

SCORE: 2

S13 Wh-clause

SCORE: 0

S14 Bitransitive predicate

SCORE: 0



S15 Sentence with three or more VPs

2) die's 'n vuurwapen hy's swat en hie voo isit orange en as jy die sne- die steller trek dan ko hie 'n bullet uit

34) Elke match wat hulle gepeel het het hulle veloo en haas en hie uhm hie in die mirrel toe begin hulle te wen toe pe- toe wat hulle nuwe tekkies kry.

SCORE: 2

S16 Relative clause marked or unmarked

34) Dis van Chinese maa hulle ke- hulle hetie geken van van tekkiesie wat hulle tekkies sien toe raak hulle excited.

SCORE: 1

S17 Infinitive clause new subject

SCORE: 0

S18 Gerund

3. regte

36. Toe maak dai meisie soe 'n 'n tornado ding

SCORE: 2

S19 Fronted or center-embedded subordinate clause

41)dis ampe soe as hulle skop dis ampe soe uhm hoe kan ek nou sê as hy skop kom daa soma nou 'n dragon uit die ball uit

42) dan kom die gras soma uit die grond uit soe maa dis nie a popentjie nie

30)die film wat ek laste gekyk het is Shoalin Socca is mense

SCORE: 2

S20 Other: e.g passive constructions e.g tag comments/intrusions

2. en as jy die sne- die steller trek dan ko hie 'n bullet uit

3. nie met regte gun nie met 'n speel goed

SCORE: 2



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NOUN SCORE: 21

VERB SCORE: 30

QUESTION SCORE: 10

SENTENCE SCORE: 31

IPSYN SCORE: 92

Sentence Listing

1. sy ((N.F. points at H.B.))= [*she ((N.F. points at H.B.))=*]
2. die's 'n vuurwapen hy's swat ((playing with the gun in his hands)) ... (1sec)... en hie voo isit orange en as jy die sne- die steller trek dan ko hie 'n bullet uit ((pointing at the barrel of the gun))= [*this is a firearm it's black ((playing with the gun in his hands)) ... (1sec)... and here in front it is orange and if you pull the tri- the trigger than a bullet comes out ((pointing at the barrel of the gun))=*]
3. nie met regte gun nie met 'n speel (goed [*not with real gun with a (toy)=*]
4. en as dit 'n retge gun gewies het en ek trek die sneller ka jhy MOORD↑ pleeg met die ding↓= [*and if it was a real gun and I pull the trigger then you can commit MURDER↑ with this thing↓=*]
5. opie stukke= [*in the movies=*]
6. die movies ((playing with the gun)) () en hie so is die uhm ... (2sec)... sit 'n mansie magasyn in= [*the movies ((playing with the gun)) () and here is the uhm ... (2sec)... one puts in the magazine =*]
7. en uhm ... (3sec)... dai's al wat ek wiet van die ding= [*en uhm ... (3sec)... that's all I know about this thing=*]
8. ek doen skaak en soccar = [*I do chess and soccer=*]
9. ek het gister gistet gister toe speel ek skaak= [*I played chess yesterday yesterday=*]

10. ons skool het ienlik in Durb- Durbanville het eintlik gewen= [*your school actually in Durb- Durbanville actually won=*]
11. skaak werk soe sema dji sema jy moe jou queen jou king protect van ...(1sec)... vanie ane goed ...(1sec)... sema jou knight sit jou king in check uhma a moet dji jou jou king bewee en as dit in check mate is das jou game (klaa [*chess works like this lets say you lets say you have to protect you queen your king against ...(1sec)... the other things ...(1sec)... lets say your knight puts your king in check uhma a you have to move your king and if it is check mate then your game is (over)*]
12. ek het lang laas socca gespeel = [*I haven't played soccer in a while=*]
13. os sal Woen- laas Woensdag toe sal os socca gespeel het toe was die game gecancel= [*we would have played soccer Wed- last Wednesday but the game was cancelled =*]
14. die Menee wasie ini skoolie= [*the teacher was not in school=*]
15. en os os het Maandag toe speel os socca uhm pouses ...(5sec)... ((L.M. adjust recording device)) en uhm en ek het uhm twee goale gescore= [*and we we played soccer on Monday uhm break times ...(5sec)... ((L.M. adjust recording device)) and uhm and I have uhm scored two goals =*]
16. ek het twee twee goale gescore ...(3sec)...[*I scored two goals ...(3sec)...*]
17. en defender) = [*and defender)=*]
18. en isi shoot eni eni shooter↓) ((N.F. make use of hand gestures)) [*and is there shoot and the and the shooter↓) ((N.F. make use of hand gestures))*]
19. by soc- by socca is daar 'n goalie=[*in soc- in soccer there is a goalie=*]
20. ek ek het uhm mid centre gespeel, en as as een skool en as hulle score dasit mos nou off- centre = [*I I have uhm played mid centre, and if if one school and if they score it is now off-centre=*]
21. en hulle moet vi my pass in dai centre= [*and they have to pass to me in that centre=*]

22. is moet vi my pass en en ek besluit of ek dai ene wil pass of vi dai ene moet pass ((N.F. using hand gestures))= *[is must pass to me and and I decide if I want to pass to that one or to that one ((N.F. using hand gestrues))=]*
23. nie ek pass vi – sema ek sien dai ene is oepe hy ka ga score dan pass eke vi hom ...*(2sec)*... *[no I pass to – let's say I see that one is open he can score a gaol then I pass to him ...*(2sec)*...]*
24. want dji moet ...*(1sec)*... teamwork speel met jou span om te wen= *[because you have to ...*(1sec)*... play teamwork with your team to win=]*
25. boots)
26. ((N.F. shakes his head no)) hu-uh=*[(N.F. shakes his head no)) no=]*
27. ek het net een uhm ek het al 'n paa van Dora se stukke gekyk= *[I only watched one uhm I have watched a few Dora eposides=]*
28. as sy dit kyk dan en ek het niks om te doen nie dan (kyk ek dit maar saam *[if she watches it then and I don't have anything else to do (I watch it with her]*
29. ek kenie hulle name nie wiet net dis 'n slak, 'n springgaan en 'n ...*(1sec)*... en 'n kokorot= *[I don't know their names just know it is a snail, a grasshopper and a ...*(1sec)*... and a cockroach=]*
30. die film wat ek laste gekyk het is Shoalin Socca is mense ...*(2sec)*... *[the last film that I watched was Shoalin Soccer is people ...*(2sec)*...*
31. ek ek die laste stik wat ek gekyk het is Shoalin Socca is va socca ma is nie die gewone socca nie= *[I I the last movie that I watched is Shoalin Soccer it is about soccer but it is not normal soccer=]*
32. Shoalin Socca= *[Shoalin Soccer=]*
33. as as hulle skop ko daa suke vuur uit die ball uit= *[if if they kick then fire comes out of the ball=]*

34. in die begin toe kan hulle nie uhm reg reg speeie. Hulle het aan meka veloo. Elke match wat hulle gepeel het het hulle veloo ...(1sec)... en haas en hie uhm hie in die mirrel toe begin hulle te wen ...(1sec)... toe pe- toe wat hulle nuwe tekkies kry. Dis van Chinese maa hulle ke- hulle hetie geken van van tekkiesie. wat hulle tekkies sien toe raak hulle excited. Toe hou hulle soma 'n party wan hulle het (tekkies gekry [*in the beginning they could not uhm play right. They lost all the time. Every match they played they lost ... (1sec)... and there's and here uhm here in the middle they started to win ... (1sec)... then pe- then because they got new sneakers. It was from Chinese but they ke- they did not know about about sneakers. When they saw the sneakers they got excited. Then they had a part because they (got sneakers]*
35. hie hie die next match wat hulle hulle het die eerste wedstryd gewen en toe die wedstryd toe wen hulle wee ...(1sec)... die die uhm die finale wedstryd en toe wa- toe het hulle nie 'n keeper da nie toe kom daa 'n meisie toe sny sy vi ha 'n bles ...(1sec)... hulle hetie gewiet sy kan oek sulke goete maakie da maak sy soe ((N.F. uses hand gestures to explain)) das 'n man op hulle team hy hy die team wat hulle tien moet speel hulle het swat aan. Nou die captain van hulle team hyt- hyt lang hare. Nou hy's die stekste. Hy't die stekste punch= [*then then the next match that they they won the first game and then game then they won again ... (1sec)... the the uhm the final game and then wa- they did not have a keeper there then there was this girl she shaved her head ... (1sec)... they did not know that she could also make such thing then she does this ((N.F. uses hand gestures to explain)) there is a man on their team he he the team they are playing against are dressed in black. Now the captian of their team he he has long hair. Now he's the strongest. He has the strongest punch=]*
36. skop hy toe hy- hyt gedink hulle gaan die match wen. Toe maak dai meisie soe 'n 'n tornado ding. Ek dink dis 'n tornado. Toe kan hulle nie score nie. En wat nou wee veder gebuer ((N.F. thinks))= [*he then kicks then he- he thought they are going to win the match. The girl made such a tornado thing. I think it is a tornado. Then they could not score. And what else happens then ((N.F. thinks))=]*
37. ja toe spin it toe spin it toe spin (it [*yes then it twirled then it twirled then it (twirled]*

38. toe spin it en toe vang die die captain va dai ding toe slat hy 'n vo- 'n bicycle ini paale en toe ... (1sec)... en na dai was it een-nul dink ek ja ... (1sec)... *[the it twirled and then the captain from the other thing then he hit a vo- a bicycle in the goal post and then ... (1sec)... and afte that it was one-null I think yes ... (1sec)...]*
39. nou wat ((N.F. clears his throat)) en die skole toe score dai team wie twie toe score dai team wee twie goals ... (1sec)... hie die wat wat da by die la- die laste tyd is ... (1sec)... die tyd naby om is toe skop die toe speeie toe speel die swat team tien die team met die met die swat speel hulle begin hulle vuil speel maak hulle almal beseer= *[now that ((N.F. clears his throat)) and the schools then the other team scored who two then the other team scored two goals ... (1sec)... here the that that there at the la- the last time ... (1sec)... the time came nearer then kicked the then play then the black team played against the team with the with the black they started to play dirty they hurt everyone=]*
40. maak hulle almal beseer toe kan hulle nie speel nie toe kom da kom da 'n ane man hyt hyt hyt die game gelos wan hyt gedink- wan hyt gewiet hulle gaan veloo. toe kom hy wat hy sien hulle ... (1sec)... hulle struggle toe kom hy toe ko help hy vi hulle. Toe score hy die la::ste goal. Ma hulle het nog once veloo wan al was dit draw Toe sê hulle dis penalties vat hulle penalties ... (1sec)... toe staan die man keeper wee. Ha a die vrou keeper het by staan ne? ((N.F. asking H.B.)) ((H.B. nods her head)) toe skop almal miss almal het al getry omie om ha te om 'n goal te skop hulle kan nog once nie score nie. toe wat is it hulle beurt↑ om nou te gat skop ... (1sec)... toe skop almal miss ... (1sec)... en toe is dit die laste man wat nog skop en toe skop hy toe skop hy in toe wen hulle die game= *[they hurt everyone then they could not play then there came there came another man he he he left the game because he thought- because he knew they will lose. Then he came because he saw they ... (1sec)... they are struggling then he came then he came to help them. Then he scored the la::st goal. But they still lost because eventhough it was a draw. Then they said panelities they took penalties ... (1sec)... then the man keeper stood again. No the woman keeper kept on standing ne? ((N.F. asking H.B.)) ((H.B. nods her head)) then everyone missed everone tried to score a goal they still could not score. Then it was their turn↑ to kick ... (1sec)... then everyone missed ... (1sec)... and then it was the*

last man that had to kick and then he kick and he scored a goal and then they won the game=]

41. *dis ampe soe as hulle skop dis ampe soe uhm hoe kan ek nou sê ...(1sec)... as hy skop kom daa soma nou 'n dragon uit die ball uit = [it is almost like when they kick it is almost like uhm how can I say this ...(1sec)... when he kick then a dragon comes out of the ball=]*

42. *dan kom die gras soma uit die grond uit soe maa dis nie a popentjie nie= [then the grass comes out of the ground but it is not a cartoon=]*

43. *dis regte mense. En opie laste ...(1sec)... en toe draai die draai die hele stuk om ((N.F. illustrates with hand gestures)) die mense wat die kar het dai vrou gestamp wat die kar die vrou stamp toe skiet die kar soma nou inie lig in op toe kan die vrou soma nou nie dood nie. Die stuk het ampe soe om gedraai = [it is real people. And on the last ...(1sec)... and then the whole move turns turns around ((N.F. illustrates with hand gestures)) the people that the car it hit a woman when the car hit the woman, the car shot in the air suddenly then the woman did not die. The movie turned around like that=]*

44. *dais dais ek het net tot daar gekyk dis al ...(5sec)... [that's that's I only watched until there that is it ...(5sec)...]*